

Naval Research Laboratory

Washington, DC 20375
NRL/PU/5220--00-425

September 2000

1994 Bibliography of NRL Journal Articles and Conference Papers

ALICE B. COX
W.F. RETTENMAIER

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1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September, 2000		3. REPORT TYPE AND DATES COVERED
4. TITLE AND SUBTITLE 1994 Bibliography of NRL Journal Articles and Conference Papers			5. FUNDING NUMBERS	
6. AUTHORS Alice B. Cox and W. F. Rettenmaier				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Research Laboratory Washington DC 20375			8. PERFORMING ORGANIZATION REPORT NUMBER NRL/PU/5220-00-425	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This publication is a listing of journal articles and conference papers by Naval Research Laboratory authors for 1994. The bibliographic information is taken, primarily, from the Institute of Scientific Information database, <i>Science Citation Index Expanded</i> . Additional citations are generated from reprints of publications which are received in the Laboratory's Ruth H. Hooker Research Library. All references are unclassified. Citations are arranged alphabetically by author. An author index is included at the end of the citation listing. An HTML version of this publication is mounted on the Website of the Ruth H. Hooker Research Library - http://infoweb.nrl.navy.mil .				
14. SUBJECT TERMS Naval research, bibliographies			15. NUMBER OF PAGES 174	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

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Preface

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1994 Bibliography of NRL Journal Articles and Conference Papers

- Aaronson, H. I. and Hall, M. G. History of the Controversy Over the Roles of Shear and Diffusion in Plate Formation About M_d and a Comparison of the Atomic Mechanisms of These Processes. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25(9)**:1797-1819, 1994.
- Aaronson, H. I. and Reynolds, W. T. Discussion to Atom-Probe Field-Ion Microscopy of Bainitic Transformation in 2.25Cr-1Mo Weld Metal. *Scripta Metallurgica et Materialia*, **30(2)**:265-267, 1994.
- Abarbanel, H. D. I.; Carroll, T. A.; Pecora, L. M.; Sidorowich, J. J., and Tsimring, L. S. Predicting Physical Variables in Time-Delay Embedding. *Physical Review E*, **49(3)**:1840-1853, 1994.
- Abbott, N. L.; Rolison, D. R., and Whitesides, G. M. Combining Micromachining and Molecular Self-Assembly to Fabricate Microelectrodes. *Langmuir*, **10(8)**:2672-2682, 1994.
- Abrams, R. H. The Microwave Power Module: A 'Supercomponent' for Radar Transmitters. Radar Developments in a Changing Global Economy. IEEE National Radar Conference, Atlanta, GA. Meeting. 29-31 Mar, 1994. New York, NY: IEEE, 19-- . 1-6, 1994.
- Abrams, R. H. The Microwave Power Module: A 'Supercomponent' for Space Applications. Space TWTA Workshop, Noordwijk, Netherlands. Meeting. 18-19 May, 1994.
- Ackerman, J. R. and Lebow, P. S. Demonstration of the Spectral and the Geometrical Criteria that Control High-Reflectivity Brillouin-Enhanced Four-Wave-Mixing. *Journal of the Optical Society of America B-Optical Physics*, **11(6)**:1000-1008, 1994.
- Ackerman, J. R. and Lebow, P. S. Optimization of the Field-of-View of a Brillouin-Enhanced 4-Wave-Mixing Phase Conjugator. *Optics Letters*, **19(23)**:2015-2017, 1994.
- Adams, J. H.; Beahm, L. P.; Boberg, P. R., and Tylka, A. J. Below-Cutoff Ions in the Heavy-Ions in-Space Experiment. Galactic Cosmic Ray Heavy Ions; **15(1)**: pp. 57-60, 1994. (*Advances in Space Research*, **15(1)**: pp. 57-60, 1994).
- Afanasev, V. V.; Revesz, A. G.; Brown, G. A., and Hughes, H. L. Deep and Shallow Electron Trapping in the Buried Oxide Layer of SIMOX Structures. *Journal of the Electrochemical Society*, **141(10)**:2801-2804, 1994.
- Afanasev, V. V.; Revesz, A. G., and Hughes, H. L. Photo-Injection Study of SIMOX Structures with Supplemental Oxygen Implants. IEEE International SOI Conference. Piscataway, NJ: The Institute of Electrical and Electronics Engineers, c1991- . 87-88, 1994.
- Ahn, S. Theory of Gyrotron and Peniotron in the Helix Waveguide. Sakai, K. and Yoneyama, T., eds. 19th International Conference on Infrared and Millimeter Waves Digest; 1994 Oct; Sandai, Japan. Japan Society of Applied Physics; 1994: Tu5.5.

- Ainsworth, T. L.; Cannella, M. E.; Chubb, S. R.; Fusina, R. A.; Jansen, R. W.; Marmorino, G. O., and Valenzuela, G. R. INSAR Imagery of Surface Currents, Wave Fields and Fronts. 1994 International Geoscience and Remote Sensing Symposium (IGARSS), Pasadena, CA. Meeting. 8-12 AUG, 1994. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 1720-1722, 1994.
- Allan, N.; McLaughlin, D.; Twarog, E.; Leykin, I.; Trizna, D.; Martin, L., and Sletten, M. Ship Borne Remote Sensing of Submesoscale Oceanographic Features Along the Northern Boundary of the Gulf Stream. 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 1723-1727, 1994.
- Alapaty, K.; Raman, S.; Madala, R. V., and Mohanty, U. C. Monsoon Rainfall Simulations With the Kuo and Betts-Miller Schemes. *Meteorology and Atmospheric Physics*, **53**(1-2):33-49, 1994.
- Alegria, A.; Colmenero, J.; Ngai, K. L., and Roland, C. M. Observation of the Component Dynamics in a Miscible Polymer Blend by Dielectric and Mechanical Spectroscopies. *Macromolecules*, **27**(16):4486-4492, 1994.
- Alfonso, D. R.; Ulloa, S. E., and Brenner, D. W. Hydrocarbon Adsorption on a Diamond (100) Stepped Surface. *Physical Review B-Condensed Matter*, **49**(7):4948-4953, 1994.
- Allen, R.; Esterowitz, L., and Fan, T. Y. Tunable Ytterbium Lasers. IEEE LEOS [IEEE/Lasers and Electro-Optics Society] Annual Meeting, 421-422, 1994.
- Altman, E. I. and Colton, R. J. Growth of Rh on Au(111) - Surface Intermixing of Immiscible Metals. *Surface Science*, **304**(1-2):L400-L406, 1994.
- Altman, E. I. and Colton, R. J. Interaction of C-60 With the Au(111) $23\times\sqrt{3}$ Reconstruction. *Journal of Vacuum Science & Technology B*, **12**(3):1906-1909, 1994.
- Ambrosiano, J. J.; Brandon, S. T.; Lohner, R., and Devore, C. R. Electromagnetics via the Taylor-Galerkin Finite Element Method on Unstructured Grids. *Journal of Computational Physics*, **110**(2):310-319, 1994.
- Ancona, M. G. Fully-Lagrangian and Lattice-Boltzmann Methods for Solving Systems of Conservation Equations. *Journal of Computational Physics*, **115**(1):107-120, 1994.
- Ancona, M. G. Thermomechanical Factors in Molybdenum Field Emitter Operations and Failure. Technical Digest of IEDM Meeting. 1994; 803-806.
- Anderson, G. P.; Golden, J. P.; Cao, L. K.; Wijesuriya, D.; Shriver-Lake, L. C., and Ligler, F. S. Development of an Evanescent Wave Fiber Optic Biosensor. *IEEE Engineering in Medicine and Biology Magazine*, **13**(3):358-368, 1994.
- Anderson, G. P.; Golden, J. P., and Ligler, F. S. An Evanescent Wave Biosensor – Part I: Fluorescent Signal Acquisition from Step-Etched Fiber Optic Probes. *IEEE Transactions on Biomedical Engineering*, **41**(6):578-584, 1994.
- Anderson, W. T.; Christianson, K. A., and Moglestue, C. Experimental and Theoretical Study of Failure Mechanisms in AlGaAs/GaAs HEMTs. Topical Workshop on Heterostructure Microelectronics. 1994; 42-44.

- Anderson, W. T.; Moglestueb, C., and Buot, F. A. Role of Hot Electrons in Subsurface Burnout in GaAs FETs. WOCSDICE '94. 18th European Workshop on Compound Semiconductor Devices and Integrated Circuits: National Microelectronics Research Centre; 1994: 36. ISBN: 952221500.
- Anderson, W. T.; Roussos, J. A., and Christianson, K. A. GaAs MMIC Switch Reliability. 5th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis; 1994: 279-284.
- Anderson, W. T.; Roussos, J. A., and Christianson, K. A. MIMIC Power Amplifier Reliability Studies. GOMAC '94. Technical Digest of the 1994 Government Microcircuit Applications Conference. 1994; 443-446.
- Ankner, J. F.; Schreyer, A.; Zabel, H.; Borchers, J. A.; Majkrzak, C. F.; Schafer, M.; Wolf, J. A.; Grunberg, P.; Filipkowski, M. E.; Gutierrez, C. J.; Krebs, J. J., and Prinz, G. A. Polarized Neutron Reflectivity Studies of Biquadratic Coupling in [Fe/Cr] (100) and [Fe/Al] (100) Superlattices and Films (Invited) (Abstract). *Journal of Applied Physics*, **76**(10):7092, 1994.
- Antiochos, S. K. Mass Flows in Coronal Loops. *Space Science Reviews*, **70**(1-2):143-148, 1994.
- Antiochos, S. K.; Dahlburg, R. B., and Klimchuk, J. A. The Magnetic-Field of Solar Prominences. AAS 24th Solar Physics Division Meeting, Stanford, CA. Meeting. 13-17 JUL 1993. *Astrophysical Journal*, **420**(1):L41-L44, 1994.
- Apruzese, J. P. X-Ray Laser Research Using Z Pinches. X-Ray Lasers: Fourth International Colloquium, Williamsburg, VA. Meeting. 16-20 May, 1994. New York, NY: AIP Press, c1994. AIP Conference Proceedings **332**: 399-403, 1994.
- Archibald, D. D. and Mann, S. Self-Assembled Microstructures from 1,2-Ethanediole Suspensions of Pure and Binary Mixtures of Neutral and Acidic Biological Galactosylceramides. *Chemistry and Physics of Lipids*, **69**(1): 51-64, 1994.
- Armistead, J. P.; Keller, T. M., and Sastri, S. B. Structure and Property Changes During Pyrolysis of an Acetylene-Terminated Resin. *Carbon*, **32**(2):345-348, 1994.
- Armistead, J. P. and Snow, A. W. Fiber-Matrix Load-Transfer in Cyanate Resin Carbon-Fiber Systems. *Polymer Composites*, **15**(6):385-392, 1994.
- Arnold, R. The Temporal and Spatial Variability of Chlorophyll in the Western Mediterranean. Seasonal and Interannual Variability of the Western Mediterranean Sea. Washington, DC: American Geophysical Union:195-225, 1994.
- Arnold, R. A.; Oriol, R. A., and Terrie, G. E. Effects of Vertical Chlorophyll Structure and Solar Irradiance on Remote Sensing Ocean Color Spectrum. Ocean Optics XI, Bergen, NO. Meeting. 13-15 JUN 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2258**: 322-331, 1994.
- Armstrong, C. M.; Park, G. S.; Ganguly, A. K.; Kyser, R. H., and Hirshfield, J. L. High Power Harmonic Gyro-Amplifiers for Millimeter-Wave Radar. IEEE 1994 National Radar Conference, Atlanta, GA. Meeting. 29-31 Mar, 1994. New York, NY: IEEE, 1994. 260-265, 1994.
- Askari, F. and Keller, W. C. Real Aperture Radar Imaging of Ocean Waves During SAXON-FPN: A Case of Azimuth-Traveling Waves. *Journal of Geophysical Research-Oceans*, **99**(C5):9817-9833, 1994.

- Askins, C. G. Fiberoptic Sensor Arrays Emerge Readymade from Draw Tower. *Laser Focus World*, **30**(5):237-238, 1994.
- Askins, C. G.; Putnam, M. A.; Williams, G. M., and Friebele, E. J. Contiguous Fiber Bragg Grating Arrays Produced On-Line During Fiber Draw. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation, Orlando, FL. Meeting. 14-16 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 80-85, 1994.
- Askins, C. G.; Putnam, M. A.; Williams, G. M., and Friebele, E. J. Stepped-Wavelength Optical-Fiber Bragg Grating Arrays Fabricated in Line on a Draw Tower. *Optics Letters*, **19**(2):147-149, 1994.
- August, R. A.; Phillips, G. W.; King, S. E., and Cutchin, J. H. Treaty Verification with Passive Neutron Signatures. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **353**(1-3):712-715, 1994.
- Ayers, J. D.; Harris, V. G.; Sprague, J. A., and Elam, W. T. Nucleation of the Nanocrystalline Phase in $\text{Fe}_{73.5}\text{Cu}_1\text{Nb}_3\text{Si}_{13.5}\text{B}_9$. *Journal of Applied Physics*, **75**(10):5801, 1994.
- Ayers, J. D.; Harris, V. G.; Sprague, J. A., and Elam, W. T. On the Role of Cu and Nb in the Formation of Nanocrystals in Amorphous $\text{Fe}_{73.5}\text{Nb}_3\text{Cu}_1\text{Si}_{13.5}\text{B}_9$. *Applied Physics Letters*, **64**(8):974-976, 1994.
- Ayres, T. R.; Stauffer, J. R.; Simon, T.; Stern, R. A.; Antiochos, S. K.; Basri, G. S.; Bookbinder, J. A.; Brown, A.; Doschek, G. A.; Linsky, J. L.; Ramsey, L. W., and Walter, F. M. A Far-Ultraviolet Flare on a Pleiades-G Dwarf. *Astrophysical Journal*, **420**(1):L33-L36, 1994.
- Bachmann, C. M.; Musman, S. A.; Luong, D., and Schultz, A. Unsupervised BCM Projection Pursuit Algorithms for Classification of Simulated Radar Presentations. *Neural Networks*, **7**(4):709-728, 1994.
- Bacmeister, J. T.; Newman, P. A.; Gary, B. L., and Chan, K. R. An Algorithm for Forecasting Mountain Wave-Related Turbulence in the Stratosphere. *Weather and Forecasting*, **9**(2):241-253, 1994.
- Baek, S. W.; Oran, E. S.; Ellzey, J. L., and Kaplan, C. R. Dynamics of a Strongly Radiating Unsteady Ethylene Jet Diffusion Flame. *Combustion and Flame*, **96**:1-21, 1994.
- Bhattacharya, D.; The, L. S.; Kurfess, J. D.; Clayton, D. D.; Gehrels, N.; Grabelsky, D. A.; Johnson, W. N.; Jung, G. V.; Kinzer, R. L.; Leising, M. D.; Purcell, W. R.; Strickman, M. S., and Ulmer, M. P. Estimating Starburst Supernova Rates Using OSSE Observations of M82 and NGC253. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 536-540, 1994.
- Ball, D. W.; Pong, R. G. S., and Kafafi, Z. H. Reactions of Atomic and Diatomic Iron with Methylacetylene in Solid Argon. *Journal of Physical Chemistry*, **98**(42):10720-10727, 1994.
- Ballas, J. A. Delivery of Information Through Sound. Auditory Display Sonification Audification and Auditory Interfaces, Santa Fe, NM. Meeting. OCT 1992. Addison-Wesley, 1994. Santa Fe Institute Studies in The Science of Complexity - Proceedings Volume, 1994, **18**: 79-94, 1994. ISBN: 0201626039.
- Bankert, R. L. Cloud Classification of AVHRR Imagery in Maritime Regions Using a Probabilistic Neural Network. *Journal of Applied Meteorology*, **33**(8):909-918, 1994.

- Bankert, R. L. Cloud Pattern Identification as Part of an Automated Image Analysis. Seventh Conference on Satellite Meteorology and Oceanography, Monterey, CA. Meeting. Jun, 1994. Boston, MA, American Meteorological Society, 1994. 441-443, 1994.
- Baras, J. and Wolk, S. Model Based Automatic Target Recognition from High Range Resolution Radar Returns. SPIE International Symposium on Optical Engineering in Aerospace Sensing. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, 57-66, 1994.
- Baras, J. and Wolk, S. Wavelet Based Progressive Classification of High Range Resolution Radar Returns. Optical Engineering in Aerospace Sensing, Orlando, FL. Meeting. Apr, 1994. Bellingham, WA: Society of Photo-Optical Instrumentation Engineers; 1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2242**, 1994.
- Barger, W. R.; Mowery, R. L., and Wyatt, J. R. Separation and Indirect Detection by Capillary Zone Electrophoresis of PPB (W/W) Levels of Aluminum Ions in Solutions of Multiple Cations. *Journal of Chromatography A*, **680**(2):659-665, 1994.
- Barnhart, C. M.; Wieselthier, J. E., and Ephremides, A. Ordinal Optimization by Means of Standard Clock Simulation and Crude Analytical Models. Decision and Control, 1994. Proceedings of the 33rd IEEE Conference on Decision and Control. [New York, NY, Institute of Electrical and Electronics Engineers, 1994.] **3**: 2645-2647, 1994.
- Baronavski, A. P. and Owrutsky, J. C. Lifetime of the S(3) State of Cs₂ Measured by Femtosecond Ultraviolet Multiphoton Ionization Spectroscopy. *Chemical Physics Letters*, **221**(5-6):419-425, 1994.
- Barrera, E. V.; Sims, J.; Callahan, D. L.; Provenzano, V.; Milliken, J., and Holtz, R. L. Processing of Fullerene-Reinforced Composites. *Journal of Materials Research*, **9**(10):2662-2669, 1994.
- Bartel, N.; Bietenholz, M. F.; Rupen, M. P.; Conway, J. E.; Beasley, A. J.; Sramek, R. A.; Romney, J. D.; Titus, M. A.; Graham, D. A.; Altunin, V. I.; Jones, D. L.; Rius, A.; Venturi, T.; Umana, G.; Francis, R. L.; McCall, M. L.; Richer, M. G.; Stevenson, C. C.; Weiler, K. W.; Vandyk, S. D.; Panagia, N.; Cannon, W. H.; Popelar, J., and Davis, R. J. The Shape, Expansion Rate and Distance of Supernova-1993j From VLBI Measurements. *Nature*, **368**(6472):610-613, 1994.
- Bashkansky, M.; Adler, C. L.; Battle, P. R., and Reintjes, J. F. Nonlinear Optical Field Cross-Correlation Techniques for Imaging Through a Strong Scattering Medium. Inverse Optics III, Orlando, FL. Meeting. 4-5 Apr, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2241**: 228-237, 1994.
- Bashkansky, M.; Adler, C. L., and Reintjes, J. Coherently Amplified Raman Polarization Gate for Imaging Through Scattering Media. *Optics Letters*, **19**(5):350-352, 1994.
- Bashkansky, M. and Reintjes, J. Image Upconversion Using Coherent Anti-Stokes-Raman Scattering. *IEEE Journal of Quantum Electronics*, **30**(2):318-328, 1994.
- Baski, A. A. and Fuchs, H. Epitaxial Growth of Silver on Mica as Studied by AFM and STM. *Surface Science*, **313**(3):275-288, 1994.
- Batra, N. K.; Berruti, T.; DelSanto, P. P.; Sassone, S. Ultrasonic Interferometric Characterization of Material Plates. Ultrasonics: International Symposium, Cannes; FR. Meeting. Nov, 1994. New York: IEEE, 1994. **2**: 1215-1218, 1994.

- Baturin, D. NRL Attacks Halon Replacement. *Sea Technology*, **35**(7):33-35, 1994.
- Bayer, M.; Forchel, A.; Itskevich, I. E.; Reinecke, T. L.; Knipp, P. A.; Greus, C.; Spiegel, R., and Faller, F. Magnetic Field Induced Breakdown of Quasi-One-Dimensional Quantum Wire Quantization. *Physical Review B-Condensed Matter*, **49**(20):14782-14785, 1994.
- Beal, E. J. and Hardy, D. R. The Effect of Temperature on Jet Fuel Thermal-Stability Defined by Direct Gravimetric Analysis of Both Surface and Fuel Insoluble Deposits. *Abstracts of Papers of the American Chemical Society*, **207**:68-PETR, 1994.
- Beal, E. J. and Hardy, D. R. Thermal-Stability of Diesel Fuels by Quantitative Gravimetric JFTOT. *Abstracts of Papers of the American Chemical Society*, **208**:120-FUEL, 1994.
- Becklehimer, J. L. and Pandey, R. B. Percolation of Chains and Jamming Coverage in Two Dimensions by Computer Simulation. *Journal of Statistical Physics*, **75**:765-771, 1994.
- Behrendt, J. C.; Blankenship, D. D.; Finn, C. A.; Bell, R. E.; Sweeney, R. E.; Hodge, S. M., and Brozena, J. M. CASERTZ Aeromagnetic Data Reveal Late Cenozoic Flood Basalts (Questionable) in the West Antarctic Rift System. *Geology*, **22**(6):527-8, 1994.
- Bender, B. A. and Jessen, T. L. A Comparison of the Interphase Development and Mechanical-Properties of Nicalon and Tyranno SiC Fiber-Reinforced ZrTiO₄ Matrix Composites. *Journal of Materials Research*, **9**(10):2670-2676, 1994.
- Bender, B. A. and Jessen, T. L. Effects of Processing on Mechanical Properties and Microstructure of a Ceramic Composite. *Composites*, **25**(2):87-93, 1994.
- Benka, S. G. and Holman, G. D. A Thermal/Nonthermal Model for Solar Hard X-Ray-Bursts. *Astrophysical Journal*, **435**(1):469-481, 1994.
- Bennett, B. R.; Delalampo, J. A.; Sinn, M. T.; Peiro, F.; Cornet, A., and Aspnes, D. E. Origin of Optical Anisotropy in Strained In_xGa_{1-x}As/InP and In_yAl_{1-y}As/InP Heterostructures. *Journal of Electronic Materials*, **23**(4):423-429, 1994.
- Bennett, B. R.; Shanabrook, B. V., and Glaser, E. R. Interface Control in InAs/AlSb Superlattices. *Applied Physics Letters*, **65**(5):598-600, 1994.
- Bennett, B. R.; Shanabrook, B. V.; Glaser, E. R., and Wagner, R. J. High-Quality InAs/AlSb Superlattices with AlAs and InSb Interfaces. Compound Semiconductor Epitaxy. San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **340**: 253-258, 1994.
- Bennett, B. R.; Shanabrook, B. V.; Wagner, R. J.; Davis, J. L.; Waterman, J. R., and Twigg, M. E. Interface Composition Control in InAs/GaSb Superlattices. *Solid-State Electronics*, **37**(4-6):733-737, 1994.
- Bentley, R. D.; Doschek, G. A.; Simnett, G. M.; Rilee, M. L.; Mariska, J. T.; Culhane, J. L.; Kosugi, T., and Watanabe, T. The Correlation of Solar Flare Hard X-Ray-Bursts with Doppler Blueshifted Soft X-Ray Flare Emission. *Astrophysical Journal*, **421**(1):L55-L58, 1994.
- Benz, A. O.; Kosugi, T.; Aschwanden, M. J.; Banka, S. G.; Chupp, E. L.; Enome, S.; Garcia, H.; Holman, G. D.; Kurt, V. G.; Sakao, T.; Stepanov, A. V., and Volwerk, M. Particle Acceleration in Flares. *Solar Physics*, **153**(1-2):33-53, 1994.

- Bergeron, P.; Ruiz, M. T.; Leggett, S. K.; Saumon, D., and Wesemael, F. The Peculiar Cool White Dwarf LHS 1126 Revisited, *Astrophysical Journal*, **423(1)**:456-460, 1994.
- Berkoff, T. A.; Davis, M. A., and Kersey, A. D. Fiber Optic Sensors For Distributed Vibration Monitoring. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2264**: 148-, 1994.
- Berkoff, T. A.; Davis, M. A., and Kersey, A. D. Source Structure Induced Measurement Errors in Fiber Bragg Grating Sensor Arrays. Distributed and Multiplexed Fiber Optic Sensors IV, San Diego, CA. Meeting. 27-28 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2294**: 60-68, 1994.
- Berkoff, T. A. and Kersey, A. D. Eight Element Time-Division Multiplexed Fiber Grating Sensor Array with Integrated Optic Wavelength Discriminator. Second European Conference of Smart Structures and Materials, Glasgow, Scotland. Meeting. 12-14 Oct, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2361**: 350-353, 1994.
- Bermudez, V. M. Study of the Adsorption of Triethylgallium, Ammonia, and Hydrazine on MgO(100) Using Infrared Reflection Absorption Spectroscopy. *Journal of Physical Chemistry*, **98(9)**:2469-2477, 1994.
- Bernard, P. S. and Rovelstad, A. L. On the Physical Accuracy of Scalar Transport Modeling in Inhomogeneous Turbulence. *Physics of Fluids*, **6(9)**:3093-3108, 1994.
- Bernhardt, P. A. Communications Using Chaotic Frequency-Modulation. *International Journal of Bifurcation and Chaos*, **4(2)**:427-440, 1994.
- Bernhardt, P.A. and Huba, J.D. Reconstruction of Non-Stationary Plasma Irregularities Using Ionospheric Tomography. *Low-Latitude Ionospheric Physics*, COSPAR Colloquia Series **7**: 319-327, 1994.
- Bernhardt, P.A.; Wagner, L. S.; Goldstein, J. A.; Trakhtengerts, V. Y.; Ermakova, E. N.; Rapoport, V. O.; Komrakov, G. P., and Babichenko, A. M. Enhancement of Stimulated Electromagnetic Emission During Two Frequency Ionospheric Heating Experiments. *Physical Review Letters*, **72(18)**:2879-2882, 1994.
- Berry, A. Synthesis and Characterization of Isobutyl-Antimony Compounds. *Abstracts of Papers of the American Chemical Society*, **208**:138-INOR, 1994.
- Berry, A. and Purdy, A. Synthesis and Characterization of Alkaline-Earth Thiolates and Dithiocarbamates. *Abstracts of Papers of the American Chemical Society*, **207**:294-INOR, 1994.
- Bertha, C. M.; Mattson, M. V.; Flippen-Anderson, J. L.; Rothman, R. B.; Xu, H.; Cha, X. Y.; Becketts, K., and Rice, K. C. A Marked Change of Receptor Affinity of the 2-Methyl-5-(3-Hydroxyphenyl)Morphans Upon Attachment of an (E)-8-Benzylidene Moiety - Synthesis and Evaluation of a New Class of Sigma-Receptor Ligands. *Journal of Medicinal Chemistry*, **37(19)**:3163-3170, 1994.
- Bessel, C. A. and Rolison, D. R. Electrochemical Reactivity of Cobalt(Salen) in Zeolites. *Abstracts of Papers of the American Chemical Society*, **208**:501-INOR, 1994.

- Bevilacqua, R. M.; Shettle, E. P.; Hornstein, J. S.; Schwartz, P. R.; Chen, D. T.; Fromm, M.; Glaccum, W.; Lumpe, J. D.; Krigman, S. S.; Debrestian, D. J.; Rusch, D. W.; Randall, C. E.; Clancy, R. T., and Olivero, J. J. The Polar Ozone and Aerosol Measurement Experiment (POAM II). Optical Spectroscopic Techniques and Instrumentation for Atmospheric and Space Research, San Diego, CA. Meeting. 25-27 July 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2266**: 374-382, 1994.
- Bey, P. P.; Yonce, D. J., and Fare, T. L. Stability Analysis of an Autonulling AC Bridge for Use with Silicon-Based Sensors. *IEEE Transactions on Circuits and Systems I-Fundamental Theory and Applications*, **41**(3):210-239, 1994.
- Bhar, T. N.; Lambert, R. J., and Hughes, H. L. Decrease in Electron Capture Cross-Section in SIMOX with Supplemental Implant. IEEE International SOI Conference; Nantucket Island, MA. Meeting. 4-6 Oct, 1994. Piscataway, NJ: The Institute of Electrical and Electronics Engineers, c1991- . 115-118, 1994.
- Bhatia, A. K.; Kastner, S. O.; Keenan, F. P.; Conlon, E. S., and Widing, K. G. The Fe-XIV Spectrum - Predicted Line-Intensities and Solar Identifications. *Astrophysical Journal*, **427**(1):497-510, 1994.
- Bhatia, S. K.; Shoen, P.; Stenger, D. A.; Pike, C. J.; Cotman, C. W., and Hickman, J. J. Rational Pattern Design for in-Vitro Cellular Networks Using Surface Photochemistry. *Journal of Vacuum Science and Technology A*, **12**:607-661, 1994.
- Bhattacharya, D.; The, L. S.; Kurfess, J. D.; Clayton, D. D.; Gehrels, N.; Leising, M. D.; Grabelsky, D. A.; Johnson, W. N.; Jung, G. V.; Kinzer, R. L.; Purcell, W. R.; Strickman, M. S., and Ulmer, M. P. Gamma-Ray Observations of NGC-253 and M82 with OSSE. *Astrophysical Journal*, **437**(1):173-178, 1994.
- Bilic, D.; Dahlberg, E. D.; Chaiken, A.; Gutierrez, C.; Lubitz, P.; Krebs, J. J.; Harford, M. Z., and Prinz, G. A. Magnetization Reversal in CoFe/Ag/Fe/ZnSe Thin-Layer Sandwiches. *Journal of Applied Physics*, **75**(10):7073-7075, 1994.
- Bilodeau, T. G.; Ewing, K. J.; Kraucunas, I. P.; Jaganathan, J.; Nau, G. M.; Aggarwal, I. D.; Reich, F., and Mech, S. Fiber-Optic Raman Probe Detection of Chlorinated Hydrocarbons in Standard Soils. Chemical, Biochemical, and Environmental Fiber Sensors V, Boston, MA. Meeting. 7-10 SEP, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2068**: 258-270, 1994.
- Binari, S. C.; Dietrich, H. B.; Kelner, G.; Rowland, L. B.; Doverspike, K., and Gaskill, D. K. Electrical Characterization of Ti Schottky Barriers on N-Type GaN. *Electronics Letters*, **30**(11):909-911, 1994.
- Binari, S. C.; Rowland, L. B.; Kruppa, W.; Kelner, G.; Doverspike, K., and Gaskill, D. K. Microwave Performance of GaN MESFETs. *Electronics Letters*, **30**(15):1248-1249, 1994.
- Blackstead, H. A.; Chrisey, D. B.; Dow, J. D.; Horwitz, J. S.; Klunzinger, A. E., and Pulling, D. B. Evidence of Superconductivity in PrBa₂Cu₃O₇. *Physica C*, **235**:1539-1540, 1994.
- Blackstead, H. A.; Pulling, D. B.; Horwitz, J. S., and Chrisey, D. B. Observation of Flux-Flow in Superconducting YBa₂Cu₃O_{7-d} Films. *Physical Review B-Condensed Matter*, **49**(21):15335-15340, 1994.

- Blank, M.; Kreischer, K. E., and Temkin, R. J. Experimental Study of Quasi-Optical Mode Converter for a 110 GHz Gyrotron / Sakai, K. and Yoneyama, T., eds. 19th International Conference on Infrared and Millimeter Waves Digest; 1994 Oct; Sandai, Japan. Japan Society of Applied Physics; 1994:331-332.
- Blank, M.; Kreischer, K. E., and Temkin, R. J. Experimental Study of Quasi-Optical Mode Converters for High Order Mode Gyrotrons. 1994 IEDM Technical Digest; 1994 Dec; San Francisco, CA. New York: IEEE; 1994: 259-262. ISBN: 780321111.
- Blauch, D. N. and Rolison, D. R. Application of AC Impedance for in-Situ Real-Time Measurement of Changes in the Bulk Conductivity of Aqueous Zeolite Dispersions During Electrolysis. *Journal of Electroanalytical Chemistry*, **370**(1-2):305-308, 1994.
- Bogart, C. W. and Yang, T. C. Source Localization with Horizontal Arrays in Shallow Water: Spatial Sampling and Effective Aperture. *Journal of the Acoustical Society of America*, **96**(3):1677-1686, 1994.
- Boos, J. B.; Kruppa, W.; Park, D.; Shanabrook, B. V., and Bennett, B. R. 0.2-Mu-M AlSb/InAs HEMTs with 5V Gate Breakdown Voltage. *Electronics Letters*, **30**(23):1983-1984, 1994.
- Borgiotti, G. V. and Rosen, E. M. Power-Flow Analysis of Surface-Waves on a Cylindrical Elastic Shell in an Acoustic Fluid. *Journal of the Acoustical Society of America*, **95**(1):244-255, 1994.
- Bowers, P. F. and Johnston, K. J. VLA Positions and Distributions of H₂O Masers Associated with 15 Mira and Semiregular Variables. *Astrophysical Journal Supplement Series*, **92**(1):189-218, 1994.
- Bowles, J.; McWilliams, R., and; Rynn, N. Direct Measurement of Velocity Space Transport in a Plasma. *Physics of Plasmas*, **1**(12):3814-, 1994.
- Bowman, S. R.; Ganem, J.; Feldman, B. J., and Kueny, A. W. Infrared-Laser Characteristics of Praseodymium-Doped Lanthanum Trichloride. *IEEE Journal of Quantum Electronics*, **30**(12):2925-2928, 1994.
- Bowman, S. R.; Rabinovich, W. S.; Kyono, C. S.; Katzer, D. S., and Ikossi-Anastasiou, K. High-Resolution Spatial Light Modulators Using GaAs/AlGaAs Multiple-Quantum Wells. *Applied Physics Letters*, **65**(8):956-958, 1994.
- Boyd, J. D.; Kennelly, E. P., and Pistek, P. Estimation of E-of-Expansion Coefficients from Incomplete Data. *Deep-Sea Research Part I-Oceanographic Research Papers*, **41**(10):1479-1488, 1994.
- Boyer, C. N.; Osterman, S. N.; Thonnard, S. E.; McCoy, R. P., and Williams, J. Z. An EUV and FUV Calibration Facility for SSULI. Ultraviolet Technology V, San Diego, CA. Meeting. 26-27 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society of Optical Engineering, **2282**: 107-115, 1994.
- Brady, R. F. Polymer Chemistry - Coming to an Unsticky End. *Nature*, **368**(6466):16-17, 1994.
- Brady, R. F. and Charlesworth, J. M. Fluorescence Cure Studies of Amino Epoxy Systems. *Progress in Organic Coatings*, **24**(1-4):1-9, 1994.
- Brenner, D. W.; Tupper, K. J.; Sinnott, S. B.; Colton, R. J., and Harrison, J. A. Structure, Energy-Dissipation, and Nonadhesive Friction - Computer-Simulations of Sliding Diamond Interfaces and Self-Assembled Monolayers. *Abstracts of Papers of the American Chemical Society*, **207**:166-COLL, 1994.

- Bridgman, W. T.; Leising, M. D.; Clayton, D. D.; Strickman, M. S.; Kurfess, J. D.; Johnson, W. N.; Kinzer, R. L.; Kroeger, R. A.; Grove, J. E.; Jung, G. V.; Grabelsky, D. A.; Purcell, W. R., and Ulmer, M. P. High Time Resolution Gamma-Ray Studies of Cygnus X-1. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 225-229, 1994.
- Broadhead, M. K.; Ali, H. B., and Bibee, L. D. Shear Q Estimates from Interface Waves in Marine Sediments. *Journal of the Acoustical Society of America*, **95**(3):1650-1653, 1994.
- Broughton, J. Issues for the 90s - A Global View - Foreword. *Computers in Mathematical Sciences*, **2**: 7, 1994.
- Brown, C. M.; Seely, J. F.; Kania, D. R.; Hammel, B. A.; Back, C. A.; Lee, R. W.; Barshalom, A., and Behring, W. E. Wavelengths and Energy-Levels for the Zn-I Isoelectronic Sequence Sn_{20}^{+} Through U_{62}^{+} . *Atomic Data and Nuclear Data Tables*, **58**(2):203-217, 1994.
- Brown, G. A. and Jenkins, W. C. Moat Edge Oriented Defects and Buried Oxide Leakage in SIMOX Integrated Circuits. IEEE International SOI Conference. Piscataway, NJ: The Institute of Electrical and Electronics Engineers, c1991-. 133-134, 1994.
- Bruce, J. G.; Johnson, D. R., and Kindle, J. C. Evidence for Eddy Formation in the Eastern Arabian Sea During the Northeast Monsoon. *Journal of Geophysical Research*, **99**(C4):7651-7664, 1994.
- Bruns, T. R.; Geist, E. L., and Lavoie, D. L. 21. Synthetic Seismograms, Migrated Seismic Reflection Profiles, and Lithologic Correlations for Leg 135 Sites in the Lau Basin and Tonga Arc. Proceedings of the Ocean Drilling Program. Scientific Results: 331-365, 1994.
- Buchner, S.; Langworthy, J. B.; Stapor, W. J.; Campbell, A. B., and Rivet, S. Implications of the Spatial Dependence of the Single-Event-Upset Threshold in SRAMs Measured with a Pulsed-Laser. *IEEE Transactions on Nuclear Science*, **41**(6):2195-2202, 1994.
- Bucholtz, F.; Villarruel, C. A.; Dagenais, D. M.; McVicker, J. A.; Koo, K. P.; Kirkendall, C. K.; Davis, A. R.; Patrick, S. P., and Dandridge, A. Fiber Optic Magnetic Sensor Technology for Undersea Applications. Fiber Optic and Laser Sensors XII, San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2292**: 2-13, 1994.
- Bucholtz, F.; Villarruel, C. A.; Kirkendall, C. K.; Dagenais, D. M.; McVicker, J. A.; Davis, A. R.; Patrick, S. S.; Koo, K. P., and Dandridge, A. Eight Element Array of 3-Axis Fiber Optic Magnetometers for Undersea Applications. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 36-, 1994.
- Bucholtz, F.; Wang, G.; Kirkendall, C. K.; Villarruel, C. A.; Davis, A. R.; Dagenais, D. M.; McVicker, J. A.; Patrick, S. S.; Koo, K. P.; Andersen, A.; Valo, H.; Gjessing, R.; Eidem, E. J., and Knudsen, T. Undersea Performance of 8-Element Fiber Optic Magnetometer Array. *Electronics Letters*, **30**(23):1974-1975, 1994.
- Buckley, L. J. Complex Permittivity Measurement Techniques for Low Dielectric-Constant Resins. *Abstracts of Papers of the American Chemical Society*, **208**:302-PMSE, 1994.

- Buckley, L. J.; Josefowicz, J. Y., and Xie, L. Polyaniline Surface Morphology During the Doping Process Using Atomic Force Microscopy. Electrical, Optical, and Magnetic Properties of Organic Solid State Materials. Boston, MA Meeting. 29 NOV-2 DEC, 1993. Pittsburgh, PA : Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **328**: 197-202, 1994.
- Budhani, R. C.; Weaver, B. D., and Holstein, W. L. Disorder-Induced Reduction of the Anomalous Hall Voltage in Proton-Irradiated and Ag²¹⁺-Ion-Irradiated Ti₂Ba₂CaCu₂O₈ Epitaxial-Films. *Physical Review B-Condensed Matter*, **50**(5):3499-3502, 1994.
- Budzien, S. A.; Feldman, P. D., and Conway, R. R. Observations of the Far Ultraviolet Airglow by the Ultraviolet Limb Imaging Experiment on STS-39. *Journal of Geophysical Research-Space Physics*, **99**(A12):23275-23287, 1994.
- Budzien, S. A.; Festou, M. C., and Feldman, P. D. Solar Flux Variability and the Lifetimes of Cometary H₂O and OH. *Icarus*, **107**(1):164-188, 1994.
- Buot, F. A. and Rajagopal, A. K. Binary Information Storage at Zero Bias in Quantum-Well Diodes. *Journal of Applied Physics*, **76**(9):5552-5560, 1994.
- Buot, F. A. and Rajagopal, A. K. Hysteresis of Trapped Charge in AlGaSb Barrier as a Mechanism for the Current Bistability in AlGaSb/InAs/AlGaSb Double-Barrier Structures (Vol 64, Pg 2994, 1994). *Applied Physics Letters*, **65**(24):3153-3153, 1994.
- Buot, F. A. and Rajagopal, A. K. Hysteresis of Trapped Charge in AlGaSb Barrier as a Mechanism for the Current Bistability in AlGaSb InAs AlGaSb Double-Barrier Structures. *Applied Physics Letters*, **64**(22):2994-2996, 1994.
- Burk, S. D. and Thompson, W. T. Mesoscale Atmospheric Refractive Conditions During the VOCAR Experiment. Tenth Conference on Numerical Weather Prediction, Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 407-409, 1994.
- Burk, S. D. and Thompson, W. T. Mesoscale Modeling of Refractive Conditions in a Complex Coastal Environment. NATO AGARD Conference, Bremerhaven, DE. Meeting. 19-22 Sep, 1994. 1-6, 1994.
- Burk, S. D.; Thompson, W. T.; Cook, J., and Love, G. G. Mesoscale Modeling of Refractive Conditions During the VOCAR Experiment. 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1994. 402-404, 1994.
- Burkhardt, M.; Smith, H. I.; Antoniadis, D. A.; Orlando, T. P.; Melloch, M. R.; Rhee, K. W., and Peckercar, M. C. Fabrication Using X-Ray Nanolithography and Measurement of Coulomb-Blockade in a Variable-Sized Quantum-Dot. *Journal of Vacuum Science & Technology B*, **12**(6):3611-3613, 1994.
- Burns, W. K.; McElhanon, W., and Goldberg, L. Second Harmonic Generation in Field Poled, Quasi-Phase-Matched, Bulk LiNbO₃. *IEEE Photonics Technology Letters*, **6**(2):252-254, 1994.
- Buscher, D. F. Direct Maximum-Entropy Image-Reconstruction from the Bispectrum. Very High Angular Resolution Imaging; Proceedings of the 158th Symposium of the International Astronomical Union, Held at the Women's College, University of Sydney, Australia, 11-15 January 1993, edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA : Kluwer Academic, c1994. International Astronomical Union Symposium, **158**: 91-93, 1994.

- Busse, L. E.; Goldberg, L.; Surette, M. R., and Mizell, G. Absorption Losses in MgO-Doped and Undoped Potassium Niobate. *Journal of Applied Physics*, **75**(2):1102-1110, 1994.
- Byun, D. G.; Hwang, S. D.; Dowben, P. A.; Perkins, F. K.; Filips, F., and Ianno, N. J. Heterojunction Fabrication by Selective-Area Chemical-Vapor-Deposition Induced by Synchrotron-Radiation. *Applied Physics Letters*, **64**(15):1968-1970, 1994.
- Calderon, S. N.; Rothman, R. B.; Porreca, F.; Flippen-Anderson, J. L.; McNutt, R. W.; Xu, H.; Smith, L. E.; Bilsky, E. J.; Davis, P., and Rice, K. C. Probes for Narcotic Receptor-Mediated Phenomena. 19. Synthesis of (+)-4-[(Alpha-R)-Alpha-((2s,5r)-4-Allyl-2,5-Dimethyl-1-Piperaziny)-3-Methoxybenzyl]-N,N-Diethylbenzamide (Snc-80) - A Highly Selective, Nonpeptide Delta-Opioid Receptor Agonist. *Journal of Medicinal Chemistry*, **37**(14):2125-2128, 1994.
- Callahan, D. A.; Langdon, A. B.; Friedman, A., and Haber, I. Longitudinal Beam Dynamics for Heavy Ion Fusion Using WARPPrz. Computational Accelerator Physics, Los Alamos, NM. Meeting. 1993. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, **297**: 211-218, 1994.
- Callahan, J. H.; McElvany, S. W., and Ross, M. M. Tandem Mass-Spectrometry Studies of Oxygen Interactions with Fullerenes and Metallofullerenes. *International Journal of Mass Spectrometry and Ion Processes*, **138**:221-239, 1994.
- Calvert, J. M. Monolayer Surface Imaging and Photoresist Channel-Constrained Approaches for High-Resolution Selective Metallization. *Abstracts of Papers of the American Chemical Society*, **208**:512-POLY, 1994.
- Calvert, J. M.; Calabrese, G. S.; Bohland, J. F.; Chen, M. S.; Dressick, W. J.; Dulcey, C. S.; Georger, J. H.; Kosakowski, J.; Pavelcheck, E. K.; Rhee, K. W., and Shirey, L. M. Photoresist Channel-Constrained Deposition of Electroless Metallization on Ligating Self-Assembled Films. *Journal of Vacuum Science & Technology B*, **12**(6):3884-3887, 1994.
- Calvert, J. M.; Dressick, W. J.; Dulcey, C. S.; Chen, M. S.; Georger, J. H.; Stenger, D. A.; Koloski, T. S., and Calabrese, G. S. Top-Surface Imaging Using Selective Electroless Metallization of Patterned Monolayer Films. *Polymers for Microelectronics*, 1994. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **537**, 210-219, 1994.
- Camilo, F.; Foster, R. S., and Wołoszczan, A. High-Precision Timing of PSR J1713+0747 - Shapiro Delay. *Astrophysical Journal*, **437**(1):L39-L42, 1994.
- Campbell, A.; McDonald, P.; Gonyea, R., and Reeves, M. Results from the CRRES MEP Experiment. *IEEE Transactions on Nuclear Science*, **41**(3):432-437, 1994.
- Campbell, P. M.; Snow, E. S., and McMarr, P. J. Fabrication of Nanometer-Scale Conducting Silicon Wires with a Scanning Tunneling Microscope. *Solid-State Electronics*, **37**(4-6):583-586, 1994.
- Capps, R. N.; Coughlin, C. S., and Samuels, M. Q. Structure-Property Relationships in Viscoelastic Behavior of Interpenetrating Polymer Networks for Constrained Layer Damping. Smart Structures and Materials 1994: Passive Damping, Orlando, FL. Meeting. 14-16 FEB., 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2193**: 250-259, 1994.
- Cargill, P. J. Some Implications of the Nanoflare Concept. *Astrophysical Journal*, **422**(1):381-393, 1994.

- Cargill, P. J.; Chen, J., and Garren, D. A. Oscillations and Evolution of Curved Current-Carrying Loops in the Solar Corona. *Astrophysical Journal*, **423**(2, Part 1): 854-870, 1994.
- Cargill, P. J.; Chen, J., and Harold, J. B. One-Dimensional Hybrid Simulations of Current Sheets in the Quiet Magnetotail. *Geophysical Research Letters*, **21**(20):2251-2254, 1994.
- Carhart, H. W. Impact of Low O₂ on Fires. *Journal of Hazardous Materials*, **36**(2):133-141, 1994.
- Carlos, W. E.; Freitas, J. A.; Khan, M. A.; Olson, D. T., and Kuznia, J. N. Donors in Wurtzite GaN Films: A Magnetic Resonance and Photoluminescence Study. Diffusion and Defect Monograph Series Crystal Properties and Preparation. *Materials Science Forum*, **143/147**(1):99, 1994.
- Carlos, W. E.; Freitas, J. A.; Pazik, J. C.; Ivanova, L. M.; Altaiskii, Y. M., and Zuev, V. L. Electron-Spin-Resonance Studies of Donors in Bulk and Thin-Film Beta-SiC. Diamond, SiC and Nitride Wide Bandgap Semiconductors, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, 1994. Materials Research Society Symposium Proceedings, **339**: 535, 1994.
- Carlos, W. E. and Prokes, S. M. Light Induced Electron Spin Resonance in Porous Silicon. *Applied Physics Letters*, **65**(10):1245-1247, 1994.
- Carnes, M. R.; Teague, W. J., and Mitchell, J. L. Inference of Subsurface Thermohaline Structure from Fields Measurable by Satellite. *Journal of Atmospheric and Oceanic Technology*, **11**(2):551-566, 1994.
- Carr, T. W. and Erneux, T. Hopf-Bifurcation of the Class-B Multimode Laser. *Physical Review A*, **50**(1):724-731, 1994.
- Carr, T. W. and Erneux, T. Understanding The Bifurcation to Traveling Waves in a Class-B Laser Using a Degenerate Ginzburg-Landau Equation. *Physical Review A*, **50**:4219-, 1994.
- Carr, T. W. and Schwartz, I. B. Controlling Unstable Steady States Using System Parameter Variation and Control Duration. *Physical Review E*, **50**(5):3410-3415, 1994.
- Carroll, T. L. Synchronizing Chaotic Systems Using Filtered Signals. *Physical Review E*, **50**(4):2580-2587, 1994.
- Carroll, T. L.; Heagy, J., and Pecora, L. M. Synchronization and Desynchronization in Pulse Coupled Relaxation Oscillators. *Physics Letters A*, **186**(3):225-229, 1994.
- Carroll, T. L. and Pecora, L. M. Synchronizing Chaotic Circuits. The Chaos Paradigm: Developments and Applications in Engineering and Science. Mystic, CT., editor, Richard A. Katz. Meeting. 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **296** :127, 1994.
- Carruthers, G. R.; Dohne, B. C.; Shephard, K. K.; Reeb, S. A. C., and Schmidt, E. G. Photometric Calibrations of the AFP-675 Far Ultraviolet Cameras Experiment. Ultraviolet Technology V, San Diego, CA. Meeting 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2282**:184-201, 1994.
- Carruthers, T. F.; Duling, I. N., and Dennis, M. L. Active-Passive Modelocking in a Single-Polarization Erbium Fiber Laser. *Electronics Letters*, **30**(13):1051-1053, 1994.

- Castner, E. W.; Chang, Y. J.; Melinger, J. S., and McMorow, D. Femtosecond Fourier-Transform Spectroscopy of Low-Frequency Intermolecular Motions in Weakly Interacting Liquids. *Journal of Luminescence*, **60-1**:723-726, 1994.
- Cervenka, P. and Demoustier, C. Postprocessing and Corrections of Bathymetry Derived from Sidescan Sonar Systems - Application with Seamarc-II. *IEEE Journal of Oceanic Engineering*, **19**(4):619-629, 1994.
- Chakarian, V.; Durbin, T. D.; Varekamp, P. R., and Yarmoff, J. A. Radiation-Damage of Epitaxial CaF_2 Overlayers on Si(111) Studied by Photon-Stimulated Desorption - Formation of Surface-F Centers. *Journal of Vacuum Science A*, **12**:2159-, 1994.
- Chan, L. Y. and Stenzel, R. L. Beam Scattering and Heating at the Front of an Electron Beam Injected into a Plasma. *Physics of Plasmas*, **1**(6):2063-2071, 1994.
- Chang, E. J. and Maxey, M. R. Unsteady-Flow About a Sphere at Low to Moderate Reynolds-Number. 1. Oscillatory Motion. *Journal of Fluid Mechanics*, **277**: 347-379, 1994.
- Chang, E. L. Can Ether Liposomes Be Used for Oral Vaccines. *Biophysical Journal.*, **66**(2):A383, 1994.
- Chang, E. L. Unusual Thermal-Stability of Liposomes Made from Bipolar Tetraether Lipids. *Biochemical and Biophysical Research Communications*, **202**(2):673-679, 1994.
- Chang, S.; Peckerar, M. C. and Marrian, C. Maximum Entropy Co-Processor for Computed Tomography. 1994 IEEE Custom Integrated Circuits Conference, San Diego, CA. Meeting. 1-4 MAY 1993. New York, NY: Institute of Electrical and Electronics Engineers, 1979 -. 343-346, 1994.
- Chang, S. W. and Holt, T. R. Impact of Assimilating SSM/I Rainfall Rates on Numerical Prediction of Winter Cyclones. *Monthly Weather Review*, **122**(1):151-164, 1994.
- Chaturvedi, P. K.; Keskinen, M. J.; Ossakow, S. L., and Fedder, J. A. Effects of Field Line Mapping on the Gradient-Drift Instability in the Coupled E and F Region High-Latitude Ionosphere. *Radio Science*, **29**(1):317-335, 1994.
- Cheek, G. T. and O'Grady, W. E. Measurement of H/D Uptake Characteristics at Palladium Using a Quartz-Crystal Microbalance. *Journal of Electroanalytical Chemistry*, **368**(1-2):133-138, 1994.
- Cheek, G. T. and O'Grady, W. E. Quartz-Crystal Microbalance Study of Platinum Amalgamation. *Abstracts of Papers of the American Chemical Society*, **208**:331-PHYS, 1994.
- Chen, C. T.; Idzerda, Y. U.; Lin, H. J.; Meigs, G.; Ho, G., and Smith, N. V. Experimental Investigation of the Magnetic Circular-Dichroism Sum-Rules. *Journal of Applied Physics*, **75**(10):6378, 1994.
- Chen, J. and Holland, D. L. Reply to "Comment on 'Physics of the Magnetotail Current Sheet' [Phys. Fluids B5, 2663 (1993)]". *Physics of Plasmas*, **1**(3):803-804, 1994.
- Chen, J. K.; Vandermeer, R. A., and Reynolds, W. T. Effects of Alloying Elements upon Austenite Decomposition in Low-C Steels. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(7):1367-1379, 1994.
- Chen, V. C. Radar Ambiguity Function, Time-Varying Matched-Filter, and Optimum Wavelet Correlator. *Optical Engineering*, **33**(7):2212-2217, 1994.

- Chen, X. H.; Gonsalves, K. E.; Chow, G. M., and Xiao, T. D. Homogeneous Dispersion of Nanostructured Aluminum Nitride in a Polyimide Matrix. *Advanced Materials*, **6**(6):481-484, 1994.
- Chenault, D. B. and Chipman, R. A. Measurements of Linear Diattenuation and Linear Retardation Spectra with a Rotating Sample Spectropolarimeter (Vol 32, Pg 3513, 1993). *Applied Optics*, **33**(7):1145, 1994.
- Chenault, D. B.; Chipman, R. A., and Lu, S. Y. Electrooptic Coefficient Spectrum of Cadmium Telluride. *Applied Optics*, **33**:7382-, 1994.
- Cheng, C. C. Soft-X-Ray Observations of Helmet Structures from SXT Yohkoh. *Space Science Reviews*, **70**(1-2):273-278, 1994.
- Cheng, C. C.; Rilee, M., and Uchida, Y. Thermal and Nonthermal Energizations in Solar Flares: Soft X-Ray Spectroscopic and Hard X-Ray Observations. Proceedings of Kofu Symposium: New Look at the Sun with Emphasis on Advanced Observations of Coronal Dynamics and Flares, 6-10 SEP, 1993. Nagano, Japan: Nobeyama Radio Observatory, 1994. NRO Report, **360**: 213-216, 1994.
- Cherkis, N. Z. P.; Steinmetz, S.; Schreiber, R.; Thiede, J., and Theiner, J. Vesteris Seamount - An Enigma in the Greenland Basin. *Marine Geophysical Researches*, **16**(4):287-301, 1994.
- Chernyu, K.; Chou, W. C.; Twardowski, A.; Yu, W. Y.; Lee, S. T.; Petrou, A.; Warnock, J., and Jonker, B. T. Line-Shape Analysis of Reflectance Spectra from ZnSe/Zn_{0.99}Fe_{0.01}Se Spin Superlattices. *Journal of Applied Physics*, **75**(6):2988-2991, 1994.
- Chin-Bing, S. A.; King, D. B.; Murphy, J. E., and Li, G. Long-Range CW and Time-Domain Simulations of Ocean Acoustic Scatter from Mid-Atlantic Ridge Corners. Automatic Object Recognition IV, Orlando, FL. Meeting. 6-7 April 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 188-194, 1994.
- Choi, I. S.; Roland, C. M., and Bissonnette, L. C. An Elastomeric Ejection System. *Rubber Chemistry and Technology*, **67**(5):892-903, 1994.
- Choi, J. B.; Meyer, J. R.; Hoffman, C. A.; Karczewski, G.; Furdyna, J. K.; Yoo, K. H., and Faurie, J. P. Reflectivity, Transport and Magneto-optical Studies of Holes in the P-Type HgZnTe/CdTe Superlattice. *Surface Science*, **305**(1-3):285-289, 1994.
- Choi, J. B.; Yoo, K. H.; Han, J. W.; Kang, T. W.; Meyer, J. R.; Hoffman, C. A.; Karczewski, G.; Furdyna, J. K., and Faurie, J. P. Transport and Optical-Properties of Holes in P-Type Zero-Band-Gap Hg(1-X)Zn(X)Te/CdTe Superlattices. *Physical Review B-Condensed Matter*, **49**(16):11060-11065, 1994.
- Choi, J. J.; Armstrong, C. M.; Ganguly, A. K., and Barsanti, M. L. Design of a 50 Kw, Wide-Band Ka-Band Slow-Wave Cyclotron Amplifier. *IEEE Transactions on Plasma Science*, **22**(4):465-475, 1994.
- Choi, J. J.; Armstrong, C. M.; Ganguly, A. K.; Calise, F., and Parker, R. K. Broadband Folded Waveguide Gyro-TWT. Sakai, K. and Yoneyama, T., eds. 19th International Conference on Infrared and Millimeter Waves, Digest, Sandai, Japan. Meeting. Oct, 1994. Japan Society of Applied Physics; 1994: 419-420.
- Choi, J. J.; Ganguly, A. K., and Armstrong, C. M. Frequency Multiplied Harmonic Gyrotron-Travelling-Wave-Tube Amplifier. *Physics of Plasmas*, **1**(6):2058-2062, 1994.

- Choi, L.-S. and Kim, O.-K. Fluorescence Probe Studies of Poly(Acrylic Acid)-Cationic Surfactant Interactions Following High Shear. *Langmuir*, **10**(1):57-60, 1994.
- Chou, W. C.; Twardowski, A.; Chernyu, K.; Chen, F. R.; Hua, C. R.; Jonker, B. T.; Yu, W. Y.; Lee, S. T.; Petrou, A., and Warnock, J. Optical Study of Strained ZnSe/GaAs and ZnMnSe/GaAs Epilayers. *Journal of Applied Physics*, **75**(6):2936-2940, 1994.
- Chouffani, K.; Uberall, H.; Dougherty, R.; Fusina, R.; Genz, H.; Hoffmann-Stascheck, P.; Nething, U., and Richter, A. A Comparative-Study of Coherent Bremsstrahlung and Channeling Radiation. *Nuclear Instruments & Methods in Physics Research Section B- Beam Interactions with Materials and Atoms*, **90**(1-4):133-136, 1994.
- Chow, G. M.; Xiao, T. D.; Chen, X., and Gonsalves, K. E. Compositional and Thermal Effects on Chemically Processed AlN-BN Nanocomposite Powders. *Journal of Materials Research*, **9**(1):168-175, 1994.
- Chrissey, L. A.; Roberts, P. M.; Benezra, V. I.; Dressick, W.; Dulcey, C. S., and Calvert, J. M. Selective Attachment of Synthetic DNA to Self-Assembled-Monolayer Functionalized Surfaces. Biomolecular Materials by Design, Boston, MA. Meeting. 28 NOV-2 DEC, 1993. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **330**: 179-184, 1994.
- Christian, T. R.; Frank, P. A., and Houston, B. H. Real-Time Analog and Digital Demodulator for Interferometric Fiber Optic Sensors. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation, Orlando, FL. Meeting. 14-16 Feb, 1994. 324-336, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 324-336, 1994.
- Christianson, K. A.; Roussos, J. A., and Anderson, W. T. Accelerated Life Testing and Failure Analysis of Single-Stage MMIC Amplifiers. *IEEE Transactions on Electron Devices*, **41**(8):1435-1443, 1994.
- Christodoulou, D.; Wink, D. K.; George, C. F.; Saavedra, J. E., and Keefer, L. K. Nitric Oxide Nucleophile Complexes as Ligands - Structural Aspects of the Coordinated Nonoate Functional-Group in Novel Mixed-Ligand, Non-Nitrosyl Metal-Complexes. Nitrosamines and Related N-Nitroso Compounds; Chemistry and Biochemistry, 1994. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **553**, 307-308, 1994.
- Chu, W.; Foster, K. W.; Shirey, L. M.; Rhee, K. W.; Kosakowski, J.; Isaacson, I. P.; McCarthy, D.; Eddy, C. R.; Dobisz, E. A.; Marrian, C. R. K., and Peckerar, M. C. Reactive Ion Etching of High-Aspect-Ratio 100 Nm Linewidth Features in Tungsten. *Applied Physics Letters*, **64**(16):2172-2174, 1994.
- Chubb, S. R. Sun-Induced Variations in Time in the Global Positioning System. *Astrophysics and Space Science*, **213**(1):63-74, 1994.
- Clark, D. L.; Chrissey, L. A.; Campbell, J. R., and Davidson, E. A. Non-Sequence-Specific Antimalarial Activity of Oligodeoxynucleotides. *Molecular and Biochemical Parasitology*, **63**(1):129-134, 1994.
- Clark, R. W.; Davis, J., and Giuliani, J. X-ray-emission from an Intense Ultra-short Pulse Laser - Aluminum Target Interaction. Ultrashort Wavelength Lasers II, San Diego, CA. Meeting. 12-13 JUL, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2012**: 246, 1994.
- Claussen, M. J.; Gaume, R. A.; Johnston, K. J., and Wilson, T. L. The W3 IRS-5 Cluster - Radio-Continuum and Water Maser Observations. *Astrophysical Journal*, **424**(1):L41-L44, 1994.

- Coffey, S. L.; Deprit, A., and Deprit, E. Frozen Orbits for Satellites Close to an Earth-Like. *Celestial Mechanics & Dynamical Astronomy*, **59**(1):37-72, 1994.
- Cohen, R. E.; Mehl, M. J., and Papaconstantopoulos, D. A. Tight-Binding Total-Energy Method for Transition and Noble-Metals. *Physical Review B-Condensed Matter*, **50**(19):14694-14697, 1994.
- Collins, G. E. and Rose-Pehrsson, S. L. Fluorescent Detection of Hydrazine, Monomethylhydrazine, and 1,1-Dimethylhydrazine by Derivatization with Aromatic Dicarbaldehydes. *Analyst*, **119**(8):1907-1913, 1994.
- Collins, M. D. Generalization of the Split-Step Padé Solution. *Journal of the Acoustical Society of America*, **96**(1):382-385, 1994.
- Collins, M. D. and Kuperman, W. A. Inverse Problems in Ocean Acoustics. *Inverse Problems*, **10**(5):1023-1040, 1994.
- Collins, M. D. and Kuperman, W. A. Overcoming Ray Chaos. *Journal of the Acoustical Society of America*, **95**(6):3167-3170, 1994.
- Collins, M. D.; Makris, N. C., and Fialkowski, L. T. Noise Cancellation and Source Localization. *Journal of the Acoustical Society of America*, **96**(3):1773-1776, 1994.
- Collison, A. J. and Nedoluha, G. E. Pumping of Main Line OH Masers in the Circumstellar Envelopes of OH/Infrared Stars. *Astrophysical Journal*, **422**(1):193-204, 1994.
- Colmenero, J.; Alegria, A.; Santangelo, P. G.; Ngai, K. L., and Roland, C. M. Detailed Correspondences Between Dielectric and Mechanical Relaxations in Poly(Vinylethylene). *Macromolecules*, **27**(2):407-410, 1994.
- Colmenero, J.; Arbe, A.; Alegria, A., and Ngai, K. L. Q-Dependence of the Relaxation-Times of the Alpha-Relaxation as Observed by Quasi-Elastic Neutron-Scattering. *Journal of Non-Crystalline Solids*, **172**:229-233, 1994.
- Colton, M. C. and Poe, G. A. Shared Processing Program, Defense Meteorological Satellite Program, Special Sensor Microwave Imager Algorithm Symposium, 8-10 June 1993. *Bulletin of the American Meteorological Society*, **75**(9):1663-1669, 1994.
- Colton, R. J. Atomic-Force Microscopy - Surface Forces and Nanomechanics. *Abstracts of Papers of the American Chemical Society*, **208**:376-PHYS, 1994.
- Connor, B. J.; Siskind, D. E.; Tsou, J. J.; Parrish, A., and Remsberg, E. E. Ground-Based Microwave Observations of Ozone in the Upper-Stratosphere and Mesosphere. *Journal of Geophysical Research-Atmospheres*, **99**(D8):16757-16770, 1994.
- Cook, J.; Love, G. G.; Burk, S. D., and Thompson, W. T. 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 73-74, 1994.
- Cook, J.; Vogel, G., and Love, G. Operational Support for Range-Dependent Radio Propagation Model. NATO AGARD (Advisory Group for Aerospace Research and Development) Conference, Bremerhaven, DE. Meeting. 19-22 Sep, 1994. 1-4, 1994.

- Cook, J. W. Magnetic Fields, Oscillations, and Heating in the Quiet Sun Temperature Minimum Region from Ultraviolet Observations at 1600 Å. Infrared Solar Physics; Proceedings of the 154th Symposium of the International Astronomical Union, Tucson, AZ. 2-6 MAR, 1992. Dordrecht; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **154**: 287-294, 1994.
- Cook, J. W.; Keenan, F. P., and Bhatta, A. K. The Allowed Lines of O IV Near 1340 Å in High Electron Density Solar Flares. *Astrophysical Journal*, **425**(2):861-864, 1994.
- Cook, J. W.; Keenan, F. P.; Harra, L. K., and Tayal, S. S. Coronal Electron Density Diagnostic from Fe XII. *Astrophysical Journal*, **429**(2):924-927, 1994.
- Cooper, A. L.; Chubb, S. R.; Askari, F.; Valenzuela, G. R.; Bennett, J. R., and Keller, W. C. Radar Surface Signatures for the Two-Dimensional Tidal Circulation Over Phelps Bank, Nantucket Shoals: A Comparison Between Theory and Experiment. *Journal of Geophysical Research-Oceans*, **99**(C4):7865-7883, 1994.
- Cooper, K. P. and Ayers, J. D. Evaluation of Atomization by the Rapidly Spinning Cup Process. *International Journal of Powder Metallurgy*, **30**(1):77-89, 1994.
- Cory, D. G.; Miller, J. B., and Garroway, A. N. Chemically Resolved Solid-State NMR Images of Polymers. *Macromolecular Symposia*, **86**:259-269, 1994.
- Costich, O. and Kang, M. Maintaining Multilevel Transaction Atomicity in MLS Database Systems with Replicated Architecture. Database Security, VII - Status and Prospects: Results of the IFIP WG 11.3 Workshop on Database Security, Lake Guntersville, AL. Meeting. 12-15 SEP, 1993. Amsterdam; New York, NY: North-Holland, 1994. *IFIP Transactions. A. Computer Science and Technology*, **A-47**, 329-355, 1994.
- Costich, O.; Kang, M. H., and Froscher, J. N. The Sintra Data Model - Structure and Operations. Database Security VIII. Amsterdam; New York, NY: North-Holland, 1994. *IFIP Transactions. A. Computer Science and Technology*, **60**, 97-110, 1994.
- Costley, R. D. and Berthelot, Y. H. Dispersion Curve Analysis of Laser-Generated Lamb Waves. *Ultrasonics*, **32**(4):249-253, 1994.
- Cotal, H. L.; Summers, G. P., and Messenger, S. R. Radiation Effects of Two-Terminal, Monolithic InP/Ga_{0.47}In_{0.53} as Tandem Solar Cells. 6th International Conference on Indium Phosphide and Related Materials, Santa Barbara, CA. Meeting, 28-31 Mar, 1994. New York, NY: IEEE, 19- . 496-499, 1994.
- Cotal, H. L.; Walters, R. J.; Messenger, S. R. and Summers, G. P. Performance of Proton- and Electron-Irradiated, Two-Terminal, Monolithic InP/Ga_{0.47}In_{0.53}As Tandem Solar Cells. IEEE Photovoltaics Specialists Conference, 24. Meeting. 1994. [New York, NY: Institute of Electrical and Electronics Engineers, 1994.] 2088, 1994.
- Couchman, L.; Roy, D. N. G., and Ramm, A. G. Inversion of Low-Frequency Subsurface Data in a Finite-Depth Ocean. *Applied Mathematics Letters*, **7**(1):11-14, 1994.
- Coughlin, C. S. and Capps, R. N. Particle-Size Effects in the Electrorheological Behavior of Silica-Poly(Dimethylsiloxane) Mixtures. Smart Structures and Materials 1994: Smart Structures and Intelligent Systems, Orlando, FL. Meeting. 14-16 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2190**: 19-, 1994.

- Crabbe, J. R.; Campbell, J. R.; Thompson, L.; Walz, S. L., and Schultz, W. W. Biodegradation of a Colloidal Ester-Based Polyurethane by Soil Fungi. *International Biodeterioration & Biodegradation*, **33**(2):103-113, 1994.
- Crawford, G. P.; Geer, R. E.; Naciri, J.; Shashidhar, R., and Ratna, B. R. Influence of the Electric Field on the Quasibookshelf Stripe Deformation in an Electroclinic Liquid Crystal. *Applied Physics Letters*, **65**(23):2937-2939, 1994.
- Crawford, G. P.; Polak, R. D.; Scharkowski, A.; Chien, L. C.; Zumer, S. Captured Liquid Crystalline Order in Polymer Networks. Liquid Crystal Materials, Devices, and Applications III, San Jose, CA. Meeting. 8-9 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2175**, 34-41, 1994.
- Crepeau, P. J. and Halford, K. W. Reed-Solomon Coding Performance with Errors and Erasures Decoding on a Rayleigh Fading Channel. IEEE MILCOM [Military Communications Conference], Fort Monmouth, NJ. Meeting. 17-26 Oct, 1994. New York, NY: Institute of Electrical and Electronics Engineers, c1982- .1023-1026, 1994.
- Crespo, P.; Hernando, A.; Escorial, A. G.; Kemner, K. M., and Harris, V. G. Extended X-Ray-Absorption Fine-Structure Studies of Heat-Treated FCC-Fe₅₀Cu₅₀ Powders Processed via High-Energy Ball-Milling. *Journal of Applied Physics*, **76**(10):6322-6324, 1994.
- Crowe, L. M.; Spargo, B. J.; Ionedo, T.; Beaman, B. L., and Crowe, J. H. Interaction of Cord Factor (Alpha,Alpha'-Trehalose-6,6'-Dimycolate) with Phospholipids. *Biochimica et Biophysica Acta-Biomembranes*, **1194**(1):53-60, 1994.
- Culbertson, J. C. and Newman, H. S. The Discovery of a Technique to Measure the Spatial Profile of Microwave Frequency Superconducting Current Densities. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2250**: 310-, 1994.
- Culhane, J. L.; Phillips, A. T.; Indakoide, M.; Kosugi, T.; Fludra, A.; Kurokawa, H.; Makishima, K.; Pike, C. D.; Sakao, T.; Sakurai, T.; Doschek, G. A., and Bentley, R. D. Yokkoh Observations of the Creation of High-Temperature Plasma in the Flare of 16-December-1991. *Solar Physics*, **153**(1-2):307-336, 1994.
- Dacol, D. K. Path-Integral Solution of the Time-Domain Progressive Wave-Equation and Wave-Propagation in Random-Media. *Waves in Random Media*, **4**(2):117-126, 1994.
- Dagenais, D. M. and Bucholtz, F. Measurement and Origin of Magnetostrictive Noise Limitation in Magnetic Fiberoptic Sensors. *Optics Letters*, **19**(21):1699-1701, 1994.
- Dagenais, D. M.; Bucholtz, F., and Dandridge, A. Experimental-Evidence of Transducer Self-Noise in Magnetostrictive Fiberoptic Sensors. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**, p. 415-, 1994.
- Dagley, I. J. and Flippen-Anderson, J. L. Synthesis of Cyclic Nitramines from Products of the Cyclocondensation Reaction of Guanidine with 2,3,5,6-Tetrahydroxypiperazine-1,4-Dicarbaldehyde. *Australian Journal of Chemistry*, **47**(11):2033-2045, 1994.

- Dahlburg, R. B. On the Ideal Initial Value Problem for the Neutral Sheet. *Physics of Plasmas*, **1**(9):3053-3058, 1994.
- Dahlburg, R. B. and Karpen, J. T. Transition to Turbulence in Solar Surges. *Astrophysical Journal*, **434**(2):766-772 (+9 plates), 1994.
- Dahlburg, R. B. and Karpen, J. T. Turbulent Transition in Solar Surges. *Space Science Reviews*, **70**(1-2):93-96, 1994.
- Dahmani, R.; Salamanca-Riba, L.; Nguyen, N. V.; Chandler-Horowitz, D., and Jonker, B. T. Determination of the Optical Constants of ZnSe Films by Spectroscopic Ellipsometry. *Journal of Applied Physics*, **76**(1):514-517, 1994.
- Dahmani, R.; Salamanca-Riba, L.; Nguyen, N. V.; Chandler-Horowitz, D., and Jonker, B. T. Strain Effects on the Energy-Bands of ZnSe Films Grown on GaAs Substrates by Spectroscopic Ellipsometry. *Applied Physics Letters*, **64**(26):3620-3622, 1994.
- Dale, C. J.; Chen, L.; McNulty, P. J.; Marshall, P. W., and Burke, E. A. A Comparison of Monte-Carlo and Analytic Treatments of Displacement Damage in Si Microvolumes. *IEEE Transactions on Nuclear Science*, **41**(6):1974-1983, 1994.
- Damodaran, K. V.; Merz, K. M., and Gaber, B. P. Interaction of Small Peptides with Lipid Bilayers - Molecular-Dynamics and Free-Energy Simulation Studies. *Biophysical Journal*, **66**(2):A392, 1994.
- Dandridge, A. The Development of Fiber Optic Sensor Systems. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 154-, 1994.
- Dandridge, A. and Cogdell, G. B. Fiber Optic Sensors -- Performance, Reliability, Smallness. *Sea Technology*, **35**(5):31-&, 1994.
- Dandridge, A.; Wang, C. C.; Tveten, A. B., and Yurek, A. M. Performance of 3X3 Couplers in Fiber Optic Sensor Systems. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 549-, 1994.
- Dasgupta, A. and Whitney, K. G. Dielectronic Recombination Calculations for Mo(34+) to Investigate the Scalability of Oxygen to Fluorine Recombination Data. *Journal of Physics B*, **28**:515-529, 1994.
- Dasgupta, A. and Whitney, K. G. Z-Scaled Data for Dielectronic Recombination from O-Like to F-Like Ions. *Atomic Data and Nuclear Data Tables*, **58**(1):77-99, 1994.
- Dashen, R. and Wurmser, D. A New Theory for Scattering from a Surface (Vol 32, Pg 971, 1991). *Journal of Mathematical Physics*, **35**(3):1441, 1994.
- Dave, P. R.; Forohar, F.; Axenrod, T.; Bedford, C. D.; Chaykovsky, M.; Rho, M. K.; Gilardi, R., and George, C. Novel Spiro Substituted Cyclotriphosphazenes Incorporating Ethylenedinitramine Units. *Phosphorus Sulfur and Silicon and the Related Elements*, **90**(1-4):175-184, 1994.

- Davidson, B. N. and Pickett, W. E. Dynamics at a Step on the Diamond (111) Surface. Diamond, SiC and Nitride Wide Bandgap Semiconductors, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, 1994. Materials Research Society Symposium Proceedings, **339**: 27, 1994.
- Davidson, B. N. and Pickett, W. E. Graphite-Layer Formation at a Diamond (111) Surface Step. *Physical Review B-Condensed Matter*, **49**(20):14770-14773, 1994.
- Davidson, B. N. and Pickett, W. E. Tight-Binding Study of Hydrogen on the C(111), C(100), and C(110) Diamond Surfaces. *Physical Review B-Condensed Matter*, **49**(16):11253-11267, 1994.
- Davies, M. A.; Ratna, B. R., and Rudolph, A. S. Structural and Thermodynamic Investigation of Filament Formation in a Diacetylenic Phospholipid. *Langmuir*, **10**(9):2872-2876, 1994.
- Davis, J.; Clark, R. W., and Giuliani, J. L. Ultra-Short Pulse Laser-Produced Aluminum Plasma. Laser Interaction and Related Plasma Phenomena: 11th International Workshop, Monterey, CA. Meeting. OCT, 1993. New York : American Institute of Physics, c1994. AIP Conference Proceedings, **318**: 18-, 1994.
- Davis, J.; Clark, R. W., and Giuliani, J. L. Ultrashort Pulse Laser Produced Plasmas. X-Ray Lasers 1994. Proceedings - 4th International Colloquium on X-Ray Lasers, Williamsburg, VA. Meeting. May, 1994. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **332**: 126-133, 1994.
- Davis, J.; Giuliani, J.; Mulbrandon, M., and Cochran, F. L. Dense Z-Pinches; Third International Conference, London, UK, 1993. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings **299**: 112-120, 1994.
- Davis, M. A.; Bellemore, D. G., and Kersey, A. D. Structural Strain Mapping Using a Wavelength/Time Division Addressed Fiber Bragg Grating Array. Second European Conference on Smart Structures and Materials, Glasgow, Scotland. Meeting. 12-14 Oct, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2361**:342-345, 1994.
- Davis, M. A.; Berkoff, T. A., and Kersey, A. D. Demodulator for Fiber Optic Bragg Grating Sensors Based on Fiber Wavelength Division Couplers. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation, Orlando, FL. Meeting. 14-16 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 86-93, 1994.
- Davis, M. A. and Kersey, A. D. All-Fiber Bragg Grating Strain-Sensor Demodulation Technique Using a Wavelength-Division Coupler. *Electronics Letters*, **30**(1):75-77, 1994.
- Davis, M. A. and Kersey, A. D. Fiber Fourier-Transform Spectrometer for Decoding Bragg Grating Sensors. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 167-, 1994.
- Davis, M. A. and Kersey, A. D. Visibility-Tuning Technique for Addressing Fiber Sensor Networks. Distributed and Multiplexed Fiber Optic Sensors IV, San Diego, CA. Meeting. 27-28 July 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2294**:121-128, 1994.

- Davis, M. A.; Kersey, A. D.; Berkoff, T. A., and Bellemore, D. G. Subcarrier Based, Path-Integrating Strain Sensor Array Utilizing Fiber Bragg Gratings. Distributed and Multiplexed Fiber Optic Sensors IV, San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2294**: 93-99, 1994.
- Davis, M. A.; Kersey, A. D.; Sirkis, J., and Friebele, E. J. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation, Orlando, FL. Meeting. 14-16 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 94-102, 1994.
- Dean, C. E. and Werby, M. F. The Prediction of Pseudo-Stoneley Resonances Via Proper Fluid Loading of Thin Shell Theories. International Conference on Theoretical and Computational Acoustics, Mystic, CT. Meeting. 5-9 JUL 1993. Singapore; New Jersey: World Scientific, c1994. 119-125, 1994.
- Dean, C. E. and Werby, M. F. The Study of Pulse Returns from Elongated Elastic Shell and the Extraction of Target Characteristics. Automatic Object Recognition IV, Orlando, FL. Meeting. 6-7 April 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 149-160, 1994.
- DeCosta, B. R.; George, C.; Li, G. Y., and He, X. S. High-Yield Trifluoroacetic Acid-Mediated Intermolecular Condensation of 1-[2-Benzo[B]Thienyl]Cycloalkanols. *Journal of Organic Chemistry*, **59**(2):482-485, 1994.
- Decultot, D.; Lecroq, F.; Maze, G.; Ripoché, J.; Werby, M. F.; Niemiec, J.; Bao, X. L., and Uberall, H. The Resonances of Finite-Length Elastic Cylinders Excited by Sound Scattering. International Conference on Theoretical and Computational Acoustics, Mystic, CT. Meeting. 5-9 JUL 1993. Singapore; New Jersey: World Scientific, c1994. 163-175, 1994.
- Deeney, C.; Lepell, P. D.; Failor, B. H.; Meachum, J. S.; Wong, S.; Thornhill, J. W.; Whitney, K. G., and Coulter, M. C. Radius and Current Scaling of Argon K-Shell Radiation. *Journal of Applied Physics*, **75**(6):2781-2788, 1994.
- DelSanto, P. P.; Schechter, R. S.; Chaskelis, H. H.; Mignogna, R. B., and Kline, R. Connection Machine Simulation of Ultrasonic Wave-Propagation in Materials. 2. The 2-Dimensional Case. *Wave Motion*, **20**(4):295-314, 1994.
- Demets, C.; Gordon, R. G., and Vogt, P. Location of the Africa-Australia-India Triple Junction and Motion Between the Australian and Indian Plates - Results From an Aeromagnetic Investigation of the Central Indian and Carlsberg Ridges. *Geophysical Journal International*, **119**(3):893-930, 1994.
- Deniz, A. V. and Obenschain, S. P. A KrF Oscillator System with Uniform Profiles. *Optics Communications*, **106**(1-3):113-122, 1994.
- Dennis, B. R.; Emslie, A. G.; Canfield, R.; Doschek, G. A.; Lin, R. P., and Ramaty, R. The NASA High-Energy Solar Physics Mission. High-Energy Solar Phenomena - A New Era of Spacecraft Measurements. Proceedings of the Compton Gamma-Ray Observatory Solar Workshop: 230-243, 1994.
- Dennis, M. L. and Diels J.-C. M. Analysis of a Ring-Laser Gyroscope with Intracavity Phase-Conjugate Coupling. *Applied Optics*, **33**(9): 1659-1672, 1994.

- Dennis, M. L.; Dixon, J. W., and Aggarwal, I. High-Power Up-Conversion Lasing at 810nm, in Tm-Zblan Fiber. *Electronics Letters*, **30**(2):136-137, 1994.
- Dennis, M. L. and Duling, I. N. Experimental Study of Sideband Generation in Femtosecond Fiber Lasers. *IEEE Journal of Quantum Electronics*, **30**(6):1469-1477, 1994.
- Dennis, M. L. and Duling, I. N. Third-Order Dispersion in Femtosecond Fiber Lasers. *Optics Letters*, **19**(21):1750-1752, 1994.
- Deppe, J. and Feldman, J. L. Energy Current and Thermal-Conductivity for Josephson-Junction Array Models of Granular Superconductors. *Physical Review B-Condensed Matter*, **50**(9):6479-6482, 1994.
- Deppe, J.; Lill, J. V.; Godbey, D. J., and Hobart, K. D. Kinetic Monte-Carlo Simulations of Ge Segregation During Epitaxial-Growth of Si-Si_xGe_{1-x} Heterostructures. Compound Semiconductor Epitaxy, San Francisco, CA. Meeting. 4-7 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **340**: 47-, 1994.
- Deppe, J.; Wallis, R. F.; Nachev, I., and Balkanski, M. 2-Dimensional Hopping Diffusion Across Material Interfaces. *Journal of Physics and Chemistry of Solids*, **55**(8):759-766, 1994.
- Dere, K. P. Explosive Events, Magnetic Reconnection, and Coronal Heating. The Solar Corona: Proceedings of Symposium E1 of the COSPAR Twenty-Ninth Plenary Meeting. Advances in Space Research, **14**: 13-22, 1994.
- Dere, K. P. Solar Mass-Flow in Fine-Scale Structures. *Space Science Reviews*, **70**(1-2):21-30, 1994.
- Dere, K. P. and Martin, S. F. HRTS Observations of Explosive Events in a Flaring Active Region. Proceedings of Kofu Symposium: New Look at the Sun with Emphasis on Advanced Observations of Coronal Dynamics and Flares, 6-10 SEP, 1993. Nagano, Japan: Nobeyama Radio Observatory, 1994. NRO Report, **360**: 289-292, 1994.
- Derecskei-Kovacs, A.; Dunlap, B. I.; Lipscomb, W. N.; Lowrey, A.; Marynick, D. S., and Massa, L. Quantum-Chemical Studies of Boron Fullerene Analogs. *Inorganic Chemistry*, **33**(25):5617-5619, 1994.
- Derman, S. and Anderson, W. T. Semiconductor Reliability - Another Field for Physicists. *The Physics Teacher*, 226-230, 1994.
- Dermer, C. D. Equipartition Plasmas Near Accreting Black Holes. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 541-545, 1994.
- Dermer, C. D. and Schlickeiser, R. Gamma-Ray Bursts and Gamma-Ray Blazars. Gamma-Ray Bursts, Second Workshop, Huntsville, AL. Meeting. OCT, 1993. New York, NY: American Institute of Physics, c1994. 510-514, 1994.
- Dermer, C. D. and Schlickeiser, R. On the Location of the Acceleration and Emission Sites in Gamma-Ray Blazars. *Astrophysical Journal Supplement Series*, **90**(2):945-948, 1994.
- Dermer, C. D. and Sturmer, S. J. On the Energetics and Number of Gamma-Ray Pulsars. *Astrophysical Journal*, **420**(2):L75-L78, 1994.

- Deutsch, J. M. and Zacher, R. A. Probability-Distribution for a Multifractal Field. *Physical Review E*, **49**(1):R8-R10, 1994.
- Dickey, J. O.; Marcus, S. L.; Hide, R.; Eubanks, T. M., and Boggs, D. H. Angular-Momentum Exchange Among the Solid Earth, Atmosphere, and Oceans - A Case-study of the 1982-1983 El Nino Event. *Journal of Geophysical Research-Solid Earth*, **99**(B12): 23921-23937, 1994.
- Divenere, A.; Yi, X. J.; Hou, C. L.; Wang, H. C.; Chen, J.; Ketterson, J. B.; Wong, G. K.; Meyer, J. R.; Hoffman, C. A., and Bartoli, F. J. Molecular-Beam Epitaxy Growth of Bi Epilayers and Bi-CdTe Superlattices. *Journal of Vacuum Science & Technology B*, **12**(2):1136-1139, 1994.
- Dmitriev, V. A.; Irvine, K.; Spencer, M., and Kelner, G. Low-Resistivity (Similar-to- $10^{-5}\Omega\text{-cm}_2$) Ohmic Contacts to 6H Silicon-Carbide Fabricated Using Cubic Silicon-Carbide Contact Layer. *Applied Physics Letters*, **64**(3):318-320, 1994.
- Dominguez, D. D.; Mowery, R. L., and Turner, N. H. Friction and Durabilities of Well-Ordered, Close-Packed Carboxylic-Acid Monolayers Deposited on Glass and Steel Surfaces by the Langmuir-Blodgett Technique. *Tribology Transactions*, **37**(1):59-66, 1994.
- Donohue, K. A.; Wimbush, M.; Zhu, X. L.; Chiswell, S. M.; Lukas, R.; Miller, L., and Hurlburt, H. E. Five Years Central Pacific Sea Level from In-Situ Array, Satellite Altimeter and Numerical Model. *Atmosphere-Ocean*, **32**(2):495-506, 1994.
- Donovan, E. P.; Hubler, G. K.; Mudholkar, M. S., and Thompson, L. T. Ion-Beam-Assisted Deposition of Molybdenum Nitride Films. *Surface & Coatings Technology*, **66**(1-3):499-504, 1994.
- Donskoy, D. M. and Blue, J. E. A New Concept of a Low-Frequency Underwater Sound Source. *Journal of the Acoustical Society of America*, **95**(4):1977-1982, 1994.
- Dorsey, P. C.; Chrisey, D. B.; Horwitz, J. S.; Lubitz, P., and Auyeung, R. C. Y. Oriented Barium Hexaferrite Thick-Films Grown on C-Plane and M-Plane Sapphire Substrates. *IEEE Transactions on Magnetics*, **30**(6):4512-4517, 1994.
- Doschek, G. A. The Electron Density in the Localized Bright Regions at the Tops of Flare Loops. Proceedings of Kofu Symposium: New Look at the Sun with Emphasis on Advanced Observations of Coronal Dynamics and Flares. Proceedings of the Japanese Solar Flare Symposium, 6-10 SEP, 1993. Nagano, Japan : Nobeyama Radio Observatory, 1994. NRO Report, **360**: 173-175, 1994.
- Doschek, G. A.; Mariska, J. T.; Strong, K. T.; Bentley, R. D.; Brown, C. M.; Culhane, J. L.; Lang, J.; Sterling, A. C., and Watanabe, T. The 1991 November 9 Flare at 03.2-UT: Observations from Yohkoh. *Astrophysical Journal*, **431**(2):888-900, 1994.
- Dougherty, R. W. and Saenz, A. W. Channeling Radiation from Quasicrystals: Methods. *Nuclear Instruments & Methods in Physics Research Section B- Beam Interactions with Materials and Atoms*, **90**(1-4):137-141, 1994.
- Doverspike, K.; Shamamian, V. A., and Freitas, J. A. Deposition of Flame Grown Diamond Films in an Enclosed Chamber. Diamond, SiC and Nitride Wide Bandgap Semiconductors, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, 1994. Materials Research Society Symposium Proceedings, **339**:313-318, 1994.

- Doyle, J. D. Air-Sea Interaction During Marine Cyclogenesis. The Life Cycles of Extratropical Cyclones, Proceedings of an International Symposium, Geophysical Institute, University of Bergen, Bergen, NO. Meeting. 27 JUN-1 Jul, 1994. Bergen, NO: Alma Mater Forlag, 1994. 61-66, 1994.
- Doyle, J. D. Coupled Ocean-Wave/Atmosphere Mesoscale Model Simulations of Cyclogenesis. Tenth Conference on Numerical Weather Prediction, Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 477-479, 1994.
- Doyle, R. J. Formation of Nitric Acid by Structural Rearrangements of Gas-Phase Ionic Complexes of Ammonium Nitrate. *Journal of the American Chemical Society*, **116**(7):3005-3011, 1994.
- Doyle, R. J. and Dunlap, B. I. Rearrangements in Negatively Charged Ammonium Nitrate Clusters. *Journal of Physical Chemistry*, **98**(34):8261-8263, 1994.
- Dreksler, S. B.; Brand, S.; Goroch, A. Evaluation of the Navy's Electro-Optical Tactical Decision Aid (EOTDA). U.S. Army 1994 Battlefield Atmospherics Conference, Las Cruces, NM. Meeting. 29 Nov-2Dec, 1994. White Sands Missile Range, NM: Battlefield Environment Directorate, U.S. Army Research Laboratory, 1994. 1-10, 1994.
- Dressick, W. J.; Dulcey, C. S.; Georger, J. H.; Calabrese, G. S., and Calvert, J. M. Covalent Binding of Pd Catalysts to Ligating Self-Assembled Monolayer Films for Selective Electroless Metal Deposition. *Journal of the Electrochemical Society*, **141**(1):210-220, 1994.
- Dobisz, E. A.; Eddy, C.; Kosakowski, J.; Glembocki, O. J.; Shirey, L. M.; Foster, K. W.; Chu, W.; Rhee, K. W.; Park, D.; Marrian, C. R. K., and Peckerar, M. C. Electron-Beam, X-Ray, and Ion-Beam Submicrometer Lithographies for Manufacturing IV. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, 178-186, 1994.
- Dozier, C. M.; Newman, D. A.; Gilfrich, J. V.; Freitag, R. K., and Kirkland, J. P. Capillary Optics for X-Ray Analysis. *Advances in X-Ray Analysis*, 499-506, 1994.
- Duling, I. N.; Chen, C. J.; Wai, P. K. A., and Menyuk, C. R. Operation of a Nonlinear Loop Mirror in a Laser Cavity. *IEEE Journal of Quantum Electronics*, **30**(1):194-199, 1994.
- Dunlap, B. I. Constraints on Small Graphitic Helices. *Physical Review B-Condensed Matter*, **60**(11):8134-8137, 1994.
- Dunlap, B. I. Relating Carbon Tubules. *Physical Review B-Condensed Matter*, **49**(8):5643-5650, 1994.
- Dunlap, B. I.; Brenner, D. W., and Schriver, G. W. Symmetrical Isomers of $C_{60}H_{36}$. *Journal of Physical Chemistry*, **98**(7):1756-1757, 1994.
- Dunlap, B. I. and Karna, S. P. Local-Density Approach to Predict Self-Consistent Linear and Nonlinear-Optical Properties of Molecules. *Abstracts of Papers of the American Chemical Society*, **208**:11-COMP, 1994.
- Dunlap, B. I. and Taylor, R. Octahedral C_{48} and Uniform Strain. *Journal of Physical Chemistry*, **98**(43):11018-11019, 1994.
- Dunn, J. H. and Lambrakos, S. G. Calculating Complex Interactions in Molecular-Dynamics Simulations Employing Lagrangian Particle Tracking Schemes. *Journal of Computational Physics*, **111**(1):15-23, 1994.

- Durfor, C. N.; Turner, D. C.; Georger, J. H.; Peek, B. M., and Stenger, D. A. Formation and Naphthoyl Derivatization of Aromatic Aminosilane Self-Assembled Monolayers: Characterization by Atomic Force Microscopy and Ultraviolet Spectroscopy. *Langmuir*, **10**(1):148-152, 1994.
- Dussault, H.; Howard, J. W.; Block, R. C.; Pinto, M. R.; Stapor, W. J., and Knudson, A. R. High-Energy Heavy-Ion-Induced Single Event Transients in Epitaxial Structures. *IEEE Transactions on Nuclear Science*, **41**(6):2018-2025, 1994.
- Earle, M. D.; Orton, R. H.; Selsor, H. D., and Steele, K. E. A Sonobuoy-Sized Expendable Air-Deployable Directional Wave Sensor. *Ocean Wave Measurement and Analysis*, 302-315, 1994.
- Easwaran, K. R. K.; Balasubramanian, S. V., and Singh, A. Conformation of Polymerizable Diacetylenic Lecithin, DC8,9PC, by H-1-NMR Spectroscopy. *Chemistry and Physics of Lipids*, **69**(2):161-165, 1994.
- Eaton, P. E.; Galoppini, E., and Gilardi, R. Alkynylcubanes as Precursors of Rigid-Rod Molecules and Alkynylcyclooctatetraenes. *Journal of the American Chemical Society*, **116**(17):7588-7596, 1994.
- Eckermann, S. D. and Vincent, R. A. First Observations of Intraseason Oscillations in the Equatorial Mesosphere and Lower Thermosphere. *Geophysical Research Letters*, **21**(4):265-268, 1994.
- Eddy, C. R.; Kosakowski, J.; Shirey, L. M.; Dobisz, E. A.; Rhee, K. W.; Chu, W.; Foster, K. W.; Marrian, C. R. K., and Peckerar, M. C. Effects of Etch Chemistry on SF₆-Based Tungsten Etching by Electron Cyclotron Resonance Reactive Ion Etching. *Journal of Vacuum Science & Technology B*, **12**(6):3351-3355, 1994.
- Eddy, C. R.; Youchison, D. L., and Sartwell, B. D. Comparison of (CH₄-O-2)-H-2 and Co-H-2 Plasmas for Low-Temperature Diamond Film Deposition by Electron-Cyclotron-Resonance Plasma-Assisted Chemical-Vapor-Deposition. *Diamond and Related Materials*, **3**(1-2):105-111, 1994.
- Edelstein, A. S. Nanoparticles from a Supersaturated Vapor. Nanophase Materials: Synthesis - Properties - Applications, Kerkyra, Greece / edited by George C. Hadjipanayis and Richard W. Siegel. Meeting. 1993. Dordrecht; London: Kluwer Academic, 1994. NATO ASI Series. Series E. Applied Sciences, **260**: 73-, 1994.
- Edelstein, A. S.; Everett, R. K.; Richardson, G. Y.; Qadri, S. B.; Altman, E. I.; Foley, J. C., and Perepezko, J. H. Intermetallic Phase Formation During Annealing of Al/Ni Multilayers. *Journal of Applied Physics*, **76**(12):7850-7859, 1994.
- Edge, A. C.; Bohringer, H.; Guzzo, L.; Collins, C. A.; Neumann, D.; Chincarini, G.; DeGrandi, S.; Dummler, R.; Ebeling, H.; Schindler, S.; Seitter, W.; Vettolani, P.; Briel, U.; Cruddace, R.; Gruber, R.; Grusky, R.; Gursky, H.; Hartner, G.; MacGillivray, H. T.; Schuecker, P.; Shaver, P.; Voges, W.; Wallin, J.; Wolter, A., and Zamorani, G. A. Giant Arc in a ROSAT-Detected Cluster of Galaxies. *Astronomy and Astrophysics*, **289**(1):L34-L36, 1994.
- Edwards, A. H.; Pickard, J. A., and Stahlbush, R. E. Interaction of Hydrogen with Defects in α -SiO₂. *Journal of Non-Crystalline Solids*, **179**:148-161, 1994.
- Elias, N. M. Base-Line Metrology System of the USNO Astrometric Interferometer. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2200**: 71-, 1994.

- Elias, N. M. and Hutter, D. J. The Base-Line Metrology System of the USNO Astrometric Interferometer. Very High Angular Resolution Imaging, 1994. Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993 / edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series. **158**:174-176, 1994.
- Elston, R.; Thompson, K. L., and Hill, G. J. Detection of Strong Iron Emission from Quasars at Redshift-Z-Greater-Than-3. *Nature*, **367**(6460):250-251, 1994.
- Elton, R. C.; Billings, D. M.; Manka, C. K.; Griem, H. R.; Grun, J.; Ripin, B. H., and Resnick, J. Spectroscopic Diagnostics in a Colliding-Blast-Wave Experiment. *Physical Review E*, **49**(2):1512-1519, 1994.
- Elton, R. C.; Grun, J.; Billings, D.-M.; Young, F. C.; Ripin, B. H.; Burris, H. R.; Resnick, J., and Ripin, D. J. Soft X-Ray Output from a Laser-Produced Plasma. *Journal of Quantitative Spectroscopy & Radiative Transfer*, **51**(1-2):89-96, 1994.
- Erickson, M. S.; Milliken, J., and George, C. F. Synthesis of Benzonaphthochrysene - In Search of Potential Precursors to Fullerenes. *Abstracts of Papers of the American Chemical Society*, **207**: 378-ORGN, 1994.
- Esarey, E.; Krall, J., and Sprangle, P. Envelope Analysis of Intense Laser Pulse Self-Modulation in Plasmas. *Physical Review Letters*, **72**(18):2887-2890, 1994.
- Esarey, E.; Krall, J.; Ting, A., and Sprangle, P. Energy Enhancement in a Self-Modulated Laser Wakefield Accelerator. Laser Interaction and Related Plasma Phenomena: 11th International Workshop, Monterey, CA. Meeting. OCT, 1993. New York : American Institute of Physics, c1994. AIP Conference Proceedings, **318**: 81-, 1994.
- Esarey, E.; Ride, S. K., and Sprangle, P. Laser Synchrotron-Radiation from Beams and Plasmas. Laser Interaction and Related Plasma Phenomena: 11th International Workshop, Monterey, CA. Meeting. OCT, 1993. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, **318**: 67-, 1994.
- Estep, L. and Arnone, R. Effect of Whitecaps on Determination of Chlorophyll Concentration from Satellite Data. *Remote Sensing of Environment*, **50**(3):328-334, 1994.
- Esterowitz, L.; Stoneman, R.; Pinto, J., and Rosenblatt, G. Diode-Pumped 2 and 3 Micron Solid-State Lasers. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2128**: 31-, 1994.
- Evans, J. S.; Strickland, D. J.; Anderson, D. E.; Conway, R. R.; Smathers, H. W.; Bakeris, D. F.; Swanson, R. A.; Chubb, T. A., and Cardon, J. G. Ultraviolet Plume Instrument Imaging from the Lase Satellite - Analysis of Broad-Band UV Auroral Limb Data. *Journal of Geophysical Research-Space Physics*. **99**(A9):17591-17600, 1994.
- Eversole, J. D.; Lin, H.-B.; Merritt, C. D., and Campillo, A. J. Absorption Spectroscopy Using Microdroplet Resonance Fluorescence Intensities. *Applied Spectroscopy*, **48**(3):373-381, 1994.
- Ewing, K. J.; Bilodeau, T.; Nau, G.; Schneider, I., and Aggarwal, I. D. Detection of Low-Levels of Trichloroethylene Vapor with Raman-Spectrometry. *Applied Optics*, **33**(27):6323-6327, 1994.

- Ewing, K. J.; Nau, G. M.; Jaganathan, J.; Bilodeau, T.; Schneider, I.; Aggarwal, I. D., and Robattille, G. Detection of Trace Levels of Mercury in Aqueous Systems via a Fiber Optic Probe. Chemical, Biochemical, and Environmental Fiber Sensors V, Boston, MA. Meeting. 7-10 SEP, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2068**: 286-295, 1994.
- Fabiny, L.; Vohra, S. T., and Bucholtz, F. Ultra-Low Drift, Sub-Microvolt Low-frequency Fiber Optic Voltage Sensor. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 45-, 1994.
- Fabiny, L.; Vohra, S. T.; Bucholtz, F., and Dandridge, A. 3-Channel Low-Frequency Fiberoptic Voltage Sensor. *Optics Letters*, **19**(3):228-230, 1994.
- Farrand, W. H. and Harsanyi, J. C. Mapping Distributed Geological and Botanical Targets Through Constrained Energy Minimization. Geologic Remote Sensing: Exploration, Environment and Engineering. Proceedings of The Thematic Conference on Geologic Remote Sensing 1994, San Antonio, TX. Meeting. May, 1994. Ann Arbor, MI: Environmental Research Institute of Michigan, 1994. I-419-I-430, 1994.
- Feldman, U. The Plasma Properties of the Solar Upper Atmosphere Determined from High Resolution Observations and the Nature of the Physical Processes Sustaining It. *Physics of Plasmas*, **1**(5):1390-1402, 1994.
- Feldman, U.; Hiei, E.; Phillips, K. J. H.; Brown, C. M., and Lang, J. Very Impulsive Solar-Flares Observed with the Yohkoh Spacecraft. *Astrophysical Journal*, **421**(2):843-850, 1994.
- Feldman, U. and Laming, J. M. On the Absence of a Relationship Between the Properties of the $T_e \geq 10^6$ K and the Properties of the $T_e \leq 7 \times 10^5$ Solar Plasmas. *Astrophysical Journal*, **434**(1):370-377, 1994.
- Feldman, U.; Seely, J. F.; Doschek, G. A.; Strong, K. T.; Acton, L. W.; Uchida, Y., and Tsuneta, S. The Morphology of the 10^7 K Plasma in Solar Flares: I Nonimpulsive Flares. *Astrophysical Journal*, **424**(1):444-458, 1994.
- Feng, C. R. and Michel, D. J. Creep Behavior and Microstructures of Nb-26Ti-48Al Alloy and Composite. Intermetallic Matrix Composites III; San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **350**: 261-266, 1994.
- Fernsler, R. F.; Hubbard, R. F., and Lampe, M. Long-Range Propagation of High-Power, Pulsed Electron Beams for Welding and Materials Processing Applications. *Journal of Applied Physics*, **75**(7):3278-3293, 1994.
- Fertig, H. A. and Reinecke, T. L. Localization and Diffusion of Energy via Confined Phonon Modes in Semiconductor Superlattices. *Physical Review B-Condensed Matter*, **50**(11):7443-7452, 1994.
- Fertig, H. A. and Reinecke, T. L. Localization and Diffusion of Phonon Modes in Semiconductor Superlattices. *Physical Review B-Condensed Matter*, **49**(16):11168-11172, 1994.

- Fett, R. W.; Burk, S. D.; Thompson, W. T., and Kozo, T. L. Environmental Phenomena of the Beaufort Sea Observed During the Leads Experiment. *Bulletin of the American Meteorological Society*, **75**:2131-2145, 1994.
- Fetterer, F. M.; Gineris, D., and Kwok, R. Sea-Ice Type Maps from Alaska Synthetic-Aperture Radar Facility Imagery - An Assessment. *Journal of Geophysical Research-Oceans*, **99**(C11):22443-22458, 1994.
- Feuillade, C. and Clay, C. S. Broad-Band Source Imaging in a Shallow-Water Wedge by an Array of Receivers. *Journal of the Acoustical Society of America*, **96**(1):501-514, 1994.
- Feuillade, C. and Love, R. H. Resonance Scattering from Fish Schools. Proceedings of the Institute of Acoustics Underwater Acoustic Scattering. Meeting. 20-22 Dec, 1994. Weymouth, UK, University of Bath, UK: Institute of Acoustics, 1994. 93-103, 1994.
- Feuillade, C.; Love, R. H., and Werby, M. F. Characteristic Resonance Signatures for Acoustical Scattering from Fish. Automatic Object Recognition IV, Orlando, FL. Meeting. 6-7 April 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 120-126, 1994.
- Feuillade, C. and Werby, M. F. Resonances of Deformed Gas-Bubbles in Liquids. *Journal of the Acoustical Society of America*, **96**(6):3684-3692, 1994.
- Feuillade, C. and Werby, M. F. Resonant Multiple Scattering from Two Deformed Water-Entrained Air Bubbles. *Acoustics Letters*, **18**(2):19-24, 1994.
- Fey, A. L.; Gaume, R. A.; Nedoluha, G. E., and Claussen, M. J. VLA Spectral-Line Observations of the H-II Complex G34.3+0.2. *Astrophysical Journal*, **435**(2):738-747, 1994.
- Fey, A. L.; Russell, J. L.; DeVegt, C.; Zacharias, N.; Johnston, K. J.; Ma, C.; Hall, D. M., and Holdenried, E. R. Radio Optical Reference Frame. VI. Additional Source Positions in the Northern-Hemisphere. *Astronomical Journal*, **107**(1):385-391, 1994.
- Fiedler, R.; Dennison, B.; Johnston, K. J.; Waltman, E. B., and Simon, R. S. A Summary of Extreme Scattering Events and a Descriptive Model. *Astrophysical Journal*, **430**(2):581-594, 1994.
- Fiedler, R.; Pauls, T.; Johnston, K. J., and Dennison, B. Galactic Structures Associated with Extreme Scattering Events in the Radio Light Curves of NRAO 140, 0954+658, and 2352+495. *Astrophysical Journal*, **430**(2):595-600, 1994.
- Fiedman, A.; Grote, D. P.; Callahan, D. A.; Langdon, A. B., and Haber, I. Overview of WARP, a Particle Code for Heavy Ion Fusion. Computational Accelerator Physics, Los Alamos, NM. Meeting. 1993. New York: American Institute of Physics, c1994. 347-356, 1994.
- Filipkowski, M. E.; Gutierrez, C. J.; Krebs, J. J., and Prinz, G. A. Observation of Large Biquadratic Coupling of FeCo Through Mn (Invited) (Abstract). *Journal of Applied Physics*, **76**(10):7090, 1994.
- Filippi, C.; Singh, D. J., and Umrigar, C. J. All-Electron Local-Density and Generalized-Gradient Calculations of the Structural Properties of Semiconductors. *Physical Review B-Condensed Matter*, **50**(20):14947-14951, 1994.
- Fischer, R. P.; Fliflet, A. W.; Manheimer, W. M.; Levush, B.; Antonsen, T. M., and Granatstein, V. L. Phase Locking, Amplification, and Mode Selection in an 85 GHz Quasioptical Gyrokystron. *Physical Review Letters*, **72**(15):2395-2398, 1994.

- Fleming, J. W.; Williams, B. A., and Ladouceur, H. D. Temperature and Mass Flow Effects in 10 Torr Methane/Oxygen Flames. *Combustion Science and Technology*, **98**(1-3):1-9, 1994.
- Fliflet, A. W. and Fischer, R. P. The Quasioptical Gyrotron, A High-Power, Tunable Source of Millimeter-Wave Radiation. Microwave Processing of Materials IV, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **347**: 109-117, 1994.
- Fliflet, A. W.; Manheimer, W. M., and Fischer, R. P. Designs for an Infrared Free-Electron Laser-Based on Gyrotron-Powered Electromagnetic Wigglers. *IEEE Transactions on Plasma Science*, **22**(5):638-648, 1994.
- Flippen, L. D. Constitutive-Operator Smoothing by Condensation. *Computers & Mathematics With Applications*, **27**(6):5-18, 1994.
- Flippen, L. D. Current Dynamic Substructuring Methods as Approximations to Condensation Model Reduction. *Computers & Mathematics with Applications*, **27**(12):17-29, 1994.
- Flippen, L. D. A Theory of Condensation Model Reduction. *Computers & Mathematics with Applications*, **27**(2):9-40, 1994.
- Flippen-Anderson, J. L.; Deschamps, J. R.; Ward, K. B.; George, C., and Houghten, R. Crystal Structure of Deltakephalin: A δ -Selective Opioid Peptide with a Novel β -Bend-Like Conformation. *International Journal of Peptide and Protein Research*, **44**(2):97-104, 1994.
- Flippen-Anderson, J. L.; George, C.; Bertha, C. M., and Rice, K. C. X-Ray Crystal Structures of Potent Opioid Receptor Ligands: Etonitazene, *Cis*-(+)-3-Methylfentanyl, Etorphine, Diprenorphine, and Buprenorphine. *Heterocycles*, **39**(2):751-766, 1994.
- Flippen-Anderson, J. L.; George, C., and Deschamps, J. R. Methyl N,N-Diallyl-O-Tert-Butyltyrosyl- α -Aminoisobutyl- α -Aminoisobutyrate, $C_{28}H_{43}N_3O_5$. *Acta Crystallographica Section C-Crystal Structure Communications*, **50**:1095-1097, 1994.
- Flippen-Anderson, J. L.; Hruby, V. J.; Collins, N.; George, C., and Cudney, B. X-Ray Structure of [D-Pen²,D-Pen⁵]Enkephalin, a Highly Potent, δ Opioid Receptor-Selective Compound: Comparisons with Proposed Solution Conformations. *Journal of the American Chemical Society*, **116**(17):7523-7531, 1994.
- Flippen-Anderson, J. L.; Kony, M., and Dagley, I. J. A High-Density Thermally Stable Explosive - Octahydro-2,5-Bis(Nitroimino)Imidazo[4,5-D]Imidazole. *Acta Crystallographica Section C-Crystal Structure Communications*, **50**:974-976, 1994.
- Flom, S. R.; Pong, R. G. S.; Bartoli, F. J., and Kafafi, Z. H. Degenerate 4-Wave-Mixing as a Nonlinear-Optical Probe of the Fullerenes. *Molecular Crystals and Liquid Crystals Science and Technology Section A-Molecular Crystals and Liquid Crystals*, **256**:289-298, 1994.
- Flom, S. R.; Pong, R. G. S.; Shirk, J. S.; George, R. D., and Snow, A. W. Nonlinear-Optical Properties of and Optical Limiting by a Glassy Phthalocyanine. *Abstracts of Papers of the American Chemical Society*, **208**:423-POLY, 1994.
- Floudas, G.; Rizos, A.; Brown, W., and Ngai, K. L. Dynamics in Concentrated-Solutions of Poly(Methyl Methacrylate) Bis(2-Ethylhexyl Phthalate). *Macromolecules*, **27**(10):2719-2725, 1994.

- Floyd, L. E.; Prinz, D. K., and Brueckner, G. E. SUSIM UARS Optical Responsivity Evolution: Character and Implications. Determining Responsivity Degradation in the SUSIM UARS., International Workshop on VUV and X-Ray Radiometry for Space-Based Instruments, Berlin, DE. Meeting. 22-23 Sep, 1994. 51-54, 1994.
- Fonda, R. W.; Spanos, G., and Vandermeer, R. A. Observations of Plate Martensite in a Low-Carbon Steel. *Scripta Metallurgica et Materialia*, **31**(6):683-688, 1994.
- Foster, R. S.; Fischer, J.; Johnston, K. J., and Grove, J. E. Limits on Gamma-Ray and Infrared Emission from the Planetary Pulsar System PSR B1257HZ and Other Millisecond Pulsars. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 309-313, 1994.
- Foster, R. S.; Lyne, A. G.; Shemar, S. L., and Backer, D. C. A Six Year Timing Solution for PSR B1951+32. *Astronomical Journal*, **108**(1):175-178, 1994.
- Fouts, D. J.; Weatherford, T.; McMorrow, D.; Melinger, J. S., and Campbell, A. B. Single Event Upsets in Gallium-Arsenide Dynamic Logic. *IEEE Transactions on Nuclear Science*, **41**(6):2244-2251, 1994.
- Frail, D. A.; Kassim, N. E., and Weiler, K. W. Radio Imaging of 2 Supernova-Remnants Containing Pulsars. *Astronomical Journal*, **107**(3):1120-&, 1994.
- Frank, L. A.; Sigwarth, J. B.; Williams, D. J.; Roelof, E. C.; Mitchell, D. G.; Gold, R. E.; Keath, E. P.; Mauk, B. H.; Meng, C. I.; Carpenter, D. L.; Hultqvist, B. K.; Lundin, R. N.; Siscoe, G. L.; Wolf, R. A.; Gorney, D. J.; Schulz, M.; McComas, D. J.; Funsten, H. O.; Moore, K. R.; Smith, B. W.; Craven, J. D.; Chiu, Y. T.; Meier, R. R., and Seely, J. F. imagers for the Magnetosphere, Aurora, and Plasmasphere. *Optical Engineering*, **33**(2):391-408, 1994.
- Frankel, M. Y. 500-GHz Characterization of an Optoelectronic S-Parameter Test Structure. *IEEE Microwave and Guided Wave Letters*, **4**(4):118-120, 1994.
- Frankel, M. Y. Optimization of a Femtosecond Ellipsometer for Gold Photorefectance Studies. *Optics Letters*, **19**(16):1252-1254, 1994.
- Frankel, M. Y. and Carruthers, T. F. Transient Ellipsometric Surface Photorefectance Applied to GaAs. *Applied Physics Letters*, **64**(15):1950-1952, 1994.
- Frankel, M. Y.; Esman, R. D., and Weller, J. F. Rapid Continuous Tuning of a Single-Polarization Fiber Ring Laser. *IEEE Photonics Technology Letters*, **6**(5):591-593, 1994.
- Frankel, M. Y.; Voelker, R. H., and Hilfiker, J. N. Coplanar Transmission Lines on Thin Substrates for High-Speed Low-Loss Propagation. *IEEE Transactions on Microwave Theory and Techniques*, **42**(3):396-402, 1994.
- Freitag, R. K.; Brown, D. B., and Dozier, C. M. Evidence for 2 Types of Radiation-Induced Trapped Positive Charge. *IEEE Transactions on Nuclear Science*, **41**(6):1828-1834, 1994.
- Freitas, J.; Klein, P. B., and Collins, A. T. Radiative Recombination Processes in Semiconducting Diamond Saito, S., ed. Fourth International Conference on New Diamond Science and Technology. Meeting. 4 Jul, 1994. Kobe, Japan. MYU, K. K.; 1994: 321-326. ISBN: 494399508x.

- Freitas, J. A.; Doverspike, K.; Klein, P. B.; Khong, Y. L., and Collins, A. T. Luminescence Studies of Nitrogen-Doped and Boron-Doped Diamond Films. *Diamond and Related Materials*, **3**(4-6):821-824, 1994.
- Freitas, J. A.; Klein, P. B., and Collins, A. T. Evidence of Donor-Acceptor Pair Recombination from a New Emission Band in Semiconducting Diamond. *Applied Physics Letters*, **64**(16):2136-2138, 1994.
- Freitas, J. A.; Klein, P. B., and Collins, A. T. Observation of a New Vibronic Luminescence Band in Semiconducting Diamond. *Electronics Letters*, **29**(19):1727-1728, 1994.
- Fremont, M.; Beall, J. H.; Dorland, B. N., and Snyder, W. A. ROSAT Observations of 3C390.3. AIP Conference Proceedings, 432-, 1994.
- Freund, H. P. A Reexamination of the Traveling-Wave Interaction. *IEEE Transactions on Plasma Science*, **22**(5):499-503, 1994.
- Freund, H. P. and Jackson, R. H. Wiggler Imperfections in Free-Electron Lasers. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors and Associated Equipment*, **341**(1-3):225-229, 1994.
- Freund, H. P.; Jackson, R. H., and Pershing, D. E. The Nonlinear-Analysis of Self-Field Effects in Free-Electron Lasers. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **341**(1-3):259-264, 1994.
- Freund, H. P.; Jackson, R. H.; Pershing, D. E., and Taccetti, J. M. Nonlinear Theory of the Free-Electron Laser Based upon a Coaxial Hybrid Iron Wiggler (Vol 1, Pg 1046, 1994). *Physics of Plasmas*, **1**(7):2404, 1994.
- Freund, H. P.; Jackson, R. H.; Pershing, D. E., and Taccetti, J. M. Nonlinear Theory of the Free-Electron Laser Based Upon a Coaxial Hybrid Wiggler. *Physics of Plasmas*, **1**(4):1046-1059, 1994.
- Friebele, E. J.; Askins, C. G.; Putnam, M. A.; Florio, J.; Fosha, A. A.; Donti, R. P., and Mosley, C. D. Distributed Strain Sensing with Fiber Bragg Grating Arrays Embedded in CRTM Composites. Second European Conference of Smart Structures and Materials, Glasgow, Scotland. Meeting 12-14 Oct, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2361**: 338-341, 1994.
- Friebele, E. J.; Askins, C. G.; Putnam, M. A.; Fosha, A. A.; Florio, J.; Donti, R. P., and Blosser, R. G. Distributed Strain Sensing with Fiber Bragg Grating Arrays Embedded in CRTM™ Composites. *Electronics Letters*, **30**:1783-1784, 1994.
- Friebele, E. J. and Kersey, A. D. Fiberoptic Sensors Measure up for Smart Structures. *Laser Focus World*, **30**(5):165-&, 1994.
- Friedman, H. From Ionosonde to Rocket Sonde. *Journal of Geophysical Research-Space Physics*, **99**(A10):19143-19153, 1994.
- Friedman, M.; Serlin, V.; Lampe, M., and Hubbard, R. Present Progress and Future-Research in the Relativistic Klystron Amplifier Program at the Naval Research Laboratory. Intense Microwave Pulses II, Los Angeles, CA. Meeting. 24-26 Jan, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2154**: 2-, 1994.

- Frost, A. E. and Seaver, M. Ionic Effects on Solid-Phase Formation in 1-Octadecanol Films on Levitated Water Drops. *Thin Solid Films*, **247**(2):184-189, 1994.
- Frost, A. E.; Seaver, M., and Rubel, G. O. Delayed Appearance of the Liquid-Condensed Phase in 1-Octadecanol Films on Levitated Waterdrops. *Journal of Chemical Physics*, **100**(4):3268-3275, 1994.
- Fu, L. P.; Lee, S. T.; Petrou, A.; Warnock, J., and Jonker, B. T. Comparison of the Spin Splittings Between the E(1)H(1) and E(2)H(2) Excitons in a ZnSe/Zn_{0.85}Mn_{0.15}Se Multiple Quantum-Well Structure. *Physical Review B-Condensed Matter*, **50**(7):4696-4700, 1994.
- Fudali, R. F. the Evidence for Large Bolide Impacts in the Present and Paleo-Ocean Basins. *Proceedings of the Pennsylvania Academy of Sciences*, **20**:289-, 1994.
- Fulford, J. K. A Simple Gaussian-Beam-Based Reverberation Model. International Conference on Theoretical and Computational Acoustics, Mystic CT. Meeting. 5-9 JUL, 1993. Singapore; New Jersey: World Scientific, c1994. 991-998, 1994.
- Fuller-Mora, W. W.; Wolf, S. A., and Kresin, V. Z. Electron-Phonon Coupling as a Mechanism for High Temperature Superconductivity. *Journal of Superconductivity*, **7**(3):543-545, 1994.
- Gaiser, P. W.; Swift, C. T., and LeVine, D. M. L-Band Synthetic Aperture Radiometers for Earth Remote Sensing. 1994 Surface and Atmospheric Remote Sensing: Technologies, Data Analysis, and Interpretation. International Geoscience and Remote Sensing 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 1311-1313, 1994.
- Galdorsi, G. V. Emerging Roles for the United-States-Navy. Ocean Yearbook. Chicago, IL: University of Chicago Press, 1978- . **11**: 338, 1994.
- Gallacher, P. C. Air-Sea Feedback During Coastal Upwelling. Second International Conference on Air-Sea Interaction and Meteorology and Oceanography of the Coastal Zone, Lisbon, Portugal. Meeting. 22-27 Sep, 1994. Boston, MA: American Meteorological Society, 1994. 204-205, 1994.
- Gallacher, P. C. and Wijesekera, H. W. Convection and Internal Waves in a Stably Stratified Shear Flow. Fourth International Symposium on Stratified Flows; 1994, Grenoble, France. Meeting. 29 JUN-2 Jul, 1994. Trondheim, NO: Tapir, 19-, 1-2.
- Gallegos, S. C. and May, D. A. Evaluation of the Naval Research Laboratory Algorithm for Identifying Clouds in Ocean Color Data / Lynch, D. K., chair/ed. Passive Infrared Remote Sensing of Clouds and the Atmosphere II, Rome, Italy. Meeting, 26-28 Sep, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2309**: 28-35, 1994.
- Gan, C. H.; Delalampo, J. A.; Bennett, B. R.; Meyerson, B. S.; Crabbe, E. F.; Sodini, C. G., and Reif, L. R. Si/Si_{1-x}Ge_x Valence-Band Discontinuity Measurements Using a Semiconductor-Insulator-Semiconductor (SIS) Heterostructure. *IEEE Transactions on Electron Devices*, **41**(12):2430-2439, 1994.
- Ganem, J.; Bowman, S. R., and Feldman, B. J. Excited-State Dynamics of Pr³⁺:LaCl₃. *Journal of Luminescence*, **58**(1-6):298-302, 1994.

- Ganguli, G. Interdependence of Global and Local Physics in the Magnetotail. Cornelius Lanezos International Centenary Conference. *SIAM Proceedings*, 470-472, 1994.
- Ganguli, G.; Keskinen, M. J.; Romero, H.; Heelis, R.; Moore, T., and Pollock, C. Coupling of Microprocesses and Macroprocesses Due to Velocity Shear: An Application to the Low-Altitude Ionosphere. *Journal of Geophysical Research-Space Physics*, **99**(A5):8873-8889, 1994.
- Ganguli, S. B.; Mitchell, H. G., and Palmadesso, P. J. Auroral Plasma Transport Processes in the Presence of kV Potential Structures. *Journal of Geophysical Research-Space Physics*, **99**(A4):5761-5770, 1994.
- Ganguly, A. K.; Park, G. S., and Armstrong, C. M. Nonlinear Theory of Harmonic Peniotron and Gyrotron Interactions in a Rising-Sun Slotted Wave Guide. *IEEE Transactions on Plasma Science*, **22**(5):902-912, 1994.
- Garner, J. C. The Clementine GaAs/Ge Solar Array. 29th Intersociety Energy Conversion Engineering Conference, Monterey, CA. Meeting. 8-12 Aug, 1994. New York, NY: American Institute of Aeronautics and Astronautics, 19-. 288-293, 1994.
- Garner, J. C.; Braun, W. R., and Zagrodnik, J. The Clementine Nickel Hydrogen Common Pressure Vessel Battery. 29th Intersociety Energy Conversion Engineering Conference, Monterey, CA. Meeting. 8-12 Aug, 1994. Washington, DC: American Institute of Aeronautics and Astronautics,, 1994. 124-129, 1994.
- Garren, D. A. and Boozer, A. H. Finite Beta-Effects in Quasihelical Stellarators. *Physics of Plasmas*, **1**(1):139-149, 1994.
- Garren, D. A. and Chen, J. Lorentz Self-Forces on Curved Current Loops. *Physics of Plasmas*, **1**(10):3425-3436, 1994.
- Garrett, J.; Reddy, S.; Ryan, J.; Kim, J.; Shirk, J.; Kenney, M.; Krasieva, T.; Tromberg, B.; Berns, M. W., and Hill, R. A. Photodynamic Therapy (PDT) of Experimental Ocular Melanoma with Silicon Naphthalocyanine (SINC) in Rabbits. *Investigative Ophthalmology & Visual Science*, **35**(4):2120, 1994.
- Garroway, A. N.; Buess, M. L.; Yesinowski, J. P.; Miller, J. B., and Krauss, R. A. Explosives Detection by Nuclear Quadrupole Resonance (NQR). Cargo Inspection Technologies, San Diego, CA. Meeting. 25-27 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2276**: 139-149, 1994.
- Garroway, A. N.; Yesinowski, J. P.; Buess, M. L., and Miller, J. B. Narcotics and Explosives Detection by ¹⁴N Pure NQR. Substance Detection Systems; Innsbruck, Austria. Meeting. 4-8 OCT, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2092**: 318-327, 1994.
- Garwood, R. W.; Isakari, S. M., and Gallacher, P. C. Termobaric Convection. The Polar Oceans and Their Role in Shaping the Global Environment. Washington, DC: American Geophysical Union; 1994;199-209.
- Gaume, R. A.; Fey, A. L., and Claussen, M. J. VLA Recombination Line Observations of the Cometary H-II-Region G34.3+0.2: Dynamics and Physical Properties. *Astrophysical Journal*, **432**(2):648-655, 1994.

- Gaume, R. A.; Wilson, T. L., and Johnston, K. J. High-Resolution Measurements of NH_3 Absorption Toward Cassiopeia-A. *Astrophysical Journal*, **425**(1):127-131, 1994.
- Ge, D. B.; Jordan, A. K., and Tamil, L. S. Numerical Inverse Scattering-Theory for the Design of Planar Optical Wave-Guides. *Journal of the Optical Society of America A-Optics Image Science and Vision*, **11**(11):2809-2815, 1994.
- Geer, R.; Qadri, S.; Shashidhar, R.; Thibodeaux, A. F., and Duran, R. S. X-Ray Investigations of Langmuir-Blodgett Multilayer Films of Side-Chain Liquid Crystal Copolymers. *Liquid Crystals*, **16**(5):869-875, 1994.
- Geer, R. E.; Stenger, D. A.; Chen, M. S.; Calvert, J. M.; Shashidhar, R.; Jeong, Y. H., and Pershan, P. S. X-Ray and Ellipsometric Studies of Self-Assembled Monolayers of Fluorinated Chlorosilanes. *Langmuir*, **10**(4):1171-1176, 1994.
- Gehrz, R. D.; Woodward, C. E.; Greenhouse, M. A.; Starrfield, S.; Wooden, D. H.; Witteborn, F. C.; Sandford, S. A.; Allamandola, L. J.; Bregman, J. D., and Klapisch, M. The Temporal Evolution of the 4-14 Micron Spectrum of V1974 Cygni (Nova Cygni 1992). *Astrophysical Journal*, **421**(2):762-770, 1994.
- Geis, M. W.; Efremow, N. N.; Susalka, R.; Twichell, J. C.; Snail, K. A.; Spiro, C.; Sweeting, B., and Holly, S. Mosaic Diamond Substrates Approaching Single-Crystal Quality Using Cube-Shaped Diamond Seeds. *Diamond and Related Materials*, **4**(1):76-82, 1994.
- George, C.; Lahti, P. M.; Modarelli, D. A., and Inceli, A. Substituted Diphenyl Oxalates. *Acta Crystallographica Section C-Crystal Structure Communications*, **50**:1308-1312, 1994.
- George, C. F.; Lahti, P. M.; Modarelli, D. A., and Inceli, A. Substituted Diphenyl Oxalates. *Acta Crystallographica*, **C50**:1308-1312, 1994.
- George, R. D. and Snow, A. W. Phthalocyanine Glasses. *Chemistry of Materials*, **6**(10):1587-1588, 1994.
- George, R. D. and Snow, A. W. Synthesis and Characterization of 3-Nitrophthalonitrile. *Abstracts of Papers of the American Chemical Society*, **207**:166-ORGN, 1994.
- George, R. D.; Snow, A. W.; Shirk, J. S.; Flom, S. R., and Pong, R. G. S. Phthalocyanine Glasses for Nonlinear Optics. *Abstracts of Papers of the American Chemical Society*, **208**:421-POLY, 1994.
- Gerlach, K. A Comparison of Two Adaptive Detection Schemes. *IEEE Transactions on Aerospace and Electronic Systems*, **30**(1):30-40, 1994.
- Gerlach, K. Convergence Rate of an SMI Canceler in Nonstationary Noise. *IEEE Transactions on Aerospace and Electronic Systems*, **30**(2):599-604, 1994.
- Gerlach, K. A Mean Level Adaptive Detector Using Nonconcurrent Data. *IEEE Transactions on Aerospace and Electronic Systems*, **30**(1):258-266, 1994.
- Gerlach, K. and Sangston, K. J. A Sharp False Alarm Upper-Bound for a Matched-Filter Bank Detector. *IEEE Transactions on Information Theory*, **40**(3):955-960, 1994.
- Ghosh, R. N.; Williams, E. R.; Clark, A. F., and Soulen, R. J. Cryogenic Precision Capacitance Bridge Using a Single-Electron Tunneling Electrometer. *Physica B*, **194**:1007-1008, 1994.

- Giangreco, C.; Piquette, J. C.; Ainsleigh, P.; Rossetto, J. F., and Brunet, E. Measurement Methodology of Projectors in Confined Environment. *Journal de Physique IV*, **4**(C5):327-330, 1994.
- Gineris, D. J. and Felterer, F. M. An Examination of the Radar Backscatter of Sea Ice in the East Siberian and Chukchi Seas. 1994 International Geoscience and Remote Sensing 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 499-502, 1994.
- Giordana, A.; Gaskill, D. K.; Wickenden, D. K., and Wickenden, A. E. Modulated Reflectance and Adsorption Characterization of Single Crystal GaN Films. *Journal of Electronic Materials*, **23**(6):509-512, 1994.
- Glaser, E. R.; Kennedy, T. A.; Freitas, J. A.; Khan, M. A.; Olson, D. T., and Kuznia, J. N. Nitrogen-Vacancy Model for the Deep State Observed in GaN Films / Spencer, M. G., ed. 5th Conference on Silicon Carbide and Related Materials. Meeting. NOV, 1993. Washington, DC. Institute of Physics; 1994: 453-456, 1994. ISBN: 750303026.
- Glaser, E. R.; Kennedy, T. A.; Klein, P. B.; Godbey, D. J., and Thompson, P. E. Time-Resolved Optically Detected Magnetic Resonance of Luminescence From Si/Si_{1-x}Ge_x Superlattices. *Japanese Journal of Applied Physics Part 1-Regular Papers Short Notes & Review Papers*, **33**(4B):2357-2360, 1994.
- Glembocki, O. J.; Pang, S. W.; Pollak, F. H.; Cream, G. M., and Larrabee, G. Diagnostic Techniques for Semiconductor Materials Processing, Boston, MA. Meeting. 29 NOV -2 DEC, 1993. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **324**: 153-159, 1994.
- Glembocki, O. J.; Tuchman, J. A.; Holm, R. T., and Peckerar, M. C. Fourier Transform Analysis of Franz-Keldysh Oscillations in Electromodulation Spectroscopy. IEEE LEOS [IEEE/Lasers and Electro-Optics Society] Annual Meeting, Boston, MA. Meeting, 31 OCT-3 Nov, 1994. 214-215, 1994.
- Glembocki, O. J.; Tuchman, J. A.; Ko, K. K.; Pang, S. W.; Dagata, J. A.; Giordana, A.; Kaplan, R., and Stutz, C. E. Photorefectance Study of the Chemically-Modified (100) GaAs Surface. Spectroscopic Characterization Techniques for Semiconductor Technology V, Los Angeles, CA. Meeting. 25-26 Mar, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2141**: 96-, 1994.
- Glembocki, O. J.; Tuchman, J. A.; Ko, K. K.; Pang, S. W.; Giordana, A., and Stutz, C. E. Photorefectance Characterization of Etch-Induced Damage in Dry Etched GaAs. Diagnostic Techniques for Semiconductor Materials Processing, Boston, MA. Meeting. 29 NOV-2 DEC, 1993. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **324**: 153-159 , 1994.
- Glendening, J. W. Dependence of a Plume Heat-Budget Upon Lateral Advection. *Journal of the Atmospheric Sciences*, **51**(23):3517-3530, 1994.
- Glendening, J. W. Flux Variations Created by Roll Vortices Over the Ocean. Second International Conference on Air-Sea Interaction and on Meteorology and Oceanography of the Coastal Zone, Lisbon, Portugal. Meeting. 18-22 Sep, 1994. Boston, MA: American Meteorological Society, 1994.
- Glesener, J. W. Hole Capture in Boron-Doped Diamond. *Applied Physics Letters*, **64**(2):217-219, 1994.

- Glicksman, M. E.; Mizenko, L. M.; Rettenmayer, M. E., and Marsh, S. P. Dendritic Solidification of Undercooled Melts - Mushy Zone Recalescence Dynamics. *Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing*, **178**(1-2):137-146, 1994.
- Godbey, D. J.; Lill, J. V.; Deppe, J., and Hobart, K. D. Ge Surface Segregation at Low Temperature During SiGe Growth by Molecular Beam Epitaxy. *Applied Physics Letters*, **65**(6):711-713, 1994.
- Goerss, J. S. and Jeffries, R. A. Assimilation of Synthetic Tropical Cyclone Observations Into the Navy Operational Global Atmospheric Prediction System. *Weather and Forecasting*, **9**(4):557-576, 1994.
- Goins, B.; Klipper, R.; Rudolph, A. S., and Phillips, W. T. Use of Technetium-99m-Liposomes in Tumor Imaging. *Journal of Nuclear Medicine*, **35**(9):1491-1498, 1994.
- Goins, B.; Klipper, R.; Sanders, J.; Rudolph, A. S., and Phillips, W. T. Circulation Profile of Tc-99m Labeled Liposome-Encapsulated Hemoglobin in a 10-Percent or 50-Percent Rat Hypovolemic Shock Model. *Artificial Cells Blood Substitutes and Immobilization Biotechnology*, **22**(3):909-915, 1994.
- Goins, B.; Ligler, F. S., and Rudolph, A. S. Inclusion of Ganglioside G(M1) Into Liposome-Encapsulated Hemoglobin Does Not Extend Circulation Persistence at Clinically Relevant Doses. *Artificial Cells Blood Substitutes and Immobilization Biotechnology*, **22**(1):9-25, 1994.
- Goldberg, L. and Mehuys, D. Blue-Light Generation Using a High-Power Tapered Amplifier Mode-Locked Laser. *Applied Physics Letters*, **65**(5):522-524, 1994.
- Goldberg, L. and Mehuys, D. Blue-Light Intensity Modulation in a Frequency-Doubled Tapered Amplifier Modelocked Laser. *Electronics Letters*, **30**(16):1296-1297, 1994.
- Goldberg, L. and Mehuys, D. High-Power Superluminescent Diode Source. *Electronics Letters*, **30**(20):1682-1684, 1994.
- Goldberg, L.; Mehuys, D., and Welch, D. High Power Mode-Locked Compound Laser Using a Tapered Semiconductor Amplifier. *IEEE Photonics Technology Letters*, **6**(9):1070-1072, 1994.
- Golden, J. P.; Anderson, G. P.; Rabbany, S. Y., and Ligler, F. S. An Evanescent Wave Biosensor - Part II: Fluorescent Signal Acquisition from Tapered Fiber Optic Probes. *IEEE Transactions on Biomedical Engineering*, **41**(6):585-591, 1994.
- Golden, J. P.; Shriver-Lake, L. C.; Narayanan, N., and Ligler, F. S. A Near IR Biosensor for Evanescent Wave Immunoassays. Longer Wavelength Lasers and Applications. Proceedings of SPIE OE LASE '94, 241-245, 1994.
- Golden, M. S.; Knupfer, M.; Kielwein, M.; Buchgeister, M.; Fink, J.; Teehan, D.; Pickett, W. E., and Singh, D. J. A Resonant-Photoemission Study of $\text{YNi}_2\text{B}_2\text{C}$. *Europhysics Letters*, **28**(5):369-374, 1994.
- Golding, W. M.; Frank, S.; Beard, R. L.; White, J. D., and Danzy, F. The Double Bulb Rubidium Maser. Proceedings of the 1994 International Frequency Control Symposium. New York, NY: Institute of Electrical and Electronics Engineers, 19- . 724-730, 1994.
- Goldschlag, D. M. A Formal Model of Several Fundamental VHDL Concepts. Ninth Annual Conference on Computer Assurance, Gaithersburg, MD. Meeting. 27-30 Jun, 1994. COMPASS Proceedings. New York, NY: IEEE, 1988- : 177-181, 1994.

- Goldschlag, D. M. Mechanically Verifying Safety and Liveness Properties of Delay Insensitive Circuits. *Formal Methods in System Design*, **5**(3):207-225, 1994.
- Gonsalves, K. E.; Chow, G. M.; Zhang, Y.; Budnick, J. I., and Xiao, T. D. Iron Nitride Boron-Nitride Magnetic Nanocomposite Powders. *Advanced Materials*, **6**(4):291-292, 1994.
- Gonsalves, K. E.; Xiao, T. D.; Chow, G. M., and Law, C. C. Synthesis and Processing of Nanostructured M50 Type Steel. *Nanostructured Materials*, **4**:139-, 1994.
- Gonsalves, K. E.; Xiao, T. S. D., and Chow, G. M. Synthesis of Nanocomposite Materials via Inorganic Polymer Gels. Inorganic and Organometallic Polymers II: Advanced Materials and Intermediates, 205th National Meeting, Denver, CO. Meeting. MAR, 1993. Washington, DC: American Chemical Society. Division of Polymer Chemistry, 1994. ACS Symposium Series, **572**:195-206, 1994. ISBN: 0841230366.
- Gopalakrishnan, G. K. and Burns, W. K. Resonant Enhancement of a LiNbO_3 Traveling-Wave Modulator for Low-Loss Analog Fiber-Optic Links. 1994 IEEE MTT-S International Symposium, San Diego, CA. Meeting. 23-27 May, 1994. [Published as vol. 42, no. 12 (December 1994) of *IEEE Transactions on Microwave Theory and Techniques*] 159-162, 1994.
- Gopalakrishnan, G. K.; Burns, W. K.; McElhanon, R. W.; Bulmer, C. H., and Greenblatt, A. S. Performance and Modeling of Broadband LiNbO_3 Traveling Wave Optical Intensity Modulators. *Journal of Lightwave Technology*, **12**(10):1807-1819, 1994.
- Gordon, K. D.; Witt, A. N.; Carruthers, G. R.; Christensen, S. A., and Dohne, B. C. The Far-Ultraviolet Dust Albedo in the Upper-Scorpius Subgroup of the Scorpius-OB-2 Association. *Astrophysical Journal*, **432**(2):641-647, 1994.
- Gordon, W. B. High Frequency Approximations to the Physical Optics Scattering Integral. *IEEE Transactions on Antennas and Propagation*, **42**(3):427-432, 1994.
- Gould, R. W. and Arnone, R. A. Extending Coastal Zone Color Scanner Estimates of the Diffuse Attenuation Coefficient into Case II Waters. Ocean Optics XI, Bergen, NO. Meeting. 13-15 Jun, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2258**: 342-356, 1994.
- Grannell, J. J.; Shirron, J. J., and Couchman, L. S. A Hierarchical P-Version Boundary-Element Method for Axisymmetrical Acoustic Scattering and Radiation. *Journal of the Acoustical Society of America*, **95**(5):2320-2329, 1994.
- Gray, H. F. Field Emitter Displays (FEDs) for Cockpit Applications. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2219**: 44-, 1994.
- Greaves, G. N. and Ngai, K. L. Ionic Transport-Properties in Oxide Glasses Derived from Atomic-Structure. *Journal of Non-Crystalline Solids*, **172**:1378-1388, 1994.
- Greus, C.; Bayer, M.; Forchel, A.; Benner, S.; Haug, H.; Knipp, P., and Reinecke, T. L. Lateral Quantization Effects in the Optical-Spectra of InGaAs/GaAs Quantum Wires. *Superlattices and Microstructures*, **16**(3):265-269, 1994.
- Greus, C.; Spiegel, R.; Knipp, P. A.; Reinecke, T. L.; Faller, F., and Forchel, A. Photoluminescence Excitation Study of Lateral-Subband Structure in Barrier-Modulated $\text{In}_{0.09}\text{Ga}_{0.91}\text{As}$ Quantum Wires. *Physical Review B-Condensed Matter*, **49**(8):5753-5756, 1994.

- Griffin, R. D. and Lee, J. N. Acousto-Optical Wideband Correlator System: Design, Implementation, and Evaluation. *Applied Optics*, **33**(29):6774-6787, 1994.
- Grinstein, F. F. Open Boundary Conditions in the Simulation of Subsonic Turbulent Shear Flows. *Journal of Computational Physics*, **115**(1):43-55, 1994.
- Griscom, D. L. From E' Centers to the Characteristic Resonance: A Colleague's Reminiscences on the Scientific Odyssey of Robert A. Weeks. *Journal of Non-Crystalline Solids*, **179**:22-38, 1994.
- Griscom, D. L.; Gingerich, M. E., and Friebele, E. J. Model for the Dose, Dose-Rate and Temperature-Dependence of Radiation-Induced Loss in Optical Fibers. *IEEE Transactions on Nuclear Science*, **41**(3):523-527, 1994.
- Griscom, D. L.; Gingerich, M. E.; Friebele, E. J.; Putnam, M., and Unruh, W. Fast-Neutron Radiation Effects in a Silica-Core Optical Fiber Studied by a CCD-Camera Spectrometer. *Applied Optics*, **33**(6):1022-1028, 1994.
- Griscom, D. and Hosono, H. The R.A. Weeks International-Symposium on Science and Technology of SiO₂ and Related Materials - Preface. *Journal of Non-Crystalline Solids*, **179**:R7-R9, 1994.
- Grossman, K. and Peckerar, M. Active Current Limitation for Cold-Cathode Field Emitters. *Nanotechnology*, **5**(4):179-182, 1994.
- Grounds, P. W. Design of an Elliptic Filter in a Microstrip Configuration. 1994 IEEE Antennas and Propagation International Symposium, Seattle, WA. Meeting. 19-24 Jun, 1994. 1214-1216, 1994.
- Grove, J. E.; Johnson, W. N.; Kinzer, R. L.; Kroeger, R. A.; Kurfess, J. D.; Strickman, M. S.; Grabelsky, D. A.; Matz, S. M.; Purcell, W. R.; Ulmer, M. P., and Jung, G. V. Timing Noise Properties of GRO JO422+32. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 192-196, 1994.
- Guha, S.; Hendershot, G.; Peebles, D.; Steiner, P.; Kozlowski, F., and Lang, W. Photoluminescence and Raman Studies of Porous Silicon in Polymethyl Methacrylate. *Applied Physics Letters*, **64**(5):613-615, 1994.
- Gursky, H. The First Decade of X-Ray Astronomy - A Personal View. Cosmological Aspects of X-Ray Clusters of Galaxies. Proceedings of the NATO Advanced Study Institute on Cosmological Aspects of X-Ray Clusters of Galaxies, Velen, Germany. Meeting. 6-8 JUN, 1993. Dordrecht [Netherlands]; Boston, MA : Kluwer Academic, 1994. NATO ASI Series. Series C, Mathematical and Physical Sciences, **441**: 9-18, 1994.
- Gursky, H. Some Events in X-Ray Astronomy that Aren't in the Journals. 4th Annual Astrophysics Conference, College Park, MD. Meeting. OCT, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **308**:39-44, 1994.
- Hafizi, B.; Sprangle, P., and Fisher, A. A Far-Infrared Grating Free-Electron Laser. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **341**(1-3):269-273, 1994.
- Hafizi, B.; Sprangle, P., and Fisher, A. Tunable Compact High Power Far-Infrared Grating Free-Electron Laser. *IEEE Transactions on Plasma Science*, **22**(5):666-673, 1994.

- Hafizi, B.; Sprangle, P., and Hirshfield, J. L. Electron Beam Quality in a Cyclotron Autoresonance Accelerator. *Physical Review E*, **50**(4):3077-3086, 1994.
- Haftel, M. I. and Mandelzweig, V. B. Nonvariational Calculation of the Relativistic and Finite-Size Corrections for the Helium Ground-State. *Physical Review A*, **49**(5):3344-3350, 1994.
- Haftel, M. I. and Mandelzweig, V. B. Nonvariational Calculation of the Relativistic, Finite-Size, and QED Corrections for the 2 S-1 Excited-State of the Helium Atom. *Physical Review A*, **49**(5):3338-3343, 1994.
- Haftel, M. I.; Rosen, M.; Franklin, T., and Hettermann, M. Molecular Dynamics Observations of Interdiffusion and Stranski-Krastanov Growth in the Early Film Deposition of Au on Ag(110). *Physical Review Letters*, **72**(12):1858-1861, 1994.
- Hagans, P. L.; O'Grady, W. E., and Russell, A. E. Probing the Electrochemical Interface with Synchrotron-Generated Far-Infrared Radiation. *Abstracts of Papers of the American Chemical Society*, **208**:197-COLL, 1994.
- Hall, D. C. and Burns, W. K. Wavelength Stability Optimisation in Er³⁺-Doped Superfluorescent Fiber Sources. *Electronics Letters*, **30**(8):653-654, 1994.
- Hall, D. C.; Burns, W. K., and Moeller, R. P. Optimization of Wavelength Stability in Er-Doped Superfluorescent Fiber Sources for Gyroscopes. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 116-, 1994.
- Hall, D. C.; Surette, M. R.; Goldberg, L., and Mehuys, D. Carrier-Induced Lensing in Broad-Area and Tapered Semiconductor Amplifiers. *IEEE Photonics Technology Letters*, **6**(2):186-188, 1994.
- Hall, M. G. and Aaronson, H. I. Formation of Invariant Plane-Strain and Tent-Shaped Surface Reliefs by the Diffusional Ledge Mechanism. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(9):1923-1931, 1994.
- Hammer, P. W.; Platt, N.; Hammel, S. M.; Heagy, J. F., and Lee, B. D. Experimental-Observation of on-Off Intermittency. *Physical Review Letters*, **73**(8):1095-1098, 1994.
- Handler, R. A. and Bernard, P. S. The Effect of Interpolation Errors on the Lagrangian Analysis of Simulated Turbulent Channel Flow. *Journal of Computational Physics*, **110**:190-195, 1994.
- Hansen, D. C.; Luther, G. W., and Waite, J. H. The Adsorption of the Adhesive Protein of the Blue Mussel *Mytilus edulis* I onto Type 304L Stainless-steel. *Journal of Colloid and Interface Science*, **168**(1): 206-216, 1994.
- Hardy, D. R. and Wechter, M. A. Characterization of Soluble Macromolecular Oxidatively Reactive Species (SMORS) from Middle Distillate Diesel Fuels - Their Origin and Role in Instability. *Abstracts of Papers of the American Chemical Society*, **208**:112-FUEL, 1994.
- Hardy, D. R. and Wechter, M. A. Characterization of Soluble Macromolecular Oxidatively Reactive Species (SMORS) from Middle Distillate Diesel Fuels - Their Origin and Role in Instability. *Energy & Fuels*, **8**(3):782-787, 1994.

- Harihar, P.; Chen, H., and Stapor, W. J. Ultraviolet Fluorescence Lifetime in Trans-Stilbene Crystal with Single Photons. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **345**(3):500-502, 1994.
- Harold, J. B. and Hassam, A. B. Two Ion Fluid Numerical Investigations of Solar Wind Gas Releases. *Journal of Geophysical Research-Space Physics*, **99**(A10):19325-19340, 1994.
- Harris, M. J. and Leising, M. D. A Search for γ -Ray Lines from the Decay of ^{59}Fe in Supernova 1987A. *Astronomy and Astrophysics*, **282**(3):766-770, 1994.
- Harris, M. J.; Share, G. H., and Leising, M. D. Search for Variable Line Emission from Galactic and Extragalactic Sources in the 1981 - 1989 SMM Data. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 250-254, 1994.
- Harris, M. J.; Share, G. H., and Leising, M. D. SMM Observations of Gamma-Ray Transients. II. A Search for Gamma-Ray Lines Between 400 and 600 KeV from the Crab Nebula. *Astrophysical Journal*, **420**(2):649-654, 1994.
- Harris, M. J.; Share, G. H., and Leising, M. D. SMM Observations of Gamma-Ray Transients. III. A Search for a Broadened, Redshifted Positron Annihilation Line from the Direction of the Galactic Center. *Astrophysical Journal*, **433**(1):87-95, 1994.
- Harris, P. J. An Expert-Systems Technology Approach to Maintenance Proficiency. *Robotics and Computer-Integrated Manufacturing*, **11**(3):195-199, 1994.
- Harris, P. J. and Heburn, G. W. Intelligent Tools for Environmental Tactical Decision Aids. IEEE International Conference on Tools with Artificial Intelligence. Los Alamitos, CA: IEEE Computer Society Press, 1994. 530-533, 1994.
- Harris, V. G.; Das, B. N.; Elam, W. T., and Koon, N. C. Amorphous-to-Crystalline Transition in Tb₃₃Fe₆₆ Films Studied via EXAFS. Crystallization and Related Phenomena in Amorphous Materials, Boston. Meeting. 1993. Pittsburgh, PA : Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **321**: 185-190, 1994.
- Harris, V. G.; Elam, W. T.; Koon, N. C., and Hellman, F. Deposition-Temperature Dependence of Structural Anisotropy in Amorphous Tb-Fe Films. *Physical Review B-Condensed Matter*, **49**(5):3637-3640, 1994.
- Harris, V. G.; Kaatz, F. H.; Browning, V.; Gillespie, D. J.; Everett, R. K.; Ervin, A. M.; Elam, W. T., and Edelstein, A. S. Structure and Magnetism of Heat-Treated Nanocrystalline Cu₈₀Co₂₀ Powders Prepared Via Chemical Means. *Journal of Applied Physics*, **75**(10):6610-6612, 1994.
- Harris, V. G.; Rubinstein, M.; Das, B. N., and Koon, N. C. Correlation of X-Ray-Diffraction and Mossbauer-Effect Measurements With Magnetic-Properties of Heat-Treated Cu₈₀Co₁₅Fe₅ Ribbons. *Journal of Applied Physics*, **75**(10):6924-6926, 1994.
- Harrison, J. A. and Brenner, D. W. Simulated Tribochemistry: An Atomic-Scale View of the Wear of Diamond. *Journal of the American Chemical Society*, **116**(23):10399-10402, 1994.
- Harvey, D. P.; Terrell, J. B., and Sudarshan, T. S. Hydrogen and Temperature Effects on the Slow Bend Behavior of 21-6-9 Stainless-Steel. *Engineering Fracture Mechanics*, **49**(1):159-163, 1994.

- Harvey, D. P.; Terrell, J. B., and Sudarshan, T. S. Hydrogen Effects on the Ductile to Brittle Transition Behavior of 21-6-9-Stainless Steel. *Journal of Materials Science*, **29**(20):5485-5490, 1994.
- Hass, N.; Covington, M.; Feldmann, W. L.; Greene, L. H., and Johnson, M. Transport Properties of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Ferromagnetic Interfaces. *Physica C*, **235**:1905-1906, 1994.
- Hayes, E. A.; Stemple, J. Z., and Rolison, D. R. Degradation of Polychlorinated Aromatics by Electrified Microheterogeneous Catalysis (EMC). *Abstracts of Papers of the American Chemical Society*, **207**:15-INOR, 1994.
- Hayward, T. J. Optimization of Hydrophone Placement for Acoustic Arrays Using Simulated Annealing. *Journal of the Acoustical Society of America*, **95**(1):201-212, 1994.
- Hazlett, R. N.; Hardy, D. R., and Malhotra, R. Examination of Middle Distillate Fuel Insolubles by Pyrolysis Field-Ionization Mass-Spectrometry. *Energy & Fuels*, **8**(3):774-781, 1994.
- Heagy, J. F. and Carroll, T. L. Chaotic Synchronization in Hamiltonian Systems. *Chaos*, **4**(2):385-390, 1994.
- Heagy, J. F.; Carroll, T. L., and Pecora, L. M. Experimental and Numerical Evidence for Riddled Basins in Coupled Chaotic Systems. *Physical Review Letters*, **73**(26):3528-3531, 1994.
- Heagy, J. F.; Carroll, T. L., and Pecora, L. M. Synchronous Chaos in Coupled Oscillator Systems. *Physical Review E*, **50**(3):1874-1885, 1994.
- Heagy, J. F. and Hammel, S. M. The Birth of Strange Nonchaotic Attractors. *Physica D*, **70**(1-2):140-153, 1994.
- Heagy, J. F.; Platt, N., and Hammel, S. M. Characterization of On-Off Intermittency. *Physical Review E*, **49**(2):1140-1150, 1994.
- Heburn, G. W. The Dynamics of the Seasonal Variability of the Western Mediterranean Circulation. Seasonal and Interannual Variability of the Western Mediterranean Sea. Washington, DC: American Geophysical Union; 1994;249-285.
- Hecker, M. An Expert-System for Processing Uncorrelated Satellite Tracks. *Advances in Astronomical Science*, **85**:317-, 1994.
- Hector, S. D.; Wong, V. V.; Smith, H. I.; McCord, M. A., and Rhee, K. W. Printability of Sub-150 Nm Features in X-Ray-Lithography - Theory and Experiments. *Journal of Vacuum Science & Technology B*, **12**(6):3965-3969, 1994.
- Hembree, L. A. and Siquig, R. Distributed Interactive Simulation Atmosphere Subgroup Rationale for Synthetic Atmosphere and Near-Space Environments. 1994 Summer Computer Simulation Conference. [La Jolla, CA, etc.: Simulation Councils, etc.] 789-794, 1994.
- Henderson, L. J. and Keller, T. M. Poly(Carborane-Siloxane-Acetylene) as Precursor to High-Temperature Thermoset and Ceramic. Inorganic and Organometallic Polymers II; Advanced Materials and Intermediates: Developed from a Symposium Sponsored by the Division of Polymer Chemistry, Inc., at the 205th National Meeting of the American Chemical Society, Denver, CO. 28 MAR -2 APR, 1993. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **572**: 416-426, 1994.

- Henderson, L. J. and Keller, T. M. Synthesis and Characterization of Poly(Carborane-Siloxane-Acetylene). *Macromolecules*, **27**(6):1660-1661, 1994.
- Hepp, M. A. and Miller, J. B. Chemical-Shift Contrast in NMR Imaging of Abundant Nuclei in Solids. *Journal of Magnetic Resonance Series A*, **110**(1):98-101, 1994.
- Hepp, M. A. and Miller, J. B. Mapping Molecular Orientation by Solid-State NMR Imaging. *Journal of Magnetic Resonance Series A*, **111**(1):62-69, 1994.
- Hepp, M. A. and Miller, J. B. NMR Imaging of Solid Polymers - Strategies for Chemical-Shift Selectivity. *Macromolecular Symposia*, **86**:271-282, 1994.
- Hertz, P.; Grove, J. E.; Kurfess, J. D.; Johnson, W. N.; Strickman, M. S.; Matz, S., and Ulmer, M. P. Continued Search for Fast Galactic Gamma-Ray Pulsars. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 126-130, 1994.
- Hertz, P.; Ly, Y.; Wood, K. S., and Cominsky, L. R. Evidence Against Secular Evolution in the Orbital Period of the LMXB EXO0748-676. New York, NY: AIP Press, c1994. AIP Conference Proceedings, 80-, 1994.
- Hertz, P.; Ly, Y.; Wood, K. S., and Cominsky, L. R. ROSAT Measurement of the Evolving Orbital Period in the LMXB EX00748-676. New York, NY: AIP Press, c1994. AIP Conference Proceedings, 363-, 1994.
- Hess, D. W. A Vortex Core Transition in an Unconventional Superconductor. *Physica B*, **194**:1419-1420, 1994.
- Hettich, R. L.; Compton, R. N.; Tuinman, A.; Derecskei-Kovacs, A.; Marynick, D. S., and Dunlap, B. I. Attachment of 2 Electrons to C₆₀f₄₈ - Coulomb Barriers in Doubly-Charged Anions. *Physical Review Letters*, **73**(21):2821-2824, 1994.
- Hickman, J. J.; Bhatia, S. K.; Quong, J. N.; Shoen, P.; Stenger, D. A.; Pike, C. J., and Cotman, C. W. Rational Pattern Design for In-Vitro Cellular Networks Using Surface Photochemistry. *Journal of Vacuum Science & Technology A-Vacuum Surfaces and Films*, **12**(3):607-616, 1994.
- Hickman, J. J.; Foster, K. E.; Kowtha, V.; Bey, P., and Stenger, D. A. Whole-Cell Based Biosensors. *Abstracts of Papers of the American Chemical Society*, **207**:76-BTEC, 1994.
- Hickman, J. J.; Foster, K. E.; Oprison, R. C.; Stenger, D. A.; Schaffner, A. E., and Barker, J. L. Engineering of Artificial Neuronal Cellular Networks. *Abstracts of Papers of the American Chemical Society*, **207**:6-BTEC, 1994.
- Hickman, J. J.; Foster, K. E.; Stenger, D. A.; Schaffner, A. E., and Barker, J. L. Biological Interface Design to Control Protein Adsorption. *Abstracts of Papers of the American Chemical Society*, **207**:244-COLL, 1994.
- Hirth, J. P.; Aaronson, H. I.; Khachatryan, A.; Cahn, J. W.; Christian, J. W.; Tsuzaki, K.; Olson, G. B.; Howe, J. M.; Wayman, C. M.; Enomoto, M.; Lee, J. K.; Chen, H.; Hsu, T. Y.; Russell, K. C.; Banerjee, S.; Fang, H. S.; Muddle, B. C., and Hall, M. G. Pacific Rim Conference on the Roles of Shear and Diffusion in the Formation of Plate-Shaped Transformation Products - General Discussion Session. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(12):2655-2673, 1994.

- Ho, J. M. and Couchman, L. S. Approximate Ray Synthesis of the Surface Fields of a Submerged Elastic Cylindrical Shell with Hemispherical Endcaps. *Journal of the Acoustical Society of America*, **96**(2):1104-1115, 1994.
- Ho, T.; Wynne, K. J.; Chen, X., and Gardella, J. A. A Procedure to Construct Surface Concentration Depth Profiles from ESCA Data. *Abstracts of Papers of the American Chemical Society*, **207**:12-PMSE, 1994.
- Ho, Y.-S. and Schoen, P. The Permittivity at X-Band Frequencies of Nickel-Coated Graphite Fibers in an Epoxy Matrix. *Journal of Materials Research*, **9**(1):246-251, 1994.
- Hodur, R. M. Current and Future Design of U.S. Navy Mesoscale Models for Operational Use. U.S. Army 1994 Battlefield Atmospherics Conference, Las Cruces, NM. Meeting. 29 Nov-2Dec, 1994. White Sands Missile Range, NM: Battlefield Environment Directorate, U.S. Army Research Laboratory, 1994. 1-7, 1994.
- Hoffman, C. A.; Meyer, J. R.; Youngdale, E. R.; Bartoli, F. J.; Miles, R. H., and Ram-Mohan, L. R. Electron-Transport in InAs/Ga_{1-x}In_xSb Superlattices. *Solid-State Electronics*, **37**(4-6):1203-1206, 1994.
- Hoffman, E.; Mankin, A.; Perez, M., and Marsh, S. J. VINCE - Vendor Independent (and Architecture Flexible) Network Control. *Computer Networks and ISDN Systems*, **27**(3):471-478, 1994.
- Holder, S. L.; Rowan, L. G., and Krebs, J. J. Electron-Paramagnetic-Resonance Forbidden Transitions from Hydrogen in Polycrystalline Diamond Films. *Applied Physics Letters*, **64**(9):1091-1093, 1994.
- Holland, G. E.; Seely, J. F.; McCoy, R. P.; Dymond, K. F.; Rollins, C., and Corson, M. Effect of Energetic Electron and Proton Bombardment on the Reflective of Silicon-Carbide Mirrors in the Extreme-Ultraviolet Region. *Applied Optics*, **33**(25):5902-5905, 1994.
- Holt, T. R. and Chang, S. W. Impact of SSM/I Precipitable Water Assimilation on Mesoscale Simulations of the ERICA IOP 4 Cyclone. Tenth Conference on Numerical Weather Prediction, Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 184-186, 1994.
- Holtz, R. L. and Provenzano, V. Enhanced Microhardness of Copper-Niobium Nanocomposites. *Nanostructured Materials*, **4**:241-, 1994.
- Honeck, R. P. and Temple, J. G. Proverbs: The Extended Conceptual Base and Great Chain Metaphor Theories. *Metaphor and Symbolic Activity*, **9**(2):85, 1994.
- Hood, J. A.; Mignogna, R. B.; Batra, N. K.; Simmonds, K. E., and Chaskelis, H. H. Measurement of Anisotropic Elastic Moduli and Comparison with Equivalent Media Theories. Nondestructive Characterization of Materials VI, Oahu, HI. Meeting. 7-11 JUN, 1993. New York, NY: Plenum Press, c1994. 567-573, 1994.
- Hope, A. S. Ground Test of Satellite Attitude Determination Using GPS. Proceedings of the AAS/AIAA Spaceflight Mechanics; Cocoa Beach, FL. Meeting 14-16 Feb, 1994. New York, NY: Plenum Press, 1957- . Spaceflight Mechanics; Advances in the Astronautical Sciences, **87**: 67-78, 1994.
- Hoppel, W. A.; Frick, G. M.; Fitzgerald, J. W., and Larson, R. E. Marine Boundary Layer Measurements of New Particle Formation and the Effects Nonprecipitating Clouds Have on the Aerosol Distribution. *Journal of Geophysical Research*, **99**(D7):14,443-14,459, 1994.

- Hoppel, W. A.; Frick, G. M.; Fitzgerald, J. W., and Wattle, B. J. A Cloud Chamber Study of the Effect That Nonprecipitating Water Clouds Have on the Aerosol Size Distribution. *Aerosol Science and Technology*, **20**(1):1-30, 1994.
- Horwitz, J. S.; Cotell, C. M.; Chrisey, D. B.; Pond, J. M.; Grabowski, K. S.; Carroll, K. R.; Newman, H. S., and Osofsky, M. S. Origins of Conductive Losses at Microwave Frequencies in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ /LaAlO₃/YBa₂Cu₃O_{7- δ} Trilayers Deposited by Pulsed Laser Deposition. *Journal of Superconductivity*, **7**(6):965-969, 1994.
- Howard, J. W.; Block, R. C.; Dussault, H.; Stapor, W. J.; McDonald, P. T.; Knudson, A. R., and Pinto, M. R. A Novel-Approach for Measuring the Radial-Distribution of Charge in a Heavy-Ion Track. *IEEE Transactions on Nuclear Science*, **41**(6):2077-2084, 1994.
- Howerton, M. M. and Burns, W. K. Depolarized Source for High Power Remote Operation of an Integrated Optical Modulator. *IEEE Photonics Technology Letters*, **6**(1):115-117, 1994.
- Hsu, D. S. Y. Tenth Micrometer Trench Fabrication by Aperture Narrowing of 0.6 μm Starting Mask Structures Using Chemical-Beam Deposition and Ion-Beam Redeposition. *Journal of Vacuum Science & Technology B*, **12**(5):3048-3053, 1994.
- Hu, H. S. W. and Griffith, J. R. Processable Fluorinated Acrylic Resins with Low Dielectric Constants. Polymers for Microelectronics.. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **537**: 507-516, 1994.
- Huba, J. D. Hall Dynamics of the Kelvin-Helmholtz Instability. *Physical Review Letters*, **72**(13):2033-2036, 1994.
- Huba, J. D.; Grossmann, J. M., and Ottinger, P. F. Hall Magnetohydrodynamic Modeling of a Long-Conduction-Time Plasma Opening Switch. *Physics of Plasmas*, **1**(10):3444-3454, 1994.
- Hubbard, R. F.; Lampe, M.; Friedman, M.; Serlin, V.; Fernsler, R. F.; Slinker, S. P.; Haber, I., and Colombant, D. G. Simulation of Beam-gap Interactions and Microwave Extraction in the NRL Relativistic Klystron Amplifier. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2154**: 61-, 1994.
- Hubler, G. K.; Donovan, E. P., and Gossett, C. R. Ion-Beam-Assisted Deposition of Hydrogenated Amorphous-Silicon Nitride. *Nuclear Instruments & Methods in Physics Research Section B-Beam Interactions with Materials and Atoms*, **91**(1-4):540-544., 1994.
- Hues, S. M.; Draper, C. F., and Colton, R. J. Measurement of Nanomechanical Properties of Metals Using the Atomic Force Microscope. *Journal of Vacuum Science & Technology B*, **12**(3):2211-2214, 1994.
- Hues, S. M.; Draper, C. F.; Lee, K. P., and Colton, R. J. Effect of PZT and PMN Actuator Hysteresis and Creep on Nanoindentation Measurements Using Force Microscopy. *Review of Scientific Instruments*, **65**(5):1561-1565, 1994.
- Hummel, C. A. 5 Years of Stellar Position Measurements with the MK-III Optical Interferometer. Very High Angular Resolution Imaging; 1994. Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993, edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series **158**: 448-450, 1994.

- Hummel, C. A. and Armstrong, J. T. Mk-III Interferometer: Milliarcsecond "Visual" Orbits of Spectroscopic Binaries. Very High Angular Resolution Imaging; Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993 / edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands] ; Boston: Kluwer Academic, c1994. IAU Symposium Series, **158**: 410-412, 1994.
- Hummel, C. A.; Armstrong, J. T.; Quirrenbach, A.; Buscher, D. F.; Mozurkewich, D.; Elias, N. M., and Wilson, R. E. Very High-Precision Orbit of Capella by Long-Base-Line Interferometry. *Astronomical Journal*, **107**(5):1859-1867, 1994.
- Hummel, C. A.; Mozurkewich, D.; Elias, N. M.; Quirrenbach, A.; Buscher, D. F.; Armstrong, J. T.; Johnston, K. J.; Simon, R. S., and Hutter, D. J. Four Years of Astrometric Measurements with the Mark III Optical Interferometer. *Astronomical Journal*, **108**(1):326-336, 1994.
- Hunter, W. R. and Long, J. P. Thin-Film Interference Mirror to Suppress Grating Harmonics in Vacuum-Ultraviolet Radiation. *Applied Optics*, **33**(7):1264-1269, 1994.
- Hutter, D. J. The USNO Astrometric Interferometer. Very High Angular Resolution Imaging: Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993 / edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. International Astronomical Union Symposium, **158**: 427-435, 1994.
- Ibnabddjalil, M.; Loh, I. H.; Chu, C. C.; Blumenthal, N.; Alexander, H., and Turner, D. Effect of Surface Plasma Treatment on the Chemical, Physical, Morphological, and Mechanical Properties of Totally Absorbable Bone Internal-Fixation Devices. *Journal of Biomedical Materials Research*, **28**(3):289-301, 1994.
- Idzerda, Y. U.; Chen, C. T.; Cheng, S. F.; Vavra, W.; Prinz, G. A.; Meigs, G.; Lin, H. J., and Ho, G. H. Extraction of the Coefficient of Giant Magnetoresistance. *Applied Physics Letters*, **64**(25):3503-3505, 1994.
- Idzerda, Y. U.; Chen, C. T.; Cheng, S. F.; Vavra, W.; Prinz, G. A.; Meigs, G.; Lin, H. J., and Ho, G. H. Multidomain and Incomplete Alignment Effects in Giant Magnetoresistance Trilayers. *Journal of Applied Physics*, **76**(10):6525-6527, 1994.
- Idzerda, Y. U.; Chen, C. T.; Lin, H. J.; Meigs, G.; Ho, G. H., and Kao, C.-C. Soft X-Ray Magnetic Circular Dichroism and Magnetic Films. *Nuclear Instruments & Methods in Physics Research Section A-Accelerators, Spectrometers, Detectors, and Associated Equipment*, **347**(1-3):134-141, 1994.
- Idzerda, Y. U.; Lin, H. J.; Ho, G.; Meigs, G.; Chaiken, A.; Prinz, G. A., and Chen, C. T. Element-Specific Magnetic Hysteresis Curves of Fe/Cu/Co Multilayers. *Journal of Applied Physics*, **75**(10):5808, 1994.
- Iturriaga, R. and Roester, C. S. Fluorometric Characterization of Dissolved and Particulate Matter in Arctic Sea Ice. Ocean Optics XI, Bergen, NO. Meeting. 13-15 Jun, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2258**: 920-932, 1994.

- Jackson, E. M.; Weaver, B. D., and Summers, G. P. Effect of Proton Irradiation on the Critical Current and Resistance of High T_c Grain Boundary Josephson Junctions. *Applied Physics Letters*, **64**(4):511-513, 1994.
- Jackson, K.; Kaxiras, E., and Pederson, M. R. Bonding of Endohedral Atoms in Small Carbon Fullerenes. *Journal of Physical Chemistry*, **98**(32):7805-7810, 1994.
- Jackson, R. H.; Freund, H. P.; Pershing, D. E., and Taccetti, J. M. The Coaxial Hybrid Iron (CHI) Wiggler. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **341**(1-3):454-458, 1994.
- Jacob, R. J. K.; Sibert, L. E.; McFarlane, D. C., and Mullen, M. P. Integrality and Separability of Input Devices. *ACM Transactions on Computer-Human Interaction*, **1**:3-26, 1994.
- Jacobs, G. A.; Hurlburt, H. E.; Kindle, J. C.; Metzger, E. J.; Mitchell, J. L.; Teague, W. J., and Wallcraft, A. J. Decade-Scale Trans-Pacific Propagation and Warming Effects of an El-Nino Anomaly. *Nature*, **370**(6488):360-363, 1994.
- Jacobs, G. A. and Mitchell, J. L. Rossby Waves from the 1986-87 and 1991-93 El Niños Observed by TOPEX/Poseidon. *TOPEX/PPOSEIDON Research News*, **3**:7-11, 1994.
- Jacobs, V. L. Radiation-Hydrodynamics Approaches to Laser-Matter Interactions. *Journal of Quantitative Spectroscopy & Radiative Transfer*, **51**(1-2):139-146, 1994.
- Jacobs, V. L.; Cooper, J., and Haan, S. L. Influence of Relaxation Phenomena in the Unified Description of Resonant and Nonresonant Radiative Transitions. *Physical Review A*, **50**(4):3005-3038, 1994.
- Jacobsen, R. L. and Ehrlich, A. C. Vibrating-Reed Dynamics in a Magnetic Field. *Physical Review Letters*, **73**(2):348-351, 1994.
- Jacobsen, R. L.; Ehrlich, A. C.; Tritt, T. M., and Gillespie, D. J. Effect of a Magnetic Field on a Vibrating Reed with Anisotropic Susceptibility. *Physical Review B-Condensed Matter*, **50**(13):9208-9214, 1994.
- Jacobsen, R. L.; Tritt, T. M.; Ehrlich, A. C., and Gillespie, D. J. Magnetoelastic Behavior of NbSe₃. *Physical Review B-Condensed Matter*, **50**(14):10373-10376, 1994.
- Jacobsen, R. L.; Tritt, T. M.; Ehrlich, A. C., and Gillespie, D. J. Temperature Dependence of Elastic Properties of TaSe₃. *Physica B*, **194**:429-430, 1994.
- Jaganathan, J. and Aggarwal, I. Separation of Iron, Cobalt, Nickel, and Copper from Aluminum Fluoride and Their Determination by Graphite Furnace Atomic Absorption Spectrometry. *Microchemical Journal*, **50**(1):44-47, 1994.
- Jang, K. W.; Meltzer, R. S., and Ganem, J. Persistent Optical Coherence Loss by Uv Irradiation in Pr³⁺-YAG. *Journal of Luminescence*, **58**(1-6):311-315, 1994.
- Jang, K. W.; Meltzer, R. S., and Ganem, J. Persistent UV-Induced Optical Dephasing in Pr-Doped Yttrium Aluminum Garnet. *Physical Review B-Condensed Matter*, **49**(5):3009-3014, 1994.

- Jansen, R. W.; Ainsworth, T. L.; Fusina, R. A.; Chubb, S. R., and Valenzuela, G. R. Hydrodynamic and Radar Modeling of Surface Features Observed in Gulf Stream Boundary Region. 1994 International Geoscience and Remote Sensing Symposium (IGARSS,; Pasadena, CA. Meeting. 8-12 Aug, 1994. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 460-462, 1994.
- Jendrasiak, G. L.; Ribeiro, A. A.; Nagumo, M. A., and Schoen, P. E. A Temperature Study of Diacetylenic Phosphatidylcholine Vesicles. *Biochimica et Biophysica Acta-Biomembranes*, **1194**(2):233-238, 1994.
- Jenkins, W. C. and Liu, S. T. Hot Electron Lifetime of 0.8 μm CMOS Transistors Fabricated in SIMOX. Sixth International Symposium on Silicon-on-Insulator Technology and Devices, San Francisco, CA. Meeting. May, 1994. Pennington, NJ: Electrochemical Society; 1994: 333-338. ISBN: 1586770432.
- Jenkins, W. C. and Liu, S. T. Radiation Response of Fully-Depleted MOS-Transistors Fabricated in SIMOX. *IEEE Transactions on Nuclear Science*, **41**(6):2317-2321, 1994.
- Jensen, K. L. An Improved Fowler Norheim Equation for Field Emission from Semiconductors. Seventh International Vacuum Microelectronics Conference, 1994. Paris, FR: Societe Francaise du Vide, 1994. 162-165, 1994.
- Jensen, K. L. Simulation of Time Dependent Quantum Transport in Field Emission from Semiconductors: Complications Due to Scattering, Surface Density, and Temperature. Seventh International Vacuum Microelectronics Conference; 1994 Jul; Grenoble, France. Paris, France: Societe Francaise du Vide; 1994: 166-169, 1994.
- Jensen, K. L. and Ganguly, A. K. Time Dependent, Self-Consistent Simulations of Field Emission from Silicon Using the Wigner Distribution Function. *Journal of Vacuum Science & Technology B*, **12**(2):770-775, 1994.
- Jensen, K. L. and Zaidman, E. G. Field Emission from an Elliptic Boss: Exact and Approximate Forms for Area Factors and Currents. *Journal of Vacuum Science & Technology B*, **12**(2):776-780, 1994.
- Jeong, J.; Grinsteion, F. F., and Hussain, F. Education of Coherent Structures in a Numerically Simulated Plane Wake. *Applied Scientific Research*, **53**(3-4):227-236, 1994.
- Jeong, L. S.; Nicklaus, M. C.; George, C., and Marquez, V. E. Facile Fluorination of Deoxy-4'-Thiopyrimidine Nucleosides with Down Hydroxyl-Groups - Retention of Configuration After Fluoride Opening of the Quaternized N-3-Mem Anhydronucleosides. *Tetrahedron Letters*, **35**(41):7573-7576, 1994.
- Jeong, L. S.; Nicklaus, M. C.; George, C., and Marquez, V. E. Unanticipated Retention of Configuration in the Dast Fluorination of Deoxy-4'-Thiopyrimidine Nucleosides with up Hydroxyl-Groups. *Tetrahedron Letters*, **35**(41):7569-7572, 1994.
- Jewell, J. M. Alkaline Earth Gallogermanate Glasses. Rare Elements in Glasses; 1994. *Key Engineering Materials*, **94-95**: 317-344, 1994.
- Jewell, J. M.; Busse, L. E.; Crahan, K.; Harbison, B. B., and Aggarwal, I. D. Optical Properties of BaO-Ga₂O₃-GeO₂ Glasses for Fiber and Bulk Optical Applications. Properties and Characteristics of Optical Glass III, San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2287**: 154-163, 1994.

- Jewell, J. M.; Higby, P. L., and Aggarwal, I. D. Properties of $\text{BaO-R}_2\text{O}_3\text{-Ga}_2\text{O}_3\text{-GeO}_2$ @ = Y, Al, La, and Gd) Glasses. *Journal of the American Ceramic Society*, **77**(3):697-700, 1994.
- Jiang, H.; Yuan, T.; How, H.; Widom, A.; Vittoria, C.; Chrisey, D.; Horwitz, J., and Drehman, A. Measurements of Surface Impedance, London Penetration Depth, and Coherence Length in Y-Ba-Cu-O Films at Microwave-Frequencies. *Physical Review B-Condensed Matter*, **49**(14):9924-9932, 1994.
- Johnson, J. K.; Davidson, B. N.; Pederson, M. R., and Broughton, J. Q. Energetics and Structure of Toroidal Forms of Carbon. *Physical Review B-Condensed Matter*, **50**(23):17575-17582, 1994.
- Johnson, J. K.; Muller, E. A., and Gubbins, K. E. Equation of State for Lennard-Jones Chains. *Journal of Physical Chemistry*, **98**(25):6413-6419, 1994.
- Johnson, J. K.; Panagiotopoulos, A. Z., and Gubbins, K. E. Reactive Canonical Monte-Carlo - A New Simulation Technique for Reacting or Associating Fluids. *Molecular Physics*, **81**(3):717-733, 1994.
- Johnson, M. The All-Metal Spin Transistor. *IEEE Spectrum*, **31**:47-, 1994.
- Johnson, M. Spin Coupled Resistance Observed in Ferromagnet-Superconductor-Ferromagnet Trilayers. *Applied Physics Letters*, **65**(11):1460-1462, 1994.
- Johnson, W. N.; Grove, J. E.; Kinzer, R. L.; Kroeger, R. A.; Kurfess, J. D.; Strickman, M. S.; McNaron-Brown, K.; Grabelsky, D. A.; Purcell, W. R.; Ulmer, M. P., and Jung, G. V. The Canonical Seyfert Spectrum: The Implications of OSSE Observations. The Second Compton Symposium; College Park, MD. Meeting. 20-22 SEP, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 515-524, 1994.
- Johnston, K. J. The Present Status of Astrometry at Optical and Radio Wavelengths. Very High Angular Resolution Imaging; Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993, edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **158**: 423-426, 1994.
- Jones-Meehan, J.; Vasanth, K. L.; Conrad, R. K.; Fernandez, M.; Little, B. J., and Ray, R. I. Corrosion Resistance of Several Conductive Caulks and Sealants from Marine Field Tests and Laboratory Studies with Marine, Mixed Communities Containing Sulfate-Reducing Bacteria (SRB). Microbiologically Influenced Corrosion Testing. ASTM Special Technical Publication, **1232**: 217-233, 1994.
- Jonker, B. T. Interfacial Contributions to Magnetic Thin Film Anisotropy Arising from Epitaxial Growth Processes in Metal/Semiconductor Structures. Epitaxial Growth Processes. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2140**: 118-130, 1994.
- Jonker, B. T. Surface Adatom Coordination and Orientation Determined by Low-Energy Auger-Electron and Photoelectron Diffraction Due to Adatom Emission. *Surface Science*, **306**(1-2):L555-L562, 1994.
- Jonker, B. T.; Abad, H.; Fu, L. P.; Yu, W. Y.; Petrou, A., and Warnock, J. Coexistence of Brillouin and Van Vleck Spin Exchange in $\text{Zn}_{1-x}\text{Mn}_x\text{Se}$ $\text{Zn}_{1-y}\text{Fe}_y\text{Se}$ Spin Superlattice Structures. *Journal of Applied Physics*, **75**(10):5725-5727, 1994.

- Jonker, B. T.; Abad, H., and Krebs, J. J. Interfacial Contributions to Magnetic-Anisotropy in Metal-Semiconductor Systems. *Journal of Applied Physics*, **76**(10):6294-6294, 1994.
- Jordan, A. K. and Veysoglu, M. E. Electromagnetic Remote Sensing of Sea Ice. *Inverse Problems*, **10**:1041-1058, 1994.
- Joyce, G.; Krall, J., and Slinker, S. ELBA (Electron Beams in Accelerators) Particle Simulation Code. *Laser and Particle Beams*, **12**(2):273-282, 1994.
- Julien, J. P.; Papaconstantopoulos, D. A.; Singh, D. J.; Pickett, W. E., and Cyrot-Lackmann, F. Electronic-Structure of the $BaA_{1-x}B_xO_3$ (A,B=Pb,Bi,Sn,Sb) Alloy Systems: Implications for Superconductivity. *Physica C*, **220**(3-4):359-366, 1994.
- Jung, G. V.; Kurfess, J. D.; Johnson, W. N.; Strickman, M. S.; Kinzer, R. L.; Purcell, W. R.; Grabelsky, D. A., and Ulmer, M. P. OSSE Observations of the Galactic Center Region. Emission from Discrete Sources. The Second Compton Symposium; College Park, MD. Meeting. 20-22 SEP, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 426-430, 1994.
- Jung, T. M.; Phaneuf, R. J.; and Williams, E. D. Sublimation and Phase-Transitions on Singular and Vicinal Si(111) Surfaces. *Surface Science*, **301**:129-135, 1994.
- Jung, T. M.; Prokes, S. M., and Kaplan, R. Growth and Energetics of Ga and Al Chains on Si(112). *Journal of Vacuum Science & Technology A - Vacuum Surfaces and Films*, **12**(4):1838-1842, 1994.
- Justus, B. L.; Campillo, A. J., and Huston, A. L. Thermal-Defocusing Scattering Optical Limiter. *Optics Letters*, **19**(9):673-675, 1994.
- Kafafi, Z. H. Fullerenes and Photonics, San Diego, CA. Meeting. 25-26 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2284**, 1994.
- Kafafi, Z. H. Nonlinear-Optical Properties of the Fullerenes. *Abstracts of Papers of the American Chemical Society*, **208**:31-COMP, 1994.
- Kafafi, Z. H.; Flom, S. R.; Sarkas, H. W.; Pong, R. G., and Bartoli, F. J. Nonlinear-Optical Properties of a Poly-Phenylene Vinylene C-60 Composite. *Abstracts of Papers of the American Chemical Society*, **208**:28-POLY, 1994.
- Kafafi, Z. H.; Flom, S. R.; Sarkas, H. W.; Pong, R. G. S.; Merritt, C. D., and Bartoli, F. J. Nonlinear Optical Properties of Chemically Modified Fullerenes. Fullerenes and Photonics, San Diego, CA. Meeting. 25-26 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2284**: 134-147, 1994.
- Kampfer, N.; Aellig, C. P.; Rudin, C.; Degenhardt, W.; Hartmann, G.; Bevilacqua, R. M.; Schwartz, P. R.; Langen, J.; Kunzi, K., and Olivero, J. First Results of Zonally Averaged ClO Concentrations as Measured by MAS on ATLAS-1. 1994 International Geoscience and Remote Sensing 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981-. 1341-1343, 1994.
- Kanert, O.; Hackmann, A.; Kuchler, R., and Ngai, K. L. Nuclear-Spin Relaxation in Electrolyte Glasses. *Journal of Non-Crystalline Solids*, **172**:1424-1430, 1994.

- Kanert, O.; Kuchler, R.; Dieckhofer, J.; Lu, X.; Jain, H., and Ngai, K. L. Study of Low-Frequency Excitations in Disordered Solids by Nuclear-Magnetic-Resonance and Electrical-Conductivity. *Journal of Non-Crystalline Solids*, **172**:1277-1284, 1994.
- Kanert, O.; Kuchler, R.; Ngai, K. L., and Jain, H. Significant Differences Between Nuclear-Spin Relaxation and Conductivity Relaxation in Low-Conductivity Glasses. *Physical Review B-Condensed Matter*, **49**(1):76-82, 1994.
- Kang, M. H.; Dietz, H. G., and Bhargava, B. Multiple-Query Optimization at Algorithm-Level. *Data & Knowledge Engineering*, **14**(1):57-75, 1994.
- Kao, C. C.; Chen, C. T.; Johnson, E. D.; Hastings, J. B.; Lin, H. J.; Ho, G. H.; Meigs, G.; Brot, J. M.; Hulbert, S. L.; Idzerda, Y. U., and Vettier, C. Dichroic Interference Effects in Circularly-Polarized Soft-X-Ray Resonant Magnetic Scattering. *Physical Review B-Condensed Matter*, **50**(13):9599-9602, 1994.
- Kao, C. C.; Chen, C. T.; Johnson, E. D.; Idzerda, Y. U., and Hastings, J. B. Soft-X-Ray Magneto-optical Kerr-Effect. *Journal of Applied Physics*, **75**(10):5810-5810, 1994.
- Kaplan, C. R.; Baek, S. W.; Oran, E. S., and Ellzey, J. L. Dynamics of a Strongly Radiating Unsteady Ethylene Jet Diffusion Flame. *Combustion and Flame*, **96**(1-2):1-21, 1994.
- Karle, I. L. 50 Years of Research. *Abstracts of Papers of the American Chemical Society*, **207**:6-WCC, 1994.
- Karle, I. L. Diffraction Studies of Model and Natural Helical Peptides. *Methods in Physiology Series*, 355-380, 1994.
- Karle, I. L.; Flippen-Anderson, J. L.; Agarwalla, S., and Balaram, P. Conformation of the Flexible Bent Helix of Leu¹-Zervamicin in Crystal C and a Possible Gating Action for Ion Passage. *Biopolymers*, **34**(6):721-735, 1994.
- Karle, I. L.; Flippen-Anderson, J. L.; Gurunath, R., and Balaram, P. Facile Transition Between 3(10)-Helix and Alpha-Helix - Structures of 8-Residue, 9-Residue, and 10-Residue Peptides Containing the - (Leu-Aib-ALA)(2)-Phe-Aib- Fragment. *Protein Science*, **3**(9):1547-1555, 1995.
- Karle, I. L.; Flippen-Anderson, J. L.; Uma, K., and Balaram, P. Hydration and Distortion of Peptide Helices in Crystals. α -Helical Structure of a Dodecapeptide, Boc-(Ala-Leu-Aib)₄-OMe. *International Journal of Peptide and Protein Research*, **44**(5):491-498, 1994.
- Karle, I. L.; Ranganathan, D.; Shah, K., and Vaish, N. K. Conformation of the Oxalamide Group in Retro-Bispeptides: Three Crystal Structures. *International Journal of Peptide and Protein Research*, **43**(2):160-165, 1994.
- Karle, I. L.; Rao, R. B.; Prasad, S.; Kaul, R., and Balaram, P. Nonstandard Amino Acids in Conformational Design of Peptides. Helical Structures in Crystals of 5 -10 Residue Peptides Containing Dipropylglycine and Dibutylglycine. *Journal of the American Chemical Society*, **116**(23):10355-10361, 1994.
- Karle, J. Applications of Mathematics to Structural Chemistry. *Journal of Chemical Information and Computer Sciences*, **34**(2):381-390, 1994.
- Karle, J. The Role of Motivation in Scientific Research. 3. The Paths of Progress. *Interdisciplinary Science Reviews*, **19**(1):35-41, 1994.

- Karpen, J. T.; Dahlburg, R. B., and Davila, J. M. The Effects of Kelvin-Helmholtz Instability on Resonance Absorption Layers in Coronal Loops. *Astrophysical Journal*, **421**(1):372-380, 1994.
- Kassim, N. E.; Hertz, P.; VanDyk, S. D., and Weiler, K. W. ROSAT Observations of SNRs as Distance Indicators. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, 325-, 1994.
- Kassim, N. E.; Hertz, P.; VanDyk, S. D., and Weiler, K. W. X-Ray Observations of Supernova-Remnants as Distance Indicators. *Astrophysical Journal*, **427**(2):L95-L97, 1994.
- Katz, R. A.; Keith, W. L.; Galib, T. A., and Handler, R. A. Application of Non-Traditional Processing Methods to Transitional and Turbulent Boundary Layer (TBL) Flow Noise. International Conference on Theoretical and Computational Acoustics, 467-498, 1994.
- Katzer, D. S.; Shanabrook, B. V., and Gammon, D. Raman-Scattering Study of the Intermixing of AIAs Monolayers in GaAs Grown by Molecular-Beam Epitaxy. *Journal of Vacuum Science & Technology B*, **12**(2):1056-1058, 1994.
- Kaxiras, E. and Boyer, L. L. Energetics of Large Lattice Strains - Application to Silicon. *Physical Review B-Condensed Matter*, **50**(3):1535-1540, 1994.
- Kaxiras, E.; Jackson, K., and Pederson, M. R. Theoretical Study of Passivated Small Fullerenes C₂₄x₄ (X=N, P, as) and Their Isoelectronic Equivalents (Bn)₁₂x₄. *Chemical Physics Letters*, **225**(4-6):448-453, 1994.
- Keefe, T. F. and Landwehr, C. E. Database Security, VII: Status and Prospects: Results of the IFIP WG 11.3 Workshop on Database Security, Lake Guntersville, AL. Meeting. 12-15 SEP, 1993. Status and Prospects: Results of the IFIP WG 11.3 Workshop on Database Security, Lake Guntersville, AL. Meeting. 12-15 SEP, 1993. Amsterdam; New York, NY: North-Holland, 1994. *IFIP Transactions. A. Computer Science and Technology*, **A-47**, 1994.
- Keegan, M. A. and Papaconstantopoulos, D. A. Electronic Structure and Total Energy of Crystalline Approximants to Quasicrystalline Al-Cu-Fe Alloys. *Nanophase Materials*, 323-331, 1994.
- Keen, T. R. and Glenn, S. M. A Coupled Hydrodynamic Bottom Boundary-Layer Model of Ekman Flow on Stratified Continental Shelves. *Journal of Physical Oceanography*, **24**:1732-, 1994.
- Keenan, F. P.; Conlon, E. S.; Bowden, D. A.; Dwivedi, B. N., and Widing, K. G. Allx Emission-Line Ratios in Solar-Flares Observed with the S082A Spectrograph on Board Skylab. *Solar Physics*, **149**(1):137-142, 1994.
- Keenan, F. P.; Conlon, E. S.; Foster, V. J.; Tayal, S. S., and Widing, K. G. Fe XVI Line Ratios in the Sun. *Astrophysical Journal*, **432**(2):809-811, 1994.
- Keenan, F. P.; Conlon, E. S.; Warren, G. A.; Pradhan, A. K.; Zhang, H. L.; Sampson, D. H., and Widing, K. G. Ne vi Line Ratios in the Sun. *Astrophysical Journal*, **421**(2):851-853, 1994.
- Keenan, F. P.; Foster, V. J.; Roche, I. J.; Mohan, M., and Widing, K. G. Ca-X-Line Ratios in Solar-Flares. *Solar Physics*, **154**(2):309-315, 1994.
- Keenan, F. P.; Harra, L. K.; Doschek, G. A., and Cook, J. W. The Determination of Electron-Densities in the Solar Atmosphere from the 1718.56 Å/1486.51 Å Emission-Line Ratio in N IV. *Astrophysical Journal*, **432**(2):806-808, 1994.

- Keiffer, R. S.; Novarini, J. C., and Norton, G. V. The Impulse-Response of an Aperture - Numerical-Calculations Within the Framework of the Wedge Assemblage Method. *Journal of the Acoustical Society of America*, **95**(1):3-12, 1994.
- Keller, M. R.; Gotwols, B. L.; Plant, W. J., and Keller, W. C. Comparison of Microwave Backscatter with Optically-Derived Cross Sections from Wind-Generated Waves in a Wavetank. 1994 International Geoscience and Remote Sensing Symposium (IGARSS), Pasadena, CA. Meeting. 8-12 Aug, 1994. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 2424-2426, 1994.
- Keller, T. M. High-Temperature Copolymer From Inorganic-Organic Hybrid Polymer and Multi-Ethynylbenzene. *Abstracts of Papers of the American Chemical Society*, **208**:19-PMSE, 1994.
- Keller, T. M. Synthesis and Polymerization of Multiple Aromatic Ether Phthalonitriles. *Chemistry of Materials*, **6**(3):302-305, 1994.
- Kelly, F. J.; Andrews, G. A., and Georges, T. M. Solar Radar Revival. STEP Symposium, Laurel, MD. Meeting, AUG, 1992. New York, NY: Pergamon Press, 1994. COSPAR Colloquium Series, **5**:147-150, 1994.
- Kemmerer, R.; Meadows, C., and Millen, J. Three Systems for Cryptographic Protocol Analysis. *Journal of Cryptology*, **7**(2):79-130, 1994.
- Kemner, K. M.; Bunker, B. A.; Kropf, A. J.; Luo, H.; Samarth, N.; Furdyna, J. K.; Weidmann, M. R., and Newman, K. E. Atomic Rearrangement at ZnTe/CdSe Interfaces. *Physical Review B*, **50**:4327-, 1994.
- Kemner, K. M.; Harris, V. G.; Elam, W. T., and Lodder, C. J. Polarization-Dependent EXAFS Studies of Chemical and Structural Anisotropy in Sputter-Deposited $\text{Co}_{76}\text{Cr}_{22}$ Films. *IEEE Transactions on Magnetics*, **30**(6):4017-4019, 1994.
- Kemner, K. M.; Kropf, J., and Bunker, B. A. A Low-temperature Total Electron Yield Detector for X-Ray-Absorption Fine-Structure Spectra. *Review of Scientific Instruments*, **5**:3667-, 1994.
- Kendziora, C. and Rosenberg, A. Raman-Spectroscopy of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ with Varying Oxygen Stoichiometry. *Physica C*, **235**:1121-1122, 1994.
- Kennedy, T. A.; Glaser, E. R.; Murdin, B. N.; Pidgeon, C. R.; Prior, K. A., and Cavenett, B. C. Identification of V_{Se} -Impurity Pairs in ZnSeN. *Applied Physics Letters*, **65**(9):1112-1114, 1994.
- Kersey, A. D. Multiplexed Bragg Grating Fiber Sensors. IEEE LEOS [IEEE/Lasers and Electro-Optics Society] Annual Meeting, Boston, MA. Meeting. 31 Oct-3 Nov, 1994. New York, NY: Institute of Electrical and Electronics Engineers, 19-. 153-154, 1994.
- Kersey, A. D. and Davis, M. A. Interferometric Fiber Sensor with a Chirped Bragg Grating Sensing Element. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 319-, 1994.
- Kersey, A. D.; Koo, D. P., and Davis, M. A. Fiber Optic Bragg Grating Laser Sensors. Fiber Optic and Laser Sensors XII; San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2292**: 102-112 , 1994.

- Kersey, A. D. and Marrone, M. J. Fiber Bragg Grating High-Magnetic-Field Probe. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 53-, 1994.
- Kersey, A. D.; Marrone, M. J.; Koo, K. P. and Dandridge, A. Optically Demodulated Interferometric Sensor System. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 343-, 1994.
- Keyes, B. M.; Dunlavy, D. J.; Ahrenkiel, R. K.; Shaw, G.; Summers, G. P.; Tzafaras, N., and Lentz, C. Time-Resolved Photoluminescence of Undoped InP. *Journal of Applied Physics*, **75**(8):4249-4251, 1994.
- Kim, C. C.; Drews, A. R.; Skelton, E. F.; Qadri, S. B.; Osofsky, M. S.; Reeves, M. E., and Liebenberg, D. H. Volume Dependence of the Superconducting Transition-Temperature for the High-Temperature Superconductor $\text{HgBa}_2\text{Ca}_{2-x}\text{Pb}_x\text{Cu}_3\text{O}_{8+\delta}$. *Physical Review B-Condensed Matter*, **50**(18):13778-13785, 1994.
- Kim, C. C.; Reeves, M. E.; Osofsky, M. S.; Skelton, E. F., and Liebenberg, D. H. A System for in-Situ Pressure and AC Susceptibility Measurements Using the Diamond Anvil Cell: $T_c(P)$ for $\text{HgBa}_2\text{CuO}_{4+\delta}$. *Review of Scientific Instruments*, **65**(4):992-997, 1994.
- Kim, C. C.; Skelton, E. F.; Qadri, S. B.; Browning, V. M.; Osofsky, M. S.; Reeves, M. E., and Liebenberg, D. H. Volume Dependence of the Superconducting Transition Temperature for the High Temperature Superconductor $\text{HgBa}_2\text{CuO}_{4+\delta}$. *Physical Review B-Condensed Matter*, **49**(18):13075-13081, 1994.
- Kim, C.; Qadri, S. B.; Scanlon, M. R., and Cammarata, R. C. Low-Dimension Structural-Properties and Microindentation Studies of Ion-Beam-Sputtered Multilayers of Ag/Al Films. *Thin Solid Films*, **240**(1-2):52-55, 1994.
- Kim, M. W. Gram-Charlier and Generalized Probabilistic Neural Networks Based Radar Target Detection in Non-Gaussian Noise. 1994 IEEE National Radar Conference, Atlanta, GA. Meeting. 29-31 MAR. 1993. New York, NY: IEEE, 1994. 183-188, 1994.
- Kim, O.-K. and Choi, L- S. Supramolecular Inclusion Complexation of Amylose with Photoreactive Dyes. *Langmuir*, **10**(8):2842-2846, 1994.
- Kim, Y. D.; Cooper, S. L.; Klein, M. V., and Jonker, B. T. Spectroscopic Ellipsometry Study of the Diluted Magnetic Semiconductor System $\text{Zn}(\text{Mn}, \text{Fe}, \text{Co})\text{Se}$. *Physical Review B-Condensed Matter*, **49**(3):1732-1742, 1994.
- Kim, Y. D.; Cooper, S. L.; Klein, M. V.; Park, J. H., and Jonker, B. T. Spectroscopic Ellipsometry Study of $\text{Zn}_{1-x}\text{Co}_x\text{Se}$ Alloys Grown on GaAs. *Physical Review B-Condensed Matter*, **50**(15):10637-10643, 1994.
- King, D. and Chin-Bing, S. A. Scattering Effects of Internal Waves in the Shallow-Water Ocean Environment. Automatic Object Recognition IV, Orlando, FL. Meeting. 6-7 April 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 195-200, 1994.

- King, D. B.; Chin-Bing, S. A., and McGirr, R. W. Effects of Shallow Water Internal Waves on Broadband Acoustic Wave Propagation. International Conference on Theoretical and Computational Acoustics, Mystic, CT. Meeting. 5-9 JUL, 1993. Singapore; New Jersey: World Scientific, c1994. 793-807, 1994.
- King, S. E.; Phillips, G. W.; Haskins, P. S.; McKisson, J. E.; Piercey, R. B., and Mania, R. C. A Solid-State Compton Camera for 3-Dimensional Imaging. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **353**(1-3):320-323, 1994.
- Kinzer, R. L.; Johnson, W. N.; Kurfess, J. D.; Strickman, M. S.; Grove, J. E.; Kroeger, R. A.; Grabelsky, D. A.; Purcell, W. R.; Ulmer, M. P., and Jung, G. V. OSSE Observations of Centaurus A Over 18 Months. Proceedings of the 2nd Compton Observatory Symposium, College Park, MD. Meeting. 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 531-535, 1994.
- Kirby, G. C.; Lindner, D. K.; Matic, P., and Mirmak, M. Mode Shape Distortions Due to Piezoceramic Actuators and Implications for Control. Smart Structures and Intelligent Systems, Orlando, FL. Meeting. 14-16 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2190**: 647-, 1994.
- Kirkendall, C. K. and Bucholtz, F. Selfaligning Demodulator for Remotely Operated Fiber Optic Magnetic Sensor System. *Electronics Letters*, **30**(12):999-1000, 1994.
- Kiskis, D. L. and Shin, K. G. SWSL - A Synthetic Workload Specification Language for Real-Time Systems. *IEEE Transactions on Software Engineering*, **20**(10):798-811, 1994.
- Kitamoto, S.; Miyamoto, S.; Waltman, E. B.; Fiedler, R. L.; Johnston, K. J., and Ghigo, F. D. Radio, Infrared and X-Ray Activity of Cygnus-X-3. *Astronomy and Astrophysics*, **281**(3):L85-L88, 1994.
- Kjeldsethmoe, O. and Cheng, C. C. The Extension of Explosive Events from the Transition Region to the Corona. *Space Science Reviews*, **70**(1-2):85-88, 1994.
- Klein, N.; Tellmann, N.; Wolf, S. A., and Kresin, V. Z. Microwave Surface Impedance of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ - S-Wave Versus D-Wave Pairing. *Journal of Superconductivity*, **7**(2):459-461, 1994.
- Knipp, P. A. and Reinecke, T. L. Boundary-Element Method for Calculating Electron and Phonon States in Quantum Wires and Related Nanostructures. *Superlattices and Microstructures*, **16**(2):201-204, 1994.
- Knipp, P. A. and Reinecke, T. L. Electron-Phonon Scattering Rates in Quantum Wires. *Solid-State Electronics*, **37**(4-6):1105-1108, 1994.
- Knudsen, S.; Tveten, A. B., and Dandridge, A. D. Operation of a Sagnac Interferometer Limited by Fundamental Thermal Induced Phase Fluctuations in the Fiber. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 355-, 1994.
- Knudsen, S.; Tveten, A. B., and Dandridge, A. D. Sensitivity Limits of a Sagnac Interferometer Due to Fundamental Thermal Induced Phase Fluctuations in the Fiber Coil. Fiber Optic and Laser Sensors XII, San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2292**: 292-298, 1994.

- Knudsen, S.; Yurek, A. M.; Tveten, A. B., and Dandridge, A. A High-Sensitivity Fiber Optic Planar Ultrasonic Microphone. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 396-, 1994.
- Koleske, D. D.; Gates, S. M.; Thoms, B. D.; Russell, J. N., and Butler, J. E. Isothermal Desorption of Hydrogen from Polycrystalline Diamond Films. *Surface Science*, **320**(3):L105-L111, 1994.
- Kollgaard, R. I.; Brinkmann, W.; Chester, M. M.; Feigelson, E. D.; Hertz, P.; Reich, P., and Wielebinski, R. A Sensitive 1.5 GHz Radio Survey Around the North Ecliptic Pole. *Astrophysical Journal Supplement Series*, **93**(1):145-159, 1994.
- Koloski, T. S.; Dulcey, C. S.; Haralson, Q. J., and Calvert, J. M. Nucleophilic Displacement Reactions at Benzyl Halide Self-Assembled Monolayer Film Surfaces. *Langmuir*, **10**(9):3122-3133, 1994.
- Konnert, J. H.; D'Antonio, P., and Ward, K. B. Observation of Growth Steps, Spiral Dislocations and Molecular Packing on the Surface of Lysozyme Crystals with the Atomic-Force Microscope. *Acta Crystallographica Section D-Biological Crystallography*, **50**:603-613, 1994.
- Koo, K. P. and Kersey, A. D. Fiber Laser Sensor System with Interferometric Read-Out and Wavelength Multiplexing. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 331-, 1994.
- Korendyke, C. M.; Dere, K. P.; Brueckner, G. E.; Wakhesju, K., and Lemen, J. R. Combined HRTS-8 Sound Rocket Observations and Yohkoh Soft X-Ray Observations of NOAA Active Region 7260 at the Solar Limb. Proceedings of Kofu Symposium: New Look at the Sun with Emphasis on Advanced Observations of Coronal Dynamics and Flares, Kofu, Yamanshi, Japan. Meeting. 6-10 SEP, 1993. Nagano, Japan: Nobeyama Radio Observatory, 1994. NRO Report, **360**: 293-296, 1994.
- Korendyke, C. M.; Prinz, D. K., and Socker, D. G. Optical Design of a Near-Ultraviolet Coronagraph for a Sounding Rocket Platform. *Optical Engineering*, **33**(2):479-483, 1994.
- Kowalski, M. P. An X-Ray Mosaic of the Perseus Cluster. The Soft X-Ray Cosmos. ROSAT Science Symposium, College Park, MD. Meeting. NOV, 1993. New York, NY: AIP Press; 1994. AIP Conference Proceedings, **313**: 363-, 1994.
- Kowtha, V. C.; Kunysz, A.; Clay, J. R.; Glass, L., and Shrier, A. Ionic Mechanisms and Nonlinear Dynamics of Embryonic Chick Heart Cell Aggregates. *Progress in Biophysics & Molecular Biology*, **61**(3):255-281, 1994
- Krall, J.; Esarey, E.; Sprangle, P., and Joyce, G. Propagation of Radius-Tailored Laser Pulses Over Extended Distances in a Uniform Plasma. *Physics of Plasmas*, **1**(5):1738-1744, 1994
- Krebs, J. J.; Lind, D. M.; Lochner, E.; Shaw, K. A.; Portwine, W., and Berry, S. D. Magnetic and Crystallographic Properties of Molecular-Beam Epitaxially Grown $\text{Fe}_3\text{O}_4/\text{NiO}$ Superlattices and Fe_3O_4 Films. *Journal of Applied Physics*, **75**(10):6688-6690, 1994
- Kresin, V. Z. and Wolf, S. A. Microscopic Model for the Isotope Effect in the High T_c Oxides. *Physical Review B-Condensed Matter*, **49**(5):3652-3654, 1994.

- Kresin, V. Z. and Wolf, S. A. Symmetry, Mechanism of the Pairing, and the Isotope Effect in the Cuprates. *Journal of Superconductivity*, **7**(3):531-535, 1994.
- Kresin, V. Z. and Wolf, S. A. Symmetry of the Pairing State in the High- T_c Oxides. *Journal of Superconductivity*, **7**(5):865-869, 1994.
- Kresin, V. Z.; Wolf, S. A.; Adrian, S. D., and Reeves, M. E. Energy Spectrum in the High T_c Oxides. *Nonlinear Superconducting Devices and High- T_c Materials*, 39-47, 1994.
- Krishnamurthy, S.; Iyengar, S. S.; Holyer, R. J., and Lybanon, M. Histogram-Based Morphological Edge Detector. *IEEE Transactions on Geoscience*, **32**:75-, 1994.
- Krivec, R.; Haftel, M. I., and Mandelzweig, V. B. Precise Nonvariational Calculation of the Mu-Dt Molecular Ion. *Few-Body Systems*, **17**(2-4):229-242, 1994.
- Kroeger, R. A.; Inderhees, S. E.; Johnson, W. N.; Kinzer, R. L.; Kurfess, J. D., and Gehrels, N. Charge Division Readout of a 2-Dimensional Germanium Strip Detector. *Nuclear Instruments & Methods in Physics Research Section A- Accelerators, Spectrometers, Detectors, and Associated Equipment*, **348**(2-3):507-509., 1994.
- Kroes, G. J. and Mowrey, R. C. Calculations on Rotationally and Diffractionally Inelastic Molecule-Surface Scattering for Arbitrary Angles of Incidence -A New-Wave Packet Technique. *Journal of Chemical Physics*, **101**(1):805-813, 1994.
- Krowne, C. M. Comparison of the Auxiliary Vector Function and Adjoint Methods in Solving Anisotropic Media Electromagnetic Problems. *IEEE Transactions on Magnetism*, **30**(6):4536-4538, 1994.
- Krowne, C. M. On Code Availability as a Condition for Acceptance of Papers. *IEEE Antennas and Propagation Magazine*, **36**(2):8989, 1994.
- Krowne, C. M. Vector Variational and Weighted Residual Finite Element Procedures for Highly Anisotropic Media. *IEEE Transactions on Antennas and Propagation*, **42**(5):642-650, 1994.
- Kruppa, W. and Boos, J. B. Low-Temperature Characteristics of 0.35 μm AlSb/InAs HEMTs. *Electronics Letters*, **30** (16):1358-1359, 1994.
- Kruppa, W. and Boos, J. B. RF Measurement of Impact Ionization and its Temperature Dependence in AlSb/InAs HEMTs. 6th International Conference on Indium Phosphide and Related Materials, Santa Barbara, CA. Meeting. Mar, 1994. New York: IEEE; 1994: 339-342, 1994.
- Kruppa, W. and Boos, J. B. Transient Response Measurement of Kink Effect in InAlAs/InGaAs/InP HEMTs. *Electronics Letters*, **30**(4):368-369, 1994.
- Kub, F. J. and Justh, E. W. High Frequency Analog Circuits Implementing Tapped Delay Lines and the LMS Algorithm. 1994 Adaptive Antenna Systems Symposium; 1994 Nov; Melville, NY. New York: IEEE; 1994: 121-123.
- Kuchler, R.; Kanert, O.; Fricke, M.; Jain, H., and Ngai, K. L. Study of Nuclear-Spin Relaxation in Clap Glasses. *Journal of Non-Crystalline Solids*, **172**:1373-1377, 1994.
- Kuiper, P. and Dunlap, B. I. The σ^* Absorption Peak at the Oxygen 1s Edge of O_2 - Exchange Splitting, Ultrafast Dissociation, and Atomic-Like Auger-Spectra. *Journal of Chemical Physics*, **100**(6):4087-4092, 1994.

- Kulkarni, S. R.; Frail, D. A.; Kassim, N. E.; Murakami, T., and Vasisht, G. The Radio Nebula of the Soft Gamma-Ray Repeater 1806-20. *Nature*, **368**(6467):129-131, 1994.
- Kummer, M. and Saenz, A. W. Nonintegrability of the Classical Zeeman Hamiltonian. *Communications in Mathematical Physics*, **162**(3):447-465, 1994.
- Kurfess, J. D. Compton Observatory Observations of AgN. Multi-Wavelength Continuum Emission of AgN. Active Galactic Nuclei Across the Electromagnetic Spectrum. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **159**: 39-48, 1994.
- Kurihara, L. K.; Chow, G. M., and Schoen, P. E. Nanocrystalline Metallic Thin-Films Produced by the Polyol Method. *Abstracts of Papers of the American Chemical Society*, **208**:317-INOR, 1994.
- Kurihara, L. K.; Chow, G. M., and Schoen, P. E. Synthesis and Characterization of Nanocrystalline M_xCu_{100-x} ($M = Fe, Co$). *Abstracts of Papers of the American Chemical Society*, **208**:318-INOR, 1994.
- Kusterbeck, A. W.; Judd, L. L.; Yu, H.; Myles, J., and Ligler, F. S. Flow Immunosensor Detection of Explosives and Drugs of Abuse. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2092**: 218, 1994.
- Kyono, C. S.; Binari, S. C., and Ikossi-Aanastasiou, K. Gain Enhancement in AlAs/InGaAs Heterojunction Bipolar Transistors Using an Emitter Ledge. *Journal of Applied Physics*, **76**(3):1954-1955, 1994.
- Kyono, C. S.; Ikossi-Aanastasiou, K.; Rabinovich, W. S.; Bowman, S. R.; Katzer, D. S., and Tsao, A. J. GaAs/AlGaAs Multiquantum-Well Resonant Photorefractive Devices Fabricated Using Epitaxial Lift-Off. *Applied Physics Letters*, **64**(17):2244-2246, 1994.
- Label, K. A.; Hawkins, D. K.; Cooley, J. A.; Seidleck, C. M.; Marshall, P.; Dale, C.; Gates, M. M.; Kim, H. S., and Stassinopoulos, E. G. Single Event Effect Ground Test-Results for a Fiber Optic Data Interconnect and Associated Electronics. *IEEE Transactions on Nuclear Science*, **41**(6):1999-2004, 1994.
- Lambert, R. J.; Bhar, T. N., and Hughes, H. L. Effect of an Augmented Oxygen Implant on Electron Trapping in Buried Oxides. *Applied Physics Letters*, **64**(24):3291-3292, 1994.
- Lambrakos, S. G.; Metzbowler, E. A.; Milewski, J.; Lewis, G.; Dixon, R., and Korzekwa, D. Simulation of Deep Penetration Welding of Stainless-Steel Using Geometric Constraints Based on Experimental Information. *Journal of Materials Engineering and Performance*, **3**(5):639-648, 1994.
- Laming, J. M. Analysis of a Redshifted Plasma-Flow Over a Sunspot. *Space Science Reviews*, **70**(1-2):107-110, 1994.
- Laming, J. M. and Feldman, U. The Solar Abundance of Helium Determined from a Redshifted Plasma Flow Over a Sunspot. *Astrophysical Journal*, **426**(1):414-424, 1994.
- Lampe, M.; Hubbard, R. F.; Friedman, M.; Serlin, V.; Slinker, S. P.; Fernsler, R. F., and Colombant, D. G. Inductively-Loaded Wide-Gap Designs for Relativistic Klystrons. Intense Microwave Pulses II, Los Angeles, CA. Meeting. 24-26 Jan, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2154**: 49-, 1994.

- Landwehr, C. E. Hidden Safety Requirements in Large-Scale Systems. Information Processing '94, Vol III; 1994; **53** 295-302. (IFIP Transactions A-Computer Science and Technology).
- Landwehr, C. E.; Bull, A. R.; McDermott, J. P., and Choi, W. S. A Taxonomy of Computer Program Security Flaws. *ACM Computing Surveys*, **26**(3):211-254, 1994.
- Lang, R. J.; Mehuys, D.; Welch, D. F., and Goldberg, L. Spontaneous Filamentation in Broad-Area Diode-Laser Amplifiers. *IEEE Journal of Quantum Electronics*, **30**(3):685-694, 1994.
- Langen, J.; Berg, A.; Dicken, H. D.; Wehr, T.; Dagenhardt, W.; Kaempfer, N., and Bevilacqua, R. M. Pressure Profiles of the Middle Atmosphere Retrieved from Millimeter-Wave Atmospheric Sounder (MAS) Onboard the Space Shuttle Mission ATLAS-1. 1994 International Geoscience and Remote Sensing 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1994. 1335-1337, 1994.
- Langland, R. H. and Liou, C. S. Operational Implementation of a Turbulence Kinetic Energy Closure Boundary-Layer Parameterization. Tenth Conference on Numerical Weather Prediction. Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 552-554, 1994.
- Lau, Y. Y.; Liu, Y. F., and Parker, R. K. Electron-Emission: From the Fowler-Nordheim Relation to the Child-Langmuir Law. *Physics of Plasmas*, **1**(6):2082-2085, 1994.
- Lean, J. and Rind, D. Solar Variability: Implications for Global Change. *EOS, Transactions of the American Geophysical Union*, **75**:5-8, 1994.
- Lee, D. K.; Niiler, P.; Warnvarnas, A., and Piacsek, S. Wind-Driven Secondary Circulation in Ocean Mesoscale. *Journal of Marine Research*, **52**(3):371-396, 1994.
- Lee, G. U.; Chrisey, L. A., and Colton, R. J. Direct Measurement of the Forces Between Complementary Strands of DNA. *Science*, **266**(5186):771-773, 1994.
- Lee, G. U.; Kidwell, D. A., and Colton, R. J. Sensing Discrete Streptavidin-Biotin Interactions with Atomic Force Microscopy. *Langmuir*, **10**(2):354-357, 1994.
- Lee, J. S.; Ainsworth, T. L.; Grunes, M. R., and Goldstein, R. M. Noise Filtering of Interferometric SAR Images. Image and Signal Processing for Remote Sensing, Rome, IT. Meeting. 26-30 Sep, 1994. Proceedings of the European Symposium on Satellite Remote Sensing. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2315**: 735-742, 1994.
- Lee, J. S.; Grunes, M. R., and Kwok, R. Classification of Multi-Look Polarimetric SAR Imagery-Based on Complex Wishart Distribution. *International Journal of Remote Sensing*, **15**(11):2299-2311, 1994.
- Lee, J. S.; Hoppel, K. W.; Mango, S. A., and Miller, A. R. Intensity and Phase Statistics of Multilook Polarimetric and Interferometric SAR Imagery. *IEEE Transactions on Geoscience and Remote Sensing*, **32**(5):1017-1028, 1994.
- Lee, J. S.; Miller, A. R., and Hoppel, K. W. Statistics of Phase Difference and Product Magnitude of Multi-Look Processed Gaussian Signals. *Waves in Random Media*, **4**(3):307-319, 1994.

- Lee, J. S.; Schuler, D. L.; Lang, R. H., and Ranson, K. J. K-Distribution for Multi-Look Processed Polarimetric SAR Imagery. 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981-. 2179-2181, 1994.
- Lee, R. W.; Gauthier, J. C.; Goldstein, W. H.; Hooper, C. F.; Kunze, H. J.; Olson, G. L.; Rose, S. J., and Seely, J. F. Radiative Properties of Hot Dense Matter: Preface. *Journal of Quantitative Spectroscopy & Radiative Transfer*, **51**(1-2):R7R7, 1994.
- Lee, S. S.; Minsek, D. W.; Vestyck, D. J., and Chen, P. Growth of Diamond from Atomic-Hydrogen and a Supersonic Free Jet of Methyl Radicals. *Science*, **263**(5153):1596-1598, 1994.
- Lee, T. F.; Clark, J. R., and Swadley, S. D. Potential Applications of the SSM/I Cloud Liquid Water Parameter to the Estimation of Marine Aircraft Icing. *Weather and Forecasting*, **9**(2):173-182, 1994.
- Lee, T. F. and Reeves, J. M. Nowcasting of Vessel Icing on a Shipboard Workstation. Tenth International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography and Hydrology: 242-246, 1994.
- Leising, M. D.; Kurfess, J. D.; Clayton, D. D.; Grabelsky, D. A.; Grove, J. E.; Johnson, W. N.; Jung, G. V.; Kinzer, R. L.; Kroeger, R. A.; Purcell, W. R.; Strickman, M. S.; The, L. S., and Ulmer, M. P. Hard X-Rays From Sn-1993j. *Astrophysical Journal*, **431**(2):L95-L98, 1994.
- Leising, M. D. and Share, G. H. Gamma-Ray Limits on Galactic Fe-60 and Ti-44 Nucleosynthesis. *Astrophysical Journal*, **424**(1):200-207, 1994.
- Lentine, A. L.; Lee, J. N.; Lee, S. H., and Efron, U. Introduction to the Feature on Spatial Light Modulators and Their Applications. *Applied Optics*, **33**(14):2767, 1994.
- Letaw, J. R.; Silberberg, R., and Tsao, C. H. Comparison of Distributed Acceleration and Standard Models of Cosmic-Ray Transport. *Advances in Space Research*, **15**:65-68, 1994.
- Levy, M.; Scarmozzino, R.; Osgood, R. M.; Wolfe, R.; Cadieu, F. J.; Hegde, H.; Gutierrez, C. J., and Prinz, G. A. Permanent Magnet Film Magneto-optic Wave-Guide Isolator. *Journal of Applied Physics*, **75**(10):6286-6288, 1994.
- Li, C. P.; Kailasanath, K., and Oran, E. S. Detonation Structures Behind Oblique Shocks. *Physics of Fluids*, **6**(4):1600-1611, 1994.
- Lichti, G. G.; von Montigrey; Balonek, T.; Courvoisier, T. J. L.; Johnson, W. N.; McConnell, M.; Pacesas, W.; Robson, E. L.; Sadun, A.; Schalinski, C.; Steppe, H.; Smith, A. G.; Staubert, R.; Swanenburg, B. N.; Turner, M. J. L.; Ulrich, M. H., and Williams, O. R. Simultaneous Observations of the Continuum Emission of the Quasar 3C 273 from Radio to X-Ray Energies. Proceedings of the Second Compton Symposium, College Park, MD. Meeting. 20-22 SEP, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 611-615, 1994.
- Liebenberg, D. H.; Cdma, M. J.; McIntyre, P. C., and Francavilla, T. L. Angular Dependence of Transport Current Near Critical at Fields to 4 T in Metalorganic Thin Films. *Journal of Superconductivity*, **7**(2):303-308, 1994.
- Liebman, J. F.; Vanvechten, D., and Haaland, A. The Energetics of Ions, Atoms, and Salts - Sodium and Its Chloride. *Structural Chemistry*, **5**(5):341-343, 1994.

- Ligler, F. S. The Center for Bio/Molecular Science and Engineering. *Supramolecular Science*, **1**:63-65, 1994.
- Light, W. R. and Gaber, B. P. Nanovision: Molecular Graphics for the Macintosh. *Journal of Molecular Graphics*, **12** (3):172-177, 1994.
- Lill, J. V. The Integration of Molecular-Dynamics Simulations with Imposed Temperature and Stress. *Computer Physics Communications*, **79**(2):219-248, 1994.
- Lill, J. V. and Broughton, J. Q. Atomistic Simulations Incorporating Nonlinear Elasticity - Slow-Stress Relaxation and Symmetry-Breaking. *Physical Review B-Condensed Matter*, **49**(17):11619-11633, 1994.
- Lin, H. B. and Campillo, A. J. CW Nonlinear Optics in Droplet Microcavities Displaying Enhanced Gain. *Physical Review Letters*, **73**(18):2440-2443, 1994.
- Lin, H. J.; Meigs, G.; Chen, C. T.; Idzerda, Y. U.; Prinz, G. A., and Ho, G. H. Elemental Determination of the Magnetic-Moment Vector (Abstract). *Journal of Applied Physics*, **76**(10):6477, 1994.
- Lin-Chung, P. J. Local Vibrational Modes of Impurities in Diamond. *Physical Review B-Condensed Matter*, **50**(23):16905-16913, 1994.
- Lin-Chung, P. J. and Rajagopal, A. K. Electronic Excitations in Nanoscale Systems with Helical Symmetry. *Journal of Physics-Condensed Matter*, **6**(20):3697-3706, 1994.
- Lin-Chung, P. J. and Rajagopal, A. K. Magnetoplasma Oscillations in Nanoscale Tubules with Helical Symmetry. *Physical Review B-Condensed Matter*, **49**(12):8454-8463, 1994.
- Liou, C. S.; Hodur, R. M., and Langland, R. H. Navy Operational Regional Atmospheric Prediction System (NORAPS): A Triple Nest Mesoscale Model. Tenth Conference on Numerical Weather Prediction. Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 423-425, 1994.
- Little, B.; Ray, R.; Hart, K., and Wagner, P. Fungal-Induced Corrosion of Wire Rope Exposed in Humid Atmospheric Conditions. *Corrosion Prevention & Control*, **41**(4):89-93, 1994.
- Little, B. J.; Wagner, P., and Jones-Meehan, J. Sulfur Isotope Fractionation in Sulfide Corrosion Products as an Indicator for Microbiologically Influenced Corrosion (MIC). Microbiologically Influenced Corrosion Testing, Jeffrey R. Kearns and Brenda J. Little, eds. Philadelphia, PA: American Society for Testing and Materials, 1994. ASTM Special Technical Publication, **1232**: 180-187, 1994.
- Little, B. J., and Wagner, P. A. Advances in MIC Testing. Microbiological Influenced Corrosion Testing, Jeffrey R. Kearns and Brenda J. Little, eds. Philadelphia, PA: American Society for Testing and Materials, 1994. ASTM Special Technical Publication, **1232**: 1-11, 1994.
- Liu, A. Y.; Singh, D. J., and Krakauer, H. Linearized-Augmented-Plane-Wave Method with Car-Parrinello Scaling. *Physical Review B-Condensed Matter*, **49**(24):17424-17427, 1994.
- Liu, X.; Sooryakumar, R.; Gutierrez, C. J., and Prinz, G. A. Exchange Stiffness and Magnetic Anisotropies in BCC Fe_{1-x}Co_x Alloys. *Journal of Applied Physics*, **75**(10):7021-7023, 1994.
- Lohrmann, D. R. and Morrisett, J. G. Reduce Noise in Millimeter-Wave Radar Receivers. *Microwaves & RF*, **33**(5):59-8, 1994.

- Lomize, A. L.; Flippen-Anderson, J. L.; George, C., and Mosberg, H. I. Conformational-Analysis of the Delta-Receptor-Selective, Cyclic Opioid Peptide, Tyr-Cyclo[D-Cys-Phe-D-Pen]Oh (Jom-13) - Comparison of X-Ray Crystallographic Structures, Molecular Mechanics Simulations, and H-1-NMR Data. *Journal of the American Chemical Society*, **116**(2):429-436, 1994.
- Long, J. P.; Itchkawitz, B. S., and Kabler, M. N. Photoelectron Spectroscopy of Laser Excited Surfaces Using Synchrotron Radiation. High Field Interactions and Short Wavelength Generation, Saint Malo, FR, Meeting. 21-25 Aug, 1994. Washington, DC: Optical Society of America, 1994. Proceedings - Optical Society of America, 213-215, 1994.
- Lubitz, P.; Lawrence, S. H.; Rachford, F. J., and Rappoli, B. J. Effects of Annealing on the Microwave Properties of Spin-Spray Ni-Zn Ferrites. *IEEE Transactions on Magnetics*, **30**(6):4539-4541, 1994.
- Lubitz, P.; Rubinstein, M.; Chrisey, D. B.; Horwitz, J. S., and Broussard, P. R. Effect of Surface Layers on Ferromagnetic Resonance in Thin Fe Films: Ni, Co, Si, and YBa₂Cu₃O_{7- δ} . *Journal of Applied Physics*, **75**(10):5595-5597, 1994.
- Luker, L. D.; Van Buren, A. L., and Rogers, P. H. A Water-Filled Cylindrical Wave-Number Calibration Array. *Journal of the Acoustical Society of America*, **96**(1):186-197, 1994.
- Lybanon, M. Satellite Altimetry of the Gulf-Stream. *American Journal of Physics*, **62**(7):661-665, 1994.
- Lybanon, M.; Lea, S. M., and Himes, S. M. Segmentation of Diverse Image Types Using Opening and Closing. 12th IAPR International Conference on Pattern Recognition, **1**: 347-351, 1994.
- MacGillivray, H. T.; Law, S. D.; Cruddace, R. G.; Collins, C. A.; Gursky, H., and Yentis, D. J. A Census of Optically-Selected Clusters. Cosmological Aspects of X-Ray Clusters of Galaxies, Velen, DE. Meeting. 6-18 JUN, 1993. Dordrecht [Netherlands]; Boston : Kluwer Academic, 1994. NATO ASI Series. Series C, Mathematical and Physical Sciences, **441**: 339-347 , 1994.
- MacGillivray, H. T. and Yentis, D. J. Wide-Field Galaxy and Cluster Surveys Using Cosmos. Astronomy from Wide-Field Imaging; Proceedings of the 161st Symposium of the International Astronomical Union, held in Potsdam, Germany, August 23-27, 1993. Dordrecht; Boston, MA: Kluwer Academic, 1994. International Astronomical Union. Symposium, **161**: 632-634, 1994.
- Magno, R. and Spencer, M. Association of a Zero-Bias Anomaly in Electron Tunneling in Al_xGa_{1-x}As with the DX Defect. *Physical Review B*, **50**(16):12238-12241, 1994.
- Magno, R. and Spencer, M. G. Defect Assisted Tunneling in GaAs/AlGaAs/GaAs Heterostructures. *Journal of Applied Physics*, **75**(1):368-372, 1994.
- Maisack, M.; Wood, K. S., and Gruber, D. E. AGN Emission Above 20 KeV - the Hard X-Ray-Detection Problem. *Astronomy and Astrophysics*, **284**(1):28-32, 1994.
- Mak, C. J.; Bak, J.; Sooryakumar, R.; Steiner, M. M., and Jonker, B. T. Optical-Transitions in (ZnCo)Se and (ZnFe)Se - Role of an Effective P-D Exchange. *Journal of Applied Physics*, **75**(10):5719-5724, 1994.
- Makris, N. C. and Berkson, J. M. Long-Range Backscatter from the Mid-Atlantic Ridge. *Journal of the Acoustical Society of America*, **95**(4):1865-1881, 1994.

- Makris, N. C.; Ingenito, F., and Kuperman, W. A. Detection of a Submerged Object Insonified by Surface Noise in an Ocean Waveguide. *Journal of the Acoustical Society of America*, **96**(3):1703-1724, 1994.
- Malafsky, G. P. The Effect of Sputter Temperature on Vacancy Island Behavior on Ni(111) Measured by Photoemission of Adsorbed Xenon. *Surface Science*, **306**(1-2):L539-L544, 1994.
- Malghani, M. S. and Smith, D. Y. A Theory of the Mollwo-Ivey Law for Defect Absorption and Its Correlation to the Stokes Shift in Emission. *Journal of Luminescence*, **60-1**:599-602, 1994.
- Malhotra, R.; Hardy, D., and Hazlett, R. N. Field-Ionization Mass-Spectrometric Analysis of the Phenalene-Indole Coupling Product - The Nature of Insolubles Formed in Diesel Oils. *Abstracts of Papers of the American Chemical Society*, **208**:111-FUEL, 1994.
- Mandelbaum, P.; Behar, E.; Seely, J. F.; Feldman, U.; Brown, C. M.; Hammel, B. A.; Back, C. A.; Lee, R. W.; Kania, D. R., and Barshalom, A. Space-Resolved Density Diagnostic of a Highly Ionized Holmium ($Z=67$) Laser-Produced Plasma from $3d(10)4l-3d(10)4l'$ Culi-Like Lines. *Physical Review E*, **49**(6):5652-5655, 1994.
- Manheimer, W.; Fliflet, A., and Fischer, R. Low Voltage Infrared Free Electron Laser with Gyrotron Powered rf Wigglers. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2250**: 112-, 1994.
- Manheimer, W.; Fliflet, A., and Fischer, R. Low Voltage Infrared Free Electron Laser with Gyrotron Powered rf Wigglers. Millimeter and Submillimeter Waves, San Diego, CA. Meeting. 10-14 Jan, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2211**: 466-478, 1994.
- Manheimer, W. M. Gyrotrons and Free Electron Lasers as Atmospheric Sensors. *Physics of Plasmas*, **1**(5):1721-1729, 1994.
- Manheimer, W. M. and Fliflet, A. W. Long-Pulse, Low-Voltage Infrared Free-Electron Laser. *IEEE Journal of Quantum Electronics*, **30**(1):185-193, 1994.
- Mansfeld, F.; Liu, G.; Xiao, H.; Tsai, C. H., and Little, B. J. The Corrosion Behavior of Copper Alloys, Stainless Steels and Titanium in Seawater. *Corrosion Science*, **36**(12):2063-2095, 1994.
- Marchywka, M.; Binari, S. C., and Moses, D. Observation of Charge Storage in Diamond MIS Capacitors. *Electronics Letters*, **30**(4):365-366, 1994.
- Marchywka, M.; Binari, S. C.; Pehrsson, P. E., and Moses, D. Development of Integrating Radiation Imagers with Diamond MIS Devices. Diamond Film Semiconductors, Los Angeles, CA. Meeting. 22-28 Jan, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2151**, 110-120, 1994.
- Marchywka, M.; Binari, S. C.; Pehrsson, P. E., and Moses, D. Recent Results in Diamond UV Detector Research. Ultraviolet Technology V, San Diego, CA. Meeting. 26-27 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2282**: 20-30, 1994.
- Marchywka, M. and Moses, D. Optical Characterization of Diamond MIS Capacitors. *IEEE Transactions on Electron Devices*, **41**(7):1265-1272, 1994.

- Mariska, J. T. Flare Plasma Dynamics Observed with the Yohkoh Bragg Crystal Spectrometer. II. Properties of the Fe XXV, Ca XIX, and S XV Resonance Lines. *Astrophysical Journal*, **434**(2):756-765, 1994.
- Markowitz, M. A.; Chang, E. L., and Singh, A. Controlled-Release from Liposomes of Long-Chain Polymerizable Diacetylenic Phosphocholine and a Short-Chain Saturated Phospholipid. Diagnostic Biosensor Polymers: Developed from a Symposium Sponsored by the Division of Industrial and Engineering Chemistry, at the 205th National Meeting of the American Chemical Society, Denver, CO. Meeting. 28 MAR-2 APR, 1993. Proceedings of the ACS Symposium on Polymeric Materials in Biosensors and Diagnostics. Washington, DC : American Chemical Society, 1994. ACS Symposium Series, **556**: 264-274, 1994.
- Markowitz, M. A.; Chow, G.-M., and Singh, A. Polymerized Phospholipid Membrane Mediated Synthesis of Metal Nanoparticles. *Langmuir*, **10**(11):4095-4102, 1994.
- Markowitz, M. A.; Singh, A., and Chang, E. L. Formation and Properties of a Network Gel Formed from Mixtures of Diacetylenic and Short-Chain Phosphocholine Lipids. *Biochemical and Biophysical Research Communications*, **203**(1):296-305, 1994.
- Marmorino, G. O.; Jansen, R. W.; Valenzuela, G. R.; Trump, C. L.; Lee, J. S., and Kaiser, J. A. C. Gulf-Stream Surface Convergence Imaged by Synthetic-Aperture Radar. *Journal of Geophysical Research-Oceans*, **99**(C9):18315-18328, 1994.
- Marmorino, G. O. and Trump, C. L. A Salinity Front and Current Rip Near Cape Hatteras, North Carolina. *Journal of Geophysical Research-Oceans*, **99**(C4):7627-7637, 1994.
- Marquardt, C. L.; Cooper, D. G.; Budni, P. A.; Knights, M. G.; Schepler, K. L.; DeDomenico, R., and Catella, G. C. Thermal Lensing in Silver Gallium Selenide Parametric Oscillator Crystals. *Applied Optics*, **33**(15):3192-3197, 1994.
- Marrian, C. R. K.; Perkins, F. K.; Brandow, S. L.; Koloski, T. S.; Dobisz, E. A., and Calvert, J. M. Low Voltage Electron Beam Lithography in Self-Assembled Ultrathin Films with the Scanning Tunneling Microscope. *Applied Physics Letters*, **64**(3):390-392, 1994.
- Marrian, C. R. K.; Perkins, F. K.; Brandow, S. L.; Koloski, T. S.; Dobisz, E. A., and Calvert, J. M. Low Voltage e-Beam Lithography with the Scanning Tunneling Microscope. Nanolithography: A Borderland Between STM, EB, IB, and X-Ray Lithography [NATO Advanced Research Workshop], Frascati, Roma, Italy. Meeting. 6-8 APR, 1993. Dordrecht ; Boston : Kluwer Academic Publishers, 1994. NATO ASI Series. Series E. Applied Sciences, **264**: 175-188, 1994.
- Marshall, D. B.; Morris, W. L.; Cox, B. N.; Graves, J.; Porter, J. R.; Kouris, D., and Everett, R. K. Transverse Strengths and Failure Mechanisms in Ti₃Al Matrix Composites. *Acta Metallurgica Et Materialia*, **42**(8):2657-2673, 1994.
- Marshall, P. W.; Dale, C. J., and Burke, E. A. Extreme-Value Theory Applications to Space Radiation-Damage Assessment in Satellite Microelectronics. *Journal of Research of the National Institute of Standards and Technology*, **99**(4):485-494, 1994.
- Marshall, P. W.; Dale, C. J.; Carts, M. A., and Label, K. A. Particle-Induced Bit Errors in High-Performance Fiber Optic Data Links for Satellite Data Management. *IEEE Transactions on Nuclear Science*, **41**(6):1958-1965, 1994.

- Marshall, P. W.; Dale, C. J.; Carts, M. A., and Label, K. A. Test-Results and Calculations of Ion-Induced Bit Error Rates for Fiber-Based Data Links in Orbital Satellite Environments. Photonics for Space Environments II, Orlando, FL. Meeting. 5-6 Apr, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2215**: 94-, 1994.
- Marshall, P.; Dale, C., and Label, K. Charged-Particle Effects on Optoelectronic Devices and Bit Error Rate Measurements on 400 Mbps Fiber Based Data Links. *IEEE Transactions on Nuclear Science*, **41**(3):528-533, 1994.
- Marshall, T. C.; Schmidt, G., and Sprangle, P. Electron Barkhausen Oscillation as a Possible Source of KHz Radiation from the Neutral Sheet of the Earths Magnetotail. *Physica Scripta*, **T52**:152-153, 1994.
- Mast, P. W.; Michopoulos, J. G.; Badaliance, R., and Chaskelis, H. Dissipated Energy as the Means for Health Monitoring of Smart Structures. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation, Orlando, DL. Meeting. 14-16 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 199-207, 1994.
- Masters, M. F.; Tucker, J. E.; Wexler, B. L., and Searles, S. K. Krypton Excimer Emission from Discharge Excited Rare Gas Clusters. *Journal of Applied Physics*, **75**(8):3777-3784, 1994.
- Mathew, J. Crossatron-Based Modulator for High Repetition Rate Operation with Arbitrary Pulse Widths. *Review of Scientific Instruments*, **65**(12):3756-3760, 1994.
- Matthew, J.; Marsh, S. J.; Dialetis, D., and Kapetanakis, C. A. Beam Trapping in a Modified Betatron Accelerator with a Localized Bipolar Electric-Field Pulse. *Journal of Applied Physics*, **76**(2):648-659, 1994.
- Matthews, J. H.; Pattabiraman, N.; Ward, K. B.; Mantile, G.; Miele, L., and Mukherjee, A. B. Crystallization and Characterization of the Recombinant Human Clara Cell 10-Kda Protein. *Proteins-Structure Function and Genetics*, **20**(2):191-196, 1994.
- Matz, S. M.; Ulmer, M. P.; Grabelsky, D. A.; Purcell, W. R.; Grove, J. E.; Johnson, W. N.; Kinzer, R. L.; Kurfess, J. D.; Strickman, M. S., and Jung, G. V. The Pulsed Hard X-Ray-Spectrum of PSR B1509-58. *Astrophysical Journal*, **434**(1):288-291, 1994.
- Mazzola, M. S.; Grothaus, M. G.; Walch, M.; Jones-Meehan, J.; Halpin, M. S.; Little, B. J., and Johnson, J. T. New Electrical Control Methods to Prevent Power Plant Fouling. Fossil Operations. 1994 Technology Transfer Conference, Baton Rouge, LA. Meeting. 29-30 Jun, 1994. 1-8 , 1994.
- McCaskill, T. B.; Reid, W. G.; Buisson, J. A., and Warren, H. E. Effect of Broadcast and Precise Ephemerides on Estimates of the Frequency Stability of GPS NAVSTAR Clocks. *International Journal of Satellite Communications*, **12**(5):435-441, 1994.
- McCoy, R. P.; Dymond, K. F.; Fritz, G. G.; Thonnard, S. E.; Meier, R. R., and Regeon, P. A. Special Sensor Ultraviolet Limb Imager: An Ionospheric and Neutral Density Profiler for the Defense Meteorological Satellite Program Satellites. *Optical Engineering*, **33**(2):423-429, 1994.
- McCoy, R. P.; Meier, R. R.; Wolfram, K. D.; Picone, J. M.; Thonnard, S. E.; Fritz, G. G.; Mørrill, J. S.; Hardin, D. A.; Christensen, A. B.; Kayser, D. C.; Pranke, J. B., and Straus, P. R. Far-Ultraviolet Imaging Spectrograph and Scanning Grating Spectrometers for the Remote Atmospheric and Ionospheric Detection System. *Optical Engineering*, **33**(2):430-437, 1994.

- McDermott, J. The B(2)/C(3) Problem - How Big Buffers Overcome Covert Channel Cynicism in Trusted Database-Systems. Database Security VIII. Amsterdam; New York, NY: North-Holland, 1994. IFIP Transactions. A. Computer Science and Technology, **60**: 111-122, 1994.
- McDermott, J. and Mukkamala, R. Performance Analysis of Transaction Management Algorithms for the SINTRA Replicated-Architecture Database System. Database Security, VII: Status and Prospects: Results of the IFIP WG 11.3 Workshop on Database Security, Lake Guntersville, AL. Meeting. 12-15 SEP, 1993. Status and Prospects: Results of the IFIP WG 11.3 Workshop on Database Security, Lake Guntersville, AL. Meeting. 12-15 SEP, 1993. Amsterdam; New York, NY: North-Holland, 1994. IFIP Transactions. A. Computer Science and Technology; **A-47**: 215-234, 1994.
- McDonald, B. E.; Caine, P., and West, M. A Tutorial on the Nonlinear Progressive Wave-Equation (NPE). 1. *Applied Acoustics*, **43**(2):159-167, 1994.
- McDonald, B. E.; Collins, M. D.; Kuperman, W. A., and Heaney, K. D. Comparison of Data and Model Predictions for Heard Island Acoustic Transmissions. *Journal of the Acoustical Society of America*, **96**(4):2357-2370, 1994.
- McElvany, S. W. Characterization of Fullerenes by FTMS. *Abstracts of Papers of the American Chemical Society*, **208**:131-ANYL, 1994.
- McElvany, S. W.; Ross, M. M., and Bohme, D. K. Fullerenes, Carbon and Metal-Carbon Clusters - Foreword. *International Journal of Mass Spectrometry and Ion Processes*, **138**:R9, 1994.
- McGill, R. A.; Abraham, M. H.; Andonian-Haftvan, J.; Du, C. M.; Diart, V., and Grate, J. W. Selection of Polymer Coatings for SAW Chemical Microsensors. NIST Workshop on Gas Sensors: Strategies for Future Technologies, Gaithersburg, MD. Meeting. 8-9 SEP, 1993. Washington, DC, National Institute of Standards and Technology, for sale by Supt. of Docs., U.S. G.P.O., 1994. 79, 1994.
- McGill, R. A.; Abraham, M. H., and Grate, J. W. Choosing Polymer-Coatings for Chemical Sensors. *Chemtech*, **24**(9):27-37, 1994.
- McGill, R. A.; Grate, J. W., and Anderson, M. R. Surface and Interfacial Properties of Surface Acoustic Wave Gas Sensors. Interfacial Design and Chemical Sensing; 1994. ["Developed from a symposium sponsored by the Division of Colloid and Surface Chemistry at the 206th National Meeting of the American Chemical Society, Chicago, Illinois, August 22-27, 1993."] Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **561**:180-294, 1994.
- McGill, R. A. and Venezky, D. L. Surface Acoustic Wave Sensor (SAW) System Technology. NIST Workshop on Gas Sensors: Strategies for Future Technologies, Gaithersburg, MD. Meeting. 8-9 SEP, 1993. Washington, DC, National Institute of Standards and Technology, for sale by Supt. of Docs., U.S. G.P.O., 1994. 77, 1994.
- McGrath, K. J.; Miller, J. B., and Roland, C. M. Miscibility in Poly(Vinylethylene)/Poly(Isoprene) Blends. *Journal of Non-Crystalline Solids*, **172**:897-901, 1994.
- McGrath, K. J. and Roland, C. M. Concentration Fluctuations and Dynamic Heterogeneity in PIP/PVE Blends. *Journal of Non-Crystalline Solids*, **172**:891-896, 1994.
- McGrath, K. J. and Roland, C. M. NMR Study of Miscibility in Polyepichlorohydrin/Poly(Vinylmethylether) Blends. *Rubber Chemistry and Technology*, **67**(4):629-635, 1994.

- McGregor, D. N.; Nair, R. R.; Batsell, S. G., and Althouse, E. L. Simulation of Large-Scale Strategic Communication-Networks. Proceedings of the 1994 Summer Computer Simulation Conference. Twenty-Sixth Annual Summer Computer Simulation Conference (SCS), San Diego, CA. Meeting. 1994. 906-911, 1994.
- McIntyre, C. R. and Reinecke, T. L. Modifying Electron-Phonon Scattering Rates in Semiconductor Quantum-Wells with Thin AlAs Layers. *Superlattices and Microstructures*, **16**(4):327-329, 1994.
- McKenzie, D. L. and Feldman, U. Solar Coronal Abundances of Elements with Low First Ionization Potential: Chromium, Calcium, and Aluminum. *Astrophysical Journal*, **420**(2):892-902, 1994.
- McKisson, J. E.; Haskins, P. S.; Phillips, G. W.; King, S. E.; August, R. A.; Piercey, R. B., and Mania, R. C. Demonstration of 3-Dimensional Imaging with a Germanium Compton Camera. *IEEE Transactions on Nuclear Science*, **41**(4):1221-1224, 1994.
- McLean, J. A General Theory of Composition for Trace Sets Closed Under Selective Interleaving Functions. 1994 IEEE Symposium on Research in Security and Privacy, Oakland, CA. Meeting. 16-18 May, 1994. IEEE Computer Society, 1980- . 79-93, 1994.
- McLeod, M. G. Magnetospheric and Ionospheric Signals in Magnetic Observatory Monthly Means - Electrical-Conductivity of the Deep Mantle. *Journal of Geophysical Research-Solid Earth*, **99**(B7):13577-13590, 1994.
- McMorrow, D.; Melinger, J. S.; Thantu, N.; Campbell, A. B.; Weatherford, T. R.; Knudson, A. R.; Tran, L. H., and Peczalski, A. Charge Collection Mechanisms of Heterostructure FETS. *IEEE Transactions on Nuclear Science*, **41**(6):2055-2062, 1994.
- McQueen, P. G.; Hess, D. W., and Serene, J. W. Formation of a Pseudogap in the 2d Symmetrical Anderson Lattice Model. *Physica B*, **194**:1169-1170, 1994.
- McQueen, P. G.; Hess, D. W., and Serene, J. W. Pseudogap Formation in the Symmetrical Anderson Lattice Model. *Physical Review B-Condensed Matter*, **50**(11):7304-7310, 1994.
- Meadows, L.; Meadows, G.; Troesch, A.; Cohen, S.; Beier, K. P.; Root, G.; Griffin, O. M., and Swean, T. F. Lagrangian Velocity Profiles in the Wake of a High-Speed Vessel. *Ocean Engineering*, **21**(2):221-242, 1994.
- Meier, R. R. and Picone, J. M. Retrieval of Absolute Thermospheric Concentrations From the Far Uv Dayglow - An Application of Discrete Inverse-Theory. *Journal of Geophysical Research-Space Physics*, **99**(A4):6307-6320, 1994.
- Melendez-Alvira, D. J.; Burnside, R. G., and Walker, J. C. G. Modeling the Arecibo Nighttime F₂ Layer. 2. Ionospheric Gradients. *Journal of Geophysical Research-Space Physics*, **99**(A12):23307-23327, 1994.
- Meli, C. A. and Greene, E. F. Helium Scattering Investigation of The Structure of the Ge(100) Surface Above 600 K. *Journal of Chemical Physics*, **101**: 7139-7143, 1994.
- Melinger, J. S.; Buchner, S.; McMorrow, D.; Stapor, W. J.; Weatherford, T. R., and Campbell, A. B. Critical Evaluation of the Pulsed-Laser Method for Single Event Effects Testing and Fundamental Studies. *IEEE Transactions on Nuclear Science*, **41**(6):2574-2584, 1994.

- Melinger, J. S.; Gandhi, S. R.; Hariharan, A.; Goswami, D., and Warren, W. S. Adiabatic Population Transfer with Frequency-Swept Laser Pulses. *Journal of Chemical Physics*, **101**(8):6439-6454, 1994.
- Mera, A. E. and Griffith, J. R. Melt Condensation and Solution Polymerization of Highly Fluorinated Aliphatic Polyesters. *Journal of Fluorine Chemistry*, **69**(2):151-155, 1994.
- Mera, A. E. and Keller, T. M. A Comparison of Acetylene-Containing Monomers Derived from Naphthalene. *Abstracts of Papers of the American Chemical Society*, **208**:57-POLY, 1994.
- Mera, A. E. and Keller, T. M. Cure Studies and Thermal-Stability of an Acetylene-Functionalized Polyphenylene Resin. *Polymer Bulletin*, **33**(1):103-107, 1994.
- Mermelstein, M. D. Midwave and Long-Wave Infrared Radiance and Clutter at the Ocean-Sky Horizon. *Optics Letters*, **19**(18):1385-1387, 1994.
- Mermelstein, M. D.; Shettle, E. P.; Takken, E. H., and Priest, R. G. Infrared Radiance and Solar Glint at the Ocean Sky Horizon. *Applied Optics*, **33**(25):6022-6034, 1994.
- Metzbower, E. Joining Division. *Advanced Materials & Processes*, **145**(3):45, 1994.
- Metzbower, E. A.; Bhadeshia, H. K. D. H., and Phillips, R. H. Microstructures in Hot-Wire Laser-Beam Welding of HY 80 Steel. *Materials Science and Technology*, **10**(1):56-59, 1994.
- Metzbower, E. A.; DeMarco, L.; Denney, P. E., and Pratt, W. A. Experimental Laser Welding Efficiency. *Laser Materials Processing*, 152-159, 1994.
- Metzbower, E. A.; Denney, P. E., and DeMarco, L. Depth of Penetration in Laser Beam Welding. *Laser Materials Processing IV: Proceedings of a Symposium Jointly Sponsored by the Minerals, Metals & Materials Society (TMS) and the Federation of European Materials Societies (FEMS), and Co-Sponsored by the Physical Metallurgy Committee and Solidification Committees of TMS Held During the TMS Annual Meeting in Denver, CO, February 22-28, 1993. Warrendale, PA: Minerals, Metals & Materials Society, c1994. 203-212, 1994.*
- Metzbower, E. A.; Denney, P. E.; Pratt, W., and Bhadeshia, H. K. D. H. Microstructural Development in an HSLA80 Laser-Beam Weldment. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. *Proceedings of the SPIE--the International Society for Optical Engineering*, 2500: 846, 1994.
- Meyer, J. R.; Hoffman, C. A.; Bartoli, F. J., and Ram-Mohan, L. R. Semimetallic InAs/Ga_{1-x}In_xSb Superlattices with HgTe/CdTe-Like Band Structures. *Physical Review B-Condensed Matter*, **49**(3):2197-2200., 1994.
- Meyer, J. R.; Reisinger, A. R.; Harris, K. A.; Yanka, R. W., and Mohnkern, L. M. Monolayer Thickness Fluctuations in Infrared Photoluminescence for [211]-Oriented HgTe-CdTe Superlattices. *Applied Physics Letters*, **64**(5):545-547, 1994.
- Meyer, J. R.; Reisinger, A. R.; Harris, K. A.; Yanka, R. W.; Mohnkern, L. M., and Ram-Mohan, L. R. Photoluminescence Study of HgTe-Hg_{0.9}Cd_{0.1}Te Superlattices. *Journal of Crystal Growth*, **138**(1-4):981-987, 1994.

- Migenes, V.; Yates, J. A.; Cohen, R. J.; Shepherd, M. C., and Bowers, P. F. High-Resolution and High-Sensitivity Spectral-Line Imaging with Multiple Arrays. Very High Angular Resolution Imaging, Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993 / edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. International Astronomical Union. Symposium, **158**: 334-336, 1994.
- Mintmire, J. W.; Robertson, D. H.; Elert, M. L.; Brenner, D. W., and White, C. T. Molecular Dynamics of Void Collapse Mechanisms in Shocked Media. High Pressure in Science and Technology - 1993. Proceedings of the Joint AIRAPT/APS Conference. New York, NY: North-Holland, c1994. 969-972, 1994.
- Mintmire, J. W.; Robertson, D. H., and White, C. T. Molecular-Dynamics Simulations of Void Collapse in Shocked Model-Molecular Solids. *Physical Review B-Condensed Matter*, **49**(21):14859-14864, 1994.
- Mintmire, J. W. and White, C. T. Structural-Properties of Fullerene Nanotubes. *Abstracts of Papers of the American Chemical Society*, **208**:393-PHYS, 1994.
- Moeller, R. P.; Burns, W. K.; Kersey, A. D., and Koo, K. P. Three Axis Low Cost Fiber Gyroscope with Electronic Closed Loop Phase Detection. Fiber Optic and Laser Sensors XI, Boston, MA. Meeting. 7-8 SEP, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2070**: 255-263, 1994.
- Moglestue, C.; Buot, F., and Anderson, W. T. Thermally-Induced Failure in GaAs Transistors Exposed to Alpha-Particle Irradiation. *Compe-The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, **13**(4):641-652, 1994.
- Monet, D. G. Digitization in Astronomy. Astronomy from Wide-Field Imaging, Potsdam, Germany. Meeting. Aug, 1994. Kluwer; 1994. International Astronomical Union Symposium, **161**: 163-, 1994.
- Monshipouri, M. and Rudolph, A. S. A Method for Fabrication of Monodisperse Hydrogel Particles Using Liposomes. *Abstracts of Papers of the American Chemical Society*, **208**:108-POLY, 1994.
- Moon, J. A.; Mahon, R.; Duncan, M. D., and Reintjes, J. Three-Dimensional Reflective Image Reconstruction Through a Scattering Medium Based on Time-Gated Raman Amplification. *Optics Letters*, **19**(16):1234-1236, 1994.
- Moon, J. A. and Reintjes, J. Achievable Image-Resolution Using Nondiffuse, Multiply Scattered-Light. *OSA Proceedings*, **21**:149-, 1994.
- Moon, J. A. and Reintjes, J. Image-Resolution by Use of Multiply Scattered-Light. *Optics Letters*, **19**(8):521-523, 1994.
- Moon, J. A.; Tauc, J.; Lee, J. K.; Schiff, E. A.; Wickboldt, P., and Paul, W. Femtosecond Photomodulation Spectroscopy of α -Si:H and α -Si:Ge:H Alloys in the Midinfrared. *Physical Review B*, **50**:(15)10608-10618, 1994.
- Moore, W. J. Errors in Film Refractive-Index Determinations from Interference-Fringes. *Applied Optics*, **33**(19):4164-4166, 1994.

- Moore, W. J.; Freitas, J. A.; Yu, M.; Zuev, V. L., and Ivanova, L. M. Donor Excitation Spectra in 3C-SiC / Spencer, M. G., ed. Institute of Physics Conference, Washington, DC. Meeting. NOV, 1993. United Kingdom: Institute of Physics; 1994. 181-184, 1994. ISBN: 750303026.
- Moore, W. J.; Kaplan, R.; Freitas, J. A.; Altaiskii, Y. M.; Zuev, V. L., and Ivanova, L. M. Properties of Crystalline 3c-SiC_c Grown from Methyl Trichlorosilane. Diamond, SiC and Nitride Wide Bandgap Semiconductors, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, 1994. Materials Research Society Symposium Proceedings, **339**: 717, 1994.
- Moran, L. B. and Yesinowski, J. P. Chemical-Shift-Selective Multiple-Quantum NMR as a Probe of the Correlation Length of Chemical Shielding Tensors. *Chemical Physics Letters*, **222**(4):363-370, 1994.
- Morgan, C. A.; Griem, H. R., and Elton, R. C. Spectroscopic Measurements of Electron Density and Temperature in Polyacetal-Capillary-Discharge Plasmas. *Physical Review E*, **49**(3):2282-2290, 1994.
- Morgenstern, M.; Biskup, J.; Dittrich, K.; Landwehr, C., and Schaefer, M. Perspectives on Database-Security Panel Summary. Database Security VIII. Amsterdam; New York, NY: North-Holland, 1994. IFIP Transactions. A. Computer Science and Technology, **60**: 377-390, 1994.
- Moriarty, R. M.; Rao, M. S. C.; Tuladhar, S. M.; Gilardi, R.; D'Silva, C., and Williams, G. Potentiometric Evaluation of the Ion-Selective Characteristics of 1,4-Bridged Cubyl Diester Crown-Ethers. *Journal of Physical Organic Chemistry*, **7**(6):303-308, 1994.
- Morrill, J. S. and Benesch, W. M. Role of N-2(A' (5)Sigma(G)(+)) in the Enhancement of N2b3-Pi(G)(V=10) Populations in the Afterglow. *Journal of Chemical Physics*, **101**(8):6529-6537, 1994.
- Morrill, J. S.; Goodell, R. J., and Benesch, W. M. Intensity Enhancements in N2 1pg V'=10 Bands Due to Transfer from N2(A'5-Sigma-G+) to N2(B3-Pi-G). *Abstracts of Papers of the American Chemical Society*, **208**:214-PHYS, 1994.
- Morris, R. E.; Black, B. H., and Mitchell, C. S. An Improved Method for Measuring Hydroperoxides in Fuel Using Potentiometry and Alternatives to Chlorofluorocarbon Solvents. *Fuel Science & Technology International*, **12**(7-8):1003-1018, 1994
- Morris, R. E. and Wechter, M. A. The Application of Light-Scattering Photometry to Evaluate Fuel Stability. *Abstracts of Papers of the American Chemical Society*, **207**:57-PETR, 1994.
- Morrish, A. A.; Glesener, J. W.; Fehrenbacher, M.; Pehrsson, P. E.; Maruyama, B., and Natishan, P. M. Diamond Tubes and Fibers. *Diamond and Related Materials*, **3**(1-2):173-176, 1994.
- Moses, D. and Cook, J. W. The Coronal Context of Transition Region Explosive Events. *Space Science Reviews*, **70**(1-2):81-84, 1994.
- Moses, D.; Cook, J. W.; Bartoe, J. D. F.; Brueckner, G. E.; Dere, K. P.; Webb, D. F.; Davis, J. M.; Harvey, J. W.; Recely, F.; Martin, S. F., and Zirin, H. Solar Fine-Scale Structures in the Corona, Transition Region, and Lower Atmosphere. *Astrophysical Journal*, **430**(2):913-&, 1994.
- Mozurkewich, D. Design and Construction of a Beam Combiner and Related Hardware. Very High Angular Resolution Imaging; Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993, edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. International Astronomical Union. Symposium, **158**: 177-180, 1994.

- Mozurkewich, D. A Hybrid Design for a 6 Way Beam Combiner. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2200**: 76-, 1994.
- Mrstik, B. J.; McMarr, P. J., and Lawrence, R. K. Relationship Between Radiation Response and Density of Buried Oxide in Separation-by-Implantation-of-Oxygen Material. *Applied Physics Letters*, **65**(23):2993-2995, 1994.
- Mrstik, B. J.; McMarr, P. J.; Lawrence, R. K., and Hughes, H. L. The Use of Spectroscopic Ellipsometry to Predict the Radiation Response of Simox. *IEEE Transactions on Nuclear Science*, **41**(6):2277-2283, 1994.
- Mukherjee, A. B.; Miele, L., and Pattabiraman, N. Phospholipase A(2) Enzymes - Regulation and Physiological Role. *Biochemical Pharmacology*, **48**(1):1-10, 1995.
- Murphy, D. P.; Peyser, T. A., and Pechacek, R. E. A Compact, Four-Way Image Splitter. *Review of Scientific Instruments*, **65**(3):762-763, 1994.
- Murphy, J. E.; Li, G. Q., and Chin-Bing, S. A. Orthogonality Relation for Rayleigh-Lamb Modes of Vibration of an Arbitrarily Layered Elastic Plate with and without Fluid Loading. *Journal of the Acoustical Society of America*, **96**(4):2313-2317, 1994.
- Murphy, R. J.; Share, G. H.; Grove, J. E.; Johnson, W. N.; Kinzer, R. L.; Kroeger, R. A.; Kurfess, J. D.; Strickman, M. S.; Matz, S. M.; Purcell, W. R.; Ulmer, M. P.; Grabelsky, D. A.; Jung, G. V.; Jensen, C. M.; Forrest, D. J., and Vestrand, W. T. OSSE Observations of the 4 June 1991 Solar-Flare. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, 15-, 1994.
- Mushrush, G. W.; Beal, E. J.; Hardy, D. R.; Hazlett, R. N., and Mose, D. G. Liquid Phase Oxidation of Organo-Sulfur Compounds by Tert-Butyl Hydroperoxide and Fuel Instability Reactions. *Fuel*, **73**(9):1481-1485, 1994.
- Mushrush, G. W.; Beal, E. J.; Pellenbarg, R. E.; Hazlett, R. N.; Eaton, H. R., and Hardy, D. R. A Model Study of the Thermal Decomposition of Cumene Hydroperoxide and Fuel Instability Reactions. *Energy & Fuels*, **8**(4):851-855, 1994.
- Mushrush, G. W. and Hardy, D. R. Sediment Precursors in Middle Distillate Fuel Instability Reactions. *Abstracts of Papers of the American Chemical Society*, **208**:110-FUEL, 1994.
- Namboodiri, K.; Gaber, B. P.; Easwaran, K. R. K., and Balasubramanian, S. V. Calcium Ionophore, A23187 and Its Amino-Acid Complexes: Spectroscopic and Molecular Modeling Studies. *Journal of Biomolecular Structure & Dynamics*, **11**(5):913-926, 1994.
- Nazeri, A. Crystallization of Sol-Gel Deposited Potassium-Tantalate-Niobate Thin-Films on Platinum. *Applied Physics Letters*, **65**(3):295-297, 1994.
- Nazeri, A.; Kahn, H.; Bender, B., and Allen, C. Microstructure of $\text{KTa}_x\text{Nb}_{1-x}\text{O}_3$ Thin-Films on MgO(100) Single-Crystals. *Journal of the American Ceramic Society*, **77**(9):2450-2454, 1994.
- Nedoluha, G. E. and Watson, W. D. Intensity-Dependent Circular-Polarization and Circumstellar Magnetic-Fields From the Observation of SiO Masers. *Astrophysical Journal*, **423**(1):394-411, 1994.

- Neves, J. C. and Moin, P. Effects of Convex Transverse Curvature on Wall-Bounded Turbulence. 2. The Pressure-Fluctuations. *Journal of Fluid Mechanics*, **272**:383-, 1994.
- Neves, J. C.; Moin, P., and Moser, R. D. Effects of Convex Transverse Curvature on Wall-Bounded Turbulence. 1. The Velocity and Vorticity. *Journal of Fluid Mechanics*, **272**:349-, 1994.
- Nezhevenko, O. A.; Yakovlev, V. P.; Gold, S. H., and Hafizi, B. Design of a High-Power X-Band Magnicon Amplifier. *IEEE Transactions on Plasma Science*, **22**(5):785-795, 1994.
- Ngai, K. Universal Patterns of Relaxations in Complex Correlated Systems. Richert, R. and Blumen, A., eds. Disorder Effects on Relaxational Processes. Germany: Springer-Verlag; 1994; 89-150.
- Ngai, K. L.; Colmenero, J., and Arbe, A. Temperature-Dependence of the Length Scale of Local Segmental Motion in PVC from Dielectric Measurements. *Abstracts of Papers of the American Chemical Society*, **207**:192-PMSE, 1994.
- Ngai, K. L. and Greaves, G. N. Molecular Dynamics Simulations and Quasielastic Neutron Scattering Measurements of Diffusion in Glass-Forming Materials: Direct Verifications of the Basic Features of the Coupling Model. Diffusion in Amorphous Materials: Proceedings of an International Symposium, Pittsburgh, PA. Meeting. 18-19 OCT, 1993. Warrendale, PA : The Minerals, Metals & Materials Society, c1994. 17-41, 1994.
- Ngai, K. L.; Riande, E., and Wright, G. B. Proceedings of the 2nd International Discussion Meeting on Relaxations in Complex-Systems. 1. Alicante, Spain, 28 June 8 July, 1993 - Preface. *Journal of Non-Crystalline Solids*, **172**:R7-R8, 1994.
- Ngai, K. L. and Rizos, A. K. A Connection Between the Modification of Solvent Dynamics by Polymer in Polymer-Solutions and Component Dynamics in Miscible Polymer Blends. *Macromolecules*, **27**(16):4493-4497, 1994.
- Ngai, K. L. and Roland, C. M. Junction Dynamics and the Elasticity of Networks. *Macromolecules*, **27**(9):2454-2459, 1994.
- Ngai, K. L.; Wang, Y. N., and Magalas, L. B. Theoretical Basis and General Applicability of the Coupling Model to Relaxations in Coupled Systems. *Journal of Alloys and Compounds*, **212**:327-332, 1994.
- Nicholas, M.; Roy, R. A.; Crum, L. A.; Oguz, H., and Prosperetti A. Sound Emissions by a Laboratory Bubble Cloud. *Journal of the Acoustical Society of America*, **95**:3171-3182, 1994.
- Nisenoff, M. HTS Microwave and Millimeter Wave Applications in the USA. 1994 Asia Pacific Microwave Conference, Tokyo, Japan. Meeting. Dec, 1994. Institute of Electronics, Information and Communication Engineers; 1994: 209-212.
- Nisenoff, M. Liters, Kilograms, Watts and Seconds: Design Goals for a Superconductive System. Extended Abstracts of the International Workshop on High Temperature Superconducting Electron Devices; 1994: 69-72.
- Nisini, B.; Smith, H. A.; Fischer, J., and Geballe, T. R. NGC-2024-IRS 2 - An Outburst in Its Near-Infrared Line and Continuum Emission. *Astronomy and Astrophysics*, **290**(2):463-472, 1994.
- Nordquist, P. E. R.; Henry, R. L.; Blakemore, J. S.; Saban, S. B., and Gorman, R. J. Annealing of GaAs Grown by Vertical Zone-Melting. *Journal of Crystal Growth*, **141**(3-4):343-346, 1994.

- Norton, G. V. and Novarini, J. An Evaluation of the Near-Field Impulse Response of Hard Oblate Spheroids in the Limit of Approaching a Thin Disk. Automatic Object Recognition IV, Orlando, FL. Meeting. 6-7 April 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 201-216, 1994.
- Nounesis, G.; Kumar, S.; Pfeiffer, S.; Shashidhar, R., and Garland, C. W. Experimental-Observation of a Transition Between 2 Uniaxial Nematic Liquid-Crystal Phases. *Physical Review Letters*, **73**(4):565-568, 1994.
- Novarini, J. C. and Caruthers, J. W. The Partition Wave-Number in Acoustic Backscattering from a 2-Scale Rough-Surface Described by a Power-Law Spectrum. *IEEE Journal of Oceanic Engineering*, **19**(2):200-207, 1994.
- Nozette, S.; Rustan, P.; Pleasance, L. P.; Horan, D. M.; Regeon, P.; Shoemaker, E. M.; Spudis, P. D.; Acton, C. H.; Baker, D. N.; Blamont, J. E.; Buratti, B. J.; Corson, M. P.; Davies, M. E.; Duxbury, T. C.; Eliason, E. M.; Jakosky, B. M.; Kordas, J. F.; Lewis, I. T.; Lichtenberg, C. L.; Lucey, P. G.; Malaret, E.; Massie, M. A.; Resnick, J. H.; Rollins, C. J.; Park, H. S.; McEwen, A. S.; Priest, R. E.; Pieters, C. M.; Reisse, R. A.; Robinson, M. S.; Simpson, R. A.; Smith, D. E.; Sorenson, T. C.; Breugge, R. W. V., and Zuber, M. T. The Clementine Mission to the Moon - Scientific Overview. *Science*, **266**(5192):1835-1839, 1994.
- Oba, R. M. Some Numerical Effects of Slow Range Variation on Mode Coupling. International Conference on Theoretical and Computational Acoustics, Mystic, CT. Meeting. 5-9 JUL, 1993. Singapore; New Jersey: World Scientific, c1994. 869-881, 1994.
- Ogden, P. M. and Erskine, F. T. Surface and Volume Scattering Measurements Using Broadband Explosive Charges in the Critical Sea Test 7 Experiment. *Journal of the Acoustical Society of America*, **96**(5):2908-2920, 1994.
- Ogden, P. M. and Erskine, F. T. Surface Scattering Measurements Using Broad-Band Explosive Charges in the Critical-Sea-Test Experiments. *Journal of the Acoustical Society of America*, **95**(2):746-761, 1994.
- Ogert, R. A.; Burans, J.; O'Brien, T., and Ligler, F. S. Comparative Analysis of Toxin Detection in Biological and Environmental-Samples. Chemical, Biochemical, and Environmental Fiber Sensors V, Boston, MA. Meeting. 7-9 SEP 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2068**: 151, 1994.
- O'Grady, W. E. and Pandya, K. I. In Situ X-Ray Absorption Spectroscopy of Nickel Oxide Electrodes. NATO Advanced Research Workshop, Funchal Portugal. Meeting. DEC, 1992. NATO ASI Series C, Mathematical and Physical Sciences, **432**:247-262, 1994.
- Oldman, T. R.; Fleetwood, D. M.; Cheek, T.; Massengill, L.; Vanvonno, N.; Shaneyfelt, M. R.; Eisen, H.; Boesch, H. E.; Schrimpf, R. D.; Campbell, A.; Bendekovic, J.; Emily, D.; Grawet, S.; Marshall, P.; Buchner, S.; Gasiot, J.; Coss, J.; Krull, W.; Farren, J.; Frederickson, R.; Lelis, A.; Amram, A., and Lenahan, P. Summary of the 1994 IEEE International Nuclear and Space Radiation Effects Conference. *IEEE Transactions on Nuclear Science*, **41**(6):1804-1807, 1994.
- Ondris-Crawford, R. J. and Crawford, G. P. Liquid-Crystals - A Bridge Between Science and Technology. *MRS Bulletin*, **19**(6):67-68, 1994.

- Oran, E. S. and DeVore, C. R. The Stability of Imploding Detonations - Results of Numerical Simulations. *Physics of Fluids*, **6**(1):369-380, 1994.
- Orris, G. J. and Collins, M. D. The Spectral Parabolic Equation and 3-Dimensional Backscattering. *Journal of the Acoustical Society of America*, **96**(3):1725-1731, 1994.
- Orris, G. J.; McDonald, B. E., and Kuperman, W. A. Matched-Phase Noise Reduction. *Journal of the Acoustical Society of America*, **96**(6):3499-3503, 1994.
- Osako, C. Y.; Ulmer, M. P.; Grabelsky, D. A.; Purcell, W. R.; Strickman, M. S.; Johnson, W. N.; Kinzer, R. L.; Kurfess, J. D., and Jung, G. V. OSSE Observations of NGC-275 in the 0.05-10.0-MeV Range. *Astrophysical Journal*, **435**(1):181-184, 1994.
- Osofsky, M. S.; Soulen, R. J.; Wolf, S. A.; Broto, J. M.; Rakoto, H.; Ousset, J. C.; Coffe, G.; Askenazy, S.; Pari, P.; Bozovic, I.; Eckstein, J. N., and Virshup, G. F. Measurements of $H_{c2}(T)$ in Bi-Sr-Cu-O. *Journal of Superconductivity*, **7**(2):279-282, 1994.
- Osterman, S. and Rottman, G. J. Photometric Calibration of the 1st 3 Spectroscopic Orders of an Extreme-Ultraviolet Spectrometer by Use of Synchrotron Radiation. *Applied Optics*, **33**:4193-, 1994.
- Ott, M.; Witzel, A.; Quirrenbach, A.; Krichbaum, T. P.; Standke, K. J.; Schalinski, C. J., and Hummel, C. A. An Updated List of Radio Flux Density Calibrators. *Astronomy and Astrophysics*, **284**(1):331-339, 1994.
- Ottinger, P. F.; Rose, D. V., and Olson, C. L. Effect of Time-of-Flight Bunching on Efficiency of Light-Ion-Beam Inertial-Confinement-Fusion Transport Schemes. *Journal of Applied Physics*, **75**(9):4402-4414, 1994.
- Overland, J. E.; Spillane, M. C.; Hurlburt, H. E., and Wallcraft, A. J. A Numerical Study of the Circulation of the Bering Sea Basin and Exchange with the North Pacific Ocean. *Journal of Physical Oceanography*, **24**(4):736-758, 1994.
- Owrutsky, J. C. and Baronavski, A. P. Deep UV Femtosecond MPI Studies of Small Gas-Phase Molecules. *Abstracts of Papers of the American Chemical Society*, **208**:202-PHYS, 1994.
- Owrutsky, J. C. and Baronavski, A. P. Lifetimes of the B -over-tilde- State of CH_3I and CD_3I Using Femtosecond Resonance Enhanced Multiphoton Ionization. *Chemical Physics Letters*, **222**(4):335-338, 1994.
- Owrutsky, J. C. and Baronavski, A. P. Time Resolved Multiphoton Ionization Study of the 102 nm State of NO. *Journal of Chemical Physics*, **101**(7):5708-5716, 1994.
- Owrutsky, J. C.; Raftery, D., and Hochstrasser, R. M. Vibrational-Relaxation Dynamics in Solutions. *Annual Review of Physical Chemistry*, **45**:519-555, 1994.
- Pace, M. D. Spin Trapping of Nitrogen Dioxide from Photolysis of Sodium Nitrite, Ammonium Nitrate, Ammonium Dinitramide, and Cyclic Nitramines. *Journal of Physical Chemistry*, **98**(25):6251-6257, 1994.
- Pace, M. D. and Brown, I. M. H-2 Endor and Fteseem of the Tanold Spin-Probe in an Amine-Cured Epoxy Matrix. *Macromolecules*, **27**(7):1879-1884, 1994.

- Pande, C. S. and Dantsker, E. On a Stochastic Theory of Grain Growth—IV. *Acta Metallurgica et Materialia*, **42**(8):2899-2903 1994.
- Pandey, R. B.; Sinkovits, R. S.; Oran, E. S., and Boris, J. P. Simulation of the Growth of a Binary Composite by a Controlled Thermal Annealing. *Journal de Physique I*, **4**(10):1427-1438, 1994.
- Papaconstantopoulos, D. A.; Mehl, M. J.; Sigalas, M. M., and Keegan, M. A. Towards Calculations of the Total Energy of Large Systems. *Metallic Alloys: Experimental and Theoretical Perspectives* / edited by J.S. Faulkner and R.G. Jordan. Dordrecht; Boston, MA: Kluwer Academic Publishers, c1994. NATO ASI Series. Series E, Applied Sciences, **256**: 451-459, 1994.
- Papaconstantopoulos, D. A. and Singh, D. J. Calculations of Elastic-Moduli from 1st Principles. *Statics and Dynamics of Alloy Phase Transformations* / Edited by Patrice E. A. Turchi and Antonios Gonis. New York, NY: Plenum Press, c1994. NATO ASI Series. Series B. Physics, **319**: 439-, 1994.
- Papanicolaou, N. A.; Anderson, W. T.; Katzer, D. S.; Jones, S. H., and Jones, J. R. All Refractory GaAs FET for High Temperature Applications. 2nd International High Temperature Electronics Conference, 9-14, 1994.
- Papanicolaou, N. A.; Jones, S. H.; Jones, J. R., and Anderson, W. T. All-Refractory GaAs FET Using Amorphous TiWSi_x Source Drain Metallization and Graded-In_xGa_{1-x}As Layers. *IEEE Electron Device Letters*, **15**(1):7-9, 1994.
- Pappas, D. P.; Glesener, J. W.; Harris, V. G.; Idzerda, Y. U.; Krebs, J. J., and Prinz, G. A. Growth of FCC Fe Films on Diamond. *Applied Physics Letters*, **64**(1):28-30, 1994.
- Pappas, D. P.; Prinz, G. A., and Ketchen, M. B. Superconducting Quantum Interference Device Magnetometry During Ultrahigh-Vacuum Growth. *Applied Physics Letters*, 1994. 1994 Dec 26; **65**(26):3401-3403.
- Parent, D. C. Probing the Unusual Kinetic-Behavior of Si₂C₂⁺ Reactions with Unsaturated and Aromatic-Compounds. *International Journal of Mass Spectrometry and Ion Processes*, **138**:307-324, 1994.
- Park, G. S.; Armstrong, C. M.; Kyser, R. H.; Ganguly, A. K.; Hirshfield, J. L., and Parker, R. K. Two Stage 35 GHz Gyro-Peniotron Amplifier Experiment / Saki, K. and Yoneyama, T., ed. 19th International Conference on Infrared and Millimeter Waves; 1994 Oct; Sandai, Japan. Japan Society of Applied Physics; 1994: Tu5.3.
- Park, G. S.; Choi, J. J.; Park, S. Y.; Armstrong, C. M.; Kyser, R. H.; Ganguly, A. K.; Nguyen, K. T., and Parker, R. K. Experimental Investigation of a Two-Stage Tapered Gyro-Traveling Wave Tube Amplifier / Saki, K. and Yoneyama, T., eds. 19th International Conference on Infrared and Millimeter Waves Digest. Meeting. Oct, 1994. Sandai, Japan. Japan Society of Applied Physics; 1994. 417-418, 1994.
- Park, G. S.; Park, S. Y.; Kyser, R. H.; Armstrong, C. M.; Ganguly, A. K., and Parker, R. K. Broad-Band Operation of a Ka-Band Tapered Gyro-Traveling Wave Amplifier. *IEEE Transactions on Plasma Science*, **22**(5):536-543, 1994.
- Park, M. A. and Callahan, J. H. An Inductive Detector for Time-of-Flight Mass-Spectrometry. *Rapid Communications in Mass Spectrometry*, **8**(4):317-322, 1994.
- Patnaik, G. and Kailasanath, K. Numerical Simulations of Burner-Stabilized Hydrogen-Air Flames in Microgravity. *Combustion and Flame*, **99**(2):247-253, 1994.

- Pauley, P.; Barker, E. H., and Baker, N. L. Jet-Streak Analysis in the Navy's Mesoscale Data Assimilation System. Tenth Conference on Numerical Weather Prediction. Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 609-611, 1994.
- Pawlikowski, G. T. and Brady, R. F. Preparation and Thermal Properties of Acrylic Polymers with Pendant Spirobis lactone Groups. *Journal of Applied Polymer Science*, **53**(7):899-914, 1994.
- Peak, J. E. and Tag, P. M. Further Progress in an End-to-End Automated Analysis of Satellite Imagery for Navy Shipboard Applications. Seventh Conference on Satellite Meteorology and Oceanography, Monterey, CA. Meeting. Jun, 1994. Boston, MA: American Meteorological Society, 1994. 413-416, 1994.
- Peak, J. E. and Tag, P. M. Segmentation of Satellite Imagery Using Hierarchical Thresholding and Neural Networks. *Journal of Applied Meteorology*, **33**(5): 605-616, 1994.
- Pearson, D. H. and Edelstein, A. S. Gas Condensation of Ultrafine Silicon Particles Using Dc Magnetron Sputtering. *Nanostructured Materials*, **4**: 883-, 1994.
- Peckerar, M. Electron-Beam, X-Ray, and Ion-Beam Submicrometer Lithographies for Manufacturing, San Jose, CA. Meeting. 28 Feb-1Mar, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2194**, 1994.
- Peckerar, M. C. and Maldonado, J. R. The Advanced Lithography Program - Governments Role in X-Ray-Development. *Solid State Technology*, **37**(6):44-8, 1994.
- Peckerar, M.; Rebbert, M., and Gopalakrishnan, G. High-Aspect-Ratio Resist Structures for Optoelectronic (and Other) Applications. Laser-Assisted Fabrication of Thin Films and Microstructures, Quebec, Canada. Meeting. 17-19 AUG, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2045**: 298, 1994.
- Peckinpugh, S. H. and Holyer, R. J. Circle Detection for Extracting Eddy Size and Position from Satellite Imagery of the Ocean. *IEEE Transactions on Geoscience and Remote Sensing*, **32**(2):267-273, 1994.
- Pederson, M. R.; Quong, A. A.; Broughton, J. Q., and Feldman, J. L. Fullerene Molecules and Tubules Polarizabilities, Vibrational Modes and Nanocapillarity. Theory of Atomic and Molecular Clusters, Leer, DE. Meeting. 13-18 JUN, 1993. *Computational Materials Science*, **2**:536-542, 1994.
- Pederson, M. R. Density-Functional Based Determination of the CH₃-CH₄ Hydrogen-Exchange Reaction Barrier. *Chemical Physics Letters*, **230**(1-2):54-60, 1994.
- Peebles, L. H. Carbon Fibres: Structure and Mechanical Properties. *International Metals Review* **39**(2):75-92, 1994.
- Peebles, L. H.; Snow, A. W., and Peters, W. C. Deuterium-Isotope Effect on the Exotherm of Polyacrylonitrile. *Abstracts of Papers of the American Chemical Society*, **208**:277-POLY, 1994.
- Peek, B. M.; Callahan, J. H.; Namboodiri, K.; Singh, A., and Gaber, B. P. Effect of Vesicle Size on the Polymerization of a Diacetylene Lipid. *Macromolecules*, **27**(1):292-297, 1994.

- Peek, B.; Ratna, B.; Pfeiffer, S.; Calvert, J. M., and Shashidhar, R. Effect of Self-assembled Monolayers on the Alignment of Liquid-Crystals. Liquid Crystal Materials, Devices, and Applications III. San Jose, CA. Meeting. 8-9 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2175**: 42, 1994.
- Pei, X. F.; Greig, N. H.; Flippen-Anderson, J. L.; Bi, S., and Brossi, A. Total Synthesis of Racemic and Optically-Active Compounds Related to Physostigmine and Ring-C Heteroanalogues from 3-[2'-(Dimethylamino)Ethyl]-2,3-Dihydro-5-Methoxy-1,3-Dimethyl-1h-Indol-2-ol. *Helvetica Chimica Acta*, **77**(5):1412-1422, 1994.
- Pellenbarg, R. E.; Morris, R. A.; Johnson, D. H., and Martin, S. J. MarChem 93: A Workshop Focused on Concerns of the Marine Chemistry Community. *Marine Chemistry*, **48**(1):83-86, 1994.
- Peng, M. S. and Chang, S. W. Assimilation of SSM/I Rainfall Rates in Numerical Prediction of Tropical Cyclones. Tenth Conference on Numerical Weather Prediction, Portland, OR. Meeting. Jul, 1994. Boston, MA: American Meteorological Society, 1994. 195-198, 1994.
- Perkins, F. K.; Dobisz, E. A.; Brandow, S. L.; Koloski, T. S.; Calvert, J. M.; Rhee, K. W.; Kosakowski, J. E., and Marrian, C. R. K. Proximal Probe Study of Self-Assembled Monolayer Resist Materials. *Journal of Vacuum Science & Technology B*, **12**(6):3725-3730, 1994.
- Petrou, A.; Fu, L. P.; Yu, W. Y.; Lee, S. T.; Jonker, B. T., and Warnock, J. Spin-Dependent Confinement in DMS-Based Heterostructures. *Journal of Applied Physics*, **75**(10):5714-5718, 1994.
- Pflug, L. A.; Ioup, G. E., and Ioup, J. W. Sampling Requirements for Nth-Order Correlations. *Journal of the Acoustical Society of America*, **95**(5):2762-2765, 1994.
- Pflug, L. A.; Ioup, G. E.; Ioup, J. W., and Field, R. L. Prefiltering for Improved Correlation Detection of Band-Limited Transient Signals. *Journal of the Acoustical Society of America*, **95**(3):1459-1473, 1994.
- Phillips, J. L.; Balogh, A.; Bame, S. J.; Goldstein, B. E.; Gosling, J. T.; Hoeksema, J. T.; McComas, D. J.; Neugebauer, M.; Sheeley, N. R., and Wang, Y. M. Ulysses at 50-Degrees South - Constant Immersion in the High-Speed Solar-Wind. *Geophysical Research Letters*, **21**(12):1105-1108, 1994.
- Phoebus, P. A.; Wittmann, P. A., and Goerss, J. S. Model Comparisons Depicting the Influence of SSM/I Wind Observations. Seventh Conference on Satellite Meteorology and Oceanography, Monterey, CA. Meeting. 6-10 Jun, 1994. Boston, MA: American Meteorological Society, 1994. 389-392, 1994.
- Photiadis, D. M. Localization of Helical Flexural Waves by Irregularity. *Journal of the Acoustical Society of America*, **96**(4):2291-2301, 1994.
- Photiadis, D. M.; Bucaro, J. A., and Corsaro, R. D. Double Layer Actuator. *Journal of the Acoustical Society of America*, **96**(3):1613-1619, 1994.
- Photiadis, D. M.; Bucaro, J. A., and Houston, B. H. Scattering from Flexural Waves on a Ribbed Cylindrical Shell. *Journal of the Acoustical Society of America*, **96**(5):2785-2790, 1994.
- Piacsek, S. A. and Allard, R. Barotropic Coastal Currents in the Mediterranean. Second International Conference on Air-Sea Interaction and Meteorology and Oceanography of the Coastal Zone. Lisbon, Portugal. Meeting. 22-27 Sep, 1994. Paper 8.6, 1994.

- Pickett, W. E. Electrons and Phonons in C-60-Based Materials. *Solid State Physics - Advances in Research and Applications*, **48**:225-347, 1994.
- Pickett, W. E. Negative Electron Affinity and Low Work Function Surface: Cesium on Oxygenated Diamond(100). *Physical Review Letters*, **73**(12):1664-1667, 1994.
- Pickett, W. E.; Papaconstantopoulos, D. A.; Pederson, M. R., and Erwin, S. C. Electron-Phonon Coupling in A3C60 - Contributions from Intermolecular Modes. *Journal of Superconductivity*, **7**(3):651-655, 1994.
- Pickett, W. E.; Pederson, M. R., and Davidson, B. N. Modeling CVD Diamond with Density-Functional Theory. *Nanotechnology*, **5**(3):172-178, 1994.
- Pickett, W. E. and Singh, D. J. LuNi₂B₂C: A Novel Ni-Based Strong-Coupling Superconductor. *Physical Review Letters*, **72**(23):3702-3705, 1994.
- Pierson, S. W. and Valls, O. T. Mapping a Layered Vortex Gas. *Physical Review B-Condensed Matter*, **49**(1):662-665, 1994.
- Pierre, M.; Bohringer, H.; Ebeling, H.; Voges, W.; Schuecker, P.; Cruddace, R., and MacGillivray, H. Optical Observations of a ROSAT Sample of Clusters of Galaxies. 1. Techniques and X-Ray Optical Analysis. *Astronomy and Astrophysics*, **290**(3):725-752, 1994.
- Pierson, S. W. Critical Behavior of Vortices in a Layered System. *Physical Review Letters*, **73**(18):2496-2499, 1994.
- Pierson, S. W.; Reinecke, T. L., and Rudin, S. Bound-States of Coupled Plasmon-Phonon Modes at Neutral Donors in Semiconductor Quantum-Wells. *Superlattices and Microstructures*, **15**(2):193-197, 1994.
- Pinto, J. F. and Esterowitz, L. Continuous Wave 3.4 μ m Er:YLF Laser Fan, T. Y. and Chai, H. T., eds. OSA Proceedings on Advanced Solid-State Lasers, Salt Lake City, UT. Meeting. 7-10 Feb, 1994. Washington, DC: Optical Society of America, c1994: 174-177, 1994.
- Pinto, J. F. and Esterowitz, L. Suppression of Spiking Behavior in Flashpumped 2 μ m Lasers. *IEEE Journal of Quantum Electronics*, **30**(1):167-169, 1994.
- Pinto, J. F.; Esterowitz, L., and Rosenblatt, G. H. Continuous-Wave 3.4 μ m Er:YLF Laser. *OSA Proceedings*, **20**:174-, 1994.
- Pinto, J. F.; Esterowitz, L., and Rosenblatt, G. H. Tm³⁺:YLF Laser Continuously Tunable Between 2.20 and 2.46 μ m. *Optics Letters*, **19**(12):883-885, 1994.
- Pinto, J. F.; Esterowitz, L.; Rosenblatt, G. H.; Kokta, M., and Peressini, D. Improved Ti: Sapphire Laser Performance with New High Figure of Merit Crystals. *IEEE Journal of Quantum Electronics*, **30**(11):2612-2616, 1994.
- Pinto, J. F.; Rosenblatt, G. H., and Esterowitz, L. Continuous-Wave Laser Action in Er³⁺-YLF at 3.41- μ m. *Electronics Letters*, **30**(19):1596-1598, 1994.
- Pinto, J. F.; Rosenblatt, G. H.; Esterowitz, L.; Castillo, V., and Quarles, G. J. Tunable Solid-State Laser Action in Ce³⁺-LiSrAlF₆. *Electronics Letters*, **30**(3):240-241, 1994.

- Piquette, J. C. Direct Measurements of Edge-Diffraction from Soft Underwater Acoustic Panels. *Journal of the Acoustical Society of America*, **95**(6):3090-3099, 1994.
- Plant, W. J.; Terray, E. A.; Petitt, R. A., and Keller, W. C. The Dependence of Microwave Backscatter from the Sea on Illuminated Area - Correlation Times and Lengths. *Journal of Geophysical Research-Oceans*, **99**(C5):9705-9723, 1994.
- Platt, N.; Hammel, S. M., and Heagy, J. F. Effects of Additive Noise on On-Off Intermittency. *Physical Review Letters*, **72**(22):3498-3501, 1994.
- Plazek, D. J.; Bero, C. A.; Neumeister, S.; Floudas, G.; Fytas, G., and Ngai, K. L. Viscoelastic Properties of Amorphous Polymers. 3. - Low-Molecular-Weight Poly(Methylphenylsiloxane). *Colloid and Polymer Science*, **272**(11):1430-1438, 1994.
- Potochnik, S. J.; Hsu, D. S. Y.; Calvert, J. M., and Pehrsson, P. E. Selective Copper CVD on Diamond Surfaces Using Self-Assembled Monolayers. Advanced Metallization for Devices and Circuits—Science, Technology, and Manufacturability, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **337**: 429-, 1994.
- Poweleit, C. D.; Smith, L. M., and Jonker, B. T. Observation of Long-Lived Exciton Magnetic Polarons in $\text{Zn}_{1-x}\text{Mn}_x\text{Se/ZnSe}$ Multiple Quantum Wells. *Physical Review B-Condensed Matter*, **50**(24):18662-18665, 1994.
- Prohaska, R.; Garate, E.; Papadichev, V.; Fisher, A., and Rostoker, N. Vacuum Desensitization of Cr-39 Track Recording Plastic. *Review of Scientific Instruments*, **65**(9):3020-3021, 1994.
- Prokes, S. M. Hot Papers - Physics - SiHx Excitation - An Alternate Mechanism for Porous Si Photoluminescence by Prokes, S.M., Glembocki, O.J., Bermudez, V.M., Kaplan, R., Friedersdorf, L.E., Searson, P.C. *Scientist*, **8**(8):16, 1994.
- Prokes, S. M. Light-Emission Properties of Porous Si. Spectroscopic Characterization Techniques for Semiconductor Technology V, Los Angeles, CA. Meeting. 25-26 Mar, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2141**: 146-, 1994.
- Prokes, S. M.; Carlos, W. E., and Glembocki, O. J. Defect-Based Model for Room-Temperature Visible Photoluminescence in Porous Silicon. *Physical Review B-Condensed Matter*, **50**(23):17093-17096, 1994.
- Prokes, S. M. and Glembocki, O. J. Role of Interfacial Oxide-Related Defects in the Red-Light Emission in Porous Silicon. *Physical Review B-Condensed Matter*, **49**(3):2238-2241, 1994.
- Prokes, S. M. and Rai, A. K. Comparison of Two Epitaxial Formation Mechanisms in the SiGe System and the Subsequent Defect Generation. *Journal of Vacuum Science & Technology A-Vacuum Surfaces and Films*, **12**(4):1148-1151, 1994.
- Proksch, R.; Foss, S.; Dahlberg, E. D., and Prinz, G. Magnetic Fine-Structure of Domain-Walls in Iron Films Observed with a Magnetic Force Microscope. *Journal of Applied Physics*, **75**(10):5776-5778, 1994.
- Pronko, M. S. Controlling Output Gain Uniformity by Spatial Variation of the X-Ray Preionization in a Large Aperture Discharge-Pumped KrF Amplifier. *IEEE Journal of Quantum Electronics*, **30**(9):2147-2156, 1994.

- Pruitt, D. S. and Hardy, D. R. Analysis of Reactants that Lead to Thermal-Instability Deposits in Aviation Jet Fuels. *Fuel Science & Technology International*, **12**(7-8):1035-1049, 1994.
- Pruitt, D. S. and Hardy, D. R. Analysis of Reactants that Lead to Thermal-Instability Deposits in Aviation Jet Fuels. *Abstracts of Papers of the American Chemical Society*, **207**:66-PETR, 1994.
- Pulsifer, P. E. and Whitney, K. G. Fokker-Planck Analysis of Short-Pulse Laser Heating in the Hot-Spot-Model Approximation. *Physical Review E*, **50**(6):4926-4936, 1994.
- Pulsifer, P.; Apruzese, J. P.; Davis, J., and Kepple, P. Residual Energy and Its Effect on Gain in a Lyman-Alpha Laser. *Physical Review A*, **49**(5):3958-3965, 1994.
- Purdy, A. P. Indium(III) Amides and Nitrides. *Inorganic Chemistry*, **33**(2):282-286, 1994.
- Purdy, A. P. and George, C. F. Recent Developments in the Chemistry of Fluorinated Isopropoxides and Tertiary Butoxides. *Inorganic Fluorine Chemistry Toward the 21st Century*. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **555** 405-420, 1994.
- Purdy, A. P. and George, C. F. Synthesis and Structure of Tri-Tert-Butoxyzincates. *Polyhedron*, **13**(5):709-712, 1994.
- Purdy, A. P. and Lowema, C. Synthesis of Ternary Sulfides by Thermolysis of Coprecipitated Precursors. *Abstracts of Papers of the American Chemical Society*, **207**:376-INOR, 1994.
- Puvvada, S.; Baral, S.; Chow, G. M.; Qadri, S. B., and Ratna, B. R. Synthesis of Palladium Metal Nanoparticles in the Bicontinuous Cubic Phase of Glycerol Monooleate. *Journal of the American Chemical Society*, **116**(5):2135-2136, 1994.
- Puvvada, S.; Naciri, J., and Ratna, B. R. Ionotropically Gelled Bicontinuous Cubic Phase as a Matrix for Controlled Release. *Biomaterials for Drug and Cell Delivery*, Boston, MA. Meeting 28 NOV-2 DEC, 1993. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **331**: 217-222, 1994.
- Puvvada, S.; Qadri, S. B.; Naciri, J., and Ratna, B. R. Effect of Acrylamide and Dodecane on the Phase Behavior of Monoolein. *Langmuir*, **10**(9):2972-2976, 1994.
- Qadri, S. B.; Skelton, E. F.; Harford, M. Z.; Kim, C., and Lubitz, P. Electron-Beam Deposition of ZrO₂-SnO₂ Films. *Surface & Coatings Technology*, **63**(3):155-157, 1994.
- Quirrenbach, A. 7 Be-Stars Resolved by Optical Long-Base-Line Interferometry. Pulsation, Rotation and Mass Loss in Early-Type Stars; 1994. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **162**: 450-451, 1994.
- Quirrenbach, A. Stellar Diameters, Limb Darkening, Extended Atmospheres, and Shells - Observations with the MKIII Interferometer. Very High Angular Resolution Imaging. Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993 / edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **158**: 407-409, 1994.

- Quirrenbach, A.; Buscher, D. F.; Mozurkewich, D.; Hummel, C. A., and Armstrong, J. T. Maximum-Entropy Maps of the Be Shell Star Zeta-Tauri from Optical Long-Base-Line Interferometry. *Astronomy and Astrophysics*, **283**(2):L13-L16, 1994.
- Quirrenbach, A.; Mozurkewich, D.; Buscher, D. F.; Hummel, C. A., and Armstrong, J. T. Phase-Referenced Visibility Averaging in Optical Long-Base-Line Interferometry. *Astronomy and Astrophysics*, **286**(3):1019-1027, 1994.
- Quirrenbach, A.; Mozurkewich, D.; Hummel, C. A.; Buscher, D. F., and Armstrong, J. T. Angular Diameters of the Carbon Stars UU-Aurigae, Y-Canum-Venaticorum, and TX-Piscium from Optical Long-Base-Line Interferometry. *Astronomy and Astrophysics*, **285**(2):541-546, 1994.
- Quong, A. A. First-Principles Determination of the Interatomic-Force-Constant Tensor of Au. *Physical Review B-Condensed Matter*, **49**(5):3226-3229, 1994.
- Quong, A. A.; Pederson, M. R., and Broughton, J. Q. Boron Hydride Analogs of the Fullerenes. *Physical Review B-Condensed Matter*, **50**(7):4787-4794, 1994.
- Rabbany, S. Y.; Kusterbeck, A. W.; Bredehorst, R., and Ligler, F. S. Effect of Antibody Density on the Displacement Kinetics of a Flow Immunoassay. *Journal of Immunological Methods*, **168**(2):227-234, 1994.
- Rabinovici, R.; Rudolph, A. S.; Vernick, J., and Feuerstein, G. Lyophilized Liposome-Encapsulated Hemoglobin - Evaluation of Hemodynamic, Biochemical, and Hematologic Responses. *Critical Care Medicine*, **22**(3):480-485, 1994.
- Rajagopal, A. K. A Time-Dependent Functional Theory for the Electron-Ion System. *Physics Letters A*, **193**(4):363-369, 1994.
- Rajagopal, A. K. Time-Dependent Functional Theory of Coupled Electron and Electromagnetic Fields in Condensed-Matter Systems. *Physical Review A*, **50**(5):3759-3765, 1994.
- Rajagopal, A. K. and Buot, F. A. A Nonequilibrium Time-Dependent Functional Theory Based on Liouvillean Quantum Field Dynamics in Condensed Matter Systems. *Physics Letters A*, **195**(5-6):312-318, 1994.
- Rajagopal, A. K. and Buot, F. A. Quantum Dynamics of Molecular Motions Based on a Functional Method. *Physical Review E*, **50**(2):721-726, 1994.
- Ramaker, D. E.; Yang, H., and Idzerda, Y. U. Factors Which Determine the Populations of the Magnetic Quantum Number in Auger-Electron Diffraction. *Journal of Electron Spectroscopy and Related Phenomena*, **68**:63-75, 1994.
- Rao, A. S.; Arora, O. P., and Pande, C. S. Superconductivity in Y-Ba-Cu-O/Al Composite System. *Physica C*, **224**(3-4):221-227, 1994.
- Rao, M. V.; Dietrich, H. B.; Klein, P. B.; Fathimulla, A.; Simons, D. S., and Chi, P. H. Ion-Implantation Into (x11)A-Oriented InP and GaAs (x≤4). *Journal of Applied Physics*, **75**(12):7774-7778, 1994.

- Rao, M. V.; Freitas, J. A.; Dietrich, H. B.; Berry, A. K.; Vellanki, J., and Dhar, N. Photoluminescence and Raman Scattering Characterization of As-Grown and Implanted Bulk ZnSe Crystals. Producibility of II-VI Materials and Devices, Orlando, FL. Meeting. 6-8 Apr, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2228**: 158-164, 1994.
- Ratna, B. R.; Crawford, G. P.; Naciri, J., and Shashidhar, R. Electrooptic Performance of Electroclinic Materials with Large Induced Tilt Angle. Liquid Crystal Materials, Devices, and Applications III, San Jose, CA. Meeting. 8-9 Feb, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2175**: 79, 1994.
- Rauscher, C. Efficient Design Methodology for Microwave Frequency Multiplexers Using Infinite-Array Prototype Circuits. *IEEE Transactions on Microwave Theory and Techniques*, **42**(7):1337-1346, 1994.
- Rauscher, C. A New Class of Microwave Active-Filters. IEEE Microwave Symposium. Meeting. 23-27 May, 1994. IEEE MTT-S Microwave Symposium Digest. **2**: 605-608, 1994.
- Rauscher, C. and Williams, K. J. Heterodyne Reception of Millimeterwave-Modulated Optical Signals with an In P-Based Transistor. *IEEE Transactions on Microwave Theory and Techniques*, **42**(11):2027-2034, 1994.
- Ravishankar, N.; Aaronson, H. I., and Chattopadhyay, K. Mechanism of the Early Stages of Alpha-1 Plate Formation in a Cu-39 Pct Zn Alloy. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(12):2631-2637, 1994.
- Rebbert, M.; Isaacson, P.; Fischer, J.; Greenhouse, M. A.; Grossman, J.; Peckerar, M., and Smith, H. A. Microstructure Technology for Fabrication of Metal-Mesh Grids. *Applied Optics*, **33**(7):1286-1292, 1994.
- Reeves, M. E.; Kresin, V. Z., and Wolf, S. A. Thermodynamic Determination of the Electron-Phonon Coupling Strength in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$. *Journal of Superconductivity*, **7**(1):257-259, 1994.
- Reid, W. G.; McCaskill, T. B.; Oaks, O. J.; Buisson, J. A., and Warren, H. E. Effect of Space Vehicle Temperature on the Frequency of On-Orbit Navstar Clocks. Proceedings of the 48th IEEE Frequency Control Symposium. Meeting. 1-3 Jun, 1994. [New York, NY: Institute of Electrical and Electronics Engineers, 1994.] 782-790, 1994.
- Reilly, M.; Gardner, S.; Goodman, J., and; Barnes, R. Calibrated GPS Ionospheric Receiver Measurements Applied to HF Communication and Surveillance Missions. HF Radio Systems and Techniques, Sixth International Conference, York. Meeting. Jul, 1994. Institution of Electrical Engineers; 1994 IEE Conference Publication, **392**: 104-, 1994. ISBN: 0852966164
- Reintjes, J.; Duncan, M. D.; Bashkansky, M.; Moon, J. A.; Mahon, R.; Tankersley, L. L., and Prewitt, J. M. S. Time-Gated Imaging Through Scattering Materials with Nonlinear-Optical Raman Interactions. *OSA Proceedings*, **21**:129-, 1994.
- Reintjes, J.; Mahon, R.; Duncan, M. D.; Tankersley, L. L.; Schultz, A.; Chen, V. C.; Kover, D. J., and Howard, P. L. Optical Oil Debris Monitor. International Conference on Condition Monitoring, Swansea. Meeting, 1994. Swansea: Pineridge, 1994., 335-343, 1994. ISBN: 0906674832.

- Reiser, P.; Prinz, D. K.; Lumpe, J., and Wang, C. Post-Launch Characterization of Stray Light in the UARS/SUSIM. Proceedings: International Workshop on VUV and X-Ray Radiometry for Space-Based Instruments, Berlin, DE. Meeting. 22-23 Sep, 1994. 47-50, 1994.
- Remillard, S. K.; Reeves, M. E.; Rachford, F. J., and Wolf, S. A. The Microwave Surface Impedance of Granular High T_c Superconductors in DC Magnetic Fields: Its Relationship to Frequency Dependence. *Journal of Applied Physics*, **75**(8):4103-4108, 1994.
- Remsberg, E. E.; Bhatt, P. P.; Eckman, R. S.; Gordley, L. L.; Russell, J. M., and Siskind, D. E. Effect of the Hitran-92 Spectral Data on the Retrieval of NO_2 Mixing Ratios From Nimbus-7 LIMS. *Journal of Geophysical Research-Atmospheres*, **99**(D11):22965-22973, 1994.
- Rendell, R. W. Role of Dynamical Cooperativity for an Enhanced Isotope Effect During Transport. *Journal of Applied Physics*, **75**(12):7626-7632, 1994.
- Reynolds, C.; Gelaro, R., and Murphree, T. Impact of Tropical Precipitation on Medium-Range Forecasting. Tenth Conference on Numerical Weather Prediction. Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 218-220, 1994.
- Reynolds, J. E.; Jauncey, D. L.; Russell, J. L.; King, E. A.; McCulloch, P. M.; Fey, A. L., and Johnston, K. J. A Radio Optical Reference Frame. VII. Additional Source Positions from a Southern Hemisphere Short Baseline Survey. *Astronomical Journal*, **108**(2):725-730, 1994.
- Rhee, G.; Burns, J. O., and Kowalski, M. P. X-Ray-Emission Associated with Radio Galaxies in the Perseus Cluster. *Astronomical Journal*, **108**(4):1137-1146, 1994.
- Rice, R. W.; Wu, C. C., and Borchelt, F. Hardness -- Grain-Size Relations in Ceramics. *Journal of the American Ceramic Society*, **77**(10):2539-2553, 1994.
- Richardson, M. D. ISSAMS: An In Situ Sediment Acoustic Measurement System. International Conference on Underwater Acoustics. Acoustic Imaging and Remote Sensing Held at the University of New South Wales. Meeting. 5-7 Dec, 1994. Darlinghurst, [N.S.W.]: Australian Acoustical Society, 1994. 104-106, 1994. ISBN: 0909882150.
- Richmond, E. D. X-Ray Photoelectron-Spectroscopy Analysis of the Growth-Kinetics of Ge on Si(001). *Thin Solid Films*, **252**(2):98-104, 1994.
- Ridout, J. A.; Chertock, B., and Gelaro, R. Response of a General Circulation Model to a Change in Cloud Solar Forcing: Model Feedbacks and Comparison with Satellite Data. *Journal of Geophysical Research-Atmospheres*, **99**(D9):18555-18576, 1994.
- Ridout, J. A.; Chertock, B., and Gelaro, R. The Response of the Navy's Global Forecast Model to Changes in Cloud Radiative Forcing: Model Feedbacks and Comparison with Satellite Data. Tenth Conference on Numerical Weather Prediction. Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 508-510, 1994.
- Rife, J. C.; Murray, B. W.; Qadri, S. B., and Hunter, W. R. Fabrication and Synchrotron Measurements of Be-Based Multi-Layer X-Ray Mirrors. Advances in Multilayer and Grazing Incidence X-Ray/EUV/FUV Optics, San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2279**: 318-324, 1994.
- Rittenmyer, K. M. Electrostrictive Ceramics for Underwater Transducer Applications. *Journal of the Acoustical Society of America*, **95**(2):849-856, 1994.

- Rittenmyer, K. M. Temperature Dependence of the Electromechanical Properties of 0-3 PbTiO₃-Polymer Piezoelectric Composite Materials. *Journal of the Acoustical Society of America*, **96**(1):307-318, 1994.
- Rittenmyer, K. M. and Ting, R. Y. New Materials for Large Strain Actuator Applications. Smart Structures and Materials 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2189**: 2-13, 1994.
- Rizos, A. K.; Hadjichristidis, N.; Pispas, S., and Ngai, K. L. Modification of Solvent Relaxation Dynamics in Block-Copolymer Solutions. *Abstracts of Papers of the American Chemical Society*, **207**:385-POLY, 1994.
- Rizos, A. K. and Ngai, K. L. Solvent Rotational Mobility in 1,2-Polybutadiene Aroclor Solutions by Dielectric Relaxation and Fabry-Perot Interferometry. *Macromolecules*, **27**(24):7076-7078, 1994.
- Rizos, A. K.; Ngai, K. L.; Pispas, S., and Hadjichristidis, N. Solvent Reorientation in Block-Copolymer Solutions. *Journal of Non-Crystalline Solids*, **172**:786-789, 1994.
- Roberson, C. W. and Hafizi, B. Effects of Longitudinal Beam Compression in a Free-Electron Laser. *Physical Review Letters*, **72**(11):1654-1657, 1994.
- Robertson, D. H.; Dunlap, B. I.; Brenner, D. W.; Mintmire, J. W., and White, C. T. Fullerene/Tubule Based Hollow Carbon Nano-Gears. Novel Forms of Carbon II, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **349**: 283-288, 1994.
- Robson, A. E. Prospects for Fusion with Dense Z-Pinches. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, 707-, 1994.
- Rodgers, E. B.; Chang, S. W., and Pierce, H. F. A Satellite Observational and Numerical Study of Precipitation Characteristics in Western North-Atlantic Tropical Cyclones. *Journal of Applied Meteorology*, **33**(2):129-139, 1994.
- Roesler, G. M.; Filipkowski, M. E.; Broussard, P. R.; Idzerda, Y. U.; Osofsky, M. S., and Soulen, R. J. Epitaxial Multilayers of Ferromagnetic Insulators with Nonmagnetic Metals and Superconductors. Superconducting Superlattices and Multilayers, Los Angeles, CA. Meeting. 24-25 JAN., 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2157**: 285-290, 1994.
- Roesler, G. M.; Filipkowski, M. E.; Broussard, P. R.; Osofsky, M. S., and Idzerda, Y. U. Magnetization-Related Transport Anomalies in Metal/Ferromagnetic Insulator Heterostructures. *Journal of Applied Physics*, **76**(10):6437-6439, 1994.
- Roesler, G. M.; Idzerda, Y. U.; Broussard, P. R., and Osofsky, M. S. Resistivity Anomaly in Nonmagnetic Metals with Ferromagnetic Insulator Proximity Layers. *Journal of Applied Physics*, **75**(10):6679-6681, 1994.
- Roesler, G. M., and Tedrow, P. M. Coherence Effects in Hall Measurements of Heavy-Fermion Compounds. *Physica B*, **194**:1181-, 1994.
- Roland, C. M. Constraints on Local Segmental Motion in Poly(Vinylethylene) Networks. *Macromolecules*, **27**(15):4242-4247, 1994.

- Roland, C. M. Isoelastic Properties of Epoxidized Polybutadiene and Polyisoprene. *Applied Polymer Symposia*, **53**:29-, 1994.
- Roland, C. M. and Ngai, K. L. Constraint Dynamics and Chemical-Structure. *Abstracts of Papers of the American Chemical Society*, **207**:194-PMSE, 1994.
- Roland, C. M. and Ngai, K. L. Constraint Dynamics and Chemical-Structure. *Journal of Non-Crystalline Solids*, **172**:868-875, 1994.
- Roland, C. M.; Santangelo, P. G.; Baram, Z., and Runt, J. Segmental Relaxation in Blends of Polychloroprene and Epoxidized Polyisoprene. *Macromolecules*, **27**(19):5382-5386, 1994.
- Roland, C. M.; Walton, J. H., and Miller, J. B. Proton NMR Determination of Crystallinity in Poly(Ethylene-Terephthalate). *Magnetic Resonance in Chemistry*, **32**:S36-S39, 1994.
- Rolison, D. R. The Intersection of Electrochemistry with Zeolite Science. *Advanced Zeolite Science and Applications*; 1994. Amsterdam; New York, NY: Elsevier, 1994. *Studies in Surface Science and Catalysis*, **85**: 543-586, 1994. ISBN: 0444820019.
- Romer, A. K.; Collins, C. A.; Bohringer, H.; Cruddace, R. G.; Ebeling, H.; MacGillivray, H. T., and Voges, W. The Large-Scale Distribution of X-Ray-Clusters of Galaxies. *Nature*, **372**(6501):75-77, 1994.
- Romero, H. and Ganguli, G. Relaxation of the Stressed Plasma Sheet Boundary Layer. *Geophysical Research Letters*, **21**(8):645-648, 1994.
- Rose-Pehrsson, S. L.; Wyatt, J. R.; Brenner, K. P.; Carver, P. T.; Brown, S. W.; Thurow, A. R., and Travis, J. C. Laboratory Development and Field Evaluation of a Passive Sampling Device for Monomethylhydrazine in Ambient Air. *American Industrial Hygiene Association Journal*, **55**(2):149-162, 1994.
- Rosenberg, A. and Dilella, D. P. Anomalous Enhanced Raman-Scattering from C₆₀ on Ag Surfaces. *Chemical Physics Letters*, **223**(1-2):76-81, 1994.
- Rosenblum, L. J. Research Issues in Scientific Visualization. *IEEE Computer Graphics and Applications*, **14**(2):61, 1994.
- Roszak, S.; Lowrey, A. H.; Sokalski, W. A., and Kaufman, J. J. Usefulness of One-Electron Properties in the Study of the Nitromethane-to-Methyl Nitrite Rearrangement. *Journal of Molecular Graphics*, **12**(3):207-211, 1994.
- Roumeliotis, G.; Sturrock, P. A., and Antiochos, S. K. A Numerical Study of the Sudden Eruption of Sheared Magnetic-Fields. *Astrophysical Journal*, **423**(2):847-853, 1994.
- Roussos, J. A.; Christianson, K. A., and Anderson, W. T. Reliability of GaAs Two-Stage MMIC Power Amplifiers. *Advanced Microelectronic Qualification/Reliability Workshop*, Boston, MA. Meeting, 16-18 Aug, 1994. 308-322, 1994.
- Rovelstad, A. L.; Handler, R. A., and Bernard, P. S. The Effect of Interpolation Errors on the Lagrangian Analysis of Simulated Turbulent Channel Flow. *Journal of Computational Physics*, **110**(1):190-195, 1994.
- Rowe, M. M. and Gettrust, J. F. Methane Hydrate Content of Blake Outer Ridge Sediments. *International Conference on Natural Gas Hydrates. Annals of the New York Academy of Sciences*, **715**:492-494, 1994.

- Rowland, L. B.; Doverspike, K.; Gaskill, D. K.; Freitas, J. A. Effect of Aluminum Nitride Buffer Layer Temperature on Gallium Nitride Grown by OMVPE, Diamond, SiC and Nitride Wide Bandgap Semiconductors, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, 1994. Materials Research Society Symposium Proceedings, **339**: 477, 1994.
- Rubinstein, M. Classical-Theory of Giant Magnetoresistance in Granular Metals. *Physical Review B-Condensed Matter*, **50**(6):3830-3838, 1994.
- Rubinstein, M.; Das, B.; Chrisey, D. B.; Horwitz, J., and Koon, N. C. Ferromagnetic-Resonance Studies of Granular-Materials. *Journal of Applied Physics*, **75**(10):6622, 1994.
- Rubinstein, M.; Das, B. N.; Koon, N. C.; Chrisey, D. B., and Horwitz, J. Ferromagnetic-Resonance Studies of Granular Giant-Magnetoresistive Materials. *Physical Review B-Condensed Matter*, **50**(1):184-192, 1994.
- Rubinstein, M.; Das, B. N.; Koon, N. C.; Chrisey, D. B., and Horwitz, J. Granular Giant Magnetoresistive Materials and Their Ferromagnetic Resonances (Abstract). *Journal of Applied Physics*, **76**(10):6823, 1994.
- Rubinstein, M.; Harris, V. G.; Das, B. N., and Koon, N. C. Magnetic-Properties of $\text{Cu}_{80}\text{Co}_{20}$ and $\text{Cu}_{80}\text{Co}_{15}\text{Fe}_5$ Melt-Spun Ribbons. *Physical Review B-Condensed Matter*, **50**(17):12550-12558, 1994.
- Rubinstein, M.; Tejada, J., and Zhang, X. X. Magnetic-Properties of an Fe/Cu Granular Multilayer. *Journal of Applied Physics*, **75**(10):6557-6559, 1994.
- Rudin, S. and Reinecke, T. L. Interaction of Coupled Plasmon-Phonon Modes with a Point Charge in a Polar Semiconductor. *Physical Review B-Condensed Matter*, **49**(15):10298-10302, 1994.
- Rudin, S. and Reinecke, T. L. Plasmons Localized at Point Charges in Semiconductor Quantum Wells. *Surface Science*, **305**(1-3):267-270, 1994.
- Rudolph, A. S. Biomaterial Biotechnology Using Self-Assembled Lipid Microstructures. *Journal of Cellular Biochemistry*, **56**(2):183-187, 1994.
- Rudolph, A. S. Encapsulated Hemoglobin: Current Issues and Future Goals. *Artificial Cells Blood Substitutes and Immobilization Biotechnology*, **22**(2):347-360, 1994.
- Rudolph, A. S.; Cliff, R. O.; Klipper, R.; Goins, B., and Phillips, W. T. Circulation Persistence and Biodistribution of Lyophilized Liposome Encapsulated Hemoglobin: An Oxygen Carrying Resuscitative Fluid. *Critical Care Medicine*, **22**(1):142-150, 1994.
- Rudolph, A. S.; Cliff, R. O.; Spargo, B. J., and Spielberg, H. Transient Changes in the Mononuclear Phagocyte System Following Administration of the Blood Substitute Liposome-Encapsulated Hemoglobin. *Biomaterials*, **15**(10):796-804, 1994.
- Ruller, J. A. and Jewell, J. M. Raman and Infrared-Spectra of Lead Gallosilicate Glasses. *Journal of Non-Crystalline Solids*, **175**(1):91-97, 1994.
- Rushing, R. A.; Thompson, C., and Cassidy, P. E. Investigation of Polyamine Quinones as Hydrophobic Curatives for Epoxy Resins. *Journal of Applied Polymer Science*, **53**(9):1211-1219, 1994.

- Russell, E.; Hwu, R. J.; Sadwick, L. P., and Papanicolaou, N. A. Subsurface Damage in Ion Implanted GaAs by High Temperature Capacitance-Voltage Measurements. 2nd International High Temperature Electronics Conference. 277-282, 1994.
- Russell, J. L.; Reynolds, J. E.; Jauncey, D. L.; DeVegt, C.; Zacharias, N.; Ma, C.; Fey, A. L.; Johnston, K. J.; Hindsley, R.; Hughes, J. A.; Malin, D. F.; White, G. L.; Kawaguchi, N., and Takahashi, Y. A Radio Optical Reference Frame. 5. Additional Source Positions in the Midlatitude Southern-Hemisphere. *Astronomical Journal*, **107**(1):379-384, 1994.
- Ruth, J.; Naciri, J., and Shashidhar, R. Ferroelectric Properties of Mixtures of a Liquid Crystalline Polymer and Its Side-Group Mesogen. *Liquid Crystals*, **16**(5):883-892, 1994.
- Ruth, J.; Selinger, J. V., and Shashidhar, R. The Electrostatic Polarization of Ferroelectric Liquid Crystals: A New Interpretation of the Triangle-Wave Technique. *Applied Physics Letters*, **65**(12):1590-1592, 1994.
- Saavedra, J. E.; Dunams, T. M.; Flippen-Anderson, J. L., and Keefer, L. K. Electrophilic Addition to Aminononoate to (R(1)R(2)NN(Ono-) Ions. Nitrosamines and Related N-Nitroso Compounds; Chemistry and Biochemistry. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **553**: 304-306, 1994.
- Sadananda, K. Fatigue of Oxide Dispersion-Strengthened Alloys. *Mathematical Properties of metallic Composites*. New York, NY: Marcel Dekker, Inc., 1994. 75-96, 1994.
- Sadananda, K. and Feng, C. R. A Review of Creep of Silicides and Composites. *High Temperature Silicides and Refractory Alloys*. 157-173, 1994.
- Saks, N. S.; Simons, M.; Fleetwood, D. M.; Yount, J. T.; Lenahan, P. M., and Klein, R. B. Radiation Effects in Oxynitrides Grown in N₂O. *IEEE Transactions on Nuclear Science*, **41**(6):1854-1863, 1994.
- Salama, K.; Lee, D. F.; Presswood, R. G., and Francavilla, T. Seeded Directional Solidification of YBa₂Cu₃O_x Superconductors. *Physica C*, **235**:213-216, 1994.
- Samimi, J. and Kinzer, R. L. Gamma-Ray Observations in the Galactic Center Region with an Imaging Detector. *Astrophysical Journal*, **434**(1):136-144, 1994.
- Sanghera, J. S.; Busse, L. E., and Aggarwal, I. D. Effect of Scattering Centers on the Optical Loss of As₂S₃ Glass-Fibers in the Infrared. *Journal of Applied Physics*, **75**(10):4885-4891, 1994.
- Sanghera, J. S.; Kung, F. H.; Pureza, P. C.; Nguyen, V. Q.; Miklos, R. E., and Aggarwal, I. D. Infrared Evanescent-Absorption Spectroscopy with Chalcogenide Glass Fibers. *Applied Optics*, **33**(27):6315-6322, 1994.
- Sanghera, J. S.; Nguyen, V. Q.; Pureza, P. C.; Kung, F. H.; Miklos, R., and Aggarwal, I. D. Fabrication of Low-Loss Ir-Transmitting Ge₃₀As₁₀Se₃₀Te₃₀ Glass-Fibers. *Journal of Lightwave Technology*, **12**(5):737-741, 1994.

- Sanghera, J. S.; Nguyen, V. Q.; Pureza, P. C.; Kung, F. H.; Miklos, R.; Busse, L., and Aggarwal, I. D. Chalcogenide Glasses Containing Tellurium for IR Fiber Optics. SPIE - International Symposium on Optics, Imaging and Instrumentation, San Diego, CA. Meeting 24-29 Jul, 1994. Fiber Optic Materials and Components. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering SPIE Proceedings **2290**: 89-97, 1994.
- Sangston, K. J. and Gerlach, K. R. Coherent Detection of Radar Targets in a Non-Gaussian Background. *IEEE Transactions on Aerospace and Electronic Systems*, **30**(2):330-340, 1994.
- Santangelo, P. G.; Ngai, K. L., and Roland, C. M. Anomalous Relaxation in Polychlorinated Biphenyl Polybutadiene Mixtures. *Macromolecules*, **27**(14):3859-3863, 1994.
- Santangelo, P. G. and Roland, C. M. The Mechanical-Behavior of Double Network Elastomers. *Rubber Chemistry and Technology*, **67**(2):359-365, 1994.
- Santangelo, P. G.; Roland, C. M.; Ngai, K. L.; Rizos, A. K., and Katerinopoulos, H. Dielectric and Mechanical Relaxation in PMPS, BMC and Their Mixtures. *Journal of Non-Crystalline Solids*, **172**:1084-1093, 1994.
- Sarkissian, A. Method of Superposition Applied to Scattering from a Target in Shallow-Water. *Journal of the Acoustical Society of America*, **95**(5):2340-2345, 1994.
- Sarkissian, A. Multiple Scattering Effects When Scattering from a Target in a Bounded Medium. *Journal of the Acoustical Society of America*, **96**(5):3137-3144, 1994.
- Saslow, W. M. and Koon, N. C. Random-Anisotropy Model - Monotonic Dependence of the Coercive Field on D/J. *Physical Review B-Condensed Matter*, **49**(5):3386-3390, 1994.
- Sastri, S. B.; Armistead, J. P., and Keller, T. M. Studies on Acetylenic Resins as Carbon Precursors. *Abstracts of Papers of the American Chemical Society*, **208**:276-POLY, 1994.
- Scales, W. A.; Bernhardt, P. A., and Ganguli, G. Early Time Evolution of Negative Ion Clouds and Electron Density Depletions Produced During Electron Attachment Chemical Release Experiments. *Journal of Geophysical Research-Space Physics*, **99**(A1):373-381, 1994.
- Scales, W. A.; Bernhardt, P. A.; Ganguli, G.; Siefring, C. L., and Rodriguez, P. Small-Scale Plasma Irregularities Produced During Electron-Attachment Chemical Releases. *Geophysical Research Letters*, **21**(7):605-608, 1994.
- Schechter, R. S.; Chaskelis, H. H.; Mignogna, R. B., and DelSanto, P. P. Real-Time Parallel Computation and Visualization of Ultrasonic Pulses in Solids. *Science*, **265**(5176):1188-1192, 1994.
- Schechter, R. S.; Chaskelis, H. H.; Mignogna, R. B., and DelSanto, P. P. Visualization of 2-Dimensional Acoustic Waves in Solids Using Parallel Processing Techniques. Review of Progress in Quantitative Nondestructive Evaluation, Brunswick, ME. Meeting. 1-6 Aug 1993. New York, NY: Plenum Press, c1982- . **13A**: 109-116, 1994.
- Schlickeiser, R. and Dermer, C. D. Particle Acceleration in Extragalactic Jets and Implications for the High-Energy Emission from Blazars. Active Galactic Nuclei Across the Electromagnetic Spectrum. 29-32, 1994. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **159**, 1994.

- Schmieder, B.; Golub, L., and Antiochos, S. K. Comparison Between Cool and Hot Plasma Behaviors of Surges. *Astrophysical Journal*, **425**(1):326-8, 1994.
- Schmieder, B.; Peres, G.; Enome, S.; Falciani, R.; Heinzel, P.; Henoux, J. C.; Mariska, J.; Reale, F.; Rilee, M. L.; Rompolt, B.; Shibasaki, K.; Stepanov, A. V.; Wulser, J. P.; Zarro, D., and Zharkova, V. Energy-Transport and Dynamics. *Solar Physics*, **153**(1-2):55-72, 1994.
- Schmieder, B.; Wilk, J. E., and Dere, K. P. Hierarchy of Spatial Scales in UV Prominences. *Space Science Reviews*, **70**(1-2):175-180, 1994.
- Schnur, J. M.; Price, R., and Rudolph, A. S. Biologically Engineered Microstructures - Controlled-Release Applications. *Journal of Controlled Release*, **28**(1-3):3-13, 1994.
- Schnur, J. M.; Ratna, B. R.; Selinger, J. V.; Singh, A.; Jyothi, G., and Easwaran, K. R. K. Diacetylenic Lipid Tubules: Experimental Evidence for a Chiral Molecular Architecture. *Science*, **264**(5161):945-947, 1994.
- Schnur, J. M. and Shashidhar, R. Self-Assembling Phospholipid Tubules. *Advanced Materials*, **6**(12):971-974, 1994.
- Schoen, P. E.; Nagumo, M., and Singh, A. Raman Active Skeletal-Optical Vibrations of Hydrocarbon Chain Segments in a Series of Diacetylenic Lipids. *Chemistry and Physics of Lipids*, **69**(3):251-257, 1994.
- Schou, J. and Brown, T. M. On the Rotation Rate in the Solar Convection Zone. *Astrophysical Journal*, **434**:378-383, 1994.
- Schou, J.; Christensen-Dalsgaard, J., and Thompson, M. J. On Comparing Helioseismic Two-Dimensional Inversion Methods. *Astrophysical Journal*, **433**:389-416, 1994.
- Shrauner, J. A. and Scherrer, P. H. East-West Inclination of Large-Scale Photospheric Magnetic Fields. *Solar Physics*, **153**:131-141, 1994.
- Schultz, K. I.; Kocher, D. G.; Daley, J. A.; Theriault, J. R.; Spinks, J., and Fisher, S. Satellite Vibration Measurements with an Autodyne CO₂-Laser Radar. *Applied Optics*, **33**(12):2349-2355, 1994.
- Schultz, W. W.; Huh, J., and Griffin, O. M. Potential Energy in Steep and Breaking Waves. *Journal of Fluid Mechanics*, **278**:201-228, 1994.
- Schwartz, D. K.; Ruiz-Garcia, J.; Qi, X.; Selinger, J. V., and Knobler, C. M. Tilt Stripe Textures in Langmuir Monolayers of Fatty-Acids. *Physica A*, **204**(1-4):606-615, 1994.
- Schwartz, I. B. and Erneux, T. Subharmonic Hysteresis and Period Doubling Bifurcations for a Periodically Driven Laser. *SIAM Journal on Applied Mathematics*, **54**(4):1083-1100, 1994.
- Schwartz, I. B. and Triandaf, I. Controlling Unstable States in Reaction-Diffusion Systems Modeled by Time Series. *Physical Review E*, **50**(4):2548-2552, 1994.
- Schwartz, I. B. and Tsang, K. Y. Antiphase Switching in Josephson Junction Arrays. *Physical Review Letters*, **73**(21):2797-2800, 1994.
- Scott, A. M.; Whitney, W. T., and Duignan, M. T. Stimulated Brillouin-Scattering and Loop Threshold Reduction with a 2.1 μm Cr,Tm,Ho-YAG Laser. *Journal of the Optical Society of America B-Optical Physics*, **11**(10):2079-2088, 1994.

- Searles, S. K.; Tucker, J. E.; Wexler, B. L., and Masters, M. F. VUV Emission from Discharge-Pumped Ar Supersonic Jets Under High-Excitation Conditions. *IEEE Journal of Quantum Electronics*, **30**(9):2141-2146, 1994.
- Seaver, M. and Barrett, A. Gas Scavenging of Soluble and Insoluble Organic Vapors by Levitated Water Drops. *Journal of Applied Meteorology*, **33**(7):808-812, 1994.
- Seaver, M.; Frost, A. E., and Duncan, M. D. Near-Field Optical Measurements at the Liquid/Air Interface. Laser Applications to Chemical Analysis, Jackson Hole, WY. Meeting. 8-11 Mar, 1994. Washington, DC: Optical Society of America, 1994. 64-66, 1994.
- Seely, J. F.; Brown, C. M.; Holland, G. E.; Lee, R. W.; Moreno, J. C.; MacGowan, B. J.; Back, C. A.; Dasilva, L. B., and Wan, A. S. Imaging of Laser-Irradiated Targets at a Wavelength of 33.8-Å Using a Normal-Incidence Multilayer Mirror. *Physics of Plasmas*, **1**(6):1997-2002, 1994.
- Seely, J. F.; Feldman, U.; Brown, C. M.; Hammel, B. A.; Back, C. A.; Hsieh, E., and Lee, R. W. Absorption Spectroscopy of Radiatively Heated Low-Z Foils. *Journal of Quantitative Spectroscopy & Radiative Transfer*, **51**(1-2):349-355, 1994.
- Seely, J. F.; Holland, G. E., and Giasson, J. V. Imaging of Laser-Produced Plasmas at Wavelengths of 130 Å and 34 Å Using a Microscope with Multilayer-Coated Mirrors, San Diego, CA. Multilayer and Grazing Incidence X-Ray/EUV Optics II. Meeting. 14-16 July 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2011**: 347-353, 1994.
- Seely, J. F. and Rosenstock, H. B. Normal-Incidence Reflectance of Crystalline K_6C_{60} , Rb_6C_{60} , and Cs_6C_{60} . *Applied Optics*, **33**(19):4225-4229, 1994.
- Sela, J. G.; Anderson, P. B.; Norton, D. W., and Young, M. A. Massive Parallelization of NMCs Spectral Model. *Journal of Parallel and Distributed Computing*, **21**(1):140-149, 1994.
- Serlin, V. and Friedman, M. Development and Optimization of the Relativistic Klystron-Amplifier. *IEEE Transactions on Plasma Science*, **22**(5):692-700, 1994.
- Serlin, V.; Friedman, M.; Lampe, M., and Hubbard, R. RF Extraction Issues in the Relativistic Klystron Amplifiers. Intense Microwave Pulses II, Los Angeles, CA. Meeting. 24-26 Jan, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2154**: 11-, 1994.
- Sethian, J. D.; Bodner, S. E.; Gerber, K. A.; Lehmberg, R. H.; McLean, E. A.; Obenschain, S. P.; Pawley, C. J.; Pronko, M. S.; Stamper, J. A.; Deniz, A. V.; Hardgrove, J.; Lehecka, T., and McGeoch, M. W. The Nike KrF Laser Program. Laser Interaction and Related Plasma Phenomena: 11th International Workshop, Monterey, CA. Meeting. OCT, 1993. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, **318**: 314-, 1994.
- Sethian, J. D.; Lehmberg, R. H.; Pawley, C. J.; Deniz, A. V.; Bodner, S. E.; McLean, E. A.; Pronko, M. S.; Hardgrove, J.; McGeoch, M. W.; Gerber, K. A.; Obenschain, S. P.; Stamper, J. A., and Lehecka, T. H. Overview of the Nike KrF Laser Program. *Fusion Technology*, **26**(3):717-721, 1994.
- Shanabrook, B. V. and Bennett, B. R. Planar Vibrational Modes as Probes of Interface Structure. *Physical Review B-Condensed Matter*, **50**(3):1695-1700, 1994.

- Shapiro, V. D.; Shevchenko, V. I.; Cargill, P. J., and Papadopoulos, K. Modulational Instability of Lower-Hybrid Waves at the Magnetopause. *Journal of Geophysical Research-Space Physics*, **99**(A12):23735-23740, 1994.
- Share, G. H.; Johnson, W. N.; Kurfess, J. D.; Murphy, R. J.; Connors, A.; Dingus, B. L.; Schaefer, B. E.; Band, D.; Matteson, J.; Collmar, W.; Schonfelder, V.; Fichtel, C. E.; Kwok, P. W.; Teegarden, B. J.; Fishman, G., and Kuiper, L. Comparison of BATSE, COMPTEL, EGRET, and OSSE Spectra of GRB-910601. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, 283-, 1994.
- Shashidhar, R. and Schnur, J. M. Self-Assembling Tubules from Phospholipids. Molecular and Biomolecular Electronics; 1994. Washington, DC: American Chemical Society, 1994. Advances in Chemistry Series, **240**: 455-473, 1994.
- Shaw, J. L. and Gray, H. F. Locally Focused Electron-Beam Deposition. *Journal of Vacuum Science & Technology B*, **12**(6):3289-3293, 1994.
- Sheeley, N. R. and Wang, Y. M. Returning to the Random Walk Proceedings of the NATO Advanced Research Workshop on Solar Surface Magnetism, Centrum Kontakt der Kontinenten, Soesterberg, NE. Meeting. 1-5 NOV, 1993. Solar Surface Magnetism. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic Publishers, 1994. NATO ASI Series. Series C, Mathematical and Physical Sciences, **433**: 379-383, 1994. ISBN: 0792328450.
- Sheinson, R. S. Laboratory Through Full-Scale - The Navy Halon Total Flooding Replacement Program. *Abstracts of Papers of the American Chemical Society*, **208**:281-ENVR, 1994.
- Shen, C. Y. The Acceleration Field Associated with Vorticity Flux Convergence. *Journal of Physical Oceanography*, **24**(5):1070-1076, 1994.
- Shen, C. Y. and Evans, T. On Vorticity Shedding by Unstable Jets. *Dynamics of Atmospheres and Oceans*, **21**(2-3):105-135, 1994.
- Shi, J. J.; Chang, S., and Raman, S. Numerical Investigation of the Interaction Between Hurricane Florence (1988) and Upper-Tropospheric Environment. Tenth Conference on Numerical Weather Prediction. Portland, OR. Meeting. 18-22 Jul, 1994, Boston, MA: American Meteorological Society, 1994. 404-406, 1994.
- Shih, A.; Yater, J.; Hor, C., and Abrams, R. H. Secondary Electron Emission Properties of Oxidized Beryllium CFA Cathodes. *IEEE Transactions on Electron Devices*, **41**(12):2448-2454, 1994.
- Shirey, L. M.; Foster, K. W.; Chu, W.; Kosakowski, J.; Rhee, K. W.; Dobisz, E. A.; Eddy, C.; Park, D.; Isaacson, I. P.; McCarthy, D.; Marrian, C. R. K., and Peckerar, M. C. Reactive Ion Etching of Tungsten for High-Resolution X-Ray Masks. Electron-Beam, X-Ray, and Ion-Beam Submicrometer Lithographies for Manufacturing, San Jose, CA. Meeting. 28 Feb-1 Mar, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2194**: 169-, 1994.
- Shirey, L. M.; Foster, K. W.; Chu, W.; Kosakowski, J.; Rhee, K. W.; Eddy, C.; Park, D. W.; Isaacson, P.; McCarthy, D.; Marrian, C. R. K.; Peckerar, M. C., and Dobisz, E. A. Reactive-Ion-Etching of 100-nm Linewidth Tungsten Features Using SF_6 , H_2 and a Cr-Lift-off Mask. Diagnostic Techniques for Semiconductor Materials Processing, Boston, MA. Meeting. 29 NOV- 2 DEC, 1993. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **324**: 487-, 1994.

- Shirk, J. S.; Flom, S. R.; Lindle, J. R.; Bartoli, F. J.; Snow, A. W., and Boyle, M. E.. Nonlinear Absorption in Phthalocyanines and Naphthalocyanines. *Electrical, Optical, and Magnetic Properties of Organic Solid State Materials*, Boston, MA. Meeting, 29 NOV-3 DEC, 1993. Pittsburgh, PA: Materials Research Society, c1994. *Materials Research Society Symposium Proceedings*, **328**: 661-, 1994.
- Shriver-Lake, L. C.; Golden, J. P.; Ogert, R. A., and Ligler, F. S. Detection of Large and Small Molecules by an Evanescent-Wave Fiber Optic Biosensor. *Abstracts of Papers of the American Chemical Society*, **207**:54-BTEC, 1994.
- Sica, L.; Aye, T.; Tenggara, I., and Wexler, B. Compensation of Spacer-Thickness Variations in a Holographic Fabry-Perot Filter. *Applied Optics*, **33**(22):5021-5028, 1994.
- Sigalas, M. M. and Papaconstantopoulos, D. A. Calculations of the Total Energy, Electron-Phonon Interaction, and Stoner Parameter for Metals. *Physical Review B-Condensed Matter*, **50**(11):7255-7261, 1994.
- Sigalas, M. M. and Papaconstantopoulos, D. A. Transferable Total Energy Parametrization for Metals: Applications to Elastic Constant Determination. *Physical Review B-Condensed Matter*, **49**(3):1574-1579, 1994.
- Simon, R. S. The Big Optical Array. Very High Angular Resolution Imaging. *Proceedings of the 158th Symposium of the International Astronomical Union, held at the Women's College, University of Sydney, Australia, 11-15 January 1993*, edited by J.G. Robertson and W.J. Tango. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. *IAU Symposium Series*, **158**: 151-153, 1994.
- Singer, I. L. Friction and Energy-Dissipation at the Atomic-Scale - A Review. *Journal of Vacuum Science & Technology A-Vacuum Surfaces and Films*, **12**(5):2605-2616, 1994.
- Singer, I. L.; Fayeulle, S.; Ehni, P. D., and Vardiman, R. G. Thermodynamic Guidance for Implantation Treatments to Improve Coating-Substrate Adhesion. *Applied Physics Letters*, **65**(25):3191-3193, 1994.
- Singh, A. and Markowitz, M. A. The Stabilization of Tubules Formed from Heterobifunctional Phospholipids. *New Journal of Chemistry*, **18**(3):377-385, 1994.
- Singh, A.; Markowitz, M. A., and Chow, G. M. Polymerizable Self-Organized Membranes: A Novel Class of Organic Compounds. *Molecularly Designed Ultrafine/Nanostructured Materials*, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. *Materials Research Society Symposium Proceedings*, 351: 67-76, 1994.
- Singh, A.; Markowitz, M. A., and Puranik, D. Formation of Microstructures with Torroidal Topology from Diacetylenic Sulpholipid. *Biophysical Journal*, **66**(2):A176, 1994.
- Singh, A.; Markowitz, M. A. and Tsao, L. I. Modulation of Phosphocholine Bilayer Structures. *Biotechnology and Bioactive Polymers*. Washington, DC: American Chemical Society. *ACS Symposium Series*, 135-146, 1994.

- Singh, A.; Markowitz, M. A.; Tsao, L. I., and Deschamps, J. Enzyme Immobilization on Polymerizable Phospholipid Assemblies. Diagnostic Biosensor Polymers: Developed from a Symposium Sponsored by the Division of Industrial and Engineering Chemistry, at the 205th National Meeting of the American Chemical Society, Denver, CO. Meeting. 28 MAR-2 APR, 1993. Proceedings of the ACS Symposium on Polymeric Materials in Biosensors and Diagnostics. Washington, DC : American Chemical Society, 1994. ACS Symposium Series, **556**: 252-263, 1994.
- Singh, A., and Schnur, J. M. Polymerizable Phospholipids - A Novel Class of Biomaterials. *Polymers for Advanced Technologies*, **5**(7):358-, 1994.
- Singh, A.; Tsao, L. I., and Puranik, D. B. Synthesis and Characterization of Metal-Chelating Polymerizable Phospholipids. *Abstracts of Papers of the American Chemical Society*, **207**:432-ORGN, 1994.
- Singh, D. J. Electronic-Structure of NaCuO_2 . *Physical Review B-Condensed Matter*, **49**(3):1580-1585, 1994.
- Singh, D. J. Electronic Structure of $\text{PrBa}_2\text{Cu}_3\text{O}_7$. *Physical Review B-Condensed Matter*, **50**(6):4106-4111, 1994.
- Singh, D. J. $\text{LaPt}_2\text{B}_2\text{C}$: A Conventional Borocarbide Superconductor. *Physical Review B-Condensed Matter*, **50**(9):6486-6488, 1994.
- Singh, D. J. Local and Nonlocal Density Functional Studies of FeCr. *Journal of Applied Physics*, **76**(10):6688-6690, 1994.
- Singh, D. J. and Papaconstantopoulos, D. A. Magnetic and Electronic Structure of CoH. *Physical Review B-Condensed Matter*, **49**(18):12801-12804, 1994.
- Singh, D. J. and Pickett, W. E. Electronic-Structure Studies of Doped and Undoped Hg-Ba-Ca-Cu-O. *Physica C*, **235**:2113-2114, 1994.
- Singh, D. J. and Pickett, W. E. Pressure-Dependent Electronic-Structure and Doping in $\text{HgBa}_2\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$. *Physica C*, **233**(3-4):237-241, 1994.
- Singh, D. J. and Pickett, W. E. Skutterudite Antimonides: Quasilinear Bands and Unusual Transport. *Physical Review B-Condensed Matter*, **50**(15):11235-11238, 1994.
- Singh, D. J. and Pickett, W. E. Unconventional Oxygen Doping Behavior in $\text{HgBa}_2\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$. *Physical Review Letters*, **73**(3):476-479, 1994.
- Sinha, S. P.; Zaleski, A.; Joannou, D. E.; Campisi, G. J., and Hughes, H. L. Generation and Annihilation of Interface States Under Alternate Hot Electron/Hole Injection in SOI MOSFET's. IEEE International SOI Conference. Piscataway, NJ: The Institute of Electrical and Electronics Engineers, c1991- . 123-124, 1994.
- Sink, C. W. and Hardy, D. R. Quantification of Compound Classes in Complex-Mixtures and Fuels Using HPLC with Differential Refractive-Index Detection. *Analytical Chemistry*, **66**(8):1334-1338, 1994.
- Sink, C. W.; Hardy, D. R., and Huang, M. H. A. An Accurate Hydrocarbon Type Analysis of All Fuel Types. *Fuel Science & Technology International*, **12**(7-8):1081-1103.
- Sinkovits, R. S. Scaling Relations for the Slippery Ballistic Growth-Model. *Physica A*, **209**(1-2):1-8, 1994.

- Sinkovits, R. S. and Pandey, R. B. Computer Simulation of Random Sequential Adsorption of 2 Interacting Species on a Lattice. *Journal of Statistical Physics*, **74**(1-2):457-463, 1994.
- Sinnott, S. B.; Colton, R. J.; White, C. T., and Brenner, D. W. Surface Patterning by Atomically-Controlled Chemical Forces: Molecular-Dynamics Simulations. *Surface Science*, **316**(1-2):L1055-L1060, 1994.
- Siquig, R. A. and Hembree, L. A. Environmental Effects for Distributed Interactive Simulation: Standards and Environmental Representations Tasks. 1994 Summer Computer Simulation Conference. [La Jolla, CA, etc.: Simulation Councils, etc.], 1994. 795-800, 1994.
- Sirkis, J.; Putnam, M. A.; Berkoff, T. A.; Kersey, A. D.; Friebele, E. J.; Jones, R. T., and Brennan, D. Development of a Structurally Embedded In-Line Fiber Etalon for Internal Strain Measurement. Fiber Optical Physical Sensors in Manufacturing and Transportation, Boston, MA. Meeting. 8-10 SEP, 1993. Bellingham, WA: SPIE--the International Society for Optical Engineering, 1994. Proceedings of SPIE--the International Society for Optical Engineering, **2072**: 262-271, 1994. ISBN: 0819413372.
- Sirkis, J.; Putnam, M. A.; Berkoff, T. A.; Kersey, A. D.; Friebele, E. J.; Jones, R. T., and Brennan, D. In-Line Fiber Etalon (ILFE) for Internal Strain Measurement. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation. Proceedings of Smart Structures and Materials Conference, Orlando, FL. Meeting. 14-16 FEB, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 137-147, 1994.
- Sirkis, J. S.; Shaw, K.; Berkoff, T. A.; Kersey, A. D.; Friebele, E. J., and Jones, R. T. Development of an Impact Detection Technique Using Optical Fiber Sensors and Neural Networks. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation. Proceedings of Smart Structures and Materials Conference, Orlando, FL. Meeting. 14-16 FEB, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2191**: 158-165, 1994.
- Siskind, D. E. On the Radiative Coupling Between Mesospheric and Thermospheric Nitric Oxide. *Journal of Geophysical Research-Atmospheres*, **99**(D11):22757-22766, 1994.
- Siskind, D. E.; Connor, B. J.; Tsou, J. J.; Parrish, A., and Remsberg, E. E. Ground-Based Microwave Observations of Ozone in the Upper Stratosphere and Mesosphere. *Journal of Geophysical Research*, **99**:16757-16770, 1994.
- Siskind, D. E.; Minschwaner, K., and Eckman, R. S. Photodissociation of O₂ and H₂O in the Middle Atmosphere: Comparison of Numerical Methods and Impact on Model O₃ and OH. *Geophysical Research Letters*, **21**(10):863-866, 1994.
- Skelton, E. F. A Record-Breaking Superconductor, Missed. *Physics Today*, **47**(2):120-121, 1994.
- Skelton, E. F.; Drews, A. R.; Osofsky, M. S.; Qadri, S. B.; Hu, J. Z.; Vanderah, T. A.; Peng, J. L., and Greene, R. L. Direct Observation of Microscopic Inhomogeneities with Energy-Dispersive Diffraction of Synchrotron-Produced X-Rays. *Science*, **263**(5152):1416-1418, 1994.
- Skibo, J. G.; Dermer, C. D., and Kinzer, R. L. Is the High-Energy Emission from Centaurus A Compton-Scattered Jet Radiation. *Astrophysical Journal*, **426**(1):L23-L26, 1994.
- Skibo, J. G.; Dermer, C. D., and Ramaty, R. Compton-Scattering in Jets: A Mechanism for ~0.4 and ~0.2 MeV Line Production. *Astrophysical Journal*, **431**(1):L39-L42, 1994.

- Skinner, A. J.; LaFemina, J. P., and Jansen, H. J. F. Structure and Bonding of Calcite: A Theoretical Study. *American Mineralogist*, **79**(34):205-214, 1994.
- Skorupka, C. W.; Krowne, C. M., and Pecora, L. M. Fractal, Non Chaotic Oscillations in a Microwave TED. *International Journal of Electronics*, **76**(4):583-588, 1994.
- Sletten, M. A. Resolution of a Phase Ambiguity in a Calibration Procedure for Polarimetric Radar Systems. *IEEE Transactions on Geoscience and Remote Sensing*, **32**(1):213-216, 1994.
- Sletten, M. A. and Trizna, D. B. An Ultrawideband, Polarimetric Radar for the Study of Sea Scatter. *IEEE Transactions on Antennas and Propagation*, **42**(11):1461-1466, 1994.
- Smedstad, O. M. and Fox, D. N. Assimilation of Altimeter Data in a Two Layer Primitive Equation Model of the Gulf-Stream. *Journal of Physical Oceanography*, **24**(2):305-325, 1994.
- Smith, F. P. and Kidwell, D. A. Untitled. *Journal of Forensic Sciences*, **39**(2):301-302, 1994.
- Smith, G. B.; Chandler, H. A., and Feuillade, C. Sector Focusing for Robust High Resolution Analysis of the Matched Field Processing Workshop Data Set. *Journal of Computational Acoustics*, **2**(3):199-215, 1994.
- Smith, R. C.; Raymond, J. C., and Laming, J. M. High-Resolution Spectroscopy of Balmer-Dominated Shocks in the Large Magellanic Cloud. *Astrophysical Journal*, **420**(1):286-293, 1994.
- Snail, K. A.; Lu, Z. P.; Weimer, R.; Heberlein, J.; Pfender, E., and Hanssen, L. M. Confirmation of (113) Facets on Diamond Grown by Chemical-Vapor-Deposition. *Journal of Crystal Growth*, **137**(3-4):676-679, 1994.
- Snow, A. W. Cyanate Ester Monomers - Synthesis and Characterization. *Abstracts of Papers of the American Chemical Society*, **208**:444-PMSE, 1994.
- Snow, A. W. and Armistead, J. P. Cyanate Resin Cure Dilatometry. *Abstracts of Papers of the American Chemical Society*, **208**:443-PMSE, 1994.
- Snow, A. W. and Armistead, J. P. A Simple Dilatometer for Thermoset Cure Shrinkage and Thermal Expansion Measurements. *Journal of Applied Polymer Science*, **52**(3):401-411, 1994.
- Snow, E. S. and Campbell, P. M. Fabrication of Si Nanostructures with an Atomic Force Microscope. *Applied Physics Letters*, **64**(15):1932-1934, 1994.
- Snow, E. S.; Campbell, P. M., and McMarr, P. J. AFM-Based Fabrication of Semiconductor Nanostructures. Extended Abstracts of the 1994 International Conference on Solid State Devices and Materials; 1994 Aug; Yokohama, Japan. Japan Society of Applied Physics; 1994: 43-45. ISBN: 4930813603.
- Snyder, W. A.; Gursky, H.; Heckathorn, H. M.; Lucke, R. L.; Dorland, B. N.; Kessel, R. A.; Berg, S. L., and Dombrowski, E. G. The Backgrounds Data Center. Ultraviolet Technology V, San Diego, CA. Meeting. 26-27 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society of Optical Engineering, **2282**: 228-235, 1994.

- Socker, D. G.; Brueckner, G. E.; Korendyke, C. M., and Schwenn, R. Spectrometric and Spectropolarimetric Observation of the Solar Corona with the LASCO/SOHO Lyot Coronagraph. X-Ray and Ultraviolet Spectroscopy and Polarimetry, San Diego, CA. Meeting. 28-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2283**: 53-57, 1994.
- Son, D. Y. and Keller, T. M. Linear Siloxane Polymers as Precursors to High-Temperature Materials. *Abstracts of Papers of the American Chemical Society*, **208**:168-PMSE, 1994.
- Soulen, R. J. Expected Performance of a Radiofrequency Biased R-Squid Noise Thermometer Below 6-Mk. *Physica B*, **194**:817-818, 1994.
- Soulen, R. J.; Fogle, W. E., and Colwell, J. H. Measurements of Absolute Temperature Below 0.75 K Using a Josephson-Junction Noise Thermometer. *Journal of Low Temperature Physics*, **94**(5/6): 385-487, 1994.
- Soulen, R. J.; Francavilla, T. L.; Drews, A. R.; Toth, L.; Lechter, W. L., and Osofsky, M. S. Successful Application of a Modified Ambegaokar-Halperin Model to Fit the Current-Voltage Characteristics of Bulk PbHgBaCaCuO. *Cryogenics*, **34**:821-824, 1994.
- Soulen, R. J.; Francavilla, T. L.; Fuller-Mora, W. W.; Miller, M. M.; Joshi, C. H.; Carter, W. L.; Rodenbush, A. J.; Manlief, M. D., and Aized, D. Explanation of the Dissipation Observed in Several High-Temperature Superconductors Using a Modified Ambegaokar-Halperin Model. *Physical Review B-Condensed Matter*, **50**(1):478-487, 1994.
- Spadaro, D.; Leto, P., and Antiochos, S. K. Observational Evidence for Nonequilibrium Ionization in the Solar Corona. *Space Science Reviews*, **70**(1-2):207-209, 1994.
- Spadaro, D.; Leto, P., and Antiochos, S. K. Observational Tests for Nonequilibrium Ionization in the Solar Corona. *Astrophysical Journal*, **427**(1):453-458, 1994.
- Spanos, G. The Fine Structure and Formation Mechanism of Lower Bainite. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(9):1967-1980, 1994.
- Spanos, G.; Masumura, R. A.; Vandermeer, R. A., and Enomoto, M. The Evolution and Growth-Kinetics of Precipitate Plates Growing by the Ledge Mechanism. *Acta Metallurgica et Materialia*, **42**(12):4165-4176, 1994.
- Spargo, B. J.; Rudolph, A. S., and Rollwagen, F. M. Recruitment of Tissue Resident Cells to Hydrogel Composites - In-Vivo Response to Implant Materials. *Biomaterials*, **15**(10):853-858, 1994.
- Spargo, B. J.; Testoff, M. A.; Nielsen, T. B.; Stenger, D. A.; Hickman, J. J., and Rudolph, A. S. Spatially Controlled Adhesion, Spreading, and Differentiation of Endothelial Cells on Self-Assembled Molecular Monolayers. *Proceedings of the National Academy of Sciences of the United States of America*, **91**(23):11070-11074, 1994.
- Sprague, J. A. and Gilmore, C. M. Effects of Atom Energy on Metal-on-Metal Film Nucleation and Growth. *Surface & Coatings Technology*, **65**(1-3):71-76., 1994.
- Sprangle, P.; Krall, J., and Esarey, E. Hose-Modulation Instability of Laser-Pulses in Plasmas. *Physical Review Letters*, **73**(26):3544-3547, 1994.

- Sprunt, S.; Nounesis, G.; Naciri, J.; Ratna, B. R., and Shashidhar, R. Stability of Magnetic Field Induced Dipolar Order in a Ferroelectric Side-Chain Liquid Crystal Polymer. *Applied Physics Letters*, **65**(21):2681-2683, 1994.
- Stahlbush, R. E. and Cartier, E. Interface Defect Formation in MOSFETs by Atomic-Hydrogen Exposure. *IEEE Transactions on Nuclear Science*, **41**(6):1844-1853, 1994.
- Stalick, W. M.; Mushrush, G. W.; Murray, J. H., and Zahadat, N. Pyrolysis Free-Radical Reactions of Substituted Long-Chain Alkyl Pyridines and Quinolines. *Abstracts of Papers of the American Chemical Society*, **208**:32-PETR, 1994.
- Stavn, R. H. and Wiedemann, A. D. Geometrical Light Field Parameters for Improving Remote Sensing Estimates of the Backscattering Coefficient for the Marine Hydrosol. Ocean Optics XII, Bergen, NO. Meeting. 13-15 Jun, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2258**: 202-209, 1994.
- Steiman-Cameron, T. Y.; Young, K.; Scargle, J. D.; Crutchfield, J. P.; Imamura, J. N.; Wolff, M. T., and Wood, K. S. Dripping Handrails and the Quasi-Periodic Oscillations of the AM Herculis Objects. *Astrophysical Journal*, **435**(2):775-783, 1994.
- Steiner, M. Constructive Codes for Arbitrary Discrete Memoryless Channels. *IEEE Transactions on Information Theory*, **40**(3):929-934, 1994.
- Steiner, M. The Strong Simplex Conjecture Is False. *IEEE Transactions on Information Theory*, **40**(3):721-731, 1994.
- Stenger, D. A.; Chen, M. S.; Calvert, J. M.; Shashidhar, R.; Jeong, Y. H., and Pershan, P. S. X-Ray and Ellipsometric Studies of Self-Assembled Monolayers of Fluorinated Chlorosilanes. *Langmuir*, **10**:1171-1176, 1994.
- Sterling, A. C.; Doschek, G. A., and Pike, C. D. Fe-XXV Temperatures in Flares from the YKKOH Bragg Crystal Spectrometer. *Astrophysical Journal*, **435**(2):898-908, 1994.
- Sterling, A. C.; Shibata, K., and Mariska, J. T. Jets and Brightenings Generated by Energy Deposition in the Middle and Upper Solar Chromosphere. *Space Science Reviews*, **70**(1-2):77-80, 1994.
- Stevens, M. H.; Meier, R. R.; Conway, R. R., and Strobel, D. F. A Resolution of the N₂ Carroll-Yoshino c₄ - X) Band Problem in the Earth's Atmosphere. *Journal of Geophysical Research-Space Physics*, **99**(A1):417-433, 1994.
- Stevenson, R. L.; Schmitz, B. E., and Delp, E. J. Discontinuity Preserving Regularization of Inverse Visual Problems. *IEEE Transactions on Systems Man and Cybernetics*, **24**(3):455-469, 1994.
- Stixrude, L.; Cohen, R. E., and Singh, D. J. Iron at High-Pressure - Linearized-Augmented-Plane-Wave Computations in the Generalized-Gradient Approximation. *Physical Review B-Condensed Matter*, **50**(9):6442-6445, 1994.
- Streitz, F. H., Cammarata, R. C., and Sieradzki, K. Surface-Stress Effects on Elastic Properties. I. Thin Metal-Films. *Physical Review B-Condensed Matter*, **49**(15):10699-10706, 1994.
- Streitz, F. H., Cammarata, R. C., and Sieradzki, K. Surface-Stress Effects on Elastic Properties. II. Metallic Multilayers. *Physical Review B-Condensed Matter*, **49**(15):10707-10716, 1994.

- Streitz, F. H. and Mintmire, J. W. Charge-Transfer and Bonding in Metallic Oxides. *Journal of Adhesion Science and Technology*, **8**(8):853-864, 1994.
- Streitz, F. H. and Mintmire, J. W. Electrostatic-Based Model for Alumina Surfaces. *Thin Solid Films*, **253**(1-2):179-184, 1994.
- Streitz, F. H. and Mintmire, J. W. Electrostatic Potentials for Metal Oxide Surfaces and Interfaces. Interface Control of Electrical, Chemical, and Mechanical Properties, Boston, MA. Meeting. NOV 29-DEC 3, 1993. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **318**: 679-684, 1994.
- Streitz, F. H. and Mintmire, J. W. Electrostatic Potentials for Metal-Oxide Surfaces and Interfaces. *Physical Review B-Condensed Matter*, **50**(16):11996-12003, 1994.
- Streitz, F. H. and Mintmire, J. W. Metal/Oxide Interfaces: An Electrostatics-Based Model. *Composite Interfaces*, **2**:473-484, 1994.
- Strickland, D. J.; Cox, R. J.; Barnes, R. P.; Paxton, L. J.; Meier, R. R., and Thonnard, S. E. Model for Generating Global Images of Emission from the Thermosphere. *Applied Optics*, **33**(16):3578-3594, 1994.
- Strobel, D. F.; Zhu, X., and Summers, M. E. On the Vertical Thermal Structure of the Atmosphere. *Icarus*, **111**(1):18-30, 1994.
- Strohkenedl, F. P.; Larsen, R. J.; Dalton, L. R.; Hellwarth, R. W., and Sarkas, H. W. Nonlinear Optical Properties of a C₆₀ Film at Wavelengths Between 740 and 880 nm. Fullerenes and Photonics, San Diego, CA. Meeting. 25-26 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2284**: 78-88 , 1994.
- Stubblefield, W. L.; Hartwig, E., and Heinrichs, D. F. A National Fleet System - A Federal Viewpoint. *Marine Technology Society Journal*, **28**(4):56-57, 1994.
- Sturmer, S. J. and Dermer, C. D. Effects of Scattering Atmospheres on the Pulse Profiles of Accreting X-Ray Pulsars. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, 495-, 1994.
- Sturmer, S. J. and Dermer, C. D. Energy-Dependent Effects of Scattering Atmospheres on X-Ray Pulsar Pulse Profiles. *Astronomy and Astrophysics*, **284**(1):161-173, 1994.
- Sturmer, S. J. and Dermer, C. D. Gamma-Ray Emission from Millisecond Pulsars. *Astronomy and Astrophysics*, **281**(3):L101-L104, 1994.
- Sturmer, S. J. and Dermer, C. D. A Nearly-Aligned, Polar Cap Gamma-Ray Pulsar Model. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 106-110, 1994.
- Sturmer, S. J. and Dermer, C. D. On the Spectra and Pulse Profiles of Gamma-Ray Pulsars. *Astrophysical Journal*, **420**(2):L79-L82, 1994.
- Sturrock, P. A.; Antiochos, S. K.; Klimchuk, J. A., and Roumeliotis, G. Asymptotic Forms for the Energy of Force-Free Magnetic-Field Configurations of Translational Symmetry. *Astrophysical Journal*, **431**(2):870-872, 1994.

- Su, M. Y.; Todoroff, D., and Cartmill, J. Laboratory Comparisons of Acoustic and Optical Sensors for Microbubble Measurement. *Journal of Atmospheric and Oceanic Technology*, **11**(1):170-181, 1994.
- Subramanian, S.; Sooryakumar, R.; Prinz, G. A.; Jonker, B. T., and Idzerda, Y. U. Elastic Constants of Body-Centered-Cubic Cobalt Films. *Physical Review B-Condensed Matter*, **49**(24):17319-17324, 1994.
- Summers, G. P.; Walters, R. J.; Xapsos, M. A.; Burke, E. A.; Messenger, S. R.; Shapiro, P., and Statler, R. L. A New Approach to Damage Prediction for Solar Cells Exposed to Different Radiations. Photovoltaic Energy Conversion, 1994. Conference Record of the Twenty Fourth IEEE Photovoltaic Specialists Conference, 1994. Meeting. 5-9 Dec, 1994. [New York, NY: Institute of Electrical and Electronics Engineers, 1994.] **2**: 2068-2075, 1994.
- Sun, C. J.; Kung, P.; Saxler, A.; Ohsato, H.; Bigan, E.; Razeghi, M., and Gaskill, D. K. Thermal-Stability of GaN Thin-Films Grown on (0001) Al_2O_3 , (01 $\bar{1}$ 2) Al_2O_3 and (0001)_{Si} 6H-SiC Substrates. *Journal of Applied Physics*, **76**(1):236-241, 1994
- Sun, D. C.; Towe, E., and Bennett, B. R. Study of Lattice-Mismatched (In,Ga)As/GaAs Heterostructures on the Unconventional (110) GaAs Surface. *Journal of Vacuum Science & Technology B*, **12**(2):1095-1098, 1994.
- Swanekamp, S. B.; Grossmann, J. M.; Ottinger, P. F.; Commisso, R. J., and Goyer, J. R. Power Flow Between a Plasma-Opening Switch and a Load Separated by a High-Inductance Magnetically Insulated Transmission Line. *Journal of Applied Physics*, **76**(5):2648-2656, 1994.
- Syverson, P. F. and Van Oorschot, P. C. On Unifying Some Cryptographic Protocol Logics. 1994 IEEE Symposium on Research in Security and Privacy, Oakland, CA. Meeting. May, 1994. Long Beach, CA : IEEE Computer Society, 1980- . 14-28, 1994.
- Szebeni, J.; Wassef, N. M.; Spielberg, H.; Rudolph, A. S., and Alving, C. R. Complement Activation in Rats by Liposomes and Liposome-Encapsulated Hemoglobin - Evidence for Anti-Lipid Antibodies and Alternative Pathway Activation. *Biochemical and Biophysical Research Communications*, **205**(1):255-263, 1994.
- Tai, O.; Skorupka, C., and Pecora, L. M. Chaotic Parameter Variation in Maps: Pseudoperiodicity, Crisis and Synchronization. *Physics Letters A*, **187**(2):175-179, 1994.
- Tait, G. B. Microwave Mixers Employing Multiple-Barrier Semiconductor Heterostructure Devices. *IEEE Transactions on Microwave Theory and Techniques*, **42**(9):1596-1601, 1994.
- Tang, C.-M.; Lau, Y. Y., and Swyden, T. A. Deflection Microwave-Amplifier with Field-Emitter Arrays. *Applied Physics Letters*, **65**(22):2881-2883, 1994.
- Tang, C.-M.; Lau, Y. Y., and Swyden, T. A. Deflection Microwave and Millimeter-Wave Amplifiers. *Journal of Vacuum Science & Technology B*, **12** (2):790-794, 1994.
- Teague, W. J.; Hallock, Z. R.; Jacobs, G. A., and Mitchell, J. L. Steric Effects in Comparisons of Inverted Echo Sounders and TOPEX/Poseidon. *TOPEX/POSEIDON Research News*, **JPL 410-42**(3):4-6, 1994.

- Teague, W. J.; Shiller, A. M., and Hallock, Z. R. Hydrographic Section Across the Kuroshio Near 35°N, 143°E. *Journal of Geophysical Research-Oceans*, **99**(C4):7639-7650, 1994.
- Tempelman, L. A.; Golden, J. P.; Anderson, G. P., and Ligler, F. S. Use of Cyanine Dyes with Evanescent Wave Fiber Optic Biosensors. Chemical, Biochemical, and Environmental Fiber Sensors VI. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2293**:139-148, 1994.
- Terrell, J. B.; Harvey, D. P.; Sudarshan, T. S., and Louthan, M. R. Participation of Hydrogen in Slow Bending Behavior of 304l Stainless-Steel. *Materials Science and Technology*, **10**(8):738-740, 1994.
- Terry, R. E. Electrostatic Turbulence in the Z Pinch Corona. *Physics of Plasmas*, **1**(7):2189-2199, 1994.
- The, L. S.; Clayton, D. D.; Leising, M. D.; Johnson, W. N.; Kurfess, J. D.; Strickman, M. S.; Kinzer, R. L.; Jung, G. V.; Grabelsky, D. A.; Purcell, W. R., and Ulmer, M. P. OSSE Observations of the Cassiopeia A Supernova Remnant. Proceedings of the Second Compton Symposium, College Park, MD, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **304**: 180-184, 1994.
- Thelen, D.; Rankin, S.; Marshall, P. W.; LaBel, K. A., and Krainak, M. A. Dual-Rate MIL-STD-1773 Fiber Optic Transceiver for Satellite Applications. Photonics for Space Environments II, Orlando, FL. Meeting. 5-6 Apr, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2215**: 101-112, 1994.
- Thompson, C. M. and Allen, J. S. The Effect of Mold Pressure on the Electrical Resistivity of Elastomers. *Rubber Chemistry and Technology*, **67**(1):107-118, 1994.
- Thompson, C. M.; Taylor, S. G., and McGee, W. W. Gel Permeation Chromatographic Analysis of Polyurethane Prepolymer Synthesis Kinetics. II. The Effects of Stoichiometry and Type of Diisocyanate. *Journal of Polymer Science Part A-Polymer Chemistry*, **32**(1):113-120, 1994.
- Thompson, C. M.; Ting, R. Y., and Jenkins, L. L. Development of a Toughened Epoxy for Reinforced Acoustical Windows. *Abstracts of Papers of the American Chemical Society*, **207**:29-PMSE, 1994.
- Thompson, K. L.; Elston, R., and Hill, G. J. Strong Optical Fe-II Emission in $Z > 2$ QSOs. *Astrophysics and Space Science Library*, **190** (Infrared Astronomy with Arrays: The Next Generation):497-, 1994.
- Thompson, P. E.; Godbey, D.; Hobart, K.; Glaser, E.; Kennedy, T.; Twigg, M., and Simons, D. Parametric Investigation of $\text{Si}_{1-x}\text{Ge}_x/\text{Si}$ Multiple-Quantum-Well Growth. *Japanese Journal of Applied Physics Part 1-Regular Papers Short Notes & Review Papers*, **33**(4B):2317-2321, 1994.
- Thompson, W. T. Numerical Simulations of the Life Cycle of a Baroclinic Wave. The Life Cycles of Extratropical Cyclones, Proceedings of an International Symposium, Bergen, NO. Meeting 27 Jun-1 Jul, 1994. Bergen, Norway: Alma Mater Forlag, 1994. 524-529, 1994.
- Thompson, W. T., and Burk, S. D. Numerical Investigations of Mesoscale Circulations Along the California Coast. Sixth Conference on Mesoscale Processes, Portland, OR. Meeting. 18-22 Jul, 1994. Boston, MA: American Meteorological Society, 1994. 593-596, 1994.

- Thompson, W. T.; Burk, S. D.; Cook, J., and Love, G. G. Variations in Coastal Atmospheric Refractivity Induced by Mesoscale Processes. 1994 Surface and Atmospheric Remote Sensing: Technologies, Data Analysis, and Interpretation. International Geoscience and Remote Sensing 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 410-412, 1994.
- Thoms, B. D. and Butler, J. E. HREELS Scattering Mechanism from Diamond Surfaces. *Physical Review B-Condensed Matter*, **50**(23):17450-17455, 1994.
- Thoms, B. D.; Owens, M. S.; Butler, J. E., and Spiro, C. Production and Characterization of Smooth, Hydrogen-Terminated Diamond C(100). *Applied Physics Letters*, **65**(23):2957-2959, 1994.
- Thoms, B. D.; Owens, M. S.; Butler, J. E., and Spiro, C. The Structure of H/C(100) - Monohydride Dimer 2x1 Reconstruction. *Abstracts of Papers of the American Chemical Society*, **207**:35-COLL, 1994.
- Thoms, B. D.; Pehrsson, P. E., and Butler, J. E. A Vibrational Study of the Adsorption and Desorption of Hydrogen on Polycrystalline Diamond. *Journal of Applied Physics*, **75**(3):1804-1810, 1994.
- Thonnard, S. E.; Osterman, S. N.; McCoy, R. P.; Williams, J. Z.; Dymond, K. F.; Ferragut, N. J.; Doerner, M. A., and Parker, S. E.. Optical Calibration of the Special Sensor Ultraviolet Limb Imager (SSULI). Ultraviolet Technology V, San Diego, CA. Meeting. 26-27 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2282**: 98-, 1994.
- Thorns, B. D.; Russell, J. N.; Pehrsson, P. E., and Butler, J. E. Adsorption and Abstraction of Hydrogen on Polycrystalline Diamond. *Journal of Chemical Physics*, **100**(11):8425-8431, 1994.
- Thornhill, J. W.; Whitney, K. G.; Deeney, C., and Lepell, P. D. Phenomenological Modeling of Turbulence in Z-Pinch Implosions. *Physics of Plasmas*, **1**(2):321-330, 1994.
- Thorpe, T. P.; Weimer, R. A., and Freitas, J. A. Novel Technique for Growth-Etch Cycling of Flame-Deposited Diamond Films. *Applied Physics Letters*, **65**(19):2490-2492, 1994.
- Thorsheim, H. R. and Butler, J. E. Vapor-Phase Diagnostics in Diamond CVD. ELEC SOC S, 193, 1994.
- Ting, R. Y. Composite Piezoelectric Materials for Transduction. *Applied Acoustics*, **41**(4):325-335, 1994.
- Ting, R. Y.; Howarth, T. R., and Rittenmyer, K. M. Hydroacoustic Evaluation of 1-3 Piezocomposite Plate and Ring Structures. Ferroic Materials: Design, Preparation, and Characteristics. [Proceedings of the International Symposium on Ferroelectric Thin Films, the International Symposium on Materials for Intelligent/Smart Systems and Adaptive Structures ... Presented at the PAC RIM Meeting held in Honolulu, HI, November 7-12, 1993.] Westerville, OH: American Ceramic Society, 1994. *Ceramic Transactions*, **43**: 231-238, 1994.
- Tonucci, R. J.; Berry, A. D., and Fatemi, M. Deposition of Submicron GaAs Wires in Nanochannel Array Glass. *Abstracts of Papers of the American Chemical Society*, **208**:303-INOR, 1994.
- Towe, E.; Sun, D., and Bennett, B. R. Growth of the (In,Al,Ga)As Quaternary Alloy System on GaAs at Low Substrate Temperatures by Molecular-Beam Epitaxy. *Journal of Vacuum Science & Technology B*, **12**(2):1099-1101, 1994.
- Treece, R. E.; Conklin, J. A., and Kaner, R. B. Metathetical Synthesis of Binary and Ternary Antiferromagnetic Gadolinium Pnictides (P, As, and Sb) *Inorganic Chemistry*, **33**(25):5701-5707, 1994.

- Treece, R. E.; Horwitz, J. S., and Chrisey, D. B. Carbon Nitride Thin-Films Grown by Pulsed-Laser Deposition. Pittsburgh, PA : Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **327**: 245-, 1994.
- Treece, R. E.; Horwitz, J. S., and Chrisey, D. B. Pulsed Laser Deposition of NbN_x ($0 \leq x \leq 1.4$) Thin Films. Polycrystalline Thin Films - Structure, Texture, Properties and Applications, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA : Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **343**: 747-752, 1994.
- Treece, R. E.; Horwitz, J. S., and Chrisey, D. B. Synthesis of Metastable Nitrides by Pulsed-Laser Deposition. *Abstracts of Papers of the American Chemical Society*, **208**:622-INOR, 1994.
- Treece, R. E.; Horwitz, J. S.; Chrisey, D. B.; Donovan, E. P., and Qadri, S. B. Pulsed Laser Ablation Synthesis of NbN_x ($0 \leq x \leq 1.3$) Thin Films. *Chemistry of Materials*, **6**(12):2205-2207, 1994.
- Treece, R. E.; Horwitz, J. S.; Claassen, J. H., and Chrisey, D. B. Pulsed Laser Deposition of High-Quality NbN Thin-Films. *Applied Physics Letters*, **65**(22):2860-2862, 1994.
- Treece, R. E.; Horwitz, J. S.; Dorsey, P. C.; Chrisey, D. B.; Tang, J., and Williams, R. S. Pulsed-Laser Deposition of Superlattice Materials for Device Applications. *Abstracts of Papers of the American Chemical Society*, **208**:278-PHYS, 1994.
- Treece, R. E. and Kaner, R. B. Solid-State Metathesis (SSM) Preparation of Materials from Insulators to Superconductors. *Abstracts of Papers of the American Chemical Society*, **208**:51-PHYS, 1994.
- Tringides, M. C. and Ngai, K. L. Phenomenological Analogies Between Nonequilibrium and Correlated Systems. *Journal of Non-Crystalline Solids*, **172**:412-419, 1994.
- Tritt, T. M.; Jacobsen, R. L.; Ehrlich, A. C., and Gillespie, D. J. Measure of the Elastic and Transport Properties of TaSe_3 Through the Stress-Induced Phase Transition. *Physica B*, **194**:1303-1304, 1994.
- Troilo, L. M.; Damjanovic, D., and Newnham, R. E. Modified Lead Calcium Titanate Ceramics with a Relatively Large Dielectric Constant for Hydrophone Applications. *Journal of the American Ceramic Society*, **77**(3):857-859, 1994.
- Trunk, G. V. and Kim, M. W. Ambiguity Resolution of Multiple Targets Using Pulse-Doppler Wave-Forms. *IEEE Transactions on Aerospace and Electronic Systems*, **30**(4):1131-1137, 1994.
- Trunk, G. V. and Kim, M. W. Multiple Target Ambiguity Resolution. 1994 IEEE National Radar Conference, Atlanta, GA. Meeting. 29-31 MAR, 1993. New York, NY: IEEE, 19-- . 91-94, 1994.
- Tsai, T. E.; Friebele, E. J.; Rajaram, M., and Mukhopadhyay, S. Structural Origin of the 5.16 eV Optical Absorption Band in Silica and Ge-Doped Silica. *Applied Physics Letters*, **64**(12):1481-1483, 1994.
- Tsao, T. R. and Chen, V. C. Gabor Wavelet Pyramid for Depth Recovery. Wavelet Applications, Orlando, FL. Meeting. 5-8 Apr, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2242**: 161-168, 1994.

- Tuchman, J. A.; Glembocki, O. J.; Stillmon, R. S.; Glaser, E. R., and Twigg, M. E. Optical Determinations of (Partial) Ordering in Ordered Alloys. Spectroscopic Characterization Techniques for Semiconductor Technology V, Los Angeles, CA. Meeting. 25-26 Mar, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2141**, 30-40, 1994.
- Tupper, K. J. and Brenner, D. W. Compression-Induced Structural Transition in a Self-Assembled Monolayer. *Langmuir*, **10**(7):2335-2338, 1994.
- Tupper, K. J. and Brenner, D. W. Molecular-Dynamics Simulations of Friction in Self-Assembled Monolayers. *Thin Solid Films*, **253**(1-2):185-189, 1994.
- Tupper, K. J.; Colton, R. J., and Brenner, D. W. Simulations of Self-Assembled Monolayers Under Compression: Effect of Surface Asperities. *Langmuir*, **10**(7):2041-2043, 1994.
- Turner, N. H. and Schreifels, J. A. Surface Analysis: X-Ray Photoelectron Spectroscopy and Auger Electron Spectroscopy. *Analytical Chemistry*, **66**(12):R163-R185, 1994.
- Tveten, A.; Yurek, A. M.; Opsasnick, M. N., and Dandridge, A. Demodulator Optimization for the Interrogation of Fiber Optic Hydrophones in Real World Environments. 10th Optical Fibre Sensors Conference; Glasgow, Scotland. Meeting. 11-13 Oct, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 522-525, 1994.
- Twigg, M. E.; Bennett, B. R.; Shanabrook, B. V.; Waterman, J. R.; Davis, J. L., and Wagner, R. J. Interfacial Roughness in InAs/GaSb Superlattices. *Applied Physics Letters*, **64**(25):3476-3478, 1994.
- Twigg, M. E.; Hughes, H. L.; Roitman, P., and Allen, L. P. Measurement of Low Defect Densities in SIMOX Using Transmission Electron Microscopy. IEEE International SOI Conference, Nantucket Island, MA. Meeting. 4-6 Oct, 1994: 85-86. Piscataway, NJ: The Institute of Electrical and Electronics Engineers, c1991- . 85-86, 1994.
- Ulmer, M. P.; Lomatch, S.; Matz, S. M.; Grabelsky, D. A.; Purcell, W. R.; Grove, J. E.; Johnson, W. N.; Kinzer, R. L.; Kurfess, J. D.; Strickman, M. S.; Cameron, R. A., and Jung, G. V. OSSE Observations of the Crab Pulsar. *Astrophysical Journal*, **432**(1):228-238, 1994.
- Umstadter, D.; Esarey, E., and Kim, J. Nonlinear Plasma-Waves Resonantly Driven by Optimized Laser-Pulse Trains. *Physical Review Letters*, **72**(8):1224-1227, 1994.
- Uthuppan, J.; Aggarwal, S. K.; Grinstein, F. F., and Kailasanath, K. Particle Dispersion in a Transitional Axisymmetrical Jet - A Numerical-Simulation. *AIAA Journal*, **32**(10):2004-2014, 1994.
- Valenzuela, G. R.; Chubb, S. R.; Mango, S. A.; Askari, F.; Holt, B.; Alpers, W.; Donato, T., and Shih, E. H. Remote Sensing of Current-Wave Interaction with SIR-C/X-SAR (SRL-1) at the Gulf Stream Supersite. 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 1728-1731, 1994.

- Van Dyk, S. D.; Sramek, R. A.; Weiler, K. W.; Hyman, S. D., and Virden, R. E. The Radio Counterpart to the Luminous X-Ray Supernova Remnant in NGC-6946. *Astrophysical Journal*, **425**(2):L77-L79, 1994.
- Van Dyk, S. D.; Weiler, K. W.; Sramek, R. A.; Rupen, M. P., and Panagia, N. SN-1993J - the Early Radio-Emission and Evidence for a Changing Presupernova Mass-Loss Rate. *Astrophysical Journal*, **432**(2):L115-L118, 1994.
- Vandenbosch, G.; Groeseneken, G.; Maes, H. E., and Klein, R. B. Oxide and Interface Degradation Resulting from Substrate Hot-Hole Injection in Metal-Oxide-Semiconductor Field-Effect Transistors at 295 and 77 K. *Journal of Applied Physics*, **75**(4):2073-2080, 1994.
- Vandermeer, R. A. and Hu, H. On the Grain Growth Exponent of Pure Iron. *Acta Metallurgica et Materialia*, **42**(9):3071-3075, 1994.
- Vandermeer, R. A. and Jensen, D. J. Modeling Microstructural Evolution of Multiple Texture Components During Recrystallization. *Acta Metallurgica et Materialia*, **42**(7):2427-2436, 1994.
- Vandermeer, R. A. and Jensen, D. J. On the Estimation of Cahn-Hagel Interface Migration Rates. *Scripta Metallurgica et Materialia*, **30**(12):1575-1580, 1994.
- Vanderplaats, N. R.; Kodis, M. A., and Freund, H. P. Design of Traveling Wave Tubes Based on Field Theory. *IEEE Transactions on Electron Devices*, **41**(7):1288-1296, 1994.
- Vardiman, R. G. Temperature-Induced Phase Development in Titanium-Implanted Silicon-Carbide. *Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing*, **177**(1-2):209-215, 1994.
- Vasudeven, A. K. [sic., i.e., Vasudevan, A. K.]; Sadananda, K., and Louat, N. A Review of Crack Closure, Fatigue Crack Threshold and Related Phenomena. *Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing*, **188**(1-2):1-22, 1994.
- Vaughan, B. A.; Vanderklis, M.; Wood, K. S.; Norris, J. P.; Hertz, P.; Michelson, P. F.; Vanparadijs, J.; Lewin, W. H. G.; Mitsuda, K., and Penninx, W. Searches for Millisecond Pulsations in Low-Mass X-Ray Binaries. 2. *Astrophysical Journal*, **435**(1):362-371, 1994.
- Veliadis, J. V. D.; Khurgin, J. B.; Ding, Y. J.; Cui, A. G., and Katzer, D. S. Investigation of the Photoluminescence-Linewidth Broadening in Periodic Multiple Narrow Asymmetric Coupled Quantum-Wells. *Physical Review B-Condensed Matter*, 1994. **50**(7):4463-4469, 1994.
- Vogt, P. R.; Crane, K., and Sundvor, E. Deep Pleistocene Iceberg Plowmarks on the Yermak Plateau - Sidescan and 3.5 KHz Evidence for Thick Calving Ice Fronts and a Possible Marine Ice-Sheet in the Arctic-Ocean. *Geology*, **22**(5):403-406, 1994.
- Vogt, P. R.; Crane, K.; Sundvor, E.; Max, M. D., and Pfirman, S. L. Methane-Generated (Questionable) Pockmarks on Young, Thickly Sedimented Oceanic-Crust in the Arctic - Vestnesa-Ridge, Fram Strait. *Geology*, **22**(3):255-258, 1994.
- Vohra, S. and Fabiny, L. Induced Stochastic Resonance Near a Subcritical Bifurcation. *Physical Review E*, **50**(4):R2391-R2394, 1994.
- Vohra, S. T. and Bucholtz, F. Characterization of the Dynamic Strain Response of Lead Magnesium Niobate Based Ferroelectric Relaxor Using a Fiber Optic Interferometer. *Ferroelectrics*, **160**:243-253, 1994.

- Vohra, S. T. and Fabiny, L. Mixing and Detection of Microwave Signals in Fiberoptic Electrostrictive Sensor. *Electronics Letters*, **30**(5):444-445, 1994.
- Vohra, S. T.; Fabiny, L., and Bucholtz, F. Multiplexed Fiber Optic Electric and Magnetic Field Sensors. Distributed and Multiplexed Fiber Optic Sensors IV, San Diego, CA. Meeting. 24-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2294**: 102-113, 1994.
- Vohra, S. T.; Fabiny, L., and Bucholtz, F. Observation of Residual Strain in Dynamically Excited Electrostrictors. *Applied Physics Letters*, **64**(7):848-850, 1994.
- Vohra, S. T.; Fabiny, L., and Wiesenfeld, K. Observation of Induced Subcritical Bifurcation by Near-Resonant Perturbations. *Physical Review Letters*, **72**(9):1333-1336, 1994.
- Vrba, F. J.; Hartmann, D. H., and Jennings, M. C. Results from the USNO Gamma-Ray Burst Optical Counterpart Search. New York, NY: AIP Press, c1994. AIP Conference Proceedings, 443-, 1994.
- Vrba, F. J.; Luginbuhl, C. B.; Hartmann, D. H.; Hudec, R.; Chaffee, F. H.; Foltz, C. B., and Hurley, K. C. Is a QSO the Source of OT050510, and is GRB910219 Related. New York, NY: AIP Press, c1994. AIP Conference Proceedings, 448-, 1994.
- Vrba, F. J.; Luginbuhl, C. B.; Hartmann, D. H.; Hudec, R.; Chaffee, F. H.; Foltz, C. B., and Hurley, K. C. Observational Evidence Linking a Quasar with an Optical Transient. *Astrophysical Journal*, **424**(1, Part 1):68-75, 1994.
- Wackerman, C.; Shuchman, R., and Fetterer, F. Estimation of Wind Speed and Wind Direction from ERS-1 Imagery. 1994 Surface and Atmospheric Remote Sensing: Technologies, Data Analysis, and Interpretation. International Geoscience and Remote Sensing 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981-. 1222-1224, 1994.
- Wagner, P. A. and Ray, R. I. Surface Analytical Techniques for Microbiologically Influenced Corrosion - A Review. Microbiologically Influenced Corrosion Testing. Philadelphia, PA: ASTM, c1994. ASTM Special Technical Publication, **1232**: 153-172, 1994.
- Wagner, P. A.; Ray, R. I.; Little, B. J., and Tucker, W. C. Microbiologically Influenced Degradation of Fiber-Reinforced Polymeric Composites. *Materials Performance*, **33**(4):46-49, 1994.
- Waljeski, K.; Moses, D.; Dere, K. P.; Saba, J. L. R.; Strong, K. T.; Webb, D. F., and Zarro, D. M. The Composition of a Coronal Active Region. *Astrophysical Journal*, **429**(2):909-923, 1994.
- Walker, C. and Kalcic, M. Gram-Schmidt Orthogonalization Technique for Atmospheric and Sunlight Correction of Landsat Imagery. Image and Signal Processing for Remote Sensing, Rome, IT. Meeting. 26-30 Sep, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2315**: 799-812, 1994.
- Walker, D. N.; Duncan, D.; Stracka, J. A.; Bowles, J. H.; Siefring, C. L.; Baumbach, M. M., and Rodriguez, P. A Tunable Microwave Plasma Source for Space Plasma Simulation Experiments. *Review of Scientific Instruments*, **65**(3):661-668, 1994.

- Walters, R. J. A Review of Radiation Effects in InP Solar Cells. 6th International Conference on Indium Phosphide and Related Materials, Santa Barbara, CA. Meeting. 28-31 Mar, 1994. New York, NY: IEEE, 19- . 275-279, 1994.
- Walters, R. J.; Messenger, S. R.; Panunto, M.; Summers, G. P.; Wojtczuk, S. J., and Gouker, P. The Radiation Response of Heteroepitaxial P*N InP/Si Solar-Cells. Photovoltaic Energy Conversion, 1994. Conference Record of the Twenty Fourth IEEE Photovoltaic Specialists Conference, 1994. [New York, NY: Institute of Electrical and Electronics Engineers, 1994.] **2**: 2145-2148, 1994.
- Walters, R. J.; Messenger, S. R., and Summers, G. P. Thermal Annealing of Radiation-Induced Defect Centers During Recovery of Diffused Junction and Epitaxial InP Solar-Cells. Photovoltaic Energy Conversion, 1994; Conference Record of the Twenty Fourth. IEEE Photovoltaic Specialists Conference - 1994, 1994 IEEE First World Conference on Photovoltaic Energy Conversion. New York, NY, IEEE, 1994, **2**: 2185-2188, 1994.
- Waltman, E. B.; Fiedler, R. L.; Johnston, K. J., and Ghigo, F. D. The Quiescent Level of Cygnus X-3 at 2.25 and 8.3 GHz: 1988-1992. *Astronomical Journal*, **108**(1):179-187, 1994.
- Wang, C. C.; Dandridge, A.; Tveten, A. B., and Yurek, A. M. Very High Responsivity Fiber Optic Hydrophones for Commercial Applications. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 360-363, 1994.
- Wang, H. T.; Griffin, O. M., and Meadows, G. A. Hull Characteristics from SAR Images of Ship Wakes. 1994 International Geoscience and Remote Sensing Symposium (IGARSS '94), Pasadena, CA. New York, NY: Institute of Electrical and Electronics Engineers, 1981- . 1278-1280, 1994.
- Wang, J. K.; Siegal, Y.; Lu, C.; Mazur, E., and Reintjes, J. Subpicosecond Stimulated Raman Scattering in High-Pressure Hydrogen. *Journal of the Optical Society of America B-Optical Physics*, **11**(6):1031-1037, 1994.
- Wang, Y.; Gu, M.; Sun, L. H., and Ngai, K. L. Mechanism of Snoek-Koster Relaxation in Body-Centered-Cubic Metals. *Physical Review B-Condensed Matter*, **50**(6):3525-3531, 1994.
- Wang, Y.-M. Effect of Areal Expansion and Coronal Heating on the Solar-Wind. *Space Science Reviews*, **70**(1-2):387-390, 1994.
- Wang, Y.- M. Polar Plumes and the Solar Wind. *Astrophysical Journal*, **435**(2):L153-L156, 1994.
- Wang, Y.-M. Two Types of Slow Solar Wind. *Astrophysical Journal*, **437**(1):L67-L70, 1994.
- Wang, Y.-M. and Sheeley, N. R. Global Evolution of Interplanetary Sector Structure, Coronal Holes, and Solar-Wind Streams During 1976-1993 - Stackplot Displays Based on Solar Magnetic Observations. *Journal of Geophysical Research-Space Physics*, **99**(A4):6597-6608, 1994.
- Wang, Y.-M. and Sheeley, N. R. The Rotation of Photospheric Magnetic Fields: A Random Walk Transport Model. *Astrophysical Journal*, **430**(1):399-412, 1994.
- Wanser, K. H.; Voss, K. F., and Kersey, A. D. Novel Fiber Devices and Sensors Based on Multimode Fiber Bragg Gratings. Tenth International Conference on Optical Fibre Sensors, Glasgow, Scotland. Meeting. 11-13 Oct, 1994 / Brian Culshaw, Julian D.C. Jones, chairs/editors. Bellingham, WA : SPIE--the International Society for Optical Engineering, 1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 265-268, 1994.

- Watanabe, H.; Kitamoto, S.; Miyamoto, S.; Fiedler, R. L.; Waltman, E. B.; Johnston, K. J., and Ghigo, F. D. Correlation Between X-Ray-Intensity and Radio Outbursts of Cygnus-X-3. *Astrophysical Journal*, **433**(1):350-356, 1994.
- Wayman, C. M.; Aaronson, H. I.; Hirth, J. P., and Rath, B. B. Proceedings of the Pacific Rim Conference on the Roles of Shear and Diffusion in the Formation of Plate-Shaped Transformation Products - Foreword. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(9):1785-1786, 1994.
- Wayman, C. M.; Aaronson, H. I.; Hirth, J. P., and Rath, B. B. Proceedings of the Pacific Rim Conference on the Roles of Shear and Diffusion in the Formation of Plate-Shaped Transformation Products. 2. - Foreword. *Metallurgical and Materials Transactions A-Physical Metallurgy and Materials Science*, **25**(12):2553-2554, 1994.
- Waytena, G. L.; Hoff, H. A.; Vold, C. L.; Broussard, P. R.; Claassen, J. H.; Cestone, V. C., and Sprague, J. A. Experimental Evidence of Resputtering of the Ytria Layer in a $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}\text{Y}_2\text{O}_3$ $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Trilayer Film. *Journal of Applied Physics*, **76**(4):2380-2386, 1994.
- Weaver, B. D.; Jackson, E. M.; Summers, G. P., and Burke, E. A. Effect of Particle Irradiation on $\text{Ba}_{0.6}\text{K}_{0.4}\text{BiO}_3$ Thin-Films. *Physica C*, **225**(3-4):381-387, 1994.
- Webb, A. W.; Osofsky, M. S.; Skelton, E. F., and Vanderah, T. A. Pressure Dependence of Resistivity for Normal-State "123" Superconducting Copper-Oxide Compounds. High Pressure in Science and Technology - 1993. Proceedings of the AIRAPT Conference. New York, NY: North-Holland, c1994. 715-717, 1994.
- Webb, A. W.; Quadri, S. B.; Skelton, E. F.; Moulton, N. E., and Vanderah, T. A. Compressibility of $\text{Ti}_2\text{Ba}_2\text{CaCu}_{28+d}$. High Pressure Science and Technology - 1993; Proceedings of the Joint International Association for Research and Advancement of High Pressure Science and Technology and American Physical Society Topical Group on Shock Compression of Condensed Matter Conference, Colorado Springs, CO; Meeting 28 JUN-2 JUL, 1993. New York, NY: AIP Press, c1994. AIP Conference Proceedings, **309**: 691-698 , 1994.
- Webb, D. F.; Forbes, T. G.; Aurass, H.; Chen, J.; Martens, P.; Rompolt, B.; Rusin, V., and Martin, S. F. Material Ejection. *Solar Physics*, **153**(1-2):73-89, 1994.
- Webb, D. F. and Howard, R. A. The Solar-Cycle Variation of Coronal Mass Ejections and the Solar-Wind Mass Flux. *Journal of Geophysical Research-Space Physics*, **99**(A3):4201-4220, 1994.
- Weber, W.; Brox, M.; Thewes, R., and Saks, N. S. Hot-Hole-Induced Negative Oxide Charges in n-MOSFETs. 1994 IEEE International Electron Devices Meeting San Francisco, CA. Meeting. 11-14 Dec, 1994. 311-314, 1994.
- Wechter, M. A. and Hardy, D. R. Predicting Diesel Fuel Stability at the Refinery Using SMORS. *Abstracts of Papers of the American Chemical Society*, **208**:116-FUEL, 1994.
- Wehler, D.; Muller, G.; Murek, C.; Piel, H.; Schonmann, K.; Wolf, T., and Wolf, S. A. Anisotropic Microwave Losses of Partially Untwinned $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Single-Crystals. *Physica C*, **235**:2003-2004, 1994.
- Weis, R. S.; Kersey, A. D., and Berkoff, T. A. A Four Element Fiber Grating Sensor Array with Phase Sensitive Detection. *IEEE Photonics Technology Letters*, **6**(12):1469-1472, 1994.

- Weis, R. S.; Kersey, A. D., and Berkoff, T. A. A Four Element Fiber Grating Sensor Array with Phase Sensitive Detection. Smart Structures and Materials 1994: Smart Sensing, Processing, and Instrumentation. Bellingham, WA: SPIE--the International Society for Optical Engineering, 199-. Proceedings of SPIE--the International Society for Optical Engineering, 150-157, 1994.
- West, R. H.; Buker, H.; Friebele, E. J.; Henschel, H., and Lyons, P. B. The Use of Optical-Time Domain Reflectometers to Measure Radiation-Induced Losses in Optical Fibers. *Journal of Lightwave Technology*, **12**(4):614-620, 1994.
- White, C. T.; Lyons, M.; Brenner, D. W.; Mintmire, J. W.; Robertson, D. H.; Mowrey, R. C., and Dunlap, B. I. Special C₄₄ Isomers. Novel Forms of Carbon II, San Francisco, CA. Meeting. 4-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **349**: 331-336, 1994.
- White, C. T.; Mintmire, J. W.; Brenner, D. W., and Robertson, D. H. Atomistic Simulations of Shock-Induced Chemistry in Solids. *Abstracts of Papers of the American Chemical Society*, **208**:16-PHYS, 1994.
- White, C. T.; Sinnott, S. B.; Mintmire, J. W.; Brenner, D. W., and Robertson, D. H. Chemistry and Phase-Transitions from Hypervelocity Impacts. *International Journal of Quantum Chemistry*, 129-137, 1994.
- White, E. and Werby, M. F. Pulse Scattering from Objects Near an Ocean Surface and the Inverse Problem of Target Identification. Automatic Object Recognition IV, Orlando, FL; Meeting. 6-7 Apr, 1994; Orlando, FL. Bellingham, WA: Society of Photo-Optical Instrumentation Engineers --the International Society for Optical Engineering. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 127-138, 1994. ISBN: 819415383.
- White, E.; Werby, M. F., and McGirr, R. W. Ray Theory and the Normal Mode Method at Very High Frequencies. International Conference on Theoretical and Computational Acoustics, Mystic, CT. Meeting. 5-9 JUL, 1993. Singapore; New Jersey: World Scientific, c1994. 607-625, 1994.
- Whitesel, H. K.; Overby, J. K.; Ransford, M. J., and Tatem, P. Smoke and Mirrors: A Fiber Optic Smoke Sensor. Fiber Optic and Laser Sensors XII, San Diego, CA, Ramon P. DePaula, chair/editor. Meeting. 25-27 Jul, 1994, Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2292**: 1213-133, 1994.
- Whitlock, R. R. and Frick, G. M. Particle Size Distributions of Aerosols Formed by Laser Ablation of Solids at 760 Torr. *Journal of Materials Research*, **9**(11):2868-2872, 1994.
- Whitney, K. G.; Dasgupta, A., and Pulsifer, P. E. Transient Ultrahigh Gains as a Diagnostic in Short-Pulse Heated Selenium Plasmas. *Physical Review E*, **50**(1):468-473, 1994.
- Whitney, K. G.; Thornhill, J. W.; Giuliani, J. L.; Davis, J.; Miles, L. A.; Nolting, E. E.; Kenyon, V. L.; Speicer, W. A.; Draper, J. A.; Parsons, C. R.; Dang, P.; Spielman, R. B.; Nash, T. J.; McGurn, J. S.; Ruggles, L. E.; Deeney, C.; Prasad, R. R., and Warren, L. Optimization of K-Shell Emission in Aluminum Z-Pinch Implosions: Theory Versus Experiment. *Physical Review E*, **50**(3):2166-2174, 1994.
- Whitney, K. G.; Thornhill, J. W.; Spielman, R. B.; Nash, T. J.; McGurn, J. S.; Ruggles, L. E., and Coulter, M. C. Analysis of Recent Saturn Aluminum PRS Experiments. Dense Z-Pinches: Third International Conference, London, England. Meeting. 19-23 APR, 1993. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, **299**: 429-436, 1994.

- Wieland, F. and Heckathorn, H. An Object-Oriented Technology for Integrating Environmental-Effects and Distributed Simulations. *Simulation Series*, **26**(2 [Object-Oriented Simulation Conference (OOS'94)]):43-, 1994.
- Wieland, F.; Szabo, A.; Heckathorn, H., and Haynes, J. Object-Oriented Design of a Scene Generation Simulation. *Simulation Symposium Proceedings*, **27**:174-, 1994.
- Wieselthier, J. E.; Barnhart, C. M., and Ephremides, A. A Neural Network Approach to Routing without Interference in Multihop Radio Networks. *IEEE Transactions on Communications*. 1994 Jan; **42**(1):166-177.
- Wieselthier, J. E.; Barnhart, C. M., and Ephremides, A. Ordinal Optimization of Admission Control in Wireless Multihop Voice/Data Networks via Standard Clock Simulation. IEEE INFOCOM '94, Toronto, Canada. Meeting. 12-16 Jun, 1994. Los Alamitos, CA: IEEE Computer Society Press, 19-. 29-38, 1994.
- Wijesuriya, D.; Anderson, G. P., and Ligler, F. S. A Rapid and Sensitive Fiber Optic Immunoassay for Bacteria. *Abstracts of Papers of the American Chemical Society*. 1994 Mar 13; **207**:55-BTEC.
- Wijesuriya, D.; Breslin, K.; Anderson, G.; Shriver-Lake, L., and Ligler, F. S. Regeneration of Immobilized Antibodies on Fiber Optic Probes. *Biosensors & Bioelectronics*. 1994; **9**(8):585-592.
- Williams, B. A. and Fleming, J. W. Comparative Species Concentrations in CH₄/O₂/Ar Flames Doped with N₂O, NO, and NO₂. *Combustion and Flame*. 1994 Jul; **98**(1-2):93-106.
- Williams, B. A. and Fleming, J. W. LiF Detection of Methoxy in CH₄/O₂/NO₂N₂ Flames. *Chemical Physics Letters*. 1994 Apr 15; **221**(1-2):27-32.
- Williams, B. A. and Fleming, J. W. Rapid Determination of Flame Temperature Profiles Using OH LIF on a Limited Number of Rotational Lines. Laser Applications in Combustion and Combustion Diagnostics II, Los Angeles, CA. Meeting. 25-26 Jan, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2122**, 74-78, 1994.
- Williams, B. A.; Fleming, J. W., and Zabarnick, S. Comment on "Laser-Induced Fluorescence Diagnostics and Chemical Kinetic Modeling of a CH₄/NO₂/O₂ Flame at 55 Torr" By S. Zabarnick, *Combustion and Flame*, **98**(3):309-311, 1994.
- Williams, C. M.; Abe, M.; Itoh, T., and Lubitz, P. The Magnetic and Structural Properties of Ferrite Plated NiZn-Ferrite Films. *IEEE Transactions on Magnetics*, **30**(6):4896-4899, 1994.
- Williams, C. M.; Chrisey, D. B.; Lubitz, P.; Grabowski, K. S., and Cotell, C. M. The Magnetic and Structural Properties of Pulsed Laser Deposited Epitaxial MnZn-Ferrite Films. *Journal of Applied Physics*, **75**(3):1676-1680, 1994.
- Williams, H. E. F.; Yang, T. C., and Kille, R. M. Laboratory Scale Measurement of Scattering from Modeled Arctic Ice Ridges. *Ultrasonics*, **32**(6):441-446, 1994.
- Williams, K. J. Nonlinear Mechanisms in Microwave Photodetectors Operated with High Intrinsic Region Electric-Fields. *Applied Physics Letters*, **65**(10):1219-1221, 1994.
- Williams, K. J. and Esman, R. D. Stimulated Brillouin Scattering for Improvement of Microwave Fiberoptic Link Efficiency. *Electronics Letters*, **30**(23):1965-1966, 1994.

- Williams, K. J.; Esman, R. D., and Dagenais, M. Effects of High Space-Charge Fields on the Response of Microwave Photodetectors. *IEEE Photonics Technology Letters*, **6**(5):639-641, 1994.
- Wilson, M. A.; Farwell, R. W., and Stanic, S. High-Frequency Propagation Statistics in a Shallow Water Environment. 1994 New York, NY: Institute of Electrical and Electronics Engineers, c1994. IEEE Oceans. II-261 - II-265, 1994.
- Witczak, S. C.; Gaitan, M.; Suehle, J. S.; Peckerar, M. C., and Ma, D. I. The Interaction of Stoichiometry, Mechanical-Stress, and Interface-Trap Density in LPCVD--Rich SiN_x-Si Structures. *Solid-State Electronics*, **37**(10):1695-1704, 1994.
- Wolf, J. A.; Krebs, J. J.; Idzerda, Y. U., and Prinz, G. A. Magnetic Studies of FCC Co Films Grown on Diamond (Abstract). *Journal of Applied Physics*, **76**(10):6452, 1994.
- Wolf, J. A.; Krebs, J. J., and Prinz, G. A. Growth and Magnetic Characterization of Face Centered Cubic Co on (001) Diamond. *Applied Physics Letters*, **65**(8):1057-1059, 1994.
- Wolf, S. A. and Kresin, V. Z. Symmetry of the Pairing, Isotope Effect and Mechanism of Superconductivity in the Cuprates. *Physica C*, **235**:2413-2414, 1994.
- Wolf, S. A. and Kresin, V. Z. Symmetry of the Pairing, Isotope Effect and Mechanism of Superconductivity in the Cuprates. *Oxide Superconductor Physics and Nano-Engineering*. Bellingham, WA: SPIE--The International Society for Optical Engineering, 1994. Proceedings of the SPIE--The International Society for Optical Engineering, **2158**:2-13, 1994.
- Wolff, M. T.; Wood, K. S., and Imamura, J. N. Dynamics of Accretion Shocks in AM Herculis Systems - Models for High-Mass White-Dwarfs. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings, 491-, 1994.
- Wood, K. S.; Fritz, G.; Hertz, P.; Johnson, W. N.; Kowalski, M. P.; Lovellette, M. N.; Wolff, M. T.; Yentis, D. J.; Bloom, E.; Cominsky, L. R.; Fairfield, K.; Godfrey, G.; Hanson, J.; Lee, A.; Michelson, P.; Taylor, R., and Wen, H. The USA Experiment on the ARGOS Satellite: A Low Cost Instrument for Timing X-Ray Binaries. EUV, X-Ray, and Gamma-Ray Instrumentation for Astronomy V, San Diego, CA. Meeting. 25-29 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2280**: 19-30, 1994.
- Wood, W. T., Stoffa, P. L., and Shipley, T. H. Quantitative Detection of Methane Hydrate Through High-Resolution Seismic Velocity Analysis. *Journal of Geophysical Research-Solid Earth*, **99**(B5): 9681-9695, 1994.
- Woods, T. N.; Rottman, G. J.; Roble, R.; White, O. R.; Soloman, S. C.; Lawrence, G.; Lean, J., and Tobiska, W. K. The TIMED Solar EUV Experiment. Optical Spectroscopic Techniques and Instrumentation for Atmospheric and Space Research, San Diego, CA. Meeting. 25-27 Jul, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering. Proceedings of the SPIE--the International Society for Optical Engineering, **2266**: 467-478, 1994.
- Worcester, P. F.; Cornuelle, B. D.; Hildebrand, J. A.; Hodgkiss, W. S.; Duda, T. F.; Boyd, J.; Howe, B. M.; Mercer, J. A., and Spindel, R. C. A Comparison of Measured and Predicted Broad-Band Acoustic Arrival Patterns in Travel Time-Depth Coordinates at 1000-Km Range. *Journal of the Acoustical Society of America*, **95**: 3118, 1994.
- Wright, J. and Creamer, D. B. Improved Linear Representation of Surface-Waves. 2. Slowly Varying Bottoms and Currents. *Journal of Fluid Mechanics*, **261**:65-74,

- Wu, S. T.; Song, M. T.; Cheng, C. C., and Dryer, M. Coronal Heating Due to the Emergence of Magnetic-Flux. *Space Science Reviews*, **70**(1-2):167-170, 1994.
- Wurmser, D. and Gragg, R. F. Theoretical Modeling of Low Frequency Acoustic Scattering from Subsurface Bubble Structures. International Conference on Theoretical and Computational Acoustics; Mystic, CT. Meeting. 5-9 JUL, 1993. Singapore; New Jersey: World Scientific, c1994. 283-305, 1994.
- Wynne, K. J.; Ho, T.; Nissan, R. A.; Chen, X., and Gardella, J. A. Poly (Dimethylsiloxane)-Urea-Urethane - Copolymers Synthesis and Surface-Properties. Inorganic and Organometallic Polymers II; 1994. Washington, DC: American Chemical Society, 1994. ACS Symposium Series, **572**: 64-80, 1994.
- Xapsos, M. A.; Burke, E. A.; Shapiro, P., and Summers, G. P. Energy Deposition and Ionization Fluctuations Induced by Ions in Small Sites - An Analytical Approach. *Radiation Research*, **137**(2):152-161, 1994.
- Xapsos, M. A.; Summers, G. P.; Blatchley, C. C.; Colerico, C. W.; Burke, E. A.; Messenger, S. R., and Shapiro, P. Co-60 Gamma-Ray and Electron Displacement Damage Studies of Semiconductors. *IEEE Transactions on Nuclear Science*, **41**(6):1945-1949, 1994.
- Xia, J. Q.; Jordan, A. K., and Kong, J. A. Electromagnetic Inverse-Scattering Theory for Inhomogeneous Dielectrics - The Local Reflection Model. *Journal of the Optical Society of America A-Optics Image Science and Vision*, **11**(3):1081-1086, 1994.
- Xie, H.; Wang, W. I., and Meyer, J. R. Infrared Electroabsorption Modulation at Normal Incidence in Asymmetrically Stepped AlSb/InAs/GaSb/AlSb Quantum-Wells. *Journal of Applied Physics*, **76**(1):92-96, 1994.
- Xie, H.; Wang, W. I.; Meyer, J. R., and Hoffman, C. A. Intersubband Electro-Optics and Frequency Conversion at Normal Incidence. IEEE LEOS [IEEE/Lasers and Electro-Optics Society] Annual Meeting, **1**: 23-24. 1994.
- Xie, H.; Wang, W. I.; Meyer, J. R., and Ram-Mohan, L. R. Normal Incidence Second-Harmonic Generation in L-Valley AlSb/GaSb/Ga_{1-x}Al_xSb/AlSb Stepped Quantum Wells. *Applied Physics Letters*, **65**(16):2048-2050, 1994.
- Xie, L. K.; Buckley, L. J., and Josefowicz, J. Y. Observations of Polyaniline Surface-Morphology Modification During Doping and De-Doping Using Atomic-Force Microscopy. *Journal of Materials Science*, **29**(16):4200-4204, 1994.
- Yang, I. Y.; Hu, H.; Su, L. T.; Wong, V. V.; Burkhardt, M.; Moon, E. E.; Carter, J. M.; Antoniadis, D. A.; Smith, H. I.; Rhee, K. W., and Chu, W. High-Performance Self-Aligned Sub-100 Nm Metal-Oxide-Semiconductor Field-Effect Transistors Using X-Ray-Lithography. *Journal of Vacuum Science & Technology B*, **12**(6):4051-4054, 1994.
- Yang, M. C. K. and Lee, J. S. Object Identification from Multiple Images Based on Point Matching Under a General Transformation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **16**(7):751-756, 1994.

- Yang, M. J. and Bennett, B. R. InAs/GaSb Infrared Photovoltaic Detector at 77k. *Electronics Letters*, **30**(20):1710-1711, 1994.
- Yang, M. J.; Wagner, R. J.; Lin-Chung, P. J.; Shanabrook, B. V.; Waterman, J. R.; Moore, W. J., and Davis, J. L. Spin-Resolved Cyclotron Resonance in a 2D Electron Gas. *Surface Science.*, **305**(1-3):271-274, 1994.
- Yang, T. C. and Bogart, C. W. Matched Mode Processing for Sparse Three-Dimensional Arrays. *Journal of the Acoustical Society of America*, **95**(6):3149-3166, 1994.
- Yang, T. C. and Giellis, G. R. Experimental Characterization of Elastic Waves in a Floating Ice Sheet. *Journal of the Acoustical Society of America*, **96**(5):2993-3009, 1994.
- Yang, T. C. and Yates, T. W. Scattering from an Object in a Stratified Medium. 1. Frequency Dispersion and Active Localization. *Journal of the Acoustical Society of America*, **96**(2):1003-1019, 1994.
- Yang, T. C. and Yates, T. W. Scattering from an Object in a Stratified Medium. 2. Extraction of Scattering Signature. *Journal of the Acoustical Society of America*, **96**(2):1020-1031, 1994.
- Yen, N-C. Wave-Packet Decomposition. *Journal of the Acoustical Society of America*, **95**(2):889-896, 1994.
- Yentis, D. J. and MacGillivray, H. T. Wide-Field Galaxy and Cluster Surveys Using Cosmos. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, **161**:632-634, 1994.
- Yoshikawa, S.; Williams, E. G., and Washburn, K. B. Vibration of Two Concentric Submerged Cylindrical Shells Coupled by the Entrained Fluid. *Journal of the Acoustical Society of America*, **95**(6):3273-3286, 1994.
- Young, D. K. and Kindle, J. C. Physical Processes Affecting Availability of Dissolved Silicate for Diatom Production in the Arabian Sea. *Journal of Geophysical Research-Oceans*, **99**(C11):22619-22632, 1994.
- Young, F. C.; Hubbard, R. F.; Lampe, M.; Neri, J. M.; Ottinger, P. F.; Stephanakis, S. J.; Slinker, S. P.; Hinshelwood, D. D.; Rose, D. V.; Olson, C. L., and Welch, D. R. Interaction of Intense MeV Light-Ion Beams with Low-Pressure Gases. *Physics of Plasmas*, **1**(5, Part 2):1700-1708, 1994.
- Young, F. C.; Welch, B. L., and Griem, H. R. Characterization of Neon Z-Pinch Plasmas for Sodium-Neon Photopumping. Dense Z-Pinches; Third International Conference, London, UK. Meeting. 1993. New York, NY: American Institute of Physics, c1994. AIP Conference Proceedings **299**: 437-446, 1994.
- Young, J. T.; Lenahan, P. M.; Saks, N. S., and Brown, G. A. Comparing the Structure and Behavior of Point Defects in Silicon Oxynitride Gate Dielectrics Formed by NH₃-Nitridation and N₂O-Growth/Nitridation. Materials Reliability in Microelectronics IV, San Francisco, CA. Meeting. 5-8 Apr, 1994. Pittsburgh, PA: Materials Research Society, c1994. Materials Research Society Symposium Proceedings, **338**: 31-36, 1994.
- Young, M. A. Massive Parallelization of Nmcs Spectral Model. *Journal of Parallel and Distributed Computing*, **21**:140-149, 1994.

- Youngdale, E. R.; Meyer, J. R.; Hoffman, C. A.; Bartoli, F. J.; Grein, C. H.; Young, P. M.; Ehrenreich, H.; Miles, R. H., and Chow, D. H. Auger Lifetime Enhancement in InAs-Ga_{1-x}In_xSb Superlattices. *Applied Physics Letters*, **64**(23):3160-3162, 1994.
- Youngdale, E. R.; Meyer, J. R.; Hoffman, C. A.; Bartoli, F. J.; Miles, R. H., and Chow, D. H. Recombination Lifetime in InAs-Ga_{1-x}In_xSb Superlattices. *Journal of Vacuum Science & Technology B*, **12**(2):1129-1132, 1994.
- Yu, H.; Kusterbeck, A. W., and Ligler, F. S. Quantitative-Analysis Using the Flow Immunosensor. *Abstracts of Papers of the American Chemical Society*, **207**:57-BTEC, 1994.
- Yu, H. Y. and Sanday, S. C. Dislocations and Disclinations in Transversely Isotropic Elastic Solids. *Philosophical Magazine A-Physics of Condensed Matter Structure Defects and Mechanical Properties*, **70**(5):725-738, 1994.
- Yu, H. Y.; Sanday, S. C., and Chang, C. I. Elastic Inclusions and Inhomogeneities in Transversely Isotropic Solids. *Proceedings of the Royal Society of London Series A-Mathematical Physical and Engineering Sciences*, **444**(1920):239-252, 1994.
- Yu, W. Y.; Lee, S. T.; Petrou, A.; Warnock, J.; Twardowski, A.; Chernyu, K.; Chen, F. R.; Hua, C. R., and Jonker, B. T. Optical Study of Strained ZnSe/GaAs and ZnMnSe/GaAs Epilayers. *Journal of Applied Physics*, **75**:2936-2940, 1994.
- Yurek, A. M.; Danver, B. A.; Tveten, A. B., and Dandridge, A. Fiber Optic Gradient Hydrophones. 10th Optical Fibre Sensors Conference, Glasgow, Scotland. Meeting 11-13 Oct, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2360**: 364-367, 1994.
- Zabetakis, P. M.; Cotell, C. M.; Chrisey, D. B., and Auyeung, R. C. Y. Pulsed-Laser Deposition of Thin-Film Hydroxyapatite - Applications for Flexible Catheters. *ASAIO J*, **40**:896-, 1994.
- Zacharias, N.; DeVegt, C.; Winter, L., and Weneit, W. Some Results of CCD-Camera Based Astrometric Plate Measurements. Dordrecht [The Netherlands]; Boston, MA: Kluwer Academic, c1994. IAU Symposium Series, 285-, 1994.
- Zaleski, A.; Sinha, S. P.; Joannou, D. E.; Campisi, G. J., and Jenkins, W. C. Common Origin of Hot Carrier Charging of Gate and Buried Oxide in SOI (SIMOX) MOSFET's. IEEE International SOI Conference. Piscataway, NJ: The Institute of Electrical and Electronics Engineers, c1991-. 125-126, 1994.
- Zhou, H.; Feldman, M., and Bass, R. Subnanometer Alignment System for X-Ray-Lithography. *Journal of Vacuum Science & Technology B*, **12**(6):3261-3264, 1994.
- Zingarelli, R. A. Simulation of Broadband Propagation and Scattering in a Waveguide. Automatic Object Recognition IV, Orlando, FL. Meeting. 6-7 Apr, 1994. Bellingham, WA: SPIE--the International Society for Optical Engineering, c1994. Proceedings of the SPIE--the International Society for Optical Engineering, **2234**: 217-223, 1994.
- Zvanut, M. E.; Benefield, C., and Hughes, H. L. Effect of Supplemental O-Implantation on the Radiation-Induced Hole Traps in SIMOX Buried Oxides. *IEEE Transactions on Nuclear Science*, **41**(6):2284-2290, 1994.

Zvanut, M. E.; Carlos, W. E.; Freitas, J. A.; Jamison, K. D., and Hellmer, R. P. Identification of Phosphorus in Diamond Thin Films Using Electron Paramagnetic-Resonance Spectroscopy. *Applied Physics Letters*, **65**(18):2287-2289, 1994.

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(16)

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