

AD-A203 366

Bibliography of Soviet Laser Developments

September - October 1987



Defense Intelligence Agency

DTIC
ELECTE
NOV 28 1988
S H D

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

DST-27002-005-88
October 1988

88 11 28 187

BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

No. 91

SEPTEMBER - OCTOBER 1987

Date of Report

August 29, 1988

Vice Director for Foreign Intelligence
Defense Intelligence Agency

This document was prepared for the Defense Intelligence Agency under an intragovernment agreement. It is intended to facilitate access of government researchers to Soviet laser literature.

Comments should be addressed to the Defense Intelligence Agency, Directorate for Scientific and Technical Intelligence, ATTN: DT-5A

Approved for public release; distribution unlimited

11-11-88

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DST-2700Z-005-88	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS, No. 91 SEPTEMBER - OCTOBER 1987		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s)		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Defense Intelligence Agency Directorate for Scientific and Technical Intelligence		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE August 29, 1988
		13. NUMBER OF PAGES 119
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. Distribution Statement (of the abstract entered in Block 20, if different from report)		
18. Supplementary Notes		
19. KEY WORDS Solid State Lasers, Liquid Lasers, Gas Lasers, Chemical Lasers, Laser Components, Nonlinear Optics, Spectroscopy of Laser Materials, Ultrashort Pulse Generation, Laser Crystal Growing, Free Electron Lasers, Laser Theory, Laser Biological Effects, Laser Communications, Laser Beam Propagation, Adaptive Optics, Laser Computer Technology, Holography, Laser Chemical Effects, Laser Parameters, Laser Measurement Applications, Laser-Excited Optical Effects, Laser Spectroscopy, Laser Beam-Target Interaction, Laser Plasma		
20. ABSTRACT This is the Soviet Laser Bibliography for September-October 1987, and is No. 91 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; crystal growing; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications systems; beam propagation; adaptive optics; computer technology; holography; laser- induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.		

INTRODUCTION

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is September-October 1987, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Soviet Reference Journals (journals of abstracts) are also included. Laser items from the popular or semipopular press are generally omitted. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library.

Since our computer is not now able to print between lines, superscripts and subscripts are indicated by (sup) and (sub).

We are producing the entire bibliography on computer. To make our bibliography compatible with other data bases, for source abbreviations, we use the letter codens generally used in our own government rather than transliterations of abbreviations used in the Soviet Union. Likewise, we use letter codens to designate affiliations. The authors' affiliations are indicated in parentheses after the authors' names in the text. Empty parentheses indicate that the affiliation was not given. A source abbreviations list, authors' affiliations list, and author index are included in the back of the bibliography.



Session For	
S GRA&I	☒
C TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

SOVIET LASER BIBLIOGRAPHY, SEPTEMBER - OCTOBER 1987

TABLE OF CONTENTS

I. BASIC RESEARCH

A. Solid State Lasers

1. Crystal

a. Miscellaneous	1
b. Ruby	2
c. LiF	2

2. Rare Earth

a. Miscellaneous	2
b. Nd ³⁺	2
c. Er ³⁺	---
d. Ho ³⁺	---
e. Tm ³⁺	---

3. Semiconductor

a. Theory	3
b. Miscellaneous Homojunction	3
c. Miscellaneous Heterojunction	4
d. GaAs	---
e. CdS	4
f. ZnSe	---
g. Pb(1-x)Sn(x)Te	---
h. InGaAsP	4

4. Glass	
a. Miscellaneous	5
b. Nd	---
c. Er	---
B. Liquid Lasers	
1. Organic Dyes	
a. Miscellaneous	5
b. Rhodamine	6
c. Polymethine	---
d. Coumarin	---
e. Phthalimide	---
f. Cyanine	---
g. Xanthene	---
h. POPOP	---
2. Inorganic Liquids	---
C. Gas Lasers	
1. Theory	6
2. Simple Mixtures	
a. Miscellaneous	---
b. He-Ne	7
c. He-Xe	---
d. He-Kr	---
e. Ar-Xe	8

3.	Molecular Beam and Ion	
a.	Miscellaneous	---
b.	Carbon Dioxide	8
c.	Carbon Monoxide	9
d.	Noble Gas	10
e.	Nitrogen	---
f.	Iodine	---
g.	Hydrogen	---
h.	Ammonia	---
i.	Carbon Tetrafluoride	---
j.	Nitrous Oxide	10
k.	Water Vapor.....	---
l.	Heavy-Water Vapor	---
m.	Submillimeter	10
n.	Metal Vapor	11
o.	Gasdynamic	11
4.	Excimer	11
5.	Dye Vapor	---
D.	Chemical Lasers	
1.	Miscellaneous	12
2.	Fluorine + Hydrogen (Deuterium)	---
3.	Photodissociation	12
4.	Transfer	---
5.	Oxygen + Iodine	12
6.	Carbon Disulfide + Oxygen	---
7.	Sulfur Hexafluoride + Hydrogen	---

E. Components

1. Miscellaneous	---
2. Resonators	
a. Design and Performance	13
b. Mode Kinetics	13
3. Pump Sources	14
4. Cooling Systems	---
5. Deflectors	---
6. Attenuators	---
7. Collimators	---
8. Diffraction Gratings	15
9. Focusers	---
10. Windows	---
11. Polarizers	---
12. Beam Shapers	16
13. Lenses	16
14. Filters	17
15. Beam Splitters	---
16. Mirrors	17
17. Detectors	17
18. Modulators	17

F.	Nonlinear Optics	
1.	General Theory	19
2.	Frequency Conversion	22
3.	Parametric Processes	23
4.	Stimulated Scattering	
a.	Miscellaneous Scattering	24
b.	Raman	24
c.	Brillouin	25
d.	Rayleigh	---
5.	Self-focusing	26
6.	Acoustic Interaction	26
G.	Spectroscopy of Laser Materials	28
H.	Ultrashort Pulse Generation	29
J.	Crystal Growing	30
K.	Theoretical Aspects of Advanced Lasers ..	30
L.	General Laser Theory	31

II.	LASER APPLICATIONS	
A.	Biological Effects	33
B.	Communications Systems	34
C.	Beam Propagation	
1.	Theory	39
2.	Propagation in the Atmosphere	40
3.	Propagation in Liquids	43
4.	Adaptive Optics	43
D.	Computer Technology	46
E.	Holography	48
F.	Laser-Induced Chemical Reactions	52
G.	Measurement of Laser Parameters	54
H.	Laser Measurement Applications	
1.	Direct Measurement by Laser	55
2.	Laser-Excited Optical Effects	62
3.	Laser Spectroscopy	66
J.	Beam-Target Interaction	
1.	Miscellaneous Targets	76
2.	Metal Targets	78
3.	Dielectric Targets	---
4.	Semiconductor Targets	81
K.	Plasma Generation and Diagnostics	83
III.	MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS ..	88
IV.	SOURCE ABBREVIATIONS	92
V.	AUTHOR AFFILIATIONS	98
VI.	AUTHOR INDEX	109

I. BASIC RESEARCH

A. SOLID STATE LASERS

1. CRYSTAL

a. Miscellaneous

1. Avanesov, A.G.; Danilov, A.A.; Denisov, A.L.; Zharikov, Ye.V.; Zagumenny, A.I.; Kuz'min, O.V.; Nikol'skiy, M.Yu.; Ostroumov, V.G.; Pisarenko, V.F.; Prokhorov, A.M.; Smirnov, V.A.; Sorokina, I.T.; Tumayev, Ye.V.; Shcherbakov, I.A. (IOF). Yttrium-scandium-aluminum garnet crystals with chromium and neodymium as a material for active media of solid-state lasers. IOF. Preprint, no. 130, 1987, 1-13. (RZFZA, 87/9L1058).
2. Danilov, A.A.; Zharikov, Yu.D.; Zavartsev, Yu.D.; Nikol'skiy, M.Yu.; Studenikin, P.A.; Shcherbakov, M.A. (IOF). Solid state laser of high average power using a cylindrical active element of chromium- and neodymium-activated yttrium-scandium-gallium garnet. IOF. Preprint, no. 160, 1987, 1-14. (RZFZA, 87/10L818).
3. Gulev, V.S.; Yeliseyev, A.P.; Solntsev, V.P.; Khramenko, G.G.; Yurkin, A.M. (IAESOAN). Flashlamp pumped tunable laser using an emerald grown by the flux method. KVEKA, no. 10, 1987, 1990-1992.
4. Tokarev, A.G.; Martynovich, Ye.F.; Zilov, S.A. (IGU). Tunable laser radiation, nonlinear absorption, and "anti-Stokes" color center luminescence in $\alpha\text{-Al}(\text{sub}2)\text{O}(\text{sub}3)$. IVUFA, no. 10, 1987, 41-46.
5. Voron'ko, Yu.K.; Gessen, S.B.; Ivanov, M.A.; Osiko, V.V.; Panin, Yu.M.; Sashin, Yu.N.; Sobol', A.A.; Sorokin, Ye.V.; Timoshechkin, M.I.; Ushakov, S.N.; Tsymbal, L.I. (IOF). Spectroscopic and lasing properties of Ca-, Mg-, and Zr-substituted gadolinium-gallium garnet crystals activated by chromium and neodymium. IOF. Preprint, no. 149, 1987, 2-13. (RZFZA, 87/10L819).
6. Voron'ko, Yu.K.; Gessen, S.B.; Yes'kov, N.A.; Osiko, V.V.; Sobol', A.A.; Timoshechkin, M.I.; Ushakov, S.N.; Tsymbal, L.I. (IOF). Spectroscopic and lasing properties of calcium-niobium-gallium garnet with Cr^{3+} and Nd^{3+} . IOF. Preprint, no. 148, 1987, 1-17. (RZFZA, 87/9L1062).

7. Zharikov, Ye.V.; Koptev, V.G.; Mironenko, S.I.; Umyskov, A.F.; Shkadarevich, A.P.; Shcherbakov, I.A. (IOF). Tunable gadolinium-scandium-gallium-garnet:Cr³⁺ laser with flashlamp pumping. IOF. Preprint, no. 165, 1987, 1-8. (RZRAB, 87/10Yel20).
- b. Ruby
8. Khabibullayev, P.K.; Bedilov, M.R.; Beysembayeva, Kh.B.; Saidov, R.P. (IYaFANUZ). radiation spectrum of a ruby laser in an electron beam field. DANKA, vol. 296, no. 3, 1987, 595-598.
9. Komarov, K.P.; Kuch'yanov, A.S.; Ugozhayev, V.D. (). Transition process in a solid-state laser with active feedback under passive mode locking. VINITI. Deposit, no. 4344-V87. (ZPSBA, vol. 47, no. 3, 1987, 518).
- c. LiF
10. Basiyev, T.T.; Karpushko, F.V.; Kulashchik, S.M.; Mirov, S.B.; Morozov, V.P.; Motkin, V.S.; Saskevich, N.A.; Sinitsyn, G.V. (IFANB, IOF). The MALSAN-201 automatic tunable single-pulse radiationally colored LiF crystal laser. ZPSBA, vol. 47, no. 4, 1987, 682-685.

2. Rare Earth

- a. Miscellaneous
11. Kaminskiy, A.A.; Kurbanov, K.; Uvarova, T.V. (IKAN). Stimulated emission from BaYb(sub2)F(sub8):Pr³⁺. IVNMA, no. 6, 1987, 1049-1052.
- b. Nd³⁺
12. Dubinskiy, M.A.; Kazakov, B.N.; Yagudin, Sh.I. (). Spectroscopy and stimulated emission of Nd³⁺ ions in yttrium-trifluoride crystals. OPSPA, vol. 63, no. 3, 1987, 698-700.
13. Ivanov, V.V.; Senatskiy, Yu.V.; Sklizkov, G.V. (FIAN). Effect of nonradiative transitions in the active medium, on the lasing and amplification kinetics in a neodymium laser. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 130-155.
14. Lazarev, V.V.; Kandaurov, A.S. (). Lasing properties of La(sub2)Be(sub2)O(sub5)-Nd(sup3+) at the 1.35 μ m wavelength. OPSPA, vol. 63, no. 4, 1987, 876-878.

- c. Er³⁺
- d. Ho³⁺
- e. Tm³⁺

3. Semiconductor

a. Theory

- 15. Ivanov, Yu.L.; Vasil'yev, Yu.B.; Reyngol'd, V.A. (FTI). Inversion of the distribution of light holes of germanium according to Landau levels. PZTFD, no. 20, 1987, 1239-1242.
- 16. Mel'nik, P.G. (IKI). Phased-array semiconductor laser radiators. IKI. Preprint, no. 1236, 1987, 3-39. (RZFZA, 87/10L826).
- 17. Mityagin, Yu.A.; Murav'yev, A.V.; Murzin, V.N.; Nozdrin, Yu.N.; Pavlov, S.A.; Stoklitskiy, S.A.; Trofimov, I.Ye.; Chebotarev, A.P.; Shastin, V.N. (FIAN). Fine structure of the spectrum of stimulated long-wave infrared p-Ge radiation in strong E and H fields. ZTEFA, no. 9, 1987, 1847-1850.
- 18. Stahl, A.; Frank, D. (). Dynamics of phonon-assisted optical interband processes in semiconductors (in English). PSSBB, v. B140, no. 1, 1987, 301-310. (RZFZA, 87/10N534).

b. Miscellaneous Homojunction

- 19. Aleksandrov, O.V.; Zaytsev, V.V.; Kalyuzhnaya, G.A.; Kiseleva, K.V. (FIAN). Effect of electromagnetic radiation on the region of homogeneity in lead telluride. KRSFA, no. 9, 1987, 12-15.
- 20. Gladyschuk, A.A.; Gurskiy, A.L.; Nikitenko, V.A.; Parashchuk, V.V.; Yablonskiy, G.P. (IFANB). Stimulated emission of streamer discharges in ZnO single crystals at 300 K. KVEKA, no. 10, 1987, 1983-1985.
- 21. Zelikman, I.N.; Kiseleva, K.V.; Revokatova, I.P. (FIAN). Nature of luminescence quenching centers in lead telluride. KRSFA, no. 9, 1987, 3-5.

c. Miscellaneous Heterojunction

22. Bogdankevich, O.V.; Borisov, N.A.; Vlasenko, N.V.; Lozovskiy, V.N.; Popov, V.P.; Usvyat, I.I. (VNITsISPIV). Variband $\text{Al}(x)\text{Ga}(1-x)\text{As}$ heterostructure for an electron-beam-pumped laser. KVEKA, no. 9, 1987, 1809-1811.
23. Goldobin, I.S.; Pak, G.T.; Petrakova, T.V.; Pushkina, T.N.; Semenov, A.T.; Filimonov, S.I.; Yakubovich, S.D. (VNIIOFI). Phased generation of radiation of a regular grating in active symmetrical mesa-stripe AlGaAs/GaAs double heterostructure couplers. KVEKA, no. 9, 1987, 1737-1738.
24. Katsap, V.N.; Kozlovskiy, V.I.; Kruchnov, V.Yu.; Namm, A.V.; Nasibov, A.S.; Novikov, V.B.; Reznikov, P.V.; Ulasyuk, V.N. (FIAN). $\text{CdS}(x)\text{Se}(1-x)/\text{CdS}$ heterostructures in lasers with e-beam longitudinal pumping. KVEKA, no. 10, 1987, 1994-1997.
25. Gonzalez, K. (Gonsales, K.); Diaz, P. (Dias, P.); Mishurnyy, V.A.; Portnoy, Ye.L.; Smirnitskiy, V.B. (). Heteroepitaxial $\text{Al}(x)\text{Ga}(1-x)\text{P}$ waveguides with a parabolic profile of the refractive index for hybrid integrated-optic systems. PZTFD, no. 18, 1987, 1098-1103.

d. GaAs

e. CdS

26. Bogdankevich, O.V.; Kostin, N.N.; Krasavina, Ye.M.; Kryukova, I.V.; Markov, Ye.V.; Matveyenko, Ye.V.; Teplitskiy, V.A. (VNITsISPIV). Effect of intrinsic defects in the structure of cadmium sulfide on the efficiency and optical radiation resistance of uncooled lasers. IVNMA, no. 10, 1987, 1618-1622.

f. ZnSe

g. $\text{Pb}(1-x)\text{Sn}(x)\text{Te}$

h. InGaAsP

27. Akhmedov, D.; Shokhudzhayev, N. (). Effect of heat treatment at conventional phosphorus vapor pressure, on the radiative characteristics of InGaAsP/InP heterostructures. DANTA, no. 12, 1986, 734-736. (RZFZA, 87/10N670).

28. Garbuzov, D.Z.; Zaytsev, S.V.; Il'inskaya, N.D.; Kolyshkin, V.I.; Ovchinnikov, A.V.; Tarasov, I.S.; Trukan, M.K. (FTI). Investigation of the service life of cw mesoband separately limited InGaAsP/InP lasers at 1.3 μ m. ZTEFA, no. 9, 1987, 1822-1824.

4. Glass

a. Miscellaneous

29. Malashkevich, G.Ye.; Yermolenko, N.N.; Aleksandrov, V.I.; Borik, M.A.; Volokhov, G.M.; Gigevich, A.S.; Denisenko, G.A.; Mazovko, A.V.; Tadeush, V.N. (IFANB). Spectral-luminescence and thermomechanical characteristics of silicate-borate glasses activated by Yb³⁺ and Er³⁺ ions. IVNMA, no. 6, 1987, 1053-1054.

b. Nd

c. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

30. Bermas, T.B.; Zaytsev, Yu.S.; Kostenich, Yu.V.; Pakter, M.K.; Paramonov, Yu.M.; Rubinov, A.N.; Smirnov, A.Yu.; Efendiyev, T.Sh. (). Lasers based on dye-doped epoxypolymers. ZPSBA, vol. 47, no. 4, 1987, 569-573.
31. Bryukhanov, V.V.; Ketsle, G.A.; Levshin, L.V.; Sokolova, L.K. (MGU). Mixed triplet-triplet annihilation of fluoresceine dyes and of anthracene in water-alcohol solutions. VMUFA, no. 5, 1987, 44-49.
32. Druzhinin, S.I.; Krashakov, S.A.; Tur, I.N.; Afanasiadi, L.Sh.; Troyanovskiy, I.V.; Uzhinov, B.M. (MGU). Mechanisms of laser radiation from 2-hetaryloxazoles and their cations. KVEKA, no. 10, 1987, 2024-2027.
33. Kasha, M. (). Proton-transfer spectroscopy and proton-transfer lasers (in English). ATPLB, v. A71, no. 5, 1987, 717-729. (RZRAB, 87/10Yel02).
34. Plakhotnik, T.V.; Pyndyk, A.M. (ISAN). Pulsed tunable dye laser with a low level of broadband background. KVEKA, no. 10, 1987, 1987-1989.

b. Rhodamine

35. Asimov, M.M.; Varpakhovich, A.G.; Rubinov, A.N. (). Spectral narrowing of the lasing of a flash-lamp pumped dye laser by injection of an external narrow-band signal. ZPSBA, vol. 47, no. 3, 1987, 389-393.
36. Giruts, Ye.L.; Ivanenko, O.I.; Kopylov, S.M.; Cherednichenko, O.B. (). Maximum gain factor in dye lasers with coherent pulse pumping. ZPSBA, vol. 47, no. 4, 1987, 573-578.
37. Malyshev, S.L.; Stasel'ko, D.I.; Strigun, V.L. (). Optical distortions of an active medium and spatial coherence of the radiation of a dye laser with coaxial flash lamp pumping. OPSPA, vol. 63, no. 3, 1987, 600-605.

c. Polymethine

d. Coumarin

e. Phthalimide

f. Cyanine

g. Xanthene

h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

38. Atezhev, V.V.; Bukreyev, V.S.; Vartapetov, S.K.; Zhukov, A.N.; Konov, V.I.; Prokhorov, A.M.; Savel'yev, A.D. (IOF). Multiwave periodic pulsed electric-discharge lasers. KRSFA, no. 9, 1987, 19-21.
39. Bakumenko, V.M.; Chebotarev, V.I.; Fesenko, L.D. (). Effect of vibrational-to-vibrational processes on the threshold condition and saturation of optically pumped lasers. RTKHA, no. 81, 1987, 108-111. (RZRAB, 87/10Ye15).
40. Bakumenko, V.M.; Fesenko, L.D.; Shevyrev, A.S. (UZPI; KhGU). Study on the relaxation characteristics of optically-pumped $\text{CH}(\text{sub}3)\text{Br}$ lasers. IVYRA, no. 8, 1987, 973-979.

41. Baranov, G.A.; Butayev, Yu.B.; Grad, V.I.; Zinchenko, A.K. (NII EA). Investigation of gain in a self-sustained discharge with a transverse gas flow. KVEKA, no. 10, 1987, 1963-1973.
42. Bieniek, S.; Bobrowski, A.; Cholewinski, J.; Pankowski, J.; Pokora, L.; Nawrot, W. (). Ultraviolet laser. Patent Poland, no. 135867, 25 Nov 1986. (RZRAB, 87/10Yel4).
43. Ivanov, V.A. (). Spectroscopic study on the dissociative recombination of $Xe^{sup+}(sub2)$ molecular ions. Formation of $Xe6p$ atoms. OPSPA, vol. 63, no. 3, 1987, 490-493.
44. Klinkov, V.K.; Nazarkin, A.V.; Norinskiy, L.V.; Rogov, V.S. (IOF). Quantum nature of the lowering of the threshold of breakdown in gases by UV laser radiation. PZTFD, no. 19, 1987, 1186-1190.
45. Kudryavtsev, A.A.; Mishakov, V.G.; Tkachenko, T.L. (). Kinetics of the populations of the states of atomic sodium in a gas-discharge plasma in a Na-Ne-H(sub2) mixture. OPSPA, vol. 63, no. 3, 1987, 480-484.

2. Simple Mixtures

a. Miscellaneous

b. He-Ne

46. Basov, N.G.; Gubin, M.A.; Nikitin, V.V.; Protsenko, Ye.D. (). Two-mode gas lasers: application in spectroscopy and optical frequency standards. Issledovaniye kvantovykh sredstv izmereniya vremeni i chastoty. VNIFTRI. Moskva, 1987, 3-20. (RZFZA, 87/9L1119).
47. Dubovets, V.G.; Kutsak, A.A.; Yalinich, V.P. (). Effect of external polarized radiation on the energy and frequency characteristics of a gas laser in the case of two common levels of lasing and bias lighting. ZPSBA, vol. 47, no. 3, 1987, 397-404.
48. Dubovets, V.G.; Yalinich, V.P. (). Effect of external polarized radiation on the energy and frequency characteristics of a gas laser in the case of one general level of lasing and bias lighting. VINITI. Deposit, no. 4901-V87. (ZPSBA, vol. 47, no. 3, 1987, 519).

49. Gaysin, R.M.; Karasev, V.A. (). Effect of instabilities in the pumping source on He-Ne laser radiation. IATOA, no. 3, 1986, 109-112. (RZFZA, 87/10L879).
50. Gusak, P.M.; Mikhaylovskiy, S.S. (OGU). The LG-126 frequency tunable laser He-Ne laser. PRTEA, no. 5, 1987, 162-164.
51. Maksimov, V.N. (VNIFTRI). Power stabilization of the radiation of a He-Ne laser. PRTEA, no. 5, 1987, 215-216.
52. Voytsekhovich, V.S.; Grinenko, V.M.; Danileyko, M.V.; Fal', A.M.; Yatsenko, L.P. (). Effect of an axial magnetic field on the characteristics of competitive resonances in ring He-Ne/CH(sub4) lasers. UFIZA, no. 4, 1987, 515-519. (RZFZA, 87/9L1006).
53. Zaytsev, V.P.; Zimokosov, G.A.; Machekhin, Yu.P.; Nikolayev, A.V. (). Method for the calculation of the shape of the contour of amplification for He-Ne lasers stabilized using the Lamb dip. OPSPA, vol. 63, no. 3, 1987, 652-654.
- c. He-Xe
- d. He-Kr
- e. Ar-Xe
54. Basov, N.G.; Baranov, V.V.; Danilychev, V.A.; Dudin, A.Yu.; Zayarniy, D.A.; Merkulov, D.G.; Romanov, A.V.; Semenova, L.V.; Ustinovskiy, N.N.; Kholin, I.V.; Chugunov, A.Yu. (FIAN). High-power electroionization Ar-Xe laser with beam divergence of 25-50 microrads. KVEKA, no. 9, 1987, 1739-1747.

3. Molecular Beam and Ion

- a. Miscellaneous
- b. Carbon Dioxide
55. Berdyshev, A.V.; Napartovich, A.P. (IAE). Effect of self-action on the axial brightness of pulsed CO₂ laser radiation. KVEKA, no. 10, 1987, 1958-1962.
56. Bobrovskiy, A.N.; Branitskiy, A.V.; Zurin, M.V.; Kozhevnikov, A.V.; Mishchenko, V.A.; Myl'nikov, G.D. (IAE). Continuously tunable CO₂ laser. KVEKA, no. 9, 1987, 1811-1814.

57. Gamazeyshchikov, A.M.; Kamardin, I.L.; Kuchinskiy, A.A.; Rodichkin, V.A.; Sheverev, V.A. (). Performance of an ILGN-705 laser in a periodic pulsed regime. PRTEA, no. 5, 1987, 164-167.
58. Lipatov, N.I.; Pashinin, P.P.; Petrov, A.N.; Prokhorov, A.M.; Yurov, V.Yu. (IOF). La(0.7)Sr(0.3)CoO(3-delta) ceramic catalyst for waveguide CO₂ lasers. PZTFD, no. 19, 1987, 1209-1213.
59. Petukhov, V.O.; Tochitskiy, S.Ya.; Churakov, V.V. (). Effective lasing using 02(sup0)1[10(sup0)1]-01(sup1)1 transitions of a CO₂ molecule. ZPSBA, vol. 47, no. 3, 1987, 404-409.

c. Carbon Monoxide

60. Anan'yev, V.Yu.; Danilychev, V.A.; Ionin, A.A.; Kotkov, A.A.; Semenov, S.A.; Sinitsyn, D.V. (FIAN). Nonlinear absorption and spectral conversion of laser radiation by carbon monoxide molecules excited in an electroionization discharge. KVEKA, no. 10, 1987, 2018-2020.
61. Anan'yev, V.Yu.; Danilychev, V.A.; Ionin, A.A.; Lytkin, A.P. (FIAN). Formation of the vibrational-rotational spectra of lasing in an electroionization CO laser. KVEKA, no. 10, 1987, 1974-1980.
62. Gutin, M.A.; Kol'chenko, A.P.; Troitskiy, Yu.V. (IAESOAN). Broadening of the spectrum of a continuous wave electric-discharge CO laser by a spectrally inhomogeneous output mirror. KVEKA, no. 9, 1987, 1857-1862.
63. Lotkova, E.N.; Ponomarev, D.I.; Sobolev, N.N. (FIAN). Like conversions in an electric-discharge CO laser. FIAN. Preprint, no. 97, 1987, 3-21. (RZFZA, 87/9L1022).
64. Shmelev, V.M.; Margolin, A.D. (IKhF). Resonant optical pumping of CO by electroionization CO laser radiation. KVEKA, no. 9, 1987, 1857-1862.
65. Volchkova, G.N.; Lavrov, A.V. (GIPKh). Effect of the temperature of the active medium on the efficiency of a subsonic industrial electric-discharge CO laser. TVYTA, no. 5, 1987, 992-997.

- d. Noble Gas
- 66. Babin, S.A.; Donin, V.I.; Rodishevskiy, A.V.; Shapiro, D.A. (IAESOAN). Coulomb broadening of the Lamb dip in Ar⁺⁺ lasers. IAESOAN. Preprint, no. 347, 3-21. (RZFZA, 87/9L1012).
- 67. Kiryunikov, K.V.; Yurshin, B.Ya. (SNIIM). Bandpass regulator of the current of an Ar⁺ laser. PRTEA, no. 5, 1987, 167-170.
- e. Nitrogen
- f. Iodine
- g. Hydrogen
- h. Ammonia
- i. Carbon Tetrafluoride
- j. Nitrous Oxide
- 68. Grin', Yu.I.; Konev, Yu.B.; Kryuchkov, S.I.; Kudryavtsev, N.N.; Orayevskiy, I.N.; Testov, V.G.; Khmelevskiy, A.N. (). Effect of ignition processes on amplification in inverse N₂O flows. FGVZA, no. 3, 1987, 16-21.
- k. Water Vapor
- l. Heavy-Water Vapor
- m. Submillimeter
- 69. Palkin, A.M.; Sozinov, V.N. (IFPSOAN). Photomagnetic effect under spin resonance conditions. ZFPRA, vol. 46, no. 6, 1987, 231-233.
- 70. Svich, V.A.; Pokormyakho, N.G.; Dryga, O.V. (KhGU). Experimental studies on the temperature conditions of submillimeter lasers with optical pumping by TEA CO₂ laser radiation. KhGU. Vestnik, no. 307, 1987, 7-9. (RZRAB, 87/10Ye67).
- 71. Yefremov, V.A.; Yefimenko, M.N.; Dyubko, S.F. (). Radiation spectrum of molecular lasers with optical pumping by a multimode source. OPSPA, v. 63, no. 3, 1987, 674-677.

n. Metal Vapor

72. Borisov, Ye.N.; Penkin, N.P.; Red'ko, T.P. (). Excitation transfer between singlet and triplet states of strontium colliding with argon atoms. OPSPA, vol. 63, no. 3, 1987, 475-479.
73. Borisov, Ye.N.; Penkin, N.P.; Red'ko, T.P. (). Radiation constants of the P and D lower levels of atomic strontium. OPSPA, vol. 63, no. 3, 1987, 673-674.
74. Klimovskiy, I.I.; Selezneva, L.A. (IVTAN). Relaxation of metastable atoms to the inter-pulse period in periodic-pulsed self-limited transition lasers. TVYTA, no. 4, 1987, 773-777.
75. Mis'kevich, A.I. (MIFI). Collisional clearing of levels in a laser with nuclear pumping using cadmium vapors. PZTFD, no. 18, 1987, 1139-1143.
76. Mis'kevich, A.I. (MIFI). Kinetic model of a laser with nuclear pumping using cadmium vapors. ZTEFA, no. 9, 1987, 1767-1775.

o. Gasdynamic

77. Cherkasov, Ye.M.; Chesnokov, V.I. (IOF). Theoretical study on the parameters of CO gasdynamic lasers. Mathematical model and numerical calculations. IOF. Preprint, no. 107, 1987, 1-64. (RZFZA, 87/10L803).
78. Kamardin, I.L.; Kuchinskiy, A.A.; Pavlov, V.N.; Rodichkin, V.A. (NIIEA). Numerical study on the development of gasdynamic perturbations in a pulsed self-sustaining discharge medium with ultraviolet pre-ionization. TVYTA, no. 5, 1987, 865-872.
79. Zhinzhikov, G.M.; Kislov, V.I.; Luk'yanov, G.A.; Pavlova, N.O. (). Efficiency of plasmadynamic lasers. ZPMFA, no. 3, 1987, 4-9.

4. Excimer

80. Apanasevich, P.A.; Bokhonov, A.F.; Burakov, V.S.; Kot, G.G.; Orlovich, V.A.; Titarchuk, V.A. (IFANB). Controlling the lasing characteristics of electric-discharge XeCl lasers with an unstable resonator. IFANB. Preprint, no. 470, 1987, 3-35. (RZRAB, 87/10Ye64).

81. Rudoy, I.G.; Soroka, A.M. (). Limiting characteristics of a laser based on molecular xenon. ZTEFA, no. 9, 1987, 1881-1883.
82. Vvedenskiy, V.D.; Mikheyev, L.D.; Sagitov, S.I.; Sukhoverkhov, V.F.; Stavrovskiy, D.B. (IONKh). Study on the interaction of optical materials and coatings with gaseous F(sub2) [in excimer lasers]. IVNMA, no. 10, 1987, 1704-1709.

5. Dye Vapor

D. CHEMICAL LASERS

1. Miscellaneous

83. Basov, N.G.; Gavrikov, V.F.; Pozdneyev, S.A.; Shcheglov, V.A. (FIAN). New type of electron-transition chemical lasers with a chain mechanism of excitation. KVEKA, no. 9, 1987, 1772-1786.
84. Basov, N.G.; Gavrikov, V.F.; Pozdneyev, S.A.; Shcheglov, V.A. (FIAN). Expansion of the spectral bandwidth of radiation from electron-transition chemical lasers. KVEKA, no. 9, 1987, 1787-1806.
85. Basov, N.G.; Gavrikov, V.F.; Shcheglov, V.A. (FIAN). Visible and near-infrared chemical exchange lasers using electron transitions in halogens and interhalogens. KVEKA, no. 9, 1987, 1754-1771.

2. Fluorine + Hydrogen (Deuterium)

3. Photodissociation

86. Laska, L.; Masek, K.; Krasa, J. (). Free running mode of operation of the high-power amplifier of the PERUN iodine laser (in English). CZYPA, v. B37, no. 5, 1987, 601-606. (RZFZA, 87/10L791).

4. Transfer

5. Oxygen + Iodine

87. Gizatullin, R.M.; Katulin, V.A.; Kuznetsov, S.G.; Kurov, A.Yu.; Muhkin, V.V.; Nikolayev, V.D.; Petrov, A.L.; Pichkasov, V.M.; Svistun, M.I. (FIANKuy). Optimization of energy characteristics of an oxygen-iodine laser. KVEKA, no. 9, 1987, 1807-1809.

88. Zagidullin, M.V.; Zaikin, A.P.; Igoshin, V.N. (FIAN). Pulse duration in free lasing $O^*(sub2)$ -I lasers. KRSFA, no. 10, 1987, 3-5.

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Hydrogen

E. COMPONENTS

1. Miscellaneous

2. Resonators

a. Design and Performance

89. Anders, K.; Steffen, U.; Kupke, W.; Schaefer, F. (). Method and device to adjust optical resonators. Patent GDR, no. 244239, 25 Mar 1987. (RZRAB, 87/10Yel98).
90. Bol'shukhin, O.G.; Orlova, I.B. (). Coherence of a field of radiation using the output of an unstable resonator filled with a weakly scattering medium. KVEKA, no. 10, 1987, 2006-2017.
91. Braginskiy, V.B.; Il'chenko, V.S. (MGU). Properties of optical dielectric microresonators. DANKA, v. 293, no. 6, 1987, 1358-1361.
92. Mikhaylov, A.Ye.; Nagibin, Yu.T.; Parfenov, V.G. (LITMO). Effect of the quantron design parameter on thermooptical distortions of the active element. IVUBA, no. 7, 1987, 92-95.
93. Vasnetsov, M.V.; Petropavlovskiy, A.I. (IFANUK). Bistability of coupled cavities. KVEKA, no. 9, 1987, 1914-1916.
94. Vladimirov, A.G.; Pelyukhova, Ye.B.; Fradkin, E.Ye. (). Origination of periodic lasing in a single-mode laser with a nonlinearly absorbing cell. OPSPA, vol. 63, no. 4, 1987, 863-869.
- b. Mode Kinetics
95. Blagodarov, S.V.; Silichev, O.O. (). Dynamics of the transverse structure of a giant pulse of laser radiation. RAELA, no. 10, 1987, 2164-2171.

96. Demchuk, M.I.; Mikhaylov, V.P.; Shkadarevich, A.P.; Manichev, I.A.; Yumashev, K.V.; Ishchenko, A.A.; Zabaznov, A.M. (). Passive mode locking in garnet lasers at a lasing wavelength of 1.3 μ m. ZPSBA, vol. 47, no. 4, 1987, 669-671.
97. Golubentsev, A.A.; Likhanskiy, V.V.; Napartovich, A.P. (). Theory of the phase locking of sets of lasers. ZETFA, vol. 93, no. 4, 1987, 1199-1209.
98. Smirnov, V.S.; Fazliyev, A.Z. (). Statistical characteristics of a ring laser with strong coupling in the presence of an external signal. OPSPA, vol. 63, no. 4, 1987, 879-884.

3. Pump Sources

99. Belous, N.A.; Vasetskiy, V.A.; Karnyushin, V.N. (). Parametric study on spark breakdown in a consecutive inclusion of discharge intervals in photopreionization circuits. INFZA, v. 52, no. 5, 1987, 812-817. (RZFZA, 87/10L802).
100. Demchuk, M.I.; Gilev, A.K.; Mikhaylov, V.P.; Dmitriyev, S.M. (NIIPFP). Increase in the stability of the predischage voltage of the power supply unit of pulsed lasers. PRTEA, no. 5, 1987, 118-120.
101. Gawlik, W.; Zachorowski, J. (). Method and device to generate discharges in pulsed gas lasers. Patent Poland, no. 135017, 31 Dec 1986. (RZRAB, 87/9Ye212).
102. Gruzinskiy, V.V.; Davydov, S.V.; Kaputerko, M.N.; Kulak, I.I. (). Cathodoluminescence pumping of complex molecules. ZPSBA, vol. 47, no. 4, 1987, 672-673.
103. Muradov, I.G. (IFI). Single phase transformerless source of the power supply of a pulsed laser. PRTEA, no. 5, 1987, 116-118.
104. Rayk, Yu.B.; Klementi, T.I.; Rodes, E.Kh.; Usay, U.Yu. (). Power supply for electric-discharge pulsed lasers. OTIZD, no. 46, 1986, 1277358. (RZRAB, 87/9Ye213).
105. Volov, V.T.; Lamazhapov, Kh.D.; Margolin, A.D.; Mishchenko, A.V.; Shmelev, V.M. (KuyISI). Analyzing the energy characteristics of a vortex glow discharge applicable to CO₂ lasers. VINITI. Deposit, no. 3521-V87, 19 May 1987, 16 p. (RZFZA, 87/10G465).

4. Cooling Systems

5. Deflectors

6. Attenuators

7. Collimators

8. Diffraction Gratings

106. Afanas'yeva, V.L.; Akhmetshina, T.A.; Autko, O.A.; Biryal'tseva, A.R.; Seleznev, V.A.; Tetel'man, T.V. (). Fabrication of holographic diffraction gratings using the SK-502 photosensitive composition, for the DFS-457 spectrograph. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 130-135. (RZFZA, 87/10L562).
107. Andreyev, A.V.; Tikhomirov, O.Yu.; Shayymkulov, M.O. (MGU). Superradiant radiation during Bragg diffraction under control conditions of the structure of a crystal lattice. ZTEFA, no. 9, 1987, 1782-1790.
108. Bakh, L.I.; Rassudova, G.N. (GOI). Method to determine errors in division of diffraction gratings. OPMPA, no. 4, 1987, 1-4. (RZRAB, 87/9Ye277).
109. Ignatkov, V.D.; Kamuz, A.M.; Klimova, N.V.; Oleksenko, P.F.; Oreshko, Ye.V.; Pekar', G.S.; Svechnikov, S.V. (). Fabrication and study of periodic corrugated structures on the surface of sulfide and zinc sulfoselenide. OPTED, no. 11, 1987, 32-35. (RZFZA, 87/9L649).
110. Kostyshin, M.T.; Romanenko, P.F.; Kolomiyets, T.M. (). Holographic diffraction gratings based on photosensitive semiconductor-metal systems. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 112-118. (RZRAB, 87/10Ye522).
111. Kraysler, O.D. (). Forming of relief in holographic diffraction gratings. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 123-129. (RZFZA, 87/10L561).
112. Lavrinenko, A.V.; Rubanov, A.S.; Stashkevich, I.V.; Chaley, A.V. (BGU). Effect of anisotropy on the diffraction properties of relief-grating/liquid-crystal systems. VBMFA, no. 2, 1987, 19-22. (RZFZA, 87/9L21).

113. Polyanskiy, A.A.; Kulygina, N.A.; Rakov, V.N.; Yenikeeva, R.R.; Mironova, T.A. (). Photochemical aspects in the forming of holographic diffraction gratings. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 119-122. (RZFZA, 87/10L559).
114. Shaposhnikov, S.N. (GOI). Diffraction of light by negative gratings with a dielectric coating. OPMPA, no. 5, 1987, 58-59.
115. Vertushkin, V.K.; Smotkiy, O.I.; Fabrikov, V.A. (LIIAAN). Diffraction of plane waves by perfectly conducting shallow-grooved gratings. DANKA, v. 293, no. 4, 1987, 860-863.

9. Focusers

10. Windows

11. Polarizers

12. Beam Shapers

116. Dzhamiykova, Ts.V. (LITMO). Conversion of higher order Gaussian-Hermitian beams by an arbitrary optical system. IVUBA, no. 7, 1987, 84-87.

13. Lenses

117. Meshcheryakov, N.A.; Tomilina, Ye.A. (). Modeling of light fields in the far zone by a cylindrical lens kinoform. VINITI. Deposit, no. 4787-V87, 29 Jun 1987, 7 p. (RZFZA, 87/10L533).
118. Osipov, Yu.V.; Firsova, L.S.; Osipov, V.Yu.; Shemshurenko, Ye.G. (LETI). Interferograms of optical fields of bifocal lenses with centrosymmetric propagation of conoscopic light beams. VINITI. Deposit, no. 4515-V87, 22 Jun 1987, 20 p. (RZFZA, 87/10L532).
119. Osipov, Yu.V.; Firsova, L.S.; Osipov, V.Yu.; Shemshurenko, Ye.G. (LETI). Interferograms of optical fields of bifocal lenses with off-axis propagation of conoscopic light beams. VINITI. Deposit, no. 4514-V87, 22 Jun 1987, 36 p. (RZFZA, 87/10L531).
120. Sochacki, J. (). Lenses for integrated optics. PSTFA, no. 1, 1987, 3-20. (RZFZA, 87/9L801).

14. Filters

121. Legostayev, V.N.; Ovcharov, A.T. (). Liquid cut-off filters for the UV. Svetotekhnika, no. 6, 1987, 11-12. (RZFZA, 87/9L736).

15. Beam Splitters

16. Mirrors

122. Freitag, W.; Grosmann, W.; Hagemann, E. (). Local monitoring of the coefficient of reflection of spherical concave surfaces in the UV (in German). EXPPA, no. 1, 1987, 65-69. (RZFZA, 87/9L729).
123. Gud, V.V.; Krasavtsev, V.M.; Sandakov, A.N.; Chikov, K.N. (LITMO). Measuring the coefficient of reflection of highly reflecting dielectric mirrors. IVUBA, no. 7, 1987, 65-69.
124. Troitskiy, Yu.V. (). Characteristic properties of the synthesis of the structure of dielectric mirrors taking into account absorption in layers. OPSPA, vol. 63, no. 4, 1987, 925-929.

17. Detectors

125. Ishanin, G.G.; Pol'shchikov, G.V.; Przhevskiy, S.S.; Fetisov, S.P.; Yakovlev, V.A. (LITMO; VNIIOFI). Uncooled detector based on the thermoelastic effect in quartz crystal. IVUBA, no. 9, 1987, 89-94.
126. Mazmanishvili, A.S. (). Readout statistics in photodetection of unpolarized coherent radiation in a background of unpolarized Gaussian noise. VINITI. Deposit, no. 4688-V87, 25 Jun 1987, 6 p. (RZRAB, 87/10Ye473).
127. Stepin, A.P. (). Ranking detector of coherent optical signals in thermal noise. RATEA, no. 5, 1987, 75-77. (RZRAB, 87/9Ye21).
128. Vul', A.Ya.; Gabarayev, R.S.; Petrosyan, S.G. (FTI). Photomagnetic "null" sensor based on a variband semiconductor. PZTFD, no. 10, 1987, 591-593.

18. Modulators

129. Abbas-Zade, A.A.; Zatayevich, V.I. (NPOKIANAz). Modulation of optical radiation by nematic liquid crystals. NPOKIANAz. Preprint, no. 23, 1987, 2-34. (RZFZA, 87/9L771).

130. Bagdasaryan, A.S.; Grishmanovskiy, A.N.; Yeskin, K.F.; Magdina, I.I. (). Thermo-optic devices to control optical radiation. ZRBEA, no. 4, 1987, 38-43.
131. Bagdasaryan, M.G.; Belin, A.M.; Svidzinskiy, K.K. (). Optical integral modulator at 1.3 μ m. KVEKA, no. 10, 1987, 2060-2061.
132. Belyayev, V.K.; Dubovoy, I.A.; Ludinkov, V.V.; Podvyaznikov, V.A.; Prokhorov, A.M.; Chevokin, V.K.; Shchelev, M.Ya. (IOF). Switch using GaAs(Cr) for the control of an electro-optic chamber. PRTEA, no. 5, 1987, 159-162.
133. Berdowski, J. (). Using transmission diffraction in surface acoustic waves to modulate light by video signals (in Polish). ARAKB, no. 3-4, 1985, 193-200. (RZFZA, 87/9P161).
134. Knyaz'kov, A.V.; Kuz'minov, Yu.S. (). Prospects for the development of various electro-optic modulation methods. Problemy fizicheskoy elektroniki. LPI. Leningrad, 1987, 155-174. (RZFZA, 87/9L770).
135. Krumin', A.E.; Shternberg, A.P. (LatGU). Structure and physical properties of transparent ferroelectric ceramics. IANFA, no. 10, 1987, 1753-1758.
136. Morichev, I.Ye. (GOI). Photoconductor/liquid crystal space-time light modulators: new trend in optical instrument manufacture. GOI. Trudy, no. 197, 1987, 14-17. (RZRAB, 87/10Ye466).
137. Musikhin, V.A.; Pribytkov, A.V.; Semiokhin, I.A. (MGU). Radiation synchronization circuit for three LTIPCh lasers with exterior devices. PRTEA, no. 5, 1987, 213-215.
138. Pashchenko, G.Ye. (). Phase distortions of spatial carriers in acousto-optic devices with noncollinear light beams. IVUBA, no. 6, 1987, 80-84. (RZFZA, 87/10L645).
139. Vladimirov, F.L.; Morichev, I.Ye.; Petrova, L.I.; Pletneva, N.I. (GOI). Light modulators based on field effects in nematic liquid crystals. OPMPA, no. 5, 1987, 11-13.
140. Zhdanov, V.I.; Kudryavtseva, G.I.; Odintsov, V.A. (). Radiation flux modulator. OTIZD, no. 16, 1987, 1307431. (RZRAB, 87/10Ye451).

141. Zolotov, Ye.M.; Tavlykayev, R.F. (IOF). Integrated optical modulator with linearized modulation characteristics. IOF. Preprint, no. 162, 1987, 1-11. (RZFZA, 87/9L772).

F. NONLINEAR OPTICS

1. Theory

142. Afanas'yev, Yu.B.; Petrov, A.A.; Petrov, M.P.; Stepanov, S.I.; Trofimov, G.S. (FTI). Dynamic self-diffraction in photorefractive BaTiO₃ crystal. PZTFD, no. 19, 1987, 1161-1164.
143. Aktsipetrov, O.A.; Baranova, I.M.; Mishina, Ye.D. (MGU, MIREA). Nonlinear optical method for the investigation of the adsorption of organic molecules on the surface of semiconductors. DANKA, vol. 296, no. 6, 1987, 1348-1352.
144. Alaverdyan, R.B.; Arakelyan, S.M.; Kazaryan, R.A.; Kechiyants, A.M.; Chilingaryan, Yu.S. (). Photoinduced orientational effects in a nonlinear photosemiconductor/nematic-liquid-crystal system. Voprosy fiziki formoobrazovaniya i fazovykh prevrashcheniy. Kalinin, 1987, 67-75. (RZFZA, 87/10L917).
145. Alekseyev, A.I.; Zhemerdeyev, O.V. (). Four-level echo study on atomic relaxation. OPSPA, v. 62, no. 4, 1987, 951-953.
146. Al'tshuler, G.B.; Nazarov, V.V.; Studenikin, L.M.; Khramov, V.Yu. (GOI). Nonlinearity of the refractive index of glass of an optical catalog. OPMPA, no. 9, 1987, 11-13.
147. Andreyev, A.A.; Sutyagin, A.N.; Shatsev, A.N. (). Study on nonlinear optical processes in laser plasmas. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 1. Kiyev, Naukova dumka, 1987, 260-262. (RZFZA, 87/9G188).
148. Apanasevich, S.P.; Lyakhnovich, A.V.; Sinitsyn, G.V. (IFANB). Optoelectronic system of modulation of cw laser radiation with programmed control for the investigation of optical bistability. PRTEA, no. 5, 1987, 156-158.

149. Arutyunyan, G.M.; Yeritsyan, G.A. (NIIFKS). Self-action effect in semiconductors. IAAFA, no. 5, 1987, 258-262.
150. Aslanyan, L.S.; Bagdasaryan, A.Ye.; Badalyan, N.N.; Petrosyan, A.A.; Khurshudyan, M.A.; Chilingaryan, Yu.S. (YeGU). Nonlinear thermal reflection of light in a nematic liquid crystal. IAAFA, no. 5, 1987, 272-276.
151. Bakiyev, A.A.; Velikovich, A.L.; Golubev, G.P.; Luchinskiy, D.G. (VNIIMS). Four-level logic element utilizing optical bistability in a noncooled thin-film semiconductor interferometer. KVEKA, no. 9, 1987, 1854-1856.
152. Basharov, A.M.; Maymistov, A.I.; Sklyarov, Yu.M. (). Self-induced transparency on the 1 to 1 transition as one more accurately solvable polarization model of nonlinear optics. OPSPA, vol. 63, no. 4, 1987, 707-709.
153. Burov, L.I.; Gancherenok, I.I. (). Effect of the migration of electron-excitation energy on the concentration dependence of the effects of light-induced anisotropy in dye solutions. OPSPA, vol. 63, no. 3, 1987, 659-660.
154. Butenko, A.V.; Shalayev, V.M.; Shtokman, M.I. (IFSOAN). Giant impurity nonlinearities in the optics of fractal clusters. IFSOAN. Preprint, no. 426F, 1987, 4-29. (RZFZA, 87/9L1158).
155. Dinh Van Hoang (Din' Van Khoang); Vo Duc Luong (Vo Duk Luong) (Vietnam). (). Conditions for the appearance of optical bistability in lasers with a saturable absorber and a nonhomogeneously broadened line. KVEKA, no. 9, 1987, 1833-1838.
156. Dubenskaya, M.G.; Il'inova, T.M.; Pavel'yev, A.B. (MGU). Saturation of two-photon absorption in direct-gap semiconductors. VMUFA, no. 5, 1987, 72-76.
157. Dubovik, V.M.; Melikyan, O.G.; Chudesnikov, D.O.; Yakovlev, V.P. (MIFI). Resonance fluorescence spectrum and force of friction in standing light waves. MIFI. Preprint, no. 026, 1987, 1-24. (RZFZA, 87/9L969).
158. Dykman, M.I.; Tarasov, G.G. (IPANUK). Thresholdless optical bistability due to giant nonlinearity of resonant absorption in crystals with F(subA) centers. KVEKA, no. 10, 1987, 2038-2043.

159. Gordiyenko, V.M.; Kubyshkin, A.P.; Mikheyenko, A.V.; Pyanchenko, V.Ya. (NITsTLAN). Interferometry of the polarizability of strongly excited vibrational states of molecules. NITsTLAN. Preprint, no. 21, 1987, 1-24. (RZFZA, 87/9L1160).
160. Khadzhi, P.I.; Shibarshina, G.D. (IPFANM). Optical bistability in a system of excitons and biexcitons. FTPPA, no. 10, 1987, 1796-1801.
161. Kiseleva, Ye.S.; Khadzhi, P.I. (). Laws governing the dispersion of nonlinear surface transverse magnetic waves at a media interface, allowing for the processes of optical conversion from excitons to biexcitons. OPSPA, v. 62, no. 2, 1987, 468-471.
162. Klyshko, D.N.; Penin, A.N. (MGU). Prospects for quantum photometry. UFNAA, v. 152, no. 4, 1987, 653-665.
163. Kovalev, V.F.; Pustovalov, V.V. (FIAN). Strong nonlinearity and higher harmonics generation in an inhomogeneous plasma. FIAN. Preprint, no. 78, 1987, 2-40. (RZFZA, 87/10G100).
164. Krasovitskiy, D.V. (). Self-induced transparency in a plasma. UFIZA, no. 6, 1987, 872-879. (RZFZA, 87/10G107).
165. Kroo, N. (). Nonlinear optics (in Hungarian). FISZA, no. 8-9, 1986, 295-298. (RZFZA, 86/10L746).
166. Langbein, U.; Lederer, F.; Ponath, H.E. (). Raman scattering of waveguide modes by polaritons in piezoelectric film waveguides (in German). WZFRE, no. 6, 1986, 771-774. (RZFZA, 87/10L55).
167. Likhanskiy, V.V.; Napartovich, A.P. (). Periodic transverse structure in lasers with saturable absorbers. PZTFD, no. 17, 1987, 1034-1038.
168. Malakyan, Yu.P. (IFI). Hyper-Raman scattering and self-induced adiabatic inversion from two-photon excitation of metal vapor. IAAFA, no. 2, 1987, 74-78.
169. Mezentsev, V.K.; Smirnov, G.I. (IAESOAN). Coherent interaction of light pulses with ions of a magnetoactive plasma. ZETFA, vol. 93, no. 4, 1987, 1235-1243.
170. Minogin, V.G.; Rozhdestvenskiy, Yu.V. (ISAN). Stochastic dynamics of atoms in a field of planar light waves. ZETFA, vol. 93, no. 4, 1987, 1173-1187.

171. Mosyak, A.A.; Perel'man, N.F. (). Resonant absorption of high-power electromagnetic radiation by multi-electron atoms. Kinetika neodnorodnykh protsessov v primesnykh poluprovodnikakh i poluprovodnikovyykh priborakh. Kishinev, 1987, 33-70. (RZFZA, 87/9L968).
172. Pashayev, O.K.; Khakimov, F.Kh.; Kholmurodov, Kh.T. (OIYaI). Soliton diffraction in nonlinear defocusing media. OIYaI. Preprint, no. R5-87-155, 1987, 6 p. (RZFZA, 87/9L1230).
173. Stasyuk, I.V.; Ivankiv, Ya.L. (ITeFUK). Raman scattering in crystals with disordered structural elements. ITeFUK. Preprint, no. 57R, 1987, 2-25. (RZFZA, 87/10L367).
174. Sushchinskiy, M.M.; Korovkina, L.I. (FIAN). Nonlinear photoinduced scattering of light in iodine solutions. KRSFA, no. 10, 1987, 18-20.
175. Szuszkiewicz, W.; Wodkiewicz, K. (). Can the two-photon ionized impurity-plasmon processes cause noticeable changes in the free-carrier absorption? (in English). ATPLB, v. A71, no. 3, 1987, 449-451. (RZFZA, 87/9L1161).
176. Titov, A.N. (). Theory of saturated absorption and saturated dispersion resonances in a strong field. Issledovaniye kvantovykh sredstv izmereniya vremeni i chastoty. VNIFTRI. Moskva, 1987, 57-72. (RZFZA, 86/10L770).
177. Yemel'yanov, V.I.; Seminogov, V.N.; Sokolov, V.I. (MGU). Effect of second-order diffraction on linear and nonlinear optical effects in the vicinity of a surface with a periodic relief. KVEKA, no. 10, 1987, 2028-2037.
178. Zharikov, A.A.; Burshteyn, A.I. (IKhKG). Nonlinear frequency modulation of oscillations by a conventional process. Spectrum of proton oscillation in complexes with a hydrogen bond. KHFID, no. 9, 1987, 1163-1172.

2. Frequency Conversion

179. Aleksandrov, K.S.; Aleksandrovskiy, A.S.; Karpov, S.V.; Lukinykh, V.F.; Myslivets, S.A.; Popov, A.K.; Slabko, V.V. (IFSOAN, KrGU). Nonlinear-optical generation of vacuum ultraviolet radiation in naphthalene vapors. DANKA, vol. 296, no. 1, 1987, 85-88.

180. Baryshev, S.A.; Belozarov, S.A.; Bilak, V.I.; Ioltukhovskiy, A.A.; Kuratev, I.I.; Semenenko, A.V.; Tsvetkov, Yu.V. (). Efficient intracavity second harmonic generation in semiconductor-pumped miniature solid-state lasers. KVEKA, no. 9, 1987, 1748-1753.
181. Belyy, M.U.; Robur, L.I.; Shaykevich, I.A. (). Angular dependence of second harmonic generation in metals. DUKAB, no. 4, 1987, 53-56. (RZFZA, 87/10L925).
182. Shipov, N.V. (). Second harmonic generation in cholesteric liquid crystals in an external field. VINITI. Deposit, no. 4900-V87. (ZPSBA, vol. 47, no. 3, 1987, 519).
183. Zadkov, V.N.; Meysner, L.B.; Shreder, T. (). Computer simulation of the dipole contribution in second harmonic generation by a surface layer of a centro-symmetrical crystal. OPSPA, vol. 63, no. 3, 1987, 695-698.

3. Parametric Processes

184. Belokopytov, G.V. (MGU). Striction parametric excitation in dielectric resonators. IVYRA, no. 9, 1987, 1121-1129.
185. Borisov, A.R.; Kotsarenko, N.Ya.; Silivra, A.A.; Fomenko, G.P. (). Parametric conversion of electromagnetic waves in relativistic electron beams in the presence of an idler wave. IVUZB, no. 5, 1987, 75-77. (RZRAB, 87/10Yel64).
186. Ionushauskas, G.; Piskarskas, A.; Sirutkaytis, V.; Yozapavichyus, A. (VilGU). Parametric generation of light in LiNbO_3 , CsHAsO_4 and $\text{Ba}_2\text{NaNb}_5\text{O}_{15}$ crystals synchronously pumped by a picosecond $\text{LaBeO}_3\text{:Nd}$ laser. KVEKA, no. 10, 1987, 2044-2045.
187. Korneyev, A.A.; Osadchiyev, V.M. (MIFI). Parametric detuning of the plasma resonance of small metallic particles in a strong field. DANKA, vol. 296, no. 2, 1987, 345-347.
188. Novikov, L.N. (). Parametric effects in optically oriented systems. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 133-140.

189. Pustovoy, V.I.; Sukhorukova, A.K. (). Generation of photoritons - parametrically coupled photons and polaritons. KVEKA, no. 10, 1987, 2050-2052.
190. Vodop'yanov, K.L.; Voevodin, V.G.; Gribenyukov, A.I.; Kulevskiy, L.A. (IOF). Highly efficient picosecond parametric superluminescence in a ZnGeP(sub2) crystal in the 5-6.3 um range. KVEKA, no. 9, 1987, 1815-1819.

4. Stimulated Scattering

a. Miscellaneous Scattering

191. Antipov, V.V.; Blistanov, A.A.; Gorelik, V.S.; Sorokin, N.G.; Chizhikov, S.I. (). Light scattering using nonlinear optical inhomogeneities in crystals with frequency doubling of excitation radiation. OPSPA, vol. 63, no. 3, 1987, 691-693.
192. Galushkin, M.G.; Zemskov, Ye.M.; Kamenets, F.F.; Klushin, V.N. (MFTI). Theory of the unsteady stimulated scattering of light. KVEKA, no. 9, 1987, 1820-1826.
193. Mukhin, Yu.V.; Pilipetskiy, N.F.; Sudarkin, A.N. (). Stimulated thermal scattering of surface electromagnetic waves. PFKMD, no. 6, 1987, 26-29. (RZFZA, 87/9L1216).

b. Raman

194. Berenberg, V.A.; Karpukhin, S.N.; Mochalov, I.V. (). Stimulated Raman scattering of nanosecond pulses in a KGd[WO(sub4)](sub2) crystal. KVEKA, no. 9, 1987, 1849-1850.
195. Brekhovskiy, G.L.; Sokolovskaya, A.I. (FIAN). Optimal conditions for stimulated Raman backscattering of focused light beams. KRSFA, no. 10, 1987, 6-8.
196. D'yakov, Yu.Ye.; Nikitin, S.Yu. (MGU). Stimulated Raman scattering of laser radiation with a wide angular spectrum. KVEKA, no. 10, 1987, 1925-1957.
197. Dzhotyan, G.P.; Minasyan, L.L. (NIIFKS). Excitation of anti-Stokes waves from stimulated Raman scattering by anharmonic vibrations in a medium. IAAFA, no. 3, 1987, 140-143.

198. Pinter, F.; Seres, F.; Vize, L.; Gati, L. (). Theory of stimulated Raman scattering in multicomponent systems (in Hungarian). Acta Academiae Paedagogicae Szegediensis. Seria physica, chemica, mathematica. 1985, 3-13. (RZFZA, 87/10L936).
 199. Vasil'yev, N.F. (SFTI). Theory of the rotational structure of the resonance Raman spectra of diatomic molecules. IVUFA, no. 10, 1987, 54-58.
 200. Venkin, G.V.; Il'inskiy, Yu.A.; Mkoyan, A.S. (MGU). Cooperative and stimulated Raman scattering of light. ZETFA, vol. 93, no. 3, 1987, 838-844.
 201. Zakaraya, M.G.; Maysuradze, G.G. (). Theory of the shape of excitation profiles for spectral lines of the resonance Raman scattering of light. OPSPA, vol. 63, no. 3, 1987, 663-665.
 202. Zozulya, A.A.; Silin, V.P.; Tikhonchuk, V.T. (). Stimulated Raman scattering of laser light in plasmas. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 1. Kiyev, Naukova dumka, 1987, 285-287. (RZFZA, 87/9G104).
- c. Brillouin
203. Abdullayev, E.A.; Sobirov, M.M. (FGPI). Double resonance Brillouin scattering of light in CdS type crystals. IUZFA, no. 5, 1987, 74-77.
 204. Adkhamov, A.A. (). Theory of absolute parametric instability from paired stimulated Brillouin scattering. VINITI. Deposit, no. 4538-V87, 23 jun 1987, 19 p. (RZFZA, 87/10G81).
 205. Blaha, R.; Laedke, E.W.; Rubenchik, A.M.; Spatschek, K.H. (). Stability of steady-state stimulated Brillouin scattering. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 1. Kiyev, Naukova dumka, 1987, 72-75. (RZFZA, 87/9G105).
 206. Ivanov, V.B.; Papernyy, S.B. (). Stimulated Brillouin scattering of a picosecond pulse train in a gas. Obrashcheniye volnovogo fronta lazernogo izlucheniya v nelineynykh sredakh. CVKOVFLI, Minsk, Feb 1986. Materialy. IFANB. Minsk, 1987, 264-265. (RZFZA, 87/9L1215).

d. Rayleigh

5. Self-focusing

- 207. Andreyev, A.A.; Yerokhin, N.S.; Sutyagin, A.N.; Fadeyev, A.P. (). Self-focusing of a laser beam in two-dimensional and expanding plasmas. FIPLD, no. 9, 1987, 1058-1067.
- 208. Areshev, I.P.; Subashiyev, V.K.; Faradzhev, B.G. (FTI). Self-defocusing of the radiation of a neodymium laser in n-type InP crystals with various degrees of doping. FTTPA, no. 10, 1987, 1873-1876.
- 209. Askar'yan, G.A.; Lerman, A.A.; Mukhamadzhanov, M.A. (IOF). Nonlinear refraction of low-power and small cross-section laser beams. KVEKA, no. 10, 1987, 2045-2047.
- 210. Golubkov, A.A.; Makarov, V.A.; Cherepetskaya, Ye.B. (MGU). Development of small-scale perturbations during self-focusing of elliptically polarized light in nonlinear gyrotropic media. VMUFA, no. 5. 1987, 91-94.
- 211. Korobkin, V.V.; Motylev, S.L. (IOF). Generation of spontaneous magnetic fields and self-focusing from laser breakdown in air. IOF. Preprint, no. 121, 1987, 1-13. (RZFZA, 87/9L1241).
- 212. Vlasov, S.N. (IPF). Structure of the field of a circularly polarized wave beam in the vicinity of a nonlinear focus in a cubically nonlinear medium. KVEKA, no. 9, 1987, 1868-1870.

6. Acoustic Interaction

- 213. Abramov, A.Yu.; Mazur, M.M.; Palavandishvili, L.S. (). Tunable laser [with an acoustooptic filter]. OTIZD, no. 6, 1987, 1290459. (RZRAB, 87/9Ye185).
- 214. Aleshkevich, V.A.; Gayvoronskiy, V.Ya.; Matveyev, A.N. (MGU). Thermo-optical generation of sound by a partially coherent light impulse. AKZHA, no. 5, 1987, 785-791.
- 215. Anan'yev, Ye.G.; Pustovoyt, V.I. (). Collinear diffraction of light by amplified sound waves. FTVTA, no. 4, 1987, 1214-1217. (RZFZA, 87/9L25).

216. Aver'yanov, N.Ye.; Baloshin, Yu.A.; Martyukhina, L.I.; Pavlinshin, I.V.; Sud'yenkov, Yu.V.; Yurevich, V.I. (LITMO). Study on the possibility of an acoustooptic method to predict the threshold of plasma formation at the surface of metals. ZTEFA, no. 9, 1987, 1758-1762.
217. Balakshiy, V.I.; Kukushkin, A.G.; Torgovkin, M.Yu. (). Recording the phase structure of light fields by the selective properties anisotropic Bragg diffraction. RAE LA, no. 4, 1987, 724-731.
218. Basyuk, S.B.; D'yakonov, A.M.; Lemanov, V.V. (FTI). Angular aperture and spectral resolution of a noncollinear acoustooptic filter. ZTEFA, no. 9, 1987, 1791-1798.
219. Belokurova, O.I.; Petrun'kin, V.Yu.; Shcherbakov, A.S.; Yushin, N.K. (LPI). Acoustooptic spectrum analyzer of radio signals with acoustic heterodyning. PZTFD, no. 10, 1987, 594-597.
220. Dunin, S.Z. (MIFI). Wave field of a linear source in the half-space of a dispersive-dissipative medium. AKZHA, no. 5, 1987, 872-877.
221. Goltvyanskaya, G.F. (). Diffraction of light by longitudinal ultrasound in uniaxial crystals. RAE LA, no. 5, 1987, 1026-1030. (RZFZA, 87/9L23).
222. Gusev, V.E. (MGU). Acoustic recording of the rapid hydrodynamic expansion of an electron-hole plasma and the dynamics of the process of the smelting recrystallization of a surface. AKZHA, no. 5, 1987, 863-871.
223. Kikkarin, S.M.; Tsarev, A.V.; Yakovkin, I.B. (IFP). Frequency dependence of the efficiency of acoustooptic interaction in GaAlAs/GaAs waveguides. KVEKA, no. 10, 1987, 2064-2067.
224. Kolomenskiy, Al.A. (IOF). Far field Doppler signals and Mach waves of a two-dimensional thermoacoustic source. AKZHA, no. 5, 1987, 909-912.
225. Ostrovskiy, I.V.; Polovinko, I.I.; Volchanskiy, O.V. (). Diffraction of light by ultrasonic vibrations controlled by defects in crystals. UFIZA, no. 4, 1987, 525-527. (RZFZA, 87/9L22).
226. Petrun'kin, V.Yu.; Rakovskiy, V.Yu.; Shcherbakov, A.S. (LPI). Four-wave Bragg scattering of light using elastic waves in a TeO(sub2) single crystal. PZTFD, no. 18, 1987, 1130-1134.

227. Sutorikhin, V.A.; Sharangovich, S.N. (). Phase characteristics of excitation amplifiers for acoustooptic modulators with distributed amplification in balanced cascades. IVUZB, no. 9, 1987, 51-53.
 228. Vernigorov, N.S.; Zadorin, A.S.; Lukinskiy, S.V. (TIASUR). Acoustooptic frequency meter. OTIZD, no. 42, 1986, 1270716. (RZRAB, 87/9Ye267).
 229. Yang Xing-yu (Yan Sin-Yuy); Feng Qi-yuan (Fyn Tsi-yuan') (Inner Mongolia, China). (). Theoretical analysis of the modulation of coherent laser radiation by the Raman-Nath standing wave acoustooptic effect. KVEKA, no. 9, 1987, 1883-1886.
 230. Yegorov, Yu.V.; Ushakov, V.N. (). Linearization of the modulation characteristics of acoustooptic phase modulators. IVUZB, no. 9, 1987, 53-55.
 231. Yepikhin, V.M.; Vizen, F.L.; Pal'tsev, L.L. (). Acoustooptical filtration of radiation with random polarization. ZTEFA, no. 10, 1987, 1910-1917.
 232. Yesepkina, N.A.; Bondartsev, S.Yu.; Lavrov, A.P. (LPI). Acoustooptic spectrum analyzer with high frequency resolution. PZTFD, no. 17, 1987, 1029-1034.
 233. Zharikov, Ye.V.; Zavartsev, Yu.D.; Nikol'skiy, M.Yu.; Prokhorov, A.M.; Studenikin, P.A.; Umyskov, A.F.; Shcherbakov, I.A. (IOF). Acoustooptic modulation of the radiation of a GSGG:Cr:Nd laser under high pumping energies. DANKA, vol. 296, no. 2, 1987, 335-337.
 234. Zil'berman, G.Ye.; Kupchenko, L.F.; Goltvyanskaya, G.F. (). Diffraction of collinearly propagating light by ultrasound. RAELA, no. 4, 1987, 703-709. (RZFZA, 87/9L24).
 235. Zil'berman, G.Ye.; Kupchenko, L.F.; Bykov, A.A.; Goltvyanskaya, G.F.; Vdovenkov, V.Yu. (). New Bragg angles in crystals with optical activity. RAELA, no. 9, 1987, 1993-1994.
- G. SPECTROSCOPY OF LASER MATERIALS
236. Agayev, Ya.; Garyagdyev, G.; Bragin, Ye.V.; Demchenko, A.M.; Annayev, A. (TurkPI). Photoelectric and luminescence properties of nGaAs-pAl(x)Ga(1-x)As heterostructures. ITUFA, no. 4, 1987, 87-89.

237. Arzumanyan, G.A.; Bagdasarov, Kh.S.; Tsorikishvili, N.G.; Todriya, T.E.; Ryadnov, S.N.; Kevorkov, A.M. (IKAN). Properties of $Y(\text{sub}3-x)\text{Er}(\text{sub}x)\text{Al}(\text{sub}5)\text{O}(\text{sub}12)$ and $\text{La}(\text{sub}1-x)\text{R}(\text{sub}x)\text{MgAl}(\text{sub}11)\text{O}(\text{sub}19)$ ($\text{R}=\text{Nd}, \text{Cr}$) crystals. IVNMA, no. 7, 1987, 1180-1185.
 238. Arzumanyan, G.A.; Bagdasarov, Kh.S.; Tsorikishvili, N.G.; Todriya, T.E.; Ryadnov, S.N.; Kevorkov, A.M. (IKAN). Properties of $Y(3-x)\text{Er}(x)\text{Al}(\text{sub}5)\text{O}(\text{sub}12)$ and $\text{La}(1-x)\text{R}(x)\text{MgAl}(\text{sub}11)\text{O}(\text{sub}19)$ crystals where $\text{R}=\text{Nd}, \text{Cr}$. IVNMA, no. 7, 1987, 1180-1185.
 239. Bernhardt, H.J.; Rauch, R.; Toepfer, K.; Wehrhan, G. (). Absorption spectrum analysis of the chemical perfection of YAG:Nd crystals. CRTED, no. 4, 1987, 599-605. (RZFZA, 87/9L388).
 240. Gorban', I.S.; Kozeyeva, L.P.; Slobodyanyuk, A.V.; Shevchenko, V.A. (). Absorption spectra of $\text{CsNd}[\text{MoO}(\text{sub}4)](\text{sub}2)$ and $\text{CsGd}[\text{MoO}(\text{sub}4)](\text{sub}2):\text{Nd}^{3+}$ crystals. ZPSBA, vol. 47, no. 4, 1987, 676-679.
 241. Lakoba, I.S. (ISAN). Luminescence spectra of various organomercuric bromide vapors in a discharge. ISAN. Preprint, no. 4, 1987, 27 p. (RZFZA, 87/9L457).
 242. Verenik, V.N.; Kuznetsova, V.V.; Mit'kina, N.N.; Pavlyuk, A.A.; Puko, R.A.; Shkadarevich, A.P. (). Stark splitting of holmium and erbium multiplets of ions in crystals of potassium-yttrium tungstates. ZPSBA, vol. 47, no. 4, 1987, 679-681.
- H. ULTRASHORT PULSE GENERATION
243. Bogdanov, V.L.; Bondarev, B.V.; Rodionov, G.D.; Sorokin, V.B. (NGU). Lasing of subpicosecond light pulses in a linear single spray dye laser. PZTFD, no. 17, 1987, 1038-1040.
 244. Gulis, I.M.; Komyak, A.I.; Sayechnikov, K.A.; Tsvirko, V.A. (). Picosecond fluorometer with nonlinear frequency conversion and recording of a signal under photon counting conditions. ZPSBA, vol. 47, no. 3, 1987, 489-494.
 245. Ivanov, V.B.; Mak, A.A.; Papernyy, S.B. (). Successive stimulated Raman scattering compression of picosecond light pulses. OPSPA, vol. 63, no. 4, 1987, 705-707.

246. Kocherov, D.A.; Luk'yanov, V.N.; Plyavenek, A.G.; Seregin, V.F.; Solodkov, A.F.; Tambiyev, Yu.A.; Shelkov, N.V.; Yakubovich, S.D. (VNIIOFI). Conditions for obtaining the dynamic parameters of picosecond single pulses of radiation of a heterostructure laser. KVEKA, no. 10, 1987, 1981-1983.
 247. Oganesyanyan, M.K.; Papazyan, T.A.; Pogosyan, E.M.; Sngirtyan, Ye.A. (NIIFKS). LP-2 picosecond laser. PRTEA, no. 5, 1987, 249.
 248. Petrosyan, L.S. (NIIFKS). Change in the polarization of ultrashort pulses of light induced by intense elliptically polarized pulses. IAAFA, no. 2, 1987, 89-94.
 249. Vodop'yanov, K.L.; Grudinin, A.B.; Dianov, Ye.M.; Kulevskiy, L.A.; Prokhorov, A.M.; Khaydarov, D.V. (IOF). Stimulated Raman scattering generation of 100-200 femtosecond pulses in a single-mode fiberoptic waveguide in the 1.5-1.7 μm region. KVEKA, no. 10, 1987, 2053-2055.
- J. CRYSTAL GROWING
250. Sidorov, V.S.; Ol'khovaya, L.A.; Ikrami, M.B.; Apinova, A. (IKhANTad). Obtaining lithium and sodium fluoride single crystals activated by $\text{Ni}(\text{sup}2+)$, $\text{Co}(\text{sup}2+)$, and $\text{Mn}(\text{sup}2+)$. IVNMA, no. 9, 1987, 1547-1549.
- K. THEORETICAL ASPECTS OF ADVANCED LASERS
251. Avetisyan, G.K.; Atsagortsyan, K.Z. (YeGU). Energetic or angular narrowing of charged particle beams by laser pulses. IAAFA, no. 2, 1987, 94-99.
 252. Belenov, E.M.; Luskinovich, P.N.; Romanenko, V.I.; Sobolev, A.G.; Uskov, A.V. (FIAN). Emission of surface electromagnetic waves under resonant electron tunneling. KVEKA, no. 10, 1987, 2108-2115.
 253. Bessonov, Ye.G. (). Free electron lasers. Generatory i usiliteli na relyativisticheskikh elektronnykh potokakh. CVSGUREP, Moskva, Jan 1984. Materialy. Doklady. Moskva, 1987, 45-67. (RZRAB, 87/10Ye81).
 254. Gronkowski, J. (). Synchrotron radiation: new prospects for x-ray methods (in Polish). PSTFA, no. 6, 1986, 513-526. (RZFZA, 87/9L682).

255. Ispiryan, K.A.; Ispiryan, M.K. (YeFI). Obtaining quasi-monochromatic beams of gamma-ray quanta by K-ionization of relativistic ions. IAAFA, no. 5, 1987, 284-287.
 256. Kalmykova, S.S.; Kurilko, V.I. (). Radiation from a moving charge and coherent instabilities in charged particle beams. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 3. Kiyev, Naukova dumka, 1987, 267-268. (RZFZA, 87/10G72).
 257. Kuz'min, R.N. (). X-ray and gamma lasers. Generatory i usiliteli na relyativistskikh elektronnykh potokakh. VSGUREP, Moskva, Jan 1984. Materialy. Doklady. Moskva, 1987, 68-75. (RZRAB, 87/10Ye450).
 258. Kuzelev, M.V.; Rukhadze, A.A. (). Stimulated emission from heavy-current relativistic electron beams. UFNAA, v. 152, no. 2, 1987, 285-316. (RZFZA, 87/10G126).
 259. Oganesyan, S.G.; Abadzhyan, S.V. (NIIFKS). Quantum theory of Cerenkov lasers. IAAFA, no. 3, 1987, 133-139.
 260. Sergeyev, A.S.; Smorgonskiy, A.V. (IPF). Theory of free electron lasers with variable parameters. IVYRA, no. 9, 1987, 1130-1137.
- L. GENERAL LASER THEORY
261. Anosov, M.D. (). Parity of quasi-energy states and rules of selection associated with them. OPSPA, v. 62, no. 3, 1987, 484-486.
 262. Arutyunyan, G.V.; Bagdasaryan, O.V. (NIIFKS). Theory of quasi-waveguide active layers, allowing for the shape of the amplification line. IAAFA, no. 3, 1987, 144-148.
 263. Bedilov, M.R.; Beysembayeva, Kh.B.; Saidov, R.P. (IYaFANUz). Effect of ionizing radiation on laser components. IYaFANUz. Preprint, no. R-6-240, 1987, 1-15. (RZFZA, 87/9L1064).

264. Danilov, A.A.; Yevstigneyev, V.L.; Zharikov, Ye.V.; Nikol'skiy, M.Yu.; Shcherbakov, I.A. (IOF). Compensation for thermooptic distortions in the lens by longitudinal inhomogeneous heating of the cylindrical active element of a solid-state laser. IOF. Preprint, no. 129, 1987, 1-10. (RZFZA, 87/10L907).
265. Denisyuk, Yu.N. (biographical subject). (GOI). Sixtieth birthday of Yu.N.Denisyuk. OPMPA, no. 9, 1987, 64.
266. Kaczmarek, F. (). Photons and waves. Interference from a single photon (in Polish). Fizyka w szkole, no. 2, 1987, 67-73. (RZFZA, 87/10A88).
267. Knoell, L. (). Permutation rules and correlation functions of field operators in quantum optics (in German). WZFRE, no. 6, 1986, 757-759. (RZFZA, 87/9L955).
268. Maslova, N.S.; Lerner, P.B. (FIAN). Radiation "capture" in interacting oscillator systems. FIAN. Preprint, no. 77, 1987, 3-33. (RZFZA, 87/9L952).
269. Romaniuk, R. (). Sixth European Symposium on Optoelectronics OPTO'86, Paris, 13-15 May 1986 (in Polish). WDTEA, no. 10, 1986, 3-6. (RZRAB, 87/9Ye7).
270. Romaniuk, R. (). Third International Congress on Applied Optics and Optoelectronics, Innsbruck, Austria, April 1986 (in Polish). WDTEA, no. 10, 1986, 1-3. (RZRAB, 87/9Ye6).
271. Smirnov, D.F.; Troshin, A.S. (LGPI). New phenomena in quantum optics: anti-bunching and sub-Poisson statistics of photons, and compressed states. UFNAA, v. 153, no. 2, 1987, 233-271.
272. Troitskiy, V.S. (NIRFI). Evolution of fundamental constants. KVEKA, no. 9, 1987, 1902-1904.
273. Zagrebnov, V.A. (). Two-level atoms in an electromagnetic field. The Feynman-Katz formula. Teoriya kvantovykh sistem s sil'nym vzaimodeystviyem. Kalinin, 1987, 46-54. (RZFZA, 87/9L966).

II. LASER APPLICATIONS

A. BIOLOGICAL EFFECTS

274. Ambartsumyan, R.V.; Yeliseyev, P.G.; Yeremeyev, B.V.; Zakharov, S.D.; Makhsudov, B.I. (FIAN). Biological action of laser radiation on red blood corpuscles in the infrared absorption band of molecular oxygen. KRSFA, no. 10, 1987, 35-37.
275. Avdeyev, P.S.; Antipenko, B.M.; Berezin, Yu.D.; Volkov, V.V.; Gatsu, A.F.; Raba, O.B. (VMOLA). Action of pulsed laser radiation at 1.96 μm on the cornea. VEOFA, no. 3, 1987, 48-51.
276. Ayde, Kh.B.; Raubishko, B.N.; Rone, I.V.; Rubikis, R.Ya. (). Biomechanical and hystological studies on arterial walls under the paravasal action of argon ion laser radiation. Meditsinskaya biomekhanika. CMKDBMed, Riga, 12-15 Sep 1986. Tezisy dokladov. Vol. 1. Riga, 1986, 9-14. (RZMKA, 87/8G988).
277. Burchuladze, T.G. (TbGU). Formation of single-strand breaks in DNA by the action of high-intensity ultraviolet radiation. SAKNA, v. 126, no. 2, 1987, 393-396.
278. Glinchuk, Ya.I.; Deyev, L.A.; Yugay, A.G.; Armali Khalil' (MNIIMG). Results of repeated vitrectomy for patients with relapsing hemorrhaging into the vitreous body during diabetic retinopathy. VEOFA, no. 3, 1987, 23-26.
279. Makarskaya, N.V.; Khvatova, A.V.; Zheludkova, V.V. (MNII). Argon laser coagulation in a system of combined organ-saving retinal region therapy for children. VEOFA, no. 5, 1987, 61-64.
280. Nesterov, A.P. (MGMIvt). Glaucoma and ocular hypertension. VEOFA, no. 3, 1987, 76-77.
281. Nesterov, A.P.; Cherkasova, I.N. (MGMIvt). Role of risk factors in the diagnostics of open-angle glaucoma. VEOFA, no. 5, 1987, 18-20.
282. Popova, M.F.; Il'yasova, Sh.G.; Inyushin, V.M. (IEMEZh). Comparative analysis of the influence of pulsed and cw low-intensity laser radiation on the regeneration of an irradiated skeletal muscle. DANKA, vol. 296, no. 5, 1987, 1248-1251.

283. Raubishko, B.N.; Kupch, Ya.A. (). Biomechanical grounds for developing vascular anastomoses by laser radiation. Meditsinskaya biomekhanika. CMKDBMed, Riga, 12-15 Sep 1986. Tezisy dokladov. Vol. 1. Riga, 1986, 318-324. (RZMKA, 87/8G983).
284. Shotter, L.L.; Tamkivi, R.P.; Klementi, T.I.; Kukk, P.L.; Pakhomova, T.A. (TarGU; VNIIGBol). Using excimer lasers in refractive corneal surgery. VEOFA, no. 5, 1987, 45-48.
285. Usupbekova, B.Sh. (). Reconstruction of interneuron synapses of the cranial cervical ganglion with the spinal cord under laser action. Akademiya nauk Kazakhskoy SSR. Vestnik, no. 5, 1987, 82-85. (RZFZA, 87/10L1030).
286. Volkov, V.V.; Balashevich, L.I.; Gatsu, A.F.; Berezin, Yu.D.; Kulakov, Ya.L.; Avdeyev, P.S.; Lazo, V.V. (). Lasers with different radiation parameters in ophthalmooncology. VEOFA, no. 4, 1987, 33-37.
287. Yashinskas, V.P. (KaMI). Anterior capsular microsurgery. VEOFA, no. 4, 1987, 75-78.
288. Zharov, V.P.; Zubov, B.V.; Loshchinov, V.I.; Murina, T.M.; Prokhorov, A.M.; Chebotareva, G.P. (IOF). Pulsed photothermal radiometry studies on optical and thermophysical properties of biological tissues. IOF. Preprint, no. 146, 1987, 21 p. (RZFZA, 87/9L1327).

B. COMMUNICATIONS SYSTEMS

289. Abdullayev, S.S.; Akhmadzhanov, T.; Zaslavskiy, G.M.; Tashdulatov, Z.T.; Khabibullayev, P.K. (IYaFANUz). Study on the properties of optical fields with a speckle structure in multimode lightguides. IYaFANUz. Preprint, no. R-6-236, 1986, 1-32. (RZFZA, 87/9L61).
290. Abdykarov, S.A.; Dzhurayev, M.D.; Nebogov, S.M. (OshGPI). Radial-bar ultrasonic vibrational systems for interpretation by pressure. IUZTA, no. 4, 1987, 90-93.
291. Abramov, V.V.; Bazarnyy, Ye.M.; Bazarov, Ye.N.; Grigor'yants, V.V.; Gulyayev, Yu.V.; Zhabotinskiy, M.Ye.; Kitayev, A.Ye.; Levkin, L.V.; Morshiyev, S.K.; Potapov, V.T.; Sokolov, A.V.; Sosnin, V.P.; Frantsesson, A.V. (IRE). Development of fiberoptic communications systems and sensors. Problemy sovremennoy radiotekhniki i elektroniki. Moskva, 1987, 104-118. (RZFZA, 87/9Zh392).

292. Abusev, V.M.; Leonov, Ye.I.; Lipovskiy, A.A.; Khabarov, S.E. (FTI). Photoinduced nonlinear transmission in optical waveguides based on sillenites. PZTFD, no. 20, 1987, 1268-1270.
293. Akhmediyev, N.N.; Korneyev, V.I. (). Propagation of a periodical sequence of pulses in an optical fiber. IVYRA, no. 10, 1987, 1249-1254.
294. Aksenov, V.I.; Aksenova, T.T.; Arm, Ye.M.; Pyatakhin, V.I.; Smolitskiy, V.A.; Suvorov, Ye.V.; Khaustov, A.I. (). Using photomultipliers with translucent negative-electron-affinity photocathodes for scintillation detectors and fiberoptic lightguide communication lines. AENGA, v. 63, no. 1, 1987, 52-53. (RZFZA, 87/10V513).
295. Babayan, V.S.; Babkina, T.V.; Butylkin, V.S.; Grigor'yants, V.V.; Fisher, P.S. (IRE). Nonlinear propagation of picosecond pulses in anisotropic lightguides. IAAFA, no. 2, 1987, 105-109.
296. Belov, A.V.; Kurkov, A.S.; Frenkel', L.A. (IOF). Measurement and computation of the chromatic dispersion of double-layer single-mode fiber-optic waveguides. KVEKA, no. 10, 1987, 2062-2063.
297. Blistanov, A.A.; Makarevskaya, Ye.V.; Nikulova, G.A. (MISIS). Problems in the fabrication technology of diffuse LiNbO_3 waveguides for integrated optics. VINITI. Deposit, no. 3996-V87, 4 Jun 1987, 40 p. (RZFZA, 87/9L803).
298. Buzdugan, A.I.; Zelenina, L.I.; Ivashchenko, Yu.N.; Iovu, M.S.; Shutov, S.D. (). Optical transmission in thin-layer heterostructures of glassy arsenic and antimony chalcogenides. IZFMB. no. 1, 1987, 68-70. (RZFZA, 87/9L52).
299. Bykovskiy, Yu.A.; Goncharov, I.G.; Zolotarev, V.A. (MIFI). Amplitude modulator of light. KVEKA, no. 10, 1987, 2058-2060.
300. Chupakhin, M.S.; Sukhanovskaya, A.I.; Krasil'shchik, V.Z.; Kreyngol'd, S.U. (). Analysis of materials for fiberoptics. Metody analiza vysokochistyykh veshchestv. Moskva, 1987, 219-236. (RZFZA, 87/10L618).
301. Dianov, Ye.M.; Dmitruk, L.N.; Plotnichenko, V.G.; Churbanov, M.F. (). Fiber lightguides based on high-purity fluoride glasses. Vysokochistnyye veshchestva, no. 3, 1987, 10-34. (RZFZA, 87/9L715).

302. Dianov, Ye.M.; Kashin, V.V.; Perminov, S.M.; Perminova, V.N.; Rusanov, S.Ya.; Sysoyev, V.K. (IOF). Criteria for the efficiency of heat input in the process of drawing fiber light guides. FKSTD, no. 5, 1987, 752-756.
303. Gavrilin, S.N.; Nikitov, S.A. (). Conversion of waveguide modes by periodic magnetic domain structures. RAELA, no. 4, 1987, 888-890.
304. Giniyatullin, N.I. (UAI). Theoretical fundamentals to construct and design fiberoptic information transducers. TsNIITEIpriboro. Deposit, no. 3780-pr87, 25 May 1987, 18 p. (RZFZA, 87/10L637).
305. Giniyatullin, N.I.; Khasanov, Z.M.; Rabchuk, A.V. (GOI). Calculation of precision in the manufacturing of fiber quantizing bundles. OPMPA, no. 10, 1987, 38-40.
306. Grimm, V.A.; Kushchenko, A.Yu. (LITMO). The ARGOS program [for computer-aided design of fiberoptic systems]. IVUBA, no. 7, 1987, 78-84.
307. Grudin, A.B.; Dianov, Ye.M.; Korobkin, D.V.; Prokhorov, A.M.; Serkin, V.N.; Khaydarov, D.V. (IOF). Decay of femtosecond pulses in single mode fiber lightguides. ZFPRA, vol. 46, no. 5, 1987, 175-177.
308. Ivanov, A.V.; Matveyev, A.N. (MGU). Effect of phase fluctuations on the parameters of optical solitons in fiber lightguides. VMUFA, no. 5, 1987, 82-85.
309. Khikmatov, N.A. (OTANUZ). Asymmetric deformation of solitons in ideal optical fibers. IUZFA, no. 4, 1987, 83-85.
310. Klevitskiy, B.G.; Korshunov, I.P. (). Determination of double-beam refraction in multimode lightguides according to measurements of the polarization of an output field. RAELA, no. 10, 1987, 2209-2213.
311. Kolobkov, V.P.; Ovcharenko, N.V.; Morozova, I.N.; Chebotarev, S.A.; Chikovskiy, A.N.; Arkatova, T.G. (). Structure and properties of TeO_2 - WO_3 system glasses. FKSTD, no. 5, 1987, 771-774.
312. Kolobrodov, G.N. (). Digital multi-angle film and sound track. ZNPFA, no. 3, 1987, 191-195. (RZFZA, 86/10L725).

313. Kondrat'yev, V.A.; Nikitin, V.A.; Prokhorov, V.P.; Yakovenko, N.A. (KubU). Theoretical and experimental study on integrated optical radiation distributors. VINITI. Deposit, no. 4092-V87, 8 Jun 1987, 20 p. (RZFZA, 87/10L671).
314. Konovalov, V.A.; Kuklin, S.V.; Surkov, V.K.; Grudkin, V.N. (). Analysis of dynamic distortions from deformations of a rotating mirror in image recording. Tekhnika fil'moproizvodstva. Leningrad, 1986, 79-82. (RZFZA, 86/10L721).
315. Kozlov, V.S.; Lobanov, O.V.; Stabnikov, M.V. (LIYaF). Using glass fiber bundles in scintillation counters. LIYaF. Preprint, no. 1281, 1987, 3-17. (RZFZA, 87/10V529).
316. Kryshkin, V.I.; Ronzhin, A.I. (IFVE). Study on methods to transmit light from scintillators to optical fibers with a re-emitter. IFVE. Preprint, no. 22, 1987, 1-8. (RZFZA, 87/10V528).
317. Makhmudov, E.B.; Chesnokov, A.A. (UzNPOK). Equipment to transmit and receive digital television signals over fiberoptic communication lines. TKTEA, no. 8, 1987, 18-23.
318. Makkaveyev, V.I.; Petrova, N.N. (). Comparative sensitivity of optimal digital lightguide communications systems. IVUZB, no. 9, 1987, 3-7.
319. Mayyer, A.A. (IOF). Self-switching of radiation in three tunnel-coupled optical waveguides. IOF. Preprint, no. 153, 1987, 1-26. (RZFZA, 87/9L69).
320. Mikheyev, P.A.; Sakharov, D.K. (). Comfort of visual perception of information through fiber elements. Svetotekhnika, no. 5, 1987, 5-7. (RZFZA, 87/9L929).
321. Muradyan, L.Kh. (MGU). Dynamics of self-action of partially coherent pulses in single-mode fiber lightguides. VMUFA, no. 5, 1987, 86-89.
322. Nikolaychenko, V.G.; Klimenko, Yu.K.; Fefelov, N.A.; Chilikin, A.B. (PKBE). High voltage meter with optical decoupling. PRTEA, no. 5, 1987, 112-114.
323. Romaniuk, R. (). Reducing the concentration of OH-ions in single-mode lightguides (in Polish). EKNTB, no. 10-11, 1986, 8-11,12. (RZFZA, 87/9L792).

324. Sergeyev, A.N.; Frolova, M.N.; Osadchev, L.A.; Shandarov, S.M. (TGU). Determining the parameters of asymmetric parabolic waveguides. IVUFA, no. 10, 1987, 46-49.
325. Siro, F.Vaskes (UDN). Study on scattering of light by irregularities in optical waveguides. VINITI. Deposit, no. 4025-V87, 4 Jun 1987, 12 p. (RZFZA, 87/9L73).
326. Siro, F.Vaskes; Yegorov, A.A. (UDN). Using light scattering to determine the statistical characteristics of irregularities in optical waveguides. VINITI. Deposit, no. 4024-V87, 4 Jun 1987, 8 p. (RZFZA, 87/9L74).
327. Sukhotin, S.A.; Golubev, V.V. (LPI). Effect of the Goos-Henchen shift on the amount of loss in waveguide modulators using electroabsorption. ZTEFA, no. 9, 1987, 1776-1781.
328. Varchuk, N.K.; Kashchey, V.A.; Ped'ko, S.N. (NPOMetrologiya). Propagation of laser radiation with mode locking in an irregular multimode fiber waveguide. PZTFD, no. 17, 1987, 1047-1050.
329. Vashurin, P.V.; Koryakovtsev, V.S.; Kotova, S.P.; Malov, A.N.; Naumov, A.F.; Parfenov, A.V. (FIAN). Self-consistent dynamic filtering of images. KRSFA, no. 10, 1987, 29-31.
330. Vizel', A.A.; Bobkov, P.N. (). Fiberoptic transmission systems at the Svyaz'-86 exhibition in Moscow. ZRBEA, no. 5, 1987, 81-87. (RZFZA, 87/9Zh5).
331. Volkov, I.S.; Volyar, A.V.; Kuchikyan, L.M.; Kondakov, M.Ye.; Savchenko, V.N. (). Mutual correlation function of laser radiation through a multimode fiber lightguide. ZPSBA, vol. 47, no. 3, 1987, 393-397.
332. Voyevodin, V.G.; Morozov, A.N.; Vinokurtseva, I.M. (SFTI). Preparation and study of Ti:LiNbO_3 :H waveguides. PZTFD, no. 19, 1987, 1177-1179.
333. Vvedenskiy, Yu.V.; Zuyev, A.B.; Ignat'yev, S.V. (GPI). Picosecond time-resolved studies on pulsed reactions in multimode fiber lightguides. IVYRA, no. 8, 1987, 1049-1052.
334. Westphal, K.D. (). Arrangement of elements in a laser module. Patent GDR, no. 242102, 14 Jan 1987. (RZRAB, 87/9Ye281).

335. Yershov, A.V.; Mikheyev, P.A. (GOI). Increase in the discrimination of fiber optic observation systems by a method of scanning of an output image. OPMPA, no. 10, 1987, 1-5.
336. Yeskin, K.F.; Dyrkheyev, V.V.; Malyshev, A.V. (). Obtaining optical lightguides in glasses by solid state diffusion of titanium. FKSTD, no. 5, 1987, 799-800.
337. Zakhidov, E.A.; Mirtadzhiyev, F.M.; Kasymdzhanov, M.A.; Khabibullayev, P.K. (OTANUZ). Polarization characteristics of single-mode fiber light guides with stresses in the cladding material. IUZFA, no. 5, 1987, 70-73.
338. Zhminchenko, S.M.; Mirovitskiy, D.I.; Nazarov, V.L.; Sebekina, N.N. (). Effect of the distribution of the refractive index in lightguides and the conditions of their excitation, on the mode composition and pulse response. RATEA, no. 6, 1987, 50-55. (RZFZA, 87/9Zh390).

C. BEAM PROPAGATION

1. Theory

339. Akhmanov, S.A.; Alekseyev, S.V.; Seminogov, V.N.; Sokolov, V.I. (NITsTLAN). Effect of the shape of periodic relief on the magnitude of the local field near a surface and on the suppression of mirror reflection. NITsTLAN. Preprint, no. 26, 1987, 1-24. (RZFZA, 87/9L81).
340. Barsukov, K.A.; Ryazantseva, N.V. (LETI). Transition radiation from a modulated current in a waveguide. IAAFA, no. 2, 1987, 69-74.
341. Bayborodin, Yu.V.; Deryugina, A.I.; Kurashov, V.N.; Mashchenko, A.I. (KPIA; KGU). Depolarization of partially coherent radiation in anisotropic optical channels. DANKA, v. 293, no. 4, 1987, 840-844. (RZFZA, 87/9L964).
342. Braginskiy, L.S.; Gilinskiy, I.A.; Svitashева, S.N. (IFPSOAN). Reflection of light by rough surfaces: interpretation of ellipsometric measurements. DANKA, v. 293, no. 5, 1987, 1097-1101.
343. Dostov, V.L.; Karpov, S.Yu. (FTI). Bragg reflection of bounded light beams. ZTEFA, no. 3, 1987, 602-605.

344. Gavrilenko, V.G.; Petrov, S.S. (GGU). Experimental study on angular distribution of light in scattering media with absorption. IVYRA, no. 5, 1987, 679-680.
345. Kondratenko, P.S.; Finkel'berg, V.M. (VNII OFI). Quantitative description of the thermal self-action of laser beams. KVEKA, no. 9, 1987, 1827-1832.
346. Paramonov, L.Ye.; Lopatin, V.N. (IFSOAN). Scattering of light by nonspherical particles (algorithms, calculation methods, programs). IFSOAN. Preprint, no. 67B, 1987, 3-50. (RZFZA, 87/10L65).
347. Pavlik, B.D. (). Absolute instability of accompanying waves in photorefractive media. UFIZA, no. 4, 1987, 519-525. (RZFZA, 87/9L440).
348. Rysakov, V.M. (FTI). Diffraction and scattering of light by phase gratings of arbitrary coherence. Using the multidimensional Kotel'nik-Shannon theorem to analyze these processes. FTI. Preprint, no. 1108, 1987, 1-59. (RZFZA, 87/9L28).
349. Semidetnov, N.V. (). Study on radiation scattering by particles of two-phase media in optical instruments to analyze the structure of media. Opticheskaya zapis' i obrabotka informatsii. KuAI. Kuybyshev, 1986, 130-137. (RZFZA, 87/10L61).
350. Yachmenev, V.A. (). Functional initial data for an algorithm to calculate light scattering by nonspherical macroparticles in terms of perturbations in the shape of the Mie scatterer. VINITI. Deposit, no. 4779-V87, 29 Jun 1987, 9 p. (RZFZA, 87/10L63).
351. Yakhmanov, S.A.; Seminogov, V.N.; Sokolov, V.I. (NITsTLAN). Diffraction of light by rough surfaces with a deep arbitrary profile. Interaction of the diffracted waves, anomalous absorption and maximally attainable local fields. NITsTLAN. Preprint, no. 25, 1987, 1-24. (RZFZA, 87/9L27).

2. Propagation in the Atmosphere

352. Arsen'yan, T.I.; Zandanova, G.I. (). Fluctuations in optical beams of different diameter at ground level. RAELA, no. 4, 1987, 874-876.
353. Banakh, V.A.; Smalikho, I.N. (IOA). Effect of temperature-induced atmospheric fluctuations on laser radiation characteristics. KVEKA, no. 10, 1987, 2098-2107.

354. Berezovskiy, V.V.; Gandurin, A.L.; Igumnov, Ye.A.; Kornilov, S.T.; Petrishchev, V.A.; Protsenko, Ye.D.; Splavnik, Yu.V.; Chirikov, S.N. (MIFI). Laser diagnostics of ammonia impurities in the atmosphere from an aircraft. KVEKA, no. 9, 1987, 1917-1919.
355. Bersenev, V.I.; Kaptsov, L.N.; Priyetzhev, A.V. (MGU). Monostatic Doppler Nd:YAG-laser lidar for measuring wind speed. VMUFA, no. 5, 1987, 89-91.
356. Budnik, A.P.; Vakulovskiy, A.S.; Popov, A.G. (IEM). Propagation mechanism of optical discharges in air at ground level in high-intensity fields. IEM. Trudy, no. 19/125, 1987, 107-112. (RZFZA, 86/10L728).
357. Glazov, G.N.; Igonin, G.M. (IOA). Optimal filtering of atmosphere parameter profiles by laser probing from space. IZKOD, no. 2, 1987, 51-56.
358. Itkin, A.M. (). Estimating the average intensity of an optical navigational beacon in a real atmosphere. Matematicheskoye i programmnoye obespecheniye zadach optimizatsii tekhnicheskikh sistem. Kiyev, 1987, 69-73. (RZRAB, 87/9Ye290).
359. Ivanov, O.G.; Okunev, R.I.; Pakhomov, L.N.; Petrun'kin, V.Yu.; Polonskiy, L.Ya.; Pyatnitskiy, L.N. (LPI). Breakdown of air under axicon focusing of laser radiation with variable curvature of a wave front. ZTEFA, no. 10, 1987, 2012-2014.
360. Khaytun, F.I.; Rasskazov, S.A. (GOI). Effect of speckle fluctuations in an optical signal on the conditions of its detection. OPMPA, no. 4, 1987, 9-11.
361. Kolosov, V.V.; Kuznetsov, M.F. (IOA). Stationary thermal defocusing of partially coherent laser beams. IVYRA, no. 9, 1987, 1099-1105.
362. Kozin, G.I.; Petrov, V.V.; Protsenko, Ye.D. (MIFI). Zeeman laser with a switchable radiation frequency for monitoring impurities in the atmosphere. KVEKA, no. 10, 1987, 1992-1994.
363. Levin, I.M.; Shifrin, K.S. (IOANLO). Remote determination of the chlorophyll concentration in the ocean by means of a pulsed lidar. IZKOD, no. 4, 1987, 12-19.
364. Luchinin, A.G. (IPF). Backscattered signals from laser probing of the upper layer of the ocean through rough seas. IFAOA, no. 9, 1987, 976-983.

365. Lyadzhin, V.A.; Filippov, V.A. (). Solution of the lidar equation applicable to wave processes in the middle atmosphere. Volnovyye vozmushcheniya v ionosfere, Alma-Ata, 1987, 117-120. (RZGFA, 87/10A46).
366. Markelova, L.P.; Nemchinov, I.V.; Shubadeyeva, L.P. (IFZ). Development of a laser explosion in the vicinity of a surface. KVEKA, no. 9, 1987, 1904-1906.
367. Panov, A.B.; Brovtsinov, G.A.; Valygina, M.A. (LITMO). Elements in calculating the parameters of polyhedron scanning mirrors for laser atmospheric probing systems. IVUBA, no. 9, 1987, 81-88.
368. Pleshanov, Yu.V.; Pikkell', E.V.; Samoylov, V.D.; Chukin, M.S. (GOI). Degree of error in the measurement of the time position of light pulses, transmitted through a turbulent atmosphere. OPMPA, no. 10, 1987, 5-6.
369. Tetevyan, S.K.; Matveyev, D.T.; Makhalov, I.K.; Georgiyev, N.; Khadzhiyskiy, A.; Krystev, G. (). Laser reflector for geophysical satellites. Astrosovet. Nauchnyye informatsii, no. 58, 1986, 31-38. (RZGFA, 87/7A66).
370. Tsyupak, I.M. (). Determining the parameters of the earth's rotation by laser observations of satellites. Kinematika i fizika nebesnykh tel, no. 1, 1987, 78-83. (RZGFA, 87/6A28).
371. Vinogradov, A.G.; Gurvich, A.S.; Kashkarov, S.S.; Kravtsov, Yu.A.; Tatarskiy, V.I. (). Amplification effect in backscattering. UFNAA, v. 152, no. 4, 1987, 707-709.
372. Zakharova, I.G.; Karamzin, Yu.N.; Trofimov, V.A. (MGU). Nonlinear distortions of elliptical light beams, KVEKA, no. 9, 1987, 1839-1848.
373. Zuyev, V.V.; Romanovskiy, O.A. (). Allowing for systematic errors in lidar differential absorption. VINITI. Deposit, no. 4675-V87, 25 Jun 1987, 48 p. (RZFZA, 87/10L1021).
374. Zuyev, V.Ye.; Krekov, G.M.; Krekova, M.M.; Titov, G.A. (IOA). Average characteristics of orbital lidar signals from broken clouds. Method of solution. IZKOD, no. 5, 1987, 35-41.

3. Propagation in Liquids

- 375. Ankilov, A.N.; Koshechkin, S.L.; Mavliyev, R.A. (IKhKG). Study on the formation process of dispersed phases in aqueous solutions with hardening salts in crossed magnetic and electric fields. KOZHA, no. 4, 1987, 741-745.
- 376. Apresyan, L.A.; Vlasov, D.V. (). Strong evidence of two-way transmission effects in problems of laser probing of the upper layer of the ocean. UFNAA, v. 152, no. 4, 1987, 711-713.
- 377. Avetisyan, V.M.; Atanesyan, V.G.; Nazaryan, A.A.; Oganessian, R.G.; Sulkhanyan, V.A.; Frangyan, A.A. (NIIFKS). Laser spectrofluorimeter for remote measurement of the concentration of pigments in water basins. Morskoy gidrofizicheskiy zhurnal, no. 5, 1987, 48-50.
- 378. Kondilenko, Ye.I.; Malyy, V.I.; Ponezha, G.V. (). Optical properties of liquid media during Raman backscattering. UFIZA, no. 5, 1987, 670-673. (RZFZA, 87/10L914).
- 379. Vitshas, A.F.; Sentsov, Yu.I. (). Gasdynamic model of the evaporative interaction of radiation with a liquid. ZPMFA, no. 5, 1987, 36-42.

4. Adaptive Optics

- 380. Abdurakhmanov, M.; Zaskal'ko, O.P.; Kuznetsov, I.G. (FIAN). Self-diffraction of a self-intersecting light beam. KRSFA, no. 9, 1987, 35-38.
- 381. Anufriyev, A.V.; Zimin, Yu.A.; Tolmachev, A.I. (). Adaptive compensation for atmospheric phase distortions with the use of a spatial spectrum of images. KVEKA, no. 10, 1987, 2116-2123.
- 382. Arutyunyan, G.V.; Dzhotyan, G.P. (). Wave front reversal in a field of surface reference waves. OPSPA, vol. 63, no. 3, 1987, 575-578.
- 383. Bakut, P.A.; Ryakhin, A.D.; Sviridov, K.N. (). Accuracy of the reconstruction of an aberration phase according to its difference values. OPSPA, vol. 63, no. 3, 1987, 671-673.
- 384. Betin, A.A.; Milovskiy, N.D.; Rusov, N.Yu.; Rul'kov, N.F. (GGU). Self-excitation of a double-pass amplifier with a wave front reversal mirror. IVYRA, no. 9, 1987, 1079-1084.

385. Brodov, M.Ye.; Gilyarov, O.N.; Ivanov, A.V.; Kulikovskiy, B.N.; Pashinin, P.P. (IOF). Eight-pass amplifier utilizing a neodymium-glass plate with a waveguide scheme and wave front reversal. KVEKA, no. 10, 1987, 1985-1987.
386. Chesnokov, S.S. (MGU). Focusing of light beams by elastic deformable mirrors. IVYRA, no. 10, 1987, 1213-1220.
387. Dorezyuk, V.A.; Shmal'gauzen, V.I. (MGU). Automatic stabilization of the base of a diagnostic interferometer. VMUFA, no. 5, 1987, 32-35.
388. Grigor'yev, I.S.; Semerok, A.F.; Firsov, V.A.; Chankin, A.V. (). Spectral ranges of wavefront reversal in forward and opposed directions, based on resonant four-wave parametric scattering of c-w radiation in sodium atom beams. Obrashcheniye volnovogo fronta lazernogo izlucheniya v nelineynykh sredakh. CVKOVFLI, Minsk, Feb 1986. Materialy. IFANB. Minsk, 1987, 78-82. (RZFZA, 87/9L1206).
389. Kanev, F.Yu.; Chesnokov, S.S. (MGU). Adaptive focusing of intense light beams using short routes. KVEKA, no. 10, 1987, 2125-2127.
390. Kleymenov, V.V.; Novikova, Ye.V. (). Estimation of a tolerance value using the radial shift of an object in adaptive optical systems. OPSPA, vol. 63, no. 3, 1987, 616-619.
391. Kovalev, A.A.; Sadovskiy V.N.; Usova, N.A. (). Liquid crystals: a new class of media for wavefront reversal in frequency degenerate interactions. Obrashcheniye volnovogo fronta lazernogo izlucheniya v nelineynykh sredakh. CVKOVFLI, Minsk, Feb 1986. Materialy. IFANB. Minsk, 1987, 155-160. (RZFZA, 87/9L1197).
392. Kovalev, V.I. (FIAN). Influence of nonlinear absorption on the nonlinear phase increment of radiation in InSb and InAs at 10.6 μ m. KVEKA, no. 9, 1987, 1851-1853.
393. Kurenkov, A.V.; Chesnokov, S.S.; Shanin, O.I. (MGU). Modal control in adaptive aperture probing systems. IVYRA, no. 8, 1987, 1040-1042.
394. Likhanskiy, V.V.; Napartovich, A.P.; Sukharev, A.G. (IAE). Phase locking of lasers utilizing a common nonlinear cell. KVEKA, no. 9, 1987, 1733-1734.

395. Malakhov, A.N.; Polovinkin, A.V.; Saichev, A.I. (). Partial wavefront reversal in randomly inhomogeneous media. UFNAA, v. 152, no. 4, 1987, 709-711.
396. Malakhov, A.N.; Polovinkin, A.V.; Saichev, A.I. (GGU). Average intensity of a beam reflected from a wavefront reversing mirror in a randomly inhomogeneous medium. IVYRA, no. 7, 1987, 857-865.
397. Pasmanik, G.A. (IPF). Laser interferometers with wavefront reversal mirrors. IANFA, no. 9, 1987, 1652-1657.
398. Serdyuk, V.M. (). Polarization wavefront reversal of light beams in photorefractive crystals. Obrashcheniye volnovogo fronta lazernogo izlucheniya v nelineynykh sredakh. CVKOVFLI, Minsk, Feb 1986. Materialy. IFANB. Minsk, 1987, 127-130. (RZFZA, 87/9L1192).
399. Sukhorukov, A.P.; Trofimov, V.A. (). Efficiency and quality of wavefront reversal from four-wave mixing (numerical modeling). Obrashcheniye volnovogo fronta lazernogo i zlucheniya v nelineynykh sredakh. CVKOVFLI, Minsk, Feb 1986. Materialy. IFANB. Minsk, 1987, 100-105. (RZFZA, 87/9L1195).
400. Vasil'yev, A.A.; Vorontsov, M.A.; Kudryashov, I.A.; Shmal'gauzen, V.I. (MGU). Adaptive focusing of radiation into a diffusely scattering reflector under nonlinear refraction. KVEKA, no. 9, 1987, 1735-1736.
401. Vorontsov, M.A.; Ivanov, V.Yu. (MGU). Selection of aberrations in adaptive optical systems. IVYRA, no. 7, 1987, 882-889.
402. Yerofeyenko, V.T.; Urbanovich, A.I. (). Derivation of equations describing wavefront reversal of optical radiation under four-wave mixing in resonant media with "follow-up" nonlinear polarizability. VINITI. Deposit, no. 4566-V87, 24 Jun 1987, 20 p. (RZFZA, 87/9L1193).
403. Zaporozhets, B.M.; Marchevskiy, F.N.; Strizhevskiy, V.L. (KGU). Reconstructing the polarization of radiation in multimode fiber lightguides by holographic wavefront reversal. PZTFD, no. 19, 1987, 1153-1158.

D. COMPUTER TECHNOLOGY

404. Agrinskiy, P.V.; Zborovskiy, A.A.; Ivanov, B.B.; Tsukerman, Ye.V. (). Optical operative processor for industrial robots. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 123-126.
405. Bachevskiy, R.S.; Gas'kevich, G.I. (). Semantic aspect of discriminating the boundaries of regions of different tonality in images. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 158-165.
406. Bliznetsov, A.M.; Gus'kov, G.A.; Krasin'kova, M.V.; Odinokov, S.B.; Petrov, V.M.; Sal'nikov, Ye.N.; Khomenko, A.V. (). Image recording by PRIZ space-time light modulators with brightness amplifiers. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 74-80.
407. Bykov, R.Ye.; Korzhik, Yu.V. (). Describing the texture of images by means of functionals in a random field. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 166-174.
408. Cherkasov, Yu.A.; Ponomarenko, T.M.; Snetkov, Ye.I.; Kuznetsova, A.L.; Petrenko, N.Ye. (). Optical signal processing in a half-tone display based on photothermoplastic spatial light modulators. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 81-95.
409. Dombrovskiy, V.A. (). Statistics of the crossed interference of holograms in holographic memories. AVMEB, no. 5, 1987, 3-12.
410. Dovgan', A.P.; Smirnov, V.A.; Butta, V.I. (). Device for tracking the information track in an optical recording medium. OTIZD, no. 1, 1987, 1282201. (RZRAB, 87/9Ye296).
411. Firsov, V.S. (). General time distribution in spatial signal searching. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 127-133.

412. Gorelik, S.L. (). Review of papers from the Second All-Union Conference on Automated Image Processing Systems, Broda, L'vov Oblast', 24-26 Sep 1986. IVUBA, no. 9, 1987, 95-96.
413. Gradoboyev, Yu.G.; Kamshilin, A.A.; Mokrushin, Yu.M.; Okunev, R.I. (). Pulsed information recording by PRIZ space-time light modulators. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 64-73.
414. Gruzevich, Yu.K.; Lebedev, Ye.N.; Levov, S.N.; Telezhnikov, V.N. (). Liquid-crystal/space-time modulator system for processing and displaying information in a wide spectral range. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 17-23.
415. Ivanchenkov, V.P.; Orlov, O.V. (). Controlling the parameters of spatial filters in optodigital information processing systems. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 113-122.
416. Petskus, A.M. (). Spatial-frequency temperature fields in two-layer dielectric-semiconductor structures under pulsed photothermal information recording. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 96-101.
417. Pletneva, N.I.; Morichev, I.Ye.; Petrova, L.I. (). Structures consisting of photoconductors, liquid-crystals, and multifunctional space-time light modulators. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 3-7.
418. Smolov, V.B. (LETI). Functional electronics: prospective trend in the development of information processing systems. IVUBA, no. 9, 1987, 6-11.
419. Tsukkerman, N.S.; Subbotin, F.M.; Romanov, A.M. (). Dynamic transfer function of modulation of optically controlled transparencies based on liquid crystals. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 24-33.

420. Vasil'yev, A.A.; Dadeshidze, V.V.; Kompanets, I.N.; Lunyakova, G.A.; Sinigibskiy, A.I. (). Liquid-crystal space-time light modulators in a circuit to discriminate rotational- and scale-invariant characters in images. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 39-57.
 421. Vladimirov, F.L.; Morichev, I.Ye. (). Optically controlled transparencies based on photoconductor/liquid-crystal structures. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 8-16.
 422. Vylegzhanin, O.N.; Galanov, A.N.; Ivanchenkov, V.P. (). Experimental design to optimize signal recording processes by space-time light modulators. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 149-157.
 423. Yesepkina, N.A.; Mansyrev, M.M.; Molodyakov, S.A.; Sayenko, I.I. (). Optoelectronic devices with multichannel acoustooptic modulators to process radio signals. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 102-112.
- E. HOLOGRAPHY
424. Akimova, L.A.; Yaroslavskaya, N.N. (). Silver halide layers for holography with polymer gelatin substitutes. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 162-165. (RZRAB, 87/10Ye528).
 425. Akylbayev, Zh.S.; Tseyeb, A.O. (). Holographic investigation of flows with photochrome visualization. ZPMFA, no. 5, 1987, 19-23.
 426. Angel'skiy, O.V.; Maksimyak, P.P. (). Correlation-optical measurement of the parameters of highly rough surfaces. OPSPA, vol. 63, no. 3, 1987, 585-588.
 427. Ashcheulov, Yu.V. (). Cubic strain in holograms. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 175-184.

428. Balan, N.F.; Kalinkin, V.Ye.; Losevskiy, N.N.; Malov, A.N. (). Operative correction and recording of holograms in bichromated gelatin layers. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 123-129. (RZRAB, 87/10Ye503).
429. Bizyayeva, O.A.; Zhukova, V.A.; Ivakhnik, V.V. (). Study on the possibility of recording holograms in perinaphthioindigo dyed films. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 103-108. (RZRAB, 87/10Ye520).
430. Bryksin, V.V.; Korovin, L.I.; Petrov, M.P.; Khomenko, A.V. (FTI). Intrinsic modes in a nonhomogeneous electrooptical crystal, allowing for gyrotropy. ZTEFA, no. 10, 1987, 1918-1924.
431. Bryskin, V.Z.; Smayev, V.P. (). Method for recording and processing of color multilayer holograms. OTIZD, no. 8, 1987, 1293690. (RZRAB, 87/10Ye500).
432. Bushmelev, N.I. (). Estimation of higher spatial frequencies in holographic textual image recording. Opticheskaya zapis' i obrabotka informatsii. Kuybyshev, 1986, 100-105. (RZFZA, 87/9L851).
433. Dovgalenko, G.Ye.; Kamshilin, A.A.; Kukhtarev, N.V. (FTI). Visualization of ultrasound oscillations with the aid of dynamic holography using photorefractive crystals. ZTEFA, no. 10, 1987, 2020-2024.
434. Dubrovin, V.F. (). Analysis of the effect of waveguide parameters on the characteristics of holographic devices. RATEA, no. 6, 1987, 67-69. (RZFZA, 87/10Zh296).
435. Durasov, V.M.; Rubanov, A.S. (). Exposure characteristics of the recording of infrared holograms in polyvinyl alcohol films. ZPSBA, vol. 47, no. 4, 1987, 673-676.
436. Gal'pern, A.D.; Bruy, V.P. (). Number of half-tones in an image reconstructed by a multiaspect hologram of focused images. OPSPA, vol. 63, no. 4, 1987, 837-843.
437. Gorodetskiy, A.Ye. (). Reconstruction of the subject image from its moire hologram. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 134-141.

438. Gorshkov, V.G.; Danileyko, Yu.K.; Lebedeva, T.P.; Nesterov, D.A. (IOF). Nonlinear processes upon the formation of three-dimensional dynamic holographic gratings. KVEKA, no. 10, 1987, 2089-2097.
439. Grigor'yev, I.S.; Likhanskiy, V.V.; Semerok, A.F.; Firsov, V.A.; Chankin, A.V. (IAE). Investigation of the properties of resonant holograms in a beam of sodium atoms. KVEKA, no. 10, 1987, 2082-2088.
440. Gruzevich, Yu.K.; Soldatenkov, V.A. (). Technological prerequisites to speed up the industrial realization of new methods of optical information processing. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 142-148.
441. Guether, R. (). Constructive determination of rotationally symmetric holographic system elements (in German). WZFRE, no. 6, 1986, 729-733. (RZFZA, 87/9L848).
442. Gusak, N.V.; Mironos, A.V.; Smirnov, V.L.; Soldatov, V.I. (). Method for the formation of highly efficient focused waveguide holograms using layers of chalcogenide glass. AVMEB, no. 5, 1987, 12-17.
443. Gutsul, T.D.; Dement'yev, I.V.; Nikiforov, Yu.T. (). Study on hologram recording processes in polyvinyl alcohol films containing heteropoly acids. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 166-169. (RZRAB, 87/10Ye527).
444. Izmaylova, V.N.; Sobolev, G.A.; Soboleva, S.B.; Yampol'skaya, G.P.; Tulovskaya, Z.D. (). Process of structure formation in bichromated gelatin layers for holography. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 47-67. (RZRAB, 87/10Ye526).
445. Kakichashvili, Sh.D.; Vardosanidze, Z.V. (GrPI). Polarization holographic reconstruction of polarization microstructure in natural light. PZTFD, no. 19, 1987, 1180-1183.
446. Klishina, T.V.; Kravtsov, V.B.; Teleshov, B.Ye.; Shats, Ya.B. (). Method to fabricate holographic lens matrixes. OTIZD, no. 45, 1986, 1275354. (RZRAB, 87/9Ye485).
447. Koronkevich, S.V. (). Third-order monochromatic aberrations of a kinoform element. OPSPA, vol. 63, no. 3, 1987, 610-615.

448. Korzinin, Yu.L. (). Suppression of scattering noise when a three-dimensional phase hologram recorded in a photorefractive medium is reconstructed by a reversed reference wave. OPSPA, vol. 63, no. 4, 1987, 832-836.
449. Kotov, I.R.; Sitnik, D.N.; Khopov, V.V. (GOI). Interpretation of specklegrams with the use of a scanning technique. OPMPA, no. 9, 1987, 1-2.
450. Lashkov, G.I.; Sukhanov, V.I. (GOI). Reoxane polymers: a new class of non-silver photosensitive materials for holography. GOI. Trudy, no. 197, 1987, 18-54. (RZFZA, 87/10L683).
451. Markhvida, I.V.; Tanin, L.V.; Utkin, I.A. (). Experimental investigation of the correlation of subjective speckle fields. OPSPA, vol. 63, no. 4, 1987, 941-943.
452. Maysuradze, L.A.; Chanturiya, Ye.M. (GrPI). Choice of a method for scanning holographic interferograms. SAKNA, v. 126, no. 2, 1987, 309-312.
453. Merzlyakov, N.S.; Popova, N.R. (). Using discrete Fresnel transformation during the digital reconstruction of holograms. AVMEB, no. 5, 1987, 17-22.
454. Meyklyar, M.P.; Sattarov, F.A.; Skochilov, A.F. (). Investigation of secondary gratings in phase reflective holograms. OPSPA, vol. 63, no. 3, 1987, 661-663.
455. Nefed'yev, L.A.; Samartsev, V.V. (). Color echo-holography in multilevel systems. ZPSBA, vol. 47, no. 4, 1987, 640-648.
456. Pavlov, A.V.; Shubnikov, Ye.I. (). Identification of different or common features in images using a holographic correlator. OPSPA, vol. 63, no. 3, 1987, 589-593.
457. Rebane, A.; Kaarli, R. (). Space-time holographic reproduction of pulsed light signals from a fragment. ETFMB, no. 2, 1987, 208-212. (RZFZA, 87/9L852).
458. Shatalin, I.D.; Kakichashvili, V.I.; Kakichashvili, Sh.D. (). Polarization hologram of 100 percent diffraction efficiency (polarization kinoform). PZTFD, no. 17, 1987, 1051-1055.

459. Stepanov, S.I.; Sochava, S.L. (FTI). Efficient energy transfer under two-wave interaction in $\text{Bi}(\text{sub}12)\text{TiO}(\text{sub}20)$. ZTEFA, no. 9, 1987, 1763-1766.
 460. Tereshchenko, Ye.D.; Utkin, V.G. (). Radioholographic determination of longitudinal dimensions of ionospheric inhomogeneities. GEAEA, no. 4, 1987, 572-575. (RZFZA, 87/10Zh138).
 461. Vertsimakha, Ya.I.; Grodzinskaya, M.D.; Libera, L.; Savchuk, A.V.; Sal'kova, Ye.N. (). Holographic properties of polyacene thin films. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 95-102. (RZRAB, 87/10Ye521).
 462. Vlasov, N.G.; Zaborov, A.N. (VNIIOFI). Recording of rainbow holograms reconstructed from multicolored images. ZNPFA, no. 4, 1987, 258-261.
 463. Vlasov, R.A.; Smirnova, T.V.; Khasanov, O.Kh. (). Recording and reconstruction of resonance dynamic holograms in a scanning regime. ZPSBA, vol. 47, no. 3, 1987, 481-489.
 464. Yakimovich, A.P. (). Diffraction efficiency of related transmission-reflection holograms. OPSPA, vol. 63, no. 4, 1987, 844-848.
 465. Yaroslavskaya, N.N.; Akimova, L.A.; Tolchin, V.G.; Shchipunova, N.A. (). Emulsion layers for holographic recording of alphanumeric information. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 170-176. (RZRAB, 87/10Ye529).
- F. LASER-INDUCED CHEMICAL REACTIONS
466. Alimov, D.T.; Gol'dman, V.Ya.; Oksengedler, B.L. (IYaFANUz). Electron aspect of laser solid-state chemistry. Self-compensation mechanism in controlling defective composition and mass transfer. IYaFANUz. Preprint, no. R-9-242, 1986, 1-13. (RZFZA, 87/9Ye991).
 467. Alkhazov, G.D.; Barzakh, A.Ye.; Buyanov, N.B.; Denisov, V.P.; Ivanov, V.S.; Letokhov, V.S.; Mishin, V.I.; Sekatskiy, S.K.; Fedoseyev, V.N.; Chubukov, I.Ya. (). Electromagnetic moments and charge radii of nuclei of holmium isotopes. Yadernaya spektroskopiya i struktura atomnogo yadra. CSYaSSAt, 37th, Yurmala, 14-17 Apr 1987. Tezisy dokladov. Yadernaya spektroskopiya v reaktsiyakh s neytronami. Leningrad, 1987, 116. (RZFZA, 87/9V273).

468. Bykovskiy, Yu.A.; Potapov, M.M.; Ukraintsev, V.A.; Chistyakov, A.A. (MIFI). Time-of-flight mass spectrometry for investigating pulsed laser action on condensed molecular media. KHVKA, no. 4, 1987, 361-366.
469. Bykovskiy, Yu.A.; Sokol'nikov, A.S.; Ukraintsev, V.A.; Chistyakov, A.A. (MIFI). Resonant action of infrared laser radiation on polymers. KHVKA, no. 5, 1987, 473-477.
470. Denisyuk, I.Yu.; Akimov, I.A. (). Using pulsed electric conductivity to determine the stability of the primary centers of latent images in model layers of silver chloride. ZNPFA, no. 4, 1987, 296-298.
471. Kaledin, L.A.; Kulikov, A.N.; Kobilyanskiy, A.I.; Shenyavskaya, Ye.A.; Gurvich, L.V. (). Relative position of a group of low-lying states of the UO molecule. ZFKHA, no. 5, 1987, 1374-1376. (RZFZA, 87/9L231).
472. Kalontarov, L.I.; Marupov, R.; Abdulloyev, N.S. (FTIANTadzh). Development of thermochemical instability during the laser breakdown of polyvinyl alcohol. KHFID, no. 10, 1987, 1380-1385.
473. Kurbatov, G.M.; Skachkov, A.N.; Sosnina, G.F. (). Selective removal of carbon impurities from boron carbide in gas phase reactions with hydrogen. KHVKA, no. 4, 1987, 380-381.
474. Letokhov, V.S. (ISAN). Laser light, atoms and nuclei. UFNAA, v. 153, no. 2, 1987, 311-334.
475. Luk'yanov, A.T.; Itskova, P.G.; Bukharbayeva, A.S. (). Dynamics of homogeneous combustion in the selective action of laser radiation. IAKFB, no. 2, 1987, 65-69. (RZFZA, 87/9L1258).
476. Pekar'kov, A.I.; Rapoport, L.P. (). Two-photon dissociation of a diatomic molecule in an intense laser field. OPSPA, vol. 63, no. 4, 1987, 751-755.
477. Skorobogatov, G.A. (LGU). Cross relaxation: evidence of $R+I[(\sup{2})P(\sub{1-2})]$ recombination during photodissociation of iodine. VLUFB, no. 2, 1987, 78-85. (RZFZA, 87/10L254).
478. Zarko, V.Ye.; Simonenko, V.N.; Kiskin, A.B. (). Non-steady-state combustion of condensed matter under the action of radiation. FGVZA, no. 5, 1987, 16-26.

G. MEASUREMENT OF LASER PARAMETERS

479. Baranauskas, R.K.; Vaytekunas, F.K.; Kurshyalis, S.K. (). Measuring the parameters of injection lasers. Radioelektronika. CRKRTNRe, 2-4 Feb 1987. Tezisy. Kaunas, 1987, 99-100. (RZRAB, 87/10Ye133).
480. Bilovolov, M.I.; Dianov, Ye.M.; Kryukov, A.P.; Pencheva, V.Kh. (IOF). Fiberoptic interferometric method to study the tuning characteristics of single-frequency semiconductor lasers. IOF. Preprint, no. 136, 1987, 1-20. (RZFZA, 87/10L871).
481. Buzyalis, R.R.; Gavrilov, G.A.; Sotnikova, G.Yu. (). Using linear charge-coupled-device photodetectors to study the transverse structure of laser beams. PZTFD, no. 17, 1987, 1077-1080.
482. Domnin, Yu.S.; Malimon, A.N.; Tatarenkov, V.M.; Shumyatskiy, P.S. (). Improving the accuracy of comparing frequency standards in the infrared to a cesium standard. Issledovaniye kvantovykh sredstv izmereniya vremeni i chastoty. VNIFTRI. Moskva, 1987, 21-27. (RZFZA, 87/9A97).
483. Ganapetyan, M.A.; Gevorgyan, A.A.; Yeritsyan, O.S.; Ninoyan, Zh.O. (YeGU). Experimental observation of amplification of the rotation of the plane of polarization and stabilization of the azimuth of polarization. IAAFA, no. 2, 1987, 100-105.
484. Gus'kov, L.N.; Lisitsyn, V.N.; Makukha, V.K.; Slyusarev, N.S.; Yurshina, L.A. (). Electrooptical indicator of the wavelengths of laser radiation. AVMEB, no. 5, 1987, 46-49.
485. Kabanov, I.S.; Pirozhkov, N.A. (). Automated complex based on the Elektronika NTs-80 microcomputer to study nonlinear optical effects in the action of laser radiation on matter. Avtomatizatsiya fizicheskogo eksperimenta. IFSOAN. Krasnoyarsk, 1987, 3-8. (RZRAB, 87/10Ye247).
486. Kopylov, L.N.; Koshelyayevskiy, N.B.; Ovchinnikov, S.N.; Tatarenkov, V.M. (). Studies and accuracy characteristics of CO₂/OsO₄ frequency references. Issledovaniye kvantovykh sredstv izmereniya vremeni i chastoty. VNIFTRI. Moskva, 1987, 28-39. (RZFZA, 87/10L877).

487. Kuz'micheva, V.M.; Yaremenko, R.G. (KhGU). Measuring the spatial energy characteristics of optical radiation by bolometric gratings. KhGU. Vestnik, no. 307, 1987, 77-81. (RZFZA, 87/10L868).
488. Raabe, K.; Zollmann, C. (). Method to stabilize the excitation conditions of ion lasers. Patent GDR, no. 246198, 27 May 1987. (RZRAB, 87/10Yel86).
489. Remizov, S.A.; Starchenko, A.N. (). Laboratory equipment for measuring the parameters of coherent optical systems. KVEKA, no. 9, 1987, 1870-1872.
490. Susenko, L.N.; Krisyuk, V.Ya.; Kokodiy, N.G.; Lysenko, G.K. (KhGU). Transient thermal effects in non-vacuum ponderomotive instruments to measure the energy of optical radiation. KhGU. Vestnik, no. 307, 1987, 81-83. (RZFZA, 87/10L869).
491. Titov, A.N.; Malyshev, Yu.M.; Rastorguyev, Yu.G. (). Frequency shift from linear and square-law Doppler effects in lasers with saturated absorption. Issledovaniye kvantovykh sredstv izmereniya vremeni i chastoty. VNIFTRI. Moskva, 1987, 40-56. (RZFZA, 87/10L872).

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

492. Babenko, V.P.; Gorbarenko, V.A.; Yevtikhiyev, N.N.; Levinson, G.R. (GOI). Interference profilograph, resistant to thermal and mechanical action. OPMPA, no. 10, 1987, 32-36.
493. Balazs, J.; Makai, Janos; Makai, Jozsef (). Fiber lightguide measuring instruments (in Hungarian). MEAUA, no. 2, 1987, 44-49. (RZFZA, 87/9L812).
494. Bazhenov, M.Yu.; Gurevich, S.B.; Konstantinov, V.B.; Kuvshinskiy, N.G.; Miroshnichenko, A.V.; Chernykh, D.F. (). Television holographic interferometer using photothermoplastic carriers. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 194-204.
495. Belikov, A.A.; Kazeyev, M.N. (). Use of photoemulsions for the recording of the spatial distribution of the intensity of infrared flows. ZTEFA, no. 10, 1987, 1942-1950.

496. Bliznyuk, Yu.A.; Kulesh, V.P.; Moskalik, L.M.; Shtandel', S.K. (). Automatic photoheterodyne interferometric system for the control of optical components. IZTEA, no. 9, 1987, 24-25.
497. Boehr, J.; Drabner, M. (). Possibility of using pulsed holography to analyse particulate flows in centrifuges (in German). BITOA, no. 5, 1987, 146-151, 160. (RZRAB, 87/10Ye513).
498. Bozyk, M. (). Interference measurements of light dispersion in optical fibers (in Polish). EKNTB, no. 10-11, 1986, 3-7. (RZFZA, 87/9L59).
499. Bugayev, A.A.; Van'kov, A.B.; Lukoshkin, V.A. (FTI). Nanosecond holographic interferometry of electron-hole plasma in silicon. FTVTA, no. 9, 1987, 2710-2713.
500. Bukhshtab, M.A. (). Method for absolute measurements of small coefficients of mirror reflection. IZTEA, no. 3, 1987, 12-13. (RZFZA, 87/9L834).
501. Bukhshtab, M.A. (). Determining small optical losses in reflected light. Svetotekhnika, no. 6, 1987, 5-6. (RZFZA, 87/9L447).
502. Butusov, M.M.; Galkin, S.L.; Ignat'yev, A.V. (EIS). Possibilities for constructing systems of fiberoptic sensors based on fiber ring interferometers. IVUBA, no. 8, 1987, 72-76.
503. Dagman, E.Ye. (IFPSOAN). Algorithms and programs to solve the inverse problem of ellipsometry when the thickness of a single-layer system film varies. IFPSOAN. Preprint, no. 8, 1987, 3-34. (RZFZA, 87/9L50).
504. Danishevskiy, A.M.; Perlin, Ye.Yu.; Fedorov, A.V. (). Multiphoton interband absorption involving free electrons and phonons in n-InAs. ZETFA, vol. 93, no. 4, 1987, 1235-1243.
505. Demin, V.V.; Donchenko, V.A.; Sinitsyna, S.V. (). Holographic recording of microparticles of different shapes. VINITI. Deposit, no. 4673-V87, 25 Jun 1987, 19 p. (RZFZA, 86/10L688).
506. Dolotov, L.Ye.; Zyuryukina, O.V.; Solov'yev, A.P.; Tsikin, B.G. (NIIMF). Method to adjust laser diagnostic devices. OTIZD, no. 6, 1987, 1290234. (RZRAB, 87/9Ye387).

507. Drenckhan, J.; Salewski, K.D. (). Refraction-free precision measurements by laser radiation at varying wavelengths. EXPPA, no. 1, 1987, 43-50. (RZFZA, 87/9L1316).
508. Dudko, G.V.; Kravchenko, A.A.; Cherednichenko, D.I. (TRI). Forming of extremely smooth surfaces of optical glasses. FKSTD, no. 5, 1987, 740-746.
509. Fedorovskiy, O.D.; Shpak, M.T. (book reviewers); Klochkov, V.P.; Kozlov, L.F.; Potykevich, I.V.; Soskin, M.S.; Koronkevich, V.P.; Khanov, V.A. (authors of reviewed books). (). Lasers to the forefront. Ukrainian-language review of Russian-language books: Lazernaya anemometriya, distantсионnaya spektroskopiya i interferometriya (Laser anemometry, remote spectroscopy and interferometry) by Klochkov, Kozlov, Potykevich, and Soskin, Kiev, 1985; and Sovremennyye lazernyye interferometry (Modern laser interferometers) by Koronkevich and Khanov, Novosibirsk, 1985. VNUKA, no. 4, 1987, 104-106.
510. Fursov, A.N.; Pisarev, V.S.; Novikov, S.A. (VNIImetmash). Speckle photography methods to measure deformations of flat objects in white light. ZVDLA, no. 8, 1987, 80-83.
511. Galanov, Ye.K.; Polikhonov, G.N. (). Investigation of magnetic circular dichroism and double refraction in local centers in InSb crystals. ZPSBA, vol. 47, no. 4, 1987, 648-652.
512. Ganzherli, N.M.; Gurevich, S.B.; Zelepuga, Ye.A.; Katushkina, N.V.; Maurer, I.A. (). Quantitative analysis of interferograms of electrophoretic separation of protein mixtures. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 185-193.
513. Glikin, L.S.; Gorbarenko, V.A.; Yepikhin, V.N. (). Enhancement of contrast in optical systems. KVEKA, no. 9, 1987, 1911-1914.
514. Gonyayev, V.S.; Frolenko, V.A.; Shestakov, N.P.; Sheshukov, A.P. (). Noncontact interference profilograph. AVMEB, no. 5, 1987, 50-56.
515. Gorbatyuk, S.N.; Kalendin, V.V.; Mayorov, A.V.; Sup'yan, V.Ya. (ViPI). Digital pulsed optical band phase meter. PRTEA, no. 5, 1987, 245.

516. Grigor'yants, A.V.; Rzhhanov, Yu.A.; Balkarey, Yu.I.; Yelison, M.I. (IRE). Self-oscillations, single pulses, and transient processes in multistable interferometers with competing optical nonlinearities. KVEKA, no. 10, 1987, 2047-2050.
517. Gubskiy, V.I.; Lutkovskiy, V.M.; Nikiforov, M.Ya.; Polyanin, V.Ye.; Klopkov, N.S.; Tolstorzhev, G.Ye. (). Light pulse generator. OTIZD, no. 43, 1986, 1272090. (RZRAB, 87/9Ye304).
518. Gudziy, V.I.; Zhukhlin, A.M.; Prikhod'ko, G.K.; Rakitin, V.D. (). Possibility of using laser and radio engineering devices for navigational safety in piloting ships under bridges. Uluchsheniye sudokhodov usloviy na rekakh i povysheniye ekspluatatsii kachestva sudokhodov i portovykh gidrotekhnicheskikh sooruzheniy. Leningrad, 1986, 70-72. (RZVTA, 87/10V128).
519. Gur'yanov, A.N.; Gusovskiy, D.D.; Devyatykh, G.G.; Dianov, Ye.M.; Karasik, A.Ya.; Kozlov, V.A.; Prokhorov, A.M.; Senatorov, A.K. (). Rotation sensor based on single-mode fiber lightguides. RATEA, no. 7, 1987, 83-88. (RZFZA, 87/10Zh295).
520. Gusev, V.G.; Balandin, S.F. (GOI). Speckle-interference quality control of lenses and of objectives. OPMPA, no. 9, 1987, 34-36.
521. Gusev, V.G.; Kodrenchuk, L.N. (TGU). Holographic interferometer for quality control of lenses. IVUBA, no. 8, 1987, 57-61.
522. Irmscher, M. (). Device to detect light scattering by laser scanning of a reflecting surface. Patent GDR, no. 244205, 25 Mar 1987. (RZRAB, 87/9Ye368).
523. Ivanenko, V.V.; Karpenko, M.I. (IGYeM). New possibilities of obtaining (^{sup40}Ar)/(^{sup39}Ar) age spectra using a laser. DANKA, vol. 296, no. 3, 1987, 710-714.
524. Ivanovskaya, M.I.; Udal'tsov, V.S.; Kostousov, V.D. (GOI). Laser interferometer-deformograph with a multipath optical system. OPMPA, no. 10, 1987, 24-26.
525. Izmaylov, G.N.; Nikolayev, F.A.; Parakhin, V.Ye. (MAI). Precision laser interferometer to check the Einstein equivalence principle. IVUFA, no. 9, 1987, 111-112.

526. Keprt, J. (). Holographic inspection of tires (in German). Rept. Akad. Wiss. DDR. Inst. Mech., no. 1, 1984, 90-104. (RZFZA, 87/9L860).
527. Klimkin, V.F.; Tolstykh, A.B.; Kostyrkin, B.V. (). High-speed laser diagnostics of electrically detonated explosive damage to solids. EOBMA, no. 3, 1987, 80-82.
528. Kovalev, A.M. (). Laser anemometers with mirror splitters for the simultaneous determination of the characteristics of particles of dispersive flow. ZPSBA, vol. 47, no. 4, 1987, 692-696.
529. Mal'tseva, N.A.; Presnyakov, Yu.P. (). Doppler interferometer for the measurement of the time function of the displacement of a surface. IZTEA, no. 10, 1987, 19.
530. Mal'tseva, N.A.; Presnyakov, Yu.P. (). Direct measurement of refraction angles based on the speckle effect. OPSPA, vol. 63, no. 3, 1987, 689-690.
531. Mokros, I.J. (). Ring lasers in the metrology of angles. JMkoa, no. 1, 1987, 18-19. (RZFZA, 87/9A168).
532. Molodkina, L.M.; Selent'yev, D.G.; Golikova, Ye.V.; Kolikov, V.M.; Chernoberezhskiy, Yu.M. (LPI; LGU). Determining the size of gripe virus particles by flow ultramicroscopy. KOZHA, no. 3, 1987, 580-583.
533. Ordzhonikidze, S.K.; Fedotov, N.G.; Sheynin, M.G. (). Effect of anti-smoke barium additives on soot formation and combustion. FGVZA, no. 4, 1987, 60-64.
534. Osten, W. (). Optimization of holographic interferometers (in German). Rept. Akad. Wiss. DDR. Inst. Mech., no. 1, 1984, 152-162. (RZFZA, 87/9L843).
535. Pavlovskiy, B.A.; Semidetnov, N.V.; Yuras, S.F.; Belyayev, V.N. (). Automation of thermophysical experiments based on laser Doppler anemometry. Metody sovershenstvovaniya rabochikh protsessov v SEU. Leningrad, 1986, 65-72. (RZVTA, 87/9V28).
536. Petru, F.; Popela, B.; Stejskal, A.; Krsek, J. (). Laser interferometry for testing numerical program controlled machine tools (in German). FGRTA, no. 4, 1987, 148-149, 191, 192. (RZRAB, 87/9Ye314).

537. Pisarev, V.S.; Shchepinov, V.P.; Yakovlev, V.V. (). Optimal holographic interferometers for the measurement of deformations during the interpretation of patterns of bands according to absolute orders. IZTEA, no. 10, 1987, 23-25.
538. Platonov, Ye.M.; Serenko, M.Yu. (GrodGU). Device to visualize cross-sections of inhomogeneities. OTIZD, no. 41, 1986, 1269076. (RZRAB, 87/9Ye364).
539. Presnyakov, G.S. (). Using laser interferometry in standards to measure the parameters of deviation in the shape of surfaces. Issledovaniya v oblasti izmereniy otkloneniy formy i raspolozheniya poverkhnostey. VNIIMS. Moskva, 1987, 38-45. (RZFZA, 87/9A99).
540. Pustogarov, A.V.; Zavidyey, V.I.; Povalyayev, O.A.; Konotopov, A.N.; Zhupanov, V.G.; Kuznetsov, V.V. (). Radiating power of an arc spot on thermochemical cathodes. TVYTA, no. 4, 1987, 783-787.
541. Pyzin, G.P.; Artemenko, S.B.; Ignat'yev, A.G. (). Optical modeling of displacement fields in shift speckle interferometry. Prochnost' mashin i apparatov pri peremeshchennykh nagruzheniyakh. Chelyabinsk, 1986, 137-141. (RZFZA, 87/10L550).
542. Rinkevichyus, B.S.; Smirnov, V.I.; Fedyanina, Ye.L. (). Interference of Gaussian beams. OPSPA, vol. 63, no. 3, 1987, 579-584.
543. Seliverov, S.N. (TSKBTP). Wideband frequency multiplier. PRTEA, no. 5, 1987, 97-98.
544. Semenov, A.T.; Shelkov, N.V. (VNIIOFI). Method for the stabilization of maximum sensitivity of a twin-wave interferometer based on a multimode waveguide. KVEKA, no. 10, 1987, 2056-2058.
545. Shurulinkov, S.P.; Stoyanov, Kh.Yu.; Palazov, D.V.; Savchenko, S.K.; Stefanov, S.M. (). Differential laser interferometer to measure angular rotations (in Bulgarian). ELPBA, no. 3, 1987, 17-19, 46, 47, 48. (RZRAB, 87/10Ye305).
546. Soroko, L.M. (OIYaI). Optical microscope [with a laser photoplotter]. OTIZD, no. 47, 1986, 1278773. (RZFZA, 87/9L778).

547. Sukholinin, V.L.; Charkviani, G.Sh.; Suladze, A.S.; Tsitsishvili, D.K. (ISMSANGruz). Using optical holography for experimental studies on deformed states of structural materials. SAKNA, v. 126, no. 3, 1987, 597-599.
548. Tolstikhina, A.L.; Petrov, V.N.; Olevskiy, S.S.; Koshchiyenko, A.V.; Semiletov, S.A.; Kozyrkin, B.I. (). Structure and composition of nickel oxide films [studied by laser ellipsometry]. IVNMA, no. 6, 1987, 968-972.
549. Vasil'yev, A.F.; Gushanskaya, N.Yu.; Zhizhin, G.N.; Yakovlev, V.A. (). Using surface electromagnetic wave spectroscopy for the study and control of the quality of the surface of half-finished microcircuits. OPSPA, vol. 63, no. 3, 1987, 682-684.
550. Vil'danov, R.R.; Kurashov, V.N.; Mirzayev, A.T.; Yakubov, A.N. (TashGU). Formation of images of coherently illuminated objects by a multi-frequency intensity interferometer with an independent monochromatic reference source. KVEKA, no. 9, 1987, 1894-1899.
551. Volkov, L.A.; Gorelenok, A.T.; Luk'yanov, V.N.; Rachkov, I.A.; Rekhviashvili, D.N.; Shmidt, N.M.; Yakubovich, S.D. (). Measurement of the amplitude-frequency characteristics of high-speed photoreceivers with the use of a homodyne glass fiber scheme for obtaining the beat amplitude of an optical signal. PZTFD, no. 17, 1987, 1059-1062.
552. Vorontsov, A.A.; Mirovitskaya, S.D. (). Diffraction method for the measurement of the dimensions of spherical particles. IZTEA, no. 9, 1987, 22-23.
553. Zakharov, M.I. (). Instrument functions and selective features of multiple beam reflecting interferometers with anisotropic elements. AVMEB, no. 5, 1987, 56-62.
554. Zakhidov, E.A.; Kasymdzhanova, M.A.; Mirtadzhiyev, F.M. (OTANUZ). Temperature characteristics of fiber lightguides in a fiberoptic Mach-Zender interferometer. IUZFA, no. 4, 1987, 74-77.
555. Zayachkovskiy, M.P.; Firtsak, Yu.Yu.; Siyanitsa, P.Ye.; Komoni, I.I. (). Semiautomatic device to measure the refractive index of crystals and glass. FZELA, no. 34, 1987, 74-77. (RZFZA, 87/9L815).

556. Zemskov, K.I.; Kazaryan, M.A.; Mikhkel'soo, V.T.; Pezt, V.E.; Petrash, G.G.; Treshchalov, A.B. (FIAN). Image brightness amplifier based on a XeCl excimer laser. KRSFA, no. 10, 1987, 49-51.
557. Zeylikovich, I.S.; Lyalikov, A.M. (GOI). Using holographic methods to improve the sensitivity of measurements for monitoring the surface of optical components. OPMPA, no. 9, 1987, 31-33.
558. Zodelava, G.L.; Sukholinin, V.L.; Charkviani, G.Sh. (ISMSANGruz). Speckle-interferometry determination of the distribution of displacements in composite plastic plates with blind round holes. SAKNA, v. 126, no. 2, 1987, 353-355.
559. Zotov, N.M.; Ponomarev, A.S.; Chmutin, A.M.; Chuyko, V.A. (VoPI). Using laser Doppler anemometry to study displacements. IVUBA, no. 7, 1987, 69-73.
560. Zuyev, V.Ye.; Kopytin, Yu.D.; Protasevich, Ye.T.; Khan, V.A. (IFA). Formation of long-lived plasmoids under the cooling of a high-frequency discharge by the flux of a water droplet aerosol. DANKA, vol. 296, no. 2, 1987, 337-340.

2. Laser-Excited Optical Effects

561. Abakumov, G.A.; Kolovskiy, V.B.; Polyakov, B.I.; Simonov, A.P. (NIFKhI). Electron-cation recombination in a polyatomic buffer gas. DANKA, vol. 296, no. 5, 1987, 1138-1140.
562. Abdinov, A.Sh.; Mamedov, F.M.; Ismailov, I.K.; Seidli, G.S. (). Oscillation and recombination characteristics of $\text{Cd}(x)\text{Hg}(1-x)\text{Te}$ single crystals where x is between 0.23 and 0.50. IAFMA, no. 5, 1986, 73-77.
563. Abesadze, T.Sh.; Buishvili, L.L.; Kakabadze, G.L. (TbGU). Relaxation of the magnetization of impurity centers caused by multiple spin transitions. SAKNA, v. 127, no. 1, 1987, 53-55.
564. Akopyan, D.G.; Arutyunyan, K.V.; Slobodskoy, M.V. (). Optical orientation of atoms saturated by an elliptically polarized wave under the Zeeman effect. Opticheskaya oriyehtatsiya atomov i molekul. CVSOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 192-196.

565. Akul'shin, A.M.; Velichanskiy, V.L.; Nikitin, V.V.; Sautenkov, V.A. (). Velocity-selective optical orientation of alkali element atoms. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 152-156.
566. Aleksandrov, Ye.B. (). Revision of the approach to optimizing the optical pumping routine for quantum frequency discriminators. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 7-11.
567. Aleksandrov, Ye.B.; Balabas, M.V.; Bonch-Bruyevich, V.A.; Provotorov, S.V.; Yakobson, N.N. (). New instruments based on optical orientation of sodium atoms, for especially accurate measurements and standardization of geomagnetic fields. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 17-21.
568. Arakelyan, V.S.; Barkhudaryan, G.R. (IRFEANArm). Investigation of the laser diffusion into silicon of n-type and p-type photoconductivity. FTPPA, no. 10, 1987, 1904-1907.
569. Asche, M.; Sarbei, O.G. (). Nonequilibrium dynamics of carriers and phonons in GaAs after high excitation by short time laser pulses (in English). PSSBB, v. B141, no. 2, 1987, 487-491. (RZFZA, 87/10N535).
570. Ashkinadze, B.M.; Subashiyev, A.V. (FTI). Self-oscillations in an exciton-electron system under the shock ionization of excitons. ZFPRA, vol. 46, no. 7, 1987, 284-286.
571. Balykin, V.I.; Letokhov, V.S. (). Laser optics of neutral atom beams. UFNAA, v. 153, no. 2, 1987, 355-356.
572. Chayka, M.P. (). Self-alignment of molecular beams. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 77-86.
573. Devdariani, A.Z. (). Inelastic collisions of optically oriented atoms accompanied by a change in the spin state and ionization. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 107-111.

574. Ferber, R.S. (). Laser optical orientation and alignment of diatomic molecules. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 27-36.
575. Gel'mukhanov, F.Kh.; Il'ichev, L.V. (). Diffusion of optically oriented or aligned particles. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 97-101.
576. Gorski, P.; Kucharczyk, W. (). Measurement of the quadratic electrooptic effect in noncentrosymmetric crystals (in English). PSSAB, v. A100, no. 1, 1987, K73-K76. (RZFZA, 87/10L383).
577. Iskandarov, Z.B.; Korniyenko, L.S.; Kotkin, A.L.; Umarkhodzhayev, R.M. (). Possibility for observing nuclear magnetization of inert gases. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 147-151.
578. Karpovich, I.V.; Lutsiv-Shumskiy, L.F.; Mokryy, O.M. (). Piezooptic constants of $KH_{2(1-x)}D_{2x}PO_4$ crystals. UFIZA, no. 72, 1987, 1016-1018. (RZFZA, 87/10N987).
579. Kosulin, N.L.; Smirnov, V.S.; Tumaykin, A.M. (). Velocity-selective laser orientation of atoms. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 187-191.
580. Kotlikov, Ye.N.; Khryashchev, L.Yu. (). Photodeflection of atoms under optical pumping. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 87-91.
581. Kovarskiy, V.A.; Sinyavskiy, E.P.; Belousov, A.V.; Keloglu, O.Yu. (). Nonradiative and optical transitions in electron-vibrational systems, induced by pulsed laser radiation. Kinetika neodnorodnykh protsessov v primesnykh poluprovodnikakh i poluprovodnikovyykh priborakh. Kishinev, 1987, 3-21. (RZFZA, 87/9L983).
582. Lozovik, Yu.Ye. (). Ion and electron clusters. UFNAA, v. 153, no. 2, 1987, 356-358.

583. Lukomskiy, N.G.; Polishchuk, V.A.; Chayka, M.P. (). Self-orientation in a gas-discharge plasma in helium. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMo, Ol'gino near Leningrad, 15-17 Apr 1986. NSFEAS. FTI. Leningrad, 1987, 92-96.
584. Lyskovich, A.B.; Piroga, S.A.; Bondar', V.D.; Gal'chinskiy, A.V. (LvGU). Parameters of non-equilibrium charge carriers in cadmium iodide crystals. IVNMA, no. 10, 1987, 1710-1712.
585. Mdivanyan, B.E.; Shikhsandov, M.Sh. (IFTT). Photostimulated motion of dislocations in gallium arsenide crystals. IFTT. Preprint, no. not given, 1987, 17 p. (RZFZA, 87/10Ye587).
586. Milosevic, D.B.; Krstic, P.S. (). Resonant potential scattering in a low-frequency laser field. Physics of Ionized Gases. CSSSPIGa, 13th, Sibenik, 1-5 Sep 1986. Contributed Papers (all in English). Beograd University, 1986, 123-126. (RZFZA, 87/9L981).
587. Milosevic, D.B.; Krstic, P.S. (). Nonresonant electron-atom scattering in a low-frequency laser field. Physics of Ionized Gases. CSSSPIGa, 13th, Sibenik, 1-5 Sep 1986. Contributed Papers (all in English). Beograd University, 1986, 119-122. (RZFZA, 87/9L980).
588. Movsesyan, M.Ye.; Movsesyan, R.Ye.; Khanbekyan, A.M. (IFI). Relaxation of photoinduced magnetization of rubidium vapor. IFI. Preprint, no. 122, 1986/1987, 3-10. (RZFZA, 87/10I83).
589. Rastopov, S.F.; Sukhodol'skiy, A.T. (IOF). Displacement of a body using a laser beam as a reference. ZTEFA, no. 9, 1987, 1833-1834.
590. Rasulov, R.Ya. (FGPI). Ballistic linear photovoltaic effect in semiconductors with degenerate valence bands. Photon mechanism. IUZFA, no. 4, 1987, 52-55.
591. Rheinlaender, B.; Thielemann, W.; Oelgart, G.; Haefner, H.; Mitdank, R.; Heider, M.; Koch, F.; Jacobs, B. (). Properties of red light-emitting (Al,Ga)As single-heterostructure diodes. Part 2. Luminescence, injection, and photoeffect efficiencies (in English). PSSAB, v. A100, no. 1, 1987, 369-377. (RZFZA, 87/9L680).

592. Savitskiy, I.V.; Shpotyuk, O.I.; Kornelyuk, V.N.; Matkovskiy, A.O. (LvGU). Radiatively stimulated changes of the spectral transmission characteristics of arsenic selenide electrophotographic layers. ZNPFA, no. 4, 1987, 281-285.
593. Smirnov, G.I.; Telegin, G.G. (IAESOAN). Resonance radiation stabilization of ion and atomic beams. KVEKA, no. 9, 1987, 1909-1911.
594. Yegorov, S.Ye.; Letokhov, V.S.; Moskovets, Ye.V. (ISAN). Franz-Keldysh effect in the laser-stimulated field desorption of thin molecular layers. ZFPRA, vol. 46, no. 6, 1987, 233-235.

3. Laser Spectroscopy

595. Abramova, V.I.; Kitayev, V.F.; Sidorov, T.A.; Titova, T.V.; Fedorovich, V.Yu. (FIAN). Brillouin study on $\text{Na}(\text{sub}2)\text{O}:\text{CaO}:\text{SiO}(\text{sub}2)$ system glasses. KRSFA, no. 10, 1987, 58-59.
596. Abyzov, A.M.; Ivanova, Ye.A.; Smirnov, Ye.P. (LTI). Raman spectroscopy study on carbon graphite materials. IVNMA, no. 10, 1987, 1664-1668.
597. Akhmanova, M.V.; Galkina, I.P.; Ivanov, S.G.; Stroganova, N.S. (). Effect of the complexing of rare-earth ions in solutions on the sensitivity of an intracavity laser spectroscopy method. ZPSBA, vol. 47, no. 4, 1987, 559-563.
598. Akhmedzhanov, R.A.; Danilova, T.P.; Kapkanschchikov, O.V.; Polushkin, I.N.; Rostovtsev, Yu.V.; Shagiyeu, Yu.M.; Shcherbakov, A.I. (IPF). Errors in measuring the parameters of a plasma by intracavity laser spectroscopy. IPF. Preprint, no. 158, 1986, pp not given. (RZFZA, 87/9G502).
599. Aleksandrov, M.L.; Mel'tsin, A.L.; Lisitsyn, I.V.; Prakhov, S.S.; Sakhovskiy, S.Ye.; Smirnov, A.V.; Fedyayev, D.I. (IAP). Laser pulsed fluorescence spectrometer. ZPSBA, vol. 47, no. 4, 1987, 686-692.
600. Aleksandrov, Ye.B.; Zapasskiy, V.S. (). Magnetic resonance in noise from light scattering intensity. UFNAA, v. 153, no. 2, 1987, 363-364.
601. Aleksandrov, Yu.A.; Baryshnikov, Yu.Yu.; Zakharov, I.L.; Makin, G.I.; Terman, M.Yu. (NIIKhGGU). Study on the effect of the structure of vanadium dioxide films on their electrophysical properties. IVNMA, no. 9, 1987, 1572-1575.

602. Alekseyev, A.I.; Zhemerdeyev, O.V. (). Transient Raman scattering by impurity ions of amorphous matter. Poverkhnost' i efekty neodnorodnosti tverdogo tela. Moskva, 1987, 94-106. (RZFZA, 87/9L1283).
603. Alimov, O.K.; Ashurov, M.Kh.; Basiyev, T.T.; Kirpichenkova, Ye.O.; Murav'yev, V.V. (IOF). Transfer of electron excitation energy by impurity ions in disordered media. Selektivnaya lazernaya spektroskopiya aktivirovannykh kristallov i stekol. IOF. Trudy, no. 9, 1987, 50-147.
604. Alimov, O.K.; Basiyev, T.T.; Mirov, S.B. (IOF). Spectral and relaxation characteristics of local electron states of impurities in structurally disordered matrixes. Selektivnaya lazernaya spektroskopiya aktivirovannykh kristallov i stekol. IOF. Trudy, no. 9, 1987, 3-49.
605. Antsupov, Ye.V.; Ksandopulo, G.I.; Gershenzon, Yu.M. (IKhF). Study of the temperature dependency of the heterogeneous destruction of HO(sub2) radicals within a zone of atomic flames of alcohols by a laser magnetic resonance method. KHFID, no. 9, 1987, 1268-1271.
606. Apatin, V.M.; Lokhman, V.N.; Makarov, G.N. (). Structure of the spectra of the multiphoton infrared absorption of vibrationally excited SF(sub6) molecules cooled in a pulsed jet. OPSPA, vol. 63, no. 4, 1987, 762-768.
607. Arutyunyan, V.M.; Muradyan, A.Zh.; Petrosyan, L.S. (). Resonance change of the polarization of probe radiation in the field of an intense laser beam. ZPSBA, vol. 47, no. 4, 1987, 583-587.
608. Ashkalunin, A.L.; Valov, P.M.; Petrovskiy, G.T.; Tsekhomskiy, V.A. (). Optical development of a latent image in cuprous halide photochromic glass. DANKA, vol. 296, no. 6, 1987, 1363-1366.
609. Asimov, M.M.; Katarkevich, V.M.; Kovalenko, A.N.; Nikitchenko, V.M.; Novikov, A.I.; Rubinov, A.N.; Efendiyev, T.Sh. (). Spectral-luminescent and lasing characteristics of a new series of bifluorophoric laser dyes. OPSPA, vol. 63, no. 3, 1987, 606-609.
610. Badalyan, A.M.; Kovalevskiy, V.I.; Smirnov, G.I.; Shapiro, D.A. (). Measurements of magnetic field induction based on the use of nonlinear magneto-optical resonances. AVMEB, no. 5, 1987, 106-107.

611. Bagratashvili, V.N.; Ionov, S.I.; Letokhov, V.S.; Lokhman, V.N.; Makarov, G.N.; Stuchebryukhov, A.A. (NITSTLAN). Infrared photodissociation spectroscopy of vibrationally-overexcited molecules. ZETFA, vol. 93, no. 4, 1987, 1188-1198.
612. Basiyev, T.T.; Dergachev, A.Yu.; Kirpichenkova, Ye.O.; Orlovskiy, Yu.V.; Osiko, V.V. (IOF). Direct measurement of the speed of nonradiative relaxation and luminescence spectra from $(sup4)G(sub7/2)$, $(sup4)G(sub5/2)+(sup2)G(sub7/2)$, and $(sup4)F(sub9/2)$ levels of Nd³⁺ ions in LaF₃, SrF₂, and YAlO₃ laser crystals. KVEKA, no. 10, 1987, 2021-2023.
613. Bodrov, N.V.; Dobrova, T.Ye.; Nemets, A.M.; Oshemkov, S.V.; Petrov, A.A. (). Laser-fluorescence detection of low concentrations of metal atoms in a graphite cuvette. ZPSBA, vol. 47, no. 4, 1987, 563-568.
614. Bol'shov, M.A.; Zybin, A.V.; Koloshnikov, V.G.; Smirenkina, I.I. (). Laser atomic fluorescence analysis with vacuum electrothermal atomization (in Russian). APHUE, no. 1, 1987, 119-121. (RZFZA, 87/10L573).
615. Borisevich, N.A. (GOI). Spectroscopy of ultrafast processes in free complex molecules. GOI. Trudy, no. 197, 1987, 3-13. (RZFZA, 87/10L1005).
616. Borisevich, N.A.; Bolot'ko, L.M.; Kosnikov, A.Yu.; Raychenok, T.F. (). Paths of the degradation of the electron excitation energy of polyatomic vapors of molecules in the presence of oxygen. OPSPA, vol. 63, no. 4, 1987, 784-789.
617. Boytsov, A.A.; Gornushkin, I.B.; Daskalova, N.N.; Zil'bershteyn, Kh.I.; Razumeyenko, M.V. (). Spectral determination of impurities in titanium dioxide single crystals. ZPSBA, vol. 47, no. 4, 1987, 554-558.
618. Bulanin, M.O.; Burtsev, A.P.; Korotkov, S.A. (). Observation of the enhancement of the electronic polarizability of polyatomic molecules under vibrational excitation. OPSPA, vol. 63, no. 3, 1987, 467-469.
619. Bulatov, V.P.; Poroykova, A.I.; Sarkisov, O.M.; Khabarov, V.N. (IKhF). Intracavity laser spectroscopy study on the COS+OH yields SH+CO₂ reaction. KHFID, no. 10, 1987, 1408-1412.

620. Buldakov, M.A.; Korolev, B.V.; Matrosov, I.I.; Popova, T.N. (). Overtone bands in nitrogen and oxygen Raman spectra. OPSPA, vol. 63, no. 4, 1987, 775-777.
621. Bulyshev, A.Ye.; Preobrazhenskiy, N.G.; Suvorov, A.Ye. (ITPM). Interaction of resonance radiation with a plasma of multiply charged ions. DANKA, vol. 296, no. 1, 1987, 91-94.
622. Burmistrov, A.S.; Golubev, O.A. (). Double-wave intracavity method for measuring methane. ZPSBA, vol. 47, no. 4, 1987, 635-640.
623. Chaplygin, V.I.; Zorov, N.B.; Kuzyakov, Yu.Ya. (MGU). Laser atomic ionization determination of Rb and Cs impurities in extra pure alkali metals and their salts. ZVDLA, no. 9, 1987, 26-28.
624. Chepurnoy, V.A. (). Luminescence of O(sup-)(sub2) in LiF single crystals. OPSPA, vol. 63, no. 3, 1987, 552-556.
625. Darmanyany, A.P. (IKhF). Effect of the nature of the medium on the quantum yield from the generation of singlet oxygen by anthracene and the radiative lifetime of the (1)Delta(g) state of oxygen. KHFID, no. 9, 1987, 1192-1198.
626. Denisov, L.K.; Loshin, A.F.; Nikiforov, V.G.; Sterlyadkina, Ye.A. (). Atomic fluorescence analysis of matter, using flashlamp-pumped LZHI dye lasers as the excitation source. ZVDLA, no. 6, 1987, 34-37.
627. Denisov, V.P.; Fedoseyev, V.N.; Ivanov, V.S.; Chubukov, I.Ya. (LIYaF). Laser spectroscopy studies on the ground states of holmium and neodymium nuclei. LIYaF. Preprint, no. 1283, 1987, 3-22. (RZFZA, 87/10V179).
628. Dneprovskiy, V.S.; Klimov, V.I.; Novikov, M.G. (MGU). Influence of intraband thermalization on the time of radiative recombination of an electron hole plasma in CdS. DANKA, vol. 296, no. 4, 1987, 850-855.
629. Dolzhikov, Yu.S. (ISAN). Raman spectroscopy determination of the parameters of vibrational distribution of IR multiphoton excited molecules. ISAN. Preprint, no. 5, 1987, 1-28. (RZFZA, 87/10L1002).

630. Dzhurinskiy, B.F.; Zolin, V.F.; Tsaryuk, V.I.; Lysanova, G.V.; Komova, M.G.; Markushev, V.M. (IRE; IONKh). Spectra and structure of europium-activated lanthanide borate tungstates (molybdates). IVNMA, no. 9, 1987, 1525-1530.
631. Ehlert, J.; Jahnke, R.; Keusch, C.; Leupold, D.; Stiel, H.; Teuchner, K. (). ESER software to interpret measurement data from nonlinear absorption and emission spectroscopy (in German). Rept. Akad. Wiss. DDR. Karl-Weierstrass-Inst. Math., no. 1, 1987, 1-72. (RZFZA, 87/10L997).
632. Fabian, J. (Fabian, Yu.) (GDR); Krysanov, S.A.; Alfimov, M.V. (IKhF). Quantum chemical and picosecond studies on excited states of thioindigoid dyes. DANKA, v. 294, no. 3, 1987, 653-655.
633. Fadeyev, Yu.A.; Brutan, E.G. (). Spectroscopic study on rotational isomerism in nitriles. VINITI. Deposit no. 2114-V87, 24 March 1987. (IVUFA, no. 10, 1987, 123).
634. Gakamskiy, D.M.; Nemkovich, N.A.; Rubinov, A.N.; Tomin, V.I. (). Inhomogeneous broadening of the electron spectra of complex molecules in nonpolar solvents and powders. OPSPA, vol. 63, no. 3, 1987, 507-510.
635. Gaysenok, V.A.; Slobodyanyuk, A.I.; Fokht, Sh. (BGU). Concentration depolarization luminescence under stepped excitation. VBMFA, no. 2, 1987, 22-26. (RZFZA, 87/9L497).
636. Gladchenko, L.F.; Lobazov, A.F.; Mostovnikov, V.A.; Nechayev, S.V. (). Study on the spectral-luminescence characteristics of dimethylaminonaphthalenesulfonyl amino acids to optimize fluorometric detection in microcolumn chromatography. ZPSBA, v. 47, no. 3, 1987, 422-427.
637. Golovashkin, A.I.; Gorelik, V.S.; Ivanenko, O.M.; Mitsen, K.V.; Fayzulloev, T.F. (FIAN). Raman scattering of light in ceramics with octahedral oxygen groups. KRSFA, no. 10, 1987, 21-23.
638. Golubev, V.G.; Zhilyayev, Yu.V.; Ivanov-Omskiy, V.I.; Markaryan, G.R.; Osutin, A.V.; Chelnokov, V.Ye. (FTI). Photoelectric laser magnetospectroscopy of shallow donors in highly pure GaAs. FTPPA, no. 10, 1987, 1771-1777.

639. Gonchar, V.F.; Sharygin, L.M.; Vovk, S.M.; Barybin, V.I.; Smyshlyayeva, O.Yu.; Loguntsev, Ye.N. (). Change in the radial inhomogeneity of primary particles of hydrated tin dioxide under heat treatment. IVNMA, no. 7, 1987, 1166-1170.
640. Gorobchenko, V.S.; Dobrokhotova, V.K.; Naboykin, Yu.B.; Ogurtsova, L.A.; Pokrovskaya, F.S.; Chukanova, I.N. (). Characteristic properties of the radiation of anthracene-doped diphenyl crystals in the 1.6-45 K temperature range. OPSPA, vol. 63, no. 3, 1987, 560-564.
641. Gudyalis, V.V.; Dagis, S.P.; Slavenas, Yu.Yu.Yu. (VilGU). Dependence of the relaxation of the bleached state of 3274y dye on the intensity of excitation radiation. KVEKA, no. 9, 1987, 1863-1865.
642. Gurinovich, V.V.; Sagun, Ye.I.; Tsvirko, M.P. (). Kinetic absorption and electron paramagnetic resonance spectroscopy studies on the primary photoprocesses in haloidmethane solutions of chlorophyll-a. ZPSBA, vol. 47, no. 3, 1987, 465-469.
643. Izmaylov, A.Ch. (). Nonlinear magneto-optical phenomena in gases with an anomalous Zeeman effect (review). ZPSBA, vol. 47, no. 3, 1987, 359-374.
644. Kamalov, V.F.; Ladokhin, A.S.; Toleutayev, B.N. (MGU, IBANUK). Nanosecond intramolecular dynamics of melittin. DANKA, vol. 296, no. 3, 1987, 742-745.
645. Karimov, R.M.; Kruzhkov, S.N.; Safonov, V.V. (UAI). The ISD-1 pulsed synchronous detector. PRTEA, no. 2, 1987, 227.
646. Kazak, N.S.; Lugina, A.S.; Miklavskaya, Ye.M.; Nadenenko, A.V.; Pavlenko, V.K.; Sannikov, Yu.A. (). Infrared spectrometer based on an upconversion process with an intracavity nonlinear frequency converter. ZPSBA, vol. 47, no. 3, 1987, 441-448.
647. Khalilov, V.Kh.; Dorfman, G.A.; Karpov, L.G.; Pevnitskiy, I.V.; Zhakhov, V.V. (NIIKvSt). Mechanism in the formation of inhomogeneities in the index of refraction of quartz glass obtained by oxidation of SiCl_4 in a high-frequency plasma. FKSTD, no. 5, 1987, 721-726.
648. Kolobrodov, V.G.; Tymchik, G.S. (). Amplitude method to control the periodicity of spatial structures by means of a coherent optical spectrum analyzer. IVUBA, no. 6, 1987, 85-89. (RZFZA, 87/10L636).

649. Koroteyev, N.I. (MGU). Interference phenomena in coherent active spectroscopy of scattering and absorption of light. Holographic multidimensional spectroscopy. UFNAA, v. 152, no. 3, 1987, 493-520.
650. Koroteyev, N.I.; Medvedev, B.A.; Shtentsel', O. (GDR). (MGU). Active Raman spectroscopy of molecular complexes with strong optical nonlinearities. VMUFA, no. 5, 1987, 40-43.
651. Kosichkin, Yu.V.; Nadezhdinskiy, A.I.; Stepanov, Ye.V. (). Diode lasers in spectroscopy. Vrashchatel'nyye spektry molekul. NSSAM. Moskva, 1986, 5-60. (RZFZA, 87/9L1266).
652. Kozlov, P.V.; Losev, S.A.; Pavlov, V.A. (MGU). Wideband active Raman spectroscopy determination of the vibrational relaxation time of nitrogen in a shock wave. ZTEFA, no. 10, 1987, 2044-2046.
653. Lisitsa, M.P.; Gudymenko, L.F.; Gule, Ye.G.; Sergeyev, S.O. (). Pulse shapes in M and P photoluminescence bands of CdS and their mutual relation. UFIZA, no. 5, 1987, 666-670. (RZFZA, 87/10L456).
654. Lisitsa, M.P.; Silenko, V.V.; Khalimonova, I.N. (). Annealing effect using N-dye centers in gamma-irradiated LiF crystals. ZPSBA, vol. 47, no. 4, 1987, 656-661.
655. Loebe, K.; Boyn, R. (). Dye laser selective 4f-4f excitation of electroluminescent Sm³⁺ centers in ZnS films and crystals (in English). PSSBB, v. B140, no. 1, 1987, K91-K95. (RZFZA, 87/9L570).
656. Lomakin, A.V. (). Laser correlation spectroscopy study on internal dynamics of macromolecules. UFNAA, v. 153, no. 2, 1987, 360-362.
657. Maslennikov, N.M.; Sidorov, Yu.I. (). Investigation of the reflection of radiation from a rough silicon surface. OPSPA, vol. 63, no. 4, 1987, 827-831.
658. Matveyev, M.Yu.; Darmanyan, A.P. (IKhF). Determining the lifetime of singlet oxygen by the damping kinetics of its luminescence after laser flash in amorphous polymer films. IASKA, no. 7, 1987, 1484-1488.
659. Mel'nik, N.N.; Tsapenko, L.M. (ISAN). Raman spectra of 2Ln(sub2)O(sub3) 9TiO(sub2) compounds (where Ln=Ce, La, Nd, Pr, Sm, Eu, Gd, Tm, Yb, Tb). IVNMA, no. 10, 1987, 1753-1755.

660. Mikla, V.I.; Stefanovich, V.A.; Semak, D.G.; Slivka, V.Yu. (). Raman spectra in reversible photostimulated conversions. UFIZA, no. 5, 1987, 682-685. (RZFZA, 87/10L370).
661. Miksyuk, Yu.I.; Gulis, I.M.; Gorbatshevich, S.K. (BGU). Effect of intermolecular interactions on the proton phototransfer reaction in 3-methoxybenzanthrone polar solutions. VBMFA, no. 2, 1987, 26-30. (RZFZA, 87/9L499).
662. Minayev, N.S.; Mudryy, A.V.; Nemtsevich, M.P.; Patuk, A.I. (). Photoluminescence of irradiated silicon-germanium solid solutions. ZPSBA, vol. 47, no. 4, 1987, 593-597.
663. Mishin, V.I.; Fedoseyev, V.N. (). Laser resonance photoionization spectroscopy of excited and autoionization atomic states of rare-earth elements. II. Gadolinium. OPSPA, vol. 63, no. 4, 1987, 710-713.
664. Mittova, I.Ya.; Pukhova, V.V.; Semenov, V.N.; Verevkina, Zh.A. (VGU). Oxidation of GaAs with a PbS layer on its surface [studied by laser mass-spectrometry]. IVNMA, no. 5, 1987, 717-720.
665. Modric, D.; Pichler, G. (). Collision induced fluorescence of the lowest triplet transition in sodium dimer. Physics of Ionized Gases. CSSSPIGa, 13th, Sibenik, 1-5 Sep 1986. Contributed Papers (all in English). Beograd University, 1986, 385-388. (RZFZA, 87/9L451).
666. Movsesyan, M.Ye.; Shmavonyan, S.V. (). Effect of collisions on stimulated electron Raman scattering and parametric scattering processes in rubidium vapors. OPSPA, vol. 63, no. 3, 1987, 520-522.
667. Nadezhdinskiy, A.I. (). Diode laser spectroscopy of the ν_3 vibrational-rotational band of the SiF_4 molecule. Vrashchatel'nyye spektry molekul. NSSAM. Moskva, 1986, 61-101. (RZFZA, 87/9L1271).
668. Nemets, V.M.; Petrov, A.A.; Solov'yev, A.A. (). Using Raman spectroscopy to analyze inorganic gases (review). ZPSBA, vol. 47, no. 4, 1987, 536-549.
669. Nikonenko, Ye.A.; Nirsha, B.M.; Marenkova, I.N.; Reznikova, L.A. (UrPI). Thermal dehydration of $\text{Mn}_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$. IVNMA, no. 9, 1987, 1516-1520.

670. Noskin, V.A. (). Laser correlation spectroscopy of quasi-elastic scattering. UFNAA, v. 153, no. 2, 1987, 358-360.
671. Novodvorskiy, O.A.; Ilyukhin, A.B.; Kuzyakov, Yu.Ya. (). Determining the coefficients of ambipolar diffusion of ions by laser optogalvanic spectroscopy of gas-air illuminating flames. ZPSBA, v. 47, no. 3, 1987, 385-388.
672. Pegar'kov, A.I.; Rapoport, L.P. (). Absorption of laser light by a diatomic molecule under double resonance. OPSPA, vol. 63, no. 3, 1987, 501-506.
673. Perekhozheva, T.N.; Sharygin, L.M.; Vovk, S.M. (). Reversibility of the exchange of alkali-earth elements in hydrated tin and titanium oxides. IVNMA, no. 9, 1987, 1491-1494.
674. Rebane, I. (). Increasing the resolving power of photo spectral hole burning by two-step hole burning. ETFMB, no. 2, 1987, 204-207. (RZFZA, 87/10L996).
675. Romanovskiy, Yu.V.; Kulikov, S.G.; Personov, R.I. (). Retarded fluorescence spectra and kinetics of organic molecules in solid solutions under selective pulsed excitation (in Russian). APHUE, no. 1, 1987, 95-98. (RZFZA, 87/10L448).
676. Ryl'kov, V.V.; Cheshev, Ye.A. (). Intercombination conversion from highly excited states of xanthene dyes. Interpretation of spectra and the role of ionic pairs. OPSPA, vol. 63, no. 4, 1987, 778-783.
677. Salayev, E.Yu.; Askerov, I.M.; Kadzhar, Ch.O.; Mamedbeyli, I.A. (). Photostimulated absorption in semi-insulating GaAs[Cr]. FTPPA, no. 9, 1987, 1664-1668.
678. Samokhvalov, A.A.; Loshkareva, N.N.; Sukhorukov, Yu.P.; Kladov, G.K.; Kurnosov, I.V. (GOI). Magnetic semiconductors - magnetooptic materials for infrared technology. OPMPA, no. 10, 1987, 18-21.
679. Shashkova, I.L.; Lyutsko, V.A.; Prodan, Ye.A. (IONKhANB; BGU). Synthesis and identification of $K(\text{sub}2)H(\text{sub}3)P(\text{sub}3)O(\text{sub}10)2H(\text{sub}2)O$. IVNMA, no. 6, 1987, 986-991.
680. Shilkina, T.Yu.; Gorbunova, L.G.; Vasil'yeva, I.G. (INKh). Synthesis and properties of neodmium disulfide. IVNMA, no. 7, 1987, 1103-1106.

681. Stavitskaya, G.P.; Ryskin, Ya.I. (IKhS). Structure and vibrational spectrum of OH ions in basic and amphoteric hydroxide crystals. IVNMA, no. 6, 1987, 869-879.
682. Tagiyev, B.G.; Zolin, V.F.; Niftiyev, G.M.; Briskina, Ch.M.; Markushev, V.M.; Abushov, S.A.; Aydayev, F.Sh. (). Radiation from Pr^{3+} in GaS single crystals. OPSPA, vol. 63, no. 3, 1987, 557-559.
683. Tyurin, A.G.; Dubenskov, P.I.; Zhuravleva, T.S.; Tsarevskiy, A.V.; Vannikov, A.V. (IELAN). Effect of the addition of rhodamine 6G on the transport of charge carriers in poly-N-epoxypropylcarbazole films. KHFID, no. 9, 1987, 1236-1242.
684. Vasil'yeva, I.G.; Dronova, G.N. (INKh). Using the p(partial)-T phase diagram to obtain $\text{La}(\text{sub}2)\text{S}(\text{sub}3)$ ceramics. IVNMA, no. 8, 1987, 1382-1385.
685. Venediktov, Ye.A.; Perfil'yev, V.A.; Berezin, B.D. (). Quenching of the photosensitized luminescence of singlet molecular oxygen by 1.4 diaminoanthraquinone in solutions. OPSPA, vol. 63, no. 3, 1987, 680-681.
686. Verevkin, Yu.K.; Teryshnik, A.D. (). Obtaining of the structureless wideband spectrum of the stimulated emission of a pulsed source. OPSPA, vol. 63, no. 4, 1987, 859-862.
687. Vigasin, A.A. (). Spectroscopic methods to estimate the dissociation energy of weakly bound complexes. Vrashchatel'nyye spektry molekul. NSSAM. Moskva, 1986, 170-187. (RZFZA, 87/9L252).
688. Voron'ko, Yu.K.; Zufarov, M.A.; Osiko, V.V.; Sobol', A.A. (IOF). New aspects of phase formation in $\text{HfO}(\text{sub}2)\text{-Ln}(\text{sub}2)\text{O}(\text{sub}3)$ systems. IVNMA, no. 6, 1987, 958-963.
689. Yermakov, V.P.; Cherepanov, V.A. (). Computer-controlled picosecond spectrometer. Avtomatizatsiya fizicheskogo eksperimenta. IFSOAN. Krasnoyarsk, 1987, 51-59. (RZRAB, 87/10Ye235).
690. Zasavitskiy, I.I.; Matveyenko, A.V.; Matsonashvili, B.N.; Trofimov, V.T. (FIAN). Phononless absorption spectrum of $\text{Pb}(\text{sub}1\text{-x})\text{Sn}(\text{sub}x)\text{Te}[\text{In}]$ and the dependence of epitaxial-layer photoconduction on thickness. FTPPA, no. 10, 1987, 1789-1795.

691. Zhiglinskiy, A.G.; Kuznetsov, I.V.; Ryazanov, N.S. (). Investigation of the possibility of the realization of laser intracavity spectrointerferometry under a high duration of cw lasing. OPSPA, vol. 63, no. 4, 1987, 870-875.
692. Zhizhin, G.N.; Krasnyukov, Yu.N.; Mukhtarov, E.I.; Sidorov, N.V. (ISAN). Low-frequency Raman spectrum analysis of phase transition in phenanthrene crystals. ISAN. Preprint, no. 6, 1987, 35 p. (RZFZA, 87/10Ye865).

J. BEAM-TARGET INTERACTION

1. Miscellaneous Targets

693. Albrecht, H.; Hohmann, H.; Radloff, W. (). Method for fabricating carbon films from the gas phase. Patent GDR, no. 242060, 14 Jan 1987. (RZRAB, 87/9Ye337).
694. Atamanenko, B.A.; Belyy, M.U.; Drozd, P.I.; Tsebulya, G.G.; Shaykevich, I.A. (KGU). Optical properties of zirconium nitride. IVNMA, no. 6, 1987, 1037-1040.
695. Bagdasarov, Kh.S.; Ryabchenkov, V.V. (). Growing of rare-earth titanate single crystals by laser heating and their luminescence spectrum analysis. Segnetoelektriki i p'yezoelektriki. Kalinin, 1987, 38-40. (RZFZA, 87/9L720).
696. Basov, N.G.; Mazur, M.Yu.; Maksimchuk, A.M.; Mikhaylov, Yu.A.; Sklizkov, G.V.; Fedotov, S.I. (FIAN). Dynamics of shock waves formed in a low-density gas during laser heating of a plasma. ZFPRA, vol. 46, no. 8, 1987, 320-322.
697. Belov, N.N. (). Structure of the optical field inside spheres and thermal explosion of particles. FGVZA, no. 4, 1987, 44-48.
698. Belov, N.N. (NIFKhI). Breaking up of quartz particles in a laser beam. KOZHA, no. 5, 1987, 987-990.
699. Chokoyev, E.S.; Zheyenbayev, Zh.Zh.; Abdylidayev, O.T. (). Scattering of laser radiation by finely dispersed particles in a plasma flare from marble. INKSA. Fiziko-tekhnicheskiye i matematicheskiye nauki, no. 1, 1987, 27-30. (RZFZA, 87/9L1242).

700. Danilovich, N.I.; Demchuk, A.V.; Nemchenok, A.S.; Polonin, A.K. (). Study on deformations in plates under laser recrystallization of multilayer silicon structures. DEFKA, no. 3, 1987, 83-87. (RZFZA, 87/9Ye995).
701. Glytenko, A.L.; Lyubov, V.Ya. (). Determination of a temperature field by the Laplace-Carson method during the surface heating of a cylindrical solid by a heat source moving along a helix. FKOMA, no. 5, 1987, 45-49.
702. Golovashkin, A.I.; Krasnosvobodtsev, S.I.; Pechen', Ye.V.; Rodin, V.V. (FIAN). Properties of films and coatings based on lanthanum and yttrium ceramic. KRSFA, no. 9, 1987, 39-41.
703. Ivashchenko, M.I.; Panov, V.P. (). Method for laser materials processing. OTIZD, no. 10, 1987, 1296344. (RZRAB, 87/9Ye317).
704. Kervalishvili, P.D.; Kuteliya, E.R.; Burkhanov, G.S.; Kuz'mishchev, V.A.; Sdobyrev, V.V.; Dement'yev, V.A. (). Effect of laser radiation on the surface structure of boron carbide crystals, obtained by plasma-arc welding. FKOMA, no. 5, 1987, 91-93.
705. Klimenko, I.B.; Platonova, I.V.; Grachev, V.I.; Vinogradov, B.A.; Arbuzov, V.R. (). Effect of preliminary laser irradiation on the process of oxidation destruction of polyacrylonitrile. VYSSA, v. A29, no. 5, 1987, 982-987. (RZFZA, 87/9Ye985).
706. Kogan, A.M.; Margulis, V.A.; Mirkin, L.I.; Filina, L.I. (). Growth of a film as a result of the condensation of a gas flow during the volatilization of materials by laser radiation. FKOMA, no. 5, 1987, 153-155.
707. Koldunov, M.F.; Manenkov, A.A.; Pokotilo, I.L. (IOF). Theory of laser destruction of transparent media initiated by absorbing inclusions: photoionization instability and time statistics of destruction. IOF. Preprint, no. 143, 1987, 1-20. (RZFZA, 87/10L962).
708. Kononenko, V.G.; Nazarenko, V.G.; Shcherbina, K.G. (KhGU; KhADI). Evolution of dislocation structures in near-surface layers of single crystals under high-temperature annealing. IVUFA, no. 9, 1987, 48-52.
709. Meshkovskiy, I.K.; Safin, V.M.; Stepanov, V.Ye. (LITMO). Improving the radiation resistance of porous optical elements. PZTFD, no. 19, 1987, 1158-1161.

710. Moiseyenko, I.F.; Glebovskiy, A.A.; Lisachenko, A.A. (). Interaction between laser radiation and metal and dielectric surfaces (from analytical data of primary products of laser desorption). PFKMD, no. 7, 1987, 116-124. (RZFZA, 87/10Ye1126).
711. Orlov, V.Yu.; Druzhinin, A.A. (NIFKhI). Sublimation of low-temperature matrices containing a vibrationally excited component. KVEKA, no. 9, 1987, 1900-1902.
712. Rozniakowski, K.; Drobnik, A.; Lipinski, A. (). Possible use of liquid crystals to visualize temperature maps evoked by laser radiation (in English). OPAPB, no. 3, 1986, 253-258. (RZRAB, 87/9Ye254).
713. Veselovskiy, I.A. (FIAN). Effect of change in reflectivity during melting on the shape of a photoacoustic signal. KRSFA, no. 10, 1987, 15-17.
714. Yemel'yanov, V.I.; Konov, V.I.; Seminogov, V.N.; Tokarev, V.N. (IOF). Formation of surface periodic structures under the action of pulsed CO₂ laser radiation on fused quartz. IOF. Preprint, no. not given, 1987, 37 p. (RZFZA, 87/10Ye1196).
715. Zheyenbayev, Zh.Zh.; Sukenbayev, A.S.; Chokoyev, E.S. (). Interaction of infrared laser radiation with synthetic diamonds. FKOMA, no. 5, 1987, 146-148.
716. Zhvavyy, S.P.; Sadovskaya, O.L. (IEANBel). Phase transitions in nanosecond laser annealing of silicon. PZTFD, no. 19, 1987, 1171-1176.

2. Metal Targets

717. Akimov, A.G.; Bonch-Bruyevich, A.M.; Gagarin, A.P.; Dorofeyev, I.A.; Dorofeyev, V.G.; Kazanskiy, L.P.; Libenson, M.N.; Pudkov, S.D.; Shirokov, V.F. (). Vapor-phase mechanism of the laser oxidation of metals. PZTFD, no. 18, 1987, 1093-1098.
718. Arutyunyan, R.V.; Baranov, V.Yu.; Baranov, G.A.; Bol'shov, L.A.; Glukhikh, V.A.; Zinchenko, A.K.; Kanevskiy, M.F.; Malyuta, D.A.; Pis'mennyy, V.D.; Podtykan, F.P.; Sebrant, A.Yu.; Stepanova, M.A. (IAE). Study on the dynamics of low-threshold optical breakdown plasmas by c-w and periodic pulsed CO₂ laser radiation in various gases. IAE. Preprint, no. 4412/12, 1987, 3-20. (RZRAB, 87/10Ye416).

719. Arutyunyan, R.V.; Baranov, V.Yu.; Bol'shov, L.A.; Vityukov, V.V.; Yevstratov, Ye.V.; Kiselev, V.P.; Kovalevich, A.M.; Podol'skiy, B.S.; Stepanov, Yu.Yu. (IAE). Processes in stirring of melts under Nd laser doping of metals from gas media. IAE. Preprint, no. 4440/7, 1987, 1-16. (RZFZA, 87/10L1026).
720. Arzuov, M.I.; Dzhumabekov, Zh.I.; Konov, V.I.; Ral'chenko, V.G.; Chapliyev, N.I. (IOF). Laser etching of tungsten in air. KRSFA, no. 9, 1987, 22-24.
721. Arzuov, M.I.; Dzhumabekov, Zh.I.; Konov, V.I.; Ral'chenko, V.G.; Chapliyev, N.I.; Shub, V.E. (IOF). Laser drilling of metals underwater. PZTFD, no. 17, 1987, 1055-1058.
722. Babey, Yu.I.; Batashov, K.V.; Beletskiy, V.V.; Berezhnitskaya, M.F.; Ivanov, S.A.; Chervatyuk, V.A. (FMIANUKr). Laser thermal hardening of small-diameter shafts of rehardened steels. FKMA, no. 4, 1987, 87-89.
723. Bartenev, O.A.; Khamitov, V.A. (). Using acoustic emission to study phase transitions in alloys [including monitoring of laser welding]. ZVDLA, no. 6, 1987, 37-45.
724. Beklemyshev, V.I.; Makarov, V.V.; Makhonin, I.I.; Petrov, Yu.N.; Prokhorov, A.M.; Pustovoy, V.I. (IOF). Photodesorption of metal ions in a semiconductor-water system. ZFPRA, vol. 46, no. 7, 1987, 275-278.
725. Bunkin, F.V.; Kirichenko, N.A.; Luk'yanchuk, B.S. (). Structures under laser oxidation of metals. UFNAA, v. 152, no. 1, 1987, 162-165.
726. Chaplanov, A.M.; Shibko, A.N.; Dyakov, T.; Mladenov, G. (). Action of pulsed laser and e-beam irradiation on aluminum thin films. PFKMD, no. 5, 1987, 64-67. (RZFZA, 87/9Ye1001).
727. Dubnyakov, V.N. (NATI). Laser surface hardening of copper alloys. MTOMA, no. 9, 1987, 52-56.
728. Dubnyakov, V.N.; Malysheva, I.B. (). Study on the chemical composition distribution in the metal processing zone of laser radiation. VINITI. Deposit, no. 8350-V86, 5 Dec 1986, 14 p. (EOBMA, no. 4, 1987, 88).

729. Golubtsov, A.A.; Pilipetskiy, N.F.; Sudarkin, A.N.; Chudinov, A.N. (IPMe). Angular dependence of the threshold and morphology of laser damage on thin silver films in frustrated total internal reflection geometry. DANKA, vol. 296, no. 4, 1987, 846-850.
730. Grigor'yants, A.G.; Safonov, A.N.; Mayorov, V.S.; Baskov, A.F.; Ivashov, G.P. (MVTU; NITsTLAN). Distribution of residual stresses in the surface of c-w CO₂ laser-hardened steels. MTOMA, no. 9, 1987, 45-49.
731. Kashchuk, O.L.; Dubnyakov, V.N. (). Effect of the nature of an absorbing coating under laser processing, on the structure of hardened zones. VINITI. Deposit, no. 8351-V86, 5 Dec 1986, 11 p. (EOBMA, no. 4, 1987, 88).
732. Kremnev, L.S.; Kholodnov, Ye.V.; Vladimirova, O.V. (). Selection of steels receptive to laser hardening. MTOMA, no. 9, 1987, 49-52.
733. Kul'batskiy, Ye.B.; Selishchev, S.V. (). Effect of the angle of incidence of a beam on the action of a near-surface laser plasma using graphite. FKOMA, no. 5, 1987, 24-26.
734. Markeyev, A.M.; Nevolin, V.N.; Fominskiy, V.Yu. (). Nanosecond laser alloying of metal materials. FKOMA, no. 5, 1987, 14-23.
735. Narva, V.K.; Loshkareva, N.S.; Kryanina, M.N.; Shurenkov, Ye.P. (MISIS; VNIITS). Laser processing of sintered TiC-steel alloys MTOMA, no. 10, 1987, 57-59.
736. Tutunaru, M.; Tatar, D.; Mihailescu, I.N. (). Change of the nature of skin absorption during CO₂ laser beam irradiation of a metallic target (in English). OPAPB, no. 3, 1986, 209-214. (RZFZA, 87/9L1253).
737. Uglov, A.A.; Smurov, I.Yu.; Gus'kov, A.G. (IMET). Thermocapillary convection in fusible metals. TVYTA, no. 4, 1987, 720-725.

3. Dielectric Targets

4. Semiconductor Targets

738. Armenski, S.; Balashev, I. (). Damage to glassy chalcogenide semiconductors under the action of pulsed laser radiation (in Bulgarian). *Godishnik na visshite uchebni zavedeniya. Tekhnicheski fizika*, no. 3, 1985(1986), 29-36. (RZFZA, 87/10Yel205).
739. As, D.J.; Palmtshofer, L.; Langer, J.M. (). Laser annealing and photoinduced sublimation in compound semiconductors (in English). *ATPLB*, v. A71, no. 3, 1987, 363-367. (RZFZA, 87/10Yel206).
740. Bal'trameyunas, R.A.; Galyatskas, A.A.; Gashka, R.I.; Nyatikshis, V.V.; Pyatrauskas, M.B.; Zhilinskas, E.V. (VilGU). Effect of laser annealing on the kinetic characteristics of ion-implanted gallium arsenide. *LitNIINTI. Deposit*, no. 1864-Li87, 13 Apr 1987, 8 p. (RZFZA, 87/9Ye997).
741. Bazakutsa, V.A.; Gnidash, N.I.; Perekrestov, V.I.; Lazarev, V.B.; Salov, A.V.; Trippel', A.F. (KhPI). Photoelectric properties of semiconductor phases in $A(\text{sub}2)(\text{supI})C(\text{supVI})-B(\text{sub}2)(\text{supV})C(\text{sub}3)(\text{supVI})$ systems where $A(\text{supI})=\text{Li, Na, K, Rb, Cs}$; $B(\text{supV})=\text{As, Sb, Bi}$; and $C(\text{supVI})=\text{S, Se, Te}$. *IVNMA*, no. 7, 1987, 1144-1147.
742. Bazhenov, V.V.; Bonch-Bruyevich, A.M.; Libenson, M.N.; Makin, V.S. (). Origin and ordering of a surface relief under heating and polishing of a surface by intense light. *PZTFD*, no. 20, 1987, 1235-1239.
743. Bedilov, M.R.; Baymuradov, M.M.; Khabibullayev, B.K. (IYaFANUz; TashGPI). Multiply charged silicon ions induced by laser radiation. *IUZFA*, no. 4, 1987, 74-77.
744. Boltunov, V.N.; Ivanov, V.A. (). Formation of defects in zinc telluride under the action of cw-laser and incoherent radiation. *ZPSBA*, vol. 47, no. 4, 1987, 579-582.
745. Budyanu, V.A. (). Spectral diagnostics of laser vaporization of semiconductor targets. *Kinetika neodnorodnykh protsessov v primesnykh poluprovodnikakh i poluprovodnikovyykh priborakh*. Kishinev, 1987, 64-81. (RZFZA, 87/9L1245).
746. Budzulyak, I.M.; Danilevich, O.I.; Zolotarev, S.V.; Korbutyak, D.V.; Litovchenko, V.G.; Pavlyuk, V.I. (IPANUK). Exciton spectra of CdTe thin films obtained by laser sputtering. *FTVTA*, no. 9, 1987, 2825-2828.

747. Bugayev, A.A.; Zakharchenya, B.P.; Kiselev, Yu.B.; Lukoshkin, V.A. (FTI). Influence of the microroughness of a surface on the induced absorption value in Si and GaAs under picosecond excitation. DANKA, vol. 296, no. 5, 1987, 1098-1100.
748. Galkin, G.N.; Yepifanov, M.S.; Mustayev, P.T.; Sergeyev, P.B. (). Measurement of the rate of recombination in n(sup+)-p junctions obtained by ion implantation and laser annealing. FTPPA, no. 9, 1987, 1719-1721.
749. Gaponov, S.V.; Kalyagin, M.A.; Strikovskiy, M.D. (IPF). Formation of defect complexes during the stimulated diffusion of phosphorus into silicon. FTPPA, no. 9, 1987, 1642-1647.
750. Kiyak, S.G.; Bonchik, A.Yu.; Gafiychuk, V.V.; Yuzhanin, A.G. (). Formation of regular relief on the surface of semiconductors under the action of millisecond laser pulses. UFIZA, no. 7, 1987, 1079-1083. (RZFZA, 87/10Yel202).
751. Kotlyarchuk, B.K.; Popovich, D.I.; Pentko, V.Ya. (IPPM). Study on the characteristics of an erosive plasma flare formed under laser sputtering of cadmium-mercury telluride films. ZTEFA, no. 9, 1987, 1824-1826.
752. Kushkimbayeva, B.Zh.; Matveyev, B.A.; Stus', N.M.; Talalakin, G.N.; Filipchenko, A.S.; Chaykina, Ye.I. (FTI). Photoluminescence of plastically deformed p-type GaSb. FTPPA, no. 10, 1987, 1914-1915.
753. Lukiyan, L.N. (). Properties of metal contacts to silicon and A(sup3)B(sup5) compounds obtained by laser heating. Kinetika neodnorodnykh protsessov v primesnykh poluprovodnikakh i poluprovodnikovyykh priborakh. Kishinev, 1987, 95-101. (RZFZA, 87/9L1324).
754. Rudenko, K.V.; Zhuk, S.V.; Gromov, G.G. (MITKhT). Characteristic properties of the laser annealing of indium antimonide in liquid nitrogen. FTPPA, no. 10, 1987, 1750-1755.
755. Selishchev, S.V.; Byalyy, A.V. (). Effect of the pressure of argon on the morphology of a surface of silicon under the action of laser radiation. FKOMA, no. 5, 1987, 88-90.

K. PLASMA GENERATION AND DIAGNOSTICS

756. Alferov, G.N.; Babin, S.A.; Drachev, V.P. (). Nonlinear dispersion interferometry of an argon laser plasma. OPSPA, vol. 63, no. 3, 1987, 594-599.
757. Alferov, G.N.; Drachev, V.P.; Kuznetsov, E.A.; Mezentsev, V.K.; Nesterikhin, Yu.Ye.; Smirnov, G.I. (). Self-action effects of a stationary high-current discharge plasma. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 2. Kiyev, Naukova dumka, 1987, 224-227. (RZFZA, 87/10G387).
758. Andreyev, A.A.; Samsonov, A.G.; Solov'yev, N.A. (). Heating and compression of spherical cladding targets by high-intensity laser radiation. KVEKA, no. 9, 1987, 1873-1882.
759. Arkhipenko, V.I.; Budnikov, V.N.; Gusakov, Ye.Z.; Savel'yev, A.N.; Simonchik, L.V. (FTI). Experimental investigation of the mechanism of the absolute parametric instability of a nonhomogeneous plasma. ZETFA, vol. 93, no. 4, 1987, 1221-1234.
760. Artsimovich, V.L.; Gaponov, S.V.; Kas'yanov, Yu.S.; Luskin, B.M.; Salashchenko, N.N.; Sobel'man, I.I.; Shevel'ko, A.P. (FIAN). Formation of directional intense vacuum ultraviolet radiation from a laser plasma. ZFPRA, vol. 46, no. 8, 1987, 311-314.
761. Bakhvalov, N.S.; Borovskiy, A.V.; Korobkin, V.V.; Chikhonkov, Ye.V.; Eglit, M.E. (IOF). Heating and nonequilibrium thermal ionization of a plasma by short laser pulses. IOF. Preprint, no. 166, 1987, 3-21. (RZFZA, 87/10G228).
762. Barkhudarov, E.M.; Gelashvili, G.V.; Gumberidze, G.G.; Taktakishvili, M.I. (IFANG). Efficiency of the conversion of laser radiation into electric energy. KVEKA, no. 9, 1987, 1906-1908.

763. Basov, N.G.; Allin, A.P.; Bykovskiy, N.Ye.; Vasin, B.L.; Valuyev, A.D.; Gromov, A.I.; Gus'kov, S.Yu.; Danilov, A.Ye.; Zakharenkov, Yu.A.; Ivanov, V.V.; Kalashnikov, M.P.; Koreshev, Ye.R.; Kruglov, B.V.; Korn, G.; Kuchinskiy, A.G.; Kush, S. (Kusch, S.); Lisunov, V.V.; Merkul'yev, Yu.A.; Mikhaylov, Yu.A.; Nikitenko, A.I.; Nikles, P. (Nickles, P.); Orlov, V.V.; Osipov, M.V.; Osetrov, V.P.; Rayneke, V. (Reinecke, W.); Riker, R.; Rode, A.V.; Rozanov, V.B.; Rupasov, A.A.; Savchenko, S.M.; Senatskiy, Yu.V.; Sklizkov, G.V.; Solodkov, V.M.; Fedotov, S.I.; Khitrov, A.L.; Tsygankov, A.A.; Chaushanskiy, S.A.; Shelobolin, A.V.; Shennagel', Kh. (Schoennagel, H.); Shikanov, A.S.; Shpilevoy, B.N.; Shcherbakov, A.A.; Yunge, K. (Junge, K.); Yakushev, A.K. (FIAN). The Del'fin laser thermonuclear facility: the complex in action and trends in development. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 3-88.
764. Basov, N.G.; Belousov, N.I.; Grishunin, P.A.; Kalmykov, Yu.K.; Lebo, I.G.; Rozanov, V.B.; Sklizkov, G.V.; Subbotin, V.I.; Finkel'shteyn, K.I.; Kharitonov, V.V.; Sherstnev, K.B. (FIAN). Hybrid reactor based on laser fusion. KVEKA, no. 10, 1987, 2068-2081.
765. Basov, N.G.; Danilov, A.Ye.; Mikhaylov, Yu.A.; Sklizkov, G.V.; Fedotov, S.I. (FIAN). Systems to concentrate radiation in laser thermonuclear devices. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 89-119.
766. Basov, N.G.; Danilov, A.Ye.; Orlov, V.V.; Savchenko, S.M.; Fedotov, S.I.; Khitrov, A.L. (FIAN). Spatial coherence and brightness properties of high-power laser beams [for laser fusion]. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 120-124.
767. Basov, N.G.; Vergunova, G.A.; Volosevich, P.P.; Gamaliy, Ye.G.; Gus'kov, S.Yu.; Yevseyev, G.A.; Levanov, Ye.I.; Maslyankin, V.I.; Rozanov, V.B.; Samarskiy, A.A. (FIAN). Transformation of laser radiation in thermal self-radiation of a plasma. KVEKA, no. 9, 1987, 1887-1893.

768. Bedilov, M.R.; Ishmuratov, A.N.; Khabibullayev, B.K. (IYaFANUz). Kinetic ion-electron emission under the action of multicharged ions from a laser plasma. IYaFANUz. Preprint, no. R-6-249, 1986, pp not given. (RZFZA, 87/9Zh623).
769. Bedilov, M.R.; Sultanov, Sh.D.; Khabibullayev, B.K.; Kholbayev, A. (IYaFANUz). Role of secondary processes in the formation of mass-spectra of recombining plasmas. IYaFANUz. Preprint, no. R-6-229, 1987, 1-11. (RZFZA, 87/10G249).
770. Bedilov, M.R.; Sultanov, Sh.D.; Khabibullayev, B.K.; Kholbayev, A. (IYaFANUz). Mass spectrometer research on a three-component laser plasma of iron group elements. IUZFA, no. 5, 1987, 93-99.
771. Bel'kov, S.A.; Zaretskiy, A.I.; Kirillov, G.A.; Kochemasov, G.G.; Maslov, N.V.; Murugov, V.M.; Okutin, G.P.; Petrov, S.I.; Senik, A.V.; Sukharev, S.A. (). Study on compression of spherical targets containing DT fuel and neon. Voprosy atomnoy nauki i tekhniki. Termoyadernyy sintez, no. 2, 1987, 28-30. (RZFZA, 87/9G194).
772. Borisenko, N.G.; Dorogotovtsev, V.M.; Isakov, A.I.; Merkul'yev, Yu.A.; Mikhaylov, Yu.A.; Nikitenko, A.I.; Fedotov, S.I. (FIAN). Superlattice of microscopic inhomogenities in the material of a laser target and the stability of a plasma during spherical compression. KRSFA, no. 10, 1987, 9-11.
773. Bulyshev, A.Ye.; Preobrazhenskiy, N.G.; Suvorov, A.Ye. (ITPM). Interaction of resonance radiation with multicharged hydrogen-like ions in a dense plasma. FIPLD, no. 10, 1987, 1221-1225.
774. Bychenkov, V.Yu.; Silin, V.P. (). Hydrodynamic instability of a laser-produced plasma with ion-acoustic turbulence. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 1. Kiyev, Naukova dumka, 1987, 260-262. (RZFZA, 87/9G190).
775. Bykovskiy, N.Ye.; Denus, S.; Dubik, A.; Ovsik, Ya.; Lisunov, V.V.; Senatskiy, Yu.V.; Fedotov, S.I. (FIAN). Using Faraday rotation to suppress reflected radiation from a target in the optical path of a laser device. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 125-129.

776. Bykovskiy, Yu.A.; Kozyrev, Yu.P.; Kolesov, I.V.; Kutner, V.B.; Pasyuk, A.S.; Peklenkov, V.D.; Oblizin, A.N.; Uziyenko, D.A.; Aleynikov, V.S. (OIYaI). Physical features in using a laser plasma as a source of multicharged ions for cyclotrons. FIPLD, no. 10, 1987, 1240-1245.
777. Bykovskiy, Yu.A.; Vinogradov, V.G.; Kozyrev, Yu.P.; Pasyuk, A.S.; Peklechkov, V.D.; Pronin, N.V.; Stetsenko, S.G.; Suvorov, K.G. (OIYaI). Using a magnetic barrier to improve the efficiency of a laser ion source. OIYaI. Soobshcheniye, no. R9-87-365, 1987, 1-8. (RZFZA, 87/10G464).
778. Derzhiyev, V.I.; Zhidkov, A.G.; Mayorov, S.A.; Chekmezov, A.N.; Yakovlenko, S.I. (IOF). Radiation transfer in resonance lines of hydrogen-like ions in a planar layer of a disintegrating plasma. Exact solution and escape factor. IOF. Preprint, no. 164, 1987, 3-47. (RZFZA, 87/10G40).
779. Izosimov, I.N.; Pulyshv, V.V. (). Hanle effect in pulsed laser vaporization. Yadernaya spektroskopiya i struktura atomnogo yadra. CSYaSSAt, 37th, Yurmala, 14-17 Apr 1987. Tezisy dokladov. Yadernaya spektroskopiya v reaktsiyakh s neytronami. Leningrad, 1987, 547. (RZFZA, 87/9V146).
780. Klimov, I.V.; Korobkin, V.V.; Markelov, Ye.Yu.; Motylev, S.L. (IOF). Relationship of the electron temperature in a laser plasma to the magnitude of electromotive force in a double layer. IOF. Preprint, no. 122, 1987, 1-12. (RZFZA, 87/9L1239).
781. Kuz'min, V.I.; Sandakov, V.S.; Sineokin, V.I.; Govechiya, V.I.; Kurov, D.A. (). Device for laser puncturing of fuel element shells. Voprosy atomnoy nauki i tekhniki. Atomnoye materialovedeniye, no. 1/24, 1987, 58-60. (RZFZA, 87/9V1005).
782. Orayevskiy, A.N.; Semenov, O.G.; Chichkov, B.N. (FIAN). Z-pinch plasma as an active medium for lasers in the far ultraviolet region of the spectrum. KVEKA, no. 10, 1987, 1998-2005.
783. Orishich, A.M.; Ponomarenko, A.G.; Snytnikov, V.N. (). Nonlinear transformation of ion fluxes into a thin sheath during plasma expansion into a vacuum. International Conference on Plasma Physics (Joint Conference CKICPThe, CICWIPla), 7th, Kiev, 6-12 Apr 1987. Proceedings Contributed Papers (All in English). Vol 4. Kiyev, Naukova dumka, 1987, 173-176. (RZFZA, 87/9G193).

784. Pleshakova, R.P.; Shikanov, A.Ye. (VNIPKTIGAGSI). Commutation of a pulsed ionic diode through the volume of an ion source with laser plasma initiation. KVEKA, no. 10, 1987, 2124-2125.
785. Rozantsev, V.A.; Petukh, M.L.; Yankovskiy, A.A. (). The effect of air pressure on the spectra of a laser plasma. ZPSBA, vol. 47, no. 4, 1987, 549-553.
786. Skobelev, I.Yu.; Khakhalin, S.Ya.; Yakovlenko, S.I. (IOF). Kinetic and energy characteristics of the recombination process in a multicharged ion plasma. IOF. Preprint, no. 157, 1987, 1-33. (RZFZA, 87/10G31).
787. Tolok, V.T. (). Efficient methods to study plasma (in Ukrainian). VNUKA, no. 4, 1987, 80.
788. Valuyev, A.D.; Vasin, B.L.; Goryachuk, O.L.; Chaushanskiy, S.A. (FIAN). Equipment to control the position of the target in the Del'fin-1. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 209-213.
789. Valuyev, A.D.; Vasin, B.L.; Kruglov, B.V.; Mazur, M.Yu.; Maksimchuk, A.M.; Mikhaylov, Yu.A.; Sklizkov, G.V.; Fedotov, S.I.; Chaushanskiy, S.A. (FIAN). Optical methods to study heating of plasma in the Del'fin-1. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 156-208.
790. Vasil'yev, A.A.; Mitrofanov, V.V.; Topchiyan, M.Ye. (). Detonation waves in gases. FGVZA, no. 5, 1987, 109-131.
791. Zakharenkov, Yu.A.; Isakov, A.I.; Karnaukhov, A.A.; Kopysov, I.A.; Sklizkov, G.V.; Shikanov, A.S. (FIAN). Automation of data acquisition and processing for laser plasma diagnostics. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 214-226.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

792. Bakut, P.A.; Mandrosov, V.I.; Matveyev, I.N.; Ustinov, N.D. (). Theory of coherent images. Teoriya kogerentnykh izobrazheniy. Moskva, Radio i svyaz', 1987, 264 p. (RZFZA, 87/9L589).
793. Geometric optical methods to study deformations and stresses. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 139 p. (RZFZA, 87/10Ye509).
794. Gubanov, V.A.; Ivanovskiy, A.L.; Ryzhkov, M.V. (). Quantum chemistry in materials science. Kvantovaya khimiya v materialovedenii. Moskva, Nauka, 1987, 335 p. (RZFZA, 87/9A58).
795. Gurevich, S.B. (ed). (). Space-time modulators of light for optical information processing. Prostranstvenno-vremennyye modulyatory sveta dlya opticheskoy obrabotki informatsii. NSPGAN. FTI. Leningrad, 1987, 208 p.
796. Interaction of particles with nuclei, atoms and molecules. Vzaimodeystviye chastits s yadrami, atomami i molekulami. AzGU. Baku, 1987, 12 p. (RZFZA, 87/10V6).
797. Khinrikus, Kh.V. (). Noise in laser information systems. Shumy v lazernykh informatsionnykh sistemakh. Moskva, Radio i svyaz', 1987, 108 p. (RZFZA, 87/10A62).
798. Kirepa, M.V. (ed). (). Physics of Ionized Gases. Summer School and Symposium. SPIG'86. CSSSPIGa, 13th, Sibenik, 1-5 Sep 1986. Contributed Papers (all in English). Beograd University, 1986, 580 p. (RZFZA, 87/9G2).
799. Kurnosov, A.N.; Yudin, V.V. (). Production technology for semiconductor instruments and integrated microcircuits. Tekhnologiya proizvodstva poluprovodnikovyykh priborov i integral'nykh mikroshem. Moskva, Vysshaya shkola, 1986, 368 p. (FTPPA, no. 8, 1987, 1527).
800. Landa, K.A.; Petrovskiy, G.T. (). Amorphous planar waveguides. Amorfnyye planarnyye volnovody. KrGU. Krasnoyarsk, 1987, 195 p. (RZFZA, 87/9Zh385).

801. Lopukhin, V.M. (ed). (). Relativistic electron flow generators and amplifiers. All-Union Seminar, Moscow, Jan 1984. Papers. Reports. Generatory i usiliteli na relyativistskikh elektronnykh potokakh. CVSGUREP, Moskva, Jan 1984. Materialy. Doklady. MGU. Moskva, 1987, 188 p. (RZFZA, 87/10A32).
802. Markov, P.I.; Ketkovich, A.A.; Sattarov, D.K. (). Fiberoptic introscopy. Volokonno-opticheskaya introskopiya. Leningrad, Mashinostroyeniye, 1987, 287 p.
803. Materials and devices for hologram recording. Materialy i ustroystva dlya registratsii gologramm. FTI. Leningrad, 1986, 178 p. (RZRAB, 87/10Ye523).
804. Morozova, N.K.; Kuznetsov, V.A. (). Zinc sulfide: preparation and optical properties. Sul'fid tsinka: polucheniye i opticheskiye svoystva. Moskva, Nauka, 1987, 200 p. (RZFZA, 87/9L721).
805. New methods of laser spectroscopy of molecules in low-temperature media. All-Union symposium, Tallin, 19-21 May 1987. Summaries of the reports. Novyye metody lazernoy spektroskopii molekul v nizkotemperaturnykh sredakh. CVSNMLSM, Tallin, 19-21 May 1987. Tezisy dokladov. Tallin, 1987, 100 p. (RZFZA, 86/10L745).
806. Nonequilibrium processes in complex semiconductors. Neravnovesnyye protsessy v slozhnykh poluprovodnikakh. AzGU. Baku, 1987, 120 p. (RZFZA, 87/10N401).
807. Optical orientation of atoms and molecules. Opticheskaya oriyentatsiya atomov i molekul. CVSOOAMO, Ol'gino near Leningrad, 15-17 Apr 1986. NSF EAS. FTI. Leningrad, 1987, 198 p.
808. Optical recording and processing of information. Opticheskaya zapis' i obrabotka informatsii. KuAI. Kuybyshev, 1986, 174 p. (RZFZA, 86/10L686).
809. Osiko, V.V. (ed). (IOF). Selective laser spectroscopy of activated crystals and glasses. Selektivnaya lazernaya spektroskopiya aktivirovannykh kristallov i stekol. IOF. Trudy, no. 9, 1987, 150 p.
810. Parygin, V.N.; Balakshiy, V.I. (). Optical information processing. Opticheskaya obrabotka informatsii. MGU. Moskva, 1987, 142 p. (RZFZA, 87/9L763).

811. Photoelectric and fiberoptic transducers for control systems and computer technology. Fotoelektricheskiye i volokonno-opticheskiye preobrazovateli dlya sistem upravleniya i vychislitel'noy tekhniki. KuAI. Kuybyshev, 1986, 172 p. (RZFZA, 87/10A63).
812. Problems of physical electronics, 1987. Problemy fizicheskoy elektroniki, 1987. LPI. Leningrad, 1987, 176 p. (RZFZA, 87/9A54).
813. Sklizkov, G.V. (ed). (FIAN). The Del'fin laser thermonuclear facility: the complex in action and trends in development. Lazernaya termoyadernaya ustanovka "Del'fin": deystvuyushchiy kompleks i napravleniya razvitiya. FIAN. Trudy, no. 178, 1987, 230 p.
814. Smirnov, A.G. (). Quantum electronics and optoelectronics. Kvantovaya elektronika i optoelektronika. Minsk, Vysheyschaya shkola, 1987, 196 p.
815. Studies on measuring of deviations in shape and position of surfaces. Issledovaniya v oblasti izmereniy otkloneniy formy i raspolozheniya poverkhnostey. VNIIMS. Moskva, 1987, 81 p. (RZFZA, 87/9A96).
816. Study on quantum means to measure time and frequency. Issledovaniye kvantovykh sredstv izmereniya vremeni i chastoty. VNIFTRI. Moskva, 1987, 119 p. (RZRAB, 87/10Ye241).
817. Tyulin, V.I. (). Vibrational and rotational spectra of polyatomic molecules: introduction to the theory. Kolebatel'nyye i vrashchatel'nyye spektry mnogoatomnykh molekul: vvedeniye v teoriyu. MGU. Moskva, 1987, 205 p. (RZFZA, 87/10L128).
818. Velikhov, Ye.P.; Kovalev, A.S.; Rakhimov, A.T. (). Physical phenomena in gas-discharge plasmas. Fizicheskiye yavleniya v gazorazryadnoy plazme. Moskva, Nauka, 1987, 160 p. (RZFZA, 87/9G372).
819. Yakovlev, P.P.; Meshkov, B.B. (). Designing of interference coatings. Proyektirovaniye interferentsionnykh pokrytiy. Moskva, Mashinostroyeniye, 1987, 192 p. (RZFZA, 87/9L739).

820. Yaroslavskiy, L.P. (). Digital processing of signals in optics and holography. Introduction to digital optics. Tsifrovaya obrabotka signalov v optike i golografii: Vvedeniye v tsifrovuyu optiku. Moskva, Radio i svyaz', 1987, 296 p.
821. Zadorin, A.S.; Shandarov, S.M.; Sharangovich, S.N. (). Acoustic and acoustooptic properties of single crystals. Akusticheskiye i akustoopticheskiye svoystva monokristallov. TGU. Tomsk, 1987, 151 p. (RZFZA, 87/9P43).
822. Zemlyanskiy, V.M. (). Laser Doppler measurement of flow velocity. Izmereniye skorosti potokov lazernym doplerovskim metodom. Kiyev, Vishcha shkola, 1987, 177 p. (RZFZA, 87/9L1310).
823. Zuyev, V.Ye. (). Laser probing of the troposphere and underlying surface. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. Novosibirsk, Nauka, 1987, 262 p. (RZFZA, 87/10Zh178).
824. Zuyev, V.Ye.; Fadeyev, V.Ya. (). Laser navigational devices. Lazernyye navigatsionnyye ustroystva. Moskva, Radio i svyaz', 1987, 161 p.

IV. SOURCE ABBREVIATIONS

(Note: CTC = cover-to-cover translation available)

AENGA	Atomnaya energiya (CTC)
AKZHA	Akusticheskiy zhurnal (CTC)
APHUE	Acta physica hungarica (Budapest)
ARAKB	Archiwum akustyki (Warsaw)
ATPLB	Acta physica polonica. Series A
AVMEB	Avtometriya (CTC)
BITOA	Bild und Ton (East Berlin)
CICWIPla	International Congress on Waves and Instabilities in Plasma
CKICPThe	Kiev International Conference on Plasma Theory
CMKDBMed	Mezhdunarodnaya konferentsiya: Dostizheniya biomekhaniki v meditsine
CRKRTNRe	Respublikanskaya konferentsiya: Razvitiye tekhnicheskikh nauk v respublike, puti i sposoby ispol'zovaniya ikh rezul'tatov
CRTED	Crystal Research and Technology (East Berlin) (formerly Krystal und Technik)
CSSSPIGa	Summer School and Symposium: Physics of Ionized Gases
CSYaSSAt	Soveshchaniye po yadernoy spektroskopii i strukture atomnogo yadra
CVKOVFLI	Vsesoyuznaya konferentsiya: Obrashcheniye volnogo fronta lazernogo izlucheniya v nelineynykh sredakh
CVSGUREP	Vsesoyuznyy seminar: Generatory i usiliteli na relyativistskikh elektronnykh potokakh
CVSNMLSM	Vsesoyuznyy simpozium: Novyye metody lazernoy spektroskopii molekul v nizkoterperaturnykh sredakh

CVSOOAMo	Vsesoyuznyy seminar po opticheskoy orientatsii atomov i molekul
CZYPA	Czechoslovak Journal of Physics
DANKA	Akademiya nauk SSSR. Doklady (CTC)
DANTA	Akademiya nauk Tadzhikskoy SSR. Doklady
DEFKA	Defektoskopiya (CTC)
DUKAB	Akademiya nauk Ukrayns'koy RSR. Dopovidi. Seriya A. Fiziko-matematychni ta tekhnichni nauki
EKNTB	Elektronika (Warsaw)
ELPBA	Elektropromishlennost i priborostroene
EOBMA	Elektronnaya obrabotka materialov (CTC)
ETFMB	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
EXPPA	Eksperimentelle Technik der Physik
FGRTA	Feingeraetetechnik
FGVZA	Fizika goreniya i vzryva (CTC)
FIPLD	Fizika plazmy (Moskva, AN SSSR) (CTC)
FIZSA	Fizika v shkole
FKMMA	Fiziko-khimicheskaya mekhanika materialov (CTC)
FKOMA	Fizika i khimiya obrabotki materialov
FKSTD	Fizika i khimiya stekla (CTC)
FTPPA	Fizika i tekhnika poluprovodnikov (CTC)
FTVTA	Fizika tverdogo tela (CTC)
FZELA	Fizicheskaya elektronika (sbornik, L'vov)
GEAEA	Geomagnetizm i aeronomiya (CTC)

IAAFA	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAFMA	Akademiya nauk Azerbaydzhanskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk
IAKFB	Akademiya nauk Kazakhskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IANFA	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya (CTC)
IASKA	Akademiya nauk SSSR. Izvestiya. Seriya khimicheskaya (CTC)
IATOA	Akademiya nauk Tadzhikskoy SSR. Izvestiya. Otdeleniye fiziko-matematicheskikh i geologo-khimicheskikh nauk
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
INFZA	Inzhenerno-fizicheskiy zhurnal (CTC)
INKSA	Akademiya nauk Kirgizskoy SSR. Izvestiya
ITUFA	Akademiya nauk Turkmeniskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk
IUZFA	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IUZTA	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya tekhnicheskikh nauk
IVNMA	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy (CTC)
IVUBA	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVUZB	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)

IZFMB	Akademiya nauk Moldavskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk
IZKOD	Issledovaniye Zemli iz kosmosa (Moskva)
IZTEA	Izmeritel'naya tekhnika (CTC)
JMKOA	Jemna mechanika a optika
KHFID	Khimicheskaya fizika (CTC)
KHVKA	Khimiya vysokikh energiy (CTC)
KOZHA	Kolloidnyy zhurnal (CTC)
KRSFA	Kratkiye soobshcheniya po fizike (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)
MEAUA	Meres es automatika
MTOMA	Metallovedeniye i termicheskaya obrabotka metallov (CTC)
OPAPB	Optica applicata (Poland)
OPMPA	Optiko-mekhanicheskaya promyshlennost' (CTC)
OPSPA	Optika i spektroskopiya (CTC)
OPTED	Optoelektronika i poluprovodnikovaya tekhnika (Kiyev)
OTIZD	Otkrytiya, izobreteniya
PFKMD	Poverkhnost'. Fizika, khimiya, mekhanika (Moskva)
PRTEA	Pribory i tekhnika eksperimenta (CTC)
PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PSTFA	Postepy fizyki
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)

RAELA	Radiotekhnika i elektronika (journal, Moskva) (CTC)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RTKHA	Radiotekhnika (sbornik, Khar'kov)
RZFZA	Referativnyy zhurnal. Fizika
RZGFA	Referativnyy zhurnal. Geofizika
RZMKA	Referativnyy zhurnal. Mekhanika
RZRAB	Referativnyy zhurnal. Radiotekhnika
RZVTA	Referativnyy zhurnal. Vodnyy transport
SAKNA	Akademiya nauk Gruzinskoy SSR. Soobshcheniya
TKTEA	Tekhnika kino i televideniya
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFIZA	Ukrainskiy fizicheskiy zhurnal (Russian language version) (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
VBMFA	Belorusskiy universitet. Vestnik. Seriya 1. Matematika, fizika, mekhanika
VEOFA	Vestnik oftal'mologii
VLUFB	Leningradskiy universitet. Vestnik. Fizika i khimiya
VMUFA	Moskovskiy universitet. Vestnik. fizika, astronomiya (CTC)
VNUKA	Akademiya nauk Ukrayns'koy RSR. Visnyk
VYSAA	Vysokomolekulyarnyye soyedineniya. Seriya A (CTC)
WDTEA	Wiadomosci telekomunikacyjne
WZFRE	Wissenschaftliche Zeitschrift der Friedrich- Schiller Universitaet. Naturwissenschaftliche Reihe (East Berlin) (formerly WZFMA)

ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)
ZFKHA	Zhurnal fizicheskoy khimii (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNPFA	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii (CTC)
ZPMFA	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki (CTC)
ZPSBA	Zhurnal prikladnoy spektroskopii (CTC)
ZRBEA	Zarubezhnaya radioelektronika
ZTEFA	Zhurnal tekhnicheskoy fiziki (CTC)
ZVDLA	Zavodskaya laboratoriya (CTC)

V. AUTHOR AFFILIATIONS

Astrosovet

Astronomicheskii sovet AN SSSR
Astronomy Council, Academy of Sciences USSR, Moscow

AzGU

Azerbaydzhanskiy gosudarstvennyy universitet
Azerbaijan State University

BGU

Belorusskiy gos universitet
Belorussian State University

ChPI

Chelyabinskiy politekhnicheskii institut
Chelyabinsk Politechnical Institute

EIS

Elektrotekhnicheskii institut svyazi
Electrotechnical Institute of Communications, Leningrad

FGPI

Ferganskiy gosudarstvennyy pedagogicheskii institut
im. Ulugbeka
Fergana State Pedagogical Institute im. Ulugbeka

FIAN

Fizicheskii institut im Lebedeva AN SSSR
Physics Institute imeni Lebedev, Academy of Sciences
USSR, Moscow

FIANKuy

Kuybyshevskiy filial Fizicheskogo instituta AN SSSR
Kuybyshev Branch of the Physics Institute, Academy of
Sciences USSR

FMIANUkr

Fiziko-mekhanicheskii institut AN Ukr SSR
Physical Mechanical Institute, Academy of Sciences
Ukrainian SSR, L'vov

FTI

Fiziko-tekhnicheskii institut im Ioffe AN SSSR
Physicotechnical Institute im Ioffe, Academy of
Sciences USSR, Leningrad

FTIANTadzh

Fiziko-tekhnicheskii institut AN TadzhSSR
Physicotechnical Institute, Academy of Sciences
Tadzhik SSR, Dushanbe

GGU

Gor'kovskiy gos universitet
Gor'kiy State University

GIPKh

Gosudarstvennyy institut prikladnoy khimii.
State Institute of Applied Chemistry.

GOI

Gosudarstvennyy opticheskii institut im Vavilova
State Optical Institute imeni Vavilov, Leningrad

GPI
 Gor'kovskiy politekhnicheskiy institut.
 Gor'kiy Polytechnical Institute.

GrodGU
 Grodnenskiy gos universitet
 Grodno State University

GrPI
 Gruzinskiy politekhnicheskiy institut
 Georgian Polytechnic Institute, Tbilisi

IAE
 Institut atomnoy energii im Kurchatova
 Institute of Atomic Energy imeni Kurchatov, Moscow

IAESOAN
 Institut avtomatiki i elektrometrii SOAN
 Institute of Automation and Electronic Measurements,
 Siberian Branch Academy of Sciences USSR

IAP
 Institut analiticheskogo priborostroyeniya AN SSSR
 Institute of Analytical Instrument Manufacture,
 Academy of Sciences USSR

IBANUK
 Institut biokhimii AN UkrSSR
 Institute of biochemistry, Academy of Sciences
 Ukrainian SSR, Kiev

IEANBel
 Institut elektroniki AN BSSR
 Institute of Electronics, Academy of Sciences
 Belorussian SSR, Minsk

IELAN
 Institut elektrokhimii AN SSSR
 Institute of Electrochemistry, Academy of Sciences
 USSR

IEM
 Institut eksperimental'noy meteorologii
 Institute of Experimental meteorology, Obninsk

IMEZh
 Institut evolyutsionnoy morfologii i ekologii
 zhivotnykh im A.N. Severtsova AN SSSR
 Institute of Evolutionary Morphology and Animal
 Ecology imeni Severtsov, Academy of Sciences
 USSR, Moscow

IFA
 Institut fiziki atmosfery AN SSSR
 Institute of Atmospheric Physics, Academy of
 Sciences, USSR

IFANB
 Institut fiziki AN BSSR
 Institute of Physics, Academy of Sciences
 Belorussian SSR, Minsk

IFANG
 Institut fiziki AN GruzSSR
 Institut of Physics, Academy of Sciences Georgian SSR,
 Tbilisi

IFANUK
 Institut fiziki AN UkrSSR
 Institute of Physics, Academy of Sciences Ukrainian SSR,
 Kiev

IFI
 Institut fizicheskikh issledovaniy AN ArmSSR
 Institute of Physics Research, Academy of Sciences
 Armenian SSR

IFP
 Institut fizicheskikh problem AN SSSR
 Institute of Problems of Physics, Academy of
 Sciences USSR

IFPSOAN
 Institut fiziki poluprovodnikov SOAN
 Institute of Semiconductor Physics, Siberian Branch
 Academy of Sciences USSR, Novosibirsk

IFSOAN
 Institut fiziki SOAN
 Institute of Physics, Siberian Branch Academy of
 Sciences USSR, Krasnoyarsk

IFTT
 Institut fiziki tverdogo tela AN SSSR
 Institute of Solid State Physics, Academy of
 Sciences USSR, Chernogolovka

IFVE
 Institut fiziki vysokikh energiy
 Institute of High Energy Physics, Serpukhov

IFZ
 Institut fiziki Zemli im Shmidta AN SSSR
 Institute of Physics of the Earth imeni Shmidt,
 Academy of Sciences USSR

IGU
 Irkutskiy gos universitet
 Irkutsk State University

IGYeM
 Institut geologii rudnykh mestorozhdeniy, petrografii,
 mineralogii i geokhimii AN SSSR
 Institut of Ore Deposits, Geology, Petrography,
 Minerology and Geochemistry, Academy of Sciences
 USSR, Moscow

IKAN
 Institut kristallografii AN SSSR
 Institute of Crystallography, Academy of Sciences
 USSR, Moscow

IKhANTad
 Institut khimii AN Tadzhikskoy SSR
 Institute of Chemistry, Academy of Sciences
 Tadzhik SSR, Dushanbe

IKhF
 Institut khimicheskoy fiziki AN SSSR
 Institute of Physics of Chemistry, Academy of Sciences
 USSR, Chernogolovka

IKhKG
 Institut khimicheskoy kinetiki i goreniya SOAN
 Institute of Chemical Kinetics and Combustion,
 Siberian Branch Academy of Sciences USSR, Novosibirsk

IKhS
 Institut khimii silikatov im Grebanshchikova AN SSSR
 Institute of Silicate Chemistry imeni Grebanshchikov,
 Academy of Sciences USSR, Leningrad

IKI
 Institut kosmicheskikh issledovaniy AN SSSR
 Institute of Space Research, Academy of Sciences USSR

IMET
 Institut metallurgii im Baykova
 Institute of Metallurgy imeni Baykov, Moscow

INKh
 Institut neorganicheskoy khimii SOAN
 Institute of Inorganic Chemistry, Siberian Branch
 Academy of Sciences USSR

IOA
 Institut optiki atmosfery SOAN
 Institute of Atmospheric Optics, Siberian Branch
 Academy of Sciences USSR

IOANLO
 Leningradskoye otdeleniye Instituta okeanologii
 AN SSSR
 Leningrad Branch of the Institute of Oceanography,
 Academy of Sciences USSR

IOF
 Institut obshchey fiziki AN SSSR
 Institute of General Physics, Academy of Sciences
 USSR, Moscow

IONKh
 Institut obshchey i neorganicheskoy khimii
 im Kurnakova AN SSSR
 Institute of General and Inorganic Chemistry imeni
 Kurnakov, Academy of Sciences USSR, Moscow

IONKhANB
 Institut obshchey i neorganicheskoy khimii AN BSSR
 Institute of General and Inorganic Chemistry, Academy
 of Sciences Belorussian SSR

IPANUK
 Institut poluprovodnikov AN UkrSSR
 Institute of Semiconductors, Academy of Sciences
 Ukrainian SSR, Kiev

IPF
 Institut prikladnoy fiziki AN SSSR
 Institute of Applied Physics, Academy of Sciences
 USSR, Gor'kiy

IPFANM
 Institut prikladnoy fiziki AN MSSR
 Institute of Applied Physics, Academy of Sciences
 Moldavian SSR, Kishinev

IPMe
 Institut problem mekhaniki AN SSSR
 Institute of Problems of Mechanics, Academy of Sciences
 USSR, Moscow

IPPM
 Institut prikladnykh problem mekhaniki i matematiki
 AN UkrSSR
 Institute of Applied Problems in Mechanics and
 Mathematics, Academy of Sciences Ukrainian SSR, L'vov

IRE
 Institut radiotekhniki i elektroniki AN SSSR
 Institute of Radioengineering and Electronics, Academy
 of Sciences USSR, Moscow

IRFEANArm
 Institut radiofiziki i elektroniki AN ArmSSR
 Institute of Radiophysics and Electronics, Academy of
 Sciences Armenian SSR, Ashtarak

ISAN
 Institut spektroskopii AN SSSR
 Institute of Spectroscopy, Academy of Sciences USSR

ISMSANGruz
 Institut stroitel'noy mekhaniki i seysmostoykosti
 AN GruzSSR
 Institute of Structural Mechanics and Seismic Stability,
 Academy of Sciences Georgian SSR

ITeFuk
 Institut teoreticheskoy fiziki AN UkrSSR
 Institute of Theoretical Physics, Academy of Sciences
 Ukrainian SSR, Kiev

ITPM
 Institut teoreticheskoy i prikladnoy mekhaniki SOAN
 Institute of Theoretical and Applied Mechanics, Siberian
 Branch Academy of Sciences USSR, Novosibirsk

IVTAN
 Institut vysokikh temperatur AN SSSR
 Institute of High Temperatures, Academy of Sciences USSR

IYaFANUz
 Institut yadernoy fiziki AN UzSSR
 Institute of Nuclear Physics, Academy of Sciences
 Uzbek SSR, Ulugbek

KaMI
 Kaunasskiy meditsinskiy institut
 Kaunas Medical Institute

RGU
 Kiyevskiy gos universitet
 Kiev State University

KhADI
 Khar'kovskiy avtomobil'no-dorozhnyy institut
 Khar'kov Highway Institute

KhGU
 Khar'kovskiy gos universitet
 Khar'kov State University

KhPI
Khar'kovskiy politekhnicheskiy institut
Khar'kov Polytechnic Institute

KPIA
Kiyevskiy politekhnicheskiy institut
Kiev Polytechnic Institute

KrGU
Krasnoyarskiy gos universitet
Krasnoyarsk State University

KuAI
Kuybyshevskiy aviatsionnyy institut
Kuybyshev Aviation Institute

KuISI
Kuybyshevskiy inzhenerno-stroitel'nyy institut
Kuybyshev Civil Engineering Institute

LatGU
Latviyskiy gos universitet
Latvian State University

LETI
Leningradskiy elektrotekhnicheskiy institut
Leningrad Electric Engineering Institute

LGPI
Leningradskiy gos pedagogicheskiy institut
Leningrad State Pedagogical Institute

LGU
Leningradskiy gos universitet
Leningrad State University

LIIAAN
Leningradskiy institut informatiki i avtomatizatsii
AN SSSR
Leningrad Institute of Information Science and
Automation, Academy of Sciences USSR

LITMO
Leningradskiy institut tochnoy mekhaniki i optiki
Leningrad Institute of Precision Mechanics and Optics

LitNIINTI
Litovskiy NII nauchno-tekhnicheskoy informatsii i
tekhniko-ekonomicheskikh issledovaniy Gosplana LitSSR
Lithuanian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Plan of the Lithuanian SSR,
Vilnius

LIYaF
Leningradskiy institut yadernoy fiziki im B.P.
Konstantinova, AN SSSR
Leningrad Institute of Nuclear Physics imeni B.P.
Konstantinov, Academy of Sciences USSR, Leningrad

LPI
Leningradskiy politekhnicheskiy institut
Leningrad Polytechnic Institute

LTI
Leningradskiy tekhnologicheskiy institut
Leningrad Technological Institute

LvGU
 L'vovskiy gos universitet
 L'vov State University
 MAI
 Moskovskiy aviatsionnyy institut
 Moscow Aviation Institute
 MFTI
 Moskovskiy fiziko-tekhnicheskii institut
 Moscow Physicotechnical Institute
 MGMIVt
 Vtoroy Moskovskiy gos meditsinskiy institut
 im Pirogova
 Second Moscow State Medical Institute imeni Pirogov
 MGU
 Moskovskiy gos universitet
 Moscow State University
 MIFI
 Moskovskiy inzhenerno-fizicheskiy institut
 Moscow Engineering Physics Institute
 MIREA
 Moskovskiy institut radiotekhniki, elektroniki i
 avtomatiki
 Moscow Institute of Radio Engineering, Electronics
 and Automation
 MISIS
 Moskovskiy institut stali i splavov
 Moscow Institute of Steel and Alloys
 MITKhT
 Moskovskiy institut tonkoy khimicheskoy tekhnologii
 imeni Lomonosova
 Moscow Institute of Fine Chemical Technology
 imeni Lomonosov
 MNII
 Moskovskiy NII glaznykh bolezney im Gel'mgol'tsa
 Moscow Scientific Research Institute of Eye Diseases
 imeni Gel'mgol'ts
 MNIIMG
 Moskovskiy NII mikrokhirurgii glaza MZ RSFSR
 Moscow Scientific Research Institute of Microsurgery
 of the Eye, Ministry of Health, Russian SFSR
 MVTU
 Moskovskoye vyssheye tekhnicheskoye uchilishche im
 Baumana
 Moscow Higher Technical College imeni Bauman
 NATI
 Gosudarstvennyy soyuznyy traktornyy NII
 (formerly: NI avtotraktornyy institut)
 State All-Union Tractor Scientific Research
 Institute, Moscow
 NGU
 Novosibirskiy gos universitet
 Novosibirsk State University

NIFKhI

NI fiziko-khimicheskiy institut im Karpova
Scientific Research Institute of
Physicochemistry imeni Karpov

NIIEA

NII elektrofizicheskoy apparatury im Yefremova
Scientific Research Institute of Electrophysical
Equipment imeni Yefremov, Leningrad

NIIFKS

NII fiziki kondensirovannykh sred Yerevanskogo
gos universiteta
Scientific Research Institute of the Physics of
Condensed Media of Yerevan State University

NIKhGGU

NII khimii pri Gor'kovskom GU
Scientific Research Institute of Chemistry at Gor'kiy
State University

NIKvSt

NII kvartsevogo stekla
Scientific Research Institute of Quartz Glass

NIIMF

NII mekhaniki i fiziki Saratovskogo GU
Scientific Research Institute of Mechanics and
Physics of Saratov State University

NIIPFP

NII prikladnykh fizicheskikh problem pri
Belorusskom gos universitete
Scientific Research Institute of Applied Physics
Problems at Belorussian State University

NIRFI

NI radiofizicheskiy institut
Radiophysics Scientific Research Institute, Gor'kiy

NITsTLAN

NI tsentr po tekhnologicheskim lazeram AN SSSR
Scientific Research Center for Industrial Lasers,
Academy of Sciences USSR

NPOKIANAz

Nauchno-proizvodstvennoye ob'yedineniye kosmicheskikh
issledovaniy AN AzSSR
Scientific Production Association of Space Research,
Academy of Sciences Azerbaydzhan SSR, Baku

NPOMetrologiya

Nauchno-proizvodstvennoye ob'yedineniye Metrologiya
Metrologiya Scientific Production Association, Khar'kov

NSFEAS

Nauchnyy sovet po probleme "Fizika elektronnykh i
atomnykh stolknoveniy AN SSSR
Scientific Council on the Physics of Electron and
Atomic Collisions, Academy of Sciences USSR

NSPGAN

Nauchnyy sovet AN SSSR po probleme "Golografiya"
Scientific Council on Holography, Academy of Sciences USSR

NSSAM

Nauchnyy sovet po spektroskopii atomov i molekul AN SSSR
Scientific Council on Spectroscopy of Atoms and Molecules,
Academy of Sciences USSR

OGU

Odesskiy gos universitet
Odessa State University

OIYaI

Ob"yedinennyy institut yadernykh issledovaniy
Joint Institute of Nuclear Research, Dubna

OshGPI

Oshskiy gos pedagogicheskiy institut
Osh State Pedagogical Institute

OTANUZ

Otdel teplofiziki AN Uzbekskoy SSR
Department of Thermophysics, Academy of Sciences
Uzbek SSR

PKBE

Proyektno-konstruktornoye byuro elektrogidravliki
AN UkrSSR
Planning and Design Office of Electrohydraulics,
Academy of Sciences Ukraininan SSR, Nikolayev

SFTI

Sibirskiy fiziko-tekhnicheskiy institut im Kuznetsova
Siberian Physicotechnical Institute imeni Kuznetsov,
Tomsk

SNIIM

Sibirskiy gos NII metrologii
Siberian State Scientific Research Institute of
Metrology, Novosibirsk

TarGU

Tartuskiy gos universitet
Tartu State University

TashGPI

Tashkentskiy gos pedagogicheskiy institut
Tashkent State Pedagogical Institute

TashGU

Tashkentskiy gos universitet
Tashkent State University

TbGU

Tbilisskiy gos universitet
Tbilisi State University

TGU

Tomskiy gos universitet
Tomsk State University

TIASUR

Tomskiy institut avtomatizatsii sistem upravleniya
i radioelektroniki
Tomsk Institute for Automation of Control Systems
and Radioelectronics

TRI

Taganrogskiy radiotekhnicheskiy institut
Taganrog Radio Engineering Institute

TsKBTP
 Tsentral'noye konstruktorskoye byuro tochnogo
 priborostroyeniya, Novosibirsk
 Central Design Bureau for Precision Instrument
 Manufacture, Novosibirsk
TsNIITEIpriboro
 TsNII informatsii i tekhniko-ekonomicheskikh
 issledovaniy priborostroyeniya, sredstv
 avtomatizatsii i sistem upravleniya
 Central Scientific Research Institute of
 Information and Technical Economic Studies on
 Instrument Manufacture, Means of Automation,
 and Control Systems, Moscow
TurkPI
 Turkmenskiy politekhnicheskiy institut
 Turkmen Polytechnic Institute, Ashkhabad
UAI
 Ufinskiy aviatsionnyy institut
 Ufa Aviation Institute
UDN
 Universitet druzhby narodov im Lumumby
 University of Friendship Among Peoples
 imeni Lumumba, Moscow
UrPI
 Ural'skiy politekhnicheskiy institut
 Ural Polytechnical Institute, Sverdlovsk
UzNPOK
 Uzbekskoye nauchno-proizvodstvennoye ob'yedineniye
 "Kibernetika" AN UzSSR
 Kibernetika Uzbek Scientific Production Association,
 Academy of Sciences Uzbek SSR
UZPI
 Ukrainskiy zaochnyy politekhnicheskiy institut
 Ukrainian Correspondence Polytechnic Institute,
 Khar'kov
VGU
 Voronezhskiy gos universitet
 Voronezh State University
VilGPI
 Vil'nyusskiy gos pedagogicheskiy institut
 Vilnius State Pedagogical Institute
VINITI
 Vsesoyuznyy institut nauchnoy i tekhnicheskoy
 informatsii
 All-Union Institute of Scientific and Technical
 Information, Moscow
ViPI
 Vinnitskiy politekhnicheskiy institut
 Vinnitsa Polytechnic Institute
VMOLA
 Voyenno-meditsinskaya akademiya im Kirova
 Military Medical Academy imeni Kirov, Leningrad

VNIFTRI

VNII fiziko-tekhnicheskikh i radiotekhnicheskikh
izmereniy

All-Union Scientific Research Institute of Physico-
technical and Radiotechnical Measurements, Moscow

VNIIGBol

VNII glaznykh bolezney

All-Union Scientific Research Institute of
Eye Diseases, Moscow

VNIImetmash

VNI i proyektno-konstruktorskiy institut
metallurgicheskogo mashinostroyeniya

All-Union Scientific Research, Design and Planning
Institute of Metallurgical Machine Building, Moscow

VNIIMS

VNII metrologicheskoy sluzhby

All-Union Scientific Research Institute of the
Metrological Service, Moscow

VNIIOFI

VNII optiko-fizicheskikh izmereniy

All-Union Scientific Research Institute of
Optophysical Measurements, Moscow

VNIITS

VNI i proyektnyy institut tugoplavkikh metallov
i tverdykh splavov

All-Union Scientific Research and Design
Institute of Refractory Metals and Hard Alloys,
Moscow

VNIPKTIGAGSI

VNI proyektno-konstruktorskiy i tekhnologicheskoy
institut geofizicheskikh, akusticheskikh i
geokhimicheskikh sistem informatsii

All-Union Scientific Research, Planning, Design and
Technological Institute for Geophysical, Acoustic
and Geochemical Information Systems

VNITSISPIV

VNI tsentr po izucheniyu svoystv poverkhnosti i vakuuma
All-Union Scientific Research Center for Studying the
Properties of Surfaces and Vacuums, Moscow

VoPI

Volgogradskiy politekhnicheskoy institut

Volgograd Polytechnic Institute

YeFI

Yerevanskiy fizicheskoy institut

Yerevan Physics Institute

YeGU

Yerevanskiy gos universitet

Yerevan State University

VI. AUTHOR INDEX

ABADZHYAN S V	31	ANUFRIYEV A V	43	BALASHEVICH L I	34
ABAKUMOV G A	62	APANASEVICH P A	11	BALAZS J	55
ABBAS-ZADE A A	17	APANASEVICH S P	19	BALKAREY YU I	58
ABDINOV A SH	62	AFATIN V M	67	BALOSHIN YU A	27
ABDULLAYEV E A	25	APINOVA A	30	BAL'TRAMEYUNAS R A	81
ABDULLAYEV S S	34	APRESYAN L A	43	BALYKIN V I	63
ABDULLOYEV N S	53	ARAKELIAN S M	19	BANAKH V A	40
ABDURAKHMANOV M	43	ARAKELIAN V S	63	BARANAUSKAS R K	54
ABDYKAROV S A	34	ARBUZOV V R	77	BARANOV G A	7,78
ABDYLDAYEV O T	76	ARESHEV I P	26	BARANOV V V	8
ABESADZE T SH	62	ARKATOVA T G	36	BARANOV V YU	78,79
ABRAMOV A YU	26	ARKHIPENKO V I	83	BARANOVA I M	19
ABRAMOV V V	34	ARM YE M	35	BARKHUDAROV E M	83
ABRAMOVA V I	66	ARMALI KHALIL'	33	BARKHUDARYAN G R	63
ABUSEV V M	35	ARMENSKI S	81	BARSUKOV K A	39
ABUSHOV S A	75	ARSEN'YAN T I	40	BARTENEV O A	79
ABYZOV A M	66	ARTEMENKO S B	60	BARYBIN V I	71
ADKHAMOV A A	25	ARTSIMOVICH V L	83	BARYSHEV S A	23
AFANASIADI L SH	5	ARUTYUNYAN G M	20	BARYSHNIKOV YU YU	66
AFANAS'YEV YU B	19	ARUTYUNYAN G V	31,43	BARZAKH A YE	52
AFANAS'YEVA V L	15	ARUTYUNYAN K V	62	BASHAROV A M	20
AGAYEV YA	28	ARUTYUNYAN R V	78,79	BASIYEV T T	2,67,68
AGRINSKIY P V	46	ARUTYUNYAN V M	67	BASKOV A F	80
AKHMADZHANOV T	34	ARZUMANYAN G A	29	RASOV N G	7,8,12,76,84
AKHMANOV S A	39	ARZUOV M I	79	BASYUK S B	27
AKHMANOVA M V	66	AS D J	81	BATASHOV K V	79
AKHMEDIYEV N N	35	ASCHE M	63	BAYBORODIN YU V	39
AKHMEDOV D	4	ASHCHEULOV YU V	48	BAYMURADOV M M	81
AKHMEDZHANOV R A	66	ASHKALUNIN A L	67	BAZAKUTSA V A	81
AKHMETSHINA T A	15	ASHKINADZE B M	63	BAZARNYY YE M	34
AKIMOV A G	78	ASHUROV M KH	67	BAZAROV YE N	34
AKIMOV I A	53	ASIMOV M M	6,67	BAZHENOV M YU	55
AKIMOVA L A	48,52	ASKAR'YAN G A	26	BAZHENOV V V	81
AKOPYAN D G	62	ASKEROV I M	74	BEDILOV M R	2,31,81,85
AKSENOV V I	35	ASLANYAN L S	20	BEKLEMYSHEV V I	79
AKSENOVA T T	35	ATAMANENKO B A	76	BELENOV E M	30
AKTSIPETROV O A	19	ATANESYAN V G	43	BELETSKIY V V	79
AKUL'SHIN A M	63	ATEZHEV V V	6	BELIKOV A A	55
AKYLBAYEV ZH S	48	ATSAGORTSYAN K Z	30	BELIN A M	18
ALAVERDYAN R B	19	AUTKO O A	15	BEL'KOV S A	85
ALBRECHT H	76	AVANESOV A G	1	BELOKOPYTOV G V	23
ALEKSANDROV K S	22	AVDEYEV P S	33,34	BELOKUROVA O I	27
ALEKSANDROV M L	66	AVER'YANOV N YE	27	BELOUS N A	14
ALEKSANDROV O V	3	AVETISYAN G K	30	BELOUSOV A V	64
ALEKSANDROV V I	5	AVETISYAN V M	43	BELOUSOV N I	84
ALEKSANDROV YE B	63,66	AYDAYEV F SH	75	BELOV A V	35
ALEKSANDROV YU A	66	AYDE KH B	33	BELOV N N	76
ALEKSANDROVSKIY A S	22			BELOZEROV S A	23
ALEKSEYEV A I	19,67	BABAYAN V S	35	BELYAYEV V K	18
ALEKSEYEV S V	39	BABENKO V P	55	BELYAYEV V N	59
ALESHKEVICH V A	26	BABEY YU I	79	BELYY M U	23,76
ALEJNIKOV V S	86	BABIN S A	10,83	BERDOWSKI J	18
ALFEROV G N	83	BABKINA T V	35	BERDYSHEV A V	8
ALFIMOV M V	70	BACHEVSKIY R S	46	BERENBERG V A	24
ALIMOV D T	52	BADALYAN A M	67	BEREZHITSKAYA M F	79
ALIMOV O K	67	BADALYAN N N	20	BEREZIN B D	75
ALKHAZOV G D	52	BAGDASAROV KH S	29,76	BEREZIN YU D	33,34
ALLIN A P	84	BAGDASARYAN A S	18	BEREZOVSKIY V V	41
AL'TSHULER G B	19	BAGDASARYAN A YE	20	BERMAS T B	5
AMBARTSUMYAN R V	33	BAGDASARYAN M G	18	BERNHARDT HJ	29
ANAN'YEV V YU	9	BAGDASARYAN O V	31	BERSENEV V I	41
ANAN'YEV YE G	26	BAGRATASHVILI V N	68	BESSONOV YE G	30
ANDERS K	13	BAKH L I	15	BETIN A A	43
ANDREYEV A A	19,26,83	BAKHVALOV N S	83	BEYSEMBAYEVA KH B	2,31
ANDREYEV A V	15	BAKIYEV A A	20	BIENIEK S	7
ANGEL'SKIY O V	48	BAKUMENKO V M	6	BILAK V I	23
ANKILOV A N	43	BAKUT P A	43,88	BILOVOLOV M I	54
ANNAYEV A	28	BALABAS M V	63	BIRYAL'TSEVA A R	15
ANOSOV M D	31	BALAKSHIY V I	27,89	BIZYAYEVA O A	49
ANTIPENKO B M	33	BALAN N F	49	BLAGODAROV S V	13
ANTIPOV V V	24	BALANDIN S F	58	BLAHA R	25
ANTSUPOV YE V	67	BALASHEV I	81	BLISTANOV A A	24,35

BLIZNETSOV A M	46	BUZDUGAN A I	35	DANILOVA T P	66
BLIZNYUK YU A	56	BUZYALIS R R	54	DANILOVICH N I	77
BOBKOV P N	38	BYALYY A V	82	DANILYCHEV V A	8,9
BOBROVSKIY A N	8	BYCHENKOV V YU	85	DANISHEVSKIY A M	56
BOBROWSKI A	7	BYKOV A A	28	DARMANYAN A P	69,72
BODROV N V	68	BYKOV R YE	46	DASKALOVA N N	68
BOEHR J	56	BYKOVSKIY N YE	84,85	DAVYDOV S V	14
BOGDANKEVICH O V	4	BYKOVSKIY YU A	35,53,86	DEMCHENKO A M	28
BOGDANOV V L	29			DEMCHUK A V	77
BOKHONOV A F	11	CHALEY A V	15	DEMCHUK M I	14
BOLOT'KO L M	68	CHANKIN A V	44,50	DEMENT'YEV I V	50
BOL'SHOV L A	78,79	CHANTURIYA YE M	51	DEMENT'YEV V A	77
BOL'SHOV M A	68	CHAPLANOV A M	79	DEMIN V V	56
BOL'SHUKHIN O G	13	CHAPLIYEV N I	79	DENISENKO G A	5
BOLTUNOV V N	81	CHAPLYGIN V I	69	DENISOV A L	1
BONCH-BRUYEVICH A M	78,81	CHARKVIANI G SH	61,62	DENISOV L K	69
BONCH-BRUYEVICH V A	63	CHAUSHANSKIY S A	84,87	DENISOV V P	52,69
BONCHIK A YU	82	CHAYKA M P	63,65	DENISYUK I YU	53
BONDAR' V D	65	CHAYKINA YE I	82	DENISYUK YU N	32
BONDAREV B V	29	CHEBOTAREV A P	3	DENUS S	85
BONDARTSEV S YU	28	CHEBOTAREV S A	36	DERGACHEV A YU	68
BORIK M A	5	CHEBOTAREV V I	6	DERYUGINA A I	39
BORISENKO N G	85	CHEBOTAREVA G P	34	DERZHIYEV V I	86
BORISEVICH N A	68	CHEKMEZOV A N	86	DEVDAIANI A Z	63
BORISOV A R	23	CHELNOKOV V YE	70	DEVYATYKH G G	58
BORISOV N A	4	CHEPURNOY V A	69	DEYEV L A	33
BORISOV YE N	11	CHE EDNICHENKO D I	57	DIANOV YE M	30,35,36,54,58
BOROVSKIY A V	83	CHEREDNI HENKO O B	6	DIAS P	4
BOYN R	72	CHEREPAOV V A	75	DIAZ P	4
BOYTSOV A A	68	CHEREPEVSKAYA YE B	26	DIN' VAN KHOANG	20
BOZYK M	56	CHEKASOV YE M	11	DINH VAN HOANG	20
BRAGIN YE V	28	CHEKASOV YU A	46	DMITRIYEV S M	14
BRAGINSKIY L S	39	CHEKASOVA I N	33	DMITRUK L N	35
BRAGINSKIY V B	13	CHERNOBEREZHSKIY YU M	59	DNEPROVSKIY V S	69
BRANITSKIY A V	8	CHERNYKH D F	55	DOBROKHOTOVA V K	71
BREKHOVSKIY G L	24	CHEVATYUK V A	79	DOBOVA T YE	68
BRISKINA CH M	75	CHESHEV YE A	74	DOLOTOV L YE	56
BRODOV M YE	44	CHESNOKOV A A	37	DOLZHIKOV YU S	69
BROVTSINOV G A	42	CHESNOKOV S S	44	DOMBROVSKIY V A	46
BRUTAN E G	70	CHESNOKOV V I	11	DOMNIN YU S	54
BRUY V P	49	CHEVOKIN V K	18	DONCHENKO V A	56
BRYKSIN V V	49	CHICHKOV B N	86	DONIN V I	10
BRYSKIN V Z	49	CHIKHONKOV YE V	83	DOREZYUK V A	44
BRYUKHANOV V V	5	CHIKOV K N	17	DORFMAN G A	71
BUDNIK A P	41	CHIKOVSKIY A N	36	DOROFYEV I A	78
BUDNIKOV V N	83	CHILIKIN A B	37	DOROFYEV V G	78
BUDYANU V A	81	CHILINGARYAN YU S	19,20	DOROGOTOVTSEV V M	85
BUDZULYAK I M	81	CHIRIKOV S N	41	DOSTOV V L	39
BUGAYEV A A	56,82	CHISTYAKOV A A	53	DOVGALENKO G YE	49
BUISHVILI L L	62	CHIZHIKOV S I	24	DOVGAN' A P	46
BUKHARBAYEVA A S	53	CHMUTIN A M	62	DRABNER M	56
BUKHSHTAB M A	56	CHOKOYEV E S	76,78	DRACHEV V P	83
BUKREYEV V S	6	CHOLEWINSKI J	7	DRENCKHAN J	57
BULANIN M O	68	CHUBUKOV I YA	52,69	DROBNIK A	78
BULATOV V P	68	CHUESNIKOV D O	20	DRONOVA G N	75
BULDAKOV M A	69	CHUDINOV A N	80	DROZD P I	76
BULYSHEV A YE	69,85	CHUGUNOV A YU	8	DRUZHININ A A	78
BUNKIN F V	79	CHUKANOVA I N	71	DRUZHININ S I	5
BURAKOV V S	11	CHUKIN M S	42	DRYGA O V	10
BURCHULADZE T G	33	CHUPAKHIN M S	35	DUBENSKAYA M G	20
BURKHANOV G S	77	CHURAKOV V V	9	DUBENSKOV P I	75
BURMISTROV A S	69	CHURBANOV M F	35	DUBIK A	85
BUROV L I	20	CHUYKO V A	62	DUBINSKIY M A	2
BURSHTYEN A I	22			DUBNYAKOV V N	79
BURTSEV A P	68	DADESHIDZE V V	48	DUBNYAKOV V N	79,80
BUSHMELEV N I	49	DAGIS S P	71	DUBOVETS V G	7
BUTAYEV YU B	7	DAGMAN E YE	56	DUBOVIK V M	20
BUTENKO A V	20	DANILEVICH O I	81	DUBOVOY I A	18
BUTTA V I	46	DANILEYKO M V	8	DUBROVIN V F	49
BUTUSOV M M	56	DANILEYKO YU K	50	DUDIN A YU	8
BUTYLKIN V S	35	DANILOV A A	1,32	DUDKO G V	57
BUYANOV N B	52	DANILOV A YE	84	DUNIN S Z	27

DURASOV V M	49	GALKIN G N	82	GORELENOK A T	61
D'YAKONOV A M	27	GALKIN S L	56	GORELIK S L	47
DYAKOV T	79	GALKINA I P	66	GORELIK V S	24,70
D'YAKOV YU YE	24	GAL'PERN A D	49	GORNUSHKIN I B	68
DYKMAN M I	20	GALUSHKIN M G	24	GOROBCHENKO V S	71
DYRKHEYEV V V	39	GALYATSKAS A A	81	GORODETSKIY A YE	49
DYUBKO S F	10	GAMALIY YE G	84	GORSHEV V G	50
DZHAMIYKOVA TS V	16	GAMAZEYSHCHIKOV A M	9	GORSKI P	64
DZHOTYAN G P	24,43	GANAPETYAN M A	54	GORYACHUK O L	87
DZHUMABEKOV ZH I	79	GANCHERENOK I I	20	GOVECHIYA V I	86
DZHURAYEV M D	34	GANDURIN A L	41	GRACHEV V I	77
DZHURINSKIY B F	70	GANZHERLI N M	57	GRAD V I	7
EFENDIYEV T SH	5,67	GAPONOV S V	82,83	GRADOBOYEV YU G	47
EGLIT M E	83	GARBUIZOV D Z	5	GRIBENYUKOV A I	24
EHLERT J	70	GARYAGDYEV G	28	GRIGOR'YANTS A G	80
FABIAN J	70	GASHKA R I	81	GRIGOR'YANTS A V	58
FABIAN YU	70	GAS'KEVICH G I	46	GRIGOR'YANTS V V	34,35
FABRIKOV V A	70	GATI L	25	GRIGOR'YEV I S	44,50
FADEYEV A P	70	GATSU A F	33,34	GRIMM V A	36
FADEYEV V YA	16	GAVRIKOV V F	12	GRIN' YU I	10
FADEYEV YU A	26	GAVRILENKO V G	40	GRINENKO V M	8
FAL' A M	91	GAVRILIN S N	36	GRISHMANOVSKIY A N	18
FARADZHEV B G	70	GAVRILOV G A	54	GRISHUNIN P A	84
FAYZULLOV T F	8	GAWLIK W	14	GRODZINSKAYA M D	52
FAZLIYEV A Z	26	GAYSENOK V A	70	GROMOV A I	84
FEDOROV A V	70	GAYSIN R M	8	GROMOV G G	82
FEDOROVICH V YU	14	GAYVORONSKIY V YA	26	GRONKOWSKI J	30
FEDOROVSKIY O D	56	GELASHVILI G V	83	GROSMANN W	17
FEDOSEYEV V N	66	GEL'MUKHANOV F KH	64	GRUDININ A B	30,36
FEDOTOV N G	57	GEORGIYEV N	42	GRUDKIN V N	37
FEDOTOV S I	52,69,73	GERSHENZON YU M	67	GRUZEVIKH YU K	47,50
FEDYANINA YE L	59	GESSEN S B	1	GRUZINSKIY V V	14
FEDYAYEV D I	76,84,85,87	GEVORGYAN A A	54	GUBANOV V A	88
PEPELOV N A	60	GIGEVICH A S	5	GUBIN M A	7
PENG QI-YUAN	66	GILEV A K	14	GUBSKIY V I	58
PERBER R S	37	GILINSKIY I A	39	GUD V V	17
PESENKO L D	28	GILYAROV O N	44	GUDYALIS V V	71
PETISOV S P	64	GINIYATULLIN N I	36	GUDYMENKO L F	72
FILIMONOV S I	6	GIRUTS YE L	6	GUDZIY V I	58
FILINA L I	17	GIZATULLIN R M	12	GUETHER R	50
FILIPCHENKO A S	4	GLADCHENKO L F	70	GULE YE G	72
FILIPPOV V A	77	GLADYSHCHUK A A	3	GULEV V S	1
FINKEL'BERG V M	82	GLAZOV G N	41	GULIS I M	29,73
FINKEL'SHTEYN K I	42	GLEBOVSKIY A A	78	GULYAYEV YU V	34
FIRSOV V A	40	GLIKIN L S	57	GUMBERIDZE G G	83
FIRSOV V S	84	GLINCHUK YA I	33	GUREVICH S B	55,57,88
FIRSOVA L S	44,50	GLUKHIKH V A	78	GURINOVICH V V	71
FIRTSAK YU YU	46	GLYTENKO A L	77	GURSKIY A L	3
FISHER P S	16	GNIDASH N I	81	GURVICH A S	42
FOKHT SH	61	GOL'DMAN V YA	52	GURVICH L V	53
FOMENKO G P	35	GOLDOBIN I S	4	GUR'YANOV A N	58
FOMINSKIY V YU	70	GOLIKOVA YE V	59	GUSAK N V	50
FRADKIN E YE	23	GOLOVASHKIN A I	70,77	GUSAK P M	8
FRANGYAN A A	80	GOLTVYANSKAYA G F	27,28	GUSAKOV YE Z	83
FRANK D	13	GOLUBENTSEV A A	14	GUSEV V E	27
FRANTSESSON A V	43	GOLUBEV G P	20	GUSEV V G	58
FREITAG W	3	GOLUBEV O A	69	GUSHANSKAYA N YU	61
FRENKEL' L A	34	GOLUBEV V G	70	GUS'KOV A G	80
FROLENKO V A	17	GOLUBEV V V	38	GUS'KOV G A	46
PROLOVA M N	35	GOLUBKOV A A	26	GUS'KOV L N	54
FURSOV A N	57	GOLUBTSOV A A	80	GUS'KOV S YU	84
FYN TSI-YUAN'	38	GONCHAR V F	71	GUSOVSKIY D D	58
GABARAYEV R S	57	GONCHAROV I G	35	GUTIN M A	9
GAFIYCHUK V V	28	GONSALES K	4	GUTSUL T D	50
GAGARIN A P	17	GONYAYEV V S	57	HAEFNER H	65
GAKAMSKIY D M	82	GONZALEZ K	4	HAGEMANN E	17
GALANOV A N	78	GORBAN' I S	29	HEIDER M	65
GALANOV YE K	70	GORBARENKO V A	55,57	HOHMANN H	76
GAL'CHINSKIY A V	70	GORBATSEVICH S K	73		
	48	GORBATYUK S N	57		
	57	GORBUNOVA L G	74		
	65	GORDIYENKO V M	21		

IGNAT'YEV A G	60	KALENDIN L A	53	KHANOV V A	57
IGNAT'YEV A V	56	KALENDIN V V	57	KHARITONOV V V	84
IGNAT'YEV S V	38	KALINKIN V YE	49	KHASANOV O KH	52
IGONIN G M	41	KALMYKOV YU K	84	KHASANOV Z M	36
IGOSHIN V N	13	KALMYKOVA S S	31	KHAUSTOV A I	35
IGUMNOV YE A	41	KALONTAROV L I	53	KHAYDAROV D V	30,36
IKRAMI M B	30	KALYAGIN M A	82	KHAYTUN F I	41
IL'CHENKO V S	13	KALYUZHNAYA G A	3	KHIKMATOV N A	36
IL'ICHEV L V	64	KAMALOV V F	71	KHINRIKUS KH V	88
IL'INOVA T M	20	KAMARDIN I L	9,11	KHITROV A L	84
IL'INSKAYA N D	5	KAMENETS F F	24	KHMELEVSKIY A N	10
IL'INSKIY YU A	25	KAMINSKIY A A	2	KHOLBAYEV A	85
IL'YASOVA SH G	33	KAMSHILIN A A	47,49	KHOLIN I V	8
ILYUKHIN A B	74	KAMUZ A M	15	KHOLMURODOV KH T	22
INYUSHIN V M	33	KANDAUROV A S	2	KHOLODOV YE V	80
IOLTUKHOVSKIY A A	23	KANEV F YU	44	KHOMENKO A V	46,49
IONIN A A	9	KANEVSKIY M F	78	KHOPOV V V	51
IONOV S I	68	KAPKANSCHIKOV O V	66	KHRAMOV V YU	19
IONUSHAUSKAS G	23	KAPTSOV L N	41	KHRANENKO G G	1
IOVU M S	35	KAPUTERKO M N	14	KHRYASHCHEV L YU	64
IRMSCHER M	58	KARAMZIN YU N	42	KHURSHUDYAN M A	20
ISAKOV A I	85,87	KARASEV V A	8	KHVATOVA A V	33
ISHANIN G G	17	KARASIK A YA	58	KIKKARIN S M	27
ISHCHENKO A A	14	KARIMOV R M	71	KIREPA M V	88
ISHMURATOV A N	85	KARNAUKHOV A A	87	KIRICHENKO N A	79
ISKANDAROV Z B	64	KARNYUSHIN V N	14	KIRILLOV G A	85
ISMAILOV I K	62	KARPENKO M I	58	KIRPICHENKOVA YE O	67,68
ISPIRYAN K A	31	KARPOV L G	71	KIRYUNIKOV K V	10
ISPIRYAN M K	31	KARPOV S V	22	KISELEV V P	79
ITKIN A M	41	KARPOV S YU	39	KISELEV YU B	82
ITSKOVA P G	53	KARPOVICH I V	64	KISELEVA K V	3
IVAKHNIK V V	49	KARPUKHIN S N	24	KISELEVA YE S	21
IVANCHENKOV V P	47,48	KARPUSHKO F V	2	KISKIN A B	53
IVANENKO O I	6	KASHA M	5	KISLOV V I	11
IVANENKO O M	70	KASHCHEY V A	38	KITAYEV A YE	34
IVANENKO V V	58	KASHCHUK O L	80	KITAYEV V F	66
IVANKIV YA L	22	KASHIN V V	36	KIYAK S G	82
IVANOV A V	36,44	KASHKAROV S S	42	KLADOV G K	74
IVANOV B B	46	KAS'YANOV YU S	83	KLEMENTI T I	14,34
IVANOV M A	1	KASYMDZHANOV M A	39	KLEVITSKIY B G	36
IVANOV O G	41	KASYMDZHANOVA M A	61	KLEYMENOV V V	44
IVANOV S A	79	KATARKEVICH V M	67	KLIMENKO I B	77
IVANOV S G	66	KATSAP V N	4	KLIMENKO YU K	37
IVANOV V A	7,81	KATULIN V A	12	KLIMKIN V F	59
IVANOV V B	25,29	KATUSHKINA N V	57	KLIMOV I V	86
IVANOV V S	52,69	KAZAK N S	71	KLIMOV V I	69
IVANOV V V	2,84	KAZAKOV B N	2	KLIMOVA N V	15
IVANOV V YU	45	KAZANSKIY L P	78	KLIMOVSKIY I I	11
IVANOV YU L	3	KAZARYAN M A	62	KLINKOV V K	7
IVANOV-OMSKIY V I	70	KAZARYAN R A	19	KLISHINA T V	50
IVANOVA YE A	66	KAZEYEV M N	55	KLOCHKOV V P	57
IVANOVSKAYA M I	58	KECHYANTS A M	19	KLOPKOV N S	58
IVANOVSKIY A L	88	KELOGLU O YU	64	KLUSHIN V N	24
IVASHCHENKO M I	77	KEPRT J	59	KLYSHKO D N	21
IVASHCHENKO YU N	35	KERVALISHVILI P D	77	KNOELL L	32
IVASHOV G P	80	KETKOVICH A A	89	KNYAZ'KOV A V	18
IZMAYLOV A CH	71	KETSLE G A	5	KOBYLYANSKIY A I	53
IZMAYLOV G N	58	KEUSCH C	70	KOCH F	65
IZMAYLOVA V N	50	KEVORKOV A M	29	KOCHEMASOV G G	85
IZOSIMOV I N	86	KHABAROV S E	35	KOCHEROV D A	30
JACOBS B	65	KHABAROV V N	68	KODRENUCHUK L N	58
JAHNKE R	70	KHARIBULLAYEV B K	81,85	KOGAN A M	77
JUNGE K	84	KHABIBULLAYEV P K	2,34,39	KOKODIY N G	55
KAARLI R	51	KHADZHI P I	21	KOL'CHENKO A P	9
KABANOV I S	54	KHADZHIYSKIY A	42	KOLDUNOV M F	77
KACZMAREK F	32	KHAKHALIN S YA	87	KOLESOV I V	86
KADZHAR CH O	74	KHAKIMOV F KH	22	KOLIKOV V M	59
KAKABADZE G L	62	KHALILOV V KH	71	KOLOBKOV V P	36
KAKICHASHVILI SH D	50,51	KHALIMONOVA I N	72	KOLOBRODOV G N	36
KAKICHASHVILI V I	51	KHAMITOV V A	79	KOLOBRODOV V G	71
		KHAN V A	62	KOLOMENSKIY AL A	27
		KHANBEKYAN A M	65	KOLOMIYETS T M	15
				KOLOSHNIKOV V G	68

KOLOSOV V V	41 KOZEYEVA L P	29 KURBANOV K	2
KOLOVSKIY V B	62 KOZHEVNIKOV A V	8 KURBATOV G M	53
KOLYSHKIN V I	5 KOZIN G I	41 KURENKOV A V	44
KOMAROV K P	2 KOZLOV L F	57 KURILKO V I	31
KOMONI I I	61 KOZLOV P V	72 KURKOV A S	35
KOMOVA M G	70 KOZLOV V A	58 KURNOSOV A N	88
KOMPANETS I N	48 KOZLOV V S	37 KURNOSOV I V	74
KOMYAK A I	29 KOZLOVSKIY V I	4 KUROV A YU	12
KONDAKOV M YE	38 KOZYREV YU P	86 KUROV D A	86
KONDILENKO YE I	43 KOZYRKIN B I	61 KURSHYALIS S K	54
KONDRATENKO P S	40 KRASA J	12 KUSCH S	84
KONDRAT'YEV V A	37 KRASAVINA YE M	4 KUSH S	84
KONEV YU B	10 KRASAVTSEV V M	17 KUSHCHENKO A YU	36
KONONENKO V G	77 KRASHAKOV S A	5 KUSHKIMBAYEVA B ZH	82
KONOTOPOV A N	60 KRASIL'SHCHIK V Z	35 KUTELIYA E R	77
KONOV V I	6,78,79 KRASIN'KOVA M V	46 KUTNER V B	86
KONOVALOV V A	37 KRASNOSVOBODTSEV S I	77 KUTSAK A A	7
KONSTANTINOV V B	55 KRASOVITSKIY D V	21 KUVSHINSKIY N G	55
KOPTEV V G	2 KRASYUKOV YU N	76 KUZELEV M V	31
KOPYLOV L N	54 KRAVCHENKO A A	57 KUZ'MICHEVA V M	55
KOPYLOV S M	6 KRAVTSOV V B	50 KUZ'MIN O V	1
KOPYSOV I A	87 KRAVTSOV YU A	42 KUZ'MIN R N	31
KOPYTIN YU D	62 KRAYSLER O D	15 KUZ'MIN V I	86
KORBUTYAK D V	81 KREKOV G M	42 KUZ'MINOV YU S	18
KORESHEV YE R	84 KREKOVA M M	42 KUZ'MISHCHEV V A	77
KORN G	84 KREMNEV L S	80 KUZNETSOV E A	83
KORNELYUK V N	66 KREYNGOL'D S U	35 KUZNETSOV I G	43
KORNEYEV A A	23 KRISYUK V YA	55 KUZNETSOV I V	76
KORNEYEV V I	35 KROO N	21 KUZNETSOV M F	41
KORNILOV S T	41 KRSEK J	59 KUZNETSOV S G	12
KORNIYENKO L S	64 KRSTIC P S	65 KUZNETSOV V A	89
KOROBKIN D V	36 KRUCHNOV V YU	4 KUZNETSOV V V	60
KOROBKIN V V	26,83,86 KRUGLOV B V	84,87 KUZNETSOVA A L	46
KOROLEV B V	69 KRUMIN' A E	18 KUZNETSOVA V V	29
KORONKEVICH S V	50 KRUZHKOVA S N	71 KUZNETSOVA V V	69,74
KORONKEVICH V P	57 KRYANINA M N	80	
KOROTEYEV N I	72 KRYANOV S A	70 LADOKHIN A S	71
KOROTKOV S A	68 KRYSHKIN V I	37 LAEDKE E W	25
KOROVIN L I	49 KRYSTEV G	42 LAKOBA I S	29
KOROVKINA L I	22 KRYUCHKOV S I	10 LAMAZHAPOV KH D	14
KORSHUNOV I P	36 KRYUKOV A P	54 LANDA K A	88
KORYAKOVTSSEV V S	38 KRYUKOVA I V	4 LANGBEIN U	21
KORZHIK YU V	46 KSANDOPULO G I	67 LANGER J M	81
KORZININ YU L	51 KUBYSHKIN A P	21 LASHKOV G I	51
KOSHCHIYENKO A V	61 KUCHARCZYK W	64 LASKA L	12
KOSHECHKIN S L	43 KUCHIKYAN L M	38 LAVRINENKO A V	15
KOSHELYAYEVSKIY N B	54 KUCHINSKIY A A	9,11 LAVROV A P	28
KOSICHKIN YU V	72 KUCHINSKIY A G	84 LAVROV A V	9
KOSNIKOV A YU	68 KUCH'YANOV A S	2 LAZAREV V B	81
KOSTENICH YU V	5 KUDRYASHOV I A	45 LAZAREV V V	2
KOSTIN N N	4 KUDRYAVTSEV A A	7 LAZO V V	34
KOSTOUSOV V D	58 KUDRYAVTSEV N N	10 LEBEDEV YE N	47
KOSTYRKIN B V	59 KUDRYAVTSEVA G I	18 LEBEDEVA T P	50
KOSTYSHIN M T	15 KUKHTAREV N V	49 LEBO I G	84
KOSULIN N L	64 KUKK P L	34 LEDERER F	21
KOT G G	11 KUKLIN S V	37 LEGOSTAYEV V N	17
KOTKIN A L	64 KUKUSHKIN A G	27 LEMANOV V V	27
KOTKOV A A	9 KULAK I I	14 LEONOV YE I	35
KOTLIKOV YE N	64 KULAKOV YA L	34 LERMAN A A	26
KOTLYARCHUK B K	82 KULASHCHIK S M	2 LERNER P B	32
KOTOV I R	51 KUL'BATSKIY YE B	80 LETOKHOV V S	52,53,63
KOTOVA S P	38 KULESH V P	56	66,68
KOTSARENKO N YA	23 KULEVSKIY L A	24,30 LEUPOLD D	70
KOVALENKO A N	67 KULIKOV A N	53 LEVANOV YE I	84
KOVALEV A A	44 KULIKOV S G	74 LEVIN I M	41
KOVALEV A M	59 KULIKOVSKIY B N	44 LEVINSON G R	55
KOVALEV A S	90 KULYGINA N A	16 LEVKIN L V	34
KOVALEV V F	21 KUPCH YA A	34 LEVOV S N	47
KOVALEV V I	44 KUPCHENKO L F	28 LEVSHIN L V	5
KOVALEVICH A M	79 KUPKE W	13 LIBENSON M N	78,81
KOVALEVSKIY V I	67 KURASHOV V N	39,61 LIBERA L	52
KOVARSKIY V A	64 KURATEV I I	23 LIKHANSKIY V V	14,21,44,50

LIPATOV N I	9	MAKSIMOV V N	8	MERKUL'YEV YU A	84,85
LIPINSKI A	78	MAKSIMYAK P P	48	MERZLYAKOV N S	51
LIPOVSKIY A A	35	MAKUKHA V K	54	MESHCHERYAKOV N A	16
LISACHENKO A A	78	MALAKHOV A N	45	MESHKOV B B	90
LISITSA M P	72	MALAKYAN YU P	21	MESHKOVSKIY I K	77
LISITSYN I V	66	MALASHKEVICH G YE	5	MEYKLYAR M P	51
LISITSYN V N	54	MALIMON A N	54	MEYSNER L B	23
LISUNOV V V	84,85	MALOV A N	38,49	MEZENTSEV V K	21,83
LITOVCHENKO V G	81	MAL'TSEVA N A	59	MIHAILESCU I N	80
LOBANOV O V	37	MALYSHEV A V	39	MIKHAYLOV A YE	13
LOBAZOV A F	70	MALYSHEV S L	6	MIKHAYLOV V P	14
LOEBE K	72	MALYSHEV YU M	55	MIKHAYLOV YU A	76,84,85,87
LOGUNTSEV YE N	71	MALYSHEVA I B	79	MIKHAYLOVSKIY S S	8
LOKHMANN V N	67,68	MALYUTA D A	78	MIKHEYENKO A V	21
LOMAKIN A V	72	MALYY V I	43	MIKHEYEV L D	12
LOPATIN V N	40	MAMEDBEYLI I A	74	MIKHEYEV P A	37,39
LOPUKHIN V M	89	MAMEDOV F M	62	MIKHKEL'SOO V T	62
LOSEV S A	72	MANDROSOV V I	88	MIKLA V I	73
LOSEVSKIY N N	49	MANENKOV A A	77	MIKLAVSKAYA YE M	71
LOSHCHINOV V I	34	MANICHEV I A	14	MIKSUYU YU I	73
LOSHIN A F	69	MANSYREV M M	48	MILOSEVIC D B	65
LOSHKAREVA N N	74	MARCHEVSKIY F N	45	MILOVSKIY N D	43
LOSHKAREVA N S	80	MARENKOVA I N	73	MINASYAN L L	24
LOTKOVA E N	9	MARGOLIN A D	9,14	MINAYEV N S	73
LOZOVIK YU YE	64	MARGULIS V A	77	MINOGIN V G	21
LOZOVSKIY V N	4	MARKARYAN G R	70	MIRKIN L I	77
LUCHININ A G	41	MARKELOV YE YU	86	MIRONENKO S I	2
LUCHINSKIY D G	20	MARKELOVA L P	42	MIRONOS A V	50
LUDINKOV V V	18	MARKEYEV A M	80	MIRONOVA T A	16
LUGINA A S	71	MARKHVIDA I V	51	MIROSHNICHENKO A V	55
LUKINSKIY S V	28	MARKOV P I	89	MIROV S B	2,67
LUKINYKH V F	22	MARKOV YE V	4	MIROVITSKAYA S D	61
LUKIYAN L N	82	MARKUSHEV V M	70,75	MIROVITSKIY D I	39
LUKOMSKIY N G	65	MARTYNOVICH YE F	1	MIRTADZHIYEV F M	39,61
LUKOSHKIN V A	56,82	MARTYUKHINA L I	27	MIRZAYEV A T	61
LUK'YANCHUK B S	79	MARUPOV R	53	MISHAKOV V G	7
LUK'YANOV A T	53	MASEK K	12	MISHCHENKO A V	14
LUK'YANOV G A	11	MASHCHENKO A I	39	MISHCHENKO V A	8
LUK'YANOV V N	30,61	MASLENNIKOV N M	72	MISHIN V I	52,73
LUNYAKOVA G A	48	MASLOV N V	85	MISHINA YE D	19
LUSKIN B M	83	MASLOVA N S	32	MISHURNYY V A	4
LUSKINOVICH P N	30	MASLYANKIN V I	84	MIS'KEVICH A I	11
LUTKOVSKIY V M	58	MATKOVSKIY A O	66	MITDANK R	65
LUTSIV-SHUMSKIY L F	64	MATROSOV I I	69	MIT'KINA N N	29
LYADZHIN V A	42	MATSONASHVILI B N	75	MITROFANOV V V	87
LYAKHNOVICH A V	19	MATVEYENKO A V	75	MITSEN K V	70
LYALIKOV A M	62	MATVEYENKO YE V	4	MITTOVA I YA	73
LYSANOVA G V	70	MATVEYEV A N	26,36	MITYAGIN YU A	3
LYSENKO G K	55	MATVEYEV B A	82	MKOYAN A S	25
LYSKOVICH A B	65	MATVEYEV D T	42	MLADENOV G	79
LYTKIN A P	9	MATVEYEV I N	88	MOCHALOV I V	24
LYUBOV V YA	77	MATVEYEV M YU	72	MODRIC D	73
LYUTSKO V A	74	MAURER I A	57	MOISEYENKO I F	78
		MAVLIYEV R A	43	MOKROS I J	59
MACHEKHIN YU P	8	MAYMISTOV A I	20	MOKRUSHIN YU M	47
MAGDINA I I	18	MAYOROV A V	57	MOKRYI O M	64
MAK A A	29	MAYOROV S A	86	MOLODKINA L M	59
MAKAI JANOS	55	MAYOROV V S	80	MOLODYAKOV S A	48
MAKAI JOZSEF	55	MAYSURADZE G G	25	MORICHEV I YE	18,47,48
MAKAREVSKAYA YE V	35	MAYSURADZE L A	51	MOROZOV A N	38
MAKAROV G N	67,68	MAYYER A A	37	MOROZOV V P	2
MAKAROV V A	26	MAZMANISHVILI A S	17	MOROZOVA I N	36
MAKAROV V V	79	MAZOVKO A V	5	MOROZOVA N K	89
MAKARSKAYA N V	33	MAZUR M M	26	MORSHIYEV S K	34
MAKHALOV I K	42	MAZUR M YU	76,87	MOSKALIK L M	56
MAKHMUDOV E B	37	MDIVANYAN B E	65	MOSKOVETS YE V	66
MAKHONIN I I	79	MEDVEDEV B A	72	MOSTOVNIKOV V A	70
MAKHSUDOV B I	33	MELIKYAN O G	20	MOSYAK A A	22
MAKIN G I	66	MEL'NIK N N	72	MOTKIN V S	2
MAKIN V S	81	MEL'NIK P G	3	MOTYLEV S L	26,86
MAKRAVEYEV V I	37	MEL'TSIN A L	66	MOVSESYAN M YE	65,73
MAKSIMCHUK A M	76,87	MERKULOV D G	8	MOVSESYAN R YE	65

MUDRYI A V	73	NOVIKOV M G	69	PARYGIN V N	89
MUKHIN V V	12	NOVIKOV S A	57	PASHAYEV O K	22
MUKHAMADZHANOV M A	26	NOVIKOV V B	4	PASHCHENKO G YE	18
MUKHIN YU V	24	NOVIKOVA YE V	44	PASHININ P P	9,44
MUKHTAROV E I	76	NOVODVORSKIY O A	74	PASMANIK G A	45
MURADOV I G	14	NOZDRIN YU N	3	PASYUK A S	86
MURADYAN A ZH	67	NYATIKSHIS V V	81	PATUK A I	73
MURADYAN L KH	37			PAVEL'YEV A B	20
MURAV'YEV A V	3	OBLIZIN A N	86	PAVLENKO V K	71
MURAV'YEV V V	67	ODINOKOV S B	46	PAVLIK B D	40
MURINA T M	34	ODINTSOV V A	18	PAVLINSHIN I V	27
MURUGOV V M	85	OELGART G	65	PAVLOV A V	51
MURZIN V N	3	OGANESYAN M K	30	PAVLOV S A	3
MUSIKHIN V A	18	OGANESYAN R G	43	PAVLOV V A	72
MUSTAYEV P T	82	OGANESYAN S G	31	PAVLOV V N	11
MYL'NIKOV G D	8	OGURTSOVA L A	71	PAVLOVA N O	11
MYSLIVETS S A	22	OKSENGEDLER B L	52	PAVLOVSKIY B A	59
		OKUNEV R I	41,47	PAVLYUK A A	29
NABOYKIN YU B	71	OKUTIN G P	85	PAVLYUK V I	81
NADENENKO A V	71	OLEKSENKO P F	15	PECHEN' YE V	77
NADEZHDINSKIY A I	72,73	OLEVSKIY S S	61	PED'KO S N	38
NAGIBIN YU T	13	OL'KHOVAYA L A	30	PEGAR'KOV A I	53,74
NAMM A V	4	ORAYEVSKIY A N	86	PEKAR' G S	15
NAPARTOVICH A P	8,14,21,44	ORAYEVSKIY I N	10	PEKLECHKOV V D	86
NARVA V K	80	ORDZHONIKIDZE S K	59	PERLENKOV V D	86
NASIBOV A S	4	ORESHKO YE V	15	PELYUKHOVA YE B	13
NAUMOV A F	38	ORISHICH A M	86	PENCHEVA V KH	54
NAWROT W	7	ORLOV O V	47	PENIN A N	21
NAZARENKO V G	77	ORLOV V V	84	PENKIN N P	11
NAZARKIN A V	7	ORLOV V YU	78	PENTKO V YA	82
NAZAROV V L	39	ORLOVA I B	13	PEREKHOZHEVA T N	74
NAZAROV V V	19	ORLOVICH V A	11	PEREKRESTOV V I	81
NAZARYAN A A	43	ORLOVSKIY YU V	68	PEREL'MAN N F	22
NEBOGOV S M	34	OSADCHEV L A	38	PERFIL'YEV V A	75
NECHAYEV S V	70	OSADCHIYEV V M	23	PERLIN YE YU	56
NEFED'YEV L A	51	OSETROV V P	84	PERMINOV S M	36
NEMCHENOK A S	77	OSHEMKOV S V	68	PERMINOVA V N	36
NEMCHINOV I V	42	OSIRO V V	1,68,75,89	PERSONOV R I	74
NEMETS A M	68	OSIPOV M V	84	PETRAKOVA T V	4
NEMETS V M	73	OSIPOV V YU	16	PETRASH G G	62
NEMKOVICH N A	70	OSIPOV YU V	16	PETRENKO N YE	46
NEMTSEVICH M P	73	OSTEN W	59	PETRISHCHEV V A	41
NESTERIKHIN YU YE	83	OSTROUMOV V G	1	PETROPAVLOVSKIY A I	13
NESTEROV A P	33	OSTROVSKIY I V	27	PETROSYAN A A	20
NESTEROV D A	50	OSUTIN A V	70	PETROSYAN L S	30,67
NEVOLIN V N	80	OVCHARENKO N V	36	PETROSYAN S G	17
NICKLES P	84	OVCHAROV A T	17	PETROV A A	19,68,73
NIFTIYEV G M	75	OVCHINNIKOV A V	5	PETROV A L	12
NIKIFOROV M YA	58	OVCHINNIKOV S N	54	PETROV A N	9
NIKIFOROV V G	69	OVSİK YA	85	PETROV M P	19,49
NIKIFOROV YU T	50			PETROV S I	85
NIKITCHENKO V M	67	PAK G T	4	PETROV S S	40
NIKITENKO A I	84,85	PAKHOMOV L N	41	PETROV V M	46
NIKITENKO V A	3	PAKHOMOVA T A	34	PETROV V N	61
NIKITIN S YU	24	PAKTER M K	5	PETROV V V	41
NIKITIN V A	37	PALAVANDISHVILI L S	26	PETROV YU N	79
NIKITIN V V	7,63	PALAZOV D V	60	PETROVA L I	18,47
NIKITOV S A	36	PALKIN A M	10	PETROVA N N	37
NIKLES P	84	PALMTSHOFER L	81	PETROVSKIY G T	67,88
NIKOLAYCHENKO V G	37	PAL'TSEV L L	28	PETRU F	59
NIKOLAYEV A V	8	PANIN YU M	1	PETRUN'KIN V YU	27,41
NIKOLAYEV F A	58	PANKOWSKI J	7	PETSKUS A M	47
NIKOLAYEV V D	12	PANOV A B	42	PETUKH M L	87
NIKOL'SKIY M YU	1,28,32	PANOV V P	77	PETUKHOV V O	9
NIKONENKO YE A	73	PAPAZYAN T A	30	PEVNITSKIY I V	71
NIKULOVA G A	35	PAPERNNY S B	25,29	PEZT V E	62
NINOYAN ZH O	54	PARAKHIN V YE	58	PICHKASOV V M	12
NIRSHA B M	73	PARAMONOV L YE	40	PICHLER G	73
NORINSKIY L V	7	PARAMONOV YU M	5	PIKKEL' E V	42
NOSKIN V A	74	PARASHCHUK V V	3	PILIPETSKIY N F	24,80
NOVIKOV A I	67	PARFENOV A V	38	PINTER F	25
NOVIKOV L N	23	PARFENOV V G	13	PIROGA S A	65

PIROZHKOV N A	54	PUKO R A	29	RUBENCHIK A M	25
PISARENKO V F	1	PULYSHEV V V	86	RUBIKIS R YA	33
PISAREV V S	57,60	PUSHKINA T N	4	RUBINOV A N	5,6,67,70
PISKARSKAS A	23	PUSTOGAROV A V	60	RUDENKO K V	82
PIS'MENNY V D	78	PUSTOVALOV V V	21	RUDOY I G	12
PLAKHOTNIK T V	5	PUSTOVOY V I	24,79	RUKHADZE A A	31
PLATONOV YE M	60	PUSTOVOYT V I	26	RUL'KOV N F	43
PLATONOVA I V	77	PYANCHENKO V YA	21	RUPASOV A A	84
PLESHAKOVA R P	87	PYATAKHIN V I	35	RUSANOV S YA	36
PLESHANOV YU V	42	PYATNITSKIY L N	41	RUSOV N YU	43
PLETNEVA N I	18,47	PYATRAUSKAS M B	81	RYABCHENKOV V V	76
PLOTNICHENKO V G	35	PYNDYK A M	5	RYADNOV S N	29
PLYAVENEK A G	30	PYZIN G P	60	RYAKHIN A D	43
PODOL'SKIY B S	79			RYAZANOV N S	76
PODTYKAN F P	78	RAABE K	55	RYAZANTSEVA N V	39
PODVYAZNIKOV V A	18	RABA O B	33	RYL'KOV V V	74
POGOSYAN E M	30	RABCHUK A V	36	RYSKOV V M	40
POKORA L	7	RACHKOV I A	61	RYSKIN YA I	75
POKORMYAKHO N G	10	RADLOFF W	76	RYZHKOV M V	88
POKOTILO I L	77	RAKHIMOV A T	90	RZHANOV YU A	58
POKROVSKAYA F S	71	RAKITIN V D	58		
POLIKHONOV G N	57	RAKOV V N	16	SADOVSKAYA O L	78
POLISHCHUK V A	65	RAKOVSKIY V YU	27	SADOVSKIY V N	44
POLONIN A K	77	RAL'CHENKO V G	79	SAFIN V M	77
POLONSKIY L YA	41	RAPOPORT L P	53,74	SAFONOV A N	80
POLOVINKIN A V	45	RASSKAZOV S A	41	SAFONOV V V	71
POLOVINKO I I	27	RASSUDOVA G N	15	SAGITOV S I	12
POL'SHCHIKOV G V	17	RASTOPOV S F	65	SAGUN YE I	71
POLUSHKIN I N	66	RASTORGUYEV YU G	55	SAICHEV A I	45
POLYAKOV B I	62	RASULOV R YA	65	SAIDOV R P	2,31
POLYANIN V YE	58	RAUBISHKO B N	33,34	SAKHAROV D K	37
POLYANSKIY A A	16	RAUCH R	29	SAKHOVSKIY S YE	66
PONATH H E	21	RAYCHENOK T F	68	SALASHCHENKO N N	83
PONEZHA G V	43	RAYK YU B	14	SALAYEV E YU	74
PONOMARENKO A G	86	RAYNEKE V	84	SALEWSKI K D	57
PONOMARENKO T M	46	RAZUMEYENKO M V	68	SAL'KOVA YE N	52
PONOMAREV A S	62	REBANE A	51	SAL'NIKOV YE N	46
PONOMAREV D I	9	REBANE I	74	SALOV A V	81
POPELA B	59	RED'KO T P	11	SAMARSKIY A A	84
POPOV A G	41	REINECKE W	84	SAMARTSEV V V	51
POPOV A K	22	REKHVIASHVILI D N	61	SAMOKHVALOV A A	74
POPOV V P	4	REMIZOV S A	55	SAMOYLOV V D	42
POPOVA M F	33	REVOKATOVA I P	3	SAMSONOV A G	83
POPOVA N R	51	REYNGOL'D V A	3	SANDAKOV A N	17
POPOVA T N	69	REZNIKOV P V	4	SANDAKOV V S	86
POPOVICH D I	82	REZNIKOVA L A	73	SANNIKOV YU A	71
POROYKOVA A I	68	RHEINLAENDER B	65	SARBEI O G	63
PORTNOY YE L	4	RIKER R	84	SARKISOV O M	68
POTAPOV M M	53	RINKEVICHYUS B S	60	SASHIN YU N	1
POTAPOV V T	34	ROBUR L I	23	SASKEVICH N A	2
POTYKEVICH I V	57	RODE A V	84	SATTAROV D K	89
POVALYAYEV O A	60	RODES E KH	14	SATTAROV F A	51
POZDNEYEV S A	12	RODICHKIN V A	9,11	SAUTENKOV V A	63
PRAKHOV S S	66	RODIN V V	77	SAVCHENKO S K	60
PREOBRAZHENSKIY N G	69,85	RODIONOV G D	29	SAVCHENKO S M	84
PRESNYAKOV G S	60	RODISHEVSKIY A V	10	SAVCHENKO V N	38
PRESNYAKOV YU P	59	ROGOV V S	7	SAVCHUK A V	52
PRIBYTKOV A V	18	ROMANENKO P F	15	SAVEL'YEV A D	6
PRIKHOD'KO G K	58	ROMANENKO V I	30	SAVEL'YEV A N	83
PRIYEZZHEV A V	41	ROMANIUK R	32,37	SAVITSKIY I V	66
PRODAN YE A	74	ROMANOV A M	47	SAYEchnikov K A	29
PROKHOROV A M	1,6,9,18,28	ROMANOV A V	8	SAYENKO I I	48
	30,34,36	ROMANOVSKIY O A	42	SCHAEFER F	13
	58,79	ROMANOVSKIY YU V	74	SCHOENNAGEL H	84
PROKHOROV V P	37	RONE I V	33	SDOBYREV V V	77
PRONIN N V	86	RONZHIN A I	37	SEBEKINA N N	39
PROTASEVICH YE T	62	ROSTOVTSSEV YU V	66	SEBRANT A YU	78
PROTSENKO YE D	7,41	ROZANOV V B	84	SEIDLI G S	62
PROVOTOROV S V	63	ROZANTSEV V A	87	SEKATSKIY S K	52
PRZHEVSKIY S S	17	ROZHDESTVENSKIY YU V	21	SELENT'YEV D G	59
PUDKOV S D	78	ROZNIAKOWSKI K	78	SELEZNEV V A	15
PUKHOVA V V	73	RUBANOV A S	15,49	SELEZNEVA L A	11

SELISHCHEV S V	80,82	SHIROKOV V F	78	SMOLITSKIY V A	35
SELIVEROV S N	60	SHKADAREVICH A P	2,14,29	SMOLOV V B	47
SEMAK D G	73	SHMAL'GAUZEN V I	44,45	SMORGONSKIY A V	31
SEMENENKO A V	23	SHMAVONYAN S V	73	SMOTKIY O I	16
SEME NOV A T	4,60	SHMELEV V M	9,14	SMUROV I YU	80
SEME NOV O G	86	SHMIDT N M	61	SMYSHLYAYEVA O YU	71
SEME NOV S A	9	SHOKHUDZHAYEV N	4	SNETKOV YE I	46
SEME NOV V N	73	SHOTTER L L	34	SNGRTYAN YE A	30
SEME NOVA L V	8	SHPAK M T	57	SNYTNIKOV V N	86
SEMEROK A F	44,50	SHPILEVOY B N	84	SOBEL'MAN I I	83
SEMIDETNOV N V	40,59	SHPOTYUK O I	66	SOBIOV M M	25
SEMILETOV S A	61	SHREDER T	23	SOBOL' A A	1,75
SEMINOGOV V N	22,39,40,78	SHTANDEL' S K	56	SOBOLEV A G	30
SEMIOKHIN I A	18	SHTENTSEL' O	72	SOBOLEV G A	50
SENATOROV A K	58	SHTERNBERG A P	18	SOBOLEV N N	9
SENATSKIY YU V	2,84,85	SHITOKMAN M I	20	SOBOLEVA S B	50
SENIK A V	85	SHUB V E	79	SOCHACKI J	16
SENTSOV YU I	43	SHUBADEYEVA L P	42	SOCHAVA S L	52
SERDYUK V M	45	SHUBNIKOV YE I	51	SOKOL'NIKOV A S	53
SEREGIN V F	30	SHUMYATSKIY P S	54	SOKOLOV A V	34
SERENKO M YU	60	SHURENKOV YE P	80	SOKOLOV V I	22,39,40
SERES F	25	SHURULINKOV S P	60	SOKOLOVA L K	5
SERGEYEV A N	38	SHUTOV S D	35	SOKOLOVSKAYA A I	24
SERGEYEV A S	31	SIDOROV N V	76	SOLDATENKOV V A	50
SERGEYEV P B	82	SIDOROV T A	66	SOLDATOV V I	50
SERGEYEV S O	72	SIDOROV V S	30	SOLNTSEV V P	1
SERKIN V N	36	SIDOROV YU I	72	SOLODKOV A F	30
SHAGIYEV YU M	66	SILENKO V V	72	SOLODKOV V M	84
SHALAYEV V M	20	SILICHEV O O	13	SOLOV'YEV A A	73
SHANDAROV S M	38,91	SILIN V P	25,85	SOLOV'YEV A P	56
SHANIN O I	44	SILIVRA A A	23	SOLOV'YEV N A	83
SHAPIRO D A	10,67	SIMONCHIK L V	83	SOROKA A M	12
SHAPOSHNIKOV S N	16,28,91	SIMONENKO V N	53	SOROKIN N G	24
SHARYGIN L M	71,74	SIMONOV A P	62	SOROKIN V B	29
SHASHKOVA I L	74	SINEOKIN V I	86	SOROKIN YE V	1
SHASTIN V N	3	SINIGIBSKIY A I	48	SOROKINA I T	1
SHATALIN I D	51	SINITSYN D V	9	SOROKO L M	60
SHATS YA B	50	SINITSYN G V	2,19	SOSKIN M S	57
SHATSEV A N	19	SINITSYNA S V	56	SOSNIN V P	34
SHAYKEVICH I A	23,76	SINYAVSKIY E P	64	SOSNINA G F	53
SHAYYMKULOV M O	15	SIRO F VASKES	38	SOTNIKOVA G YU	54
SHCHEGLOV V A	12	SIRUTKAYTIS V	23	SOZINOV V N	10
SHCHELEV M YA	18	SITNIK D N	51	SPATSCHEK R H	25
SHCHEPINOV V P	60	SIYANITSA P YE	61	SPLAVNIK YU V	41
SHCHERBAKOV A A	84	SKACHKOV A N	53	STABNIKOV M V	37
SHCHERBAKOV A I	66	SKLIZKOV G V	2,76,84,87,90	STAHL A	3
SHCHERBAKOV A S	27	SKLYAROV YU M	20	STARCHENKO A N	55
SHCHERBAKOV I A	1,2,28,32	SKOBELEV I YU	87	STASEL'KO D I	6
SHCHERBAKOV M A	1	SKOCHILOV A F	51	STASHKEVICH I V	15
SHCHERBINA K G	77	SKOROBOGATOV G A	53	STASYUK I V	22
SHCHIPUNOVA N A	52	SLABKO V V	22	STAVITSKAYA G P	75
SHELKOV N V	30,60	SLAVENAS YU YU YU	71	STAVROVSKIY D B	12
SHELOBOLIN A V	84	SLIVKA V YU	73	STEFANOV S M	60
SHEMASHURENKO YE G	16	SLOBODSKOY M V	62	STEFANOVICH V A	73
SHENNAGEL' KH	84	SLOBODYANYUK A I	70	STEFFEN U	13
SHENYAVSKAYA YE A	53	SLOBODYANYUK A V	29	STEJSKAL A	59
SHERSTNEV K B	84	SLYUSAREV N S	54	STEPANOV S I	19,52
SHESHUKOV A P	57	SMALIKHO I N	40	STEPANOV V YE	77
SHESTAKOV N P	57	SMAYEV V P	49	STEPANOV YE V	72
SHEVCHENKO V A	29	SMIRENKINA I I	68	STEPANOV YU YU	79
SHEVEL'KO A P	83	SMIRNITSKIY V B	4	STEPANOVA M A	78
SHEVEREV V A	9	SMIRNOV A G	90	STEPIN A P	17
SHEVYREV A S	6	SMIRNOV A V	66	STERLYADKINA YE A	69
SHEYNIN M G	59	SMIRNOV A YU	5	STETSENKO S G	86
SHIBARSHINA G D	21	SMIRNOV D F	32	STIEL H	70
SHIBKO A N	79	SMIRNOV G I	21,66,67,83	STOKLITSKIY S A	3
SHIFRIN K S	41	SMIRNOV V A	1,46	STOYANOV KH YU	60
SHIKANOV A S	84,87	SMIRNOV V I	60	STRIGUN V L	6
SHIKANOV A YE	87	SMIRNOV V L	50	STRIKOVSKIY M D	82
SHIKHSANDOV M SH	65	SMIRNOV V S	14,64	STRIZHEVSKIY V L	45
SHILKINA T YU	74	SMIRNOV YE P	66	STROGANOVA N S	66
SHIPOV N V	23	SMIRNOVA T V	52	STUCHEBRYUKHOV A A	68

STUDENIKIN L M	19	TITOV A N	22,55	USTINOVSKIY N N	8
STUDENIKIN P A	1,28	TITOV G A	42	USUPBEKOVA B SH	34
STUS' N M	82	TITOVA T V	66	USVYAT I I	4
SUBASHIYEV A V	63	TKACHENKO T L	7	UTKIN I A	51
SUBASHIYEV V K	26	TOCHITSKIY S YA	9	UTKIN V G	52
SUBBOTIN F M	47	TODRIYA T E	29	UVAROVA T V	2
SUBBOTIN V I	84	TOEPFER K	29	UZHINOV B M	5
SUDARKIN A N	24,80	TOKAREV A G	1	UZIYENKO D A	86
SUD'YENKOV YU V	27	TOKAREV V N	78		
SUKENBAYEV A S	78	TOLCHIN V G	52	VAKULOVSKIY A S	41
SUKHANOV V I	51	TOLEUTAYEV B N	71	VALOV P M	67
SUKHANOVSKAYA A I	35	TOLMACHEV A I	43	VALUYEV A D	84,87
SUKHAREV A G	44	TOLOK V T	87	VALYGINA M A	42
SUKHAREV S A	85	TOLSTIKHINA A L	61	VAN'KOV A B	56
SUKHODOL'SKIY A T	65	TOLSTORZHEV G YE	58	VANNIKOV A V	75
SUKHOLININ V L	61,62	TOLSTYKH A B	59	VARCHUK N K	38
SUKHORUKOV A P	45	TOMILINA YE A	16	VARDOSANIDZE Z V	50
SUKHORUKOV YU P	74	TOMIN V I	70	VARPAKHOVICH A G	6
SUKHORUKOVA A K	24	TOPCHIYAN M YE	87	VARTAPETOV S K	6
SUKHOTIN S A	38	TORGOVKIN M YU	27	VASETSKIY V A	14
SUKHOVERKHOV V F	12	TRESHCHALOV A B	62	VASHURIN P V	38
SULADZE A S	61	TRIPPEL' A F	81	VASIL'YEV A A	45,48,87
SULKHANYAN V A	43	TROFIMOV G S	19	VASIL'YEV A F	61
SULTANOV SH D	85	TROFIMOV I YE	3	VASIL'YEV N F	25
SUP'YAN V YA	57	TROFIMOV V A	42,45	VASIL'YEV YU B	3
SURKOV V K	37	TROFIMOV V T	75	VASIL'YEVA I G	74,75
SUSENKO L N	55	TROITSKIY V S	32	VASIN B L	84,87
SUSHCHINSKIY M M	22	TROITSKIY YU V	9,17	VASNETSOV M V	13
SUTORIKHIN V A	28	TROSHIN A S	32	VAYTEKUNAS F K	54
SUTYAGIN A N	19,26	TROYANOVSKIY I V	5	VDOVENKOV V YU	28
SUVOROV A YE	69,85	TRUKAN M K	5	VELICHANSKIY V L	63
SUVOROV K G	86	TSAPENKO L M	72	VELIKHOV YE P	90
SUVOROV YE V	35	TSAREV A V	27	VELIKOVICH A L	20
SVECHNIKOV S V	15	TSAREVSKIY A V	75	VENEDIKTOV YE A	75
SVICH V A	10	TSARYUK V I	70	VENKIN G V	25
SVIDZINSKIY K K	18	TSEBULYA G G	76	VERENIK V N	29
SVIRIDOV K N	43	TSEKHOMSKIY V A	57	VEREVKIN YU K	75
SVISTUN M I	12	TSEYEB A O	48	VEREVKINA ZH A	73
SVITASHEVA S N	39	TSIKIN B G	56	VERGUNOVA G A	84
SYSOYEV V K	36	TSITSISHVILI D K	61	VERNIGOROV N S	28
SZUSZKIEWICZ W	22	TSORIKISHVILI N G	29	VERTSIMAKHA YA I	52
		TSUKERMAN YE V	46	VERTUSHKIN V K	16
		TSUKKERMANN N S	47	VESELOVSKIY I A	78
TADEUSH V N	5	TSUVETKOV YU V	23	VIGASIN A A	75
TAGIYEV B G	75	TSVIRKO M P	71	VIL'DANOV R R	61
TAKTAKISHVILI M I	83	TSVIRKO V A	29	VINOGRADOV A G	42
TALALAKIN G N	82	TSYGANKOV A A	84	VINOGRADOV B A	77
TAMBIYEV YU A	30	TSYMBAL L I	1	VINOGRADOV V G	86
TAMKIVI R P	34	TSYUPAK I M	42	VINOKURTSEVA I M	38
TANIN L V	51	TULOVSKAYA Z D	50	VITSHAS A F	43
TARASOV G G	20	TUMAYEV YE V	1	VITYUKOV V V	79
TARASOV I S	5	TUMAYKIN A M	64	VIZE L	25
TASHDULATOV Z T	34	TUR I N	5	VIZEL' A A	38
TATAR D	80	TUTUNARU M	80	VIZEN F L	28
TATARENKOV V M	54	TYMCHIK G S	71	VLADIMIROV A G	13
TATARSKIY V I	42	TYULIN V I	90	VLADIMIROV F L	18,48
TAVLYKAYEV R F	19	TYURIN A G	75	VLADIMIROVA O V	80
TELEGIN G G	66			VLASENKO N V	4
TELESHOV B YE	50	UDAL'TSOV V S	58	VLASOV D V	43
TELEZHNIKOV V N	47	UGLOV A A	80	VLASOV N G	52
TEPLITSKIY V A	4	UGOZHAYEV V D	2	VLASOV R A	52
TERESHCHENKO YE D	52	UKRAINTSEV V A	53	VLASOV S N	26
TERMAN M YU	66	ULASYUK V N	4	VO DUC LUONG	20
TERYSHNIK A D	75	UMARKHODZHAYEV R M	64	VO DUK LUONG	20
TESTOV V G	10	UNYSKOV A F	2,28	VODOP'YANOV K L	24,30
TETEL'MAN T V	15	URBANOVICH A I	45	VOLCHANSKIY O V	27
TETEVYAN S K	42	USAY U YU	14	VOLCHKOVA G N	9
TEUCHNER K	70	USHAKOV S N	1	VOLKOV I S	38
THIELEMANN W	65	USHAKOV V N	28	VOLKOV L A	61
TIKHOMIROV O YU	15	USKOV A V	30	VOLKOV V V	33,34
TIKHONCHUK V T	25	USOVA N A	44	VOLOKHOV G M	5
TIMOSHECHKIN M I	1	USTINOV N D	88	VOLOSEVICH P P	84
TITARCHUK V A	11				

VOLOV V T	14	YUGAY A G	33	ZHUK S V	82
VOLYAR A V	38	YUMASHEV K V	14	ZHUKHLIN A M	58
VORON'KO YU K	1,75	YUNGE K	84	ZHUKOV A N	6
VORONTSOV A A	61	YUOZAPAVICHYUS A	23	ZHUKOVA V A	49
VORONTSOV M A	45	YURAS S F	59	ZHUPANOV V G	60
VOVK S M	71,74	YUREVICH V I	27	ZHURAVLEVA T S	75
VOYEVODIN V G	24,38	YURKIN A M	1	ZHVAVYY S P	78
VOYTSEKHOVICH V S	8	YUROV V YU	9	ZIL'BERMAN G YE	28
VUL' A YA	17	YURSHIN B YA	10	ZIL'BERSHTEYN KH I	68
VVEDENSKIY V D	12	YURSHINA L A	54	ZILOV S A	1
VVEDENSKIY YU V	38	YUSHIN N K	27	ZIMIN YU A	43
VYLEGZHANIN O N	48	YUZHANIN A G	82	ZIMOKOSOV G A	8
				ZINCHENKO A K	7,78
WEHRHAN G	29	ZABAZNOV A M	14	ZODELAVA G L	62
WESTPHAL K D	38	ZABOROV A N	52	ZOLIN V F	70,75
WODKIEWICZ K	22	ZACHOROWSKI J	14	ZOLLMANN C	55
		ZADKOV V N	23	ZOLOTAREV S V	81
YABLONSKIY G P	3	ZADORIN A S	28,91	ZOLOTAREV V A	35
YACHMENEV V A	40	ZAGIDULLIN M V	13	ZOLOTOV YE M	19
YAGUDIN SH I	2	ZAGREBNOV V A	32	ZOROV N B	69
YAKHMANOV S A	40	ZAGUMENNYI A I	1	ZOTOV N M	62
YAKIMOVICH A P	52	ZAIKIN A P	13	ZOZULYA A A	25
YAKOBSON N N	63	ZAKARAYA M G	25	ZUBOV B V	34
YAKOVENKO N A	37	ZAKHARCHENYA B P	82	ZUFAROV M A	75
YAKOVKIN I B	27	ZAKHARENKO YU A	84,87	ZURIN M V	8
YAKOVLENKO S I	86,87	ZAKHAROV I L	66	ZUYEV A B	38
YAKOVLEV P P	90	ZAKHAROV M I	61	ZUYEV V V	42
YAKOVLEV V A	17,61	ZAKHAROV S D	33	ZUYEV V YE	42,62,91
YAKOVLEV V P	20	ZAKHAROVA I G	42	ZYBIN A V	68
YAKOVLEV V V	60	ZAKHIDOV E A	39,61	ZYURYUKINA O V	56
YAKUBOV A N	61	ZANDANOVA G I	40		
YAKUBOVICH S D	4,30,61	ZAPASSKIY V S	66		
YAKUSHEV A K	84	ZAPOROZHETS B M	45		
YALINICH V P	7	ZARETSKIY A I	85		
YAMPOL'SKAYA G P	50	ZARKO V YE	53		
YAN SIN-YUY	28	ZASAVITSKIY I I	75		
YANG XING-YU	28	ZASKAL'KO O P	43		
YANKOVSKIY A A	87	ZASLAVSKIY G M	34		
YAREMENKO R G	55	ZATAYEVICH V I	17		
YAROSLAVSKAYA N N	48,52	ZAVARTSEV YU D	1,28		
YAROSLAVSKIY L P	91	ZAVIDEY V I	60		
YASHINSKAS V P	34	ZAYACHKOVSKIY M P	61		
YATSENKO L P	8	ZAYARNIY D A	8		
YEFIMENKO M N	10	ZAYTSEV S V	5		
YEFREMOV V A	10	ZAYTSEV V P	8		
YEGOROV A A	38	ZAYTSEV V V	3		
YEGOROV S YE	66	ZAYTSEV YU S	5		
YEGOROV YU V	28	ZBOROVSKIY A A	46		
YELISEYEV A P	1	ZELENINA L I	35		
YELISEYEV P G	33	ZELEPUGA YE A	57		
YELISON M I	58	ZELIKMAN I N	3		
YEMEL'YANOV V I	22,78	ZEMLYANSKIY V M	91		
YENIKEYEVA R R	16	ZEMSKOV K I	62		
YEPIFANOV M S	82	ZEMSKOV YE M	24		
YEPIKHIN V M	28	ZEYLIKOVICH I S	62		
YEPIKHIN V N	57	ZHABOTINSKIY M YE	34		
YEREMEYEV B V	33	ZHAKHOV V V	71		
YERITSYAN G A	20	ZHARIKOV A A	22		
YERITSYAN O S	54	ZHARIKOV YE V	1,2,28,32		
YERMAKOV V P	75	ZHARIKOV YU D	1		
YERMOLENKO N N	5	ZHAROV V P	34		
YEROFEYENKO V T	45	ZHDANOV V I	18		
YEROKHIN N S	26	ZHELUDKOVA V V	33		
YERSHOV A V	39	ZHEMERDEYEV O V	19,67		
YESEPKINA N A	28,48	ZHEYENBAYEV ZH ZH	76,78		
YESKIN K F	18,39	ZHIDKOV A G	86		
YES'KOV N A	1	ZHIGLINSKIY A G	76		
YEVSEYEV G A	84	ZHILINSKAS E V	81		
YEVSTIGNEYEV V L	32	ZHILYAYEV YU V	70		
YEVSTRATOV YE V	79	ZHINZHNIKOV G M	11		
YEVTIKHIYEV N N	55	ZHIZHIN G N	61,76		
YUDIN V V	88	ZHMINCHENKO S M	39		

DISTRIBUTION LIST

DOD AND JOINT ACTIVITIES

A015	2	ASD R&D/DARPA
A105	1	OASD PA
A128	1	SDIO
A340	1	JCS/J-5 MIL SEC
A353	1	JSTPS
B002	1	DIA/DO
B004	1	DIA/DI-1
B060	1	DIA/RTS-2A5 PENT
B079	1	DIA/DIC-2C
B140	1	DIA/DE-1 (GROUND)
B159	14	DIA/DT-5A1
B163	1	DIA/DT-5B
B177	1	DIA/DT-5
B311	1	DIA/DC-6
B327	1	DIA/DE-TA02
B351	1	DIA/RTS-3A4
B352	50	DIA/RTS-2F STOCK
B537	1	DIA/DB-TPO
B594	1	DIA/DB-1F
B618	1	DIA/DB-4D
B731	1	DIA/DX-6
B737	1	DIA/RTS-2B (LIB)
B762	1	DIA/DB-6E2
B780	1	DIA/DB-1D2

U.S. ARMY

C461	2	INFANTRY CENTER
C500	1	TRADOC
C509	2	BALLISTIC RES LAB
C512	1	ARMY MATERIEL CMD
C515	1	CHEMICAL R&D CTR
C521	1	ELECTRONIC PG
C523	1	LABCOM
C540	1	USASDC
C550	2	CECOM
C569	1	BRDEC (STRBE-HF)
C632	1	CHEMICAL SCHOOL
C633	1	ORDNANCE CTR & SCH
C641	1	AVIATION CTR & SCH
C646	1	CACDA
C667	1	USAJFKSWC
C683	1	INTEL CTR&SCH
C755	1	902D MIG
C768	4	ITAC (LIBRARY)

U.S. NAVY

D002	1	OP-81(DNM)/CNA
D028	1	NAVAIRTESTCEN PAX
D217	2	NAVWPNCEN
D218	2	NRL CODE 2627
D220	2	ONR
D246	2	NAVSWC CODE D22
D248	2	NAVSEASYS COM
D249	2	NAVPGSCOL
D258	1	DTNSRDC
D424	1	NAVAVIONICEN IND
D505	1	COMNAVSECGRU
D506	1	COMNAVSPACECOM
D553	1	NAVSPASUR
D785	1	NSGSA WASHINGTON
D947	1	NIC-10

U.S. AIR FORCE

E021	1	DET-1, AFIS
E100	2	TAC 480 RTG/INPPD

E280	1	AFTAC/DOI
E303	1	HQ AFIS/INKL
E403	1	AF SYSTEMS CMD/INA
E404	2	AEDC/DOI
E407	1	BALLISTIC MSL OFC
E408	5	AF WEAPONS LAB/IND
E411	5	AERONAUT SYS DIV
E413	2	ELEC SYS DIV/IND
E414	1	WSMC/SPX (AFCS)
E418	1	OG AIRLOGCTR-MMECR
E425	1	WR AIRLOGCTR/MMR-2
E427	2	ROME AIRDEVCTR-INA
E429	1	HQ SPACE DIV/IND
E452	1	CADRE/WGOI

UNIFIED AND SPECIFIED COMMANDS

G005	4	HQ AFSPACECOM/INXS
H005	1	USCINCEUR
H300	1	ODCS IN(USAREUR)
H527	1	HQ 8TH INF DIV
J515	1	FICEURLANT
K300	1	IPAC (LIBRARY)
K320	1	USARJAPAN
L041	1	544 IAS/IAR
L051	1	544 IAS/IAI

OTHERS

P002	2	NPIC/IB
P005	2	DOE/DASI
P007	1	DOE/NV/SSD/COCO
P015	3	NPIC/IEG/MSL&C3
P055	6	CIA/OCR/DSD/DB
P090	5	NSA
Q008	3	NISC
Q420	10	FTD/SIIS
Q592	4	FSTC (IS-1)
Q619	5	MSIC REDSTONE
R085	5	NASA
S003	1	SANDIA NAT LABS
S013	1	LLL
S030	4	FRD LIB OF CONG
S085	1	ORGDP

TOTAL DISTRIBUTION:		175
STOCK:		50
TOTAL PRINT:		225

(MICROFICHE)

DOD AND JOINT ACTIVITIES

B352	25	DIA/RTS-2F STOCK
------	----	------------------

U.S. ARMY

C500	1	TRADOC
C617	2	CONCEPT ANALYS AGCY
C768	1	ITAC (LIBRARY)

U.S. AIR FORCE

E706	1	HQ ESC/INAM
------	---	-------------

TOTAL DISTRIBUTION:		5
STOCK:		25
TOTAL PRINT:		30