

AD-A195 970

BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS NUMBER 00

1/2

MARCH - APRIL 1987(U) DEFENSE INTELLIGENCE AGENCY

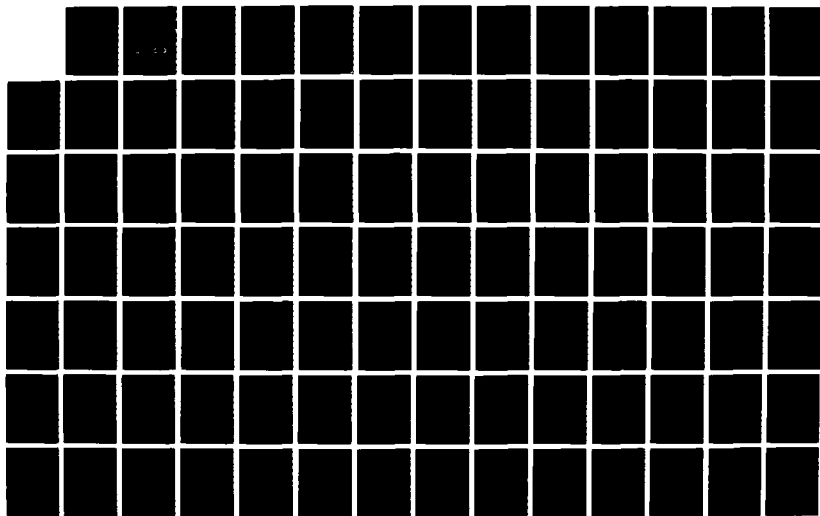
WASHINGTON DC DIRECTORATE FOR SCI.. 03 MAR 88

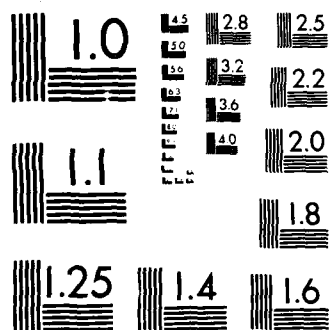
UNCLASSIFIED

DIA-DST-27002-002-00

F/G 9/3

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

AD-A195 978

DTIC FILE COPY

4

Bibliography of Soviet Laser Developments

March - April 1987



Defense Intelligence Agency

DTIC
ELECTE
JUN 06 1988
S D

DST-2700Z-002-88

March April 1988

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

33

055

BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

No. 88

MARCH - APRIL 1987

Date of Report

March 3, 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

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DST-2700Z-002-88	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS, No. 88 MARCH - APRIL 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		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Intelligence Agency Directorate for Scientific and Technical Intelligence		12. REPORT DATE March 3, 1988
		13. NUMBER OF PAGES 162
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; 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; jhd.		
20. ABSTRACT This is the Soviet Laser Bibliography for March-April 1987, and is No. 88 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; 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.		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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 March-April 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	
IS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

SOVIET LASER BIBLIOGRAPHY, MARCH-APRIL 1987

TABLE OF CONTENTS

I. BASIC RESEARCH

A. Solid State Lasers

1. Crystal

a. Miscellaneous	1
b. Ruby	---
c. LiF	3

2. Rare Earth

a. Miscellaneous	3
b. Nd ³⁺	4
c. Er ³⁺	6
d. Ho ³⁺	---
e. Tm ³⁺	---

3. Semiconductor

a. Theory	6
b. Miscellaneous Homojunction	7
c. Miscellaneous Heterojunction	8
d. GaAs	---
e. CdS	9
f. ZnSe	---
g. Pb(1-x)Sn(x)Te	---
h. InGaAsP	9

4. Glass	
a. Miscellaneous	10
b. Nd	10
c. Er	---
B. Liquid Lasers	
1. Organic Dyes	
a. Miscellaneous	12
b. Rhodamine	13
c. Polymethine	13
d. Coumarin	13
e. Phthalimide	---
f. Cyanine	14
g. Xanthene	---
h. POPOP	---
2. Inorganic Liquids	---
C. Gas Lasers	
1. Theory	14
2. Simple Mixtures	
a. Miscellaneous	15
b. He-Ne	16
c. He-Xe	---
d. He-Kr	17
e. Ar-Xe	---

3. Molecular Beam and Ion	
a. Miscellaneous	---
b. Carbon Dioxide	17
c. Carbon Monoxide	23
d. Noble Gas	23
e. Nitrogen	---
f. Iodine	---
g. Hydrogen	---
h. Ammonia	24
i. Carbon Tetrafluoride	25
j. Nitrous Oxide	---
k. Water Vapor.....	---
l. Heavy-Water Vapor	---
m. Submillimeter	---
n. Metal Vapor	25
o. Gasdynamic	26
4. Excimer	26
5. Dye Vapor	---
D. Chemical Lasers	
1. Miscellaneous	---
2. Fluorine + Hydrogen (Deuterium)	27
3. Photodissociation	27
4. Transfer	---
5. Oxygen + Iodine	28
6. Carbon Disulfide + Oxygen	---
7. Sulfur Hexafluoride + Hydrogen	29

E. Components

1. Miscellaneous	29
2. Resonators	
a. Design and Performance	29
b. Mode Kinetics	30
3. Pump Sources	31
4. Cooling Systems	32
5. Deflectors	---
6. Attenuators	32
7. Collimators	---
8. Diffraction Gratings	32
9. Focusers	33
10. Windows	---
11. Polarizers	---
12. Beam Shapers	33
13. Lenses	---
14. Filters	33
15. Beam Splitters	---
16. Mirrors	33
17. Detectors	35
18. Modulators	35

F. Nonlinear Optics	
1. General Theory	37
2. Frequency Conversion	43
3. Parametric Processes	45
4. Stimulated Scattering	
a. Miscellaneous Scattering	46
b. Raman	47
c. Brillouin	48
d. Rayleigh	---
5. Self-focusing	48
6. Acoustic Interaction	49
G. Spectroscopy of Laser Materials	51
H. Ultrashort Pulse Generation	52
J. Crystal Growing	---
K. Theoretical Aspects of Advanced Lasers ..	53
L. General Laser Theory	54

II.	LASER APPLICATIONS	
A.	Biological Effects	56
B.	Communications Systems	56
C.	Beam Propagation	
1.	Theory	61
2.	Propagation in the Atmosphere	63
3.	Propagation in Liquids	70
4.	Adaptive Optics	71
D.	Computer Technology	75
E.	Holography	76
F.	Laser-Induced Chemical Reactions	79
G.	Measurement of Laser Parameters	82
H.	Laser Measurement Applications	
1.	Direct Measurement by Laser	85
2.	Laser-Excited Optical Effects	103
3.	Laser Spectroscopy	107
J.	Beam-Target Interaction	
1.	Miscellaneous Targets	115
2.	Metal Targets	119
3.	Dielectric Targets	121
4.	Semiconductor Targets	122
K.	Plasma Generation and Diagnostics	124
III.	MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS ..	129
IV.	SOURCE ABBREVIATIONS	132
V.	AUTHOR AFFILIATIONS	137
VI.	AUTHOR INDEX	149

I. BASIC RESEARCH

A. SOLID STATE LASERS

1. Crystal

a. Miscellaneous

1. Bagdasarov, Kh.S.; Danilov, V.P.; Murina, T.M.; Novikov, Ye.G.; Prokhorov, A.M.; Semenov, V.B.; Fedorov, Ye.A. (IOF). Tunable laser using an $\text{Al}(\text{sub}2)\text{O}(\text{sub}3):\text{Ti}(\text{sup}3+)$ crystal with flashlamp pumping. PZTFD, no. 6, 1987, 369-371.
2. Bakin, D.V.; Dorozhkin, L.M.; Krasilov, Yu.I.; Kuznetsov, N.T.; Shestakov, A.V. (). Wide-band nonlinearly tunable generation in the infrared range based on $\text{Al}(\text{sub}2)\text{O}(\text{sub}3)-\text{Ti}$ -laser emission. OPSPA, vol. 62, no. 4, 1987, 891-893.
3. Beterov, I.M.; Drozdova, O.V.; Kolyago, S.S.; Mats, R.E. (). Tunable lasing in $\text{Tl}(\text{sup}0)[\text{I}]$ color centers in $\text{KCl}:\text{Tl}$ crystals. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 9. (RZRAB, 87/4Ye282).
4. Brodin, M.S.; Gushcha, A.O.; Tishchenko, V.V. (IFANUK). Electron-hole liquid and hysteresis of biexciton radiation in AgBr . ZETFA, vol. 92, no. 3, 1987, 932-940.
5. Gaponenko, S.V.; Zimin, L.G.; Kononov, V.A.; Korik, O.Ye.; Mikhnov, S.A.; Uskov, V.I. (). Phototropic properties of sapphire with radiative color centers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 7. (RZRAB, 87/4Ye202).
6. Grigor'yev, V.N.; Yegorov, G.N.; Zharikov, Ye.V.; Mikhaylov, V.A.; Pak, S.K. (). Pulsed gadolinium-scandium-gallium garnet: Cr, Nd lasers with polarized radiation output. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 22. (RZRAB, 87/4Ye189).
7. Ivanov, N.A.; Inshakov, D.V.; Parfianovich, I.A.; Khulugurov, V.M. (). New lasers using color centers in LiF and NaF crystals with flashlamp pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 5. (RZRAB, 87/4Ye207).

8. Koptev, V.G.; Mironenko, S.I.; Umyskov, A.F. (). Tunable Cr³⁺-doped gadolinium-scandium-gallium garnet laser with flashlamp pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 241. (RZRAB, 87/4Ye210).
9. Kruglik, G.S.; Skripko, G.A.; Shkadarevich, A.P.; Kondratyuk, N.V.; Urbanovich, V.S.; Nazarenko, P.N.; Bartoshevich, S.G.; Mironenko, S.I. (). Obtaining coherent tunable radiation in Al(sub2)O(sub3):Ti(sup3+) crystals. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 14. (RZRAB, 87/4Ye196).
10. Mikhaylov, A.Ye. (LITMO). Study and optimization of pulsed gadolinium-scandium-gallium garnet lasers without forced cooling. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 145-146.
11. Natarov, S.Yu.; Pashinin, P.P.; Shklovskiy, Ye.I. (). Pulsed gadolinium-scandium-gallium garnet:Cr,Nd lasers with a stimulated Brillouin mirror and plasma switch. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 20. (RZRAB, 87/4Ye190).
12. Trunov, V.I.; Pestryakov, Ye.V. (). Tunable lasing in BeAl(sub2)O(sub4):Ti(sup3+) lasers under coherent pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 237. (RZRAB, 87/4Ye284).
13. Vashkevich, I.M.; Zabaznov, A.M.; Uvarova, N.N. (). Single pulsed waveguide lasers using gadolinium-scandium-gallium garnet crystals. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 17. (RZRAB, 87/4Ye193).
14. Vodop'yanov, K.L.; Kulevskiy, L.A. (). Spectrally limited picosecond pulses in an yttrium-scandium-gallium garnet:Cr³⁺,Er³⁺ laser at 2.79 um with active mode lock. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 182. (RZRAB, 87/4Ye195).
15. Zharikov, Ye.V.; Nasel'skiy, S.P.; Ryabov, A.I.; Shcherbakov, I.A. (IOF). Short-lived absorption in excited GSGG:Cr-Nd crystals. KVEKA, no. 4, 1987, 836-837.

16. Zharikov, Ye.V.; Zabaznov, A.M.; Prokhorov, A.M.; Shkadarevich, A.P. (). Using gadolinium-scandium-gallium garnet crystals with color centers as passive and active elements of solid state lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 3. (RZRAB, 87/4Ye206).
17. Zhitnyuk, V.A.; Kuratev, I.I.; Moseyevskiy, V.A.; Siyuchenko, O.G.; Shestakov, A.V.; Shnitser, P.I. (). Highly efficient laser using $\alpha\text{-Al}(\text{sub}2)\text{O}(\text{sub}3):\text{Ti}(\text{sup}3+)$ crystals. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 245. (RZRAB, 87/4Ye198).
- b. Ruby
- c. LiF
18. Basiyev, T.T.; Dolzhenko, S.V.; Yershov, B.V.; Kravtsov, S.B.; Mirov, S.B.; Spiridonov, V.A.; Fedorov, V.V. (). Optimizing the parameters of $\text{LiF:F}(\text{sub}2)(\text{sup}-)$ lasers pumped by a neodymium laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 6. (RZRAB, 87/4Ye173).
19. Martynovich, Ye.F.; Baryshnikov, V.I.; Grigorov, V.A.; Shchepina, L.I. (). Miniature laser elements using color centers at the lowest lasing threshold. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 4. (RZRAB, 87/4Ye205).
20. Vcytovich, A.P.; Kalinov, V.S.; Mikhnov, S.A.; Ovseychuk, S.I. (). Lithium fluoride active medium with $\text{F}(\text{sub}3)(\text{sup}+)$ color centers to obtain lasing in the green region. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 8. (RZRAB, 87/4Ye201).

2. Rare Earth

- a. Miscellaneous
21. Antipenko, B.M.; Glebov, A.S.; Dumbravyanu, R.V.; Sobolev, B.P.; Uvarova, T.V. (). Spectroscopy and lasing characteristics of $\text{BaEr}(\text{sub}2)\text{F}(\text{sub}8):\text{Tm} + \text{Ho}$ crystals. KVEKA, no. 4, 1987, 677-681.

22. Borodulenko, G.P.; Bykovskiy, Yu.A.; Kirillovich, A.A.; Ponomarev, N.M.; Pukhliy, Zh.A. (IOF). Optical properties of lanthanum oxosulfide single crystals. FTVTA, no. 3, 1987, 888-890.
23. Kaminskiy, A.A. (). Stimulated emission spectroscopy of Ln^{3+} ions in tetragonal LiLuF_4 fluoride (in English). PSSAB, v. A97, no. 1, 1986, K53-K58. (RZFZA, 87/3L902).
- b. Nd^{3+}
24. Antropov, A.B.; Korchagin, A.A.; Makarov, V.N.; Saprykin, L.G. (). Efficient use of optomechanical shutters with total internal reflection for a Q-switched YAG:Nd^{3+} laser. ZPSBA, vol. 46, no. 3, 1987, 486-489.
25. Basiyev, T.T.; Dergachev, A.Yu.; Zverev, P.G.; Lysoy, B.G.; Mirov, S.B.; Konyushkin, V.A. (IOF). Passive Q-switching in a c-w YAG:Nd^{3+} laser by means of $\text{LiF:F}(\text{sub}2)(\text{sup} -)$ crystals. IOF. Preprint, no. 306, 1986, 21 p. (RZFZA, 87/3L975).
26. Baturina, O.A.; Grechushnikov, B.N.; Kaminskiy, A.A.; Konstantinova, A.F.; Markosyan, A.A.; Mill', B.V.; Khodzhabagyan, G.G. (IKAN). Crystal optic studies on compounds with a trigonal Ca-gallogermanate structure $[\text{Ca}(\text{sub}3)\text{Ga}(\text{sub}2)\text{Ge}(\text{sub}4)\text{O}(\text{sub}14)]$. KRISA, no. 2, 1987, 406-412.
27. Bogdanov, S.F.; Borisov, A.A.; Konvisar, P.G.; Rustamov, S.R. (). Generator of UV radiation at the third harmonic of a mode-locked YAG:Nd^{3+} laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 116. (RZRAB, 87/4Yel62).
28. Konyashchenko, A.V.; Kryukov, I.V.; Kryukov, P.G.; Sharkov, A.V. (FIAN). Passive shutter with a mixture of saturable absorbers for solid-state laser mode locking. KVEKA, no. 4, 1987, 813-815.
29. Kornev, A.F.; Nikitichev, A.A.; Soms, L.N.; Stupnikov, V.K. (). Comparative characteristics of neodymium-containing YAG, gadolinium-scandium-gallium garnet and YLiF_4 crystals in periodic pulsed lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 21. (RZRAB, 87/4Yel97).

30. Kravtsov, N.V.; L'vov, B.V.; Samsuyev, K.B.; Shelayev, A.N.; Shokalo, V.I. (). Compact mode-locked ring YAG:Nd laser with continuous LED pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, pp not given. (RZRAB, 87/4Yel59).
31. Mak, A.A.; Ustyugov, V.I.; Khaleyev, M.M.; Zakgeym, A.L.; Marakhonov, V.M. (). Amplitude fluctuations in LED-pumped c-w YAG:Nd lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 165. (RZRAB, 87/4Yel63).
32. Parfenov, V.A.; Pikovskiy, A.S.; Khandokhin, P.A. (). Instability and chaos in Nd:YAG lasers with a ring resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 99. (RZRAB, 87/4Yel61).
33. Pecka, J. (). YAG:Nd laser head. Author's certificate Czechoslovakia, no. 229274, 15 Aug 1986. (RZRAB, 87/3Ye98).
34. Yevdokimova, O.N.; Kaptsov, L.N. (). Dynamic instability in a giant-pulse-generating YAG:Nd³⁺ laser with mode locking. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 186. (RZRAB, 87/4Yel65).
35. Yonushauskas, G.; Sinkyavichyus, G.; Sirutkaytis, V.; Yozapavichyus, A. (). Picosecond neodymium-containing crystal lasers with passive mode lock and their use to pump optical parametric oscillators. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 219. (RZRAB, 87/4Yel92).
36. Zabavin, V.N.; Kazakov, A.A.; Kochetkov, A.M.; Shavkunov, S.V. (). Highly efficient pulsed garnet laser with intracavity frequency doubling. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 123. (RZRAB, 87/4Yel71).
37. Zaslavskaya, V.R.; Korunnyy, V.N. (). Lasing dynamics of YAG:Nd³⁺ lasers with an additional mirror. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 187. (RZRAB, 87/4Yel64).

38. Zaytsev, G.F.; Kruzhalov, S.V.; Parfenov, V.A.; Pakhomov, L.N. (). Single-frequency YAG laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 166. (RZRAB, 87/4Ye166).
- c. Er3+
39. Arutyunyan, S.M.; Kostanyan, G.Ye.; Petrosyan, A.G.; Sanamyan, T.V. (). Study on YAlO(sub3):Er3+ lasers in the three-micron range. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 248. (RZRAB, 87/4Ye204).
40. Bagdasarov, Kh.S.; Lobachev, V.A.; Murina, T.M.; Prokhorov, A.M.; Fedorov, Ye.A. (). Study on the lasing characteristics of YAG:Er3+ lasers at 2.94 um under millisecond pulse pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 247. (RZRAB, 87/4Ye172).
- d. Ho3+
- e. Tm3+

3. Semiconductor

- a. Theory
41. Akimova, I.V.; Kozlovskiy, V.I.; Korostelin, Yu.V.; Nasibov, A.S.; Pechenov, A.N.; Reznikov, P.V.; Reshetov, V.I.; Skasyrskiy, Ya.K.; Shapkin, P.V. (FIAN). Effect of stoichiometry in A(2)B(6) single crystal compounds on the characteristics of e-beam-pumped semiconductor lasers. FIAN. Trudy, no. 177, 1987, 142-171.
42. Andronov, A.A.; Mityagin, Yu.V.; 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). Long-wavelength infrared laser using hot holes in germanium. KVEKA, no. 4, 1987, 702-704.
43. Bezhan, N.P.; Brynzar', V.I.; Gitsu, D.V.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPI). Electric response of laser diodes under selective Q-switching conditions. Part 1. Resonance spectra of optoelectronic signals and amplification line shape in injection lasers. MoldNIINTI. Deposit, no. 763-M, 25 Dec 1986, 22 p. (RZFZA, 87/4L644).

44. Bezhan, N.P.; Brynzar', V.I.; Gitsu, D.V.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPI). Electric response of laser diodes under selective Q-switching conditions. Part 2. Photosensitivity of laser diodes during regenerative amplification and lasing. MoldNIINTI. Deposit, no. 764-M, 25 Dec 1986, 23 p. (RZFZA, 87/4L645).
45. Bezhan, N.P.; Brynzar', V.I.; Gitsu, D.V.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPI). Electric response of laser diodes under selective Q-switching conditions. Part 3. Optoelectronic signal spectra of laser diodes with additional mode selection. MoldNIINTI. Deposit, no. 765-M, 25 Dec 1986, 8 p. (RZFZA, 87/4L646).
46. Bezhan, N.P.; Brynzar', V.I.; Gitsu, D.V.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPI). Electric response of laser diodes under selective Q-switching conditions. Part 4. Anomalous optoelectronic signal spectra. MoldNIINTI. Deposit, no. 766-M, 25 Dec 1986, 13 p. (RZFZA, 87/4L647).
47. Bogatov, A.P.; Yeliseyev, P.G. (). Nonlinear optics of semiconductor lasers. Itogi nauki i tekhniki. Radiotekhnika, no. 35, VINITI, 1986, 208-269. (RZFZA, 87/3L907).
48. Kuz'min, A.N.; Kurlenkov, S.S.; Ryabtsev, G.I.; Sapozhnikov, S.M.; Tanin, L.V. (). Study on mechanical stresses in (Al,Ga)As laser diodes during mounting on a cold conductor. VBSFA, no. 5, 1986, 76-79. (RZFZA, 87/3L951).
49. Machac, P.; Myslik, V. (). Electronics to study the service life of semiconductors (in Czech). ELKCA, no. 11, 1986, 813-821. (RZFZA, 87/4L1043).
50. Marugin, A.V.; Kharchev, A.V. (). Study on modulation characteristics of laser diodes. RATEA, no. 11, 1986, 89-92. (RZFZA, 87/3L944).
- b. Miscellaneous Homojunction
51. Bogdankevich, O.V.; Zverev, M.M.; Kopyt, S.P.; Krasavina, Ye.M.; Kryukova, I.V.; Novozhilova, L.G.; Pevtsov, V.F. (VNITsISPIV). Electron-beam-pumped repetitively pulsed semiconductor laser. KVEKA, no. 3, 1987, 605-607.
52. Danishevskiy, A.M. (FTI). Stimulated emission and optical orientation in PbSe and PbTe under two-photon pumping. FTVTA, no. 4, 1987, 1006-1010.

c. Miscellaneous Heterojunction

53. Aydaraliyev, M.; Zotova, N.V.; Karandashev, S.A.; Matveyev, B.A.; Stus', N.M.; Talalakin, G.N. (FTI). Temperature dependence of the parameters of stimulated emission in p-n structures based on $\text{InAs}(1-x)\text{Sb}(x)$. PZTFD, no. 6, 1987, 329-331.
54. Baranov, A.N.; Dzhurtanov, B.Ye.; Imenkov, A.N.; Timchenko, I.N.; Yakovlev, Yu.P. (FTI). Manifestation of self-consistent quantum-dimensional potential wells in electroluminescent properties of GaInAsSb lasers. PZTFD, no. 8, 1987, 459-464.
55. Bazarov, A.Ye.; Goldobin, I.S.; Yelisseyev, P.G.; Kobilzhanov, O.A.; Pak, G.T.; Petrakova, T.V.; Pushkina, T.N.; Semenov, A.T. (FIAN). Stimulated emission phasing in arrays of stripe $\text{GaAlAs}/\text{GaAs}$ lasers with the use of active directional couplers. KVEKA, no. 4, 1987, 874-876.
56. Belovolov, M.I.; Gur'yanov, A.N.; Gusovskiy, D.D.; Dianov, Ye.M.; Kuznetsov, A.V.; Pencheva, V.Kh.; Prokhorov, A.M. (IOF). Michelson fiber interferometer study on single-frequency semiconductor lasers. KVEKA, no. 4, 1987, 871-874.
57. Selivanov, Yu.G.; Shotov, A.P. (FIAN). Optical limitation in a symmetric $\text{PbS}/\text{PbSSe}/\text{PbSnSe}$ heterostructure. KRSFA, no. 4, 1987, 21-23.
58. Tsidulko, I.M. (FTIANTadzh). Effect of diffusion of excess carriers under stimulated emission conditions, on pumping efficiency and differential resistance in injection lasers. IATOA, no. 2, 1986, 53-60.
59. Yelisseyev, P.G.; Pak, G.T.; Popovichev, V.V.; Sapozhnikov, S.M. (FIAN). Study on the longevity of cw $\text{GaAlAs}/\text{GaAs}$ injection lasers. KVEKA, no. 4, 1987, 892-894.
60. Yelisseyev, P.G.; Zherdev, A.A.; Kargapol'tsev, V.S.; Talenskiy, O.N.; Zharisov, G.G. (FIAN). Radiation characteristics of $\text{AlGaAs}/\text{GaAs}$ laser heterostructures grown from nonstoichiometric melts. FIAN. Trudy, no. 177, 1987, 204-211.
61. Yelyukhin, V.A.; Karpov, S.Yu.; Konnikov, S.G.; Popova, T.B.; Rukolayne, S.A.; Cherneva, T.V.; Ebanoidze, M.K. (FTI). Far field of radiation of heterolasers with a gradient waveguide. ZTEFA, no. 4, 1987, 747-754.

- d. GaAs
- e. CdS
- 62. Brodin, M.S.; Kipen', A.A.; Kukhtarev, N.V.; Piryatinskiy, Yu.P.; Yanushevskiy, N.I. (IFANUK). Intermode scattering by light-induced gratings in microlasers utilizing CdS-type single crystals. KVEKA, no. 4, 1987, 693-695.
- f. ZnSe
- g. $\text{Pb}(1-x)\text{Sn}(x)\text{Te}$
- h. InGaAsP
- 63. Alferov, Zh.I.; Arsent'yev, I.N.; Garbuzov, D.Z.; Strugov, N.A.; Tikunov, A.V.; Chudinova, Ye.I. (FTI). Visible InGaAsP/GaAsP separately-limited double-heterostructure lasers, prepared by a liquid epitaxy method at 0.65-0.67 μm , $I(\text{subn}) = 3-0.8$ $\text{kA/cm}(\text{sup}2)$, $P=5$ mW, $T=300$ K). PZTFD, no. 6, 1987, 372-374.
- 64. Averkiyev, N.S.; Baranov, A.N.; Imenkov, A.N.; Rogachev, A.A.; Yakovlev, Yu.P. (FTI). Polarization of radiation in a quantum-dimension laser using a heterojunction. PZTFD, no. 6, 1987, 332-337.
- 65. Garbuzov, D.Z.; Chalyy, V.P.; Chudinov, A.V.; Svelokuzov, A.Ye.; Ovchinnikov, A.V. (FTI). Quantum-dimensional effects in luminescence spectra of liquid-phase InGaAsP/InP heterostructures with an active region 230-60 angstroms in thickness. FTTPA, no. 3, 1987, 437-441.
- 66. Makhsudov, B.I.; Naydich, Ye.I.; Khakimov, F.Kh. (FIAN). Kinetics of degradation in InGaAsP/InP lasers. KRSFA, no. 4, 1987, 18-20.
- 67. Yeliseyev, P.G.; Sverdlov, B.N.; Shokhudzhayev, N. (FIAN). Piezooptic and anisotropic deformation effects in GaInAsP/InP heterolasers. FIAN. Trudy, no. 177, 1987, 172-203.

4. Glass

a. Miscellaneous

68. Balashov, I.F.; Berezin, B.G.; Ivanov, V.N.; Nikolayev, Yu.P. (). Effect of induced losses on the lasing efficiency of laser glasses. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 13. (RZRAB, 87/4Ye219).

b. Nd

69. Alekseyev, V.N.; Groznyy, A.G.; Zhilin, A.N.; El'ts, V.K. (). Experimental study on the radiation characteristics of a laser with a coupled resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 145. (RZRAB, 87/4Ye226).
70. Avakyants, L.I.; Karpova, M.L.; Radchenko, V.V. (NIIYaF). Radiation properties of a multifiber Nd³⁺ glass laser. KVEKA, no. 4, 1987, 876-878.
71. Azizov, S.T.; Baratov, Sh.P.; Nizametdinov, M.M.; Redkorechev, V.I.; Samigulin, K.R.; Khusainov, I.A.; Usmanov, T.; Sharin, F.G. (). Wide-aperture periodic-pulsed neodymium laser and second harmonic generation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 124. (RZRAB, 87/4Ye217).
72. Barkovskiy, K.P.; Gerasimov, V.B.; Zabelin, D.G.; Zaika, V.M.; Ivanov, A.Ye.; Lyubimov, V.V.; Makarov, N.A.; Umnov, V.O. (). Automatic phasing of retromirror elements in neodymium lasers with a spatial filter, and its effect on the space-time and spectral structure of laser radiation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 43. (RZRAB, 87/4Ye225).
73. Basiyev, T.T.; Denker, B.I.; Il'ichev, N.N.; Larikov, A.V.; Malyutin, A.A.; Osiko, V.V.; Pashinin, P.P. (). Compact neodymium glass laser system with high radiation brightness at 0.5 joules. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 19. (RZRAB, 87/4Ye221).

74. Berenberg, V.A.; Gavrilov, O.D.; Malinin, B.G.; Rubanov, A.D.; Stepanov, A.I.; Shiryayev, V.A. (). Obtaining microsecond pulses in a neodymium laser under control of dynamic development of lasing in the transverse cross-section of the resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 157. (RZRAB, 87/4Ye229).
75. Berenberg, V.A.; Kozeyeva, L.P.; Pavlyuk, A.A.; Terpugov, V.S. (). Study on the energy and spatial characteristics of a planar waveguide neodymium microlaser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 219. (RZRAB, 87/4Ye216).
76. Bordachev, Ye.G.; Volynkin, V.M.; Yeshmemet'yeva, Ye.V.; Ivanushkina, L.V.; Korolev, V.I.; Kromskiy, G.I.; Malashenkov, V.A.; Popova, L.G.; Sedov, B.M. (). Comparative characteristics of neodymium-glass lasers excited by coaxial and tubular flash lamps. VINITI. Deposit, no. 8046-V86. (ZPSBA, vol. 46, no. 3, 1987, 506).
77. Buchenkov, V.A.; Vinokurov, G.N.; Shumilin, V.V.; Krepostnov, P.Ye.; Levoshkin, A.V.; Mironov, Ye.P.; Rubanov, A.D. (). Highly efficient neodymium glass lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 24. (RZRAB, 87/4Ye223).
78. Buzhinskiy, I.M.; Gurenko, V.A.; Avakyants, L.I.; Radchenko, V.V.; Karpova, M.L. (). Lasing properties of multifiber neodymium glass lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 12. (RZRAB, 87/4Ye220).
79. Danil'chuk, N.V.; Levin, M.B.; Starostina, G.P.; Cherkasov, A.S.; Shapovalov, V.N. (). Study on the efficiency of using luminescent light filters based on activated quartz glass in a neodymium laser. KVEKA, no. 3, 1987, 580-585.
80. Ivanov, V.V.; Senatskiy, Yu.V.; Sklizkov, G.V. (). Removal of population inversion by an inhomogeneously broadened Stark multiplet at the 1.06 μ m laser transition and amplification of nanosecond pulses in neodymium glass. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 174. (RZRAB, 87/4Ye228).

81. Kryzhanovskiy, V.I.; Serebryakov, V.A.; Yashin, V.Ye. (). Study on gain saturation in neodymium phosphate glasses. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 15. (RZRAB, 87/4Ye212).
82. Kuchma, I.G.; Levoshkin, A.V.; Murzin, A.G.; Prilezhayev, D.S.; Fromzel', V.A. (). Problem of the efficiency limit to neodymium glass lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 18. (RZRAB, 87/4Ye222).
83. Kuzovkova, T.A.; Nilov, Ye.V. (). Calculating the kinetics of periodic pulsed lasing in neodymium glass lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 190. (RZRAB, 87/4Ye224).
84. Lancranjan, I. (). Control of the output parameters of a passively Q-switched Nd:glass laser (in English). RRPQA, no. 5, 1986, 457-467. (RZFZA, 87/4L998).

c. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

85. Alekseyev, V.A.; Davydenko, Yu.N.; Nikiforov, V.G.; Trinchuk, B.F.; Khomyak, A.S.; Shulenin, A.V. (). Active stabilization system of laser energy and wavelength for a flashlamp pumped dye laser. ZPSBA, vol. 46, no. 4, 1987, 558-562.
86. Lisitsa, M.P.; Kostyshin, M.T.; Romanenko, P.F.; Kulish, N.P.; Kolomiyets, T.M.; Malysh, N.I. (IPANUK). Frequency control of a dye laser by means of a holographic grating based on a semiconductor-metal system. KVEKA, no. 4, 1987, 701-702.
87. Vasil'yeva, O.A.; Gorelenko, A.Ya.; Davydov, S.V.; Kalosha, I.I.; Tchkachev, V.A. (). Lasing in arylacetylene derivative solutions under laser and flashlamp pumping. ZPSBA, vol. 46, no. 4, 1987, 642-645.

88. Znamenskiy, N.V.; Korniyenko, L.S.; Mnuskin, V.Ye.; Odintsov, V.I.; Piskarev, M.G.; Tokareva, A.N.; Trinchuk, B.F. (). Broadening the lasing range of dye lasers in the IR by stimulated resonance processes in sodium vapor. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 178. (RZRAB, 87/4Ye147).

b. Rhodamine

89. Levin, M.B.; Snegov, M.I.; Cherkasov, A.S. (). Determination of rate constants for molecular processes controlling the level of induced absorption in a laser based on a rhodamine 6G aqueous-micellar solution with flash lamp pumping. OPSPA, vol. 62, no. 3, 1987, 571-577.
90. Minasyan, V.V.; Nazaryan, Ye.Kh.; Tumanyan, A.G. (YerPIL). Optimal carbamide content in mixtures for amplification of luminescence in aqueous solutions of rhodamine 6G. ArmNIINTI. Deposit, no. 51-Ar, 11 Dec 1986, 6 p. (RZFZA, 87/4L982).

91. Vinogradov, S.V.; Kuznetsov, V.V.; Lyutinskiy, V.V.; Nazarov, V.N.; Neporent, B.S.; Nikolayev, G.Ye.; Poznyak, R.I.; Revinskiy, V.V.; Sokolov, A.V.; Tovmasyan, S.K.; Chernyavskiy, A.F.; Shilov, V.B. (). Optical multichannel recorder and its use to study picosecond dye lasers. ZPSBA, vol. 46, no. 3, 1987, 514-518.

c. Polymethine

92. Brueckner, V.; Fassler, D.; Feller, K.H.; Gase, R.; Pancoska, P. (). Laser active medium for dye lasers. Patent GDR, no. 238481, 20 Aug 1986. (RZRAB, 87/3Ye88).

d. Coumarin

93. Korol'kova, N.V.; Reva, M.G.; Uzhinov, B.M. (MGU). Widening of the spectral tuning range of laser radiation from aminocoumarins as a result of an acid-base interaction. KVEKA, no. 4, 1987, 837-840.
94. Korol'kova, N.V.; Uzhinov, B.M. (MGU). Evidence of universal intermolecular interactions in the spectral luminescence and lasing properties of coumarin 1. VMUFA, no. 2, 1987, 56-59.

- e. Phthalimide
- f. Cyanine
- 95. Vranchev, D.P.; Andreev, G.N. (). Effect of some organic acids on the spectral luminescent and lasing properties of aqueous cyanine solutions (in English). Bolgarskiy fizicheskiy zhurnal, no. 3, 1986, 263-270. (RZRAB, 87/3Ye533).
- g. Xanthene
- h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

- 96. Afonin, Yu.V.; Melekhov, A.V. (). Parametric study on non-self-sustained space discharges initiated by self-sustained discharges. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 40-45.
- 97. Bakos, J.S. (). Optically pumped far IR lasers and their application in plasma diagnostics (in English). KFKKA, no. 31/D, 1986, 48 p. (RZFZA, 87/4L975).
- 98. Belykh, A.D.; Berdyshev, A.V.; Gurashvili, V.A.; Izyumov, S.V.; Kochetov, I.V.; Kurnosov, A.K.; Napartovich, A.P.; Putilin, V.M. (). Multifrequency laser at vibrational-rotational transitions of CO and CO₂ molecules excited by non-self-sustained discharge. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 33. (RZRAB, 87/4Ye79).
- 99. Burmakov, A.P.; Goncharov, V.K.; Kolesnik, A.V.; Zhumar', A.Yu. (). Stimulated emission from the interaction between a pulsed electric-discharge plasma flow in carbon and the surface of an obstruction. ZPSBA, v. 45, no. 5, 1986, 758-762.
- 100. Gavronskaya, Ye.A.; Liukonen, R.A.; Trofimenko, A.M. (). Pulsed electroionization CO-CO₂ laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 36. (RZRAB, 87/4Ye129).

101. Gembarzhevskiy, G.V.; Generalov, N.A.; Kosynkin, V.D. (). Phenomenon of an anomalous change in velocity pulsations of a turbulent gas flow under the influence of a glow discharge. PZTFD, no. 7, 1987, 427-431.
102. Gerasimov, S.V.; Konovalov, I.N. (). Tuning of molecular lasers to vibrational rotational spectrum lines by controlled intracavity acoustooptic filters. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 59. (RZRAB, 87/4Ye49).
103. Karasev, A.V.; Polishchuk, I.Ya.; Skovorod'ko, S.N.; Fomin, V.A.; Shpil'rayn, E.E. (IVTAN). Possibility of the elimination of longitudinal inhomogeneity of the energy contribution during the pumping of lasers by a proton beam. DANKA, vol. 293, no. 5, 1987, 1116-1118.
104. Krasnikov, Yu.I.; Malov, A.N. (). Compact periodic pulsed laser with two synchronously excited active volumes. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 25-39.
105. Kukhlevskiy, S.V.; Provorov, A.S.; Reushev, M.Yu. (). XeCl and N(sub2) waveguide lasers in the UV. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 57. (RZRAB, 87/4Ye62).
106. Namitokov, K.K.; Nikitchenko, T.Yu.; Ovchinnikov, S.S.; Skoblik, I.P. (KhIIS). Optical radiation from coaxial discharges with controlled power feed to the active medium. UkrNIINTI. Deposit, no. 2582-Uk, 13 Nov 1986, 17 p. (RZFZA, 87/4L103).
107. Pastor, A.A.; Derdobintsev, P.Yu.; Shubin, N.N. (). Interferometric diagnostics of gas-discharge active media at high pressure. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 27. (RZRAB, 87/4Ye138).

2. Simple Mixtures

a. Miscellaneous

108. Aleksandrov, A.Yu.; Dolgikh, V.A.; Kerimov, O.M.; Myznikov, Yu.F. (FIAN). Laser action with a duration of up to 200 microseconds in the red spectral region using 3p-3s transitions in neon. KVEKA, no. 3, 1987, 630-632.

109. Berdnikov, A.A.; Derzhiyev, V.I.; Murav'yev, I.I.; Shevnin, A.M.; Yakovlenko, S.I.; Yancharina, A.M. (). Quasi c-w lasing at 585.3 nm in Ne-H(sub2) mixtures excited in discharges with a hard component. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 58. (RZRAB, 87/4Ye74).
- b. He-Ne
110. Basov, N.G.; Gubin, M.A.; Nikitin, V.V.; Nikul'chin, A.V.; Protsenko, Ye.D.; Tyurikov, D.A.; Shelkovnikov, A.S. (FIAN). Transportable optical frequency standard and results of its metrological tests. KVEKA, no. 4, 1987, 866-868.
111. Danileyko, M.V.; Kravchuk, A.L.; Tselinko, A.M.; Yatsenko, L.P. (). Frequency-stable radiation source based on a ring He-Ne laser at 0.63 um. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 47. (RZRAB, 87/4Ye103).
112. Demkin, V.N.; Privalov, V.Ye. (). Investigation of power instability of radiation from industrial helium-neon lasers. IZTEA, no. 4, 1987, 27-29.
113. Krylov, P.S.; Privalov, V.Ye. (). Active medium perturbation and frequency shift of the radiation of a He-Ne/I(sub2)(sup127) laser. RAELA, no. 3, 1987, 587-595.
114. Mironov, A.V. (). Calculation of lens frequency shift for a saturated-absorption stabilized He-Ne/(sup127)I(sub2) laser at 633 nm. OPSPA, vol. 62, no. 3, 1987, 624-630.
115. Shpak, I.V.; Klochko, A.I.; Kostolomov, A.F.; Gudelev, V.G.; Yasinskiy, V.M. (). Amplitude frequency characteristics of He-Ne lasers with an anisotropic resonator in transverse magnetic fields. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 81. (RZRAB, 87/4Ye102).
116. Shpak, I.V.; Klochko, A.I.; Kostolomov, A.F.; Gudelev, V.G.; Yasinskiy, V.M. (). Anisotropic control of gain and losses in orthogonally polarized modes of He-Ne lasers in mutually orthogonal transverse magnetic fields. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 80. (RZRAB, 87/4Ye104).

c. He-Xe

d. He-Kr

117. Apai, P.; Janossy, M.; Mezei, P.; Rozsa, K.; Rubin, Gy. (). Direct-current helium and helium-krypton discharges in aluminum hollow cathode discharge tubes for blue He-Kr+ laser operation (in English). KFKKA. Preprint, no. 59/D, 1986, 1-37. (RZFZA, 87/3L877).

e. Ar-Xe

3. Molecular Beam and Ion

a. Miscellaneous

b. Carbon Dioxide

118. Agalakov, Yu.G.; Rubinov, Yu.A. (). CO2 laser at super-atmospheric pressure with self-sustained discharge at a high excitation level. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 89. (RZRAB, 87/4Ye36).
119. Akhunov, N.; Baytsur, G.G.; Kononov, I.G.; Firsov, K.N.; Yamshchikov, V.A. (). Optical characteristics of CO2 amplifiers with lightly ionized substances added to the active mixture under excitation by self-sustained discharge. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 49. (RZRAB, 87/4Ye27).
120. Alimpiyev, S.S.; Akhunov, N.; Baytsur, G.G.; Zasavitskiy, I.I.; Kosichkin, Yu.V.; Nadezhdinskiy, A.I.; Nikiforov, S.M.; Odabashyan, G.L.; Omel'yanchuk, A.M.; Stepanov, Ye.V.; Ushakov, A.I.; Shotov, A.P. (). Amplification of diode laser radiation in TEA CO2 laser media. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 65. (RZRAB, 87/4Ye39).
121. Antyukhov, V.V.; Glova, A.F.; Golubentsov, A.A.; Kachurin, O.R.; Lebedev, F.V.; Likhanskiy, V.V.; Napartovich, A.P. (). Efficient phase locking in a set of CO2 lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 137. (RZRAB, 87/4Ye305).

122. Apollonov, V.V.; Kononov, I.G.; Prokhorov, A.M.; Sorochenko, V.R.; Shakir, Yu.A.; Yamshchikov, V.A. (). Study on the operating modes of the Polinom CO2 laser device. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 67. (RZRAB, 87/4Ye37).
123. Apollonov, V.V.; Prokhorov, A.M.; Firsov, K.N. (). CO2 lasers with lightly ionized substances added to the active mixture. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 50. (RZRAB, 87/4Ye45).
124. Aver'yanov, V.P.; Gavrilova, T.V. (). Measuring the gas temperature of the plasma in a waveguide CO2 laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 77. (RZRAB, 87/4Ye47).
125. Bagratashvili, V.N.; Gordiyenko, V.M.; Zherikhin, A.N.; Kubyshkin, A.P. (). IR luminescence diagnostics of the active media of CO2 lasers at fundamental and Raman transitions. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 79. (RZRAB, 87/4Ye29).
126. Baranov, A.N.; Volkov, A.Yu.; Demin, A.I.; Zotov, S.D.; Kudryavtsev, Ye.M. (). Laser at transitions between levels of coupled CO2 modes with combined electric gasdynamic pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 68. (RZRAB, 87/4Ye24).
127. Baranov, G.A.; Grad, V.I.; Zinchenko, A.K.; Lednev, M.G. (NIIEA). Change in chemical composition of a medium in a steady-state discharge with a transverse gas flow. KHVKA, no. 2, 1987, 178-182.
128. Belousova, I.M.; Glukhikh, I.V.; Dutov, A.I.; Chirkov, V.N.; Yachnev, I.L. (). Effect of the isotopic composition of CO2, on the radiation parameters of electroionization CO2 lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 78. (RZRAB, 87/4Ye133).
129. Bertel', I.M.; Petukhov, V.O.; Prokopov, A.P.; Tochitskiy, S.Ya.; Churakov, V.V. (). Energy, spectral, and temporal characteristics of a two-wave TEA CO2 laser. ZPSBA, vol. 46, no. 3, 1987, 391-396.

130. Borovkov, V.V.; Kornilov, V.G.; Lazhintsev, B.V.; Nor-Arevyan, V.A.; Sukhanov, L.V.; Chelpanov, V.I. (). Study on small-scale optical inhomogeneities in electroionization CO₂ lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 87. (RZRAB, 87/4Ye32).
131. Borovkov, V.V.; Kornilov, V.G.; Sukhanov, L.V.; Chelpanov, V.I. (). Method for measuring inhomogeneities in energy contribution in electroionization CO₂ lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 86. (RZRAB, 87/4Ye34).
132. Burtsev, V.A.; Gordeychik, A.G.; Kuchinskiy, A.A.; Rodichkin, V.A.; Smirnov, V.A.; Tomashevich, V.P.; Fomichev, A.I. (). Pulsed CO₂ laser for thermonuclear research. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 84. (RZRAB, 87/4Ye26).
133. Danilov, O.B.; Zinchenko, M.I.; Rityn', Ye.N.; Rubinov, Yu.A.; Slobodskaya, P.V.; Sosnov, Ye.N. (). Study on energy losses in waveguide lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 86. (RZRAB, 87/4Ye35).
134. Denisov, A.A.; Kulikov, O.L.; Timonina, N.A. (). Using a T-shaped resonator to select out longitudinal modes in TEA CO₂ lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 53. (RZRAB, 87/4Ye41).
135. Denisov, A.A.; Kulikov, O.L.; Pilipetskiy, N.F.; Shkunov, V.V. (). TEA CO₂ laser with self-pumping by four-wave mixing mirrors. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 345. (RZRAB, 87/4Ye31).
136. Dimakov, S.A.; Koval'chuk, L.V.; Pel'menev, A.G.; Petrov, V.F.; Rodionov, A.Yu.; Trusov, V.P.; Sherstobitov, V.Ye.; Yashukov, V.P. (). Effect of thermal nonlinearity on the dynamics of radiation from an electroionization CO₂ laser with an unstable resonator. KVEKA, no. 3, 1987, 466-476.
137. Dimakov, S.A.; Petrov, V.F.; Rodionov, A.Yu.; Yashukov, V.P. (). Beneficial losses in pulsed electroionization CO₂ lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 52. (RZRAB, 87/4Ye44).

138. Draganescu, V.; Farcas, I.; Gutu, I.; Axinte, C.; Dumitras, D.C. (). CO2 lasers and their application for unconventional material processing (in English). RRPQA, no. 6, 1986, 579-587. (RZFZA, 87/4L934).
139. Gadiyak, G.V.; Dobrivskiy, A.L.; Nasyrov, K.A. (). Optimization of flow-through lasers in numerical modeling. Moshchnyye CO2-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 18-24.
140. Galushkin, M.G.; Koval'chuk, L.V.; Rodionov, A.Yu.; Seregin, A.M.; Cheburkin, N.V. (). Effect of low inertial nonlinear inhomogeneities in the active medium, on the spatial characteristics of CO2 laser radiation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 75. (RZRAB, 87/4Ye28).
141. Gamazeyshchikov, A.M.; Berezin, A.D.; Kuchinskiy, A.A.; Rodichkin, V.A.; Sheverev, V.A. (). Sealed-off periodic-pulsed TEA CO2 lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 85. (RZRAB, 87/4Ye33).
142. Gerasimchuk, A.G.; Kornilov, S.T.; Protsenko, Ye.D. (). Waveguide CO2 lasers with radio-frequency excitation of the active medium and with a selective and nonselective resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 51. (RZRAB, 87/4Ye48).
143. Grasyuk, A.Z.; Yefimovskiy, S.V.; Kurbasov, S.V. (). Pulsed CO2 laser with injection control of the spectral time characteristics. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 66. (RZRAB, 87/4Ye38).
144. Grigorescu, D.; Grigoriu, C.; Velculescu, V.G. (). Effect of Q-switching on TEA CO2 lasers (in English). RRPQA, no. 7, 1986, 681-687. (RZFZA, 87/4L1077).
145. Ivanchenko, A.I.; Krashenninnikov, V.V.; Ponomarenko, A.G.; Shepelenko, A.A. (). Physical technical fundamentals in the development of fast flow-through lasers with nonsectioned electrodes. Moshchnyye CO2-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 3-17.

146. Kalmykov, A.V.; Moiseyev, V.G.; Smirnov, A.S.; Tomashevich, S.V. (). Waveguide CO₂ laser with radio-frequency pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 60. (RZRAB, 87/4Ye46).
147. Kamenicky, I. (). The ELA-001A high-power c-w CO₂ laser (in Slovakian). Trend VUMA, no. 1, 1986, 26-35. (RZRAB, 87/4Ye51).
148. Karapuzikov, A.I.; Troshin, B.I. (). Highly efficient CO₂ laser with radio-frequency excitation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 72. (RZRAB, 87/4Ye25).
149. Karlov, N.V.; Kisletsov, A.V.; Kovalev, I.O.; Kuz'min, G.P.; Nesterenko, A.A.; Khokhlov, E.M. (). Continuously tunable high-pressure CO₂ laser with a plasma cathode. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 74. (RZRAB, 87/4Ye289).
150. Karnyushin, V.N. (). Ionization and transport processes in flow-through CO₂ lasers. Fizika potochnykh gazorazryadnykh sistem. Minsk, 1986, 3-14. (RZFZA, 87/4L950).
151. Knyazev, I.N.; Sarkisyan, A.A. (ISAN). Line narrowing and continuous frequency tuning in high-pressure CO₂ lasers. ISAN. Preprint, no. 25, 1986, 42 p. (RZFZA, 87/3L867).
152. Koval'chuk, L.V.; Pol'skaya, M.E. (). Numerical modeling of random phase inhomogeneities in the active media of electroionization CO₂ lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 76. (RZRAB, 87/4Ye134).
153. Kulikov, O.L.; Pilipetskiy, N.F.; Timonina, N.A. (). Use of a T-type resonator for the selection of a longitudinal mode in a pulsed CO₂ laser. OPSPA, vol. 62, no. 4, 1987, 931-932.
154. Kuz'menko, V.A. (). Two-frequency pulsed CO₂ laser. OTIZD, no. 28, 1986, 1247981. (RZRAB, 87/3Ye33).
155. Kuz'menko, V.A. (IAE). Two-frequency pulsed CO₂ laser. KVEKA, no. 4, 1987, 695-698.

156. Leshenyuk, N.S.; Pashkevich, V.V. (). Precise characteristics of the diagnostics of active media of CO(sub2) lasers by gain measurements. ZPSBA, vol. 46, no. 4, 1987, 567-573.
157. Orishich, A.M.; Posukh, V.G.; Snytnikov, V.N. (). Two-meter CO2 laser pulse amplifier with controlled duration. Moshchnyye CO2-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 56-76.
158. Petukhov, V.O.; Tochitskiy, S.Ya.; Churakov, V.V. (IFANB). Simultaneous efficient stimulated emission at two lines of different sequence bands in a TEA CO2 laser. KVEKA, no. 3, 1987, 624-627.
159. Razhenkov, Ye.G.; Vinogradov, Ye.G.; Globova, S.N.; Lavrov, N.A.; Pavlov, N.V. (). High-speed system to stabilize the axis of the directional pattern of flow-through CO2 lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 207. (RZRAB, 87/4Ye42).
160. Starovoytov, V.S.; Trushin, S.A. (). Lasers using isotopically substituted modifications of CO2. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 48. (RZRAB, 87/4Ye90).
161. Toth, I.; Wittmann, R.; Antal, K.; Halasz, F.; Peczel, I.; Richter, P. (). Waveguide CO2 lasers with radio-frequency pumping (in Hungarian). FNMKA, no. 10-11, 1986, 296-300, 349, 350, 351. (RZRAB, 87/4Ye53).
162. Urbankova, H.; Engst, P.; Novak, M. (). CO2 waveguide laser: a tunable IR radiation source (in Czech). CKCFA, v. A36, no. 5, 1986, 469-478. (RZFZA, 87/3L1053).
163. Vol'skaya, S.P.; Tselykovskiy, A.F. (). Internal modulation of radiation in waveguide CO2 lasers with transverse radio-frequency excitation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 62. (RZRAB, 87/4Ye43).

c. Carbon Monoxide

164. Anan'yev, V.Yu.; Babayev, I.K.; Danilychev, V.A.; Ionin, A.A.; Lytkin, A.P.; Sazhina, N.N. (). Energy and spectral characteristics of pulsed electroionization lasers using mixtures of isotopically substituted CO molecules. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 38. (RZRAB, 87/4Yel31).
165. Anan'yev, V.Yu.; Danilychev, V.A.; Ionin, A.A.; Kotkov, A.A.; Lytkin, A.P.; Sinitsyn, D.V. (). Oscillator-amplifier electroionization laser system using CO. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 39. (RZRAB, 87/4Yel32).
166. Leonov, S.N.; Liukonen, R.A. (). Theoretical analysis of the processes in pulsed electroionization CO lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 37. (RZRAB, 87/4Yel30).
167. Lotkova, E.N. (FIAN). Possibilities and prospects for an electric-discharge CO laser. FIAN. Preprint, no. 340, 1986, 31 p. (RZFZA, 87/3L870).
168. Masyshev, V.I.; Sysoyev, V.K. (). Forming the radiation spectrum of sealed-off isotopic CO lasers by nonselective and dispersive resonators. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 34. (RZRAB, 87/4Ye78).

d. Noble Gas

169. Alferov, G.N.; Babin, S.A.; Drachev, V.P. (IAESOAN). Nonlinear dispersion interferometry of argon laser plasma. IAESOAN. Preprint, no. 306, 1986, 36 p. (RZFZA, 87/4L966).
170. Babin, S.A. (IAESOAN). Effect of spatial inhomogeneity on asymmetry of Lamb dip in argon lasers. IAESOAN. Preprint, no. 303, 1986, 24 p. (RZFZA, 87/4L946).
171. Batyrbekov, G.A.; Batyrbekov, E.G.; Tleuzhanov, A.B.; Khasenov, M.U. (IYaFANKaz). Electric discharge laser with radioisotope preionization. ZTEFA, no. 4, 1987, 783-785.

172. Bykovskiy, V.F.; Dyatlov, M.K.; Mal'kova, G.I.; Miretskiy, B.P.; Samorukova, T.P. (). High-power argon laser in the ultraviolet band. AVMEB, no. 2, 1987, 113-114.
173. Elbel, M.; Quad, R.; Simon, M. (). Optical pumping of metastable argon ions in a hollow cathode discharge (in English). ANPYA, no. 6-8, 1986, 413-423. (RZRAB, 87/4Ye330).
174. Grin', L.Ye.; Zaroslova, O.S.; Kartaleva, S.S.; Lebedeva, V.V.; Odintsov, A.I. (MGU). Study on the lifetime of the $4p(\sup{2})D(\sub{5/2})$ ArII upper laser level from spontaneous emission at the downward transition. VMUFA, no. 2, 1987, 83-85.
175. Kuznetsov, A.A.; Sulakshin, S.S. (NIIYaFT). Radiation characteristics of a dense low-temperature inert gas plasma produced by a heavy-current e-beam. Aktual'nyye voprosy teplo fiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 147-148.
176. Zuyev, V.S.; Kanayev, A.V.; Mikheyev, L.D. (). Optical pumping of xenon active laser media. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 261. (RZRAB, 87/4Ye324).
- e. Nitrogen
- f. Iodine
- g. Hydrogen
- h. Ammonia
177. Dyad'kin, A.P.; Ivanenko, M.M.; Starodubtsev, A.I.; Churakov, V.V. (IFANB). Temperature dependence of oscillation energy and gain in an optically pumped $NH(\sub{3})$ laser. KVEKA, no. 4, 1987, 881-883.
178. Yefremov, V.A.; Yefimenko, M.N.; Dyubko, S.F. (KhGU). Amplitude modulation of a submillimeter $NH(\sub{3})$ laser with two-photon pumping. KVEKA, no. 4, 1987, 698-700.

i. Carbon Tetrafluoride

179. Baranov, V.Yu.; Malyuta, D.D.; Petrushevich, Yu.V.; Starostin, A.N.; Strel'tsov, A.P.; Khomenko, S.V. (). Experimental and computational theoretical study on CF(sub4) lasers under high pumping power. IAE. Preprint, no 4377/7, 1986, 32 p. (RZFZA, 87/4L976).
180. Baranov, V.Yu.; Malyuta, D.D.; Strel'tsov, A.P.; Khomenko, S.V. (IAE). Effect of a stimulated emission field on absorption pump radiation in a three-level system. KVEKA, no. 4, 1987, 834-835.

j. Nitrous Oxide

k. Water Vapor

l. Heavy-Water Vapor

m. Submillimeter

n. Metal Vapor

181. Bokhan, P.A. (ITF). Quasi-cw collisional stimulated emission from a tin vapor laser. KVEKA, no. 4, 1987, 705-706.
182. Burlakov, V.D.; Gorbunova, T.M.; Loboda, S.A.; Mikhaylichenko, Yu.P.; Osipova, N.V. (IOA). Study on the ground state population of copper atoms in a copper vapor laser with a longitudinal discharge. TVYTA, no. 2, 1987, 394-396.
183. Derzhiyev, V.I.; Zhidkov, A.G.; Karelin, A.K.; Yakovlenko, S.I. (). Pumping mechanism of He-Cd mixtures in a recombining nonequilibrium plasma. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 83. (RZRAB, 87/4Ye327).
184. Dmitriyev, A.B.; Mis'kevich, A.I.; Salamakha, B.S. (). Excitation of potassium and sodium vapors by (sup3)He[npl](sup3)T neutron nuclear reaction products. OPSPA, v. 61, no. 5, 1986, 939-945.
185. Grozeva, M.; Sabotinov, N.; Telbizov, P.; Vuchkov, N. (). Effect of the population of the lower levels, on the oscillation of the green lines in He-Cd lasers (in English). Bolgarskiy fizicheskiy zhurnal, no. 3, 1986, 270-272. (RZFZA, 87/4L948).

186. Isakov, V.K. (). Study on processes of limitation of the emission pulse repetition rate in a manganese vapor laser. KVEKA, no. 4, 1987, 682-692.
187. Shpenik, Yu.O. (KIYaIUzh). Excitation of periodic pulsed lasing in bismuth vapor under low pressures of the buffer gas. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 135-136.

o. Gasdynamic

188. Alekseyev, K.P.; Glazenzov, V.M.; Gorshunov, N.M.; Myasnikov, A.Yu.; Neshimenko, Yu.P.; Shcherbo, A.B. (). Active medium for gasdynamic lasers based on molecules with nonresonant vibrational levels. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 70. (RZRAB, 87/4Ye116).

4. Excimer

189. Ageyev, V.P.; Bukreyev, V.S.; Vartapetov, S.K.; Konov, V.I.; Prokhorov, A.M.; Savel'yev, A.D. (). Electric-discharge periodic pulsed excimer lases for scientific research and technology. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 56. (RZRAB, 87/4Ye61).
190. Babichenko, S.M.; Vill, A.A.; Poryvkina, L.V.; Saar, K.Yu.; Soskind, Ya.G. (). Spatial coherence of XeCl laser radiation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 54. (RZRAB, 87/4Ye60).
191. Bychkov, Yu.I.; Ivanov, N.G.; Konovalov, I.N.; Losev, V.F.; Mesyats, G.A. (ISE). Excitation of a rare-gas halide laser by a microsecond electron beam. KVEKA, no. 4, 1987, 664-669.
192. Klementov, A.D.; Morozov, N.V.; Sergeyev, P.B. (). Effect of pumping inhomogeneities on the radiation divergence in e-beam KrF lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 138. (RZRAB, 87/4Ye69).
193. Kumpyak, Ye.V.; Lomayev, M.I.; Mel'chenko, S.V.; Mesyats, G.A.; Potalitsyn, Yu.F.; Tarasenko, V.F.; Toptygin, V.V. (ISE). Start-up of a megavolt gas switch by the radiation of an exciplex laser. ZTEFA, no. 4, 1987, 675-680.

194. Panchenko, A.N.; Tarasenko, V.F. (ISE). Controlling the pulse length of XeCl* lasers by a plasma switch. FIPLD, no. 4, 1987, 497-498.
195. Poet, V.E.; Treshchalov, A.B. (). Formation of the space-time distribution of excited components in the active medium of electric-discharge XeCl lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 82. (RZRAB, 87/4Ye71).
196. Vinnik, M.L.; Kovalenko, S.Ye. (ISE). XeCl laser under injection synchronization. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 157-158.

5. Dye Vapor

D. CHEMICAL LASERS

1. Miscellaneous

2. Fluorine + Hydrogen (Deuterium)

197. Bashkin, A.S.; Kurdoglyan, M.S.; Orayevskiy, A.N. (). Energy and spectral characteristics of c-w HF lasers with resonance optical pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 42. (RZRAB, 87/4Ye87).
198. Bashkin, A.S.; Zolotarev, V.A.; Tomashov, V.N.; Frolov, M.P. (). Study on chemical H(sub2)-F(sub2) lasers at a high initiation level. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 44. (RZRAB, 87/4Ye121).
199. Gordon, Ye.B.; Matyushenko, V.I.; Sizov, V.D. (). Pulsed chemical HF lasers using F(sub2), H(sub2), CO mixtures. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 29. (RZRAB, 87/4Ye118).

3. Photodissociation

200. Bokun, V.Ch.; Nadkhin, A.I.; Sotnichenko, S.A. (). Lasing mechanism of a photodissociation laser at the (sup2)P(sub1/2)--(sup2)P(sub3/2) transition of the chlorine atom. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 45. (RZRAB, 87/4Ye126).

201. Nadkhin, A.I.; Sotnichenko, S.A. (). Laser atomic resonance spectroscopy to monitor the concentration of atomic chlorine in the active medium of photodissociation and chemical lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 46. (RZRAB, 87/4Yel27).

202. Shtirand, O.; Kreichi, V.; Pekarek, L.; Zuyev, V.S.; Orlov, Ye.P. (FIAN). Evolution of perturbations of an active medium and conditions of focalization of radiation from iodine photodissociation amplifiers with slow-pumping. KVEKA, no. 3, 1987, 452-459.

4. Transfer

5. Oxygen + Iodine

203. Azyazov, V.N.; Igoshin, V.I.; Kupriyanov, N.L.; Sirochenko, V.P.; Stepanenko, T.T. (). Calculating the energy characteristics of oxygen-iodine lasers with an unstable resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 64. (RZRAB, 87/4Yel23).

204. Basov, N.G.; Vagin, N.P.; Konoshenko, A.F.; Kryukov, P.G.; Pazyuk, V.S.; Nurligareyev, D.Kh.; Tomashov, V.N.; Yuryshv, N.N. (). Study on c-w and periodic pulsed oxygen-iodine lasers with chemical pumping. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 40. (RZRAB, 87/4Yel24).

205. Zagidullin, M.V.; Igoshin, V.I.; Kupriyanov, N.L.; Pichugin, S.Yu. (FIANKuy). Active medium utilizing a mixture of O_2 with δ with an iodine aerosol. KVEKA, no. 3, 1987, 509-515.

206. Zagidullin, M.V.; Igoshin, V.I.; Kupriyanov, N.L. (FIANKuy). Water vapor content in an active medium of a chemical oxygen-iodine laser. KVEKA, no. 3, 1987, 516-523.

207. Zagidullin, M.V.; Zaikin, A.P.; Kupriyanov, N.L.; Igoshin, V.I.; Pichugin, S.Yu. (FIAN). Analysis of relaxation in the energy store of an oxygen-iodine active medium with bound iodine. FIAN. Preprint, no. 226, 1986, 30 p. (RZFZA, 87/3L880).

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Hydrogen

208. Bel'kov, Ye.P.; Burtsev, V.A.; Gallay, I.Ya.; Dashuk, P.N.; Spichkin, G.L.; Fomin, V.M. (LPI). Electric discharge SF(sub6)+H(sub2) laser with a stabilized volumetric discharge by ceramic barriers. PZTFD, no. 5, 1987, 278-281.

E. COMPONENTS

1. Miscellaneous

209. Optical elements for lasers. Catalog. IFANB. Preprint, no. 440, 1986, 46 p. (RZRAB, 87/3Ye279).

2. Resonators

a. Design and Performance

210. Aver'yanov, N.Ye.; Baloshin, Yu.A.; Belyakov, I.V.; Pavlishin, I.V. (). Design of optically pumped resonators. ZPSBA, vol. 46, no. 3, 1987, 396-400.
211. Bezrodnyy, V.I.; Prokhorenko, V.I.; Tikhonov, Ye.A.; Shpak, M.T.; Yatskin, D.Ya. (). Lasers with a Sagnac circuit resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 144. (RZRAB, 87/4Ye167).
212. Bobyl'kov, D.B.; Rozanov, N.N. (). Bifurcation of a transverse structure of a field near the boundary of stability of an optical resonator. OPSPA, vol. 62, no. 4, 1987, 878-884.
213. Dem'yantseva, S.D.; Tabarin, V.A. (). Estimation of the limiting frequency of the modulation of polarization in a laser with an anisotropic cavity. ZPSBA, vol. 46, no. 4, 1987, 648-650.
214. Dem'yantseva, S.D.; Tabarin, V.A. (). Magneto-optical radiation modulation in a laser with a three-mirror cavity. VINITI. Deposit, no. 8515-V86. ZPSBA, vol. 46, no. 4, 1987, 685).
215. Vasil'yev, A.B.; Korolenko, P.V.; Novoselov, A.G.; Tikhmirov, V.N.; Sharkov, V.F. (). Multibeam laser resonators with improved characteristics. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 139. (RZRAB, 87/4Ye349).

b. Mode Kinetics

216. Gromov, A.N.; Trashkeyev, S.I. (). Simple formulas for losses in round-mirror symmetric stable resonators. OPSPA, vol. 62, no. 3, 1987, 618-620.
217. Gulyamova, E.S.; Il'ichev, N.N.; Malyutin, A.A.; Shpuga, S.M. (). Active-passive mode locking in lasers with long optical-wavelength resonators. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 177. (RZRAB, 87/4Ye312).
218. Isayev, S.K.; Firsov, V.V.; Yatsenko, Yu.P. (). Passive mode lock in a laser with a lightguide resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 154. (RZRAB, 87/4Ye310).
219. Korniyenko, L.S.; Kravtsov, N.V.; Shelayev, A.N. (). New methods to stabilize lasing in solid state ring lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 163. (RZRAB, 87/4Ye304).
220. Kravtsov, N.V.; Lariontsev, Ye.G.; Shelayev, A.N. (NIIYaF). Acoustooptic nonreciprocity due to the Fizeau effect in a ring laser. KVEKA, no. 4, 1987, 840-842.
221. Nosova, L.V. (). Modes and losses of a coupled resonator during misalignment. OPSPA, vol. 62, no. 4, 1987, 866-871.
222. Silichev, O.O. (MFTI). Analytical calculation of the ground mode of a stable resonator. KVEKA, no. 4, 1987, 842-844.
223. Smirnov, V.N.; Stokovskiy, G.A. (). Diffraction phase coupling of opposed waves in a ring resonator with a unidimensional diaphragm. OPSPA, vol. 62, no. 3, 1987, 614-617.
224. Stefanescu, E.N.; Sterian, P.E.; Popescu, I.M. (). Algorithm for the time-dependent problem of optical bistability (in English). RRPQA, no. 4, 1986, 345-350. (RZFZA, 87/3L970).
225. Vitrishchak, I.B.; Orlov, S.Yu.; Pokrovskiy, V.P. (). Natural oscillation modes in a resonator coupled to a matrix-controlled transparency. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 141. (RZRAB, 87/4Ye347).

3. Pump Sources

226. D'yakonov, V.P.; Smerdov, V.Yu. (MEISF). Pulsed transformer to record nanosecond currents. PRTEA, no. 2, 1987, 103-105.
227. Gadiyak, G.V.; Shveygert, V.A.; Uuemaa, O.U. (). Effect of preionization inhomogeneities on the formation of a homogeneous discharge. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 166-170.
228. Kalmykov, A.V.; Moiseyev, V.G.; Smirnov, A.S.; Sivers, M.A.; Tomashevich, S.V. (). Transistor power source for radio-frequency pumping of gas lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 61. (RZRAB, 87/4Ye326).
229. Koch, E.O. (). Connecting pipe for a pump to a laser with an internal mirror. Patent GDR, no. 239909, 8 Oct 1986. (RZRAB, 87/4Ye342).
230. Marak, I.S.; Zharnikov, S.D.; Solov'yeva, N.N. (). Semiconductor radiation sources in pumping systems for solid state microlasers. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTF. Moskva, 1986, 32-34. (RZRAB, 87/3Ye259).
231. Meleshko, V.P. (). Dynamics in the development of a streamer channel. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 171-174.
232. Necsoiu, T.; Chiordanescu, V.; Lancranjan, I.; Florea, V. (). Device for pumping the active medium of a solid state laser. Patent Romania, no. 87220, 30 Sep 1985. (RZRAB, 87/3Ye258).
233. Rozsa, K. (). Hollow-cathode discharges for gas and metal vapor lasers (in Hungarian). MGFFA, no. 1, 1986, 1-56. (RZFZA, 87/3L876).
234. Shveygert, V.A.; Shveygert, I.V. (). Cathode region of a glow discharge in inert gases. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 150-165.

235. Vakorin, A.A.; Danilov, O.B.; Zhevlakov, A.P.; Leksyutina, N.G.; Trishchev, V.M. (). Periodic pulsed flashlamp with controllable parameters. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 55. (RZRAB, 87/4Ye325).

4. Cooling Systems

236. Nishchik, A.P.; Savina, V.N.; Mokhlay, N.V. (KPIA). Cooling systems for lasers. UkrNIINTI. Deposit, no. 76-Uk87, 4 Jan 1987, 18 p. (RZFZA, 87/4L764).

5. Deflectors

6. Attenuators

237. Bena, R.; Cuculescu, I.; Opran, M.; Plosceanu, C. (). Liquid crystal signal attenuation device for optical fibers (in English). BIPED, 1984-1985, 46-47, 58-64. (RZFZA, 87/3L664).

7. Collimators

8. Diffraction Gratings

238. Chervenko, M.Yu. (). Dependence of the reflectional properties of multilayer gratings on the shift of the layers. Informsvyaz'. Deposit, no. 982-sv, 2 Dec 1986, 19 p. (RZFZA, 87/3Zh186).
239. Haensel, H.; Polack, W.; Dobschal, H.J. (). Device to fabricate wide-aperture high-resolution concave holographic gratings. Patent GDR, no. 237911, 30 Jul 1986. (RZRAB, 87/4Ye660).
240. Haensel, H.; Polack, W.; Dobschal, H.J.; Busse, B. (). Device to fabricate wide-aperture concave holographic gratings. Patent GDR, no. 237912, 30 Jul 1986. (RZRAB, 87/4Ye661).
241. Kirilenko, A.A.; Kusaykin, A.P.; sirenko, Yu.K. (IRFEANUK). Non-mirror reflection of waves by waveguide type gratings. Specific scattering modes. IVYRA, no. 10, 1986, 1182-1191.
242. Korsunov, V.V. (). Calculating the diffraction field of an echellete with an arbitrary angle at the vertex. RATEA, no. 12, 1986, 69-72. (RZFZA, 87/3Zh185).

9. Focusers

243. Dmitriyev, Ye.I.; Shestakov, A.P. (). Focusing sensor of laser radiation. PRTEA, no. 2, 1987, 206-208.

10. Windows

11. Polarizers

12. Beam Shapers

244. Bukharin, N.A.; Domnin, V.N. (LPI). Device for shaping two light beams. OTIZD, no. 16, 1987, No. 1307430.

13. Lenses

14. Filters

245. Bondarev, B.V.; Kobtsev, S.M. (). Birefringent filters to control the lasing wavelength of tunable lasers in a wide range. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 194. (RZRAB, 87/4Ye286).
246. Kocharovskaya, O.A.; Tsaregradskiy, V.B. (). Stimulated Raman filters for passive mode locking of lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 180. (RZRAB, 87/4Ye311).
247. Pisarek, T. (). Optical absorption filter for solid state lasers. Patent Poland, no. 129555, 30 Apr 1986. (RZRAB, 87/3Ye250).
248. Suslikov, L.M.; Gad'mashi, Z.P.; Slivka, V.Yu. (GOI). Optical filters of three spectral lines, using gyrotropic crystals with an isotropic point. OPMPA, no. 10, 1986, 4-6.

15. Beam Splitters

16. Mirrors

249. Basov, N.G.; Gorozhankin, E.V.; Kurenkov, V.V.; Lobanov, A.N.; Panteleyev, V.I.; Fayzullov, F.S. (FIAN). Obtaining of polymer coatings in a plasma of an electroionization discharge. ZTEFA, no. 4, 1987, 669-674.
250. Beyzina, L.G.; Karetskaya, S.P.; Kel'man, V.M. (IYaFANKaz). Electrostatic transaxial convex mirrors. ZTEFA, no. 3, 1987, 434-439.

251. Bondarchuk, Ya.M.; Vatseba, M.A. (LvGU). Design of mirror coatings for He-Ne lasers in the visible range. UkrNIINTI. Deposit, no. 2790-Uk, 16 Dec 1986, 73-74. (RZFZA, 87/4L663).
252. Bondarchuk, Ya.M.; Vatseba, M.A. (LvGU). Mirrors for resonators of He-Ne lasers lasing at 3s(sub2)-2p transitions at 543, 593, 612 and 640 nm. UkrNIINTI. Deposit, no. 2790-Uk, 16 Dec 1986, 75-76. (RZFZA, 87/4L1070).
253. Buylov, L.L.; Lipatov, N.I.; Prokhorov, A.M.; Spitsyn, B.V.; Khomich, V.Yu. (). Polycrystal diamond coatings for optical elements of lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 277. (RZRAB, 87/4Ye334).
254. Cojocar, E.; Julea, T.; Medianu, R. (). Reflectivity computations of multilayer coatings for use with excimer lasers at 2480 angstroms (in English). RRPQA, no. 8, 1986, 833-836. (RZFZA, 87/4L673).
255. Goldina, N.D.; Donin, V.I.; Nikolayev, G.N.; Timofeyev, T.T. (IAESON). Mirrors of high-power cw argon lasers. KVEKA, no. 3, 1987, 564-573.
256. Gonchukov, S.A.; Zimina, O.V.; Kovsh, I.B.; Pyatakhin, M.V.; Urin, V.M.; Shevchenko, V.G. (). Correcting the shape of mirrors to compensate for optical inhomogeneities in gas active media in multipass systems. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 201. (RZRAB, 87/4Ye316).
257. Koch, E.O. (). Adjusting device for a laser with an internal mirror. Patent GDR, no. 239083, 10 Sep 1986. (RZRAB, 87/3Ye261).
258. Lamekin, P.I.; Predko, K.G. (). Characteristic properties of the operation of a mirror-lens system under conditions of quasi-monochromatic illumination. OPSA, vol. 62, no. 4, 1987, 914-919.
259. Muscalu, G.L.; Gaceff, St.; Nemes, G.; Stratan, A.; Ghita, L.; Ghita, C. (). Optical coatings for high-power lasers at 1.06 μ m (in English). RRPQA, no. 5, 1986, 503-505. (RZFZA, 87/3L639).

- 260. Natarov, S.Yu.; Pashinin, P.P.; Sklovskiy, Ye.I.; Shcherbakov, I.A. (IOF). Stimulated Brillouin scattering mirror with a plasma shutter in a two-way laser amplifier. KVEKA, no. 3, 1987, 477-480.
- 261. Shabanov, M.F. (SAO). Photometric method to study the image quality in the primary focus of a 6-meter telescope with digital processing of the photographs. Astrofizicheskiye issledovaniya. SAO. Izvestiya, vol. 23, 1986, 132-136. (RZFZA, 87/3L669).

17. Detectors

- 262. Karnaukh, B.M.; Tomashkevich, A.K.; Makhomet, V.I. (KNIIGLv). High-speed photodetection device. PRTEA, no. 2, 1987, 234-235.
- 263. Zhukovskiy, V.G.; Rtishchev, V.A. (IAE). Recording of laser pulses by semiconductor detectors in the IR. IAE. Preprint, no. 4373/14, 1986, 20 p. (RZFZA, 87/4L642).

18. Modulators

- 264. Aonio, L.N.; Blato, I.V.; Moskalenko, A.V.; Osipov, A.P.; Remizov, S.A. (). The PD-288 acoustooptic modulator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 159. (RZRAB, 87/4Ye623).
- 265. Berezhnoy, A.A.; Buzhinskiy, A.A.; Popov, Yu.V. (GOI). EPOS space-time light modulator. OPMPA, no. 3, 1987, 24-26.
- 266. Buchenkov, V.A.; Kiselev, A.I.; Lakhno, P.R.; Mikhaylov, Yu.N.; Fisher, A.M.; Rozhdestvin, V.N.; Fefelov, A.N.; Khomenko, S.I. (). Efficiency of single-pulsed lasers with frustrated total internal reflection modulators. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 23. (RZRAB, 87/4Ye213).
- 267. Damm, T.; Noack, F. (). Device for thermal stabilization of acoustooptic standing-wave modulators. Patent GDR, no. 239699, 1 Oct 1986. (RZRAB, 87/4Ye631).

268. Danilov, A.A.; Nikol'skiy, M.Yu. (). Methods to control solid state laser radiation by gadolinium scandium gallium garnet:Cr,Nd elements. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 16. (RZRAB, 87/4Ye187).
269. Danilychev, A.V.; Korobkin, V.V. (IOF). High-speed electrooptic Pockels modulators. IOF. Preprint, no. 207, 1986, 36 p. (RZFZA, 87/3L668).
270. Gulyayev, Yu.V.; Zakharov, L.Yu.; Kuznetsov, P.I.; Kopylov, Yu.L.; Kravchenko, V.B.; Temot, V.V.; Yakushcheva, G.G. (). Electrooptic modulators based on waveguides in A(sub2)B(sub6)/GaAs heteroepitaxial structures. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 215. (RZRAB, 87/4Ye630).
271. Ivanov, A.M.; Myl'nikov, V.S. (). Space-time modulator of light based on a photoconductive organic polymer-liquid crystal structure with a twist effect. ZTEFA, no. 3, 1987, 598-600.
272. Loginov, N.A.; Mikhaylenko, M.V.; Randoshkin, V.V.; Tron'ko, V.D.; Shimanskaya, N.V.; Chani, V.I. (IOF). Pulsed Faraday light modulator with transverse magnetic biasing. IOF. Preprint, no. 310, 1986, 11 p. (RZFZA, 87/4L720).
273. Popescu, I.M.; Podoleanu, A.Gh. (). Theoretical study on laser mode locking by electrooptic modulators in coupled cavities (in Romanian). BIPED, no. 46-47, 1984-1985, 37-44. (RZFZA, 87/3L978).
274. Vetrov, A.A.; Kulyasov, A.G.; Sokolov, S.A. (). Study on the possibility of wideband amplitude-frequency resonator modulation in the LG-74 laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 160. (RZRAB, 87/4Ye635).
275. Zartov, G.D.; Panayotov, Kr.P.; Peyeva, R.A. (). Optical bistability parameters of an interference laser light modulator (in English). Bolgarskiy fizicheskiy zhurnal, no. 3, 1986, 249-255. (RZRAB, 87/3Ye553).

F. NONLINEAR OPTICS

1. General Theory

- 276. Ageyev, L.A.; Kuleva, M.G.; Yarovaya, R.G. (KhGU). Simple demonstration experiment on nonlinear optics. Thermal defocusing of laser radiation. UFNAA, v. 151, no. 3, 537-540.
- 277. Aleksandrov, S.N.; Ivanov, M.G.; Nemenov, M.I.; Ryvkin, B.S.; Sinitsyn, M.A.; Yavich, B.S. (FTI). N-type current-voltage characteristics under electroabsorption in a double heterostructure. FTPPA, no. 4, 1987, 703-706.
- 278. Al'tshuler, G.B.; Inochkin, M.V.; Manenkov, A.A. (IOF; LITMO). Interaction between opposed waves and optical bistability in nonlinear randomly inhomogeneous heterogeneous media. KVEKA, no. 3, 1987, 586-591.
- 279. Amus'ya, M.Ya.; Solov'yev, A.V. (FTI). Cerenkov radiation from atoms. PZTFD, no. 22, 1986, 1369-1373.
- 280. Andreyev, A.V. (MGU). Superradiance in a resonator. VMUFA, no. 2, 1987, 79-81.
- 281. Andreyev, B.V.; Zakharkin, B.I.; Karaseva, L.G.; Konovalov, V.A.; Lebedeva, T.P.; Nikolayev, V.N. (). Nonlinear absorption in crystalline niobates with stimulated defects of structure. ZPSBA, vol. 46, no. 3, 1987, 446-452.
- 282. Avetisyan, Yu.A. (). Diffraction effects in superradiance. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 44-65. (RZFZA, 87/4L862).
- 283. Avetisyan, Yu.A. (). Mode structure of superradiance. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 62-73. (RZFZA, 87/4L864).
- 284. Badalyan, A.M.; Kovalevskiy, V.I.; Smirnov, G.I. (). Highest magneto-optical nonlinearities of resonance absorption in a gas. ZPSBA, vol. 46, no. 3, 1987, 452-458.
- 285. Bagdoyev, A.G.; Bezirgenyan, G.S. (). Equations of interacting bounded high-power light beams in inhomogeneous nonlinear dissipative media, and their solutions. DANAA, no. 1, 1986, 34-39. (RZFZA, 87/4L852).

286. Benedikt, M.G.; Trifonov, Ye.D. (). Threshold conditions for superfluorescence. OPSPA, v. 61, no. 4, 1986, 681-682.
287. Benedikt, M.G.; Trifonov, Ye.D. (). Cooperative effects in the reflection of ultrashort pulses from the surface of a resonance medium. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 13-44. (RZFZA, 87/4L868).
288. Bonch-Bruyevich, A.M.; Przhibel'skiy, S.G.; Chigir', N.A. (). Two-photon excitation of cesium atoms by correlated optical fields. ZETFA, vol. 92, no. 3, 1987, 781-787.
289. Borshch, A.A.; Brodin, M.S.; Lukomskiy, V.P.; Semioshko, V.I. (IFANUK). Transverse optical bistability during self-defocusing of opposed beams in a nonlinear medium. KVEKA, no. 4, 1987, 736-742.
290. Bunkin, F.V.; Lyakhov, G.A.; Romanovskiy, M.Yu. (IOF). Nonlinear optical and acoustic methods to determine the kinetic parameters of liquids. Nelineynaya optika i nelineynaya akustika zhidkosti. IOF. Trudy, no. 6, 1987, 103-123.
291. Fischer, R.; Schubert, M. (). Trends in nonlinear optics (in English). ANPYA, no. 6-8, 1986, 455-471. (RZFZA, 87/4L848).
292. Fomin, V.M.; Pokatilov, Ye.P. (). Optical properties of multilayer structures. Part 2. Reflection and transmission (in English). PSSBB, v. B136, no. 2, 1986, 593-602. (RZFZA, 87/3L325).
293. Glushko, B.A. (). Effect of collisions on stimulated resonance processes in three-level atoms. IAAFA, no. 5, 1986, 254-261. (RZFZA, 87/3L806).
294. Golubev, G.P.; Kaufman, I.Kh.; Luchinskiy, D.G. (). Photomodulation of optical constants in GaSe thin films. OPSPA, vol. 62, no. 4, 1987, 721-724.
295. Gorban', I.S.; Grishchuk, V.V.; Patskun, I.I. (ZhiPedI). Nonlinear absorption in ZnGeP(sub2) single crystals. DUKAB, no. 3, 1987, 50-52.
296. Grabovskiy, V.A.; Zheludev, N.I. (MGU). Nonlinear gyrotropy in silver thiogallate. VMUFA, no. 2, 1987, 81-83.

297. Grigor'yan, V.S. (NIIFKS). Formation of solitary pulses in dispersive nonlinear amplifying media. ZFPRA, v. 44, no. 10, 1986, 447-450.
298. Gudkov, Yu.P.; Mazurenko, Yu.T.; Pigurnov, P.N.; Smirnov, V.A. (). Stochastic description of secondary resonance emission from a two-level electron-vibrational system. Optically active Brownian oscillator model. OPSPA, v. 61, no. 4, 1986, 771-779.
299. Henneberger, F. (). Optical bistability at the absorption edge of semiconductors (in English). PSSBB, v. B137, no. 2, 1986, 371-432. (RZFZA, 87/3L987).
300. Irmer, G.; Monecke, J.; Bayramov, B.Kh.; Toporov, V.V. (). Phonon shifts in GaP due to temperature and pressure rise induced by a laser beam (in English). PSSBB, v. B136, no. 2, 1986, 481-488. (RZFZA, 87/3N415).
301. Kaminski, J.Z. (). Remark on the Kroll-Watson formula [for the amplitude of inelastic electron-atom scattering in the presence of a monochromatic electromagnetic field] (in English). ATPLB, v. A70, no. 2, 1986, 205-209. (RZFZA, 87/3L808).
302. Katanayev, I.I. (). Antigrouing of photons in nonlinear resonance fluorescence in impurity centers under weak electron-phonon interaction. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 94-103. (RZFZA, 87/4L883).
303. Katanayev, I.I.; Troshin, A.S. (). Statistical properties of nonlinear secondary resonance emission from impurity centers in crystals. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 84-93. (RZFZA, 87/4L884).
304. Klochan, Ye.L.; Lariontsev, Ye.G.; Naniy, O.Ye. (). Effect of dynamic self-diffraction on the characteristics of ring lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 164. (RZRAB, 87/4Ye519).
305. Kochetov, Ye.A. (OIYaI). Point spectrum of the three-level atom + radiation system. OIYaI. Preprint, no. R17-86-465, 4 p. (RZFZA, 87/3L799).
306. Kochetov, Ye.A. (OIYaI). Multiphoton transitions in three-level systems. OIYaI. Preprint, no. R17-86-614, 6 p. (RZFZA, 87/3L801).

307. Kosobukin, V.A.; Sel'kin, A.V. (FTI). Resonance elastic scattering of light by fluctuations in the surface exciton potential. PZTFD, v. 44, no. 8, 1986, 377-380.
308. Lyakhov, G.A.; Svirko, Yu.P. (IOF). Frequency conversion, self-action of light and lasing in orientationally ordered liquids. Nelineynaya optika i nelineynaya akustika zhidkosti. IOF. Trudy, no. 6, 1987, 24-102.
309. Maymistov, A.I.; Yelyutin, S.O. (). Transient propagation of ultrashort light pulses in the exciton absorption band of semiconductors. Nestatsionarnyye protsessy v poluprovodnikakh i dielektrikakh. Moskva, 1986, 65-70. (RZFZA, 87/3L1069).
310. Mazurenko, Yu.T.; Yarunin, V.S. (). Dynamics of molecules in a light resonance field. OPSPA, v. 61, no. 4, 1986, 684-687.
311. Monozon, B.S.; Ignat'yeva, L.A. (LKI). Magnetoabsorption of one of two interacting strong light waves in semiconductors. FTPPA, no. 11, 1986, 2098-2102.
312. Nerkararyan, Kh.V. (). Optical nonlinearity during resonance formation of strongly bound excitons. OPSPA, vol. 62, no. 4, 1987, 796-800.
313. Pirogov, V.Yu. (). Derivation of quantum equations of motion for problems in superradiance. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 3-12. (RZFZA, 87/4L863).
314. Pirogov, V.Yu. (). Statistical properties of superradiance. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 73-84. (RZFZA, 87/4L867).
315. Richter, Th. (). Cooperative spontaneous emission from two different atoms (in German). ANPYA, no. 6-8, 1986, 529-544. (RZFZA, 87/4L859).
316. Rotaru, A.Kh.; Khadzhi, P.I.; Shibarshina, G.D. (). Optical bistability in a system of coherent excitons, photons and biexcitons in the M-band region. UFIZA, no. 10, 1986, 1506-1512. (RZFZA, 87/3L1004).

317. Rueckmann, I.; Yarashyunas, K.; Chesnulyavichyus, I. (). Laser-induced probe-beam defocusing at the band edge of $\text{CdS}(x)\text{Se}(1-x)$ mixed crystal at room temperature (in English). PSSAB, v. A96, no. 2, 1986, 603-610. (RZFZA, 87/4L1107).
318. Sazonov, V.N.; Khromov, I.Ye. (FIAN). Periodic structure of the distribution function in terms of vibrational energy of polyatomic molecules in an intense IR field. DANKA, v. 290, no. 6, 1986, 1367-1370.
319. Selishchev, A.V.; Sysuyev, V.M. (LPI). Soliton propagation of ultrashort optical pulses in single-mode fiber lightguides. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 149-150.
320. Shmiglyuk, M.I.; Bardetskiy, P.I.; Tiron, Sh.D. (). Nonlinear optical nutation at transitions between exciton levels in $\text{Cu}(\text{sub}2)\text{O}$. Analogy with a three-level system. VINITI. Deposit, no. 8623-V, 16 Dec 1986, 17 p. (RZFZA, 87/4L871).
321. Shmiglyuk, M.I.; Pitey, V.N. (IPFANM). Hyper-Raman scattering and instabilities in semiconductors due to biexciton-polariton interactions. VINITI. Deposit, no. 8704-V, 17 Dec 1986, 16 p. (RZFZA, 87/3L1005).
322. Smirnov, D.F.; Troshin, A.S. (). Generation of sub-Poisson radiation by means of cooperative effects in pumping. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 117-130. (RZFZA, 87/4L882).
323. Stadnik, V.A.; Khasanov, I.Sh. (IFTT). Optical bistability in an ion-implantation semiconductor. PZTFD, no. 6, 1987, 337-340.
324. Steudel, H. (). Superfluorescence from a system of atoms in front of a mirror (in English). ANPYA, no. 6-8, 1986, 615-620. (RZFZA, 87/4L865).
325. Sushilov, N.V.; Pul'kin, S.A.; Zeylikovich, I.S.; Gayda, L.S. (). Rabi resonances and nondamping nutation in sodium vapor. OPSPA, v. 61, no. 5, 1986, 935-938.
326. Trifonov, Ye.D. (IFANEst). Phononless lines in superradiance. IFANEst. Trudy, no. 59, 1986, 205-215. (RZFZA, 87/4L858).

327. Usoskin, A.I.; Popova, O.A. (). Resonance absorption of light in small semiconductor particles. OPSPA, v. 61, no. 5, 1986, 1017-1021.
328. Vaychaytis, V.I.; Ignatavichyus, M.V.; Kudryashov, V.A.; Pimenov, Yu.N. (). Observation of Cerenkov radiation during the propagation of picosecond light pulses in sodium vapors. ZFPRA, vol. 45, no. 7, 1987, 327-329.
329. Yeliseyev, P.G.; Bogatov, A.P. (). Nonlinear refraction and optical bistability in semiconductors and semiconductor lasers. Itogi nauki i tekhniki. Radiotekhnika, no. 35, 1986, 157-207. (RZFZA, 87/3L1001).
330. Yemel'yanov, V.I.; Seminogov, V.N. (NITsTLAN). Nonlinear laser generation of capillary waves and formation of ordered surface structures. NITsTLAN. Preprint, no. 15, 1986, 23 p. (RZFZA, 87/4L1113).
331. Yevseyev, I.V.; Reshetov, V.A. (). Four-level stimulated photon echo. OPSPA, v. 61, no. 5, 1986, 1053-1057.
332. Zakharov, S.M.; Lysak, Yu.D.; Manykin, E.A. (MIFI). Effect of diffraction on the formation of photon echo signals. KVEKA, no. 4, 1987, 860-865.
333. Zakharov, V.I. (IOA). Possibility of converting coherent and chaotic light to the compressed state with sub-Poisson fluctuations of photons in multiphoton absorption. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 163-164.
334. Zakharov, V.Ye.; Mikhaylov, A.V. (ITFL). Domains of polarization in nonlinear optics. ZFPRA, vol. 45, no. 6, 1987, 279-282.
335. Zaytsev, A.I. (). Semiclassical theory of superradiance in systems with a low Fresnel number. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 103-117. (RZFZA, 87/4L857).
336. Zheludev, N.I.; Petrenko, A.D.; Trush, G.I. (MGU). Nonlinear optical activity due to reflection. Nonlinear refraction anisotropy. KRISA, no. 2, 1987, 399-405.

337. Zolot'ko, A.S.; Kitayeva, V.F.; Fedorovich, V.Yu. (FIAN). Self-action of a circularly polarized light wave in a homeotropically oriented nematic liquid crystal. FIAN. Preprint, no. 326, 1986, 10 p. (RZFZA, 87/4L1164).
338. Zon, B.A.; Kupersmidt, V.Ya.; Pakhomov, G.V.; Urazbayev, T.T. (VGU). Observation of the Cotton-Mouton inverse effect in a magneto-ordered (Lu,Bi)(sub3)(Fe,Ga)(sub5)O(sub12) crystal. ZFPRA, vol. 45, no. 5, 1987, 219-222.

2. Frequency Conversion

339. Aktsipetrov, O.A.; Akhmediyev, N.N.; Vsevolodov, N.N.; Yesikov, D.A.; Shutov, D.A. (MGU). Photochromism in nonlinear optics: photocontrolled second harmonic generation by bacteriorhodopsin molecules. DANKA, vol. 293, no. 3, 1987, 592-594.
340. Andreyev, R.B. (). Multicolored periodic-pulsed laser radiation source based on nonlinear frequency conversion. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 111. (RZRAB, 87/4Ye199).
341. Andreyev, Yu.M.; Baranov, V.Yu.; Voyevodin, V.G.; Geyko, P.P.; Satov, Yu.A.; Gribenyukov, A.A.; Izyumov, S.V.; Kozochkin, S.M.; Strel'tsov, A.P.; Pis'mennyy, V.D. (). Efficient conversion of nanosecond CO₂ laser pulses to the second harmonic. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 121. (RZRAB, 87/4Ye646).
342. Andreyev, Yu.M.; Belykh, A.D.; Voyevodin, V.G.; Geyko, P.P.; Gribenyukov, A.I.; Gurashvili, V.A.; Izyumov, S.V. (IOA; SFTI; IAE). CO laser radiation frequency doubling with an efficiency of 3 percent. KVEKA, no. 4, 1987, 782-783.
343. Andreyev, Yu.M.; Voyevodin, V.G.; Geyko, P.P.; Gribenyukov, A.I.; Dyad'kin, A.P.; Pigul'skiy, S.V.; Starodubtsev, A.I. (IOA; SFTI; IAE). Efficient second harmonic generation of NH(sub3) laser radiation in CdGeAs(sub2). KVEKA, no. 4, 1987, 784-786.
344. Garmash, V.M.; Lokshin, Ye.P.; Levchuk, Ye.A.; Mosiyevskiy, V.A.; Tarasov, A.V.; Filimonov, A.A. (). Efficient second harmonic generation in a quasi-c-w neodymium-doped yttrium orthoaluminate laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 118. (RZRAB, 87/4Ye648).

345. Garmash, V.M.; Yermakov, G.A.; Pavlova, N.I.; Tarasov, A.V.; Angert, N.B. (). Study on the parameters of 90-degree synchronism in potassium triphosphate crystals under second harmonic generation from neodymium-doped yttrium orthoaluminate lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 117. (RZRAB, 87/4Ye203).
346. Kochikyan, R.V.; Markushev, V.M.; Yakovlev, Yu.O.; Belan, V.R.; Zolin, V.F.; Koreneva, L.G. (IRE). Measurement of the nonlinear susceptibility of certain molecular crystals by a frequency interference band method. KVEKA, no. 3, 1987, 557-563.
347. Matveyev, A.N.; Petrova, I.Yu.; Sukhorukov, A.P. (MGU). Effects of dispersion of the coefficient of nonlinear wave coupling in frequency doubling of subpicosecond optical pulses. VINITI. Deposit, no. 8511-V, 12 Dec 1986, 37 p. (RZFZA, 87/4L853).
348. Matveyev, A.N.; Pirogova, I.Yu.; Telegin, L.S.; Chirkin, A.S. (MGU). High-intensity optical radiation losses in transparent nonlinear media. KVEKA, no. 4, 1987, 754-761.
349. Petrovich, V.I.; Manokhin, A.Ye.; Zusman, G.V. (). Method for the verification of converters of the average quadratic values of complex harmonic signals. IZTEA, no. 3, 1987, 18-19.
350. Popescu, I.M.; Puscas, N.N.; Sterian, P.E.; Irimescu, D. (). Numerical analysis of the efficiency of seventh harmonic generation in Na:Xe mixtures (in English). RRPQA, no. 4, 1986, 357-361. (RZFZA, 87/4L1121).
351. Ryba-Romanowski, W.; Ben Bouzid, F.; Mazurak, Z.; Jezowska-Trzebiatowska, B. (). Conversion of 1.06 μ m Nd³⁺:YAG laser radiation into green fluorescence in Cs(sub2)NaEr(sub0.1)Yb(sub0.9)Cl(sub6) single crystals. Rare Earths Spectroscopy. International Symposium, Wroclaw, 10-15 Sep 1984. Proceedings. (All in English). Singapore, World Science, 1985, 545-550. (RZFZA, 87/4L1123).
352. Troilin, V.I.; Yemel'yanenko, A.V.; Pagubko, A.B. (). Experimental study on the spectral composition of nonmonochromatic IR radiation converted in nonlinear crystals. Elektronnyye vozbuzhdeniya i struktural'nyye defekty kristallov. Khabarovsk, 1986, 86-88. (RZFZA, 87/3L1013).

353. Yezhelya, I.B.; Kovalenko, L.L.; Kolpakov, Yu.G.; Poletayeva, Ye.V. (). Study on the spectral-angular characteristics of nonlinear crystal converters. Elektronnyye vozvuzhdeniya i strukturnal'nyye defekty kristallov. Khabarovsk, 1986, 89-94. (RZFZA, 87/3L1012).

3. Parametric Processes

354. Babin, A.A.; Fel'dshteyn, F.I.; Freydmann, G.I. (). LiIO(sub3) crystal parametric oscillator with automatic signal injection, tunable up to 3.2 um. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 110. (RZRAB, 87/4Ye297).
355. Begishev, I.A.; Gulamov, A.A.; Yerofeyev, Ye.A.; Usmanov, T. (IEANUZ). Highly efficient parametric generation of light in the visible region. PZTFD, no. 5, 1987, 305-309.
356. Begishev, I.A.; Gulamov, A.A.; Yerofeyev, Ye.A.; Kamalov, Sh.R.; Redkorechev, V.I.; Usmanov, T. (). Highly efficient parametric amplification in the radiation field of a wide-aperture neodymium laser. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 109. (RZRAB, 87/4Ye298).
357. Bezayeva, L.G.; Kaptsov, L.N.; Landa, P.S. (). Study on chaotic modulation of oscillations in an oscillator with inertial nonlinearity under external parametric action. RAELA, no. 3, 1987, 647-650.
358. Boychenko, V.L.; Novikov, M.M.; Kholodnykh, A.I. (MGU). Improvement of output characteristics of a pulsed optical parametric oscillator upon injection of an external signal into an extracavity wave. KVEKA, no. 3, 1987, 628-630.
359. Kitayeva, G.Kh.; Penin, A.N.; Sergiyenko, A.V. (MGU). Interference of zero-point fluctuations of an electromagnetic vacuum and photon correlation during the parametric scattering of light. DANKA, vol. 293, no. 4, 1987, 848-850.
360. Lebedev, V.V.; Plyasulya, V.M. (). Parametric oscillation in the vacuum UV in an electric-discharge plasma. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 119. (RZRAB, 87/4Ye299).

361. Starodumov, A.N.; Uzunov, I.M. (FIAN). Parametric amplification of radiation fluctuations in a turbulent medium with thermal nonlinearities. KRSFA, no. 11, 1986, 64-65.
362. Vaychaytis, V.; Ignatavichyus, M.; Kudryashov, V.A.; Pimenov, Yu.N.; Yakite, R. (VilGU). Spectral and energy characteristics of four-photon parametric scattering in sodium vapor. KVEKA, no. 4, 1987, 762-769.
363. Verlan, E.M. (). Saturation effects, Stark shifts of levels and multipole radiation in nonlinear parametric interactions of electromagnetic waves in alkali metal vapor. Part 1. UFIZA, no. 10, 1986, 1516-1527. (RZFZA, 87/3L1018).

4. Stimulated Scattering

a. Miscellaneous Scattering

364. Golubtsov, A.A.; Pilipetskiy, N.F.; Sudarkin, A.N.; Chudinov, A.N. (IPMe). Experimental study on stimulated temperature scattering in a surface electromagnetic wave. ZFPRA, vol. 45, no. 5, 1987, 208-211.
365. Grigor'yev, S.F.; Zaskal'ko, O.P. (FIAN). Nonlinear theory of stimulated scattering of elliptically polarized light waves. KRSFA, no. 4, 1987, 12-14.
366. Zaikin, A.P.; Kupriyanov, N.L. (). Possibilities of the onset of enthalpy stimulated scattering of light in oxygen-iodine active media. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 132. (RZRAB, 87/4Ye365).

b. Raman

367. Andryunas, K.; Barila, A.; Vishchakas, Yu.; Mochalov, I.V.; Syrus, V. (). Stimulated Raman self-conversion in laser crystal media. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 108. (RZRAB, 87/4Ye200).
368. Bepalov, V.G.; Krylov, V.N.; Stasel'ko, D.I.; Yutanova, Ye.Yu. (). Highly coherent lasing in a Raman laser with amplification. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 98. (RZRAB, 87/4Ye294).

369. Bespalov, V.G.; Mikhaylov, V.N.; Parfenov, V.A. (). Frequency tuning with high spectral brightness based on vibrational and rotational stimulated Raman scattering in gases. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 159-160.
370. Bespalov, V.G.; Stasel'ko, D.I.; Yutanova, Ye.Yu. (). Fine structure of stimulated Raman scattering spectra in compressed hydrogen. The first Stokes component. OPSPA, vol. 62, no. 4, 1987, 763-769.
371. Dianov, Ye.M.; Ivanov, L.M.; Karasik, A.Ya.; Mamyshev, P.V. (). Tunable Raman lasing in extended dispersive media. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 98. (RZRAB, 87/4Ye291).
372. Furman, A.S. (). Stimulated scattering of light by trap recharging waves. PZTFD, no. 6, 1987, 346-351.
373. Gaysler, V.A.; Neizvestnyy, I.G.; Sinyukov, M.P.; Talochkin, A.B. (IFPSOAN). Raman scattering of light using surface oscillations of germanium crystals. ZFPRA, vol. 45, no. 7, 1987, 347-350.
374. Grudinin, A.B.; Dianov, Ye.M.; Khaydarov, D.V. (IOF). Stimulated Raman scattering in an anisotropic single-mode waveguide. ZTEFA, no. 4, 1987, 788-790.
375. Grudinin, A.B.; Dianov, Ye.M.; Korobkin, D.V.; Prokhorov, A.M.; Serkin, V.N.; Khaydarov, D.V. (FIAN). Stimulated Raman lasing in the 1.6 μm region during excitation of a single-mode lightguide by YAG:Nd³⁺ laser radiation at 1.064 μm . ZFPRA, vol. 45, no. 5, 1987, 211-213.
376. Kravtsov, N.V.; Naumkin, N.I. (). Effect of a magnetic field on the characteristics of Raman lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 95. (RZRAB, 87/4Ye290).
377. Vorob'yev, N.S.; Grudinin, A.B.; Dianov, Ye.M.; Korobkin, D.V.; Khaydarov, D.V. (IOF). Direct measurement of the duration of stimulated Raman scattering Stokes components in a single-mode fiber lightguide under 150 picosecond laser pumping. PZTFD, no. 6, 1987, 365-368.

378. Yagubov, A.A. (). Theory of Raman scattering by spin waves in ferromagnetics. Vysokoenergeticheskiye i molekulyarnyye protsessy. AzGU. Baku, 1986, 55-58. (RZFZA, 87/3L821).

c. Brillouin

379. Blinov, N.A.; Novoderezhkin, V.I.; Sinel'nikov, V.P.; Filippov, S.S.; Tsatsulin, M.I.; Cheburkin, N.V. (). Effect of radiation polarization on steady-state 180-degree stimulated Brillouin scattering in gyrotropic media. KVEKA, no. 4, 1987, 789-791.
380. Grigor'yev, S.F.; Zaskal'ko, O.P.; Kuz'min, V.V. (FIAN). Stimulated Brillouin scattering in light-absorbing media. ZETFA, vol. 92, no. 4, 1987, 1246-1255.
381. Grigor'yev, S.F.; Zaskal'ko, O.P.; Kuz'min, V.V. (). Disruption of phase locking from stimulated Brillouin scattering in light-absorbing media. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 96. (RZRAB, 87/4Ye520).
382. Kagan, V.D. (FTI). Additional maximum in the scattering of light by sound under conditions of sonic instability. FTVTA, no. 4, 1987, 1199-1202.
383. Papernyy, S.B.; Petrov, V.F.; Startsev, V.R. (). Stimulated Brillouin scattering compression of light pulses under conditions of four-wave parametric interaction. OPSPA, vol. 62, no. 3, 1987, 610-613.
384. Zhukov, N.N.; Zaskal'ko, O.P.; Kuz'min, N.N. (FIAN). Self-induced distributed feedback during stimulated Brillouin scattering. KVEKA, no. 4, 1987, 770-776.

d. Rayleigh

5. Self-focusing

385. Armeyev, V.Yu.; Karabutov, A.A.; Sapozhnikov, O.A. (MGU). Thermal self-focusing of ultrasound in a liquid [compared with self-focusing of light]. AKZHA, no. 2, 1987, 177-180.
386. Bagdoyev, A.G.; Bezirgenyan, G.S. (). Self-focusing of high-power light waves in optical media with saturation. DANAA, no. 2, 1986, 78-82. (RZFZA, 87/4L1165).

387. Baranov, V.Yu.; Bol'shov, L.A.; Kirichenko, T.K.; Kozochkin, S.M.; Likhanskiy, V.V.; Makarov, K.N.; Malyuta, D.D.; Satov, Yu.A.; Sokolova, L.K.; Strel'tsov, A.P. (IAE). Resonant self-focusing of CO₂ laser pulses in SF(sub6). KVEKA, no. 4, 1987, 707-713.

6. Acoustic Interaction

388. Antonov, S.N.; Gulyayev, Yu.V.; Kotov, V.M.; Poruchikov, P.V. (). Acoustooptical switches of optical channels. RAELA, no. 3, 1987, 623-628.
389. Balakshiy, V.I.; Kolosov, M.A. (). Laser acoustooptic device to study surface relief. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 148. (RZRAB, 87/4Ye453).
390. Belikov, I.B.; Voloshinov, V.B.; Nikanorova, Ye.A.; Parygin, V.N. (). Angular aperture of a tunable acoustooptic filter. AVMEB, no. 2, 1987, 52-57.
391. Bogdanov, S.V.; Bol'sheva, T.A. (). Limiting parameters of acoustooptic deflectors using paratellurite. AVMEB, no. 2, 1987, 58-60.
392. Daurkin, Ye.G.; Semenov, V.I.; Sheloput, D.V. (). Acoustooptic mode locking with improved thermostability. AVMEB, no. 2, 1987, 40-43.
393. Glazov, A.L.; Gurevich, S.B.; Muratkov, K.L. (FTI). Characteristics of photoacoustic systems for the construction of images of solid-state objects. ZTEFA, no. 3, 1987, 600-602.
394. Gulyayev, Yu.V.; Isadzhanyan, Ye.G.; Shkerdin, G.N. (). Bistable properties of a nonlinear Fabry-Perot resonator with acoustooptic interaction. RAELA, no. 4, 1987, 868-873.
395. Gusev, V.E.; Petrosyan, Ye.G. (MGU). Linear theory of longitudinal sound generation in the case of interzone absorption of optical radiation in semiconductors. AKZHA, no. 2, 1987, 223-232.
396. Jakab, L.; Richter, P.; Giber, J. (). Acoustooptic signal processing devices (in Hungarian). FNMKA, no. 10-11, 1986, 308-312, 349, 350, 351-352. (RZRAB, 87/4Ye613).

397. Klinger, M.I. (). Scattering of low-energy quantum particles (quasiparticles) in glass. PZTFD, no. 8, 1987, 489-492.
398. Kocsany, L.; Giber, J.; Richter, P. (). Photoacoustic research at the Department of Atomic Physics of the Budapest Technical University (in Hungarian). FNMKA, no. 10-11, 1986, 329-331, 349, 350, 352. (RZFZA, 87/4A52).
399. Krylov, V.V.; Shtentsel', T.V. (MGU). Laser sound excitation in a layered solid medium. AKZHA, no. 2, 1987, 267-270.
400. Lyamshev, L.M. (AKIN). Lasers in acoustics. UFNAA, vol. 151, no. 3, 1987, 479-527.
401. Mikhaylov, V.N.; Musin, V.M. (). Influence of the inhomogeneity of the distribution of sound intensity on the efficiency of acoustooptic interaction. RAELA, no. 4, 1987, 696-702.
402. Nishanov, V.N.; Khabibullayev, P.K. (OTANUZ). Resonance excitation of surface acoustic waves by quasi-two-dimensional local plasmons. DANKA, vol. 293, no. 6, 1987, 1369-1371.
403. Ovchinnikov, O.B.; Pashin, A.Ye.; Puchenkov, O.V.; Rastorguyev, D.L. (AKIN). Recording of spatial-temporal characteristics of short acoustic pulses excited by optical radiation. AKZHA, no. 2, 1987, 312-316.
404. Rylov, V.A. (). Study on schemes of optoacoustic gas analyzers with high selectivity. ZPSBA, v. 46, no. 3, 1987, 474-480.
405. Semenov, V.I.; Sheloput, D.V.; Czitrovszky, A.; Jani, P. (). Selection of active materials for acoustooptic mode lockers (in English). KFKKA. Preprint, no. 84/E, 1986, 1-15. (RZFZA, 87/4P100).
406. Skvor, Z. (). Miniature optoacoustic transducer. Author's certificate Czechoslovakia, no. 231037, 15 Jun 1986. (RZRAB, 87/3Ye578).
407. Trubetskoy, A.V. (). Multi-frequency acoustooptic interaction in an anisotropic medium. AVMEB, no. 2, 1987, 43-52.

408. Yepikhina, G.Ye.; Zhogun, V.N.; Pal'tsev, L.L.; Shekhovtsov, V.N.; Shpil'kin, A.D. (). Optoacoustic recording of short-duration pulsed laser radiation. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 100-103. (RZFZA, 87/4L1212).
409. Zil'berman, G.Ye.; Kupchenko, L.F.; Goltvyanskaya, G.F. (). Non-mutual acoustooptical effect, allowing for the diffraction divergence of light and sound waves. RAELA, no. 3, 1987, 629-631.

G. SPECTROSCOPY OF LASER MATERIALS

410. Denisov, A.L.; Zharikov, Ye.V.; Zagumennyy, A.I.; Kalitin, S.P.; Noginov, M.A.; Ostroumov, V.G.; Smirnov, V.A.; Sorokina, I.T.; Shcherbakov, I.A. (IOF). Luminescence sensitization of neodymium ions by chromium ions in gadolinium-scandium-aluminum garnet crystals. IOF. Preprint, no. 350, 1986, 7 p. (RZFZA, 87/4L509).
411. Georgobiani, A.N.; Kotlyarevskiy, M.B.; Mikhaleiko, V.N.; Shvetsov, Yu.V. (). Analysis of radiative transitions in an F(sup+) center of ZnS based on a model of configuration curves. ZPSBA, vol. 46, no. 4, 1987, 608-612.
412. Gorban', I.S.; Gumenyuk, A.F.; Degoda, V.Ya.; Sizontova, Ye.I. (). Mechanism of Y(sub3)Al(sub5)O(sub12) X-ray luminescence. OPSPA, vol. 62, no. 3, 1987, 596-600.
413. Iova, I.; Chera, I. (). Selective excitation of the atomic energy levels in a hollow cathode electric discharge (in English). RRPQA, no. 5, 1986, 469-480. (RZFZA, 87/3G295).
414. Iova, I.; Chera, I.; Broscaru, A.; Gingut, D. (). Selective excitation in a c-w or pulsed hollow cathode discharge (in English). ABFZA, vol. 35, 1986, 27-36. (RZFZA, 87/3G292).
415. Kudryavtsev, A.A.; Tonkov, M.V. (). Principles of the origin of the longwave IR absorption spectrum in CO2+He gas mixtures. OPSPA, v. 61, no. 5, 981-987.
416. Kulagin, N.A.; Ozerov, M.F.; Rokhmanova, V.O. (). Effect of gamma-radiation on the electron state of Cr ions in Y(sub3)Al(sub5)O(sub12) single crystals. ZPSBA, vol. 46, no. 4, 1987, 612-616.

417. Skripko, G.A.; Shkadarevich, A.P.; Cherches, Kh.A.; Urbanovich, V.S.; Bliznyuk, N.I.; Poskrebko, T.A.; Zhuk, S.P. (). Spectroscopic characteristics of chromium-activated silicates. VINITI. Deposit, no. 615-V87, 26 Jan 1987, 10 p. (RZFZA, 87/4L359).

H. ULTRASHORT PULSE GENERATION

418. Aganesyan, M.K.; Papazyan, T.A.; Pogosyan, E.M.; Sngryan, Ye.A. (NIIFKS). The LP-2 picosecond laser. KVEKA, no. 3, 1987, 655-656.
419. Baklanov, A.Ye. (ITF). Ultrashort pulse generation by phase-locked lasers. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 139-140.
420. Biglov, Z.A.; Gordiyenko, V.M.; Kudinov, I.A.; Platonenko, V.T.; Popova, O.P. (). Generation and amplification of ultrashort pulses in the 10 μ m range. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 73. (RZRAB, 87/4Ye208).
421. Demchuk, M.I.; Manichev, I.A.; Mikhaylov, V.P.; Yumashev, K.V. (). Investigation of the nonlinear stage of the formation of ultrashort pulse duration in a solid laser. ZPSBA, vol. 46, no. 4, 1987, 562-567.
422. Dianov, Ye.M.; Karasik, A.Ya.; Mamyshev, P.V.; Prokhorov, A.M.; Fursa, D.G. (IOF). High-contrast subpicosecond pulses obtained by a single-stage 110-fold compression of YAG:Nd³⁺ laser pulses. KVEKA, no. 4, 1987, 662-663.
423. Konyashchenko, A.V.; Kryukov, I.V.; Kryukov, P.G. (). Passive mode locking in pulsed solid state lasers by varying the parameters of the resonator in a wide range. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 173. (RZRAB, 87/4Ye309).
424. Peshko, I.I. (). Ultrashort pulses of shortest duration in solid state lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 179. (RZRAB, 87/4Ye227).
425. Pozhar, V.E.; Pustovoyt, V.I. (VNIFTRI). Compression of ultrashort light pulses. KVEKA, no. 4, 1987, 811-813.

426. Prokhorenko, V.I.; Tikhonov, Ye.A.; Yatskiy, D.Ya.; Bushmakina, Ye.N. (IFANUK). Stimulated emission of ultrashort pulses from a YAG:Nd³⁺ laser in a scheme with colliding pulses. KVEKA, no. 4, 1987, 804-810.
 427. Prokhorov, A.M.; Fedorov, V.B.; Fomenkov, I.V. (). Dynamics of ultrashort pulse generation in a neodymium laser with a plasma mirror. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 176. (RZRAB, 87/4Ye184).
 428. Prots', V.I.; Stavitskiy, I.P.; Stupak, M.F. (). Obtaining of single subnanosecond pulses in a laser with a stimulated Brillouin scattering - stimulated Raman scattering mirror. AVMEB, no. 2, 1987, 110-113.
 429. Tomov, I. (). Generation of femtosecond light pulses. Fizika (Bulgaria), no. 3, 1986, 3-6. (RZFZA, 87/3L858).
 430. Varanavichyus, A.; Podenas, D.; Stabinis, A.; Yankauskas, A. (). Efficient chirp of picosecond pulses from Nd³⁺ glass and YAG lasers in short single-mode lightguides. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 175. (RZRAB, 87/4Ye218).
 431. Vysloukh, V.A.; Matveyeva, T.A. (MGU). Effect of delay in nonlinear response on femtosecond pulse compression. KVEKA, no. 4, 1987, 792-795.
 432. Wilhelmi, B. (). Possibilities and limits to the compression of femtosecond light pulses (in German). ANPYA, no. 3-5, 1986, 355-368. (RZFZA, 87/3L980).
- J. CRYSTAL GROWING
- K. THEORETICAL ASPECTS OF ADVANCED LASERS
433. Bandilla, A. (). Free electron lasers (in German). WIFOA, no. 8, 1986, 192-195. (RZFZA, 87/3L822).
 434. Bessonov, Ye.G. (FIAN). Effect of the angular and energy spread in a particle beam, on the spectral angular intensity and gain in undulator radiation sources. ZTEFA, no. 12, 1986, 2361-2370.
 435. Ginzburg, N.S.; Tokman, M.D. (IPF). Relativistically invariant form of averaged equations of the movement of an electron in a field of two intense electromagnetic waves. ZTEFA, no. 3, 1987, 409-416.

436. Isakov, P.Ya.; Kozhevnikov, A.V.; Lukin, V.A.; Pak, V.S. (). Forming of dense relativistic e-beams for free-electron lasers. VINITI. Deposit, no. 608-V87, 6 Jan 1987, 14 p. (RZFZA, 87/4L921).

L. GENERAL LASER THEORY

437. Alferov, Zh.I. (member, editorial board) (). New international journal "Optoelectronics: Devices and Technologies, OP-DET" (Japan). KVEKA, no. 3, 1987, 654.
438. Czechowicz, R. (). Spatial pulse shaping in solid state lasers (in Polish). EKNTB, no. 4, 1986, 3-7,1. (RZFZA, 87/4L1092).
439. Datsyuk, V.V.; Izmaylov, I.A.; Kochelap, V.A. (KGU; IPANUK). Kinetics of electron-vibrational relaxation of molecules under conditions of recombination excitation. KHFID, no. 3, 1987, 304-309.
440. Draganescu, V.; Dumitras, D.C. (). Lasers in Romania: a historical approach and the present state of the art (in English). RRPQA, no. 6, 1986, 563-578. (RZFZA, 87/4L933).
441. Dul'nev, G.N. (biographical subject). (). Gennadiy Nikolayevich Dul'nev (on his sixtieth birthday). IVUBA, no. 4, 1987, 92-93.
442. Giber, J.; Richter, P. (). Optical research at the Department of Atomic Physics of the Physics Institute at the Budapest Technical University (in Hungarian). FNMKA, no. 10-11, 1986, 289-290, 349-351. (RZFZA, 87/4A51).
443. Grachuk, A.Z. (). Development of lasers going into 1986. International conferences in the United States: International Laser Science, Dallas, 18-22 Nov 1985, and Lasers-85, Las Vegas, 2-6 Dec 1985. KVEKA, no. 3, 1987, 637-653.
444. Kaliteyevskiy, N.I.; Marchenko, O.M.; Pen'kov, S.N. (LGU). Lasers in classroom experiments. IVUFA, no. 4, 1987, 73-77.
445. Kiselevskiy, L.I. (biographical subject) (BGU). Leonid Ivanovich Kiselevskiy on his sixtieth birthday. ZPSBA, vol. 46, no. 4, 1987, 691-692.

446. Koryukin, I.V.; Khandokhin, P.A.; Khanin, Ya.I. (). Coherent fluctuations and chaos in three-level lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 167. (RZRAB, 87/4Yel8).
447. Kozhevnikova, I.N.; Lyakhov, G.A. (IOF). Distributed feedback effects in active media. Theory and physical applications. Nelineynaya optika i nelineynaya akustika zhidkosti. IOF. Trudy, no. 6, 1987, 3-23.
448. Mikhaylov, A.Ye.; Parfenov, V.G.; Savintseva, L.A. (LITMO). Thermal regime and radiation energy of solid-state lasers of different designs. IVU3A, no. 4, 1987, 82-86.
449. Moskalenko, M.A. (). Determining the range of single pulse action in a laser with passive Q-switching in the resonator. IVUBA, no. 11, 1986, 85-90. (RZFZA, 87/3L843).
450. Potapov, A.I.; Polyakov, V.Ye. (SZPI). Tunable lasers with coherent pumping. TsNIITEIpriboro. Deposit, no. 3612-pr, 17 Dec 1986, 34-41. (RZFZA, 87/4L999).
451. Vakhitov, N.G.; Isayev, M.P.; Kushnir, V.R.; Sharif, G.A. (). Laser with combined radiation output. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 196. (RZRAB, 87/4Yel94).
452. Zaskal'ko, O.P. (book reviewer). (). Review of book: Picosecond Electronics and Optoelectronics. Springer Series in Electrophysics, Vol. 21. West Berlin, Springer-Verlag, 1985, 258 p. UFNAA, v. 151, no. 4, 1987, 732-733.

II. LASER APPLICATIONS

A. BIOLOGICAL EFFECTS

453. Avdeyev, P.S.; Berezin, Yu.D.; Volkov, V.V.; Gudakovskiy, Yu.P.; Mal'kova, N.Yu.; Somov, Ye.Ye.; Ushkova, I.N. (). Laser eye stimulator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 317. (RZRAB, 87/4Ye607).
454. Beylin, Ye.N.; Buyanov-Uzdal'skiy, A.Yu.; Zharov, V.P.; Loshchilov, V.I.; Mishakov, G.V.; Chekalin, S.V. (MVTU). Study on laser-acoustic effects in water and their effect on cell structures. AKZHA, no. 2, 1987, 194-199.

B. COMMUNICATIONS SYSTEMS

455. Abramov, A.V.; Dianov, Ye.M.; Karpechev, V.N.; Korniyenko, L.S.; Rybaltovskiy, A.O.; Chernov, P.V. (IOF). Thermally stimulated transitions of radiative color centers in pure quartz glass fiber light guides. FKSTD, no. 2, 1987, 226-230.
456. Aksenov, B.Ye.; Dmitriyev, V.I.; Shvarkunov, S.N. (LPI). Methods and equipment to study fiberoptic communication lines in local computer networks. LPI. Trudy, no. 414, 1986, 82-86. (RZFZA, 87/4L699).
457. Andreyev, I.A.; Afrailov, M.A.; Baranov, A.N.; Mirsagatov, M.A.; Mikhaylova, M.P.; Yakovlev, Yu.P. (FTI). Avalanche multiplication in photodiode structures based on GaInAsSb solid solutions. PZTFD, no. 8, 1987, 481-485.
458. Andriyesh, A.M.; Kulyak, I.P.; Ponomar', V.V.; Kanchiyev, Z.I. (IPFANM). Photoinduced light absorption in chalcogenide-glass fibers. KVEKA, no. 3, 1987, 603-604.
459. Anfilov, I.V.; Zenkin, S.S. (GOI). Optical systems of laser recording devices for the obtaining of printing photoforms. OPMPA, no. 4, 1987, 25-27.
460. Armand, N.A.; Grigor'yevskiy, V.I.; Lomakin, A.N. (). Possibility for synchronizing distant points by means of an optical communication channel. RAELA, no. 3, 1987, 658-659.

461. Avrutskiy, I.A.; Bufetova, G.A.; Svakhin, A.S.; Sychugov, V.A.; Tishchenko, A.V. (IOF). Planar waveguides with leak modes and determination of their parameters. KVEKA, no. 4, 1987, 884-886.
462. Babkina, T.V.; Bogoroditskaya, R.A.; Grigor'yants, V.V.; Gur'yev, B.M.; Lobanchev, M.I.; Mironychev, A.P.; Rabinovich, E.M.; Tuchin, V.V. (NIIMF). He-Ne laser with mode locking at 1.15 μm for the diagnostics of fiber lightguides. PRTEA, no. 2, 1987, 166-169.
463. Belanov, A.S.; Dianov, Ye.M.; Krivenkov, V.I.; Solopov, V.M. (). Linearity of polarization of the HE(sub11) mode in circular fiber lightguides. RATEA, no. 12, 1986, 75-76. (RZFZA, 87/3Zh266).
464. Bereza, V.N.; Kamuz, A.M.; Klimova, N.V.; Oleksenko, P.F.; Pekar', G.S. (). Diffuse waveguides in CdS and ZnS polycrystal substrates. OPTED, no. 10, 1986, 33-37. (RZFZA, 87/4L35).
465. Bezhan, N.P.; Brynzar', V.I.; Gitsu, D.V.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPIA). Selective detection of optical information by a laser diode. ZTEFA, no. 3, 1987, 586-588.
466. Bulushev, A.G.; Gurov, Yu.V.; Makhotkin, V.Ye.; Okhotnikov, O.G.; Pak, V.G.; Shurukhin, B.P. (IOF). Fiber-optic single-mode demultiplexer. KVEKA, no. 3, 1987, 623-624.
467. Burshta, I.I.; Pasechnik, Yu.A.; Snitko, O.V. (IPANUK). Waveguide polaritons in three-layer systems. ZTEFA, no. 3, 1987, 423-426.
468. Cherenkov, G.A. (). Fiberoptic filter with absorbing layers. EKVZA, no. 3, 1987, 54-57.
469. Dedoborshch, V.G.; Adzhemov, A.S. (). Prospects for the development of digital communication networks and commutation systems. EKVZA, no. 1, 1987, 17-20.
470. Dianov, Ye.M.; Sokolov, V.O.; Sulimov, V.B. (IOF). Numerical modeling of defects formed by the interaction of atomic fluorine with cross-linkage oxygen atoms in vitreous silicon dioxide [used to produce quartz glass fiber lightguides]. FKSTD, no. 2, 1987, 306-308.

471. Dianov, Ye.M.; Zakhidov, E.A.; Karasik, A.Ya.; Kasyndzhanov, M.A.; Mirtadzhiyev, F.M.; Prokhorov, A.M.; Khabibullayev, P.K. (IOF). Optical Kerr effect in glass fiber-optic waveguides with weak and strong birefringence. KVEKA, no. 4, 1987, 822-826.
472. Dumarevskiy, Yu.D.; Zemskov, K.I.; Kazarin, M.A.; Kas'yanov, A.B.; Kovtonyuk, N.F.; Medvedeva, L.V.; Petrash, G.G.; Telegin, L.S. (). Reproduction of television images on a large screen by means of metal-dielectric-semiconductor/liquid-crystal structures and brightness amplifiers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 302. (RZRAB, 87/4Ye400).
473. Frenkel', L.A. (). Calculation algorithm for dispersion characteristics of low-mode dielectric graded-index elliptic waveguides. RAELA, no. 4, 1987, 732-739.
474. Gan'shin, V.A.; Korkishko, Yu.N. (MIET). Characteristics of planar ion-exchange of a lens in LiNbO_3 . ZTEFA, no. 4, 1987, 827-829.
475. Gavrilov, V.N.; Gryaznov, Yu.M.; Volod'kin, A.V. (). The OMK3-76 optical tester [to control fiberoptic nodes]. Sredstva svyazi, no. 4, 1986, 21-24. (RZFZA, 87/4L763).
476. Glebov, L.B.; Dotsenko, A.V.; Nikonorov, N.V.; Tsyplyayev, S.A. (). Mode selection in planar photosensitive waveguides. OPSPA, vol. 62, no. 4, 1987, 905-910.
477. Glebov, L.B.; Yevstrop'yev, S.K.; Morozova, I.S.; Petrovskiy, G.T. (). Application of a method of stripping by layers for the determination of the optical characteristics of planar waveguides. OPSPA, vol. 62, no. 3, 1987, 686-691.
478. Golubev, P.N.; Kapranov, R.I.; Kvitenko, Yu.N. (). Frequency generation in fiberoptic delay lines. Teoriya i tekhniki radiolokatsii, radionavigatsii i radiosvyazi v grashdanskoy aviatsii. Riga, 1985, 127-130. (RZRAB, 87/3Ye249).
479. Goncharenko, I.A. (IEANBel). Waveguide dispersion of anisotropic optical waveguides. KVEKA, no. 4, 1987, 816-821.
480. Gorbachev, O.V.; Zhilinskiy, A.P.; Oborotov, V.A. (MEIS). Optoacoustic effect in fiber lightguides. AKZHA, no. 2, 1987, 356-358.

481. Gur'yanov, A.N.; Dianov, Ye.M.; Kim, V.M.; Kurkov, A.S.; Mashinskiy, V.M.; Neustruyev, V.B.; Khopin, V.F. (IOF). Fundamental radiative color centers in germanium silicate glass and in fiber lightguides based on it. IOF. Preprint, no. 323, 1986, 26 p. (RZFZA, 87/3L323).
482. Junge, K. (). Physical problems of information transmission over lightguides (in German). ANPYA, no. 3-5, 1986, 243-252. (RZFZA, 87/3L684).
483. Kashin, V.V.; Perminov, S.M.; Perminova, V.N.; Rusanov, S.Ya.; Sysoyev, V.K. (IOF). Numerical modeling of thermophysical processes in extraction of quartz lightguides. IOF. Preprint, no. 238, 1986, 41 p. (RZFZA, 87/4L755).
484. Klovskiy, D.D.; Sisakyan, I.N.; Shvartsburg, A.B.; Shirokov, S.M. (). Statistical properties of the nonlinear evolution of a random pulse in an optical fiber. RAELA, no. 4, 1987, 740-746.
485. Koliyenko, V.P. (). Study on diffuse optical waveguides. Matematicheskkiye modeli teorii perenosy v neodnorodnykh i nelineynykh sredakh s fazovymi prevrashcheniyami. Minsk, 1986, 62-67. (RZFZA, 87/3L46).
486. Kotov, G.A.; Tarasov, S.V.; Tentler, G.Sh.; Shandybina, G.D. (). Automation of the laser industrial process to fabricate printed board masks. CKSVVTPr, Leningrad, 9-10 Dec 1986. Materialy. DNTF. Leningrad, 1986, 12-16. (RZRAB, 87/4Ye429).
487. Krupina, V.L.; Artem'yev, V.S.; Serbin, A.I.; Krasavtseva, N.B. (). Effect of mode interference in fiber lightguides, on noise immunity in the optical signal detector. Sredstva svyazi, no. 4, 1986, 56-59. (RZFZA, 87/4L698).
488. Kukharchik, P.D.; Belkin, V.G.; Skripko, A.S.; Dryk, A.A. (). Thermomagnetic system to record CO2 laser radiation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 69. (RZRAB, 87/4Ye402).
489. Malysh, V.N.; Osovitskiy, A.N. (). Properties of optical waveguides obtained by a solid-state diffusion method. OPSPA, vol. 62, no. 4, 1987, 911-913.

490. Mayyer, A.A.; Serdyuchenko, Yu.N.; Sitarskiy, K.Yu.; Shchelev, M.Ya.; Shcherbakov, I.A. (IOF). Decay of ultrashort pulses under self-switching of light in tunnel-coupled waveguides. IOF. Preprint, no. 345, 1986, 12 p. (RZFZA, 87/4L31).
491. Mikhal', O.F. (VNIIM). Comparison of three approximations in model calculations of temperature dependence of transmission in fiber lightguides. VNIIMI. Deposit, no. 281-kk, 4 Nov 1986, 34 p. (RZFZA, 87/3Zh267).
492. Nesterova, Z.V.; Aleksandrov, I.V. (GOI). Sources of coherent radiation based on an optical fiber. OPMPA, no. 3, 1987, 53-60.
493. Osadchev, L.A.; Sergeyev, A.N.; Frolova, M.N. (GOI). Distribution of the index of refraction in oxide films based on TiO_2 . OPMPA, no. 3, 1987, 11-12.
494. Osyka, M.I.; Pasternak, Ya.A.; Shelelyak, M.Z. (). Industrial quadruple nuclear and fiberoptic thermal converters. IZTEA, no. 3, 1987, 29-30.
495. Parminov, S.M.; Parminova, V.N.; Sysoyev, V.K. (IOF). Extraction of quartz fiber lightguides as a "free boundary" problem. Numerical study. IOF. Preprint, no. 269, 1986, 28 p. (RZFZA, 87/4L752).
496. Serebryakov, V.A.; Chertkov, A.A. (). Microsecond radiation wave front reversal in fiber-optic waveguides. KVEKA, no. 4, 1987, 786-789.
497. Sichla, F.; Wegner, A. (). Switching device to detect digital optical signals over lightguides. Patent GDR, no. 237946, 30 Jul 1986. (RZRAB, 87/3Ye570).
498. Smirnova, A.D. (IOF). Calculating quasioptic paths for the transport of Gaussian beams. IOF. Preprint, no. 275, 1986, 22 p. (RZFZA, 87/3Zh268).
499. Stoykov, V.; Drazhev, M. (). Transimpedance measurement receiver units to measure constant optical power in fiberoptic systems (in English). Bolgarskiy fizicheskiy zhurnal, no. 3, 1986, 256-262. (RZFZA, 87/4L748).
500. Strizhevskiy, V.L.; Fontaniy, V.A.; Yashkir, Yu.N. (). Parametric interaction of optical modes of a fiber lightguide. OPSPA, vol. 62, no. 3, 1987, 674-677.

501. Vasil'yev, A.V.; Plotnichenko, V.G. (IOF). Measurement of optical characteristics of infrared fiber-optic waveguides. KVEKA, no. 4, 1987, 827-833.
502. Vasil'yev, V.N.; Naumchik, V.D.; Lanin, Yu.I. (). Analysis of radiative heat exchange during drawing out of optical fiber. Matematicheskiye modeli teorii perenosa v neodnorodnykh i nelineynykh sredakh s fazovymi prevrashcheniyami. Minsk, 1986, 136-150. (RZFZA, 87/3L61).
503. Wiederhold, G.; Kramer, W.; Mueller, R.; Sauer, E.; Heumann, E.; Kleinschmidt, J.; Vogler, K.; Zschocke, W.; Ruehle, K. (). Method for inscribing information in the volume of homogeneous plastic materials by guided laser beams. Patent GDR, no. 237972, 6 Aug 1986. (RZRAB, 87/3Ye468).
504. Yesikov, O.S.; Kamenshchikov, G.D. (MIFI). Bragg diffraction of waveguide optical modes using a magnetized structure, induced by a magnetic tape. PZTFD, no. 8, 1987, 468-471.

C. BEAM PROPAGATION

1. THEORY

505. Bobrov, S.T.; Greysukh, G.I.; Stepanov, S.A. (). Correction of diffraction-lens spherochromatism. OPSPA, vol. 62, no. 3, 1987, 669-673.
506. Bogatyrev, S.N. (MFTI). Vaporization of aerosol particles in an optical radiation field. VINITI. Deposit, no. 8649-V, 17 Dec 1986, 16 p. (RZFZA, 87/4L1192).
507. Ciarkowski, A. (). Three-dimensional problem of diffraction at the boundary of two media (in Polish). Prace instytutu podstawowych problemow techniki PAN, no. 17, 1986, 27 p. (RZFZA, 87/4L6).
508. Denisov, V.I.; Yelisseyev, V.A. (MGU). Interaction of plane gravitational and electromagnetic waves in an external gravitational field. VMUFA, no. 2, 1987, 3-7.
509. Dmitriyev, A.Ye.; Parshkov, O.M. (SarPI). Formation of a signal pulse during transient double resonance in a medium with large inhomogeneous broadening of spectral transitions. KVEKA, no. 3, 1987, 498-508.

510. Gase, R.; Ponath, H.E.; Schubert, M. (). Temporal-spatial radiation functional and its measurement (in English). ANPYA, no. 6-8, 1986, 487-498. (RZFZA, 87/3L7).
511. Lenk, R.; Stuetzer, H. (). Tunneling loss mechanism and reduced specular reflex in a total reflection regime (in English). WZTKA, no. 2, 1986, 263-268. (RZFZA, 87/3L5).
512. Marchevskiy, F.N.; Strizhevskiy, V.L.; Turchin, Ya.A. (KGU). Autorotation of the polarization ellipse in a laser-active isotropic medium with cubic nonlinear polarization. DUKAB, no. 2, 1987, 67-70.
513. Maymistov, A.I.; Sklyarov, Yu.M. (MIFI). Effect of regular phase modulation on the formation of optical solitons. KVEKA, no. 4, 1987, 796-803.
514. Molotkov, N.Ya. (). Study on focusing and scattering systems with variable refractive index, in an optics course for institutions of higher learning. VINITI. Deposit, no. 114-V87, 6 Jan 1987, 11 p. (RZFZA, 87/4A102).
515. Novikov, O.G.; Myshkin, V.F. (ToPI). Study on the propagation and scattering of electromagnetic waves under optical breakdown disperse gas media. Aktual'nyye voprosy tep lofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 241-242.
516. Remizovich, V.S. (). Linear theory of reflection of radiation from the surface of a semi-infinite scatterer and its relationship to the problem of propagation of radiation in an infinite homogeneous medium. PFKMD, no. 1, 1987, 5-12. (RZFZA, 87/4L4).
517. Yelyutin, S.O.; Maymistov, A.I. (). Anomalous evolution of optical solitons. OPSPA, v. 61, no. 5, 1986, 1058-1060.

2. Propagation in the Atmosphere

- 518. Abdullayev, S.S.; Mirzayev, A.T.; Rasulov, I.K. (TashGU). Statistics of photocounts of modulated radiation transmitted through a turbulent atmosphere. KVEKA, no. 3, 1987, 524-528.
- 519. Abramovich, D.I.; Butskiy, V.V.; Gruzinskiy, V.V.; Nikolenko, V.F.; Naumov, N.V.; Shablinskiy, O.Ye. (BGU). Automated system for the approximate analysis of the optical state of the atmosphere. PRTEA, no. 2, 1987, 231-232.
- 520. Akhtyrchenko, Yu.V.; Vysotskiy, Yu.P.; Golub, S.L.; Zakharchenko, S.V.; Semenov, L.P.; Skripkin, A.M. (IEM). Excitation of long laser sparks by CO₂ laser radiation over an atmospheric path. IEM. Trudy, no. 40/123, 1986, 99-103. (RZFZA, 87/4L835).
- 521. Alekseyev, A.P.; Kusmatov, O.E.; Tyabotov, A.Ye. (). Results of lidar studies on fog during weather modification. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 122. (RZRAB, 87/3Ye528).
- 522. Almayev, R.Kh.; Lebedev, S.S. (IEM). Intensity distribution of laser radiation reflected from a wavefront reversing mirror in a cleared medium. IEM. Trudy, no. 40/123, 1986, 23-31. (RZFZA, 87/4L832).
- 523. Almayev, R.Kh.; Lebedev, S.S.; Lipskaya, O.A.; Semenov, L.P. (IEM). Passage of light beams with different intensity profiles, through droplet aerosols. IEM. Trudy, no. 40/123, 1986, 20-23. (RZFZA, 87/4L834).
- 524. Almayev, R.Kh.; Semenov, L.P.; Slesarev, A.G. (IEM). Propagation of laser radiation through clouds during explosion of droplets. IEM. Trudy, no. 40/123, 1986, 4-10. (RZFZA, 87/4L836).
- 525. Almayev, R.Kh.; Semenov, L.P.; Slesarev, A.G. (IEM). Action of a sequence of laser pulses on droplet aerosols. IEM. Trudy, no. 40/123, 1986, 10-15. (RZFZA, 87/4L837).
- 526. Anisimov, M.P.; Aksenov, A.A.; Volk, V.N. (). Laser instruments to measure the concentration and disperse composition of aerosols and hydrosols. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 71-74. (RZRAB, 87/3Ye526).

527. Artemov, V.M. (IPG). Automated two-wave laser gas analyzer. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 31-41.
528. Artemov, V.M.; Artemov, Ye.M.; Fridman, Sh.D. (IPG). Dynamics of the ground-level concentration of ozone. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 114-118.
529. Artemov, V.M.; Artemov, Ye.M.; Kop'yev, V.A.; Fridman, Sh.D. (IPG). Laser monitoring of air pollution by ammonia and sulfur dioxide wastes. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 80-86.
530. Artemov, V.M.; Artemov, Ye.M.; Zharov, V.P.; Nazarov, I.M.; Fridman, Sh.D.; Biryulin, V.P. (IPG). Effect of fertilizing of agricultural fields on air pollution by ammonia. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 106-114.
531. Baldenkov, G.N.; Dul'kin, V.M.; Kozintsev, V.I.; Prokudina, T.M.; Kovalev, V.A.; Koval'kova, Ye.E.; Rybakov, Ye.Ye.; Fridman, Sh.D. (IPG). Principle of systematic errors in laser measurement of the transparency of the atmosphere. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 135-140.
532. Baldenkov, G.N.; Vaserman, M.A.; Dul'kin, Vyach.M.; Dul'kin, V.M.; Kozintsev, V.I.; Smirnov, V.V. (). Electronic device to measure the attenuation index of the atmosphere. IZTEA, no. 4, 1987, 29-30.
533. Baldenkov, G.N.; Zhil'tsov, V.I.; Goshokov, M.M.; Kozintsev, V.I.; Milen'kiy, M.N.; Nazarov, I.M.; Rozhdestvenskaya, V.I.; Fridman, Sh.D. (IPG). Laser probing to determine the mass concentration of aerosols in plumes of industrial wastes. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 41-52.
534. Balin, Yu.S.; Belen'kiy, M.S.; Mironov, V.L.; Samokhvalov, I.V.; Safonova, N.V.; Razenkov, I.A. (). Lidar studies on random aerosol inhomogeneities in the atmosphere. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 121. (RZRAB, 87/3Ye513).

535. Banakh, V.A. (). Propagation of laser radiation over local paths in a turbulent atmosphere. VINITI. Deposit, no. 109-V87, 6 Jan 1987, 35 p. (RZRAB, 87/4Ye358).
536. Barykin, V.N. (). Effect of temperature fluctuations in nonisothermal jets, on the parameters of the beam. Matematicheskiye modeli teorii perenosa v neodnorodnykh i nelineynykh sredakh s fazovymi prevrashcheniyami. Minsk, 1986, 88-95. (RZFZA, 87/3Gl99).
537. Bersenev, V.I.; Kurochkin, N.N.; Savin, V.I. (). Using lasers for remote measuring of wind velocity. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 67-70. (RZRAB, 87/3Ye527).
538. Bochkarev, N.N. (IOA). Study on the kinetics of optical breakdown sites in the atmosphere in terms of acoustic response. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 155-156.
539. Bochkarev, N.N.; Gavril'yukov, N.N. (IOA). Acoustic diagnostics of evaporation and fragmentation of water aerosol droplets in a high-power optical radiation field. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 97-98.
540. Bondur, V.G.; Kulakov, V.V.; Murynin, A.B. (). Evaluating the state of the atmosphere-ocean interface by laser probing. CVSRLIAt, 8th. Materialy. Part 1. Tomsk, 1986, 169-173. (RZRAB, 87/4Ye596).
541. Buldakov, M.A.; Ippolitov, I.I.; Klimkin, V.M.; Matrosov, I.I.; Mitchenkov, V.M. (). Interaction between KrF* laser radiation and basic gas constituents of the atmosphere. ZPSBA, v. 46, no. 4, 1987, 554-558.
542. Burakov, S.D.; Godlevskiy, A.P.; Ivanov, V.V.; Kopytin, Yu.D.; Ostanin, S.A.; Soldatkin, N.P. (). Airborne lidar to diagnose gas anomalies in the troposphere. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 124. (RZRAB, 87/3Ye512).

543. Chaykovskiy, A.P.; Shcherbakov, V.N. (). Simultaneous data processing of measurements of optical and microphysical characteristics of atmospheric aerosols. VBSFA, no. 5, 1986, 51-55. (RZFZA, 87/3L776).
544. Dedov, V.A.; Zhuravleva, N.G.; Legovich, Yu.S.; Rozhdestvenskaya, V.I. (IPG). Dialog system to analyze and process the results of laser probing of the atmosphere. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGKP. IPG. Trudy, no. 67, 1986, 86-97.
545. Engard, F.; Peczeli, I.; Halasz, L.; Richter, P. (). Determining the effective cross-section of molecular gas absorption at CO₂ laser wavelengths (in Hungarian). FNMKA, no. 10-11, 1986, 301-305, 349, 350, 351. (RZRAB, 87/4Ye517).
546. Glazov, G.N.; Igonin, G.M. (). Optimal filtering of profiles of meteorological parameters during laser probing of the atmosphere. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 135. (RZRAB, 87/3Ye529).
547. Gochelashvili, K.S.; Prokhorov, A.M.; Starodubmov, A.N. (). Propagation of laser radiation in the atmosphere. Effects of thermal self-action. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 90. (RZRAB, 87/4Ye357).
548. Gochelashvili, K.S.; Uzunov, I.M. (). Fluctuations in the parameters of short pulses in a turbulent medium with thermal nonlinearity. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 91. (RZRAB, 87/4Ye355).
549. Golub, S.L.; Skripkin, A.M. (IEM). Methods to improve the sensitivity of laser spectrochemical analysis of aerosol particles. IEM. Trudy, no. 40/123, 1986, 42-48. (RZFZA, 87/4L1254).
550. Ippolitov, I.I.; Sosnin, A.V.; Khmel'nitskiy, G.S.; Klimkin, V.M.; Mitchenkov, V.M. (). Absorption and Raman spectroscopy in studies on the gas composition of the atmosphere. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. IOA. Novosibirsk, Nauka, 1987, 94-147.

551. Kazaryan, R.A.; Mnatsakanyan, T.A. (IFI). Characteristics of the intracavity method for the detection of an infrared optical signal in the atmosphere and the improvement of its noise immunity. KVEKA, no. 3, 1987, 607-609.
552. Kolev, I.N.; Parvanov, O.P.; Kaprielov, V.K.; Ilev, I.K. (). Results from lidar study on low cloudiness (in English). CRABA, no. 8, 1986, 41-44. (RZRAB, 87/3Ye530).
553. Kopytin, Yu.D.; Lazarev, S.V. (). Remote probing methods based on nonlinear and coherent optical effects. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. IOA. Novosibirsk, Nauka, 1987, 148-222.
554. Kopytin, Yu.D.; Mal'tseva, G.A. (IOA). Vaporization of haze particles consisting of a solid nucleus and salt solution envelope. IVUFA, no. 4, 1987, 44-51.
555. Kositsyn, V.Ye.; Montanari, S.G.; Timashov, A.V. (). Remote monitoring of air pollution by methane from gas pipelines. Avtomatizatsiya kontrolya zagryazneniya okruzhayushchey sredy. Materialy Seminara. Moskva, 1985, 109-116. (Referativnyy sbornik. Sistemy, pribory i metody kontrolya kachestva okruzhayushchey sredy, 86/10.84.83).
556. Kostin, V.P. (). Estimating the relative increase of energy potential in laser devices necessary to compensate for atmospheric modulating noise. RATEA, no. 1, 1987, 84-85. (RZFZA, 87/4L1246).
557. Kozintsev, V.I.; Novoselov, A.N.; Fridman, Sh.D. (IPG). Lidar to measure gaseous air pollutants. Distantсионnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 68-79.
558. Kozintsev, V.I.; Prokudina, T.M.; Rozhdestvenskaya, V.I. (IPG). Effective range of a lidar with adjustable gain in the photodetector. Distantсионnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 118-123.
559. Kozintsev, V.I.; Prokudina, T.M.; Rozhdestvenskaya, V.I. (IPG). Estimation of errors in measuring the transparency of the atmosphere, occurring while correcting lidar signals at the square of the distance. Distantсионnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGGP. IPG. Trudy, no. 67, 1986, 123-128.

560. Kublashvili, G.S. (). Laser probe measurement of sea wave parameters near shore. SAKNA, vol. 125, no. 3, 1987, 541-544.
561. Lebedev, S.S. (IEM). Phase compensation of thermal distortions of a laser beam in a droplet medium. IEM. Trudy, no. 40/123, 1986, 16-19. (RZFZA, 87/4L838).
562. Lezhen, A.S.; Sviridov, S.A.; Stemkovskiy, A.I. (IOAN; SimGU). Method and device to determine rises and gradients of the sea surface. OTIZD, no. 25, 1986, 1242714. (RZGFA, 87/4V57).
563. Meleshkin, A.V.; Lipovskiy, I.M.; Gorokhovskiy, A.V.; Rikhter, L.Ya. (). Study on IR laser fluorescence of molecular gases to analyze air pollution. Okhrana truda i okruzhayushchey sredy. Saratov, 1985, 3 2-35. (Referativnyy sbornik. Sistemy, pribory i metody kontrolya kachestva okruzhayushchey sredy, 86/7.84.35).
564. Milen'kiy, M.N.; Kozintsev, V.I.; Konstantinov, B.A.; Baldenkov, G.N. (IPG). Possibility of using multiple scattering to measure the cloud ceiling. Distantcionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGKP. IPG. Trudy, no. 67, 1986, 129-135.
565. Mishin, I.V. (). Transfer of polarized radiation in a horizontally inhomogeneous atmosphere. VINITI. Deposit, no. 153-V87, 7 Jan 1987, 16 p. (RZFZA, 87/4L8).
566. Nazarov, I.; Rozhdestvenskaya, V.; Fridman, Sh. (). Using lidar measurements to study transfer of air pollutants. PFMSD, no. 3, 1985, 18-24. (Referativnyy sbornik. Sistemy, pribory i metody kontrolya kachestva okruzhayushchey sredy, 86/10.84.38).
567. Nikolayev, A.N. (IPG). Determining the vertical profile of concentrations of molecular components of the atmosphere. Distantcionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGKP. IPG. Trudy, no. 67, 1986, 97-106.
568. Nikolayev, A.N.; Rozhdestvenskaya, V.I.; Fridman, Sh.D. (IPG). Remote methods for monitoring air pollution in the OGSNK [Soviet acronym for Government-Wide Service for Observing and Controlling Environmental Pollution]. Distantcionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGKP. IPG. Trudy, no. 67, 1986, 5-16.

569. Orishich, A.M.; Ponomarenko, A.G.; Posukh, V.G. (). Effect of pulse length on the efficiency of the interaction of CO₂ laser radiation with a target in the atmosphere. ZPMFA, no. 2, 1987, 27-30.
570. Richter, P.; Peczeli, I.; Halasz, L.; Giber, J.; Engard, F.; Lippenyi, T. (). Laser remote analytical methods to measure degree of air pollution (in Hungarian). FNMKA, no. 10-11, 1986, 291-295, 349, 350, 351. (RZFZA, 87/4L1250).
571. Samokhvalov, I.V.; Balin, Yu.S.; Matviyenko, G.G.; Shamanayev, V.S. (). Remote determination of the parameters of atmospheric aerosols. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. IOA. Novosibirsk, Nauka, 1987, 5-62.
572. Samokhvalov, I.V.; Shamanayev, V.S.; Ippolitov, I.I.; Klimkin, V.M.; Khmel'nitskiy, G.S. (). Using lasers to study various characteristics of bodies of water. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. IOA. Novosibirsk, Nauka, 1987, 223-239.
573. Shevchenko, T.B.; Shugan, I.V. (). Laser probing of the sea surface from aircraft. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 305. (RZRAB, 87/4Ye594).
574. Skripkin, A.M. (IEM). Dependence of the threshold of optical breakdown in an aerosol on the frequency of laser radiation during the emergence of a long laser spark. ZTEFA, no. 3, 1987, 554-556.
575. Tishchenko, A.Yu. (TsAO). Determining the concentration of freon-12 in the atmosphere by diode laser spectroscopy and cryogenic enrichment. TsAO. Trudy, no. 161, 1986, 48-56. (RZGFA, 87/4V36).
576. Tuzova, S.I. (). Spatial coherence of an optical radiation field in a turbulent medium with discrete large-scale inhomogeneities. VINITI. Deposit, no. 8908-V, 26 Dec 1986, 19 p. (RZFZA, 87/4L831).
577. Varshavchik, M.L. (GOI). Effect of the scattering properties of the atmosphere on errors in measuring the effective area of scattering of three-dimensional objects. OPMPA, no. 3, 1987, 8-10.
578. Volkovitskiy, O.A.; Petrushin, A.G. (IEM). Approximate formulas to calculate the scattering index of visible radiation by aqueous aerosols under small angles. IEM. Trudy, no. 40/123, 1986, 66-70. (RZFZA, 87/4L41).

579. Yengoyan, T.M.; Zhil'tsov, V.I.; Kozintsev, V.I.; Sil'nitskiy, A.F.; Nazarov, I.M.; Rozhdestvenskaya, V.I.; Fridman, Sh.D. (IPG). Lidar methods to determine the concentration of nitrogen dioxide in the air. Distantstionnyye sredstva i metody izmereniya zagryazneniy atmosfery i vybrosov. GKGKP. IPG. Trudy, no. 67, 1986, 53-61.
580. Zakharchenko, S.V.; Semenov, L.P.; Sintyurin, G.A. (IEM). Study on optical discharges in aerodisperse media under reduced air pressure. IEM. Trudy, no. 40/123, 1986, 31-35. (RZFZA, 87/4L1172).
581. Zakharyan, M.V.; Pozhidayev, V.N. (). Probability for attenuation of various optical wavelengths over horizontal paths in fogs. RAELA, no. 12, 1986, 2324-2329.
582. Zuyev, V.V. (). Laser probing of the fields of meteorological parameters of the atmosphere by lidar differential absorption. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. IOA. Novosibirsk, Nauka, 1987, 63-93.
583. Zuyev, V.V.; Romanovskiy, O.A. (). Lidar probing of humidity profiles in the stratosphere and troposphere from aircraft and satellites at the H₂O absorption line in the 3 μ m region. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 123. (RZRAB, 87/3Ye525).

3. Propagation in Liquids

584. Abramov, O.I.; Yeremin, V.I.; Zaymidoroga, I.O.; Nastich, Yu.N.; Perepechko, S.I.; Shcherbakova, G.A. (VEI). Multichannel measuring system for remote laser spectrofluorimetry of aqueous media. Informelektro. Deposit, no. 545-et, 20 Oct 1986, 10 p. (RZGFA, 87/3V16).
585. Dreyden, G.V.; Ostrovskiy, Yu.I.; Samsonov, A.M.; Sokurinskaya, Ye.V. (FTI). Interaction between compression shockwaves and a planar liquid-solid interface. ZFPRA, no. 19, 1986, 1153-1158.
586. Levin, I.M. (IOAN). Brightness and contrast during remote probing of a depth-wise inhomogeneous ocean by narrow light beams. OKNOA, no. 6, 1986, 932.
587. Levin, I.M. (IOAN). Backscattering signal from pulsed remote irradiation of turbid media by narrow light beams. IFAOA, no. 12, 1986, 1328-1332.

588. Solov'yev, A.N. (IOANAO). Background noise in measuring the fluorescence intensity of chlorophyll in the sea. OKNOA, no. 4, 1987, 683-686.

4. Adaptive Optics

589. Adonts, G.G.; Akopyan, D.G. (). Theory of wavefront reversal of polarized light under four-wave interaction in resonance media. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 5-52.
590. Adonts, G.G.; Kanetsyan, E.G. (). Optical phase conjugation under four-wave interaction. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 53-64.
591. Afanas'yev, A.A.; Voytovich, A.P.; Dotsenko, M.V. (IFANB). Nondegenerate four-wave interaction in a resonant medium with Doppler broadening of the absorption line. KVEKA, no. 3, 1987, 492-497.
592. Alekseyev, V.N.; Golubev, V.V.; Dmitriyev, D.I.; Zhilin, A.N.; Lyubimov, V.V.; Mak, A.A.; Reshetnikov, V.I.; Sirazetdinov, V.S.; Starikov, A.D. (). Study on wavefront reversal in a phosphate glass laser amplifier with an output aperture of 12 cm. KVEKA, no. 4, 1987, 722-727.
593. Anikeyev, I.Yu.; Glazkov, D.A.; Gordeyev, A.A.; Zubarev, I.G.; Mironov, A.B.; Mikhaylov, S.I. (FIAN). Interferometer with stimulated Brillouin scattering mirrors. KVEKA, no. 4, 1987, 777-781.
594. Antipov, A.L. (IPF). Influence of thermal phase variation on stimulated scattering and wave front reversal of a light beam. KVEKA, no. 4, 1987, 728-735.
595. Anufriyev, A.V.; Vol'pov, A.L.; Zimin, Yu.A. (). Adaptation to phase distortions in coherent optical systems. KVEKA, no. 3, 1987, 592-596.
596. Apresyan, L.A. (). Effect of the nonreciprocity of a medium on wave front reversal efficiency. IVYRA, no. 3, 1987, 365-373.
597. Arutyunov, Yu.A.; Zherdiyenko, V.V.; Khizhnyak, A.I. (IFANUK). Efficiency of wavefront reversal during forward four-wave mixing in media with transient nonlinear response. IFANUK. Preprint, no. 4, 1987, 52 p.

598. Arutyunov, Yu.A.; Zherdiyenko, V.V.; Khizhnyak, A.I. (). Transient conversion of the spatial structure of laser beams in multiwave interactions. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 93. (RZRAB, 87/4Ye332).
599. Arutyunyan, V.M.; Aramyan, A.R.; Ishkhanyan, S.P.; Papazyan, T.A. (). Experimental study on the spectral characteristics of nondegenerate wavefront reversal under four-wave frequency mixing. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 65-83.
600. Belousov, V.N.; Niziyenko, Yu.K. (). Efficient stimulated Brillouin compressor with amplification in a parallel pumping beam. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 94. (RZRAB, 87/4Ye333).
601. Drozhzhin, V.V.; Kozinchuk, V.A.; Strizhevskiy, V.A.; Ustyuzhaninov, A.M.; Martynenkov, V.M. (GosNITsIPR). Device to correct nonlinear distortions and digital-to-analog signal conversion in a laser recorder. GosNITsIPR. Trudy, no. 27, 1986, 110-116. (RZRAB, 87/4Ye612).
602. Dzhotyan, G.P.; Karadzhyan, G.N.; Bokash, I.S.; Yukhas, T. (). Wavefront reversal in a transient reference wave field. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 143-160.
603. Dzhotyan, G.P.; Minasyan, L.L. (). Theory of transient four-wave wavefront reversal of optical radiation. Linear processes. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 93-102.
604. Dzhotyan, G.P.; Minasyan, L.L. (). Stimulated Raman scattering and parametric processes in a multimode pumping field. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 103-142.
605. Gabriyelyan, V.L.; Kazaryan, R.A.; Rylov, G.Ye. (IFI). Wavefront reversal of YAG laser second harmonic radiation probing the atmosphere. KVEKA, no. 4, 1987, 879-881.

606. Golubev, V.V.; Sirazetdinov, V.S.; Starikov, A.D. (). Correction of laser-beam astigmatic aberrations by a stimulated Brillouin scattering mirror. OPSPA, vol. 62, no. 4, 1987, 885-890.
607. Grin', Yu.G.; Koryabin, A.V.; Kuz'minskiy, A.L.; Shenyavskiy, L.A.; Shmal'gauzen, V.I. (). Experimental studies on compensating for the curvature of the field and inclinations of the wavefront over an inclined path of pulsed probing. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 199. (RZRAB, 87/4Ye356).
608. Gyulamiryan, A.L.; Melkonyan, A.A.; Minasyan, Kh.Ye. (). Four-wave wave-front reversal of light by thermal nonlinearity of weakly absorbing media. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 84-88.
609. Gyulamiryan, A.L.; Melkonyan, A.A.; Minasyan, Kh.Ye. (). Four-wave wave-front reversal of radiation from an independent laser. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 89-92.
610. Ivanov, A.V.; Kandidov, V.P.; Krindach, D.P.; Popov, V.V. (). Adaptive focusing of light beams under wind refraction. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 205. (RZRAB, 87/4Ye360).
611. Kirakosyants, V.Ye.; Loginov, V.A.; Slonov, V.V. (). Wave front measurement in an optical reception system with multichannel phase modulation. KVEKA, no. 4, 1987, 889-891.
612. Kononov, V.V.; Kislitsyn, B.V.; Kuprenyk, V.I.; Sergeyev, V.V. (). Wavefront reversal of c-w CO2 laser radiation in absorbing liquids. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 346. (RZRAB, 87/4Ye544).
613. Korchemskaya, Ye.Ya.; Soskin, M.S.; Taranenko, V.B. (IFANUK). Space-polarizational wave front reversal during four-wave mixing in biochrome films. KVEKA, no. 4, 1987, 714-721.
614. Koryakovskiy, A.S.; Marchenko, V.M.; Prokhorov, A.M. (IOF). Possibility of using thermal optical phenomena to correct wavefronts. KRSFA, no. 4, 1987, 24-26.

615. Kovalev, V.I.; Suvorov, M.B. (FIAN). Nonlinear absorption of opposed waves in InAs at the wavelength of 10.6 μm . KVEKA, no. 3, 1987, 621-622.
616. Kozhevnikova, I.N. (IOF). Effect of nonlinear absorption on the efficiency of wavefront reversal of forward beams. KRSFA, no. 4, 1987, 30-32.
617. Lapotko, L.O.; Pukhlov, G.M. (). Various methods for wavefront correction of laser radiation. Matematicheskkiye modeli teorii perenosa v neodnorodnykh i nelineynykh sredakh s fazovymi prevrashcheniyami. Minsk, 1986, 72-87. (RZFZA, 87/3L1037).
618. Lyubimov, V.V.; Nosova, L.V. (). Forming a given wavefront by a laser with a coupled ring resonator. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 136. (RZRAB, 87/4Ye351).
619. Matveyev, A.Z. (IPF). Noise of thermal and hypersonic four-wave phase-conjugate mirrors influenced by wave mismatch. KVEKA, no. 4, 1987, 743-753.
620. Odulov, S.G.; Oleynik, O.I. (IFANUK). Wave front reversal in barium-sodium niobate crystals. KVEKA, no. 4, 1987, 886-889.
621. Prots', V.I.; Stavitskiy, I.P.; Stupak, M.F. (IAESOAN). Dynamics of spectrum, intensity, and spatial characteristics of radiation from a laser with stimulated Brillouin scattering - stimulated thermal scattering mirrors upon exposure to an external signal. KVEKA, no. 4, 1987, 670-676.
622. Ragul'skiy, V.V. (). Process of stimulated scattering of chaotically polarized light [in wavefront reversal]. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 95. (RZRAB, 87/4Ye545).
623. Smirnov, A.V. (LITMO). Deformable mirrors for adaptive optical systems. TsNIITEIpriboro. Deposit, no. 3617-pr, 29 Dec 1986, 27 p. (RZFZA, 87/4L716).
624. Trofimov, V.A. (MGU). Adaptive control by the wave front of a light beam over a reflecting signal. IVYRA, no. 4, 1987, 505-515.

- 625. Trofimov, V.A. (MGU). Dynamic control of the lower modes of a light beam wavefront in a nonlinear medium. IVUFA, no. 4, 1987, 63-69
- 626. Trofimov, V.A. (). Controlling the wavefront of a light beam in a medium with relaxing nonlinearity. AVMEB, no. 2, 1987, 29-33.
- 627. Vorontsov, M.A.; Kudryashov, I.A.; Shmal'gauzen, V.I. (). Fifteen-channel adaptive system to focus laser radiation. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 28-31. (RZRAB, 87/3Ye278).
- 628. Zaporozhets, V.M.; Marchevskiy, F.N.; Strizhevskiy, V.L.; Timonin, P.V. (KGU). Suppression of spatial noise in optical fibers based on holographic wave front reversal. PZTFD, no. 7, 1987, 435-439.
- 629. Zozulya, A.A.; Silin, V.P.; Tikhonchuk, V.T. (FIAN). Theory of wave front reversal during stimulated scattering in a self-intersecting light beam. ZETFA, vol. 92, no. 3, 1987, 788-800.

D. COMPUTER TECHNOLOGY

- 630. Abdullayev, A.Yu.; Zadkov, V.N. (MGU). Developmental trends in automated laser facilities. VINITI. Deposit, no. 601-V87, 26 Jan 1987, 50 p. (RZFZA, 87/4L619).
- 631. Basov, N.G.; Plotnikov, A.F.; Popov, Yu.M.; Seleznev, V.N. (FIAN). New optoelectronic reversible storage medium. KVEKA, no. 3, 1987, 437-451.
- 632. Dombrovskiy, V.A.; Dombrovskiy, S.A. (GOI). Analysis of aberrations of optical systems of holographic memory using plane carriers. OPMPA, no. 3, 1987, 1-5.
- 633. Gorbatovskiy, M.V.; Demina, T.P.; Poryadin, Yu.D.; Fomichev, N.N. (). Multichannel integrated optical modulator for parallel information processing. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 214. (RZRAB, 87/4Ye629).
- 634. Grinev, A.Yu.; Voronin, Ye.N.; Kukshin, A.I. (). Optoelectronic processors for adaptive antenna arrays. ZRBEA, no. 10, 1986, 50-61.

635. Molodyakov, S.A.; Novitskiy, A.P. (LPI). Preliminary processing of information by charge-coupled devices in optodigital systems. LPI. Trudy, no. 414, 1986, 86-89. (RZFZA, 87/4L710).

636. Sinitsyn, G.V. (IFANB). Purely optical elements for digital logic based on bistable thin-film interferometers. KVEKA, no. 3, 1987, 529-535.

E. HOLOGRAPHY

637. Antonovskaya, N.G.; Kozhevnikov, N.M.; Surkov, S.G. (LPI). Lecture demonstrations of holographic interferograms. IVUFA, no. 4, 1987, 122-123.

638. Auslender, A.L.; Matevosov, G.A.; Katusha, V.G.; Petrov, D.G.; Tsvetov, Ye.R. (). Device to measure the holographic characteristics of photorecording media. OTIZD, no. 32, 1986, 1254428. (RZRAB, 87/3Ye593).

639. Badalyan, V.G.; Bazulin, Ye.G. (AKIN). Application of an adaptive extrapolation method in acoustic holography. AKZHA, no. 2, 1987, 190-193.

640. Bobak, W.; Dlugaszek, A. (). Quantitative interpretation of holographic interferograms by the method of difference of fringe orders (in English). JTPHD, no. 1-2, 1986, 17-24. (RZFZA, 87/4L775).

641. Boyko, Yu.B.; Rybak, A.M.; Tikhonov, Ye.A. (). Holographic recording of reflection gratings using a photopolymerizable layer. ZPSBA, vol. 46, no. 4, 1987, 667-669.

642. Bugayev, A.A.; Van'kov, A.B.; Zakharchenya, B.P. (FTI). Holographic diagnostics of amplitude-phase distortions of a pumping pulse in semiconductors. PZTFD, no. 7, 1987, 404-409.

643. Bykovskiy, Yu.A.; Kazakevich, A.V.; Lamekin, V.F.; Mironos, A.V.; Smirnov, V.L. (). Analysis of anisotropic properties of waveguide holograms formed using isotropic materials. KVEKA, no. 4, 1987, 845-850.

644. Bykovskiy, Yu.A.; Kazakevich, A.V.; Lamekin, V.F.; Mironos, A.V.; Smirnov, V.L. (). Matching holographic filtration in a wave-driving channel. PZTFD, no. 7, 1987, 414-418.

645. Cojocaru, E.; Medianu, R. (). Interference pattern in a photoresist layer on reflecting substrates (in English). RRPQA, no. 5, 1986, 523-527. (RZFZA, 87/4L782).
646. Dmitriyev, N.I.; Kalenkov, S.G.; Solomakho, G.I. (). Recording and synthesis of holograms by orthogonal transparencies. AVMEB, no. 2, 1987, 24-28.
647. Fit'o, V.M.; Levchenko, O.G.; Duts', N.P.; Zhovtanetskiy, O.I. (GOI). Use of photothermoplastic recording for the visualization of heterogeneous transparent media. OPMPA, no. 4, 1987, 44-47.
648. Kanayev, I.F.; Malinovskiy, V.K.; Pugachev, A.M. (IAESOAN). Study on the contribution of hot electrons to transfer processes in LiNbO(sub3) crystals. FTVTA, no. 3, 1987, 692-701.
649. Koreshev, S.N. (). Device to record reflection holograms of optical elements. OTIZD, no. 30, 1986, 1251014. (RZRAB, 87/4Ye651).
650. Koronkevich, S.V. (GOI). Lens model of a phase-only synthetic hologram optical element. OPMPA, no. 4, 1987, 15-17.
651. Korzhov, Ye.I.; Oparin, A.N.; Polezhayev, V.V.; Potaturkin, O.I. (). Multichannel holographic intensity correlator with a quasi-monochromatic electron-light pipe. AVMEB, no. 2, 1987, 8-17.
652. Kozik, V.I.; Potaturkin, O.I. (). Study on the effect of longitudinal shifts of a holographic filter on the reciprocal scale of correlating images. AVMEB, no. 2, 1987, 3-8.
653. Malikov, R.F.; Mustafin, R.Kh. (). Kinetics and spectrum of a light pulse in picosecond holography. OPSPA, vol. 62, no. 3, 1987, 631-635.
654. Mansurov, A.N.; Shadrin, G.A. (). Use of a parabolic equation for the solution of the problem of image reconstruction by a heterodyne holography method. RAELA, no. 4, 1987, 881-883.
655. Maripov, A. (). Holograms of transmitting objects. INKSA, no. 6, 1986, 48-53. (RZFZA, 87/4L784).
656. Marti, L.; Ostrovskiy, Yu.I.; Reyngand, N.O. (FTI). Device for holographic information recording. OTIZD, no. 30, 1986, 1251013. (RZRAB, 87/4Ye656).

657. Myl'nikov, V.S.; Ivanov, A.M. (). Holographic characteristics of a liquid-crystal modulator of light using the twist-effect with organic polymer photoconductors. ZTEFA, no. 4, 1987, 729-734.
658. Nefed'yev, L.A.; Samartsev, V.V. (). Color echo-holography. OPSPA, vol. 62, no. 3, 1987, 701-703.
659. Saari, P.M. (IFANEst). Phononless lines and space-time holography of ultrafast events. IFANEst. Trudy, no. 59, 1986, 157-184. (RZFZA, 87/4L770).
660. Safronov, G.S.; Tishko, T.V. (KhGU). Phase-contrast holographic microscope. PRTEA, no. 2, 1987, 249.
661. Shkunov, V.V.; Yakovleva, T.V. (IPMe). Calculation of noise of speckle-field volume holograms under saturable photoresponse. KVEKA, no. 3, 1987, 460-465.
662. Soroko, L.M. (OIYaI). Hologram readout device. OTIZD, no. 30, 1986, 1251015. (RZRAB, 87/4Ye652).
663. Stozharova, K.A.; Aristov, A.K. (GOI). Investigation of concave diffraction gratings for polychromators. OPMPA, no. 4, 1987, 11-15.
664. Tereshchenko, Ye.D. (). Reconstructing the structure of ionospheric inhomogeneities by radioholograms of finite sizes formed by point probing sources. Issledovaniye vysokoshirotnoy ionosfery. PGI. Apatity, 1986, 46-52. (RZFZA, 87/3Zh115).
665. Tereshchenko, Ye.D.; Galinov, A.V.; Mel'nichenko, Yu.A.; Khudukon, B.Z. (). Radioholographic study on ionospheric inhomogeneities. Ionosfernyye issledovaniya, no. 41, Moskva, 1986, 103-108. (RZFZA, 87/3Zh124).
666. Vasnetsov, M.V.; Sokolova, I.G.; Soskin, M.S.; Taranenko, V.B. (IFANUk). Holographic grazing-diffraction selector-telescope. KVEKA, no. 3, 1987, 597-602.
667. Zeylikovich, I.S.; Lyalikov, A.M.; Spornik, N.M. (). Color shade methods for the studying of a reconstructed wave front. OPSPA, vol. 62, no. 3, 1987, 659-663.

F. LASER-INDUCED CHEMICAL REACTIONS

668. Akhabayev, B.A.; Nikiforov, A.Yu.; Skorobogatov, P.K. (). Laser ionization methods to measure the parameters of semiconductor structures. Elektronika dlya eksperimental'noy fiziki. Moskva, 1986, 8-13. (RZFZA, 87/3N311).
669. Akhabayev, B.A.; Nikiforov, A.Yu.; Skorobogatov, P.K. (). Requirements for laser devices for quality control of integrated microcircuits by ionizing methods. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 117-119. (RZRAB, 87/3Ye448).
670. Akhmanov, A.S.; Kovalev, A.S.; Popov, A.M.; Poroykov, A.Yu. (). Possibilities of using excimer lasers to produce submicron-sized microstructures. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 153. (RZRAB, 87/4Ye493).
671. Akinfiyev, N.N.; Nikonorov, A.P.; Moskvitina, Ye.N.; Pankratov, A.V. (MGU). Laser vaporization of a graphite target in a nitrogen atmosphere. VINITI. Deposit, no. 8479-V, 11 Dec 1986, 12 p. (RZFZA, 87/4L1173).
672. Akulin, V.M.; Bagatur'yants, A.A.; Vurdov, V.D.; Yel'tsov, K.N.; Yesadze, G.G.; Zuyeva, G.Ya.; Prokhorov, A.M.; Khokhlov, E.M. (IOF). Preparation of oscillation-excited C(sub2)H(sub5)Cl molecules for heterogeneous reactions. KHFID, no. 3, 1987, 310-315.
673. Alfimov, M.V.; Khayrutdinov, R.F. (IKhF). Photochemistry of organized molecular systems. IKhF. Preprint, no. not given, 1986, 70 p. (RZFZA, 87/4L231).
674. Balakhnin, V.P.; Kostikov, S.M.; Sarkisov, O.M.; Cheskis, S.G. (IKhF). Study on the photochemical reactions of NO(sub2) under the action of laser radiation. KHVKA, no. 2, 1987, 183-188.
675. Brisov, A.Yu. (). Photosynthesis: the pre-laser period. Lazery i fotosintez. Itogi nauki i tekhniki. Biofiziki, no. 19. VINITI. 1986, 5-83. (RZFZA, 87/4L931).

676. Bunkin, N.F.; Zon, B.A.; Lavrishchev, S.V.; Luk'yanchuk, B.S.; Shafeyev, G.A. (IOF). Effect of electric field on the kinetics of laser-induced heterogeneous reactions. IOF. Preprint, no. 268, 1986, 50 p. (RZRAB, 87/3Ye532).
677. Chasovnikov, S.A.; Chichinin, A.I.; Krasnoperov, L.N. (IKhKG). Time-resolved laser magnetic resonance study on the reactivity of Cl atoms in $(\text{sup}2)\text{P}(\text{sub}3/2)$ and $(\text{sup}2)\text{P}(\text{sub}1/2)$ states with ClNO molecules. KHFID, no. 4, 1987, 447-454.
678. Delone, N.B. (). Formation of multicharged atomic ions in a laser radiation field (review of experimental data). Korrelyatsionnyye i relyativistskiye efekty v atomakh i ionakh. SSAN. Moskva, 1986, 20-53. (RZFZA, 87/4L60).
679. Gordon, Ye.B.; Matyushenko, V.I.; Repin, P.B.; Sizov, V.D. (). Using a photodissociation iodine laser to determine the concentration of fluorine atoms in a pulsed high-voltage discharge plasma in $\text{SF}(\text{sub}6)$. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 30. (RZRAB, 87/4Ye523).
680. Grunwald, V.R.; Hertz, J.H. (). Recording of optical gain in UV multiphoton photodissociation of molybdenum hexacarbonyl (in German). ANPYA, no. 6-8, 1986, 499-504. (RZFZA, 87/3L1101).
681. Iogansen, A.A.; Kulakov, P.V.; Sarkisov, O.M.; Titov, A.A.; Cheskis, S.G. (IKhF). Energy distribution of energy released in $\text{O}[(\text{sup}1)\text{D}] + \text{NH}(\text{sub}3)$ yields $\text{NH}(\text{sub}2) + \text{OH}$ reactions according to the degrees of freedom of the products. KHFID, no. 4, 1987, 426-432.
682. Kanayev, I.F.; Malinovskiy, V.K.; Ryabova, L.A.; Salun, V.S.; Serbinov, I.A. (). Obtaining of graphite microstructures by the laser pyrolysis of acetone. AVMEB, no. 2, 1987, 106-108.
683. Kurochkin, V.L. (ITF). Measuring the cross-section of photodissociation of InI by XeCl excimer laser radiation in a molecular beam. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 141-142.

684. Kurochkin, V.L.; Kostikov, K.K. (ITF). Effects in the formation of electric fields and dynamics of the disintegration of a photo-ion plasma in a vacuum. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 153-154.
685. Mordkovich, N.Yu.; Lunin, B.S.; Timofeyev, V.V.; Zhitnev, Yu.N. (MGU). Nonequilibrium dissociation of ozone by exposure to pulsed infrared laser radiation. KHFID, no. 4, 1987, 455-459.
686. Musikhin, V.A.; Semiokhin, I.A.; Sokolova, Ye.A. (MGU). Calculating the isotopic selectivity of the excitation of bromine molecules under the action of the second harmonic of YAG:Nd³⁺ laser radiation. VMUKA, no. 6, 1986, 543-546. (RZFZA, 87/3L231).
687. Pustovalov, V.K.; Bobuchenko, D.S.; Zhdanok, V.A. (). Using laser technology for physical chemical and heat processing of materials and surfaces (in Russian). CIWKilme, 31st, Ilmenau, 27-31 Oct 1986. Vortragsreihe. Band 4. Ilmenau, 1986, 39-42. (RZRAB, 87/4Ye457).
688. Ryabtsev, I.I.; Fateyev, N.V. (ITF). Photoionization of Rydberg sodium atoms in the nP series by CO₂ laser radiation. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 171.
689. Shuvalov, V.A. (). Picosecond processes in charge separation and structural organization of photosynthesis reaction centers. Lazery i fotosintez. Itogi nauki i tekhniki. Biofiziki, no. 19. VINITI. 1986, 138-172. (RZFZA, 87/4L931).
690. Strokach, Yu.P.; Barachevskiy, V.A.; Sokolyuk, N.T.; Gerasimenko, Yu.Ye. (NIOPIK). Photoisomerization of phenoxynaphthacenequinones in solution under laser photoexcitation. KHFID, no. 3, 1987, 320-325.
691. Yevseyev, A.V.; Puretskiy, A.A. (ISAN). Enhancement of isotopic selectivity during the infrared multifrequency multiphoton excitation of OsO_(sub4) molecules in a supersonic molecular jet. KVEKA, no. 3, 1987, 611-614.
692. Zaslonko, I.S.; Mukoseyev, Yu.K.; Slinkin, S.V. (IKhF). Transient period of the quasi-steady-state distribution of energy of NO_(sub2) molecules during shock wave heating. KHFID, no. 3, 1987, 299-303.

G. MEASUREMENT OF LASER PARAMETERS

693. Arnol'd, N.D.; Bunkin, N.F.; Luk'yanchuk, B.S.; Shafeyev, G.A. (). Thermodiffusion instability and its use to control the parameters of laser radiation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 161. (RZRAB, 87/4Ye96).
694. Belousova, I.M.; Afanas'yev, D.V.; Bobrov, B.D.; Vorob'yev, A.N.; Gavronskaya, Ye.A.; Grigor'yev, V.A.; Dmitriyev, Ye.I.; Skepko, A.G.; Snezhkov, G.Yu.; Shestakov, A.P. (). Multichannel sensor of IR wavefront distortions. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 203. (RZRAB, 87/4Ye381).
695. Bohmeyer, W.; Kabel, W. (). Measurement of high current and voltage pulses in the nanosecond range (in German). EXPPA, no. 4, 1986, 299-305. (RZFZA, 87/4A183).
696. Bol'shukhin, O.G.; Orlova, I.B. (). Determining the deterioration of directivity of radiation from a laser with an unstable resonator in the presence of small-scale phase inhomogeneities. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 134. (RZRAB, 87/4Ye367).
697. Boychuk, L.N.; Vorontsov, S.S.; Grachev, G.N. (). Development of methods and equipment to diagnose the active medium, measure and control the beam parameters, and control the radiation spectrum of CO₂ lasers. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 46-55.
698. Bukhshtab, M.A.; Kirillov, A.Yu.; Koromyslichenko, V.N. (). Measuring the optical characteristics of mirrors and active elements of lasers with a sensitivity of less than 10 to the minus 4 in c-w laser radiation. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 290. (RZRAB, 87/4Ye380).
699. Damm, T.; Noack, F. (). Device to synchronize optical pulses in a pulse sequence. Patent GDR, no. 238480, 20 Aug 1986. (RZRAB, 87/4Ye307).
700. Domnin, Yu.S.; Zvyagin, A.V. (). Physical fundamentals of ion frequency standards. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1986, 35-46. (RZFZA, 87/3A111).

701. Drozhbin, Yu.A.; Zvorykin, V.D.; Kovsh, I.B.; Trofimenko, V.V.; Yarova, A.G. (VNIIOFI). Using high-speed photography to study space-time characteristics of laser radiation in the medium infrared range. ZNPFA, no. 2, 1987, 135-138.
702. Gorlin, G.B.; Paritskiy, L.G.; Tisnek, T.V. (FTI). Motion picture recorder of infrared radiation. PRTEA, no. 2, 1987, 234.
703. Grabalin, M.L.; Kliment'yev, S.I.; Kononov, V.V.; Leonov, S.N. (). Instrument to measure wavefront shape and intensity distribution by beam cross-section for c-w lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 202. (RZRAB, 87/4Ye382).
704. Grits, S.I.; Ishunina, T.P.; Masyshev, V.I.; Nevдах, V.V.; Orlov, L.N.; Pivovarchik, V.F.; Ryzhikov, Yu.P. (). The Yupiter laser diagnostics complex. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 35. (RZRAB, 87/4Ye30).
705. Grunwald, V.R.; Hertz, J.H. (). Measuring low signal gain by the Ladenburg-Levy method (in German). ANPYA, no. 315, 1986, 201-212. (RZFZA, 87/4L1052).
706. Ishchenko, Ye.F.; Karpilenko, A.V. (). Statistical approach to determining the position of the axis of a laser beam. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 101-104. (RZRAB, 87/3Ye19).
707. Ishunina, T.P.; Nevдах, V.V.; Pasyukevich, A.N.; Orlov, L.N.; Shumilin, V.V. (IFANB). Spectrum scanning device. OTIZD, no. 29, 1986, 1132655. (RZRAB, 87/3Ye234).
708. Katrich, A.B.; Khudoshin, A.V. (). Measurement of the spatial-energy characteristics of laser radiation. AVMEB, no. 2, 1987, 108-110.
709. Kushch, V.S.; Ovchinnikov, S.N. (). Development of a portable laser HeNe/CH frequency standard. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1986, 60-68. (RZFZA, 87/3A113).
710. Lyashko, O.M.; Kutsak, A.A. (). Frequency characteristics of ring lasers during modulation of sinusoidal substitution parameters by noise. VINITI. Deposit, no. 617-V87, 27 Jan 1987, 9 p. (RZFZA, 87/4L1082).

711. Nestrizhenko, Yu.A. (). Digital instrument to measure the energy of single pulses of laser radiation. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 27-28. (RZRAB, 87/3Ye298).
712. Panteleyeva, T.R.; Chuyko, V.G. (). Systematic error in instruments to measure intensity of electromagnetic radiation. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 124-128. (RZFZA, 87/4L632).
713. Savel'yev, A.D.; Sergeyev, S.N.; Smirnov, V.V.; Shichkin, S.V. (). Laser wavemeter. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 192. (RZRAB, 87/4Ye369).
714. Titov, A.N.; Malyshev, Yu.M.; Rastorguyev, Yu.G. (). Experimental studies on the accuracy possibilities of laser frequency standards using saturated absorption. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1986, 53-60. (RZFZA, 87/3A112).
715. Voicu, L.; Stamatescu, I.; Hening, A.L.; Raetchi, V.; Mihailescu, I.N. (). Signals generated by lead zirconium titanate (PZT) ceramics when irradiated by microsecond pulsed TEA CO2 laser pulses (in English). RRPQA, no. 7, 1986, 697-699. (RZFZA, 87/4L1051).
716. Volkov, S.Yu.; Kozlov, D.N.; Smirnov, V.V. (IOF). Fizeau interferometer instrument to measure laser wavelengths. IOF. Preprint, no. 272, 1986, 49 p. (RZFZA, 87/3L959).
717. Vysogorets, M.V.; Lozovoy, V.I.; Postovalov, V.Ye.; Prokhorov, A.M.; Serdyuchenko, Yu.N.; Shchelev, M.Ya. (IOF). The EOK-5K multiframe electrooptic camera. KVEKA, no. 4, 1987, 895-896.

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

718. Akhv, V.A.; Zubenko, S.A.; Galkin, A.G. (). Simple single coordinate device for readout and processing of interferograms. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 20-21.
719. Akopyan, K.A.; Novikov, S.A.; Taratorin, B.I.; Fursov, A.N. (). Coherent optical determination of residual stresses in planar welded construction elements. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 7-8.
720. Anan'yevskiy, V.A.; Beskov, A.N.; Nerezov, S.N. (). Solving contact problems by holographic and speckle interferometry. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 39.
721. Anan'yevskiy, V.A.; Beskov, A.N.; Veryuzhskiy, Yu.V.; Karmugin, B.V. (). Using lasers and interferograms for experimental and theoretical studies of stress deformation states of reinforcement housing elements. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 46-47.
722. Anan'yevskiy, V.A.; Beskov, A.N.; Veryuzhskiy, Yu.V.; Karmugin, B.V. (). Using an experimental and theoretical method to study self-loaded reinforcement housings at high pressure. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 105-106.
723. Anan'yevskiy, V.A.; Beskov, A.N.; Karmugin, B.V.; Nerezov, S.N. (). Laser study on strength characteristics of valve elements. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 106.
724. Ankudinov, V.B.; Zhilin, V.G. (IVTAN). Single-component fiberoptic transducer in transparent media. TVYTA, no. 2, 1987, 349-352.

725. Artamonov, Ye.V.; Yefimovich, I.A. (). Laser interferometry study on the stress deformed state of the cutting part of an instrument during nonstationary cutting. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 67.
726. Artemenko, S.B.; Belonozhko, A.T.; Izmaylov, Yu.G.; Pakhomov, S.A.; Rechkalov, V.G. (). Using laser interferometry to measure the rate of vaporization. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 46.
727. Artemenko, S.B.; Ignat'yev, A.G.; Pyzin, G.P. (). Broadening the range of measurements in speckle interferometry of defocused images. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 47-49.
728. Artemenko, S.B.; Ignat'yev, A.G.; Pyzin, G.P.; Trosman, V.Yu. (). Methods of compensation in shearing speckle interferometry. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 49.
729. Artem'yev, V.I.; Markovich, I.E.; Nemchinov, I.V.; Sulyayev, V.A. (IFZ). Two-dimensional self-similar motion of a strong shock wave over a heated surface. DANKA, vol. 293, no. 5, 1987, 1082-1084.
730. Az'gov, K.A.; Bakhtin, V.G. (). Holographic interferometry analysis of the stress deformation state and strength of dentures. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 59-60.
731. Babchenko, A.M. (). Laser lightguide system to monitor the parameters of liquid media. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 127-128. (RZRAB, 87/3Ye460).
732. Babich, V.V.; Glushchenko, V.V.; Rekov, G.I.; Tatarinov, A.S. (). Optoelectronic instrument to measure deformations. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 5-6.

ND-ALB 970

BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS NUMBER 88

2/2

MARCH - APRIL 1987(U) DEFENSE INTELLIGENCE AGENCY

WASHINGTON DC DIRECTORATE FOR SCI.. 03 MAR 68

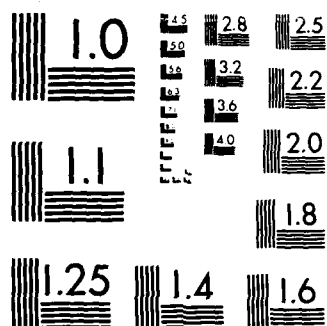
UNCLASSIFIED

DIA-DST-2700Z-002-88

F/G 9/3

NL

1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 2. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 3. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 4. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 5. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 6. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 7. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 8. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 9. 1. 1. 1. 1. 1. 1. 1. 1. 1.
 10. 1. 1. 1. 1. 1. 1. 1. 1. 1.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

733. Bakhtin, V.G. (). Algorithms and package of programs to calculate spatial problems in holographic interferometry of diffusely reflecting objects. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 31-32.
734. Bakhtin, V.G.; Kudrin, A.B. (). Using multidimensional spline functions for approximation of data in holographic interferometry. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 29-31.
735. Balasanyan, R.N.; Polgar, K.; Erdei, Sh. (IFI). Using second harmonic generation to monitor the optical homogeneity of lithium niobate crystals and the corresponding melt composition. KRISA, no. 2, 1987, 482-485.
736. Barudov, S.T.; Grigorov, S.E. (). Solenoid current stabilizer using the active medium of an ion laser. Author's certificate Bulgaria, no. 37662, 30 Sep 1985. (RZRAB, 87/3Ye277).
737. Batunina, A.V.; Voronkov, V.V.; Kalinushkin, V.P.; Murina, T.M. (IOF). Calibration of intensity during the investigation of the scattering of light. PRTEA, no. 2, 1987, 159-160.
738. Belinskiy, A.V.; Chirkin, A.S. (MCU). Diffraction effects at mirror inhomogeneities in multibeam interferometers. IVYRA, no. 10, 1986, 1200-1203.
739. Bellendir, E.N.; Zlatin, N.A.; Pugachev, G.S.; Zil'berbrand, Ye.L.; Orlov, A.V. (FTI). Dual-channel recording of frequency drift in Doppler interferometers. ZTEFA, no. 4, 1987, 735-739.
740. Belotserkovskiy, E.N. (VIGD). Irregular surface lightguide sensors of physical quantities. VIGD. Preprint, no. not given, 1986, 27 p. (RZFZA, 87/4A296).
741. Benderskiy, V.A.; Velichko, G.I. (IKhF). Adsorption of n-amyl alcohol by a mercury electrode studied by laser temperature jump. ELKKA, no 4, 1987, 490-496.
742. Belousov, P.Ya.; Dubnishchev, Yu.N.; Meledin, V.G. (). Coherent optical velocimeters in scientific research and industrial technology. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 48-50. (RZRAB, 87/3Ye461).

743. Beskov, A.N.; Korniyenko, N.V.; Malyshev, A.N.; Nerezov, S.N.; Pyatkov, A.V. (). Speckle interferometry study on soil deformations. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 63-64.
744. Birich, G.N.; Bogdanov, Yu.V.; Kanorskiy, S.I.; Sobel'man, I.I.; Sorokin, V.N.; Struk, I.I.; Yukov, Ye.A. (FIAN). Precision laser spectropolarimetry. FIAN. Preprint, no. 317, 1986, 56 p. (RZFZA, 87/4L731).
745. Borisevich, N.A. (IFANB). Picosecond technology and ultrafast processes in complex molecules. Chapter in book: Nauka i chelovechestvo 1987 (Science and man in 1987). Moskva, Znaniye, 1987, 244-259.
746. Borodin, Yu.P. (). Interferometer for holographic studies of objects. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 69-70.
747. Borodin, Yu.P. (). Holographic complex for prompt analysis of residual stresses. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 70-71.
748. Borovtsov, P.V.; Chekayev, N.S. (). Holographic interferometry study on the effect of piezoelement structures in contour modes of vibrations, on the the frequency spectrum. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 33-34.
749. Bratescu, G.G.; Maris, Z.; Zamfir, E. (). Ellipsometric study of "identical thin film" on polished glass surfaces and study of losses in laser cavity (in English). RRPQA, no. 7, 1986, 689-692. (RZFZA, 87/3L379).
750. Bronnikov, V.I. (). Measuring the speed of an object in real time by dynamic speckle structure. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 147. (RZRAB, 87/4Ye438).

751. Bulatov, Ye.I.; Yegorov, A.A.; Strizhak, V.A. (). Holographic interferometry study on variation in the shape of elastic spherical shells. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 53-54.
752. Burmakov, A.P.; Kolesnik, A.V.; Mikhaylov, V.B. (NIIPFP). Using single-line interferometry to determine the temperature and density of components of partially absorbing plasma formations. ZTEFA, no. 10, 1986, 2013-2015.
753. Burusin, V.I. (). Laser Doppler flowmeter. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 135. (RZRAB, 87/3Ye462).
754. Butusov, M.M.; Dremov, S.S.; Strigalev, V.Ye. (EIS). Checking the parameters of a fiber light guide during the chemical removal of a quartz shell. IVUBA, no. 4, 1987, 78-81.
755. Butusov, M.M.; Galkin, S.L.; Drogachenko, S.A.; Yermakova, N.V.; Lomakin, V.G.; Nikolayev, V.A. (). Role of the interaction of nearly degenerate modes in a multimode fiber ring interferometer. OPSPA, vol. 62, no. 3, 1987, 678-680.
756. Chernovol, A.N.; Ul'yanov, B.A.; Kuz'menko, B.P. (). Interpretation of speckle interferograms of defocused images. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 42.
757. Cibulka, J.; Jelinek, R.; Klaboch, L.; Gardavski, J. (). Circuit for measuring the velocity profile of liquid flows in periodic mechanical structures. Author's certificate Czechoslovakia, no. 232962, 15 Jul 1986. (RZRAB, 87/3Ye458).
758. Danilov, V.I.; Zuyev, L.N.; Mnikh, N.M. (). Speckle photography study on coarse-grained materials. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 74-75.
759. Darr, C.P. (). Laser scanning method for surface monitoring (in German). Beitrage zur Optik und Quantenelektronik. Band 11. Veroeffentlichungen zur 19 Fruehjahrsschule Optik, Dresden, 24-26 Mar 1986. Dresden, 1986, 67-71. (RZRAB, 87/3Ye463).

760. Degtyarev, I.S.; Lenkova, G.A.; Lokhmatov, A.I. (). Angle interferometer for laser scanning devices. AVMEB, no. 2, 1987, 18-24.
761. Degtyarev, V.I.; Donchenko, V.A.; Zuyev, V.Ye.; Kabanov, M.V.; Krakovetskiy, Yu, K.; Len'kov, S.I.; Mishurinskiy, B.Ye.; Ponomarev, Ye.A.; Popov, L.N.; Fedotov, I.I. (). Optical methods to study the structure of the Earth's crust. CVSRLIAt, 8th. Materialy. Part 1. Tomsk, 1986, 211-214. (RZRAB, 87/4Ye597).
762. Dem'yanyuk, V.A.; Ivakhnenko, G.A.; Makarovskiy, A.P. (KPIA). Digital filtering of the signals from laser positioning sensors in machine tools with numerical programmed controls. Avtomatika, no. 2, 1987, 58-59.
763. Deniskin, S.A.; Sitnikov, L.L.; Ostsemin, A.A. (). Development of holographic photoelasticity methods to study samples with cracks. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 64-66.
764. Didenko, A.Ya.; Lemeshko, B.D.; Ostrovskiy, V.A. (MIFI). Change in sensitivity of photographic materials under the action of high-voltage pulses. ZNPFA, no. 2, 1987, 138-141.
765. Dubrov, M.N.; Yakovlev, A.P.; Aleshin, V.A. (IRE; IFZ). Relationship of high-frequency microseismic deformations to the stress state of the lithosphere. DANKA, vol. 293, no. 5, 1987, 1085-1089.
766. Eydel'berg, M.I.; Sandulov, D.B. (SimGU). Nature of passivation of niobium in sulfur-hydrogen fluoride baths. ELKKA, no. 4, 1987, 533-535.
767. Fatuyev, V.A.; Babin, M.M.; Nasibullin, M.I. (). Optical laser informational measuring system, based on microcomputers, to measure linear and angular displacements. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 76-80. (RZRAB, 87/3Ye302).
768. Fedorovich, V.Yu.; Kitayeva, V.F.; Shishilov, K.F. (FIAN). Acoustic and structural properties of aqueous solutions of gamma-collidine. KRSFA, no. 4, 1987, 15-17.

769. Fursov, A.N.; Novikov, S.A.; Kirdeyev, Yu.P. (). Holographic interferometry study on vibrations in the frames of heavy-duty die-forging hammers. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 54-55.
770. Fursov, A.N.; Pisarev, V.S.; Novikov, S.A. (). Study on speckle photography in white light to measure deformations of planar components. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 67-69.
771. Garashchuk, V.P.; Tyurina, T.P. (). Study on holograms of vibrating objects, recorded in media with relaxation. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 73-74.
772. Gavin, L.B.; Mul'gi, A.S.; Shor, V.V. (KTIRPKh). Numerical and experimental study on processes of turbulent heat and mass transfer in a two-phase jet. TVYTA, no. 2, 1987, 413-414.
773. Gerasimov, S.I.; Zhilkin, V.A. (). Study on the concentration of deformations and stresses from tension of a plate with an opening after the limit of elasticity. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 43-45.
774. German, O.I.; Kucheryuk, V.I. (). Using holographic interferometry in studies on the dynamics of oblique drill pipe strings. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 38-39.
775. Giniyatullin, N.I.; Khasanov, Z.M. (). Using fiberoptics in geometric optical measurements. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 11.
776. Giterman, Kh.F.; Kolesov, B.N.; Konyukhov, B.A.; Konyukhov, I.D. (). Optical polarization study on the spatial structure of harmonic elastic fields. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 111.

777. Glonti, V.N.; Denisov, Yu.A.; Priyetzhev, A.V. (). Laser methods to measure the flow velocity of biological fluids through thin capillaries. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 59-63. (RZRAB, 87/3Ye536).
778. Gorshkov, V.I.; Dubovikov, M.S.; Dubovikova, Ye.A.; Kononov, V.N.; Nikolayev, F.Ya. (). Method to measure changes in three-dimensional phase objects. OTIZD, no. 32, 1986, 1254427. (RZRAB, 87/3Ye594).
779. Gorshkov, V.I.; Matsonashvili, R.B. (). Pulsed device for holographic interferometry of fast-flow processes. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 72-73.
780. Grigor'yev, V.A.; Zaborov, Ya.O.; Ivanov, P.P. (GOI). Using a liquid mirror to calibrate an interferometer with a planar wavefront for comparison. OPMPA, no. 10, 1986, 48-50.
781. Grishanov, A.N.; De, S.T.; Denezhkin, Ye.N.; Khandogin, V.A. (). Experimental holographic interferometry study on the stability of plates with openings. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 56-57.
782. Grishanov, A.N.; Pavlikov, A.I.; Khandogin, V.A. (). Invariance of the J interval in plastic deformations. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 55-56.
783. Gromov, A.N.; Shulyat'yev, V.B. (ITPM). Instrument to measure the radius of curvature of reflective surfaces. PRTEA, no. 2, 1987, 212-213.
784. Gumennik, Ye.V.; Rinkevichyus, B.S. (). Laser scanning refractometer to study phase objects. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 81-84. (RZRAB, 87/3Ye311).
785. Gur'yanov, A.N.; Gusovskiy, D.D.; Devyatykh, G.G.; Dianov, Ye.M.; Neustruyev, V.B.; Prokhorov, A.M. (IOF; IKhAN). Multichannel anisotropic single-mode fiber lightguides for fiberoptic sensors. KVEKA, no. 3, 1987, 609-611.

786. Gusel'nikov, S.M.; Zhgutova, Ye.V.; Zavarzin, A.G.; Mikhail'chenko, A.A. (ITF). Laser optical diagnostics of high-temperature dust jet flows. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 261-262.
787. Hejjas, I (). Accuracy of laser scanning measuring instruments [in Hungarian]. Magyar ipari keszuleki intezet. Kozlemenye, no. 24, 1986, 49-65. (RZRAB, 87/3Ye457).
788. Ignat'yev, Yu.A.; Morozov, V.P.; Chigorko, A.B.; Andrianov, V.F. (). Fiberoptic deformation and pressure sensors. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 28-29.
789. Ignat'yev, Yu.A.; Potapov, M.G.; Chemerilov, V.V. (). Measuring of displacements of large-scale deformed shells. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 119-120.
790. Jung, B.; Fleischer, M.; Klinger, P. (). Optical system to correct errors in pyramidal shape of line scanning in optomechanical deflection systems. Patent GDR, no. 236810, 18 Jun 1986. (RZRAB, 87/4Ye485).
791. Kamshilin, A.A.; Mokrushin, Ye.V. (FTI). Method to measure the vibration parameters of objects. OTIZD, no. 32, 1986, 1254311. (RZRAB, 87/4Ye655).
792. Kell, K.Yu.E. (). Using holographic interferometry in integral photoelasticity. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 58-59.
793. Khaykin, N.Sh. (). Method to measure the coefficients of scattering of laser radiation by mobile scattering objects at a given solid angle. OTIZD, no. 33, 1986, 1124686. (RZRAB, 87/3Ye329).
794. Klaboch, L.; Baudys, A. (). System to verify the functioning of measuring circuits in laser Doppler anemometers. Author's certificate Czechoslovakia, no. 232963, 15 Jul 1986. (RZRAB, 87/3Ye309).
795. Klimkin, V.F. (NGU). Development of electric breakdown of water in submillimeter intervals. ZTEFA, no. 4, 1987, 805-807.

796. Korenev, M.S.; Osvetimskiy, A.A.; Rybakov, M.M. (). Effect of spectral separation of signals on errors in fiberoptic transducers. Teoreticheskiye i eksperimental'nyye issledovaniya v oblasti sozdaniya poluprovodnikovyykh izmeritel'nykh preobrazovateley. Moskva, 1986, 71-76. (RZMIB, 87/4.32.1261).
797. Kostyuchenko, V.P.; Kudrin, A.B.; Polukhin, V.P. (). Determining residual stresses by grooving in conjunction with holographic interferometry. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 36-37.
798. Kosyakov, V.I.; Pechenkin, I.V.; Sadikov, S.N.; Smirnov, D.V.; Tukhvatulin, A.Sh. (). Longitudinal spherical aberration and birefringence in polymer gradient lenses. OPSPA, vol. 62, no. 4, 1987, 900-904.
799. Kozel, S.M.; Listvin, V.N.; Shatalin, S.V.; Yushkaytis, R.V. (). Auto-heterodyne fiber reflectometer. PZTFD, no. 7, 1987, 418-421.
800. Krivoshlykov, S.G.; Sisakyan, I.N. (IOF). Functional possibilities and the sensitivity of sensors based on multimode graded-index optical waveguides. KVEKA, no. 3, 1987, 481-491.
801. Kul'tepin, N.G. (). Pulse generation system for digitization in high-resolution Fourier spectrometers. MTRLB, no. 10, 1986, 35-41. (RZFZA, 87/4A299).
802. Kulesh, V.P. (). Multiple beam dual frequency interference of light. AVMEB, no. 2, 1987, 34-40.
803. Kulesh, V.P. (). Application of photoheterodyne interferometry. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 54-58. (RZRAB, 87/3Ye310).
804. Kulikov, V.D.; Lisitsyn, V.M. (). Nanosecond time-resolved optical polarization recording of pulsed elastic stresses. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 26-28.
805. Kutovoy, V.P. (). Studying spatial problems by holography using dispersion of piezooptic coefficients. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 42-43.

806. Kutovoy, V.P. (). Possibilities of using laser interferometry for measurements in experimental mechanics. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 51-53.
807. Kuz'menko, B.P.; Sadakov, O.S. (). Using geometric optical methods to study various problems in the mechanics of composites. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 97-98.
808. Liberts, G.V.; Zaulo, V.A. (). Laser second harmonic generation diagnostics of ferroelectric materials. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 124-127. (RZRAB, 87/3Ye480).
809. Lobanov, L.M.; Pivtorak, V.A.; Onishchenko, Yu.I. (). Using holographic interferometry to study size stability of elements and units of welded structures. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 34.
810. Lobanov, L.M.; Pivtorak, V.A.; Tkachuk, G.I.; Cherkashin, G.V. (). Study on the stress deformed state and quality control of polymer materials by optical methods. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 105.
811. Logutko, A.L.; Moiseyenko, V.Yu.; Fesenko, V.I. (). Reversible step drive. PRTEA, no. 2, 1987, 71-73.
812. Malov, A.N.; Naumov, A.F. (). Interferometer with a liquid crystal cell, to measure small displacements at elevated vibration levels. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 84-88. (RZRAB, 87/3Ye312).
813. Mal'tseva, N.A.; Presnyakov, Yu.P. (). Wave effects in the interferometry of transparent media. OPSPA, vol. 62, no. 3, 1987, 664-668.
814. Mayboroda, V.S.; Belyayev, A.Yu.; Trotsenko, L.N.; Polishchuk, S.B.; Kabyka, S.M.; Shlyuko, V.Ya.; Fomenko, V.P. (). Using holographic interferometry for quality control of soldered joints of mebranes on mass-produced components. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 61.

815. Mayboroda, V.S.; Belyayev, A.Yu.; Shlyuko, V.Ya.; Zharkov, S.B.; Shilov, V.Yu.; Lapin, N.A.; Shvedov, L.N. (). Using a strobe holographic method to analyze vibrations of products under production conditions. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 61-63.
816. Meterskiy, V.Ya.; Unzhakov, A.D.; Morozov, V.A. (). Holographic reflection telescope. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 71.
817. Mishchenko, Yu.V. (). Laser refractometer to study dispersion. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTp. Moskva, 1986, 96-100. (RZRAB, 87/3Ye313).
818. Muzychenko, O.M. (). Using holographic interferometry to study vibrations in sound transducers in electronic clocks. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTp. Moskva, 1986, 131-133. (RZRAB, 87/3Ye599).
919. Natsvlshvili, A.G.; Khvitiya, B.D.; Chirakadze, A.A. (TbGU). Optical method to study the microwave field distribution in crystals and microwave structures. GruzNIINTI. Deposit, no. 260-G, 26 Nov 1986, 8 p. (RZRAB, 87/4Ye528).
820. Nekrasov, Yu.I.; Smolin, N.I. (). Determination of deformations in elements of a sectioned cutting instrument during its loading. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 115-116.
821. Novopashin, M.D.; Ivanov, A.M. (). Using holographic interferometry to determine the limit characteristics of materials. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 40-42.
822. Odintsev, I.N.; Shchepinov, V.P.; Yakovlev, V.V. (). Holographic interferometry evaluation of the microplasticity of materials in biaxial stress state. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 45.

823. Osintsev, A.V.; Ostrovskiy, Yu.I.; Shchepinov, V.P.; Yakovlev, V.V. (). Holographic interferometry determination of the contact surface and distribution of contact pressures along it. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 37-38.
824. Osvetimskiy, A.A.; Korenev, M.S. (). Compensating for instability of parameters in the reception-transmission path of fiberoptic amplitude transducers. Teoreticheskiye i eksperimental'nyye issledovaniya v oblasti sozdaniya poluprovodnikovyykh izmeritel'nykh preobrazovateley. Moskva, 1986, 76-79. (RZMIB, 87/4.32.1262).
825. Ovod, V.I. (GOI). Calculation of the calibration characteristics of laser analyzers of microparticles. OPMPA, no. 4, 1987, 4-7.
826. Ovod, V.I. (GOI). Calculating the characteristics of optical microparticle analyzers, allowing for divergence of nonuniform illuminating beams. OPMPA, no. 10, 1986, 1-4.
827. Pavlovskiy, B.A.; Yuras, S.F. (). Comprehensive measurements of the parameters of moving particles. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 63-66. (RZRAB, 87/3Ye483).
828. Petrova, G.P.; Petrusevich, Yu.M.; Shirkova, I.I.; Revokatov, O.P. (MGU). Interaction of serum albumin with water at different hydrogen ion concentrations from Rayleigh scattering data. VMUFA, no. 2, 1987, 59-63.
829. Pisarev, V.S.; Shchepinov, V.P.; Yakovlev, V.V. (). Optimal holographic interferometers for the measurement of deformations during the interpretation of patterns of bands by relative sequences. IZTEA, no. 3, 1987, 13-15.
830. Plosceanu, C.; Socaciu, M.; Cuculescu, I.; Dragomir, A.; Savin, O. (). Polymorphism of the binary mixture of sitosteryl chloride and cholesteryl laurate [studied by small-angle scattering of laser radiation] (in English). CRTED, no. 8, 1986, K142-K145. (RZFZA, 87/4Ye648).
831. Pokorný, J. (). Laser clocks (in Slovakian). JM KOA, no. 8, 1986, 209-210. (RZRAB, 87/3Ye308).

832. Popa, O.A.; Slepoy, B.Kh. (). Calculating the parameters of spatial-frequency filtering of images in laser scanning microscopes. IVUBA, no. 11, 1986, 90-95. (RZFZA, 87/3L682).
833. Povelitsyn, V.A.; Tsvetkova, A.V. (MEI). Experimental laser Doppler anemometry study on phase velocity profiles of disperse flows. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 311-312.
834. Priklonskiy, A.I.; Gurevich, V.S.; Zarudskiy, M.A. (). Coherent optical determination of Poisson coefficients. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 126-127.
835. Rashkovich, L.N.; Shustin, O.A. (MGU). New optical interference methods for investigating crystallization kinetics in a solution. UFNAA, vol. 151, no. 3, 1987, 529-535.
836. Ridosic, D. (). Using laser methods to measure the optical thickness of antireflection thin films (in Croatian). Naucno-tehnicki pregled Vojenotehnicki institut, no. 8, 1986, 44-47. (RZFZA, 87/4L668).
837. Rinkevichyus, B.S.; Smirnov, V.I.; Timofeyev, A.S. (). Laser Doppler anemometers to measure spatial correlation functions of turbulent velocity fields. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 51-54. (RZRAB, 87/3Ye482).
838. Rozanov, V.V.; Obrastsov, S.P.; Romanov, P.Yu. (LGU). Sensitivity of the optical characteristics of a polydisperse aerosol to variations in the complex refractive index. IFAOA, no. 4, 1987, 390-395.
839. Rozenshteyn, A.Z.; Kaplanskiy, F.B. (ITE). Investigation of the characteristics of light scattered by microparticles as applied to problems of the laser-Doppler anemometry of sea currents. IFAOA, no. 4, 1987, 376-381.
840. Rysanek, V. (). Review of physical measurements for microelectronics (in English). Progress in Physical Measurements. Methods of Electronic Technology. International Spring Seminar on Electronic Technology, 9th, Balatonfured, 13-16 May 1986. Place of publication not given, 1986, 7-15. (RZFZA, 87/4A182).

841. Salewski, K.D. (). Two-frequency phase-shift laser interferometer for absolute distance measurements (in German). FGRTA, no. 12, 1986, 553-556, 575, 576. (RZRAB, 87/4Ye390).
842. Serov, Ye.Yu.; Zapara, A.L.; Pogorelov, I.A. (MTI). Laser Doppler anemometry study on the aerodynamics of dust collectors with opposed swirling flows. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 293-294.
843. Shkoldin, V.N.; Khilo, P.A. (GomGU). Device for optical modeling of antenna directional patterns. OTIZD, no. 31, 1986, 1252741. (RZRAB, 87/4Ye657).
844. Spotar', S.Yu.; Terekhov, V.I. (). Two spontaneously variable conditions of the flow of a vortex above a plane. ZPMFA, no. 2, 1987, 68-70.
845. Sueptitz, P. (). Advances in optical information recording (in German). Beitrage zur Optik und Quantenelektronik. Band 11. Veroeffentlichungen zur 18 Fruehjahrsschule Optik, Dresden, 24-26 Mar 1986. Dresden, 1986, 19-22. (RZRAB, 87/3Ye348).
846. Sverdlov, M.Yu. (AlGU). Holographic study on the spatial structure of the electron concentration in a low-threshold optical breakdown plasma. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 99-100.
847. Svetlov, P.I.; Maksimenko, V.V.; Tikhonenko, V.I.; Gubskiy, V.I.; Khlopkov, N.S.; Borodavko, A.N.; Slesar', A.S.; Konon, M.R.; Novik, M.I. (TSKBOPANB). Data measurement system for the approximate analysis of a back scattering signal in the atmosphere. PRTEA, no. 2, 1987, 233.
848. Svetova, N.V. (KazGU). Change in the reflectivity of surfaces during formation of cryogenic deposits on them. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 101-102.
849. Tkachenko, A.G.; Koryuchkin, A.V. (ToPI). Laser Doppler anemometry study on high-frequency discharges. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 247-248.

850. Tsareva, G.A.; Ovcharenko, A.B.; Temnikov, A.I. (). Fiber optic strain gauge. TsNIITEIpriboro. Deposit, no. 3608-pr, 25 Nov 1986, 13 p. (RZFZA, 87/4A172).
851. Tsukkerman, S.T. (LITMO). Structure of an optical controlling beam. IVUBA, no. 3, 1987, 84-91.
852. Tsvetkov, A.D.; Potapova, N.I.; Sedov, B.M.; Shchavelev, O.S. (). Diffraction on the apodizing edge of a glass absorbing screen with a weak optical wedge. OPSPA, vol. 62, no. 4, 1987, 860-865.
853. Tychinskiy, V.P.; Pankov, V.L.; Karpun'kin, A.V. (). Digital laser polarimeter to study dynamic processes. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTF. Moskva, 1986, 88-91. (RZRAB, 87/3Ye534).
854. Tyushkevich, B.N. (). Testing of vibrating objects by two-pulsed ruby lasers. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTF. Moskva, 1986, 91-95. (RZRAB, 87/3Ye598).
855. Ukazov, V.P.; Khodzhanizayov, G.A. (). Holographic studies on temperature stability of components of optical instruments. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 66-67.
856. Ustimenko, A.P. (). Package of programs to process holographic interferometry data of shells with cut-outs. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 22-24.
857. Vadkovskaya, T.N.; Drozhbin, Yu.A.; Lobachev, V.A.; Murina, T.M.; Prokhorov, A.M.; Trofimenko, V.V. (). Photographic recording of YAG:Er³⁺ radiation using the effect of thermal sensitization of photoemulsions. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 250. (RZRAB, 87/4Ye405).
858. Validov, M.A.; Belous, G.M.; Tonkov, V.L.; Galyautdinov, R.T. (GOI). Dual-beam control method for the transmission of metal films precipitated in a vacuum. OPMPA, no. 3, 1987, 62.

859. Vasserman, Ye.S. (ITF). Optical diagnostics of the bubble structure of gas and vapor liquid media in a steady flow and in wave processes. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 189-190.
860. Vilenchits, B.B.; Umreyko, D.S. (). Investigation of the sensitivity of the thermorefractometric method when analyzing gas media on the basis of experimental design. ZPSBA, vol. 46, no. 3, 1987, 458-461.
861. Vinnichenko, A.P.; Kislenko, V.I. (KGU). Synchronization of control systems by LTI-PCh and Arzni-2501 lasers. PRTEA, no. 2, 1987, 169-170.
862. Vlasov, D.V.; Gorbunov, A.L.; Parshin, Ye.P.; Pleskach, A.V.; Shebnev, Ye.P.; Yakubov, Yu.R. (). Method for recording charged particle tracks in bubble chambers. OTIZD, no. 36, 1986, 1222077. (RZFZA, 87/4V459).
863. Voronov, V.S.; Dorogin, A.D.; Kucheryuk, V.I. (). Speckle interferometry in diagnostics of bioprotheses. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 50-51.
864. Voronov, V.S.; Orlov, A.P. (). Interferometry in studies on deformative properties of human heart valves. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 57-58.
865. Yakubovskiy, Yu.V.; Kolosov, V.N. (). Holographic interferometry determination of residual stresses. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 60.
866. Yakubovskiy, Yu.Ye. (). Approximate method for separation of stresses during geometric nonlinear bending of thin-walled structures. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 128.
867. Yazdauskas, A.A.; Shlyazhas, R.B.; Zailskas, R.A. (IFTPE). Two-component laser Doppler system for fast scanning of velocity fields in boundary layers. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 143-144.

868. Yerashov, V.I. (GOI). Device to measure linear displacements of the scanning mirror in a Fourier spectrometer. OPMPA, no. 10, 1986, 61.
869. Yevseyev, A.R.; Nakoryakov, V.Ye.; Pokusayev, B.G.; Tachkov, S.A.; Timkin, L.S. (). Measurement of the structural characteristics of a gas-liquid flow by a laser anemometer with a fiber waveguide. AVMEB, no. 2, 1987, 69-73.
870. Zakharov, A.A.; Astrov, D.N.; Belyanskiy, L.B.; Dedikov, S.P. (). Measurement of pressure in a gas thermometer. IZTEA, no. 3, 1987, 24-26.
871. Zaykov, V.I.; Salo, A.Ya.; Muller, A.I. (). Shaping the structure of the reference beam in laser optical measuring instruments. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 12-13.
872. Zelengur, A.A.; Mironov, B.P.; Tararin, V.N. (). Interaction between a dust flow and a transversely streamlined inflow cylinder [measured by laser]. Termogidrogazodinamika turbulentnykh techeniy (Thermohydrogasdynamics of turbulent flows). ITF. Novosibirsk, 1986, 75-85.
873. Zhak, V.D.; Iskakov, M.S.; Kashinskiy, O.N.; Nakoryakov, V.Ye. (). Investigation of hydrodynamics and mass exchange in a volume of homogeneous liquid with artificially created turbulence. ZPMFA, no. 2, 1987, 78-84.
874. Zhilkin, V.A.; Borynyak, L.A.; Ananenko, A.A.; Melentovich, F.N. (). Holographic interferometry study on the deformed state of large-scale products. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 34-36.
875. Zhuk, A.Z.; Petukhov, V.A.; Chekhovskoy, V.Ya. (). Laser high-temperature dilatometer. IZTEA, no. 10, 1986, 32-33.
876. Zhuravlev, A.V. (ITF). Visualization of thermal fields in acrylates under radiative heating through scattering media. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 133.

877. Zubarev, Ye.I.; Rinkevichyus, B.S.; Sutorshin, V.N.; Tolkachev, A.V. (). Laser Doppler measurement of ultralow deformation rates in solids. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 150. (RZRAB, 87/4Ye437).
878. Zyryanov, V.Ya.; Epshteyn, V.Sh. (IFSOAN). Measuring the refractive indices of a liquid crystal by a tunable source of coherent infrared radiation. PRTEA, no. 2, 1987, 164-166.

2. Laser-Excited Optical Effects

879. Abramovich, B.S.; Nemtsov, B.Ye. (NIRFI). Resonant excitation of atoms moving in imperfect crystals. FTVTA, no. 4, 1987, 1181-1187.
880. Akopyan, D.G.; Arutyunyan, K.V. (NIIFKS). Effect of optical pumping of atoms on the change in polarization of weak signals. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 167-168.
881. Amus'ya, M.Ya. (). Entrainment of electrons by photons. CVSRESKh, 8th, Vladivostok, 29 Sep - 8 Oct 1983. Vladivostok, 1986, 88-97. (RZFZA, 87/3L1097).
882. Ashkinadze, B.M.; Bel'kov, V.V.; Subashiyev, A.V. (FTI). Thermal breakdown of excitons. FTVTA, no. 4, 1987, 1193-1197.
883. Balykin, V.I.; Letokhov, V.S.; Ovchinnikov, Yu.B.; Sidorov, A.I. (ISAN). Reflection of an atomic beam from a gradient of a light field. ZFPRA, vol. 45, no. 6, 1987, 282-284.
884. Basun, S.A.; Kaplyanskiy, A.A.; Feofilov, S.P. (FTI). Photocurrent kinetics and mechanism of absolute negative photoconductivity in ruby. FTVTA, no. 4, 1987, 1284-1288.
885. Bezverbnyy, A.V. (TGU). Gas kinetics in a light beam of finite size, allowing for the effect of recoil from spontaneous emission. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 137-138.
886. Bibik, V.A.; Davydova, N.A. (IFANUK). Localization of excitons in layered PbI(sub2) crystals irradiated by a ruby laser. FTVTA, no. 3, 1987, 777-782.

887. Bryukhanov, V.V.; Ketsle, G.A.; Laurinas, V.Ch.; Levshin, L.V.; Muldakhmetov, Z.M. (). Singlet-triplet annihilation of singlet oxygen and triplet molecules of xanthene dyes in liquid solutions [studied by laser excitation of delayed fluorescence]. ZPSBA, vol. 46, no. 4, 1987, 588-593.
888. Budnik, A.P.; Vakulovskiy, A.S. (IEM). Energy distribution of electrons in a laser radiation field. IEM. Trudy, no. 40/123, 1986, 48-56. (RZRAB, 87/4Ye526).
889. Chapovskiy, P.L.; Shalagin, A.M. (IAESOAN). Dynamics of light-induced gas separation. KVEKA, no. 3, 1987, 574-579.
890. Dotsenko, A.V.; Morozov, A.V.; Tsekhomskiy, V.A. (). Mathematical modeling of the formation of color centers in heterogeneous photochromic glasses. FKSTD, no. 2, 1987, 196-201.
891. Garnov, S.V.; Yepifanov, A.S.; Klimentov, S.M.; Manenkov, A.A.; Prokhorov, A.M. (IOF). Three and four photon processes of the excitation of nonequilibrium carriers in wide-band crystals. ZFPRA, vol. 45, no. 8, 1987, 399-402.
892. Garnov, S.V.; Yepifanov, A.S.; Klimentov, S.M.; Panov, A.A.; Shakhverdiyev, E.M. (FIAN). Laser photoexcitation of nonequilibrium carriers in alkali-halide crystals. KRSFA, no. 4, 1987, 3-5.
893. Kaminskiy, A.S.; Leyferov, B.M.; Safonov, A.N. (IRE). Excitons bound to defect complexes in silicon. FTVTA, no. 4, 1987, 961-970.
894. Kartazayev, V.A. (). Study on two-photon excitation of Xe(6p) and quenching of Xe(6P) by Xe atoms and CO₂ molecules. OPSPA, vol. 62, no. 3, 1987, 714-716.
895. Katsavets, N.I.; Leonov, Ye.I. (FTI). Transient electrooptic phenomena in aluminum- and manganese-doped Bi(sub12)SiO(sub20) single crystals. ZTEFA, no. 10, 1986, 1993-1995.
896. Kaziyeu, F.N.; Kuliyeu, Sh.M.; Mamedov, A.K.; Seyidli, G.S. (). Temperature dependence of the lifetimes of charge carriers in Cd(x)Hg(1-x)Te (x=0.2-0.5). DAZRA, no. 11, 1986, 37-39.

897. Kiselev, V.F.; Plotnikov, G.S.; Besspalov, V.A.; Zoteyev, A.V.; Fomin, Yu.D. (MGU). Elemental excitations in a system of semiconductors and adsorbed molecules. KNKTA, no. 1, 1987, 20-34.
898. Klochikhin, A.A.; Nel'son, D.K.; Razbirin, B.S.; Yakobson, M.A.; Myuller, G.O.; Yegorov, V.D. (FTI). Recombination radiation and phonon-plasma interaction in strongly excited cadmium sulfide. FTVTA, no. 4, 1987, 1123-1128.
899. Kovalenko, V.F.; Peka, G.P.; Tokalin, O.A.; Khimichev, A.I. (KGU). Influence of radiational-thermal action on photoluminescence of $\text{Al}(\text{sub}x)\text{Ga}(\text{sub}1-x)\text{As}$ variband structures. FTPPA, no. 4, 1987, 598-602.
900. Kovalev, A.A.; Nekrasov, G.L.; Serak, S.V. (). Orientational and temperature dependence of absorption by dyes in a liquid crystal matrix. VBSFA, no. 5, 1986, 56-62. (RZFZA, 87/31169).
901. Kuchiyev, M.Yu. (FTI). Atomic antenna [absorption of energy by atoms in a laser field]. ZFPRA, vol. 45, no. 7, 1987, 319-321.
902. Kumpyak, Ye.V.; Lomayev, M.I.; Mesyats, G.A.; Panchenko, A.N.; Potalitsyn, Yu.F.; Tarasenko, V.F. (ISE). Firing of a spark gap arrester by laser ultraviolet radiation transmitted through a lightguide. PRTEA, no. 2, 1987, 171-173.
903. Kurova, I.A.; Ormant, N.N.; Chitaya, K.B. (MGU). Kinetics of broken-bond formation in a-Si:H films. FTPPA, no. 4, 1987, 700-702.
904. Kuzakov, S.M.; Vreeker, R. (Netherlands); Glasbeek, M. (Netherlands). (IGU). Optically detectable spin echo from the excited triplet states of color centers in CaO crystals. FTVTA, no. 4, 1987, 1238-1239.
905. Lakhin, V.N.; Petrov, G.D. (). Measuring the sizes of disperse particles by the spectrum of their thermal radiation. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. Moskva, 1986, 117-123. (RZFZA, 87/4L45).
906. Lev, B.I.; Martynchenko, V.I.; Sarbey, O.G.; Sibashvili, A.S.; Frolova, Ye.K. (IFANUK). Periodic phase transition in a nematic liquid crystal under the action of infrared CO₂ laser radiation. ZFPRA, v. 45, no. 5, 1987, 245-247.

907. Likholit, I.L.; Masterov, V.F.; Baydakov, L.A.; Blinov, L.N. (LPI). Electron paramagnetic resonance of photoinduced paramagnetic centers in As-P-S and Ge-Tl-S chalcogenide glassy semiconductors. FTVTA, no. 3, 1987, 881-884.
908. Mikla, V.I.; Semak, D.G.; Mateleshko, A.V.; Levkulich, A.R. (UzhGU). Relaxation of photosensitized metastable trapping centers in As-Se chalcogenide glass. FTPPA, no. 3, 1987, 427-432.
909. Minogin, V.G.; Rozhdestvenskiy, Yu.V. (). Stabilization of the velocities of atoms by the pressure of resonance radiation. OPSPA, vol. 62, no. 4, 1987, 920-921.
910. Nezhevenko, Ye.S.; Fel'dbush, V.I.; Shipov, P.M. (). Space-time transmission characteristics of a controlled PRIZ transparency. AVMEB, no. 2, 1987, 114-117.
911. Plyatsko, S.V.; Sizov, F.F.; Darchuk, S.D. (IPANuk). Rearrangement of lattice defects in narrow-gap $Pb(1-x)Sn(x)Te$. DUKAB, no. 1, 1987, 56-58.
912. Rastrenin, O.V.; Silichev, O.O.; Fomichev, A.A.; Yakshin, M.A. (). Study on reflection of light from excited semiconductors. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 92. (RZRAB, 87/4Ye516).
913. Red'ko, T.P. (). Diffusion of normal lithium atoms and diffusion of lithium atoms excited to lower resonance states in inert gases. OPSPA, v. 61, no. 5, 1986, 946-950.
914. Reshetov, V.I.; Armeyeva, A.E.; Bushuyeva, G.V.; Talenskiy, O.N.; Pentyur, S.A.; Pechenov, A.N.; Tyapunina, N.A. (FIAN). Laser-stimulated motion of dislocations in CdS. FTVTA, no. 4, 1987, 1209-1211.
915. Shatkovskiy, Ye.V.; Didzhyulis, A.A. (IFPV). Photoluminescence of a hot electron-hole plasma in gallium arsenide under high-power excitation. FTPPA, no. 3, 1987, 549-551.
916. Sheroziya, G.A. (FIAN). Recording of a surface current during the reflection of light from a diffraction grating. ZFPRA, vol. 45, no. 7, 1987, 332-335.

917. Sizykh, D.V. (VTsSOAN). Numerical modeling of the process of laser cooling of an atomic beam during adiabatic scanning of the radiation frequency. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 169-170.
918. Stuchebryukhov, A.A. (NITsLAN). Theory of intramolecular vibrational relaxation in polyatomic molecules. NITsLAN. Preprint, no. 16, 1986, 14 p. (RZFZA, 87/4D48).
919. Vasil'yev, A.A.; Kompanets, I.N.; Parfenov, A.V. (). Liquid crystal converters of images: parameters and functional properties. AVMEB, no. 2, 1987, 100-105.
920. Vasil'yev, Yu.V.; Kuritsyna, Ye.F. (MGU). Dynamic reorientation processes for a nematic liquid crystal. VMUFA, no. 2, 1987, 86-87.
921. Vendik, O.G.; Pakhomov, O.V.; Tereshchenko, L.L. (LETI). Thermal model of the development of a normal region in a superconductive film with a current. ZTEFA, no. 4, 1987, 663-668.

3. Laser Spectroscopy

922. Aaviksoo, Ya.; Lippmaa, Ya.; Permogorov, S.; Reznitskiy, A.; Lavallar, F. (France); Gurdon, K. (France). (IFANest; FTI). Kinetics of the formation of localized excitons in a solid CdS(subl-x)Se(subx) solution. ZFPRA, vol. 45, no. 8, 1987, 391-393.
923. Aaviksoo, Ya.; Lippmaa, Ya.; Reynot, T. (). Measurement of picosecond times of the decay of surface states of anthracene. OPSPA, vol. 62, no. 3, 1987, 706-708.
924. Abakumov, G.A.; Drobakha, S.A.; Klimanov, A.V.; Ostrovskiy, A.V.; Polyakov, B.I.; Simonov, A.P.; Chuyko, L.S. (). Photophysical characteristics of molecules of complex organic compound active media of gas-phase lasers. OPSPA, vol. 62, no. 3, 1987, 621-623.
925. Akhmanova, M.V.; Ivanov, S.G.; Stroganova, N.S.; Galkina, I.P. (GEOKhI). Using intracavity laser spectroscopy to determine rare-earth elements with complex absorption bands. ZAKHA, no. 3, 1987, 473-476.

926. Akhmedzhanov, R.A.; Bykov, Yu.V.; Kim, A.V.; Polushkin, I.N.; Rostovtsev, Yu.V.; Fridman, A.A. (IPF). Measuring the vibrational temperature of nitrogen in a discharge by intracavity laser spectroscopy. IPF. Preprint, no. 147, 1986, 18 p. (RZFZA, 87/3L239).
927. Akopyan, I.Kh.; Bondarenko, B.V.; Novikov, B.V. (LGU). Luminescence in $\text{HgI}(\text{sub}2)$ crystals at high excitation densities. VINITI. Deposit, no. 8272-V, 22 Dec 1986, 6 p. (RZFZA, 87/3L457).
928. Alekseyev, V.A.; Basov, N.G.; Gubin, M.A.; Krylova, D.D.; Nikitin, V.V.; Nikul'chin, A.V.; Protsenko, Ye.D.; Tyurikov, D.A.; Shelkovnikov, A.S. (FIAN). Using dispersion saturation to observe an anomalous in the intensities of the recoil components of the 3.39 μm methane line. KRSFA, no. 4, 1987, 36-38.
929. Aliyev, R.A.; Guseynov, G.D.; Zolin, V.F.; Markushev, V.M.; Popova, M.N.; Sardarly, R.M. (). Photoluminescence spectrum of neodymium-doped $\text{TlGaS}(\text{sub}2)[\text{Se}(\text{sub}2)]$ single crystals. IAFMA, no. 3, 1986, 103-107. (RZFZA, 87/4L512).
930. Al'tshuler, N.S.; Karamyan, A.A.; Larionov, A.L.; Soboleva, L.V.; Khapayeva, L.I. (KaGU). Electron-phonon resonances in the optical spectroscopy of $\text{Er}(x)\text{Y}(1-x)(\text{HCOO})(\text{sub}3)2\text{H}(\text{sub}2)\text{O}$. FTVTA, no. 4, 1987, 1115-1122.
931. Apanasevich, S.P.; Dovchenko, D.N.; Zheludev, N.I. (). Modulation spectroscopy of nonlinear optical activity. OPSPA, vol. 62, no. 3, 1987, 481-484.
932. Artemenkov, L.I.; Vukolov, K.Yu.; Mukhin, P.A.; Shvindt, N.N.; Vayksel'baum, L.; Ventsel', U.; Ventske, D.; Krebs, K.G.; Lider, G.; Noymann, V. (IAE). Using laser fluorescence spectroscopy to study the behavior of iron atoms at the periphery of a plasma pinch in the TO-2 tokamak. IAE. Preprint, no. 4340/7, 1986, 16 p. (RZFZA, 87/3G254).
933. Artsybysheva, I.B.; Lunter, S.G.; Timofeyev, N.T.; Fedorov, Yu.K. (). Luminescence of Mo(V) in phosphate glass. OPSPA, vol. 62, no. 4, 1987, 934-936.
934. Atabayev, Sh.; Polivanov, Yu.N. (IOF). Temperature dependence of Raman spectra on polaritons associated with overdamped soft modes of lithium niobate and lithium tantalate crystals. FTVTA, no. 4, 1987, 1165-1173.

935. Atabekyan, L.S.; Chibisov, A.K. (). Spectral-kinetic characteristics of intermediate products of the pulsed photoexcitation of 1',3',3'-trimethyl-6-nitro-8-methoxy (indo line-2,2'-(2H-11benzopyrene) in acetone. ZPSBA, vol. 46, no. 4, 1987, 651-654.
936. Avarmaa, R.; Saari, P. (). Laser spectroscopy of crystals and molecules. AN ESSR [Academy of Sciences Estonian SSR], 1980-1985. Tallin, 1986, 29-38. (RZFZA, 87/4L1214).
937. Avarmaa, R.A. (). Vibration wing in the spectrum of an impurity ion in liquid solutions. OPSPA, vol. 62, no. 3, 1987, 547-551.
938. Avarmaa, R.A. (IFANEst). Phononless lines in complex spectra, in particular of biogenic molecules. IFANEst. Trudy, no. 59, 1986, 95-114. (RZFZA, 87/4L457).
939. Avdeyenko, A.A.; Karachevtsev, V.A.; Naboykin, Yu.V. (). Temperature dependence of the phosphorescence of naphthalene-tetrachlorophthalic anhydride crystals with charge transfer. ZPSBA, vol. 46, no. 4, 1987, 593-598.
940. Bagayev, S.N.; Baklanov, A.Ye.; Dychkov, A.S.; Pokasov, P.V.; Chebotayev, V.P. (ITF). Ultrahigh-resolution laser spectroscopy with cold particles. ZFPRA, vol. 45, no. 8, 1987, 371-374.
941. Bagdasarov, Kh.S.; Arzumanyan, G.A.; Ryadnov, S.N.; Belykh, I.G. (IKAN). Effect of crystallization conditions on the content of gas-forming impurities in leucosapphire crystals [studied by laser mass-spectroscopy]. KRISA, no. 2, 1987, 467-472.
942. Bayev, V.M.; Gamaliy, V.F.; Sviridenkov, E.A.; Toptygin, D.D.; Yushchuk, O.I. (). Technique for quantitative measurements of single and two-photon absorption spectra obtained by an intracavity laser spectroscopy method. ZPSBA, vol. 46, no. 4, 1987, 573-578.
943. Belyy, M.U.; Glinka, Yu.D.; Kushnirenko, I.Ya.; Kumeskiy, V.R. (KGU). Luminescence properties of $\text{CrO}(\text{sub}4)(\text{sup}2-)$ impurity molecular anions in $\text{CsCaCl}(\text{sub}3)$ crystals. DUKAB, no. 1, 1987, 39-41.
944. Belyy, M.U.; Kolesnik, A.S.; Okhrimenko, B.A.; Yablochkov, S.M.; Yashuk, V.P. (). Structure of the absorption and luminescence spectra of lead complexes. ZPSBA, v. 45, no. 4, 1986, 612-618.

945. Berik, I.K.; Berik, Ye.B.; Svetashev, A.G.; Tsvirko, M.P. (). Nonlinear absorption spectroscopy study of the nature of an anomalous band in the 4f to 5d absorption spectrum of a Ce(sup3+) aquaion. OPSPA, vol. 62, no. 3, 1987, 561-564.
946. Beyzel', N.F.; Bekov, G.I.; Peliyeva, L.A. (). Seminar on New Atomic Absorption, Atomic Fluorescence, and Atomic Ionization Methods of Analysis, Severodonetsk, 2-4 Jun 1986. ZAKNA, no. 3, 1987, 568-569.
947. Bletskan, D.I.; Mitrovtsiy, I.M.; Stefanovich, V.A.; Potoriy, M.V.; Voroshilov, Yu.V.; Slivka, V.Yu. (UzhGU). Polymorphism of germanium disulfide. KRISA, no. 2, 1987, 385-393.
948. Brodin, M.S.; Kadan, V.N.; Matsko, M.G. (IFANUK). Nonequilibrium Bose-condensation of polaritons in a macrofilled mode in HgI(sub2) and PbI(sub2) crystals. ZFPRA, vol. 45, no. 5, 1987, 242-245.
949. Bunkin, A.F.; Galumyan, A.S.; Mal'tsev, D.V.; Surskiy, K.O.; Strel'tsov, V.N. (IOF). Four-photon Raman spectroscopy using elastic scattering of pump waves. KVEKA, no. 3, 1987, 633-636.
950. Burov, L.I.; Gancherenok, I.I. (). Nonlinear polarization spectroscopy of complex molecular solutions under picosecond excitation. ZPSBA, v. 45, no. 5, 1986, 861-864.
951. Bushuk, B.A.; Rubinov, A.N.; Stupak, A.P. (). Spectral dependence of the decay time of induced dichroism from amplification in oxazine 17 in polar solvents. ZPSBA, vol. 46, no. 3, 1987, 489-492.
952. Bykova, N.G.; Lebedeva, V.V.; Sedel'nikova, A.E. (MGU). Nonlinear resonances in three-level spectroscopy in Gaussian light fields. VINITI. Deposit, no. 6927-V, 1 Oct 1986, 7 p. (RZFZA, 87/3L1115).
953. Bykovskiy, Yu.A.; Timoshin, V.T.; Shamonov, I.I. (). Using laser mass-spectroscopy to analyze the number of original and final products in biotechnology. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTF. Moskva, 1986, 104-108. (RZRAB, 87/3Ye535).

954. Chichinin, A.I.; Krasnoperov, L.N. (IKhKG). Laser magnetic resonance observation of stationary inversion at a fine structure transition of a Cl atom in a direct current discharge and in a high-frequency discharge in ICl/Ar mixtures. KHFID, no. 3, 1987, 410-411.
955. Churkin, A.V. (). Line intensity of quasi-steady-state resonance coherent anti-Stokes Raman spectroscopy under redistribution of the populations of electron states. VBSFA, no. 5, 1986, 67-72. (RZFZA, 87/3L1133).
956. Davydov, V.Yu.; Chisler, E.V. (FTI). Vibrational spectra of KDA and RDA crystals in a ferroelectric phase. FTVTA, no. 4, 1987, 1060-1066.
957. Dem'yanenko, A.V.; Zasavitskiy, I.I.; Ochkin, V.N.; Savinov, S.Yu.; Sobolev, N.N.; Spiridonov, M.V.; Shotov, A.P. (FIAN). Pulsed diode laser spectroscopy study on CO₂ molecule distribution according to vibration-rotational levels in a glow discharge. KVEKA, no. 4, 1987, 851-859.
958. Denisov, V.N.; Podobedov, V.B.; Graz, F. (). Application of a dissector in hyper-Raman and Raman spectroscopy. ZPSBA, vol. 46, no. 4, 1987, 636-641.
959. Derbov, V.L.; Potapov, S.K.; Novikov, A.D. (). Properties of resonance multilevel quantum systems in a strong light field. Model of intense collisions. OPSPA, vol. 62, no. 3, 1987, 503-509.
960. Dmitriyev, V.P.; Loshkarev, V.V.; Rabkin, L.M.; Roshal', S.B.; Shuvalov, L.A. (RGU). Reorientation dynamics of sulfate ions and superionic conductivity in CsDSO(sub4). FTVTA, no. 4, 1987, 1225-1227.
961. D'yakov, Yu.Ye.; Nikitin, S.Yu. (). Saturation effects in active Raman spectroscopy, allowing for nonmonochromaticity of the exciting radiation and the transience of the excitation process. OPSPA, vol. 62, no. 3, 1987, 538-546.
962. Ganago, A.O.; Drobin, V.M.; Melkozernov, A.N.; Trofimov, V.N.; Shuvalov, V.A. (IPochF). Laser differential spectrophotometer for studying photochemical reactions at cryogenic temperatures. ZPSBA, vol. 46, no. 4, 1987, 686-690.

963. Gomonay, A.I. (KIYaIUzh). Possibility of recording undistorted electron spectra formed under nonlinear ionization of atoms. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 14-15.
964. Gorokhov, Yu.A.; Ogurok, D.D.; Tumanova, L.M. (). Spectrochromatographic analysis of organic compounds with cw tunable CO and CO₂ lasers. ZPSBA, vol. 46, no. 3, 1987, 387-391.
965. Gribov, L.A.; Prokof'yeva, N.I. (). Theory of dipole transitions between isomeric states of polyatomic molecules belonging to a certain potential surface. ZPSBA, vol. 46, no. 4, 1987, 603-608.
966. Gul'binas, V.; Dzhagarov, B.M.; Kabelka, V.; Savitskene, Zh. (IFANB; IFANLi). Picosecond absorption spectroscopy of unsteady states of oxyhemoglobin photodissociation products. DANKA, vol. 293, no. 4, 1987, 987-990.
967. Karpov, S.V.; Kurmanbayev, M.S. (NIIFL). Raman study on orientation disorder in Ba[NO(sub3)](sub2) crystals. FTVTA, no. 3, 1987, 866-868.
968. Kikas, Ya.V. (IFANEst). Photoburning of spectral holes. IFANEst. Trudy, no. 59, 1986, 115-130. (RZFZA, 87/4L291).
969. Kolerov, A.N. (). Use of intracavity laser spectroscopy for the recording of absorption bands in solids. OPSPA, vol. 62, no. 3, 1987, 709-711.
970. Kozyreva, Ye.B.; Yakovleva, Zh.S. (KazPedI). Dependence of the intrinsic and impurity luminescence spectra of AgHal on the excitation methods. ZNPFA, no. 2, 1987, 119-123.
971. Kreyngol'd, F.I.; Lider, K.F. (NIIFL). Oscillations in the luminescence excitation spectrum of Cu(sub2)O crystals due to scattering of ls excitons by acoustic phonons. FTVTA, no. 3, 1987, 749-752.
972. Kukushkin, I.V. (IFTT). Interline splitting in the energy distribution of two-dimensional electrons on a silicon surface. ZFPRA, vol. 45, no. 5, 1987, 222-225.
973. Lisitsa, M.P.; Artamonov, V.V.; Yaremko, A.M. (IPANUK). Polariton dispersion in the presence of a Fermi resonance. DUKAB, no. 9, 1986, 48-52.

974. Malinowski, M. (). Inhomogeneity of $\text{KNd}(x)\text{RE}(1-x)\text{P}(\text{sub}4)\text{O}(\text{sub}12)$ ($\text{RE}=\text{Y}, \text{Pr}, \text{Gd}$) systems studied by site-selection time-resolved spectroscopy. Rare Earths Spectroscopy. International Symposium, Wroclaw, 10-15 Sep 1984. Proceedings. (All in English). Singapore, World Science, 1985, 433-436. (RZFZA, 87/4L513).
975. Malyshev, Yu.M.; Rastorguyev, Yu.G.; Titov, A.N. (). Experimental study on the characteristics of saturated absorption resonance in a drift region. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1986, 47-53. (RZFZA, 87/3L1116).
976. Marunkov, A.G.; Chekalin, N.V. (GEOKhI). Experimental study on the limiting possibilities of a flame atomic ionization spectrometer. ZAKHA, no. 4, 1987, 638-641.
977. Matveyev, O.I. (). Atomic resonance spectrometers and filters. ZPSBA, vol. 46, no. 3, 1987, 359-375.
978. Mostepanenko, V.M.; Eydes, M.I. (). Current applications of the theory of atomic spectra in metrology. Korrelyatsionnyye i relyativistskiye efekty v atomakh i ionakh. SSAN. Moskva, 1986, 93-105. (RZFZA, 87/4A133).
979. Mueller, E.; Gebhardt, W. (). Position and lifetime of photoluminescence in $\text{Cd}(1-x)\text{Mn}(x)\text{Te}$ and $\text{Zn}(1-x)\text{Mn}(x)\text{Te}$. Exchange dependent effects (in English). PSSBB, v. B137, no. 1, 1986, 259-267. (RZFZA, 87/3L496).
980. Nagli, L.Ye.; Stan'ko, N.G. (IFANLa). Indium ion-induced quasilocal states of conduction bands in alkali-halide crystals. FTVTA, no. 4, 1987, 1011-1016.
981. Nagli, L.Ye.; Stan'ko, N.G. (). Kinetics of luminescence and excited absorption in indium-activated alkali-halide crystals. LZFTA, no. 6, 1986, 37-40. (RZFZA, 87/4L497).
982. Naryshkina, S.I.; Tupoleva, A.L.; Zolin, V.F.; Soshchin, N.P.; Dudareva, A.G.; Malova, A.M.; Markushev, V.M. (). Laser spectroscopy of lanthanide oxyiodides. ZPSBA, vol. 46, no. 4, 1987, 645-647.

983. Piskarskas, A.S.; Rotomskis, R.I. (). Ultrashort pulse lasers in spectroscopy of photosynthesis. Lazery i fotosintez. Itogi nauki i tekhniki. Biofiziki, no. 19. VINITI. 1986, 173-240. (RZFZA, 87/4L931).
984. Pokorny, J. (). Laser spectroscopy (in Slovakian). JMKOA, no. 9, 1986, 227-228. (RZFZA, 87/4L1213).
985. Potapov, A.I.; Polyakov, V.Ye.; Zanina, K.A.; Alkin, I.K.; Morokina, G.S. (SZPI). Modified intracavity laser spectroscopy method and its use to study molecular mobility of oligomer binders and polymers based on them. TsNIITEIpriboro. Deposit, no. 3612-pr, 17 Dec 1986, 42-51. (RZFZA, 87/4L1217).
986. Razzhivin, A.P. (). Energy transfer during photosynthesis in terms of picosecond laser spectroscopy data. Lazery i fotosintez. Itogi nauki i tekhniki. Biofiziki, no. 19. VINITI. 1986, 84-137. (RZFZA, 87/4L931).
987. Rebane, L.A.; Blumberg, G.E.; Fefer, Ye.M.; Fimberg, T.A. (IKhBFANes). Unit for the automated measurement of stimulated resonance Raman scattering profiles under step-by-step double scanning conditions. PRTEA, no. 2, 1987, 243-244.
988. Serdyukov, V.I.; Sinitsa, L.N. (). Intracavity laser spectroscopy using $F(\text{sup}2)(\text{sup}-):LiF$ color centers. ZPSBA, vol. 46, no. 3, 1987, 400-406.
989. Shul'ga, A.M.; Gladkov, L.L.; Stanishevskiy, I.V.; Starukhin, A.S. (IFANB). Structure of NH tautomers of tetraethyl porphyrine and its derivative with an isocycle. TEKNA, no. 2, 1987, 215-221.
990. Sidorov, N.V.; Mukhtarov, E.I. (). Raman spectrum study on thermal disordering in the structure of crystalline benzene. IVUFA, no. 3, 1987, 126.
991. Stepanov, B.I. (book reviewer); Lisitsa, M.P.; Yaremko, A.M. (authors of reviewed book). (). Review of book: Rezonans Fermi (Fermi resonance). Kiyev, Naukova dumka, 1984. ZPSBA, v. 46, no. 4, 1987, 693.
992. Syurdo, A.I.; Kortov, V.S.; Mil'man, I.I. (). Vibration structure of absorption and luminescence spectra of corundum irradiated by fast electrons and neutrons. OPSPA, vol. 62, no. 4, 1987, 801-804.

993. Tinchurina, E.G. (IOA). Extracting the widths and relative intensities of lines from intracavity absorption spectra. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 165-166.
 994. Tsaryuk, V.I.; Zolin, V.F.; Lokshin, B.V.; Klemenkova, Z.S. (IRE). Applicability criteria for molecular models describing the electron-vibrational spectra of lanthanide compounds. FTVTA, no. 4, 1987, 1157-1164.
 995. Tsyganova, Ye.V. (IOA). Intracavity spectroscopy of selectively excited states of water molecules. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 161-162.
 996. Vasil'yev, V.V.; Yegorov, V.S.; Chekhonin, I.A. (). Phase modulation from collective effects in intracavity spectroscopy. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 197. (RZRAB, 87/4Ye626).
 997. Vedenin, V.D.; Kulyasov, V.N.; Kurbatov, A.L.; Rodin, N.V.; Shubin, M.V. (). J-dependence of collisional broadening of SmI fine-structure components. OPSPA, vol. 62, no. 4, 1987, 737-741.
 998. Zapasskiy, V.S.; Kozlov, G.G. (). measuring small g-tensor components of paramagnetic centers in crystals. FTVTA, no. 3, 1987, 899-901.
 999. Zuyev, B.K.; Kunin, L.L.; Mikhaylova, G.V.; Sevast'yanov, V.S.; Timonina, O.K. (GEOKhI). Analytical possibilities of a laser mass-spectrometric method to study the distribution of hydrogen in titanium. ZAKHA, no. 4, 1987, 655-659.
- J. BEAM-TARGET INTERACTION
1. Miscellaneous Targets
1000. Ageyev, L.A.; Miloslavskiy, V.K.; Blokha, V.B. (KhGU). New mechanism for forming surface periodic structures in thin films of light-sensitive materials under the action of laser radiation. PZTFD, no. 5, 1987, 269-273.
 1001. Bakos, J.S.; Burger, G.; Ignacz, P.N.; Kovacs, J.; Szigeti, J. (). Measuring laser blow-off of thin sodium films (in English). KFKKA. Preprint, no. 57/D, 1986, 1-11. (RZFZA, 87/3L1073).

1002. Benditskiy, A.A.; Gromov, G.L. (). Possible mechanism of local amplification of a CO₂ laser radiation field by a rough surface. PFKMD, no. 12, 1986, 116-120. (RZFZA, 87/3L1086).
1003. Bosak, N.A. (IFANB). Study on pressure pulses under periodic pulsed laser action. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 151-152.
1004. Bufetova, G.A.; Svakhin, A.S.; Sychugov, V.A.; Tishchenko, A.V. (IOF). Formation of periodic structures on the surface of layered media under laser radiation. IOF. Preprint, no. 256, 1986, 30 p. (RZFZA, 87/3L1088).
1005. Chmel', A.Ye.; Leksovskaya, N.P.; Kondyrev, A.M. (). Morphology of laser damage to surfaces of polymers. PFKMD, no. 1, 1987, 59-62. (RZFZA, 87/4Ye955).
1006. Cholakh, S.O.; Skosyrskiy, Ya.K.; Kozlovskiy, V.I.; Poliyenko, A.N. (UrPI). Threshold of elastic displacement defect formation in lithium hydride crystals. FTVTA, no. 3, 1987, 864-866.
1007. Danilovich, N.I.; Demchuk, A.V.; Pristrem, A.M. (). Diffraction effects in the formation of surface structures during laser recrystallization of silicon layers. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 122-124. (RZRAB, 87/3Ye481).
1008. Dobrotvorskaya, M.V.; Sotnikov, V.T. (KhAI). Emission optical effects under radiative and combined heat exchange in semiconductors and dielectrics. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 105-106.
1009. Gladkevich, K.G.; Ryumina, A.P.; Chukayev, V.I.; Shmagin, Yu.I. (). Using laser radiation for decorative processing of semiprecious stones. CKSVVTPr, Leningrad, 9-10 Dec 1986. Materialy. DNTP. Leningrad, 1986, 44-47. (RZRAB, 87/4Ye501).
1010. Glikin, L.S.; Gorbarenko, V.A.; Yepikhin, V.N. (). Active projection systems with laser amplifiers for sizing of materials. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 42-47. (RZRAB, 87/3Ye416).

1011. Glikin, L.S.; Gorbarenko, V.A.; Yepikhin, V.N. (). New possibilities for laser processing of optically inhomogeneous materials. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 37-42. (RZRAB, 87/3Ye419).
1012. Golovachenko, A.F.; Devoyno, O.G. (). Control of surface properties by laser doping. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 35-37. (RZRAB, 87/3Ye418).
1013. Gritsenko, A.P.; Lakhin, V.N.; Mamaykin, V.S.; Petrov, G.D. (). High-speed device to measure the sizes of disperse particles in a photoerosion plasma. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. Moskva, 1986, 67-72. (RZFZA, 87/3G298).
1014. Kostur, V.G.; Lyba, O.M.; Yermakov, A.V. (LvGU). Study on the effect of laser radiation on the properties of polysilicic layers. UkrNIINTI. Deposit, no. 2790-Uk, 16 Dec 1986, 30-31. (RZFZA, 87/4Ye960).
1015. Kovalenko, V.M.; Panasyuk, A.I.; Osipovich, G.N. (). Robot-operated complex for laser cutting of materials. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 15-16. (RZRAB, 87/3Ye412).
1016. Kroetenheerdt, E.; Peisker, F.; Otto, A. (). Method for trimming electrode structures of piezoceramic filters [by laser]. Patent GDR, no. 236836, 18 Jun 1986. (RZRAB, 87/3Ye435).
1017. Lakiza, Yu.V.; Lenius, V.N.; Malashchenko, A.A.; Mezenov, A.V. (). Servicing and flux-free sealing of exhaust holes in hermetic instruments by laser heating. Sovershenstvovaniye tekhniki i tekhnologii svarki v radioelektroniki i priborostroyeniya v svete resheniy 27 S"yezda KPSS. Nauchno-tekhnicheskii seminar, 2-3 Dec 1986. Materialy. Leningrad, 1986, 46-49. (RZRAB, 87/4Ye500).
1018. Lavrent'yev, A.A.; Lebedev, V.B.; Popov, V.F.; Timofeyev, Yu.A. (). Using lasers to obtain highly stable resistive structures. CKSVVTPr, Leningrad, 9-10 Dec 1986. Materialy. DNTP. Leningrad, 1986, 51-54. (RZRAB, 87/4Ye497).
1019. Manokhin, A.I.; Uglov, A.A.; Selishchev, S.V. (IMET). Instability of shielding from concentrated energy fluxes by intense outflows of vapor from materials. DANKA, v. 291, no. 2, 1986, 348-351.

1020. Okatov, M.A.; Varnashova, I.S.; Kachkin, S.S.; Orlova, L.A. (). Protection of optical elements in lasers. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 275. (RZRAB, 87/4Ye6).
1021. Parinov, S.T.; Russov, V.M. (). Study on the role of the Mie effect in the action of optical radiation. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 82-99. (RZFZA, 87/4L1183).
1022. Pashinin, P.P.; Rastopov, S.F.; Sukhodol'skiy, A.T. (IOF). Laser treatment and cutting of transparent materials. KVEKA, no. 4, 1987, 869-870.
1023. Petrov, V.A.; Chernyshev, A.P. (IVTAN). Experimental study on surface heating of magnesium oxide ceramic by laser radiation. TVYTA, no. 2, 1987, 361-368.
1024. Pokrovskiy, Yu.A.; Poluyanov, G.I.; Polynkin, A.V. (). Flexible laser industrial module in the production of microwave devices. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 114. (RZRAB, 87/3Ye441).
1025. Ryabova, L.A.; Kalafati, Yu.D.; Serbinov, I.A.; Salun, V.S.; Borman, K.V. (). Laser deposition of materials from the gas phase. PFKMD, no. 1, 1987, 141-142. (RZFZA, 87/4Ye499).
1026. Seidel, V.; Uebel, U. (). Method for laser trimming of thick-film resistors. Patent GDR, no. 235950, 21 May 1986. (RZRAB, 87/4Ye499).
1027. Shestakov, S.D. (). Extra- and interpolation methods to predict the results of laser trimming of film resistors. CKSVVTPr, Leningrad, 9-10 Dec 1986. Materialy. DNTP. Leningrad, 1986, 55-59. (RZRAB, 87/4Ye496).
1028. Shestakov, S.D.; Margolin, N.S. (). Laser trimming of thin-film resistors with prediction of the results. Construction and plotting of simulated models on the LUAPR device. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, pp not given. (RZRAB, 87/3Ye445).
1029. Smirnov, V.N. (). Comparison of thresholds of optical breakdown in a volume and on the surface of sodium chloride crystals. ZTEFA, no. 3, 1987, 523-530.

1030. Strekalov, V.N. (STANKIN). Nonequilibrium vaporization due to nonradiative recombination of electron-hole pairs near a crystal surface. FTPPA, no. 10, 1986, 1939-1942.
1031. Varlamov, G.B.; Levinskiy, A.V. (KPIA). Experimental equipment and methods to study temperature conductivity of optical materials. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 129-130.
1032. Vasilenko, A.G.; Kardapolova, M.A.; Spiridonov, N.V. (). Effect of doping elements on the adhesive properties of laser-melted coatings. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTF. Moskva, 1986, 16-18. (RZRAB, 87/3Ye440).
1033. Volkov, Ya.F.; Dyatlov, V.G.; Zelenin, G.V.; Kotsubanov, V.D.; Mitina, N.I.; Nikol'skiy, I.K.; Pavlova, G.P. (FTIANUK). Obtaining atom flows from laser vaporization of materials. FTIANUK. Preprint, no. 12, 1986, 8 p. (RZFZA, 87/3G201).
1034. Volkova, N.V.; Izakson, G.M.; Maksimov, Yu.P.; Mironov, I.A.; Sokolov, V.V. (). Optical elements of industrial laser devices at 10.6 μ m. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 43. (RZRAB, 87/4Ye428).
1035. Wiesner, P.; Eckstein, M. (). Surface processing by laser (in German). CIWKilme, 31st, Ilmenau, 27-31 Oct 1986. Vortragsreihe. Band 4. Ilmenau, 1986, 65-68. (RZRAB, 87/4Ye425).
1036. Zehner, U.; Heinrich, W. (). Automated laser microprocessing by Nd:YAG laser (in German). CIWKilme, 31st, Ilmenau, 27-31 Oct 1986. Vortragsreihe. Band 4. Ilmenau, 1986, 69-72. (RZRAB, 87/4Ye487).

2. Metal Targets

1037. Astapchik, S.A.; Khat'ko, T.N. (FTIB). Effect of laser radiation on metals in a liquid nitrogen medium. VABFA, no. 2, 1987, 24-28.
1038. Astapchik, S.A.; Tsarev, G.L.; Bereza, N.A.; Chebot'ko, I.S. (FTIB). Synergistic model for the rapid growth of crystals from a melt. VABFA, no. 2, 1987, 13-18.

1039. Besprozvannykh, V.A.; Yermakov, V.A.; Razdobreyev, A.A. (). Explosion of metal particles in a laser radiation field. Goreniye geterogennykh i gazovykh sistem. CVSGVzry, 8th, Tashkent, 13-17 Oct 1986. Materialy. Chernogolovka, 1986, 58-62. (RZFZA, 87/3L1072).
1040. Bol'shov, L.A.; Glova, A.F.; Kachurin, O.R.; Lebedev, F.V. (). Formation of a surface periodic structure during the solidification of a liquid membrane. ZTEFA, no. 3, 1987, 581-583.
1041. Bunkin, S.B.; Gladkov, S.M.; Koroteyev, N.I.; Rychev, M.V.; Fedorov, A.B. (). Nonlinear optical diagnostics of the atomic component of a laser breakdown plasma near a metal surface. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 152. (RZRAB, 87/4Ye570).
1042. Chaplanov, A.M.; Shibko, A.N. (). Laser action on copper thin films. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 133-134. (RZRAB, 87/3Ye488).
1043. Dubnyakov, V.N.; Kashchuk, O.L.; Osipov, O.P. (). Effect of thermal loading on the structure and properties of alloyed instrument steel treated by laser radiation. EOBMA, no. 2, 1987, 21-23.
1044. Dymshits, A.V.; Fadeyeva, N.Ye.; Peresetskiy, M.L. (). Using laser technology in chemical and petroleum mechanical engineering. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 4-7. (RZRAB, 87/3Ye417).
1045. Golub', A.P. (). Averaged transfer equation calculation of the disintegration of a CO2 laser-heated radiating aluminum plasma into a vacuum. VINITI. Deposit, no. 8066-B86. (ZPSBA, v. 46, no. 3, 1987, 506).
1046. Gornyy, S.G.; Lopota, V.A.; Soroka, A.M. (). Forming of deep penetration in laser welding. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 7-14. (RZRAB, 87/3Ye413).
1047. Ignatov, A.G.; Skripchenko, A.I. (). Quality of laser welds in steels for power plant machinery. CKSVVTPr, Leningrad, 9-10 Dec 1986. Materialy. DNTP. Leningrad, 1986, 31-35. (RZRAB, 87/4Ye458).

1048. Kolchanov, E.A. (). Improving the durability of tungsten-free solid alloy tools by laser heat treatment. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 22-23. (RZRAB, 87/3Ye411).
1049. Kuznetsov, P.V.; Kurochkin, V.I. (FIANKuy). Convective volatilization of particles in a field of electromagnetic radiation. ZTEFA, no. 3, 1987, 556-559.
1050. Malyshev, V.S.; Mashkovich, S.B.; Lomayev, G.V.; Goryuchkin, A.I.; Kutanov, Yu.I. (). Control of pulsed laser hardening of 30KhRA steel by the Barkhausen effect. DEFKA, no. 12, 1986, 70-74. (RZRAB, 87/4Ye439).
1051. Orlick, H. (). Laser welding of small parts (in German). CIWKilme, 31st, Ilmenau, 27-31 Oct 1986. Vortragsreihe. Band 4. Ilmenau, 1986, 35-38. (RZRAB, 87/4Ye486).
1052. Protasevich, V.A.; Samodeyeva, T.I. (). Using laser radiation to improve the quality of plasma coatings. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 19-22. (RZRAB, 87/3Ye410).
1053. Sadovskiy, V.D.; Schastlivtsev, V.M.; Tabatchikova, T.I.; Yakovleva, I.L. (IFM). Formation of austenite under ultrafast laser heating of steels with a martensite fagot structure. FMMTA, no. 3, 1987, 555-562.
1054. Timofeyev, Yu.A. (). Resistive properties of refractory metal films condensed by laser radiation. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 110-111. (RZRAB, 87/3Ye303).
1055. Vasil'yeva, A.G.; Safonov, A.N.; Tarasenko, V.M. (). Study on heat resistance of steels after treatment by a c-w CO2 laser. IVUSA, no. 4, 1987, 90-94.

3. Dielectric Targets

1056. Ageyev, L.A.; Blokha, V.B.; Miloslavskiy, V.K. (). Competition of waveguide modes during the formation of photoinduced periodic structures in dielectric AgCl-Cl films. OPSPA, vol. 62, no. 3, 1987, 681-685.

1057. Alimpiyev, S.S.; Artyushenko, V.G.; Butvina, L.N.; Voytsekhovskiy, V.V.; Dianov, Ye.M.; Nikiforov, S.M.; Shtarkov, A.L. (IOF). Resistance of KRS-5 polycrystal lightguides to pulsed radiation. ZTEFA, no. 3, 1987, 531-534.
1058. Kask, N.Ye.; Fedorov, G.M. (NIIYaF). Kinetics of bleaching in an optical discharge region in glass. FKSTD, no. 2, 1987, 283-287.
1059. Kondratenko, V.S.; Tanaseychuk, A.S.; Shershnev, Ye.B. (). Laser cutting of glass products in the production of picture tubes. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTF. Moskva, 1986, 24-27. (RZRAB, 87/3Ye414).
1060. Zhekov, V.I.; Murina, T.M.; Popov, A.V.; Prokhorov, A.M. (IOF). Nonlinear volumetric absorption in $Y(\text{sub}3-x)\text{Er}(\text{sub}x)\text{Al}(\text{sub}5)\text{O}(\text{sub}12)$. ZFPRA, vol. 45, no. 6, 1987, 277-279.

4. Semiconductor Targets

1061. Batishche, S.A.; Danilovich, N.I.; Mostovnikov, V.A.; Pristrem, A.M.; Tatur, G.A. (). Study on thermal stability of ion-implanted and laser-annealed silicon layers. ZPSBA, vol. 46, no. 4, 1987, 578-583.
1062. Gromov, G.G.; Zhuk, S.V.; Rudenko, K.V.; Ufimtsev, V.B. (MITKhT). Two-beam laser annealing of semiconductors. FTPPA, no. 4, 1987, 688-693.
1063. Guro, G.M.; Kalyuzhnaya, G.A.; Mirzoyev, F.Kh.; Shelepin, L.A. (FIAN). Mechanisms of external action on the growth of crystals. FIAN. Trudy, no. 177, 1987, 85-98.
1064. Kalyuzhnaya, G.A.; Kiseleva, K.V. (FIAN). Problem of stoichiometry in $A(2)B(6)$ and $A(4)B(6)$ variable-composition semiconductors. FIAN. Trudy, no. 177, 1987, 5-84.
1065. Kapayev, V.V. (). Evolution of a periodic structure on a semiconductor surface under laser radiation. KVEKA, no. 3, 1987, 536-545.
1066. Kiyak, S.G.; Bonchik, A.Yu.; Gafiychuk, V.V.; Gonov, S.Zh.; Yuzhanin, A.G. (IPPM). Anisotropic melting of semiconductors under the action of pulsed laser radiation. DUKAB, no. 5, 1987, 60-64.

1067. Kuchma, V.I.; Kurilo, I.V.; Varshava, S.S. (LvPI). Study on various strength properties of GaAs and their changes under the effect of external action. UkrNIINTI. Deposit, no. 259-Uk87, 7 Jan 1987, 6 p. (RZFZA, 87/4Ye962).
1068. Kukin, V.N.; Maksimov, S.K.; Piskunov, D.I. (MIET). Structural perfection of silicon layers formed under pulsed laser postimplantation annealing. DANKA, vol. 293, no. 3, 1987, 606-610.
1069. Merkulova, S.P.; Shelepin, L.A.; Shubin, A.A. (FIAN). Structural relaxation in solids under shock action. FIAN. Trudy, no. 177, 1987, 133-141.
1070. Reshina, I.I. (FTI). Degree of disorder of laser-annealed A(sub3)B(sub5) semiconductors in terms of Raman spectra. FTVTA, no. 4, 1987, 1247-1249.
1071. Safin, B.M.; Shrayner, Yu.A.; Raykin, L.G. (). Laser burning in of ohmic contacts to p-type gallium phosphide. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. DNTP. Moskva, 1986, 108-109. (RZRAB, 87/3Ye446).
1072. Sizov, F.F.; Plyatsko, S.V.; Darchuk, S.D.; Teterkin, V.V.; Gromovoy, Yu.S. (IPANUK). Conversion of defects in narrow-gap Pb(1-x)Sn(x)Te. FTPPA, no. 12, 1986, 2228-2230.
1073. Zenkov, Yu.V.; Kashkarov, P.K.; Yunovich, A.E. (MGU). Effect of defects induced by laser radiation on photoluminescence of nitrogen-doped gallium phosphide. FTPPA, no. 4, 1987, 740-742.
1074. Zoteyev, A.V.; Kiselev, V.F. (MGU). Resonance phenomena during the action of CO2-laser radiation on a germanium surface. VMUFA, no. 2, 1987, 92-94.

K. PLASMA GENERATION AND DIAGNOSTICS

1075. Afanas'yev, Yu.V.; Isakov, V.A.; Khachiyan, K.A. (FIAN). Acceleration of three-layer targets in inertial fusion in heavy ion beams [including comparison to laser beams]. FIPLD, no. 1, 1987, 101-108.
1076. Aglitskiy, Ye.V.; Antsiferov, P.S.; Mandel'shtam, S.L.; Panin, A.M.; Pal'chikov, V.G.; Tkachev, A.N. (). Precise measurements and calculations in spectra of V, Fe, Co, Ni, Cu, Zn, Ga, Sr and Y helium-like ions. Comparison with experiments with laser plasma. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 104-116. (RZFZA, 87/4G30).
1077. Akatova, T.Yu.; Goncharov, S.G.; Razdobarin, G.T.; Shil'nikov, A.N. (FTI). Numerical modeling of an experiment on plasma diagnostics by Thomson scattering. FTI. Preprint, no. 1074, 1986, 46 p. (RZFZA, 87/3G251).
1078. Akimov, A.Ye.; Baranov, V.Yu.; Kozochkin, S.M.; Makarov, K.N.; Malyuta, D.D.; Pis'mennyy, V.D.; Satov, Yu.A.; Strel'tsov, A.P. (IAE). Generation of the subharmonics and higher harmonics of ionic-sound oscillations in a laser plasma. ZFPRA, vol. 45, no. 8, 1987, 381-383.
1079. Anan'in, O.B.; Bykovskiy, Yu.A.; Zver'kov, A.K.; Frondzey, I.Ya. (MIFI). Soft X-ray collimation. KVEKA, no. 3, 1987, 617-618.
1080. Andreyev, N.Ye.; Zozulya, A.A.; Kuprin, A.V.; Silin, V.P.; Tikhonchuk, V.T.; Chegotov, M.V. (FIAN). Dynamics of excitation of nonlinear states of double scattering. FIPLD, no. 3, 1987, 371-376.
1081. Antipov, A.A.; Grasyuk, A.Z.; Losev, L.L.; Lutsenko, A.P.; Meshalkin, Ye.A. (FIAN). Generation of high-frequency currents through the biharmonic interaction of a laser beam with a metal target. FIPLD, no. 3, 1987, 336-341.
1082. Antonov, V.M. (). Diagnostics of the corpuscular composition and parameters of intense laser plasma flows, on the KI-1 test bench. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 117-124.

1083. Antonov, V.M.; Zakharov, Yu.P.; Maksimov, V.V.; Orishich, A.M.; Ponomarenko, A.G.; Posukh, V.G.; Snytnikov, V.I.N. (). Using laser plasma for laboratory modeling of astrophysical processes. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 77-116.
1084. Apollonov, V.V.; Belyayev, V.N.; Moshkunov, S.I.; Temnikov, V.I. (IOF). Recording of charged particles by means of a drift magnetic separator. PZTFD, no. 5, 1987, 309-312.
1085. Barabash, L.Z.; Bykovskiy, Yu.A.; Krechet, K.I.; Khaydarov, R.T.; Shumshchurov, A.V.; Sharkov, B.Yu. (ITEF). Forming an intense beam of heavy ions from a laser plasma. ITEF. Preprint, no. 146, 1986, 27 p. (RZFZA, 87/3G202).
1086. Basov, N.G.; Getts, K.; Maksimchuk, A.M.; Mikhaylov, Yu.A.; Rode, A.V.; Sklizkov, G.V.; Fedotov, S.I.; Ferster, E.; Hora, H. (Australia). (FIAN). X-ray line spectrum study on fast ion generation in a laser plasma. ZETFA, vol. 92, no. 4, 1987, 1299-1306.
1087. Basov, N.G.; Volovski, Ye.; Denus, S.; Zakharenkov, Yu.A.; Mruz, V.; Rupasov, A.A.; Sklizkov, G.V.; Farny, Yu.; Shikanov, A.S. (FIAN). Hydrodynamic efficiency of double-cascade targets radiated by a laser. FIPLD, no. 4, 1987, 486-489.
1088. Bayanov, V.I.; Ponomareva, N.A.; Serebryakov, V.A.; Skobelev, I.Yu.; Fayenov, A.Ya.; Khakhalin, S.Ya. (). Study on the formation of x-ray spectra in a recombining plasma produced by different harmonics of Nd laser radiation. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. Moskva, 1986, 31-39. (RZFZA, 87/4G126).
1089. Borovskiy, A.V.; Korobkin, V.V.; Polonskiy, L.Ya.; Pyatnitskiy, L.N.; Uvaliyev, M.I. (). Conditions for obtaining an extended multicharge nonequilibrium plasma pinch from optical breakdown of gases. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad 1986, 32. (RZRAB, 87/4Yel43).

1090. Bryunetkin, B.A.; Derzhiyev, V.I.; Dyakin, V.M.; Fayenov, A.Ya.; Yakovlenko, S.I. (). Nonequilibrium gasdynamics of a plasmoid, containing Be ions with $Z=1/III$ under the interaction between a disintegrating plasma and an obstruction. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 72-82. (RZFZA, 87/4G95).
1091. Bryunetkin, B.A.; Dyakin, V.M.; Mayorov, S.A. (). Study on the possibility of attaining population and gain at $n'l'-nl$ ($n, n'=3,4,5$) transitions of hydrogen-like Be IV ions in a recombinating freely disintegrating laser plasma. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 39-57. (RZFZA, 87/4L1177).
1092. Bufetov, I.A.; Prokhorov, A.M.; Fedorov, V.B.; Fomin, V.K. (IOF). Structure of the subsonic combustion of an optical discharge in air. PZTFD, no. 7, 1987, 397-400.
1093. Burmakov, A.P.; Goncharov, V.K.; Zhumar', A.Yu. (NIIPFP). Amplification in the ultraviolet region due to transitions in ions of carbon plasma interacting with a barrier. KVEKA, no. 3, 1987, 618-620.
1094. Burmistrov, V.V.; Glova, A.F.; Lebedev, F.V.; Yartsev, V.P. (IAE). Dynamic characteristics of an optical discharge propagating in a focused CO₂ laser beam. KVEKA, no. 3, 1987, 614-617.
1095. Gaysinskiy, I.M.; Oks, Ye.A. (). New spectral line shift effect in the interaction of laser radiation with a plasma. Korrelyatsionnyye i relyativistskiye efekty v atomakh i ionakh. SSAN. Moskva, 1986, 106-125. (RZFZA, 87/3L1075).
1096. Koldashov, G.A. (). Oscillation in a plasma produced by a ruby laser with wavefront reversal. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 57-66. (RZFZA, 87/4L1044).
1097. Kolokolov, N.B.; Kudryavtsev, A.A. (). Role of step-by-step excitation in a plasma produced by a beam of charged particles and by a non-self-maintained three-dimensional discharge. OPSPA, vol. 62, no. 3, 1987, 494-497.

1098. Komarov, V.M.; Mezenov, A.V.; Migel', V.M.; Ponomareva, N.V. (LETI). Thermoelectric detector for the measurement of the energy of ions and X-ray radiation of a laser plasma. PRTEA, no. 2, 1987, 210-212.
1099. Kovalev, V.F.; Pustovalov, V.V. (FIAN). Laser flux in plasma wave reversal. FIAN. Preprint, no. 318, 1986, 16 p. (RZFZA, 87/4G109).
1100. Kozlovskiy, K.I.; Tsybin, A.S.; Shikanov, A.Ye. (MIFI). Transparent laser dischargers. PRTEA, no. 2, 1987, 98-99.
1101. Kulumbayev, E.B.; Lelevkin, V.M.; Otorbayev, D.K. (). Analyzing the characteristics of optical plasmatrons. INKSA, no. 6, 1986, 35-41. (RZFZA, 87/4G502).
1102. Lend'yel, V.I.; Navrotsky, V.T.; Sabad, Ye.P. (UzhGU; KIYaIUzh). Resonances in electron scattering by atoms and ions. UFNAA, vol. 151, no. 3, 1987, 425-468.
1103. Litovchenko, V.G.; Korbutyak, D.V.; Kryuchenko, Yu.V. (IPANUK). Radiative characteristics of nonequilibrium long-wavelength plasmons in an electron-hole plasma. FTVTA, no. 3, 1987, 798-802.
1104. Losev, L.L.; Meshalkin, Ye.A. (FIAN). Ionization of air by radiation from a laser plasma. ZTEFA, no. 3, 1987, 446-453.
1105. Rayzer, Yu.P.; Silant'yev, A.Yu.; Surzhikov, S.T. (IPMe). Numerical calculation of two-dimensional flows in an optical plasmatron. VINITI. Deposit, no. 7510-86, 31 Oct 1986. (TVYTA, no. 2, 1987, 412).
1106. Rozanov, V.B.; Shumskiy, S.A. (FIAN). Formation of a fast electron spectrum during multiple interaction with plasma resonance fields. KVEKA, no. 3, 1987, 546-556.
1107. Serebryakov, V.A.; Solov'yev, N.A. (). Laser modeling of high-speed impact. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 308. (RZRAB, 87/4Ye521).
1108. Shelaputin, I.I. (IPM). Method to calculate the kinetics of alpha particles in a laser plasma. IPM. Preprint, no. 153, 1986, 20 p. (RZFZA, 87/3G81).

1109. Silant'yev, A.Yu. (). Flare formation from "combustion" in a laser beam in a gas flow (optical plasmatron). Kinetika i gorenije. CVSGVzry, 8th, Tashkent, 13-17 Oct 1986. Materialy. Chernogolovka, 1986, 79-81. (RZFZA, 87/3G200).
1110. Snytnikov, Val.N. (). Decay of a noncollisional plasma between two electrodes. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 130-140.
1111. Tishchenko, V.N. (). Kinetic coefficients of weakly ionized nitrogen under pumping by an alternating-current electric field. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 141-149.
1112. Vasin, B.L.; Kalashnikov, M.P.; Korn, G.R.; Maksimchuk, A.M.; Mikhaylov, Yu.A.; Puzyrev, V.N.; Sklizkov, G.V.; Fedotov, S.I.; Chaushanskiy, S.A. (). Development of picosecond semiconductor switches and their use for optical diagnostics of plasma in experiments on laser fusion. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 193. (RZRAB, 87/4Ye553).
1113. Veresh, M.F.; Zapesochnyy, I.P.; Starodub, V.P. (UzhGU). Two mechanisms of the formation of an inverse population of Cd(sup+) levels in a continuous plasma jet. ZTEFA, no. 3, 1987, 572-574.
1114. Vergunova, G.A.; Kologrivov, A.A.; Rozanov, V.B.; Sklizkov, G.V.; Shikanov, A.S. (FIAN). Spectral and energy characteristics of electromagnetic emission from a laser plasma. FIPLD, no. 3, 1987, 342-349.
1115. Zakharov, Yu.P. (). Probe methods to study the interaction between laser plasma flows and magnetized background noise media. Moshchnyye CO₂-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 125-132.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

1116. Ablekov, V.K.; Denisov, Yu.N. (). Flow-through chemical lasers. Protochnyye khimicheskiye lazery. Moskva, Energoatomizdat, 1987, 176 p.
1117. All-Union Symposium on Propagation of Laser Radiation in the Atmosphere, 8th. Papers. Part 1. CVSRLIAt, 8th. Materialy. Chast' 1. Tomsk, 1986, 240 p. (RZRAB, 87/4Ye354).
1118. Arutyunyan, V.M. (ed). (). Wavefront reversal under four-wave interaction. Obrashcheniye volnovogo fronta pri chetyrekhvolnovom vzaimodeystvii. NIIFKS. Yerevan, 1986, 161 p.
1119. Bunkin, F.V. (ed). (IOF). Nonlinear optics and nonlinear acoustics in liquids. Nelineynaya optika i nelineynaya akustika zhidkosti. IOF. Trudy, no. 6, 1987, 128 p.
1120. Current problems in thermal physics and physical hydrogasdynamics. All-Union Conference of Young Researchers, 2nd, 10-12 Mar 1987. Summaries of the reports. Aktual'nyye voprosy teplofiziki i fizicheskoy gidrogazodinamiki. CVKMIAVT, 2nd, 10-12 Mar 1987. Tezisy dokladov. ITF. NSTT. Novosibirsk, 1987, 319 p.
1121. Ivanov, V.I.; Malevich, I.A. (). Multifunctional lidar systems. Mnogofunktsional'nyye lidarnyye sistemy. Minsk, Universitetskoye, 1986, 287 p. (RZFZA, 87/4L1253).
1122. Jezowska-Trzebiatowska, B. (ed). (). Rare Earths Spectroscopy. International Symposium, Wroclaw, 10-15 Sep 1984. Proceedings. (All in English). Singapore, World Science, 1985, 675 p. (RZFZA, 87/3L259).
1123. Kuz'menko, V.P.; Kozhevnikov, G.N.; Makoretskiy, V.A.; Skorniyakov, G.P. (eds). (). Geometric optical methods to study deformations and stresses. Optiko-geometricheskiye metody issledovaniya deformatsiy i napryazheniy. ChPI. Chelyabinsk, 1986, 139 p.
1124. Kuz'minov, Yu.S. (). Electrooptic and nonlinear optic lithium niobate crystals. Elektroopticheskiy i nelineynoopticheskiy kristall niobata litiya. Moskva, Nauka, 1987, 264 p.

1125. Lasers and photosynthesis. Lazery i fotosintez. Itogi nauki i tekhniki. Biofiziki, no. 19. VINITI. 1986, 5-240. (RZFZA, 87/4L931).
1126. Lasers in the national economy. Conference. Papers. Lazery v narodnom khozyaystve. Konferentsiya. Materialy. Moskva, DNTP, 1986, 141 p. (RZFZA, 87/3A26).
1127. Laser optics. All-Union Conference, 5th, Leningrad, 12-16 Jan 1987. Summaries of the reports. Optika lazerov. CVKOLaze, 5th, Leningrad, 12-16 Jan 1987. Tezisy dokladov. Leningrad, 1986, 400 p. (RZRAB, 87/5Yel).
1128. Measurement of pulsed electromagnetic fields. Izmereniya impul'snykh elektromagnitnykh poley. VNIFTRI. Moskva, 1986, 82 p. (RZRAB, 87/4Ye383).
1129. Popov, Yu.M. (ed). (FIAN). Stoichiometry in crystal compounds and its effect on their physical properties. Stekhiometriya v kristallicheskikh soyedineniyakh i yeye vliyaniye na ikh fizicheskiye svoystva. FIAN. Trudy, no. 177, 1987, 224 p.
1130. Research in the field of measuring time and frequency. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1986, 95 p. (RZFZA, 87/3A120).
1131. Rozhdestvenskaya, V.I. (ed). (IPG). Remote means and methods to measure air pollution and wastes. Distantсионные средства и методы измерения загрязнений атмосферы и выбросов. GKGKP. IPG. Trudy, no. 67, 1986, 149 p.
1132. Safronova, U.I. (ed). (). Correlation and relativistic effects in atoms and ions. Korrelyatsionnye i relyativistskiye efekty v atomakh i ionakh. SSAN. Moskva, 1986, 300 p. (RZFZA, 87/4D9).
1133. Samokhvalov, I.V.; Kopytin, Yu.D.; Ippolitov, I.I.; Balin, Yu.S.; Zuyev, V.V.; Klimkin, V.M.; Lazarev, S.V.; Matviyenko, G.G.; Mitchenkov, V.M.; Sosnin, A.V.; Khmel'nitskiy, G.S.; Shamanayev, V.S.; Dudel'zak, A.E. (auths); Zuyev, V.Ye. (ed). (). Laser probing of the troposphere and underlying surface. Lazernoye zondirovaniye troposfery i podstilayushchey poverkhnosti. IOA. Novosibirsk, Nauka, 1987, 262 p.
1134. Sheremet'yev, A.G. (). Fiberoptic gyroscope. Volokonnyy opticheskiy giroskop. Moskva, Radio i svyaz', 1987, 152 p.

1135. Shestopalov, V.P.; Kirilenko, A.A.; Masalov, S.A.; Sirenko, Yu.K. (). Resonance scattering of waves. Vol. 1. Diffraction gratings. Rezonansnoye rasseyaniye voln. Tom 1. Difraktsionnyye reshetki. Kiyev, Naukova dumka, 1986, 232 p. (RZFZA, 87/3Zh183).
1136. Shvarts, K.K. (). Physics of optical recording in dielectrics and semiconductors. Fizika opticheskoy zapisi v dielektrikakh i poluprovodnikakh. Riga, Zinatne, 1986, 232 p. (RZFZA, 87/4L828).
1137. Spectral methods to study the interaction between laser radiation and matter. Spektral'nyye metody issledovaniya vzaimodeystviya lazernogo izlucheniya s veshchestvom. VNIFTRI. Moskva, 1986, 129 p. (RZFZA, 87/4L1168).
1138. Theoretical and applied optics. All-Union Conference of Young Scientists and Specialists, 2nd. Collection of summaries of the reports. Teoreticheskaya i prikladnaya optika. CVKMUTPO, 2nd. Sbornik tezisov dokladov. Leningrad, 1986, 502 p. (RZFZA, 87/3L1).
1139. Theoretical and experimental spectroscopy. Teoreticheskaya i eksperimental'naya spektroskopiya. DGU. Dnepropetrovsk, 1986, 127 p. (RZFZA, 87/4L107).
1140. Trifonov, Ye.D. (ed). (). Cooperative radiation and photon statistics. Kooperativnoye izlucheniye i statistika fotonov. LGPI. Leningrad, 1986, 131 p. (RZFZA, 87/4L849).
1141. Zuyev, V.Ye.; Kabanov, M.V. (). Optics of atmospheric aerosols. Optika atmosfernogo aerolya. Series: Sovremennyye problemy atmosfernoy optiki (Current problems of atmospheric optics), Vol. 4. Leningrad, Gidrometeoizdat, 1987, 256 p.
1142. Zuyev, V.Ye.; Makogon, M.M.; Makushkin, Yu.S.; Mitsel', A.A.; Ponomarev, Yu.N. (). Applied spectroscopy of the atmosphere. Optical models of a molecular atmosphere. Problems of local gas analysis. Prikladnaya spektroskopiya atmosfery. Opticheskiye modeli molekulyarnoy atmosfery. Voprosy lokal'nogo gazoanaliza. IOA. Tomsk, Izdaniye Tomskogo filiala SOAN, 1986, 147 p.

IV. SOURCE ABBREVIATIONS

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

ABFZA	Analele Universitatii Bucuresti. Fizica
AKZHA	Akusticheskiy zhurnal (CTC)
ANPYA	Annalen der Physik (Leipzig)
ATPLB	Acta physica polonica. Series A
AVMEB	Avtometriya (CTC)
BIPED	Buletinul Institutului politehnic Gheorghe Gheorghiu-Dej, Bucuresti. Seria electrotehnica
CIWKilme	Internationales wissenschaftliches Kolloquium, Ilmenau
CKCFA	Ceskoslovensky casopis pro fysiku
CKSVVTPr	Kratkosrochnyy seminar: Vnedreniye vysokoeffektivnykh tekhnologiskikh protsessov s primeneniym lazerov v promyshlennosti pri realizatsii programmy Intensifikatsiya-90
CRABA	Bolgarskaya akademiya nauk. Doklady (formerly: Bulgarska akademiya na naukite. Doklady)
CRTED	Crystal Research and Technology (East Berlin) (formerly Krystal und Technik)
CVKMIAVT	Vsesoyuznaya konferentsiya molodykh issledovateley: Aktual'nyye voprosy teplofiziki i fizicheskoy gidrodinamiki
CVKMUTPO	Vsesoyuznaya konferentsiya molodykh uchenykh i spetsialistov: Teoreticheskaya i prikladnaya optika
CVKOLaze	Vsesoyuznaya konferentsiya: Optika lazerov
CVSGVzry	Vsesoyuznyy simpozium po goreniyu i vzryvu
CVSRadme	Vsesoyuznoye soveshchaniye: Radiometeorologiya

CVSRESKh	Vsesoyuznoye soveshchaniye: Rentgenovskiy elektronnyy spektr i khimicheskaya svyaz'
CVSRLIAt	Vsesoyuznyy simpozium po rasprostraneniyu lazernogo izlucheniya v atmosfere
DANAA	Akademiya nauk Armyanskoy SSR. Doklady
DANKA	Akademiya nauk SSSR. Doklady (CTC)
DAZRA	Akademiya nauk Azerbaydzhanskoy SSR. Doklady
DEFKA	Defektoskopiya (CTC)
DUKAB	Akademiya nauk Ukrayns'koy RSR. Dopovidi. Seriya A. Fiziko-matematichni ta tekhnichni nauki
EKNTB	Elektronika (Warsaw)
EKVZA	Elektrosvyaz' (CTC)
ELKCA	Elektrotechnicky casopis
ELKKA	Elektrokhimii (CTC)
EOBMA	Elektronnaya obrabotka materialov (CTC)
EXPPA	Eksperimentelle Technik der Physik
FGRTA	Feingeraetetechnik
FIPLD	Fizika plazmy (Moskva, AN SSSR) (CTC)
FKOMA	Fizika i khimiya obrabotki materialov
FKSTD	Fizika i khimiya stekla (CTC)
FMMTA	Fizika metallov i metallovedeniye (CTC)
FNMKA	Finomechanika, mikrotehnika (Budapest)
FTPPA	Fizika i tekhnika poluprovodnikov (CTC)
FTVTA	Fizika tverdogo tela (CTC)

IAAFA	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAFMA	Akademiya nauk Azerbaydzhanskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk
IATOA	Akademiya nauk Tadzhikskoy SSR. Izvestiya. Otdeleniye fiziko-matematicheskikh i geologo-khimicheskikh nauk
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
INKSA	Akademiya nauk Kirgizskoy SSR. Izvestiya
IVUBA	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVUSA	Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)
IZTEA	Izmeritel'naya tekhnika (CTC)
JMKOA	Jemna mechanika a optika
JTPHD	Journal of Technical Physics (Poland)
KFKKA	Kozponti fizikai kutato intezet kozlemenyek (Budapest)
KHFID	Khimicheskaya fizika (CTC)
KHVKA	Khimiya vysokikh energiy (CTC)
KNKTA	Kinetika i kataliz (CTC)
KRISA	Kristallografiya (CTC)
KRSFA	Kratkiye soobshcheniya po fizike (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)

LZFTA	Akademiya nauk Latviyskoy SSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk
MGFFA	Magyar fizikai folyoirat
MTRLB	Metrologiya
OKNOA	Okeanologiya (CTC)
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)
PFMSD	Problemy fonovogo monitoringa sostoyaniya prirodnoy sredy (sbornik, Leningrad)
PRTEA	Pribory i tekhnika eksperimenta (CTC)
PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)
RAELA	Radiotekhnika i elektronika (journal, Moskva) (CTC)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RRPQA	Revue Roumaine de Physique
RZFZA	Referativnyy zhurnal. Fizika
RZGFA	Referativnyy zhurnal. Geofizika
RZMIB	Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZRAB	Referativnyy zhurnal. Radiotekhnika

SAKNA	Akademiya nauk Gruzinskoy SSR. Soobshcheniya
TEKHA	Teoreticheskaya i eksperimental'naya khimiya (CTC)
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFIZA	Ukrainskiy fizicheskiy zhurnal (Russian language version) (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
VABFA	Belorusskiy universitet. Vestnik. Seriya fiziko-tekhnicheskikh nauk
VBSFA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
VMUFA	Moskovskiy universitet. Vestnik. fizika, astronomiya (CTC)
VMUKA	Moskovskiy universitet. Vestnik. Khimiya (CTC)
WIFOA	Wissenschaft und Fortschritt (GDR)
WZTKA	Wissenschaftliche Zeitschrift der Technischen Hochschule Karl-Marx-Stadt, Chemnitz
ZAKHA	Zhurnal analiticheskoy khimii (CTC)
ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNPPA	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)

V. AUTHOR AFFILIATIONS

AKIN

Akusticheskiy institut AN SSSR
Acoustics Institute, Academy of Sciences USSR

AlGU

Altayskiy gos universitet
Altai State University, Barnaul

ArmNIINTI

Armyanskiy NII nauchno-tekhnicheskoy informatsii i
tekhniko-ekonomicheskikh issledovaniy Gosplana
Armyanskoy SSR
Armenian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Plan of the Armenian SSR,
Yerevan

AzGU

Azerbaydzhanskiy gosudarstvennyy universitet
Azerbaydzhan State University

BGU

Belorusskiy gos universitet
Belorussian State University

ChPI

Chelyabinskiy politekhnicheskoy institut
Chelyabinsk Politechnical Institute

DGU

Dnepropetrovskiy gosudarstvennyy universitet
Dnepropetrovsk State University

DNTP

Dom nauchno-tekhnicheskoy propagandy
House of Scientific and Technical Propaganda

EIS

Elektrotekhnicheskoy institut svyazi
Electrotechnical Institute of Communications, Leningrad

FIAN

Fizicheskiy 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

FTI

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

FTIANTadzh

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

FTIANUK

Fiziko-tekhnicheskiy institut AN UkrSSR
Physicotechnical Institute, Academy of Sciences
Ukrainian SSR, Khar'kov

FTIB

Fiziko-tekhnicheskiy institut AN BSSR
Physicotechnical Institute, Academy of Sciences
Belorussian SSR

GEOKhI

Institut geokhimii i analiticheskoy khimii
im Vernadskogo AN SSSR
Institute of Geochemistry and Analytical Chemistry
imeni Vernadskiy, Academy of Sciences USSR, Moscow

GKGKP

Gosudarstvennyy komitet SSSR po gidrometeorologii
i kontrolyu prirodnoy sredy
USSR State Committee on Hydrometeorology and
Monitoring of the Environment

GOI

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

GomGU

Gomel'skiy gosudarstvennyy universitet.
Gomel' State University.

GosNITSIPR

Gos NI tsentr izucheniya prirodnikh resursov
State Scientific Research Center for the Study
of Natural Resources

GruzNIINTI

Gruzinskiy NII nauchno-tekhnicheskoy informatsii i
tekhniko-ekonomicheskikh issledovaniy Goskomiteta
Soveta Ministrov GSSR po nauke i tekhnike
Georgian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Committee on Science and
Technology of the Council of Ministers of the
Georgian SSR, 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

IEANBel

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

IEANUz

Institut elektroniki AN UzSSR
Institute of Electronics, Academy of Sciences
Uzbek SSR, Tashkent

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

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

IFANEst
 Institut fiziki AN EstSSR
 Institute of Physics, Academy of Sciences Estonian SSR

IFANLa
 Institut fiziki AN LatSSR
 Institut of Physics, Academy of Sciences Latvian SSR,
 Salaspils

IFANLi
 Institut fiziki AN LitSSR
 Institute of Physics, Academy of Sciences Lithuanian SSR

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

IFM
 Institut fiziki metallov Ural'skogo nauchnogo tsentra
 AN SSSR
 Institute of Physics of Metals, Ural Scientific Center,
 Academy of Sciences USSR, Sverdlovsk

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

IFPV
 Institut fiziki poluprovodnikov AN LitSSR
 Institute of Semiconductor Physics, Academy of Sciences
 Lithuanian SSR, Vilnius

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

IFTPE
 Institut fiziko-tekhnicheskikh problem energetiki
 AN LitSSR
 Institute of Physical and Technical Problems of
 Power Engineering, Academy of Sciences
 Lithuanian SSR, Kaunas

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

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

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

IKhAN
 Institut khimii AN SSSR
 Institute of Chemistry, Academy of Sciences USSR,
 Gor'kiy

IKhBFANes
 Institut khimicheskoy i biologicheskoy fiziki
 AN EstSSR
 Institute of Chemical and Biological Physics,
 Academy of Sciences Estonian SSR

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

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

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

Informelektro
 Tsentral'nyy NII informatsii i tekhniko-ekonomicheskikh
 issledovaniy v elektrotekhnike
 Central Scientific Research Institute of Information
 and Technical Economic Research in Electric
 Engineering, Moscow

Informsvyaz'
 Tsentr nauchno-tekhnicheskoy informatsii i propagandy
 po svyazi "Informsvyaz'", Ministerstvo svyazi SSSR
 Center for Scientific and Technical Information and
 Propaganda on Communications, USSR Ministry of
 Communications, Moscow

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

IOAN
 Institut okeanologii AN SSSR
 Institute of Oceanography, Academy of Sciences
 USSR, Moscow

IOANAO
 Atlanticheskoye otdeleniye Instituta okeanologii
 AN SSSR
 Atlantic Branch of the Institute of Oceanography,
 Academy of Sciences USSR, kaliningrad

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

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

IPG
 Institut prikladnoy geofiziki AN SSSR
 Institute of Applied Geophysics, Academy of
 Sciences USSR

IPM
 Institut prikladnoy matematiki AN SSSR
 Institute of Applied Mathematics, Academy of Sciences
 USSR

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

IPochF
 Institut pochvovedeniya i fotosinteza AN SSSR,
 Pushchino, Moskovskaya oblast'
 Institute of Soil Science and Photosynthesis,
 Academy of Sciences USSR, Pushchino, Moscow Oblast

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

IRFEANUK
 Institut radiofiziki i elektroniki AN UkrSSR
 Institute of Radiophysics and Electronics, Academy of
 Sciences Ukrainian SSR

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

ISE
 Institut sil'notochnoy elektroniki SOAN
 Institute of High-Current Electronics, Siberian Branch
 Academy of Sciences USSR, Tomsk

ITE
 Institut termofiziki i elektrofiziki AN EstSSR
 Institute of Thermophysics and Electrophysics,
 Academy of Sciences Estonian SSR

ITEF
 Institut teoreticheskoy i eksperimental'noy fiziki
 Institute of Theoretical and Experimental Physics, Moscow

ITF
 Institut teplofiziki SOAN
 Institute of Thermophysics, Siberian Branch Academy of
 Sciences USSR, Novosibirsk

ITFL
 Institut teoreticheskoy fiziki im Landau AN SSSR
 Institute of Theoretical Physics imeni Landau,
 Academy of Sciences USSR, Chernogolovka

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

IYaFANKaz
 Institut yadernoy fiziki AN KazSSR
 Institute of Nuclear Physics, Academy of Sciences
 Kazakh SSR, Alma-Ata

KaGU
 Kazanskiy gos universitet
 Kazan' State University

KazGU
 Kazakhskiy gos universitet
 Kazakh State University, Alma Ata

KazPedi
 Kazakhskiy pedagogicheskiy institut
 Kazakh Pedagogical Institute

KGU
 Kiyevskiy gos universitet
 Kiev State University

KhAI
 Khar'kovskiy aviatsionnyy institut
 Khar'kov Aviation Institute
KhGU
 Khar'kovskiy gos universitet
 Khar'kov State University
KhIIS
 Khar'kovskiy institut inzhenerov kommunal'nogo
 stroitel'stva
 Khar'kov Institute of Civil Engineers
KIYaIUzh
 Uzhgorodskoye otdeleniye Instituta yadernykh
 issledovaniy AN UkrSSR
 Uzhgorod Branch of the Institute of Nuclear
 Research, Academy of Sciences Ukrainian SSR
 in Kiev
KNIIGLv
 L'vovskiy filial Kiyevskogo NII gidropriborov
 Lvov branch of the Kiev Scientific Research
 Institute Hydraulic Instruments
KPI
 Kishinevskiy politekhnicheskiy institut
 Kishinev Polytechnic Institute
KPIA
 Kiyevskiy politekhnicheskiy institut
 Kiev Polytechnic Institute
KTIRPKh
 Kaliningradskiy tekhnicheskiy institut rybnoy
 promyshlennosti i khozyaystva
 Kaliningrad Technical Institute of the
 Fishing Industry and Fisheries
LETI
 Leningradskiy elektrotekhnicheskiy institut
 Leningrad Electric Engineering Institute
LGPI
 Leningradskiy gos pedagogicheskiy institut
 Leningrad State Pedagogical Institute
LGU
 Leningradskiy gos universitet
 Leningrad State University
LITMO
 Leningradskiy institut tochnoy mekhaniki i optiki
 Leningrad Institute of Precision Mechanics and Optics
LKI
 Leningradskiy korablestroitel'nyy institut
 Leningrad Shipbuilding Institute
LPI
 Leningradskiy politekhnicheskiy institut
 Leningrad Polytechnic Institute

LvGU
 L'vovskiy gos universitet
 L'vov State University
 LvPI
 L'vovskiy politekhnicheskii institut
 L'vov Polytechnic Institute
 MEI
 Moskovskiy energeticheskii institut
 Moscow Power Engineering Institute
 MEIS
 Moskovskiy elektrotekhnicheskii institut svyazi
 Moscow Electrotechnical Institute of Communications
 MEISF
 Smolenskiy filial Moskovskogo energeticheskogo
 instituta
 Smolensk Branch of the Moscow Power Engineering
 Institute
 MFTI
 Moskovskiy fiziko-tekhnicheskii institut
 Moscow Physicotechnical Institute
 MGU
 Moskovskiy gos universitet
 Moscow State University
 MIET
 Moskovskiy institut elektronnoy tekhniki
 Moscow Institute of Electronic Engineering
 MIFI
 Moskovskiy inzhenerno-fizicheskii institut
 Moscow Engineering Physics Institute
 MITKhT
 Moskovskiy institut tonkoy khimicheskoy tekhnologii
 imeni Lomonosova
 Moscow Institute of Fine Chemical Technology
 imeni Lomonosov
 MoldNIINTI
 Moldavskiy NII nauchno-tekhnicheskoy informatsii i
 tekhniko-ekonomicheskikh issledovaniy Gosplana MSSR
 Moldavian Scientific Research Institute of Scientific
 and Technical Information and of Technical Economic
 Studies for the State Plan of the Moldavian SSR,
 Kishinev
 MTI
 Moskovskiy tekstil'nyy institut
 Moscow Textile Institute
 MVTU
 Moskovskoye vyssheye tekhnicheskoye uchilishche im
 Baumana
 Moscow Higher Technical College imeni Bauman

NGU
 Novosibirskiy gos universitet
 Novosibirsk State University
 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
 NIIFL
 NII fiziki pri Leningradskom gos universitete
 Scientific Research Institute of Physics at Leningrad
 State University
 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
 NIIYaF
 NII yadernoy fiziki pri Moskovskom gos universitete
 Scientific Research Institute of Nuclear Physics at
 Moscow State University
 NIIYaFT
 NII yadernoy fiziki pri Tomskom politekhnicheskom
 institute
 Scientific Research Institute of Nuclear Physics
 at Tomsk Polytechnic Institute
 NIOPIK
 NII organicheskikh poluproduktov i krasiteley
 Scientific Research Institute of Organic
 Intermediates and Dyes, Moscow
 NIRFI
 NI radiofizicheskii 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
 NSTT
 Nauchnyy sovet AN SSSR po kompleksnoy probleme
 "Teplofizika i teploenergetika"
 Scientific Council on the Comprehensive Problem:
 Thermal Physics and Thermal Power Engineering,
 Academy of Sciences USSR

OGSNK

Obshchegosudarstvennaya sluzhba nablyudeniya i kontrolya za urovnem zagryazneniya okruzhayushchey sredy
Government-Wide Service for Observing and Controlling Environmental Pollution

OIYaI

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

OTANUZ

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

PGI

Polyarnyy geofizicheskiy institut Kol'skogo filiala AN SSSR
Polar Geophysical Institute, Kola Branch, Academy of Sciences USSR, Apatity

RGU

Rostovskiy-na-Donu gos universitet
Rostov on Don State University

SAO

Spetsial'naya astrofizicheskaya observatoriya AN SSSR
Special Astrophysical Observatory, Academy of Sciences USSR

SarPI

Saratovskiy politekhnicheskiy institut
Saratov Polytechnic Institute

SFTI

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

SimGU

Simferopol'skiy gos universitet
Simferopol State University

SSAN

Sovet po spektroskopii AN SSSR
Council on Spectroscopy, Academy of Sciences USSR, Moscow

STANKIN

Moskovskiy stankoinstrumental'nyy institut
Moscow Machine Tool Institute

SZPI

Severo-zapadnyy zaachnyy politekhnicheskiy institut
Northwestern Correspondence Polytechnic Institute, Leningrad

TashGU
 Tashkentskiy gos universitet
 Tashkent State University
 TbGU
 Tbilisskiy gos universitet
 Tbilisi State University
 TGU
 Tomskiy gos universitet
 Tomsk State University
 ToPI
 Tomskiy politekhnicheskii institut
 Tomsk Polytechnic Institute
 TsAO
 Tsentral'naya aerologicheskaya observatoriya
 Central Aerological Observatory, Dolgoprudnyy
 TsKBOPANB
 Tsentral'noye konstruktorskoye byuro s opytym
 proizvodstvom AN BSSR
 Central Design Bureau with Pilot Production,
 Academy of Sciences Belorussian SSR
 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
 UkrNIINTI
 Ukrainskiy NII nauchno-tekhnicheskoy informatsii i
 tekhniko-ekonomicheskikh issledovaniy Gosplana
 UkrSSR
 Ukrainian Scientific Research Institute of Scientific
 and Technical Information and of Technical Economic
 Studies for the State Plan of the Ukrainian SSR, Kiev
 UrPI
 Ural'skiy politekhnicheskii institut
 Ural Polytechnical Institute, Sverdlovsk
 UzhGU
 Uzhgorodskiy gos universitet
 Uzhgorod State University
 VEI
 Vsesoyuznyy elektrotekhnicheskii institut
 All-Union Electrical Engineering Institute, Moscow
 VGU
 Voronezhskiy gos universitet
 Voronezh State University
 VIGD
 Vladivostokskiy institut gornogo dela
 Vladivostok Institute of Mining

VilGU
 Vil'nyusskiy gos universitet
 Vilnius State University

VINITI
 Vsesoyuznyy institut nauchnoy i tekhnicheskoy
 informatsii
 All-Union Institute of Scientific and Technical
 Information, Moscow

VNIFTRI
 VNII fiziko-tekhnicheskikh i radiotekhnicheskikh
 izmereniy
 All-Union Scientific Research Institute of Physico-
 technical and Radiotechnical Measurements, Moscow

VNIIFI
 VNII tekhnicheskoy informatsii, klassifikatsii i
 kodirovaniya Goskomiteta standartov Soveta
 Ministrov SSSR
 All-Union Scientific Research Institute of
 Information, Classification and Coding,
 State Committee on Standards, USSR Council
 of Ministers, Moscow

VNIIM
 VNII metrologii im Mendeleyeva
 All-Union Scientific Research Institute of Metrology
 imeni Mendeleyev, Leningrad

VNIIOFI
 VNII optiko-fizicheskikh izmereniy
 All-Union Scientific Research Institute of
 Optophysical Measurements, Moscow

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

VTSSOAN
 Vychislitel'nyy tsentr SOAN
 Computer Center, Siberian Branch Academy of Sciences
 USSR

YerPIL
 Leninakanskiy filial Yerevanskogo
 politekhnicheskogo instituta
 Leninkan Branch of the Yerevan
 Polytechnic Institut

ZhiPedI
 Zhitomirskiy Pedagogicheskiy Institut
 Zhitomir Pedagogical Institute

VI. AUTHOR INDEX

AAVIKSOO YA	107	ANDRYUNAS K	46	BABIN S A	23
ABAKUMOV G A	107	ANFILOV I V	56	BABKINA T V	57
ABDULLAYEV A YU	75	ANGERT N B	44	BADALYAN A M	37
ABDULLAYEV S S	63	ANIKEYEV I YU	71	BADALYAN V G	76
ABLEKOV V K	129	ANISIMOV M P	63	BAGATUR'YANTS A A	79
ABRAMOV A V	56	ANKUDINOV V B	85	BAGAYEV S N	109
ABRAMOV O I	70	ANTAL K	22	BAGDASAROV KH S	1,6,109
ABRAMOVICH B S	103	ANTIPENKO B M	3	BAGDOYEV A G	37,48
ABRAMOVICH D I	63	ANTIPOV A A	124	BAGRATASHVILI V N	18
ADONTS G G	71	ANTIPOV A L	71	BAKHTIN V G	86,87
ADZHEMOV A S	57	ANTONOV S N	49	BAKIN D V	1
AFANAS'YEV A A	71	ANTONOV V M	124,125	BAKLANOV A YE	52,109
AFANAS'YEV D V	82	ANTONOVSKAYA N G	76	BAKOS J S	14,115
AFANAS'YEV YU V	124	ANTROPOV A B	4	BALAKHNIN V P	79
AFONIN YU V	14	ANTSIFEROV P S	124	BALAKSHIY V I	49
AFRAILOV M A	56	ANTYUKHOV V V	17	BALASANYAN R N	87
AGALAKOV YU G	17	ANUFRIYEV A V	71	BALASHOV I F	10
AGANESYAN M K	52	AONIO L N	35	BALDENKOV G N	64,68
AGEYEV L A	37,115,121	APAI P	17	BALIN YU S	64,69,130
AGEYEV V P	26	APANASEVICH S P	108	BALOSHIN YU A	29
AGLITSKIY YE V	124	APOLLONOV V V	18,125	BALYKIN V I	103
AKATOVA T YU	124	APRESYAN L A	71	BANAKH V A	65
AKHABAYEV B A	79	ARAMYAN A R	72	BANDILLA A	53
AKHMANOV A S	79	ARISTOV A K	78	BARABASH L Z	125
AKHMANOVA M V	107	ARMAND N A	56	BARACHEVSKIY V A	81
AKHMEDIYEV N N	43	ARMEYEV V YU	48	BARANOV A N	8,9,18,56
AKHMEDZHANOV R A	108	ARMEYEVA A E	106	BARANOV G A	18
AKHTYRCHENKO YU V	63	ARNOL'D N D	82	BARANOV V YU	25,43,49,124
AKHUNOV N	17	ARSENT'YEV I N	9	BARATOV SH P	10
AKHV V A	85	ARTAMONOV V V	112	BARDETSKIY P I	41
AKIMOV A YE	124	ARTAMONOV YE V	86	BARILA A	46
AKIMOVA I V	6	ARTEMENKO S B	86	BARKOVSKIY K P	10
AKINFIYEV N N	79	ARTEMENKOV L I	108	BARTOSHEVICH S G	2
AKOPYAN D G	71,103	ARTEMOV V M	64	BARUDOV S T	87
AKOPYAN I KH	108	ARTEMOV YE M	64	BARYKIN V N	65
AKOPYAN K A	85	ARTEM'YEV V I	86	BARYSHNIKOV V I	3
AKSENOV A A	63	ARTEM'YEV V S	59	BASHKIN A S	27
AKSENOV B YE	56	ARTSYBYSHEVA I B	108	BASIYEV T T	3,4,10
AKTSIPETROV O A	43	ARTYUSHENKO V G	122	BASOV N G	16,28,33
AKULIN V M	79	ARUTYUNOV YU A	71,72		75,108,125
ALEKSANDROV A YU	15	ARUTYUNYAN K V	103	BASUN S A	103
ALEKSANDROV I V	60	ARUTYUNYAN S M	6	BATISHCHE S A	122
ALEKSANDROV S N	37	ARUTYUNYAN V M	72,129	BATUNINA A V	87
ALEKSEYEV A P	63	ARZUMANYAN G A	109	BATURINA O A	4
ALEKSEYEV K P	26	ASHKINADZE B M	103	BATYRBKOV E G	23
ALEKSEYEV V A	12,108	ASTAPCHIK S A	119	BATYRBKOV G A	23
ALEKSEYEV V N	10,71	ASTROV D N	102	BAUDYS A	93
ALESHIN V A	90	ATABAYEV SH	108	BAYANOV V I	125
ALFEROV G N	23	ATABEKYAN L S	109	BAYDAKOV L A	106
ALFEROV ZH I	9,54	AUSLENDER A L	76	BAYEV V M	109
ALFIMOV M V	79	AVAKYANTS L I	10,11	BAYRAMOV B KH	39
ALIMPIYEV S S	17,122	AVARMAA R	109	BAYTSUR G G	17
ALIYEV R A	108	AVARMAA R A	109	BAZAROV A YE	8
ALKIN I K	114	AVDEYENKO A A	109	BAZULIN YE G	76
ALMAYEV R KH	63	AVDEYEV P S	56	BEGISHEV I A	45
AL'TSHULER G B	37	AVERKIYEV N S	9	BEKOV G I	110
AL'TSHULER N S	108	AVER'YANOV N YE	29	BELAN V R	44
AMUS'YA M YA	37,103	AVER'YANOV V P	18	BELANOV A S	57
ANANENKO A A	102	AVETISYAN YU A	37	BELEN'KIY M S	64
ANAN'IN O B	124	AVRUTSKIY I A	57	BELIKOV I B	49
ANAN'YEV V YU	23	AXINTE C	20	BELINSKIY A V	87
ANAN'YEVSKIY V A	85	AYDARALIYEV M	8	BELKIN V G	59
ANDREEV G N	14	AZIZOV K A	86	BEL'KOV V V	103
ANDREYEV A V	37	AZIZOV S T	10	BEL'KOV YE P	29
ANDREYEV B V	37	AZYAZOV V N	28	BELLENDIR E N	87
ANDREYEV I A	56			BELONozhko A T	86
ANDREYEV N YE	124	BABAYEV I K	23	BELOTSERKOVSKIY E N	87
ANDREYEV R B	43	BABCHENKO A M	86	BELOUS G M	100
ANDREYEV YU M	43	BABICH V V	86	BELOUSOV P YA	87
ANDRIANOV V F	93	BABICHENKO S M	26	BELOUSOV V N	72
ANDRIYESH A M	56	BABIN A A	45	BELOUSOVA I M	18,82
ANDRONOV A A	6	BABIN M M	90	BELOVOLOV M I	8

BELYAKOV I V	29	BONDARCHUK YA M	34	CHALYY V P	9
BELYANSKIY L B	102	BONDARENKO B V	108	CHANI V I	36
BELYAYEV A YU	95,96	BONDAREV B V	33	CHAPLANOV A M	120
BELYAYEV V N	125	BONDUR V G	65	CHAPOVSKIY P L	104
BELYKH A D	14,43	BORDACHEV YE G	11	CHASOVNIKOV S A	80
BELYKH I G	109	BORISEVICH N A	88	CHAUSHANSKIY S A	128
BELYY M U	109	BORISOV A A	4	CHAYKOVSKIY A P	66
BEN BOUZID F	44	BORMAN K V	118	CHEBOTAREV A P	6
BENA R	32	BORODAVKO A N	99	CHEBOTAYEV V P	109
BENDERSKIY V A	87	BORODIN YU P	88	CHEBOT'KO I S	119
BENDITSKIY A A	116	BORODULENKO G P	4	CHEBURKIN N V	20,48
BENEDIKT M G	38	BOROVKOV V V	19	CHEGOTOV M V	124
BERDNIKOV A A	16	BOROVSKIY A V	125	CHEKALIN N V	113
BERDYSHEV A V	14	BOROVTSOV P V	88	CHEKALIN S V	56
BERENBERG V A	11	BORSHCH A A	38	CHEKAYEV N S	88
BEREZA N A	119	BORYNYAK L A	102	CHEKHONIN I A	115
BEREZA V N	57	BOSAK N A	116	CHEKHOVSKOY V YA	102
BEREZHNOY A A	35	BOYCHENKO V L	45	CHELPANOV V I	19
BEREZIN A D	20	BOYCHUK L N	82	CHEMERILOV V V	93
BEREZIN B G	10	BOYKO YU B	76	CHERA I	51
BEREZIN YU D	56	BRATESCU G G	88	CHERCHES KH A	52
BERIK I K	110	BRISOV A YU	79	CHERENKOV G A	57
BERIK YE B	110	BRODIN M S	1,9,38,110	CHERKASHIN G V	95
BERSENEV V I	65	BRONNIKOV V I	88	CHERKASOV A S	11,13
BERTEL' I M	18	BROSCARU A	51	CHERNEVA T V	8
BESKOV A N	85,88	BRUECKNER V	13	CHERNOV P V	56
BESPALOV V A	105	BRYNZAR' V I	6,7,57	CHERNOVOL A N	89
BESPALOV V G	46,47	BRYUKHANOV V V	104	CHERNYAVSKIY A F	13
BESPROZVANNYKH V A	120	BRYUNETKIN B A	126	CHEARNYSHEV A P	118
BESSONOV YE G	53	BUCHENKOV V A	11,35	CHEERTKOV A A	60
BETEROV I M	1	BUDNIK A P	104	CHERVENKO M YU	32
BEYLIN YE N	56	BUFETOV I A	126	CHESKIS S G	79,80
BEYZEL' N F	110	BUFETOVA G A	57,116	CHESNULYAVICHYUS I	41
BEYZINA L G	33	BUGAYEV A A	76	CHIBISOV A K	109
BEZAYEVA L G	45	BUKHARIN N A	33	CHICHININ A I	80,111
BEZHAN N P	6,7,57	BUKHSHTAB M A	82	CHIGIR' N A	38
BEZIRGENYAN G S	37,48	BUKREYEV V S	26	CHIGORKO A B	93
BEZRODNIYY V I	29	BULATOV YE I	89	CHIORDANESCU V	31
BEZVERBNYY A V	103	BULDAKOV M A	65	CHIRAKADZE A A	96
BIBIK V A	103	BULUSHEV A G	57	CHIRKIN A S	44
BIGLOV Z A	52	BUNKIN A F	110	CHIRKIN A S	87
BIRICH G N	88	BUNKIN F V	38,129	CHIRKOV V N	18
BIRYULIN V P	64	BUNKIN N F	80,82	CHISLER E V	111
BLATO I V	35	BUNKIN S B	120	CHITAYA K B	105
BLETSKAN D I	110	BURAKOV S D	65	CHMEL' A YE	116
BLINOV L N	106	BURGER G	115	CHOLAKH S O	116
BLINOV N A	48	BURLAKOV V D	25	CHUDINOV A N	46
BLIZNYUK N I	52	BURMAKOV A P	14,89,126	CHUDINOV A V	9
BLOKHA V B	115,121	BURMISTROV V V	126	CHUDINOVA YE I	9
BLUMBERG G E	114	BUROV L I	110	CHUKAYEV V I	116
BOBAK W	76	BURSHTA I I	57	CHURAKOV V V	18,22,24
BOBROV B D	82	BURTSEV V A	19,29	CHURKIN A V	111
BOBROV S T	61	BURUSIN V I	89	CHUYKO L S	107
BOBUCHENKO D S	81	BUSHMAKIN YE N	53	CHUYKO V G	84
BOBYL'KOV D B	29	BUSHUK B A	110	CIARKOWSKI A	61
BOCHKAREV N N	65	BUSHUYEVA G V	106	CIBULKA J	89
BOGATOV A P	7,42	BUSSE B	32	COJOCARU E	34,77
BOGATYREV S N	61	BUTSKIY V V	63	CUCULESCU I	32,97
BOGDANKEVICH O V	7	BUTUSOV M M	89	CZECHOWICZ R	54
BOGDANOV S F	4	BUTVINA L N	122	CZITROVSKY A	50
BOGDANOV S V	49	BUYANOV-UZDAL'SKIY A YU	56		
BOGDANOV YU V	88	BUYLOV L L	34	DAMM T	35,82
BOGORODITSKAYA R A	57	BUZHINSKIY A A	35	DANIL'CHUK N V	11
BOHMEYER W	82	BUZHINSKIY I M	11	DANILEYKO M V	16
BOKASH I S	72	BYCHKOV YU I	26	DANILOV A A	36
BOKHAN P A	25	BYKOV YU V	108	DANILOV O B	19,32
BOKUN V CH	27	BYKOVA N G	110	DANILOV V I	89
BOL'SHEVA T A	49	BYKOVSKIY V F	24	DANILOV V P	1
BOL'SHOV L A	49,120	BYKOVSKIY YU A	4,76,110	DANILOVICH N I	116,122
BOL'SHUKHIN O G	82		124,125	DANILYCHEV A V	36
BONCH-BRUYEVICH A M	38			DANILYCHEV V A	23
BONCHIK A YU	122			DANISHEVSKIY A M	7

DARCHUK S D	106,123	DRAGOMIR A	97	FEOFILOV S P	103
DARR C P	89	DRAZHEV M	60	FERSTER E	125
DASHUK P N	29	DREMOV S S	89	FESENKO V I	95
DATSYUK V V	54	DREYDEN G V	70	FILIMONOV A A	43
DAURKIN YE G	49	DROBAKHA S A	107	FILIPPOV S S	48
DAVYDENKO YU N	12	DROBIN V M	111	FIMBERG T A	114
DAVYDOV S V	12	DROGACHENKO S A	89	FIRSOV K N	17,18
DAVYDOV V YU	111	DROZDOVA O V	1	FIRSOV V V	30
DAVYDOVA N A	103	DROZHBIN YU A	83,100	FISCHER R	38
DE S T	92	DROZHZHIN V V	72	FISHER A M	35
DEDIKOV S P	102	DRYK A A	59	FIT'O V M	77
DEDOBORSCH V G	57	DUBNISHCHEV YU N	87	FLEISCHER M	93
DEDOV V A	66	DUBNYAKOV V N	120	FLOREA V	31
DEGODA V YA	51	DUBOVNIKOV M S	92	FOMENKO V P	95
DEGTAREV I S	90	DUBOVNIKOVA YE A	92	FOMENKOV I V	53
DEGTAREV V I	90	DUBROV M N	90	FOMICHEV A A	106
DELONE N B	80	DUDAREVA A G	113	FOMICHEV A I	19
DEMCHUK A V	116	DUDEL'ZAK A E	130	FOMICHEV N N	75
DEMCHUK M I	52	DUL'KIN V M	64	FOMIN V A	15
DEMIN A I	18	DUL'KIN VYACH M	64	FOMIN V K	126
DEMINA T P	75	DUL'NEV G N	54	FOMIN V M	29,38
DEMKN V N	16	DUMAREVSKIY YU D	58	FOMIN YU D	105
DEM'YANENKO A V	111	DUMBRAVYANU R V	3	FONTANIY V A	60
DEM'YANTSEVA S D	29	DUMITRAS D C	20,54	FRENKEL' L A	58
DEM'YANYUK V A	90	DUTOV A I	18	FREYDMAN G I	45
DENEZHKN YE N	92	DUTS' N P	77	FRIDMAN A A	108
DENISKIN S A	90	DYAD'KIN A P	24,43	FRIDMAN SH	68
DENISOV A A	19	DYAKIN V M	126	FRIDMAN SH D	64,67,68,70
DENISOV A L	51	D'YAKONOV V P	31	FROLOV M P	27
DENISOV V I	61	D'YAKOV YU YE	111	FROLOVA M N	60
DENISOV V N	111	DYATLOV M K	24	FROLOVA YE K	105
DENISOV YU A	92	DYATLOV V G	119	FROMZEL' V A	12
DENISOV YU N	129	DYCHKOV A S	109	FRONDZEY I YA	124
DENKER B I	10	DYMSHITS A V	120	FURMAN A S	47
DENUS S	125	DYUBKO S F	24	FURSA D G	52
DERBOV V L	111	DZHAGAROV B M	112	FURSOV A N	85,91
DERDOBINTSEV P YU	15	DZHOTYAN G P	72		
DERGACHEV A YU	4	DZHURTANOV B YE	8	GABRIYEL'YAN V L	72
DERZHIYEV V I	16,25,126			GACEFF ST	34
DEVOYNO O G	117	EBANOIDZE M K	8	GADIYAK G V	20,31
DEVYATYKH G G	92	ECKSTEIN M	119	GAD'MASHI Z P	33
DIANOV YE M	8,47,52,56,57	ELBEL M	24	GAFIYCHUK V V	122
	58,59,92,122	EL'TS V K	10	GALINOV A V	78
DIDENKO A YA	90	ENGARD F	66,69	GALKIN A G	85
DIDZHYULIS A A	106	ENGST P	22	GALKIN S L	89
DIMAKOV S A	19	EPSHTEYN V SH	103	GALKINA I P	107
DLUGASZEK A	76	ERDEI SH	87	GALLAY I YA	29
DMITRIYEV A B	25	EYDEL'BERG M I	90	GALUMYAN A S	110
DMITRIYEV A YE	61	EYDES M I	113	GALUSHKIN M G	20
DMITRIYEV D I	71			GALYAUDINOV R T	100
DMITRIYEV N I	77	FADEYEVA N YE	120	GAMALIY V F	109
DMITRIYEV V I	56	FARCAS I	20	GAMAZEYSHCHIKOV A M	20
DMITRIYEV V P	111	FARNY YU	125	GANAGO A O	111
DMITRIYEV YE I	33,82	FASSLER D	13	GANCHERENOK I I	110
DOBRIVSKIY A L	20	FATEYEV N V	81	GAN'SHIN V A	58
DOBROTVORSKAYA M V	116	FATUYEV V A	90	GAPONENKO S V	1
DOBSCHAL H J	32	FAYENOV A YA	125,126	GARASHCHUK V P	91
DOLGIKH V A	15	FAYZULLOV F S	33	GARBUIZOV D Z	9
DOLZHENKO S V	3	FEDOROV A B	120	GARDAVSKI J	89
DOMBROVSKIY S A	75	FEDOROV G M	122	GARMASH V M	43,44
DOMBROVSKIY V A	75	FEDOROV V B	53,126	GARNOV S V	104
DOMNIN V N	33	FEDOROV V V	3	GASE R	13,62
DOMNIN YU S	82	FEDOROV YE A	1,6	GAVIN L B	91
DOMCHENKO V A	90	FEDOROV YU K	108	GAVRILOV O D	11
DONIN V I	34	FEDOROVICH V YU	43,90	GAVRILOV V N	58
DOROGIN A D	101	FEDOTOV I I	90	GAVRILOVA T V	18
DOROZHKN L M	1	FEDOTOV S I	125,128	GAVRILYUKOV N N	65
DOTSENKO A V	58,104	FEFELOV A N	35	GAVRONSKAYA YE A	14,82
DOTSENKO M V	71	FEFER YE M	114	GAYDA L S	41
DOVCHENKO D N	108	FEL'DBUSH V I	106	GAYSINSKIY I M	126
DRACHEV V P	23	FEL'DSHTEYN F I	45	GAYSLE R V A	47
DRAGANESCU V	20,54	FELLER K H	13	GEBHARDT W	113

GEMBARZHEVSKIY G V	15	GORSHUNOV N M	26	HEJJAS I	93
GENERALOV N A	15	GORYUCHKIN A I	121	HENING A L	84
GEORGEBIANI A N	51	GOSHOKOV M M	64	HENNEBERGER F	39
GERASIMCHUK A G	20	GRABALIN M L	83	HERTZ J H	80,83
GERASIMENKO YU YE	81	GRABOVSKIY V A	38	HEUMANN E	61
GERASIMOV S I	91	GRACHEV G N	82		
GERASIMOV S V	15	GRAD V I	18	IGNACZ P N	115
GERASIMOV V B	10	GRASYUK A Z	20,54,124	IGNATAVICHYUS M	46
GERMAN O I	91	GRAZ F	111	IGNATAVICHYUS M V	42
GETTS K	125	GRECHUSHNIKOV B N	4	IGNATOV A G	120
GEYKO P P	43	GREYSUKH G I	61	IGNAT'YEV A G	86
GHITA C	34	GRIBENYUKOV A A	43	IGNAT'YEV YU A	93
GHITA L	34	GRIBENYUKOV A I	43	IGNAT'YEVA L A	40
GIBER J	49,50,54,69	GRIBOV L A	112	IGONIN G M	66
GINGUT D	51	GRIGORESCU D	20	IGOSHIN V I	28
GINIYATULLIN N I	91	GRIGORIU C	20	ILEV I K	67
GINZBURG N S	53	GRIGOROV S E	87	IL'ICHEV N N	10,30
GITERMAN KH F	91	GRIGOROV V A	3	IMENKOV A N	8,9
GITSU D V	6,7,57	GRIGOR'YAN V S	39	INOCHKIN M V	37
GLADKEVICH K G	116	GRIGOR'YANTS V V	57	INSHAKOV D V	1
GLADKOV L L	114	GRIGOR'YEV S F	46,48	IOGANSEN A A	80
GLADKOV S M	120	GRIGOR'YEV V A	82,92	IONIN A A	23
GLAZENKOV V M	26	GRIGOR'YEV V N	1	IOVA I	51
GLAZKOV D A	71	GRIGOR'YEVSKIY V I	56	IPPOLITOV I I	65,66,69,130
GLAZOV A L	49	GRIN' L YE	24	IRIMESCU D	44
GLAZOV G N	66	GRIN' YU G	73	IRMER G	39
GLEBOV A S	3	GRINEV A YU	75	ISADZHANYAN YE G	49
GLEBOV L B	58	GRISHANOV A N	92	ISAKOV P YA	54
GLIKIN L S	116,117	GRISHCHUK V V	38	ISAKOV V A	124
GLINKA YU D	109	GRITS S I	83	ISAKOV V K	26
GLOBOVA S N	22	GRITSENKO A P	117	ISAYEV M P	55
GLONTI V N	92	GROMOV A N	30,92	ISAYEV S K	30
GLOVA A F	17,120,126	GROMOV G G	122	ISHCHENKO YE F	83
GLUKHIKH I V	18	GROMOV G L	116	ISHKHANYAN S P	72
GLUSHCHENKO V V	86	GROMOVOY YU S	123	ISHUNINA T P	83
GLUSHKO B A	38	GROZEVA M	25	ISKAKOV M S	102
GOCHELASHVILI K S	66	GROZNYI A G	10	IVAKHNENKO G A	90
GODLEVSKIY A P	65	GRUDININ A B	47	IVANCHENKO A I	20
GOLDINA N D	34	GRUNWALD V R	80,83	IVANENKO M M	24
GOLDOBIN I S	8	GRUZINSKIY V V	63	IVANOV A M	36,78,96
GOLOVACHENKO A F	117	GRYAZNOV YU M	58	IVANOV A V	73
GOLTVYANSKAYA G F	51	GUBIN M A	16,108	IVANOV A YE	10
GOLUB' A P	120	GUBSKIY V I	99	IVANOV L M	47
GOLUB S L	63,66	GUDAKOVSKIY YU P	56	IVANOV M B	6,7,51
GOLUBENTSOV A A	17	GUDELEV V G	16	IVANOV M G	37
GOLUBEV G P	38	GUDKOV YU P	39	IVANOV N A	1
GOLUBEV P N	58	GULAMOV A A	45	IVANOV N G	26
GOLUBEV V V	71,73	GUL'BINAS V	112	IVANOV P P	92
GOLUBTSOV A A	46	GULYAMOVA E S	30	IVANOV S G	107
GOMONAY A I	112	GULYAYEV YU V	36,49	IVANOV V I	129
GONCHARENKO I A	58	GUMENNIK YE V	92	IVANOV V N	10
GONCHAROV S G	124	GUMENYUK A F	51	IVANOV V V	11,65
GONCHAROV V K	14,126	GURASHVILI V A	14,43	IVANUSHKINA L V	11
GONCHUKOV S A	34	GURENKO V A	11	IZAKSON G M	119
GONOV S ZH	122	GUREVICH S B	49	IZMAYLOV I A	54
GORBACHEV O V	58	GUREVICH V S	98	IZMAYLOV YU G	86
GORBAN' I S	38,51	GURO G M	122	IZYUMOV S V	14,43
GORBARENKO V A	116,117	GUROV YU V	57		
GORBATOVSKIY M V	75	GUR'YANOV A N	8,59,92	JAKAB I	49
GORBUNOV A L	101	GUR'YEV B M	57	JANI P	50
GORBUNOVA T M	25	GUSEL'NIKOV S M	93	JANOSSY M	17
GORDEYCHIK A G	19	GUSEV V E	49	JELINEK R	89
GORDEYEV A A	71	GUSEYNOV G D	108	JEZOWSKA-	
GORDIYENKO V M	18,52	GUSHCHA A O	1	TRZEBIATOWSKA B	44,129
GORDON YE B	27,80	GUSOVSKIY D D	8,92	JULEA T	34
GORELENKO A YA	12	GUTU I	20	JUNG B	93
GORLIN G B	83	GYULAMIRYAN A L	73	JUNGE K	59
GORNIY S G	120				
GOROKHOV YU A	112	HAENSEL H	32		
GOROKHOVSKIY A V	68	HALASZ F	22		
GOROZHANKIN E V	33	HALASZ L	66,69		
GORSHKOV V I	92	HEINRICH W	119		

KABANOV M V	90,131	KATSAVETS N I	104	KLABOCH L	89,93
KABEL W	82	KATUSHA V G	76	KLEINSCHMIDT J	61
KABELKA V	112	KAUFMAN I KH	38	KLEMENKOVA Z S	115
KABYKA S M	95	KAZAKEVICH A V	76	KLEMENTOV A D	26
KACHKIN S S	118	KAZAKOV A A	5	KLIMANOV A V	107
KACHURIN O R	17,120	KAZARIN M A	58	KLIMENTOV S M	104
KADAN V N	110	KAZARYAN R A	67,72	KLIMENT'YEV S I	83
KAGAN V D	48	KAZIYEV F N	104	KLIMKIN V F	93
KALAFATI YU D	118	KELL K YU E	93	KLIMKIN V M	65,66,69,130
KALASHNIKOV M P	128	KEL'MAN V M	33	KLIMOVA N V	57
KALENKOV S G	77	KERIMOV O M	15	KLINGER M I	50
KALINOV V S	3	KETSLE G A	104	KLINGER P	93
KALINUSHKIN V P	87	KHABIBULLAYEV P K	50,58	KLOCHAN YE L	39
KALITEYEVSKIY N I	54	KHACHIYAN K A	124	KLOCHIKHIN A A	105
KALITIN S P	51	KHADZHI P I	40	KLOCHKO A I	16
KALMYKOV A V	21,31	KHAKHALIN S YA	125	KLOVSKIY D D	59
KALOSHA I I	12	KHAKIMOV F KH	9	KNYAZEV I N	21
KALYUZHNAVAYA G A	122	KHALEYEV M M	5	ROBILZHANOV O A	8
KAMALOV SH R	45	KHANDOGIN V A	92	KOBTSEV S M	33
KAMENICKY I	21	KHANDOKHIN P A	5,55	KOCH E O	31,34
KAMENSHCHIKOV G D	61	KHANIN YA I	55	KOCHAROVSKAYA O A	33
KAMINSKI J Z	39	KHAPAYEVA L I	108	KOCHELAP V A	54
KAMINSKIY A A	4	KHARCHEV A V	7	KOCHETKOV A M	5
KAMINSKIY A S	104	KHASANOV I SH	41	KOCHETOV I V	14
KAMSHILIN A A	93	KHASANOV Z M	91	KOCHETOV YE A	39
KAMUZ A M	57	KHASENOV M U	23	KOCHIKYAN R V	44
KANAYEV A V	24	KHAT'KO T N	119	KOCSANY L	50
KANAYEV I F	77,80	KHAYDAROV D V	47	KOLCHANOV E A	121
KANCHIYEV Z I	56	KHAYDAROV R T	125	KOLDASHOV G A	126
KANDIDOV V P	73	KHAYKIN N SH	93	KOLEROV A N	112
KANETSYAN E G	71	KHAYRUTDINOV R F	79	KOLESNIK A S	109
KANORSKIY S I	88	KHILO P A	99	KOLESNIK A V	14,89
KAPAYEV V V	122	KHIMICHEV A I	105	KOLESOV B N	91
KAPLANSKIY F B	98	KHIZHNYAK A I	71,72	KOLEV I N	67
KAPLYANSKIY A A	103	KHLOPKOV N S	99	KOLIYENKO V P	59
KAPRANOV R I	58	KHMEL'NITSKIY G S	66,69	KOLOGRIVOV A A	128
KAPRIELOV V K	67		130	KOLOKOLOV N B	126
KAPTSOV L N	5,45	KHODZHABAGYAN G G	4	KOLOMIYETS T M	12
KARABUTOV A A	48	KHODZHANIYAZOV G A	100	KOLOSOV M A	49
KARACHEVTSEV V A	109	KHOKHLOV E M	21,79	KOLOSOV V N	101
KARADZHYAN G N	72	KHOLODNYKH A I	45	KOLPAKOV YU G	45
KARAMYAN A A	108	KHOMENKO S I	35	KOLYAGO S S	1
KARANDASHEV S A	8	KHOMENKO S V	25	KOMAROV V M	127
KARAPUZIKOV A I	21	KHOMICH V YU	34	KOMPANETS I N	107
KARASEV A V	15	KHOMYAK A S	12	KONDRATENKO V S	122
KARASEVA L G	37	KHOPIN V F	59	KONDRATYUK N V	2
KARASIK A YA	47,52,58	KHROMOV I YE	41	KONDYREV A M	116
KARDAPOLOVA M A	119	KHUDOSHIN A V	83	KONNIKOV S G	8
KARELIN A K	25	KHUDUKON B Z	78	KONON M R	99
KARETSKAYA S P	33	KHULUGUROV V M	1	KONONOV I G	17,18
KARGAPOL'TSEV V S	8	KHUSAINOV I A	10	KONONOV V A	1
KARLOV N V	21	KHVITIYA B D	96	KONONOV V N	92
KARMUGIN B V	85	KIKAS YA V	112	KONONOV V V	73,83
KARNAUKH B M	35	KIM A V	108	KONOSHENKO A F	28
KARNYUSHIN V N	21	KIM V M	59	KONOV V I	26
KARPECHEV V N	56	KIPEN' A A	9	KONOVALOV I N	15,26
KARPILENKO A V	83	KIRAKOSYANTS V YE	73	KONOVALOV V A	37
KARPOV S V	112	KIRDEYEV YU P	91	KONSTANTINOV B A	68
KARPOV S YU	8	KIRICHENKO T K	49	KONSTANTINOVA A F	4
KARPOVA M L	10,11	KIRILENKO A A	32,131	KONVISAR P G	4
KARPUN'KIN A V	100	KIRILLOV A YU	82	KONYASHCHENKO A V	4,52
KARTALEVA S S	24	KIRILLOVICH A A	4	KONYUKHOV B A	91
KARTAZAYEV V A	104	KISELEV A I	35	KONYUKHOV I D	91
KASHCHUK O L	120	KISELEV V F	105,123	KONYUSHKIN V A	4
KASHIN V V	59	KISELEVA K V	122	KOPTEV V G	2
KASHINSKIY O N	102	KISELEVSKIY L I	54	KOP'YEV V A	64
KASHKAROV P K	123	KISLENKO V I	101	KOPYLOV YU L	36
KASK N YE	122	KISLETSOV A V	21	KOPYT S P	7
KAS'YANOV A B	58	KISLITSYN B V	73	KOPYTIN YU D	65,67,130
KASYMDZHANOV M A	58	KITAYEVA G KH	45	KORBYTYAK D V	127
KATANAYEV I I	39	RITAYEVA V F	43,90	KORCHAGIN A A	4
KATRICH A B	83	KIYAK S G	122	KORCHEMSKAYA YE YA	73

KORENEV M S	94,97	KOZLOV D N	84	KULYAK I P	56
KORENEVA L G	44	KOZLOV G G	115	KULYASOV A G	36
KORESHEV S N	77	KOZLOVSKIY K I	127	KULYASOV V N	115
KORIK O YE	1	KOZLOVSKIY V I	6,116	KULEVSKIY V R	109
KORKISHKO YU N	58	KOZUCHKIN S M	43,49,124	KUMPYAK YE V	26,105
KORN G R	128	KOZYREVA YE B	112	KUNIN L L	115
KORNEV A F	4	KRAKOVETSKIY YU K	90	KUPCHENKO L F	51
KORNILOV S T	20	KRAMER W	61	KUPERSHMIT V YA	43
KORNILOV V G	19	KRASAVINA YE M	7	KUPRENYK V I	73
KORNIYENKO L S	13,30,56	KRASAVTSEVA N B	59	KUPRIN A V	124
KORNIYENKO N V	88	KRASHENINNIKOV V V	20	KUPRIYANOV N L	28,46
KOROBKIN D V	47	KRASIOLOV YU I	1	KURATEV I I	3
KOROBKIN V V	36,125	KRASNIKOV YU I	15	KURBASOV S V	20
KOROLENKO P V	29	KRASNOPEROV L N	80,111	KURBATOV A L	115
KOROLEV V I	11	KRAVCHENKO V B	36	KURDOGLYAN M S	27
KOROL'KOVA N V	13	KRAVCHUK A L	16	KURENKOV V V	33
KOROMYSLICHENKO V N	82	KRAVTSOV N V	5,30,47	KURILO I V	123
KORONKEVICH S V	77	KRAVTSOV S B	3	KURITSYNA YE F	107
KOROSTELIN YU V	6	KREBS K G	108	KURKOV A S	59
KOROTEYEV N I	120	KRECHET K I	125	KURLENKOV S S	7
KORSUNOV V V	32	KREICHI V	28	KURMANBAYEV M S	112
KORTOV V S	114	KREPOSTNOV P YE	11	KURNOSOV A K	14
KORUNNY V N	5	KREYNGOL'D F I	112	KUROCHKIN N N	65
KORYABIN A V	73	KRINDACH D P	73	KUROCHKIN V I	121
KORYAKOVSKIY A S	73	KRIVENKOV V I	57	KUROCHKIN V L	80,81
KORYUCHKIN A V	99	KRIVOSHLYKOV S G	94	KUROVA I A	105
KORYUKIN I V	55	KROETENHEERDT E	117	KUSAYKIN A P	32
KORZHOV YE I	77	KROMSKIY G I	11	KUSHCH V S	83
KOSICHKIN YU V	17	KRUGLIK G S	2	KUSHNIR V R	55
KOSITSYN V YE	67	KRUPINA V L	59	KUSHNIRENKO I YA	109
KOSOBUKIN V A	40	KRUZHALOV S V	6	KUSMATOV O E	63
KOSTANYAN G YE	6	KRYLOV P S	16	KUTANOV YU I	121
KOSTIKOV K K	81	KRYLOV V N	46	KUTOVOY V P	94,95
KOSTIKOV S M	79	KRYLOV V V	50	KUTSAK A A	83
KOSTIN V P	67	KRYLOVA D D	108	KUZAKOV S M	105
KOSTOLOMOV A F	16	KRYUCHENKO YU V	127	KUZ'MENKO B P	89,95
KOSTUR V G	117	KRYUKOV I V	4,52	KUZ'MENKO V A	21
KOSTYSHIN M T	12	KRYUKOV P G	4,28,52	KUZ'MENKO V P	129
KOSTYUCHENKO V P	94	KRYUKOVA I V	7	KUZ'MIN A N	7
KOSYAKOV V I	94	KRYZHANOVSKIY V I	12	KUZ'MIN G P	21
KOSYNKIN V D	15	KUBLASHVILI G S	68	KUZ'MIN N N	48
KOTKOV A A	23	KUBYSHKIN A P	18	KUZ'MIN V V	48
KOTIK'AREVSKIY M B	51	KUCHERYUK V I	91,101	KUZ'MINOV YU S	129
KOTOV G A	59	KUCHINSKIY A A	19,20	KUZ'MINSKIY A L	73
KOTOV V M	49	KUCHIYEV M YU	105	KUZNETSOV A A	24
KOTSUBANOV V D	119	KUCHMA I G	12	KUZNETSOV A V	8
KOVACS J	115	KUCHMA V I	123	KUZNETSOV N T	1
KOVAL'CHUK L V	19,20,21	KUDINOV I A	52	KUZNETSOV P I	36
KOVALENKO L L	45	KUDRIN A B	87,94	KUZNETSOV P V	121
KOVALENKO S YE	27	KUDRYASHOV I A	75	KUZNETSOV V V	13
KOVALENKO V F	105	KUDRYASHOV V A	42,46	KUZOVKOVA T A	12
KOVALENKO V M	117	KUDRYAVTSEV A A	51,126	KVITENKO YU N	58
KOVALEV A A	105	KUDRYAVTSEV YE M	18		
KOVALEV A S	79	KUKHARCHIK P D	59	LAKHIN V N	105,117
KOVALEV I O	21	KUKHLEVSKIY S V	15	LAKHNO P R	35
KOVALEV V A	64	KUKHTAREV N V	9	LAKIZA YU V	117
KOVALEV V P	127	KUKIN V N	123	LAMEKIN P I	34
KOVALEV V I	74	KUKSHIN A I	75	LAMEKIN V F	76
KOVALEVSKIY V I	37	KUKUSHKIN I V	112	LANCRANJAN I	12,31
KOVAL'KOVA YE E	64	KULAGIN N A	51	LANDA P S	45
KOVSH I B	34,83	KULAKOV P V	80	LANIN YU I	61
KOVTONYUK N F	58	KULAKOV V V	65	LAPIN N A	96
KOZEL S M	94	KULESH V P	94	LAPOTKO LO	74
KOZEYEVA L P	11	KULEVA M G	37	LARIKOV A V	10
KOSHEVNIKOV A V	54	KULEVSKIY L A	2	LARIONOV A L	108
KOSHEVNIKOV G N	129	KULIKOV O L	19,21	LARIONTSSEV YE G	30,39
KOSHEVNIKOV N M	76	KULIKOV V D	94	LAURINAS V CH	104
KOSHEVNIKOVA I N	55,74	KULISH N P	12	LAVRENT'YEV A A	117
KOSIK V I	77	KULIYEV SH M	104	LAVRISHCHEV S V	80
KOSINCHUK V A	72	KUL'TEPIN N G	94	LAVROV N A	22
KOSINTSEV V I	64,67,68,70	KULUMBAYEV E B	127	LAZAREV S V	67,130

LAZHINTSEV B V	19	LUKOMSKIY V P	38	MARIS Z	88
LEBEDEV F V	17,120,126	LUK'YANCHUK B S	80,82	MARKOSYAN A A	4
LEBEDEV S S	63,68	LUNIN B S	81	MARKOVICH I E	86
LEBEDEV V B	117	LUNTER S G	108	MARKUSHEV V M	44,108,113
LEBEDEV V V	45	LUTSENKO A P	124	MARTI L	77
LEBEDEVA T P	37	L'VOV B V	5	MARTYNCHENKO V I	105
LEBEDEVA V V	24,110	LYAKHOV G A	38,40,55	MARTYNENKOV V M	72
LEDNEV M G	18	LYALIKOV A M	78	MARTYNOVICH YE F	3
LEGOVICH YU S	66	LYAMSHEV L M	50	MARUGIN A V	7
LEKSOVSKAYA N P	116	LYASHKO O M	83	MARUNKOV A G	113
LEKSYUTINA N G	32	LYBA O M	117	MASALOV S A	131
LELEVKIN V M	127	LYSAK YU D	42	MASHINSKIY V M	59
LEMESHO B D	90	LYSOY B G	4	MASHKOVICH S B	121
LEND'YEL V I	127	LYTKIN A P	23	MASTEROV V F	106
LENIUS V N	117	LYUBIMOV V V	10,71,74	MASYCHEV V I	23,83
LENK R	62	LYUTINSKIY V V	13	MATELESHKO A V	106
LEN'KOV S I	90			MATEVOSOV G A	76
LENKOVA G A	90	MACHAC P	7	MATROSOV I I	65
LEONOV S N	23,83	MAK A A	5,71	MATS R E	1
LEONOV YE I	104	MAKAROV K N	49,124	MATSKO M G	110
LESHENYUK N S	22	MAKAROV N A	10	MATSONASHVILI R B	92
LETOKHOV V S	103	MAKAROV V N	4	MATVEYEV A N	44
LEV B I	105	MAKAROVSKIY A P	90	MATVEYEV A Z	74
LEVCHENKO O G	77	MAKHOMET V I	35	MATVEYEV B A	8
LEVCHUK YE A	43	MAKHOTKIN V YE	57	MATVEYEV O I	113
LEVIN I M	70	MAKHSUDOV B I	9	MATVEYEVA T A	53
LEVIN M B	11,13	MAKOGON M M	131	MATVIYENKO G G	69,130
LEVINSKIY A V	119	MAKORETSKIY V A	129	MATYUSHENKO V I	27,80
LEVKULICH A R	106	MAKSIMCHUK A M	125,128	MAYBORODA V S	95,96
LEVOSHKIN A V	11,12	MAKSIMENKO V V	99	MAYMISTOV A I	40,62
LEVSHIN L V	104	MAKSIMOV S K	123	MAYOROV S A	126
LEYFEROV B M	104	MAKSIMOV V V	125	MAYYER A A	60
LEZHEN A S	68	MAKSIMOV YU P	119	MAZURAK Z	44
LIBERTS G V	95	MAKUSHKIN YU S	131	MAZURENKO YU T	39,40
LIDER G	108	MALASHCHENKO A A	117	MEDIANU R	34,77
LIDER K F	112	MALASHENKOV V A	11	MEDVEDEVA L V	58
LIKHANSKIY V V	17,49	MALEVICH I A	129	MEL'CHENKO S V	26
LIKHOLIT I L	106	MALIKOV R F	77	MELEDIN V G	87
LIPATOV N I	34	MALININ B G	11	MELEKHOV A V	14
LIPOVSKIY I M	68	MALINOVSKIY V K	77,80	MELENTOVICH F N	102
LIPPENYI T	69	MALINOWSKI M	113	MELESHKIN A V	68
LIPPMAN YA	107	MAL'KOVA G I	24	MELESHKO V P	31
LIPSKAYA O A	63	MAL'KOVA N YU	56	MELKONYAN A A	73
LISITSA M P	12,112,114	MALOV A N	15,95	MELKOZERNOV A N	111
LISITSYN V M	94	MALOVA A M	113	MEL'NICHENKO YU A	78
LISTVIN V N	94	MAL'TSEV D V	110	MERKULOVA S P	123
LITOVCHENKO V G	127	MAL'TSEVA G A	67	MESHALKIN YE A	124,127
LIUKONEN R A	14,23	MAL'TSEVA N A	95	MESYATS G A	26,105
LOBACHEV V A	6,100	MALYSH N I	12	METERSKIY V YA	96
LOBANCHEV M I	57	MALYSH V N	59	MEZEI P	17
LOBANOV A N	33	MALYSHEV A N	88	MEZENOV A V	117,127
LOBANOV L M	95	MALYSHEV V S	121	MIGEL' V M	127
LOBODA S A	25	MALYSHEV YU M	84,113	MIHAILESCU I N	84
LOGINOV N A	36	MALYUTA D D	25,49,124	MIKHAL' O F	60
LOGINOV V A	73	MALYUTIN A A	10,30	MIKHAL'CHENKO A A	93
LOGUTKO A L	95	MAMAYKIN V S	117	MIKHALENKO V N	51
LOKHMATOV A I	90	MAMEDOV A K	104	MIKHAYLENKO M V	36
LOKSHIN B V	115	MAMYSHEV P V	47,52	MIKHAYLICHENKO YU P	25
LOKSHIN YE P	43	MANAK I S	31	MIKHAYLOV A V	42
LOMAKIN A N	56	MANDEL'SHTAM S L	124	MIKHAYLOV A YE	2
LOMAKIN V G	89	MANENKOV A A	37,104	MIKHAYLOV A YE	55
LOMAYEV G V	121	MANICHEV I A	52	MIKHAYLOV S I	71
LOMAYEV M I	26,105	MANOKHIN A I	117	MIKHAYLOV V A	1
LOPOTA V A	120	MANOKHIN A YE	44	MIKHAYLOV V B	89
LOSEV L L	124,127	MANSUROV A N	77	MIKHAYLOV V N	47,50
LOSEV V F	26	MANYKIN E A	42	MIKHAYLOV V P	52
LOSHCHILOV V I	56	MARAKHONOV V M	5	MIKHAYLOV YU A	125,128
LOSHKAREV V V	111	MARCHENKO O M	54	MIKHAYLOV YU N	35
LOTKOVA E N	23	MARCHENKO V M	73	MIKHAYLOVA G V	115
LOZOVY V I	84	MARCHEVSKIY F N	62,75	MIKHAYLOVA M P	56
LUCHINSKIY D G	38	MARGOLIN N S	118	MIKHEYEV L D	24
LUKIN V A	54	MARIPOV A	77	MIKHNOV S A	1,3

MIKLA V I	106	MURAV'YEV A V	6	NIKITIN V V	16,100
MILEN'KIY M N	64,68	MURAV'YEV I I	16	NIKOLAYEV A N	68
MILL' B V	4	MURINA T M	1,6,87,100,122	NIKOLAYEV F YA	92
MIL'MAN I I	114	MURYNIN A B	65	NIKOLAYEV G N	34
MILOSLAVSKIY V K	115,121	MURZIN A G	12	NIKOLAYEV G YE	13
MINASYAN KH YE	73	MURZIN V N	6	NIKOLAYEV V A	89
MINASYAN L L	72	MUSCAL'J G L	34	NIKOLAYEV V N	37
MINASYAN V V	13	MUSIKHIN V A	81	NIKOLAYEV YU P	10
MINOGIN V G	106	MUSIN V M	50	NIKOLENKO V F	63
MIRETSKIY B P	24	MUSTAFIN R KH	77	NIKOL'SKIY I K	119
MIRONENKO S I	2	MUZYCHENKO O M	96	NIKOL'SKIY M YU	36
MIRONOS A V	76	MYASNIKOV A YU	26	NIKONOROV A P	79
MIRONOV A B	71	MYL'NIKOV V S	36,78	NIKONOROV N V	58
MIRONOV A V	16	MYSHKIN V F	62	NIKUL'CHIN A V	16,108
MIRONOV B P	102	MYSLIK V	7	NILOV YE V	12
MIRONOV I A	119	MYULLER G O	105	NISHANOV V N	50
MIRONOV V I	64	MYZNIKOV YU F	15	NISHCHIK A P	32
MIRONOV YE P	11			NIZAMETDINOV M M	10
MIRONYCHEV A P	57	NABOYKIN YU V	109	NIZIYENKO YU K	72
MIROV S B	3,4	NADEZHDINSKIY A I	17	NOACK F	35,82
MIRSAGATOV M A	56	NADKHIN A I	27,28	NOGINOV M A	51
MIRTADZHIYEV F M	58	NAGLI L YE	113	NOR-AREVYAN V A	19
MIRZAYEV A T	63	NAKORYAKOV V YE	102	NOSOVA L V	30,74
MIRZOYEV F KH	122	NAMITOKOV K K	15	NOVAK M	22
MISHAKOV G V	56	NANIY O YE	39	NOVIK M I	99
MISHCHENKO YU V	96	NAPARTOVICH A P	14,17	NOVIKOV A D	111
MISHIN I V	68	NARYSHKINA S I	113	NOVIKOV B V	108
MISHURINSKIY B YE	90	NASEL'SKIY S P	2	NOVIKOV M M	45
MIS'KEVICH A I	25	NASIBOV A S	6	NOVIKOV O G	62
MITCHENKOV V M	65,66,130	NASIBULLIN M I	90	NOVIKOV S A	85,91
MITINA N I	119	NASTICH YU N	70	NOVIKOV YE G	1
MITROVTSIY I M	110	NASYROV K A	20	NOVITSKIY A P	76
MITSEL' A A	131	NATAROV S YU	2,35	NOVODEREZHKN V I	48
MITYAGIN YU V	6	NATSVLISHVILI A G	96	NOVOPASHIN M D	96
MNATSAKANYAN T A	67	NAUMCHIK V D	61	NOVOSELOV A G	29
MNIKH N M	89	NAUMKIN N I	47	NOVOSELOV A N	67
MNUSKIN V YE	13	NAUMOV A F	95	NOVOZHILOVA L G	7
MOCHALOV I V	46	NAUMOV N V	63	NOYMAN V	108
MOISEYENKO V YU	95	NAVROTSKIY V T	127	NOZDRIN YU N	6
MOISEYEV V G	21,31	NAYDICH YE I	9	NURLIGAREYEV D KH	28
MOKHLAY N V	32	NAZARENKO P N	2		
MOKRUSHIN YE V	93	NAZAROV I	68	OBOROTOV V A	58
MOLODYAKOV S A	76	NAZAROV I M	64,70	OBRAZTSOV S P	98
MOLOTKOV N YA	62	NAZAROV V N	13	OCHKIN V N	111
MONECKE J	39	NAZARYAN YE KH	13	ODABASHYAN G L	17
MONOZON B S	40	NECISOIU T	31	ODINTSEV I N	96
MONTANARI S G	67	NEFED'YEV L A	78	ODINTSOV A I	24
MORDKOVICH N YU	81	NEIZVESTNYI I G	47	ODINTSOV V I	13
MOROKINA G S	114	NEKRASOV G L	105	ODULOV S G	74
MOROZOV A V	104	NEKRASOV YU I	96	OGUROK D D	112
MOROZOV N V	26	NEL'SON D K	105	OKATOV M A	118
MOROZOV V A	96	NEMCHINOV I V	86	OKHOTNIKOV O G	57
MOROZOV V P	93	NEMENOV M I	37	OKHRIMENKO B A	109
MOROZOVA I S	58	NEMES G	34	OXS YE A	126
MOSEYEVSKIY V A	3	NEMTSOV B YE	103	OLEKSENKO P F	57
MOSHKUNOV S I	125	NEPORENT B S	13	OLEYNIK O I	74
MOSIYEVSKIY V A	43	NEREZOV S N	85,88	OMEL'YANCHUK A M	17
MOSKALENKO A V	35	NERKARARYAN KH V	40	ONISHCHENKO YU I	95
MOSKALENKO M A	55	NESHIMENKO YU P	26	OPARIN A N	77
MOSKVITINA YE N	79	NESTERENKO A A	21	OPRAN M	32
MOSTEPANENKO V M	113	NESTEROVA Z V	60	ORAYEVSKIY A N	27
MOSTOVNIKOV V A	122	NESTRIZHENKO YU A	84	ORISHICH A M	22,69,125
MRUZ V	125	NEUSTRUYEV V B	59,92	ORLICK H	121
MUELLER E	113	NEVDAKH V V	83	ORLOV A P	101
MUELLER R	61	NEZHEVENKO YE S	106	ORLOV A V	87
MURKIN P A	108	NIKANOROVA YE A	49	ORLOV L N	83
MURHTAROV E I	114	NIKIFOROV A YU	79	ORLOV S YU	30
MUKOSEYEV YU K	81	NIKIFOROV S M	17,122	ORLOV YE P	28
MULDAKHMETOV Z M	104	NIKIFOROV V G	12	ORLOVA I B	82
MUL'GI A S	91	NIKITCHENKO T YU	15	ORLOVA L A	118
MULLER A I	102	NIKITICHEV A A	4	ORMANT N N	105
MURATIKOV K L	49	NIKITIN S YU	111	OSADCHEV L A	60

OSIKO V V	10	PAVLOV S A	6	PODENAS D	53
OSINTSEV A V	97	PAVLOVA G P	119	PODOBEDOV V B	111
OSIPOV A P	35	PAVLOVA N I	44	PODOLEANU A GH	36
OSIPOV O P	120	PAVLOVSKIY B A	97	POET V E	27
OSIPOVA N V	25	PAVLYUK A A	11	POGORELOV I A	99
OSIPOVICH G N	117	PAZYUK V S	28	POGOSYAN E M	52
OSOVITSKIY A N	59	PECHENKIN I V	94	POKASOV P V	109
OSTANIN S A	65	PECHENOV A N	6,106	POKATILOV YE P	38
OSTROUMOV V G	51	PECKA J	5	POKORNY J	97,114
OSTROVSKIY A V	107	PECZELI I	22,66,69	POKROVSKIY V P	30
OSTROVSKIY V A	91	PEISKER F	117	POKROVSKIY YU A	118
OSTROVSKIY YU I	70,77,97	PEKA G P	105	POKUSAYEV B G	102
OSTSEMIN A A	90	PEKAR' G S	57	POLACK W	32
OSVETIMSKIY A A	94,97	PEKAREK L	28	POLETAYEVA YE V	45
OSYKA M I	60	PELIYEVA L A	110	POLEZHAYEV V V	77
OTORBAYEV D K	127	PEL'MENEV A G	19	POLGAR K	87
OTTO A	117	PENCHEVA V KH	8	POLISHCHUK I YA	15
OVCHARENKO A B	100	PENDYUR S A	106	POLISHCHUK S B	95
OVCHINNIKOV A V	9	PENIN A N	45	POLIVANOV YU N	108
OVCHINNIKOV O B	50	PEN'KOV S N	54	POLIYENKO A N	116
OVCHINNIKOV S N	83	PEREPECHKO S I	70	POLONSKIY L YA	125
OVCHINNIKOV S S	15	PERESETSKIY M L	120	POL'SKAYA M E	21
OVCHINNIKOV YU B	103	PERMINOV S M	59	POLUKHIN V P	94
OVOD V I	97	PERMINOVA V N	59	POLUSHKIN I N	108
OVSEYCHUK S I	3	PERMOGOROV S	107	POLUYANOV G I	118
OZEROV M F	51	PESHKO I I	52	POLYAKOV B I	107
		PESTRYAKOV YE V	2	POLYAKOV V YE	55,114
PAGUBKO A B	44	PETRAKOVA T V	8	POLYNKIN A V	118
PAK G T	8	PETRASH G G	58	PONATH H E	62
PAK S K	1	PETRENKO A D	42	PONOMAR' V V	56
PAK V G	57	PETROSYAN A G	6	PONOMARENKO A G	20,69,125
PAK V S	54	PETROSYAN YE G	49	PONOMAREV N M	4
PAKHOMOV G V	43	PETROV D G	76	PONOMAREV YE A	90
PAKHOMOV L N	6	PETROV G D	105,117	PONOMAREV YU N	131
PAKHOMOV O V	107	PETROV V A	118	PONOMAREVA N A	125
PAKHOMOV S A	86	PETROV V F	19,48	PONOMAREVA N V	127
PAL'CHIKOV V G	124	PETROVA G P	97	POPA O A	98
PAL'TSEV L L	51	PETROVA I YU	44	POPESCU I M	30,36,44
PANASYUK A I	117	PETROVICH V I	44	POPOV A M	79
PANAYOTOV KR P	36	PETROVSKIY G T	58	POPOV A V	122
PANCHENKO A N	27,105	PETRUSEVICH YU M	97	POPOV L N	90
PANCOSKA P	13	PETRUSHEVICH YU V	25	POPOV V F	117
PANIN A M	124	PETRUSHIN A G	69	POPOV V V	73
PANKOV V L	100	PETUKHOV V A	102	POPOV YU M	75,130
PANKRATOV A V	79	PETUKHOV V O	18,22	POPOV YU V	35
PANOV A A	104	PEVTSOV V F	7	POPOVA L G	11
PANTELEYEV V I	33	PEYEVA R A	36	POPOVA M N	108
PANTELEYEVA T R	84	PICHUGIN S YU	28	POPOVA O A	42
PAPAZYAN T A	52,72	PIGUL'SKIY S V	43	POPOVA O P	52
PAPERNYY S B	48	PIGURNOV P N	39	POPOVA T B	8
PARFENOV A V	107	PIKOVSKIY A S	5	POPOVICHEV V V	8
PARFENOV V A	5,6,47	PILIPETSKIY N F	19,21,46	POPUSHOY V V	6,7,57
PARFENOV V G	55	PIMENOV YU N	42,46	FOROYKOV A YU	79
PARFIANOVICH I A	1	PIROGOV V YU	40	PORUCHIKOV P V	49
PARINOV S T	118	PIROGOVA I YU	44	PORYADIN YU D	75
PARITSKIY L G	83	PIRYATINSKIY YU P	9	PORYVKINA L V	26
PARMINOV S M	60	PISAREK T	33	POSKREBKO T A	52
PARMINOVA V N	60	PISAREV V S	91,97	POSTOVALOV V YE	84
PARSHIN YE P	101	PISKAREV M G	13	POSUKH V G	22,69,125
PARSHKOV O M	61	PISKARSKAS A S	114	POTALITSYN YU F	26,105
PARVANOV O P	67	PISKUNOV D I	123	POTAPOV A I	55,114
PARYGIN V N	49	PIS'MENNY V D	43,124	POTAPOV M G	93
PASECHNIK YU A	57	PITEY V N	41	POTAPOV S K	111
PASHIN A YE	50	PI'OVARCHIK V F	83	POTAPOVA N I	100
PASHININ P P	2,10,35,118	PIVTORAK V A	95	POTATURKIN O I	77
PASHKEVICH V V	22	PLATONENKO V T	52	POTORIY M V	110
PASTERNAK YA A	60	PLESKACH A V	101	POVELITSYN V A	98
PASTOR A A	15	PLOSCEANU C	32,27	POZHAR V E	52
PASYUKEVICH A N	83	PLOTNICHENKO V G	61	POZHIDAYEV V N	70
PATSKUN I I	38	PLOTNIKOV A F	75	POZNYAK R I	13
PAVLIKOV A I	92	PLOTNIKOV G S	105	PREDKO K G	34
PAVLISHIN I V	29	PLYASULYA V M	45	PRESNYAKOV YU P	95
PAVLOV N V	22	PLYATSKO S V	105,123	PRIKLONSKIY A I	98

PRILEZHAYEV D S	12	REVINSKIY V V	13	SADAKOV O S	95
PRISTREM A M	116,122	REVOKATOV O P	97	SADIKOV S N	94
PRIVALOV V YE	16	REYNGAND N O	77	SADOVSKIY V D	121
PRIYEZZHEV A V	92	REYNOT T	107	SAFIN B M	123
PROKHORENKO V I	29,53	REZNIKOV P V	6	SAFONOV A N	104,121
PROKHOROV A M	1,3,6,8,18	REZNITSKIY A	107	SAFONOVA N V	64
	26,34,47,52	RICHTER P	22,49,50	SAFRONOV G S	78
	53,58,66,73		54,66,69	SAFRONOVA U I	130
	79,84,92,100	RICHTER TH	40	SALAMAKHA B S	25
	104,122,126	RIDOSIC D	98	SALEWSKI K D	99
PROKOF'YEVA N I	112	RIKHTER L YA	68	SALO A YA	102
PROKOPOV A P	18	RINKEVICHYUS B S	92,98,103	SALUN V S	80,118
PROKUDINA T M	64,67	RITYN' YE N	19	SAMARTSEV V V	78
PROTASEVICH V A	121	RODE A V	125	SAMIGULIN K R	10
PROTS' V I	53,74	RODICHKIN V A	19,20	SAMODEYEVA T I	121
PROTSENKO YE D	16,20,108	RODIN N V	115	SAMOKHVALOV I V	64,69,130
PROVOROV A S	15	RODIONOV A YU	19,20	SAMORUKOVA T P	24
PRZHIBEL'SKIY S G	38	ROGACHEV A A	9	SAMSONOV A M	70
PUCHENKOV O V	50	ROKHMANOVA V O	51	SAMSUYEV K B	5
PUGACHEV A M	77	ROMANENKO P F	12	SANAMYAN T V	6
PUGACHEV G S	87	ROMANOV P YU	98	SANDULOV D B	90
PUKHLIY ZH A	4	ROMANOVSKIY M YU	38	SAPOZHNIKOV O A	48
PUKHLOV G M	74	ROMANOVSKIY O A	70	SAPOZHNIKOV S M	7,8
PUL'KIN S A	41	ROSHAL' S B	111	SAPRYKIN L G	4
PURETSKIY A A	81	ROSTOVTSYEV YU V	108	SARBAY O G	105
PUSCAS N N	44	ROTARU A KH	40	SARDARLY R M	108
PUSHKINA T N	8	ROTOMSKIS R I	114	SARKISOV O M	79,30
PUSTOVALOV V K	81	ROZANOV N N	29	SARKISYAN A A	21
PUSTOVALOV V V	127	ROZANOV V B	127,128	SATOV YU A	43,49,124
PUSTOVOYT V I	52	ROZANOV V V	98	SAUER E	61
PUTILIN V M	14	ROZENSHTYEN A Z	98	SAVEL'YEV A D	26,84
PUZYREV V N	128	ROZHDESTVENSKAYA V I	64,66	SAVIN O	97
PYA'AKHIN M V	34		67,68	SAVIN V I	65
PYATKOV A V	88		70,130	SAVINA V N	32
PYATNITSKIY L N	125	ROZHDESTVENSKIY YU V	106	SAVINOV S YU	111
PYZIN G P	86	ROZHDESTVIN V N	35	SAVINTSEVA L A	55
		ROZSA K	17,31	SAVITSKENE ZH	112
QUAD R	24	RTISHCHEV V A	35	SAZHINA N N	23
		RUBANOV A D	11	SAZONOV V N	41
RABINOVICH E M	57	RUBIN GY	17	SCHASTLIVTSEV V M	121
RABKIN L M	111	RUBINOV A N	110	SCHUBERT M	38,62
RADCHENKO V V	10,11	RUBINOV YU A	17,19	SEDEL'NIKOVA A E	110
RAETCHI V	84	RUDENKO K V	122	SEDOV B M	11,100
RAGUL'SKIY V V	74	RUECKMANN I	41	SEIDEL V	118
RANDOSHKIN V V	36	RUEHLE K	61	SELEZNEV V N	75
RASHKOVICH L N	98	RUKOLAYNE S A	8	SELISHCHEV A V	41
RASTOPOV S F	118	RUPASOV A A	125	SELISHCHEV S V	117
RASTORGUYEV D L	50	RUSANOV S YA	59	SELIVANOV YU G	8
RASTORGUYEV YU G	84,113	RUSOV V M	118	SEL'KIN A V	40
RASTRENIN O V	106	RUSTAMOV S R	4	SEMAK D G	106
RASULOV I K	63	RYABOV A I	2	SEME NOV A T	8
RAYKIN L G	123	RYABOVA L A	80,118	SEME NOV L P	63,70
RAYZER YU P	127	RYABTSEV G I	7	SEME NOV V B	1
RAZBIRIN B S	105	RYABTSEV I I	81	SEME NOV V I	49,50
RAZDOBARIN G T	124	RYADNOV S N	109	SEMINOGOV V N	42
RAZDOBREYEV A A	120	RYBA-ROMANOWSKI W	44	SEMIOKHIN I A	81
RAZENKOV I A	64	RYBAK A M	76	SEMIO SHKO V I	38
RAZHENKOV YE G	22	RYBAKOV M M	94	SENATSKIY YU V	11
RAZZHIVIN A P	114	RYBAKOV YE YE	64	SERAK S V	105
REBANE L A	114	RYBALTOVSKIY A O	56	SERBIN A I	59
RECHKALOV V G	86	RYCHEV M V	120	SERBINOV I A	80,118
RED'KO T P	106	RYLOV G YE	72	SERDYUCHENKO YU N	60,84
REDKORECHEV V I	10,45	RYLOV V A	50	SERDYUKOV V I	114
REKOV G I	86	RYSANEK V	98	SEREBRYAKOV V A	12,60
REMIZOV S A	35	RYUMINA A P	116		125,127
REMIZOVICH V S	62	RYVKIN B S	37	SEREGIN A M	20
REPIN P B	80	RYZHIKOV YU P	83	SERGEYEV A N	60
RESHETNIKOV V I	71			SERGEYEV P B	26
RESHETOV V A	42	SAAR K YU	26	SERGEYEV S N	84
RESHETOV V I	6,106	SAARI P	109	SERGEYEV V V	73
RESHINA I I	123	SAARI P M	78	SERGIYENKO A V	45
REUSHEV M YU	15	SABAD YE P	127	SERKIN V N	47
REVA M G	13	SABOTINOV N	25	SEROV YE YU	99

SEVAST'YANOV V S	115	SHLYAZHAS R B	101	SIZOV V D	27,89
SEYIDLI G S	104	SHLYUKO V YA	95,96	SIZYKH D V	107
SHABANOV M F	35	SHMAGIN YU I	116	SKASYRSKIY YA K	6
SHABLINSKIY O YE	63	SHMAL'GAUZEN V I	73,75	SKEPKO A G	82
SHADRIN G A	77	SHMIGLYUK M I	41	SKLIZKOV G V	11,125,128
SHAFEYEV G A	80,82	SHNITSER P I	3	SKLOVSKIY YE I	35
SHAKHVERDIYEV E M	104	SHOKALO V I	5	SKLYAROV YU M	62
SHAKIR YU A	18	SHOKHUDZHAYEV N	9	SKOBELEV I YU	125
SHALAGIN A M	104	SHOR V V	91	SKOBLIK I P	15
SHAMANAYEV V S	69,130	SHOTOV A P	8,17,111	SKORNYAKOV G P	129
SHAMONOV I I	110	SHPAK I V	16	SKOROBOGATOV P K	79
SHANDYBINA G D	59	SHPAK M T	29	SKOSYRSKIY YA K	116
SHAPKIN P V	6	SHPENIK YU O	26	SKOVOROD'KO S N	15
SHAPOVALOV V N	11	SHPIL'KIN A D	51	SKRIPCHENKO A I	120
SHARIF G A	55	SHPIL'RAYN E E	15	SKRIPKIN A M	63,66,69
SHARIN F G	10	SHPUGA S M	30	SKRIPKO A S	59
SHARKOV A V	4	SHRAYNER YU A	123	SKRIPKO G A	2,52
SHARKOV B YU	125	SHTARKOV A L	122	SKVOR Z	50
SHARKOV V F	29	SHTENTSEL' T V	50	SLEPOY B KH	98
SHASTIN V N	6	SHTIRAND O	28	SLESAR' A S	99
SHATALIN S V	94	SHUBIN A A	123	SLESAREV A G	63
SHATKOVSKIY YE V	106	SHUBIN M V	115	SLINKIN S V	81
SHAVKUNOV S V	5	SHUBIN N N	15	SLIVKA V YU	33,110
SHCHAVELEV O S	100	SHUGAN I V	69	SLOBODSKAYA P V	19
SHCHELEV M YA	60,84	SHULENIN A V	12	SLONOV V V	73
SHCHEPINA L I	3	SHUL'GA A M	114	SMERDOV V YU	31
SHCHEPINOV V P	96,97	SHULYAT'YEV V B	92	SMIRNOV A S	21,31
SHCHERBAKOV I A	2,35,51,60	SHUMILIN V V	11,83	SMIRNOV A V	74
SHCHERBAKOV V N	66	SHUMSHCHUROV A V	125	SMIRNOV D F	41
SHCHERBAKOVA G A	70	SHUMSKIY S A	127	SMIRNOV D V	94
SHCHERBO A B	26	SHURUKHIN B P	57	SMIRNOV G I	37
SHEBNEV YE P	101	SHUSTIN O A	98	SMIRNOV V A	19,39,51
SHEKHOVTSOV V N	51	SHUTOV D A	43	SMIRNOV V I	96
SHELAPUTIN I I	127	SHUVALOV L A	111	SMIRNOV V L	76
SHELAYEV A N	5,30	SHUVALOV V A	81,111	SMIRNOV V N	30,116
SHELELYAK M Z	60	SHVARKUNOV S N	56	SMIRNOV V V	64,84
SHELEPIN L A	122,123	SHVARTS K K	131	SMIRNOVA A D	60
SHELOVNIKOV A S	16,108	SHVARTSBURG A B	59	SMOLIN N I	96
SHELOPUT D V	49,50	SHVEDOV L N	96	SNEGOV M I	13
SHENYAVSKIY L A	73	SHVETSOV YU V	51	SNEZHKOVA G YU	82
SHEPELENKO A A	20	SHVEYGERT I V	31	SNGRYAN YE A	52
SHEREMET'YEV A G	130	SHVEYGERT V A	31	SNITKO O V	57
SHEROZIYA G A	106	SHVINDT N N	108	SNYTNIKOV V N	22
SHERSHNEV YE B	122	SIBASHVILI A S	105	SNYTNIKOV VAL N	128
SHERSTOBITOV V YE	19	SICHLA F	60	SNYTNIKOV VL N	125
SHESTAKOV A P	33,82	SIDOROV A I	103	SOBEL'MAN I I	88
SHESTAKOV A V	1,3	SIDOROV N V	114	SOBOLEV B P	3
SHESTAKOV S D	118	SILANT'YEV A YU	127,128	SOBOLEV N N	111
SHESTOPALOV V P	131	SILICHEV O O	30,106	SOBOLEVA L V	108
SHEVCHENKO T B	69	SILIN V P	75,124	SOCACIU M	97
SHEVCHENKO V G	34	SIL'NITSKIY A F	70	SOKOLOV A V	13
SHEVEREV V A	20	SIMON M	24	SOKOLOV S A	36
SHEVNIN A M	16	SIMONOV A P	107	SOKOLOV V O	57
SHIBARSHINA G D	40	SINEL'NIKOV V P	48	SOKOLOV V V	119
SHIBKO A N	120	SINITSA L N	114	SOKOLOVA I G	78
SHICHKIN S V	84	SINITSYN D V	23	SOKOLOVA L K	49
SHIKANOV A S	125,128	SINITSYN G V	76	SOKOLOVA YE A	81
SHIKANOV A YE	127	SINITSYN M A	37	SOKOLYUK N T	81
SHIL'NIKOV A N	124	SINKYAVICHYUS G	5	SOKURINSKAYA YE V	70
SHILOV V B	13	SINTYURIN G A	70	SOLDATKIN N P	65
SHILOV V YU	96	SINYUKOV M P	47	SOLOMAKHO G I	77
SHIMANSKAYA N V	36	SIRAZETDINOV V S	71,73	SOLOPOV V M	57
SHIPOV P M	106	SIRENKO YU K	32,131	SOLOV'YEV A N	71
SHIRKOVA I I	97	SIROCHENKO V P	28	SOLOV'YEV A V	37
SHIROKOV S M	59	SIRUTKAYTIS V	5	SOLOV'YEV N A	127
SHIRYAYEV V A	11	SISAKYAN I N	59,94	SOLOV'YEVA N N	31
SHISHILOV K F	90	SITARSKIY K YU	60	SOMOV YE YE	56
SHKADAREVICH A P	2,3,52	SITNIKOV L L	90	SOMS L N	4
SHKARDIN G N	49	SIVERS M A	31	SOROCHENKO V R	18
SHKLOVSKIY YE I	2	SIYUCHENKO O G	3	SOROKA A M	120
SHKOLDIN V N	99	SIZONTOVA YE I	51	SOROKIN V N	88
SHKUNOV V V	19,78	SIZOV F F	106,123	SOROKINA I T	51

SOROKO L M	78	SULIMOV V B	57	TINCHURINA E G	115
SOSHCHIN N P	113	SULYAYEV V A	86	TIRON SH D	41
SOSKIN M S	73,78	SURKOV S G	76	TISHCHENKO A V	57,116
SOSKIND YA G	26	SURSKIY K O	110	TISHCHENKO A YU	69
SOSNIN A V	66,130	SURZHIKOV S T	127	TISHCHENKO V N	128
SOSNOV YE N	19	SUSHILOV N V	41	TISHCHENKO V V	1
SOTNICHENKO S A	27,28	SUSLIKOV L M	33	TISHKO T V	78,83
SOTNIKOV V T	116	SUTORSHIN V N	103	TITOV A A	80
SPICHKIN G L	29	SUVOROV M B	74	TITOV A N	84,113
SPIRIDONOV M V	111	SVAKHIN A S	57,116	TKACHENKO A G	99
SPIRIDONOV N V	119	SVELOKUZOV A YE	9	TKACHEV A N	124
SPIRIDONOV V A	3	SVERDLOV B N	9	TKACHUK G I	95
SPITSYN B V	34	SVERDLOV M YU	99	TLEUZHANOV A B	23
SPORNIK N M	78	SVETASHEV A G	110	TOCHITSKIY S YA	18,22
SPOTAR' S YU	99	SVETLOV P I	99	TOKALIN O A	105
STABINIS A	53	SVETOVA N V	99	TOKAREVA A N	13
STADNIK V A	41	SVIRIDENKOV E A	109	TOKMAN M D	53
STAMATESCU I	84	SVIRIDOV S A	68	TOLKACHEV A V	103
STANISHEVSKIY I V	114	SVIRKO YU P	40	TOLKACHEV V A	12
STAN'KO N G	113	SYCHUGOV V A	57,116	TOMASHEVICH S V	21,31
STARIKOV A D	71,73	SYRBU A V	6,7,57	TOMASHEVICH V P	19
STARODUB V P	128	SYRUS V	46	TOMASHKEVICH A K	35
STARODUBMOV A N	66	SYSOYEV V K	23,59,60	TOMASHOV V N	27,28
STARODUBTSEV A I	24,43	SYSUYEV V M	41	TOMOV I	53
STARODUMOV A N	46	SYURDO A I	114	TONKOV M V	51
STAROSTIN A N	25	SZIGETI J	115	TONKOV V L	100
STAROSTINA G P	11			TOPOROV V V	39
STAROVOYTOV V S	22	TABARIN V A	29	TOPTYGIN D D	109
STARTSEV V R	48	TABATCHIKOVA T I	121	TOPTYGIN V V	26
STARUKHIN A S	114	TACHKOV S A	102	TOTH I	22
STASEL'KO D I	46,47	TALALAKIN G N	8	TOVMASYAN S K	13
STAVITSKIY I P	53,74	TALENSKIY O N	8,106	TRASHKEYEV S I	30
STEFANESCU E N	30	TALOCKHIN A B	47	TRESHCHALOV A B	27
STEFANOVICH V A	110	TANASEYCHUK A S	122	TRIFONOV YE D	38,41,131
STEMKOVSKIY A I	68	TANIN L V	7	TRINCHUK B F	12,13
STEPANENKO T T	28	TARANENKO V B	73,78	TRISHCHEV V M	32
STEPANOV A I	11	TARARIN V N	102	TROFIMENKO A M	14
STEPANOV B I	114	TARASENKO V F	26,27,105	TROFIMENKO V V	83,100
STEPANOV S A	61	TARASENKO V M	121	TROFIMOV I YE	6
STEPANOV YE V	17	TARASOV A V	43,44	TROFIMOV V A	74,75
STERIAN P E	30,44	TARASOV S V	59	TROFIMOV V N	111
STEUDEL H	41	TARATORIN B I	85	TROILIN V I	44
STOKLITSKIY S A	6	TATARINOV A S	86	TRON'KO V D	36
STOYKOV V	60	TATUR G A	122	TROSHIN A S	39,41
STOZHAROVA K A	76	TELBIZOV P	25	TROSHIN B I	21
STRATAN A	34	TELEGIN L S	44,58	TROSMAN V YU	86
STREKALOV V N	119	TEMNIKOV A I	100	TROTSENKO L N	95
STREL'TSOV A P	25,43	TEMNIKOV V I	125	TRUBETSKOY A V	50
	49,124	TEMOT V V	36	TRUNOV V I	2
STREL'TSOV V N	110	TENTLER G SH	59	TRUSH G I	42
STRIGALEV V YE	89	TEREKHOV V I	99	TRUSHIN S A	22
STRIZHAK V A	89	TERESHCHENKO L L	107	TRUSOV V P	19
STRIZHEVSKIY V A	72	TERESHCHENKO YE D	78	TSAREGRADSKIY V B	33
STRIZHEVSKIY V L	60,62,75	TERPUGOV V S	11	TSAREV G L	119
STROGANOVA N S	107	TETERKIN V V	123	TSAREVA G A	100
STROKACH YU P	81	TIKHMIROV V N	29	TSARYUK V I	115
STROKOVSKIY G A	30	TIKHONCHUK V T	75,124	TSATSULIN M I	48
STRUGOV N A	9	TIKHONENKO V I	99	TSEKHOMSKIY V A	104
STRUK I I	88	TIKHONOV YE A	29,53,76	TSELINKO A M	16
STUCHEBRYUKHOV A A	107	TIKUNOV A V	9	TSELYKOVSKIY A F	22
STUETZER H	62	TIMASHOV A V	67	TSIDULKO I M	8
STUPAK A P	110	TIMCHENKO I N	8	TSUKKERMAN S T	100
STUPAK M F	53,74	TIMKIN L S	102	TSVETKOV A D	100
STUPNIKOV V K	4	TIMOFEYEV A S	98	TSVETKOVA A V	98
STUS' N M	8	TIMOFEYEV N T	108	TSVETOV YE R	76
SUBASHIYEV A V	103	TIMOFEYEV T T	34	TSVIRKO M P	110
SUDARKIN A N	46	TIMOFEYEV V V	81	TSYBIN A S	127
SUEPTITZ P	99	TIMOFEYEV YU A	111,121	TSYGANOVA YE V	115
SUKHANOV L V	19	TIMONIN P V	75	TSYPLYAYEV S A	58
SUKHODOL'SKIY A T	118	TIMONINA N A	19,21	TUCHIN V V	57
SUKHORUKOV A P	44	TIMONINA O K	115	TUKHVATULIN A SH	94
SULAKSHIN S S	24	TIMOSHIN V T	110	TUMANOVA L M	112

TUMANYAN A G	13	VELICHKO G I	87	YAKOVLEVA T V	78
TUPOLEVA A L	113	VENDIK O G	107	YAKOVLEVA ZH S	112
TURCHIN YA A	62	VENTSEL' U	108	YAKSHIN M A	106
TUZOVA S I	69	VENTSKE D	108	YAKUBOV YU R	101
TYABOTOV A YE	63	VERESH M F	128	YAKUBOVSKIY YU V	101
TYAPUNINA N A	106	VERGUNOVA G A	128	YAKUBOVSKIY YU YE	101
TYCHINSKIY V P	100	VERLAN E M	46	YAKUSHCHEVA G G	36
TYURIKOV D A	16,108	VERYUZHSKIY YU V	85	YAMSHCHIKOV V A	17,18
TYURINA T P	91	VETROV A A	36	YANCHARINA A M	16
TYUSHKEVICH B N	100	VILENCHITS B B	101	YANKAUSKAS A	53
		VILL A A	26	YANUSHEVSKIY N I	9
UEBEL U	118	VINNICHENKO A P	101	YARASHYUNAS K	41
UFIMTSEV V B	122	VINNIK M L	27	YAREMKO A M	112,114
UGLOV A A	117	VINOGRADOV S V	13	YAROVA A G	83
UKAZOV V P	100	VINOGRADOV YE G	22	YAROVAYA R G	37
UL'YANOV B A	89	VINOKUROV G N	11	YARTSEV V P	126
UMNOV V O	10	VISHCHAKAS YU	46	YARUNIN V S	40
UMREYKO D S	101	VITRISHCHAK I B	30	YASHIN V YE	12
UMYSKOV A F	2	VLASOV D V	101	YASHKIR YU N	60
UNZHAKOV A D	96	VODOP'YANOV K L	2	YASHUK V P	109
URAZBAYEV T T	43	VOGLER K	61	YASHUKOV V P	19
URBANKOVA H	22	VOICU L	84	YASINSKIY V M	16
URBANOVICH V S	2,52	VOLK V N	63	YATSENKO L P	16
URIN V M	34	VOLKOV A YU	18	YATSENKO YU P	30
USHAKOV A I	17	VOLKOV S YU	84	YATSKIN D YA	29
USHKOVA I N	56	VOLKOV V V	56	YATSKIV D YA	53
USKOV V I	1	VOLKOV YA F	119	YAVICH B S	37
USHANOV T	10,45	VOLKOVA N V	119	YAZDAUSKAS A A	101
USOSKIN A I	42	VOLKOVITSKIY O A	69	YEFIMENKO M N	24
USTIMENKO A P	100	VOLOD'KIN A V	58	YEFIMOVICH I A	86
USTYUGOV V I	5	VOLOSHINOV V B	49	YEFIMOVSKIY S V	20
USTYUZHANINOV A M	72	VOLOVSKI YE	125	YEFREMOV V A	24
UUEMAA O U	31	VOL'POV A L	71	YEGOROV A A	89
UVALIYEV M I	125	VOL'SKAYA S P	22	YEGOROV G N	1
UVAROVA N N	2	VOLYNKIN V M	11	YEGOROV V D	105
UVAROVA T V	3	VOROB'YEV A N	82	YEGOROV V S	115
UZHINOV B M	13	VOROB'YEV N S	47	YELISEYEV P G	7,8,9,42
UZUNOV I M	46,66	VORONIN YE N	75	YELISEYEV V A	61
		VORONKOV V V	87	YEL'TSOV K N	79
VADKOVSKAYA T N	100	VORONOV V S	101	YELYUKHIN V A	8
VAGIN N P	28	VORONTSOV M A	75	YELYUTIN S O	40,62
VAKHITOV N G	55	VORONTSOV S S	82	YEMEL'YANENKO A V	44
VAKORIN A A	32	VOROSHILOV YU V	110	YEMEL'YANOV V I	42
VAKULOVSKIY A S	104	VOYEVODIN V G	43	YENGOYAN T M	70
VALIDOV M A	100	VOYTOVICH A P	3,71	YEPIFANOV A S	104
VAN'KOV A B	76	VOYTSEKHOVSKIY V V	122	YEPIKHIN V N	116,117
VARANAVICHYUS A	53	VRANCHEV D P	14	YEPIKHINA G YE	51
VARLAMOV G B	119	VSEVOLODOV N N	43	YERASHOV V I	102
VARNASHOVA I S	118	VUCHKOV N	25	YEREMIN V I	70
VARSHAVA S S	123	VUKOLOV K YU	108	YERMAKOV A V	117
VARSHAVCHIK M L	69	VURDOV V D	79	YERMAKOV G A	44
VARTAPETOV S K	26	VYSLOUKH V A	53	YERMAKOV V A	120
VASERMAN M A	64	VYSOGORETS M V	84	YERMAKOVA N V	89
VASHKEVICH I M	2	VYSOTSKIY YU P	63	YEROPEYEV YE A	45
VASILENKO A G	119			YERSHOV B V	3
VASIL'YEV A A	107	WEGNER A	60	YESADZE G G	79
VASIL'YEV A B	29	WIEDERHOLD G	61	YESHMEMET'YEVA YE V	11
VASIL'YEV A V	61	WIESNER P	119	YESIKOV D A	43
VASIL'YEV V N	61	WILHELMI B	53	YESIKOV O S	61
VASIL'YEV V V	115	WITTMANN R	22	YEVDOKIMOVA O N	5
VASIL'YEV YU V	107			YEVSEYEV A R	102
VASIL'YEVA A G	121	YABLOCHKOV S M	109	YEVSEYEV A V	81
VASIL'YEVA O A	12	YACHNEV I L	18	YEVSEYEV I V	42
VASIN B L	128	YAGUBOV A A	48	YEVSTROP'YEV S K	58
VASNETSOV M V	78	YAKITE R	46	YEZHELYA I B	45
VASSERMAN YE S	101	YAKOBSON M A	105	YONUSHAUSKAS G	5
VATSEBA M A	34	YAKOVLENKO S I	16,25,126	YUKHAS T	72
VAYCHAYTIS V	46	YAKOVLEV A P	90	YUKOV YE A	88
VAYCHAYTIS V I	42	YAKOVLEV V V	96,97	YUMASHEV K V	52
VAYKSEL'BAUM L	108	YAKOVLEV YU O	44	YUNOVICH A E	123
VEDENIN V D	115	YAKOVLEV YU P	8,9,56	YUOZAPAVICHYUS A	5
VELCULESCU V G	20	YAKOVLEVA I L	121	YURAS S F	97

YURYSHEV N N	28	ZHILINSKIY A P	58
YUSHCHUK O I	109	ZHILIN V A	91,102
YUSHKAYTIS R V	94	ZHIL'TSOV V I	64,70
YUTANOVA YE YU	46,47	ZHITNEV YU N	81
YUZHANIN A G	122	ZHITNYUK V A	3
		ZHOGUN V N	51
ZABAVIN V N	5	ZHOVTANETSKIY O I	77
ZABAZNOV A M	2,3	ZHUK A Z	102
ZABELIN D G	10	ZHUK S P	52
ZABOROV YA O	92	ZHUK S V	122
ZADKOV V N	75	ZHUKOV N N	48
ZAGIDULLIN M V	28	ZHUKOVSKIY V G	35
ZAGUMENNYI A I	51	ZHUMAR' A YU	14,126
ZAICA V M	10	ZHURAVLEV A V	102
ZAIKIN A P	28,46	ZHURAVLEVA N G	66
ZAILSKAS R A	101	ZIL'BERBRAND YE L	87
ZAKGEYM A L	5	ZIL'BERMAN G YE	51
ZAKHARCHENKO S V	63,70	ZIMIN L G	1
ZAKHARCHENYA B P	76	ZIMIN YU A	71
ZAKHARENKOV YU A	125	ZIMINA O V	34
ZAKHARKIN B I	37	ZINCHENKO A K	18
ZAKHAROV A A	102	ZINCHENKO M I	19
ZAKHAROV L YU	36	ZLATIN N A	87
ZAKHAROV S M	42	ZNAMENSKIY N V	13
ZAKHAROV V I	42	ZOLIN V F	44,108,113,115
ZAKHAROV V YE	42	ZOLOTAREV V A	27
ZAKHAROV YU P	125,128	ZOLOT'KO A S	43
ZAKHARYAN M V	70	ZON B A	43,80
ZAKHIDOV E A	58	ZOTEYEV A V	105,123
ZAMFIR E	88	ZOTOV S D	18
ZANINA K A	114	ZOTOVA N V	8
ZAPARA A L	99	ZOZULYA A A	75,124
ZAPASSKIY V S	115	ZSCHOCKE W	61
ZAPESOCHNYY I P	128	ZUBAREV I G	71
ZAPOROZHETS V M	75	ZUBAREV YE I	103
ZAROSLOVA O S	24	ZUBENKO S A	85
ZARTOV G D	36	ZUSMAN G V	44
ZARUDSKIY M A	98	ZUYEV B K	115
ZASAVITSKIY I I	17,111	ZUYEV L N	89
ZASKAL'KO O P	46,48,55	ZUYEV V S	24,28
ZASLAVSKAYA V R	5	ZUYEV V V	70,130
ZASLONKO I S	81	ZUYEV V YE	90,130,131
ZAULO V A	95	ZUYEVA G YA	79
ZAVARZIN A G	93	ZVEREV M M	7
ZAYKOV V I	102	ZVEREV P G	4
ZAYMIDOROGA I O	70	ZVER'KOV A K	124
ZAYTSEV A I	42	ZVORYKIN V D	83
ZAYTSEV G F	6	ZVYAGIN A V	82
ZEHNER U	119	ZYRYANOV V YA	103
ZELENGUR A A	102		
ZELENIN G V	119		
ZEMSKOV K I	58		
ZENKIN S S	56		
ZENKOV YU V	123		
ZEYLIKOVICH I S	41,78		
ZHAK V D	102		
ZHARIKOV YE V	1,2,3,51		
ZHARISOV G G	8		
ZHARKOV S B	96		
ZHARNIKOV S D	31		
ZHAROV V P	56,64		
ZHDANOK V A	81		
ZHEKOV V I	122		
ZHELUDEV N I	38,42,108		
ZHERDEV A A	8		
ZHERDIYENKO V V	71,72		
ZHERIKHIN A N	18		
ZHEVLAKOV A P	32		
ZHGUTOVA YE V	93		
ZHIDKOV A G	25		
ZHILIN A N	10,71		
ZHILIN V G	85		

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/DD
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/VP-TA02
B351 1 DIA/RTS-3A4
B352 50 DIA/RTS-2F STOCK
B537 1 DIA/VP-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-91(DNM)
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 NAVAVIONICGEN IND
D506 1 COMNAVSPACECOM
D553 1 NAVSPASUR
D785 1 NSGSA WASHINGTON
D947 1 NIC-52

U.S. AIR FORCE

E021 1 DET-1, AFIS
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)
E427 2 ROME AIRDEVCTR-INA
E429 1 HQ SPACE DIV/IND
E452 1 CADRE/WGOI

UNIFIED AND SPECIFIED COMMANDS

G005 4 ASPACECOM/INXSL
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

93 CUST. 220 COPIES

(MICROFICHE)

DOD AND JOINT ACTIVITIES

B352 25 DIA/RTS-2F STOCK

U.S. ARMY

C500 1 TRADOC
C617 2 CONCEPT ANALY AGCY

U.S. AIR FORCE

E706 1 HQ ESC/INAM

UNIFIED AND SPECIFIED COMMANDS

G005 1 ASPACECOM/INXSL

5 CUST. 30 COPIES

END

DATE

FILMED

9-88

DTIC