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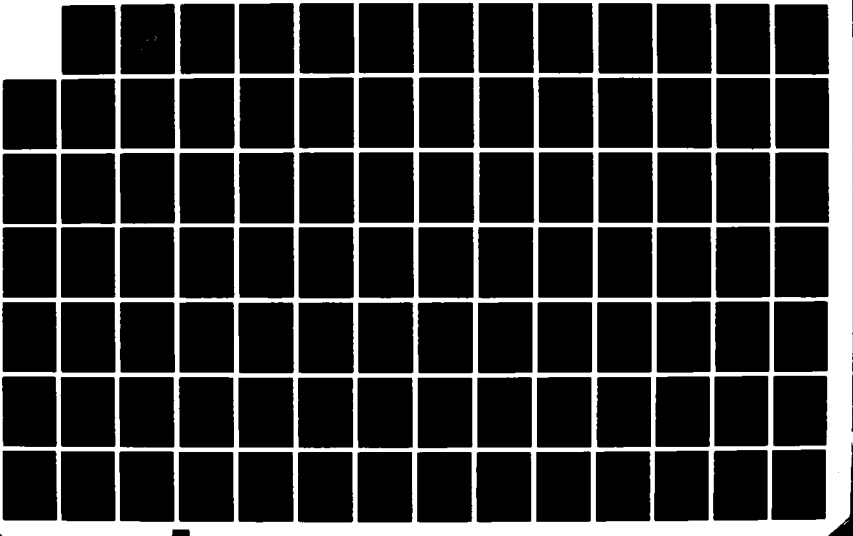

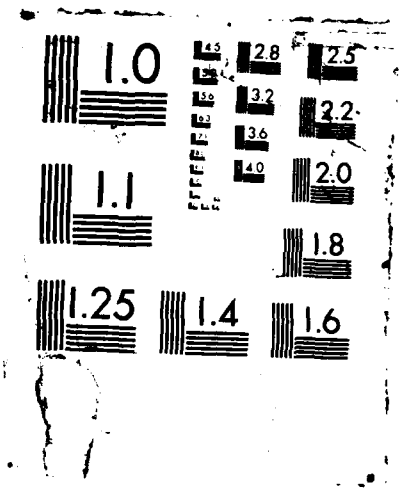
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No. 75

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Vice Director for Foreign Intelligence
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20. ABSTRACT

This is the Soviet Laser Bibliography for January-February 1985, and is No. 75 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; crystal growing; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications systems; beam propagation; adaptive optics; computer technology; holography; laser-induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.

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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 January-February 1985, 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 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 now producing the entire bibliography on computer. To make our bibliography compatible with other data bases, we have converted the source abbreviations from our previous practice of those used in the Soviet Union to the letter codens generally used in our own government. Likewise, we have converted the affiliations designations from numbers to letter codens. The authors' affiliations are indicated in parentheses after the authors' names in the text. Empty parentheses indicate the affiliation was not given. A source abbreviations list, authors' affiliations list, and author index are included in the back of the bibliography.

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TABLE OF CONTENTS

I. BASIC RESEARCH

A. SOLID STATE LASERS

1. Crystal

a. Miscellaneous

1. Martynovich, Ye.F.; Baryshnikov, V.I.; Grigorov, V.A. (NIIPFI). The generation of laser radiation in the visible spectral region by Al(sub2)O(sub3) color centers at room temperature. PZTFD, no. 4, 1985, 200-202.

2. Zharikov, Ye.V.; Laptev, V.V.; Mayyer, A.A.; Osiko, V.V. (). Cation competition in octahedric positions of gallium garnets. IVNMA, no. 6, 1984, 984-990. (RZFZA, 851L1035).

b. Ruby

c. LiF

3. Akhvlediani, Z.G.; Ivanov, N.A.; Mikhalenko, A.A.; Khulugurov, V.M.; Shkadarevich, A.P. (). Lasing at new color centers in LiF in the spectral range from 0.64 to 0.72 um. PZTFD, no. 3, 1985, 187-190.

4. Mikhnov, S.A.; Rakush, V.V. (). Optimization of the optical density of active elements under longitudinal laser excitation. ZPSBA, v. 42, no. 2, 1985, 197-201.

2. Rare Earth

a. Miscellaneous

5. Chernaya, T.S.; Muradyan, L.A.; Rusakov, A.A.; Kaminskiy, A.A.; Simonov, V.I. (IKAN). Verification and analysis of erbium aluminum garnet and erbium-doped YAG structures. KRISA, no. 1, 1985, 72-75.

b. Nd3+

6. Berenberg, V.A.; Boldyrev, S.A.; Leonov, G.S.; Nesterenko, V.F.; Pavlyuk, A.A.; Terpugov, V.S. (). Solid-state microlasers with pumping by miniature pulsed lamps. KVEKA, no. 2, 1985, 375-377.

7. Bykovskiy, N.Ye.; Ivanov, V.V.; Senatskiy, Yu.V. (FIAN). Features of the kinetics of the lasing of a neodymium laser during pulsed, selective pumping. KVEKA, no. 2, 1985, 422-425.

8. Gladkov, S.M.; Kuznetsov, V.I. (MGU). Tunable YAG:Nd3+ laser with a grazing incidence diffraction grating. KVEKA, no. 1, 1985, 219-220.

9. Kaminskiy, A.A.; Dem'yanets, L.N.; Sarkisov, S.E.; Khaydukov, N.K.; Safronov, G.M. (IKAN; IONKh). Growth and spectral-luminescent properties of rhombic K(sub2)GdF(sub5)-Nd3+ crystals. IVNMA, no. 1, 1985, 106-114.

10. Kaminskiy, A.A.; Zhmurova, Z.I.; Lomonov, V.A.; Sarkisov, S.E. (). Two stimulated emission channels at (sup4)F(sub3/2) -> (sup4)I(subl1/2,13/2) in Nd3+ ions in crystals of the CaF(sub2)-ScF(sub3) system. PSSAB, v. A84, no. 1, 1984, K81-K84. (RZFZA, 85/2L1155).

11. Mindak, M.; Szydlak, J. (). Examples of operating characteristics and power balance in the pump cavity of c-w Nd:YAG lasers. OPAPB, no. 4 [in English], 1984, 407-419. (RZRAB, 85/2Ye143).

c. Er3+

d. Ho3+

12. Tkachuk, A.M.; Khil'ko, A.V.; Petrov, M.V. (). Probabilities of radiationless intermultiplet transitions of holmium ions in lithium-yttrium double fluoride crystals and stimulated scattering. OPSPA, v. 58, no. 2, 1985, 361-366.

e. Tm3+

3. Semiconductor

a. Theory

13. Arif, Z.; Zafar, M.S. (). Time delay characteristics for semiconductor injection lasers. FZKAA, no. 3, 1984, 243-251. (RZFZA, 85/2L1171).

14. Khaydarov, A.V. (TashGU). Laboratory class on injection lasers. TashGU. Trudy, no. 721, 1983, 31-32. (RZFZA, 85/2A80).

15. Petrescu-Prahova, I.B. (). Research on A(III)B(V) materials for optoelectronics in the Institute of Physics and Techonology of Materials, Czechoslovakia. CZYPA, v. B34, no. 5, 1984, 447-456. (RZFZA, 85/1N253).

16. Sheynkman, M.K. (). Nonequilibrium processes in wideband semiconductors. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 113-124.

17. Svechnikov, G.S. (OEISKF). Radiation sources for integrated optics. OPTED, no. 7, 1985, 3-21.

18. Tarasov, M.D.; Kovalenko, V.A.; Panitkin, Yu.G. (). Method for forming optical pulses from a semiconductor laser. OTIZD, no. 1, 1985, 1072722.

19. Volkova, N.V.; Izakson, G.M.; Knyazev, V.K.; Litvinov, P.L.; Savitskiy, A.V.; Ul'yanitskiy, K.S. (). Germanium-doped cadmium telluride crystals as an optical material for IR laser technology. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 38-39.

b. Miscellaneous Homojunction

20. Bogdankevich, O.V.; Darznek, S.A.; Zverev, M.M.; Kostin, N.N.; Krasavina, Ye.M.; Kryukova, I.V.; Markov, Ye.V.; Smirnov, V.V.; Ushakhin, V.A. (). A pulsed uncooled zinc oxide semiconductor laser. PZTFD, no. 3, 1985, 136-140.

c. Miscellaneous Heterojunction

21. Bert, N.A.; Vasil'yev, V.I.; Konnikov, S.G.; Kuchinskiy, V.I.; Lazutka, A.S.; Mishurnyy, V.A.; Portnoy, Ye.L. (FTI). The discrepancy of the periods of the lattices and the intensity of photoluminescence in the heterogeneous composites GaInSbAs/GaSb. PZTFD, no. 4, 1985, 193-197.

22. Bessonov, Yu.L.; Kurlenkov, S.S.; Morozov, V.N.; Sapozhnikov, S.M.; Chan Min Thai; Shidlovskiy, V.R. (). Effect of the spectral bandwidth on the power fluctuations of injection lasers. KVEKA, no. 2, 1985, 347-350.

23. Bessonov, Yu.L.; Kurlenkov, S.S.; Morozov, V.N.; Sapozhnikov, S.M.; Chan Min Thai; Shidlovskiy, V.R. (FIAN). Study on the multimode lasing in AlGaAs double heterostructure injection lasers with a narrow stripe contact. KVEKA, no. 2, 1985, 367-369.

24. Bogatov, A.P.; Goldobin, I.S.; Yeliseyev, P.G.; Okhotnikov, O.G.; Pak, G.T.; Rakhval'skiy, M.P.; Faynboym, Ye.G.; Khayretdinov, K.A. (FIAN). C-w single-frequency lasing in an injection laser using a double terrace-shaped heterostructure with an external dispersion resonator. KVEKA, no. 1, 1985, 162-164.

25. Boroshnev, A.V.; Gorshkova, O.A.; Kobyakova, M.Sh.; Okhotnikov, O.G.; Pak, G.T.; Shavvo, I.A. (FTI). The control of astigmatism and the polarization of radiation in a stripe-geometry heterolaser. PZTFD, no. 3, 1985, 165-168.

d. GaAs

e. CdS

f. ZnSe

26. Volkova, N.V.; Izakson, G.M.; Litvinov, P.L.; Maksimov, Yu.P.; Mironov, I.A. (). Polycrystal zinc selenide optical elements for industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 36-37.

g. Pb(1-x)Sn(x)Te

h. InGaAsP

27. Alferov, Zh.I.; Arsent'yev, I.N.; Vavilova, L.S.; Garbuzov, D.Z.; Tikunov, A.V.; Tulashvili, E.V. (FTI). Stripe-geometry separate boundary InGaAsP/GaAs double-heterostructure lasers with a thin active region at 0.87 um. PZTFD, no. 2, 1985, 205-209.

4. Glass

a. Miscellaneous

b. Nd

28. Alekseyev, V.N.; Dmitriyev, D.I.; Zhilin, A.N.; Chernov, V.N. (). Gain saturation in GLS 22 neodymium phosphate glass. KVEKA, no. 1, 159-161.

29. Alekseyev, V.N.; Golovin, S.V.; Kostometov, G.P.; Mironov, Ye.P.; Starikov, A.D.; Chernov, V.N. (). An investigation of the possibilities for increasing the efficiency of neodymium glass laser amplifiers with final disk stages. KVEKA, no. 2, 1985, 325-330.

30. Danilov, A.Ye.; Orlov, V.V.; Savchenko, S.M.; Suchkov, A.F.; Fedotov, S.I.; Khitrov, A.L. (FIAN). Study on the effect of the spectral composition of the radiation on amplification in neodymium glass. KVEKA, no. 1, 1985, 217-219.

31. Goncharov, V.K.; Zhuk, D.V. (). Neodymium glass laser with a U-shaped lasing pulse of controlled duration. ZPSBA, v. 42, no. 2, 1985, 334-336.

e. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

32. Andreyev, S.P.; Vodchin, A.I.; Ganushkina, L.P.; Gravchikov, A.S.; Kvach, V.V.; Kozich, V.P.; Orlovich, V.A.; Uzunbadzhakov, A.S. (IFANB). Automated high-power dye laser. IFANB. Preprint, no. 334, 1984, 3-5. (RZRAB, 85/2Yel25).

33. Hultzsch, R.; Czerney, P.; Herrmann, U.; Hartmann, H.; Wilke, K. (). Active medium for a dye laser. Patent GDR, no. 208501, 2 May 1984. (RZRAB, 85/2Yel36).

34. Korol'kova, N.V.; Kurokhtin, N.V.; Uzhinov, B.M. (MGU). The effect of universal intermolecular interactions on laser radiation from oxazine 17. KVEKA, no. 1, 1985, 96-98.

35. Korzhik, M.V.; Kuz'min, V.V. (BGU). Laser with a pumped dye solution. PRTEA, no. 1, 1985, 168-170.

36. Ryzhov, Yu.N.; Cheremiskin, I.V.; Chekhlova, T.K. (). Distributed-feedback lasers with an active framing medium. ZPSBA, v. 42, no. 1, 1985, 48-51.

37. Saletskiy, A.M.; Yuzhakov, V.I. (MGU). The lasing properties of a two-component dye solution with excitation by a lamp in different solvents. KVEKA, no. 2, 1985, 294-305.

38. Schubert, D.; Barth, M.; Scholz, D. (). Laser-pumped c-w dye laser. Patent GDR, no. 207593, 7 Mar 1984. (RZRAB, 85/2Yel30).

39. Tsvirko, M.P.; Solov'yev, K.N.; Piskarskas, A.S.; Pyatosin, V.Ye.; Krasauskas, V.V.; Kachura, T.F. (NIIPFP; IFANB; VilGU). The picosecond kinetics of the intramolecular transfer of energy in porphyrin complexes of rare-earth elements. DANKA, vol. 279, no. 5, 1984, 1118-1122.

40. Vasil'yev, N.N.; Gorelenko, A.Ya.; Kalosha, I.I.; Mezhentsev, V.A.; Tishchenko, I.G.; Tolkachev, V.A.; Tulach, V.Ya.; Shkadarevich, A.P. (). 1,3,2-dioxaborines, a new class of laser dyes. ZPSBA, v. 42, no. 1, 1985, 51-55.

b. Rhodamine

Trusov, A.K.; Trusov, K.K. (). Submicrosecond dye laser with lamp pumping. KVEKA, no. 2, 1985, 405-407.

c. Polymethine

d. Coumarin

e. Phthalimide

f. Cyanine

g. Xanthene

h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

41. Achasov, O.V.; Fomin, N.A.; Shabunya, S.I. (ITMO). Numerical modeling of the transfer of saturating radiation in resonantly absorbing media. ITMO. Preprint, no. 13, 1984, 14 p. (RZFZA, 85/2L1126).

42. Alferov, V.I.; Bushmin, A.S.; Dmitriyev, L.M. (IKI). Nozzle lattice and ballast resistance for producing a glow discharge in a gas flow. PRTEA, no. 1, 1985, 143-144.

43. Borisova, N.A.; Gubarev, A.V.; Nekrasov, A.A.; Pechenova, O.I. (). Periodic pulsed flow-through gas laser. OTIZD, no. 1, 1985, 890929.

44. Burakov, V.S.; Misakov, P.Ya.; Naumenkov, P.A.; Raykov, S.N. (IFANB). Characteristics of the opto-Galvanic effect in media with population inversion. DBLRA, no. 12, 1984, 1078-1081.

45. Derbilov, V.I.; Sitnikov, I.O. (). Modeling of the stabilization of the composition of gas mixtures. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 59-60.

46. Drobyazko, S.V.; Nekrasov, A.A.; Yakushev, A.A. (). Periodic pulsed flow-through gas laser. OTIZD, no. 7, 1985, 646730.

47. Dubrovskiy, G.V.; Strel'chenya, V.M. (LGU). Theory of vibrational-rotational excitation of polyatomic molecules. KHFID, 1983. (Cited in Soviet Journal of Chemical Physics, no. 6, 1985, 1230-1247).

48. Dudkin, V.A.; Ogurechnikov, V.A.; Rukhin, V.B. (). Study on oxidation of carbon disulfide in gas flows using IR spectroscopy. FGVZA, no. 6, 1984, 109-114.

49. Karasheva, T.T.; Otorbayev, D.K.; Ochkin, V.N.; Rykov, V.A.; Savinov, S.Yu.; Sobolev, N.N.; Tskhay, S.N. (FIAN). Doppler broadening of spectral lines and distribution of excited atoms and molecules by their velocities in a nonequilibrium plasma. Elektronno-vozbuzhdennyye molekuly v neravnovesnoy plazme. FIAN. Trudy, no. 157, 1985, 124-186.

50. Krillov, I.A.; Potapkin, B.V.; Rusanov, V.D.; Strelkova, M.I.; Fridman, A.A. (). The effect of initial spatially non-uniform temperature disturbances on the dynamics of vibrational relaxation. ZPMFA, no. 6, 1984, 77-80.

51. Nekrasov, A.A.; Gubarev, A.V. (). Pulsed flow-through gas-discharge laser. OTIZD, no. 7, 1985, 724041.

52. Nekrasov, A.A.; Gubarev, A.V. (). Pulsed flow-through laser. OTIZD, no. 7, 1985, 713475.

53. Nekrasov, A.A.; Gubarev, A.V.; Malakhov, V.I. (). Device for exciting a discharge. OTIZD, no. 1, 1985, 888783.

54. Nekrasov, A.A.; Gubarev, A.V.; Yakushev, A.A. (). Method for exciting a discharge in a flow-through gas laser. OTIZD, no. 7, 1985, 784696.

55. Ochkin, V.N.; Savinov, S.Yu.; Sobolev, N.N. (FIAN). Mechanisms for the formation of distributions of e-beam-excited molecules by vibrational-rotational levels in a gas discharge. Elektronno-vozbuzhdennyye molekuly v neravnovesnoy plazme. FIAN. Trudy, no. 157, 1985, 6-85.

56. Osipov, A.I. (). Translational relaxation in physicochemical kinetics. KHFID, 1983. (Cited in Soviet Journal of Chemical Physics, no. 8, 1985, 1675-1681).

57. Otorbayev, D.K.; Ochkin, V.N.; Rubin, P.L.; Savinov, S.Yu.; Sobolev, N.N.; Tskhay, S.N. (FIAN). Excitation of rotational levels of electron states of molecules by electron impact in a gas discharge. Elektronno-vozbuzhdennyye molekuly v neravnovesnoy plazme. FIAN. Trudy, no. 157, 1985, 86-123.

58. Vinogradova, G.N.; Panchenko, V.P. (IAE). Mathematical model of mixing of vibrationally excited N2-CO2-H2O molecules. IAE. Preprint, no. 3977/16, 1984, 28 p. (RZFZA, 85/2L1128).

59. Yegorov, V.S.; Niz'yev, V.G.; Polulyakh, V.P. (). Pericdic pulsed laser with a high pulse repetition rate. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 9-10.

60. Yegorova, G.I.; Yemelin, S.S.; Simonov, K.G.; Shelkunov, G.P. (). Electroionization laser. OTIZD, no. 1, 1985, 1068007.

61. Zavilopulo, A.N.; Snegurskiy, A.V.; Shpenik, O.B. (). Total cross-sections for excitation of metastable atomic levels of inert gases by electron impact. ZPSBA, v. 42, no. 2, 1985, 192-196.

62. Zusmanovskiy, S.A.; Kabanova, G.D.; Simonova, K.G. (). Electroionization laser. OTIZD, no. 1, 1985, 1072723.

2. Simple Mixtures

a. Miscellaneous

b. He-Ne

63. Feng Qi-yuan (China). Theoretical derivation of Smith's empirical equation. KVEKA, no. 1, 1985, 168-170.

64. Vasiliu, V.; Apostol, D.; Bachmann, P.; Ristici, M. (). The LG-5 model He-Ne laser. SCEFA, no. 8, 1984, 735-737. (RZFZA, 85/2L1100).

65. Zmiyevskoy, G.N. (). Effect of spontaneous emission at the operating transition on noise in a ring laser. OPSPA, v. 58, no. 2, 1985, 452-454.

c. He-Xe

d. He-Kr

e. Ar-Xe

66. Baranov, V.V.; Danilychev, V.A.; Dudin, A.Yu.; Zayarnyy, D.A.; Ustinovskiy, N.N.; Kholin, I.V.; Chugunov, A.Yu. (FIAN). The possibility of generating pulses with durations of hundreds of microseconds during excitation by an electron pulse of a high-pressure Ar:Xe mixture laser. PZTFD, no. 3, 1985, 173-176.

3. Molecular Beam and Ion

a. Miscellaneous

67. Gruzinskiy, V.V.; Degtyarenko, K.M.; Kopylova, T.N.; Pavlova, V.T. (BPI; SFTI). Lasing in chain compound vapors. IVUFA, no. 1, 1985, 101-103.

68. Yefremov, V.A. (KhGU). Dynamic amplification of three-level K-subsystems excited by a sinusoidal signal with a rectangular envelope. UFZHA, no. 2, 1985, 192-194.

b. Carbon Dioxide

69. Abaliyev, A.E.; Gurvich, L.O.; Gutman, M.B.; Kozlov, G.I.; Kuznetsov, V.A.; Masyukov, V.A.; Ratnovskiy, A.A.; Rubin, G.K. (). The Iglan-3M multichannel CO2 laser with a power of 4 kilowatts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 4-5.

70. Abil'siitov, G.A.; Azanchevskiy, V.L.; Golubev, V.S.; Yegorov, Yu.A.; Kartavyy, S.K.; Smirnov, V.V.; Sumerin, V.V.; Shternin, L.A. (). Development of the ULGN-5.02 laser industrial facility based on the TL-5 laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 3-4.

71. Ageyev, B.M.; Danilov, O.B.; Zatulovskiy, L.M.; Rubinov, Yu.A. (). Thermal regime of a waveguide CO2 laser. ZTEFA, no. 1, 1985, 103-106.

72. Akirtava, O.S.; Golubev, V.S.; Dzhikiya, V.L.; Kvitiya, Z.A.; Rogozhina, G.P. (). Study on the characteristics of a steady-state fast-flow CO2 laser with a high-frequency capacitive discharge. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 15.

73. Antyukhov, V.V.; Glova, A.F.; Kachurin, O.R.; Lebedev, F.V.; Yartsev, V.P. (IAE). Waveguide CO2 laser excited by an al+ernating-current capacitance discharge. IAE. Preprint, no. 3935/14, 1984, 32 p. (RZFZA, 85/2L1108).

74. Antyukhov, V.V.; Glova, A.F.; Lebedev, F.V. (). Effect of misalignment of the resonator mirrors on the radiation characteristics of a waveguide CO2 laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 42-43.

75. Apollonov, V.V.; Vas'kovskiy, Yu.M.; Zhavoronkov, M.I.; Prokhorov, A.M.; Rovinskiy, R.Ye.; Rogalin, V.Ye.; Ustinov, N.D.; Firsov, K.N.; Tsenina, I.S.; Yamshchikov, V.A. (IOF). High-power electric-discharge CO2 laser with addition of easily ionized substances to the mixture. KVEKA, no. 1, 1985, 5-9.

76. Averin, A.P.; Basov, N.G.; Glotov, Ye.P.; Danilychev, V.A.; Karpov, G.N.; Kerimov, O.M.; Krasovskiy, V.M.; Malysh, M.M.; Sazhina, N.N.; Soroka, A.M.; Tsepelev, V.Ye.; Ustinov, N.D.; Cheburkin, N.V. (FIAN). Energy and spectral characteristics of a c-w electroionized CO2 laser with cryogenic cooling of the working mixture. KVEKA, no. 1, 1985, 140-143.

77. Basov, N.G.; Danilychev, V.A.; Katrich, A.B.; Negashev, S.A.; Sazhina, N.N.; Snegireva, N.I.; Khudoshin, A.V.; Cheburkin, N.V. (). Radiation divergence in a universal industrial electroionization CO2 laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 16-17.

78. Bogdanov, M.P.; Verin, V.M.; Generalov, N.A.; Zimakov, V.P.; Kartavyy, S.K.; Kosynkin, V.D.; Laptev, A.R.; Solov'yev, N.G.; Shternin, L.A. (). The ULG-2.01 combined periodic pulsed and c-w industrial laser facility. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 8-9.

79. Borisovskiy, V.Ye.; Gavryushenko, B.S.; Kurochkin, Yu.V.; Ukolov, V.V. (). Angular divergence and homogeneity of radiation in CO2 lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 17-18.

80. Britva, A.Ya.; Gutenberg, V.Ya.; Gutman, M.B.; Dobrovol'skiy, V.F.; Zhuravel', V.M.; Ivanchenko, A.I.; Kazantsev, L.S.; Krasheninnikov, V.V.; Lipov, V.Ya.; Ponomarenko, A.G.; Rubin, G.K.; Shepelenko, A.A. (). Development, testing and ways of perfecting a prototype laser industrial facility with a power of 1.2 kilowatts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 7-8.

81. Bruyev, A.S.; Konyukhov, V.K.; Odintsov, A.I. (). Quasi-steady-state current distribution of populations at levels of vibrationally excited molecules. KHFID, no. 10, 1984, 1372-1379. (RZFZA, 85/1L996).

82. Bychkov,Yu.I.; Orlovskiy, V.M.; Osipov, V.V.; Tel'nov, V.A. (ISE). Small scale sealed-off pulsed CO2 laser. PRTEA, no. 1, 1985, 241-242.

83. Deryugin, A.A.; Likhanskiy, V.V.; Napartovich, A.P. (). A new mechanism for modulating the output radiation in a laser with an unstable resonator. KVEKA, no. 2, 1985, 311-314

84. Drobyazko, S.V.; Dubrovskaya, G.G.; Lisogorskiy, S.M.; Sharkov, V.F. (). Change in the composition of the mixture during long-term operation of an industrial closed-cycle CO2 laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 56-57.

85. Drobyazko, S.V.; Pavlovich, Yu.V.; Senatorov, Yu.M. (). Periodic pulsed CO2 laser for thermal technology. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 10-11.

86. Dymshakov, V.A.; Lebedev, F.V.; Ryazanov, A.V. (). Fluctuations of the state of the polarization of the radiation from a CO2 laser. KVEKA, no. 2, 1985, 306-310

87. Garashchuk, V.P.; Kirsey, V.I. (). Effect of the radiation power of a CO2 laser on the geometric parameters of the laser beam. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 18-19.

88. Gavrilyuk, V.D.; Kolesov, L.L.; Lebedev, F.V.; Nesterenko, V.M.; Timofeyev, V.A. (). Closed-cycle c-w CO2 laser with excitation of the active medium by an alternating-current discharge. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 6-7.

89. Gladush, G.G.; Samokhin, A.A. (). Threshold energy deposits in a glow discharge in a transverse gas flow. TVYTA, no. 1, 1985, 36-41.

90. Glova, A.F.; Dreyzin, Yu.A.; Kachurin, O.R.; Lebedev, F.V.; Pis'mennyy, V.D. (). The phase synchronization of a two-dimensional set of waveguide CO2-lasers. PZTFD, no. 4, 1985, 249-252

91. Goykhman, V.Kh.; Kartavyy, S.K.; Pevzner, Ya.B.; Shternin, L.A. (). Lasing characteristics of two- and three-component active media of c-w CO2 lasers with a power of 2.5 kilowatts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 60-61.

92. Goykhman, V.Kh.; Pankova, R.B. (). Structure of the active medium of a CO2 laser using a self-maintained glow discharge in a transverse gas flow. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 45-46.

93. Ivanchenko, A.I.; Krasheninnikov, V.V.; Ponomarenko, A.G.; Shepelenko, A.A. (). Efficient use of pumping techniques in closed-cycle CO2 lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 58-59.

94. Ivanchenko, A.I.; Krasheninnikov, V.V.; Ponomarenko, A.G.; Shepelenko, A.A. (). The LOK-3 and LOK-3M fast-flow c-w CO2 lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 5-6.

95. Ivanova, L.A.; Izakson, G.M.; Makarov, V.V.; Rudina, O.G.; Khazanov, A.B. (). Optimization of the optical characteristics of optical elements in CO2 industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 33-34.

96. Kolesnikov, V.Yu.; Khokhlov, Yu.M.; Rachevskiy, L.A. (KAI). Thermal regime of a metal discharge chamber with a glass-enamel coating. KVEKA, no. 1, 1985, 165-166.

97. Kryuchkov, S.I.; Kudryavtsev, N.N.; Novikov, S.S. (MFTI). Absorptivity of a vibrationally nonequilibrium carbon dioxide gas on 15 um Q-branch bands. TVYTA, no. 1, 1985, 50-53.

98. Maciiowski, T.; Strzelec, M. (). Sealed-off waveguide CO2 laser. OPAPB, no. 4 [in English], 1984, 391-406. (RZRAB, 85/2Ye53).

99. Makarevich, A.M.; Salauyanchyk, D.A. (IFANB). Electrical characteristics of a volumetric discharge with pre-photoionization. VBSFA, no. 1, 1985, 66-69.

100. Mayorov, V.S.; Safonov, A.N.; Fromm, V.A. (). Requirements for industrial CO2 laser radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 68-69.

101. Petukhov, V.O.; Sazhina, N.N.; Starovoytov, V.S.; Trushin, S.A.; Cheburkin, N.V.; Chekin, S.K.; Churakov, V.V. (IFANB). Study on the amplification and lasing spectra of a TE laser using a mixture of isotope-substituted carbon dioxide molecules. KVEKA, no. 2, 1985, 416-419.

102. Platonenko, V.T.; Taranukhin, V.D. (MGU). The amplification of pulsed radiation in a regenerative TEA CO2 amplifier. KVEKA, no. 1, 1985, 99-103

103. Vakhterov, A.A.; Ilyukhin, A.A.; Konev, Yu.B.; Lipatov, N.I.; Pashinin, P.P.; Prokhorov, A.M.; Smirnov, V.V.; Yurov, V.Yu. (IOF). The diagnostics of the capillary discharge of a waveguide CO2 laser by a method of anti-Stokes light scattering. PZTFD, no. 1, 1985, 3-7.

104. Vasil'tsov, V.V.; Zabelin, A.M.; Lebedev, F.V.; Leonov, P.G.; Medvedev, D.K.; Minnebayev, K.F.; Morozenkov, A.A. (). Operation of the TL-10S industrial CO2 laser in an amplifier mode. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 41-42.

105. Volchenok, V.I.; Komarov, V.N.; Ochkin, V.N. (). Effect of hydrogen and xenon additives on the chemical composition of the plasma from waveguide CO2 lasers. KHVKA, no. 5, 1984, 477-479. (RZFZA, 85/1L989).

c. Carbon Monoxide

106. Basov, N.G.; Bakayev, V.G.; Ionin, A.A.; Kovsh, I.B.; Kuchayev, A.V.; Lytkin, A.P.; Paisov, V.N.; Sinitsyn, D.V.; Sobolev, V.A. (FIAN). Pulsed electroionization lasers with cryogenic cooling of the active medium. ZTEFA, no. 2, 1985, 326-334.

107. Drozhbin, Yu.A.; Zvorykin, V.D.; Kovsh, I.B.; Trofimenko, V.V.; Yarova, A.G. (FIAN). Study on the dynamics of the angular divergence of the radiation from a pulsed electroionization CO laser. KVEKA, no. 2, 1985, 315-324.

108. Kochetov, I.V.; Kurnosov, A.K.; Loboyko, A.I.; Napartovich, A.P.; Taran, M.D. (IAE). Implicit Geer integration solution for equations of vibrational kinetics of a CO laser. IAE. Preprint, no. 4014/12, 1984, 8 p. (RZFZA, 85/2L1114).

109. Konev, Yu.B.; Kochetov, I.V.; Kurnosov, A.K. (IAE). Effect of diatomic molecule impurities on the lasing characteristics of electroionization CO lasers. IAE. Preprint, no. 3995/12, 1984, 12 p. (RZFZA, 85/2L1113).

110. Kornilov, S.T.; Protsenko, Ye.D.; Tymper, S.I. (). Waveguide CO laser for monitoring air pollution. ZPSBA, v. 42, no. 1, 1985, 44-47.

d. Noble Gas

111. Basov, N.G.; Aleksandrov, A.Yu.; Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Myznikov, Yu.F.; Rudoy, I.G.; Soroka, A.M. (FIAN). High-power quasi-c-w high-pressure laser in the p-s transitions of the neon atom in the visible region of the spectrum. KVEKA, no. 1, 1985, 228.

112. Basov, N.G.; Aleksandrov, A.Yu.; Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Myznikov, Yu.F.; Rudoy, I.G.; Soroka, A.M. (FIAN). High-power quasi-c-w lasing in the visible region of the spectrum in a high pressure mixture of inert gases. ZFPRA, vol. 41, no. 4, 1985, 156-158.

113. Bunkin, F.V.; Derzhiyev, V.I.; Mesyats, G.A.; Skakun, V.S.; Tarasenko, V.F.; Yakovlenko, S.I. (IOF). Plasma laser at 585.3 nm with Penning cleaning in dense mixtures of e-beam-excited neon. KVEKA, no. 2, 1985, 245-246.

114. Dietel, W.; Kuehlke, D. (). Passive mode-locked inert gas ion laser. Patent GDR, no. 208511, 2 May 1984. (RZRAB, 85/2Ye89).

e. Nitrogen

115. Abramov, A.G.; Asinovskiy, E.I.; Vasilyak, L.M. (IVTAN). Pumping a coaxial nitrogen laser with electrical breakdown waves. TVYTA, no. 1, 1985, 177-179.

116. Asinovskiy, E.I.; Vasilyak, L.M.; Markovets, V.V.; Tokunov, Yu.M. (). Ultraviolet lasing in helium-nitrogen mixtures. ZPSBA, v. 42, no. 1, 1985, 131-134.

117. Lucht, H.; Moench, C.W.; Mueller, D. (). Pulsed gas laser with transverse electric excitation. Patent GDR, no. 208711, 4 Apr 1984. (RZRAB, 85/1Ye47).

118. Martirosyan, A.Ye.; Papanyan, V.O. (IFI). Compact sectional gas laser with longitudinal pumping. PRTEA, no. 1, 1985, 166-168.

f. Iodine

g. Hydrogen

h. Ammonia

i. Carbon Tetrafluoride

j. Nitrous Oxide

k. Water Vapor

l. Heavy-Water Vapor

m. Submillimeter

n. Metal Vapor

119. Atamas', S.N.; Koptev, Yu.V.; Latush, Ye.L. (RGU). Lasing in transitions of tellurium dimers during optical pumping by the radiation of a helium-strontium recombination laser. KVEKA, no. 2, 1985, 432-433.

120. Belyayev, V.P.; Zubov, V.V.; Isayev, A.A.; Lyabin, N.A.; Sobolev, Yu.F.; Chursin, A.D. (FIAN). Space, time and energy characteristics of copper vapor laser radiation. KVEKA, no. 1, 1985, 74-79.

121. Cilea, M.I.; Preda, A.M.; Popescu, I.M.; Cristescu, C.P. (). Simultaneous laser oscillations at the Cd II and Zn II lines obtained in the same laser tube [in French]. RRPQA, no. 6, 1984, 515-517. (RZFZA, 85/2L1104).

122. Direktor, L.B.; Kachalov, V.V.; Malikov, M.M.; Skovorod'ko, S.N.; Fomin, V.A. (IVTAN). Using a coaxial discharge chamber in a metal vapor laser. TVYTA, no. 1, 1985, 193-195.

123. Isayev, A.A.; Lemmerman, G.Yu. (FIAN). A pulsed barium vapor laser in a self-heating regime. KVEKA, no. 1, 1985, 68-73.

124. Kas'yan, V.G.; Kiseleva, G.G. (). The LG-70 helium-cadmium laser. KVEKA, no. 1, 1985, 238.

125. Loboda, S.A.; Semenova, O.P. (). Copper vapor laser spectrum. VINITI. Deposit, no. 6777-84, 18 Oct 1984, 24 p. (RZFZA, 85/1L1000).

126. Voronyuk, L.V.; Grechko, L.G.; Pinkevich, I.P.; Selishchev, P.A.; Sidenko, T.S. (KGU). Optimization of the parameters of a copper laser under short excitation pulses. KVELA, no. 28, 1985, 99-101.

127. Zenchenko, S.A.; Ivanov, V.I.; Malevich, I.A.; Shulekin, S.F. (BGUNIIFP). Switching the lasing wavelengths in a copper vapor laser. KVEKA, no. 1, 1985, 196-197.

128. Zinchenko, S.P.; Ivanov, I.G.; Latush, Ye.L.; Sem, M.F. (). Effect of inelastic collisons with slow electrons on the excitation of lines in a hollow-cathode He-Hg laser. OPSPA, v. 58, no. 2, 1985, 302-306.

o. Gasdynamic

129. Bogomolov, B.G.; Danilov, S.L.; Yefremov, N.M.; Zile, A.V.; Karpukhin, V.T.; Markov, A.V.; Chernyshev, S.M.; Shal'nova, N.I. (). Experience in using industrial CO2 gasdynamic lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 12-13.

130. Borisova, N.A.; Breyev, V.V.; Gubarev, A.V.; Pechenova, O.I. (IAE). Supersonic flows in channels with a periodic pulsed local heat energy supply. IAE. Preprint, no. 3968/1, 1984, 15 p. (RZFZA, 85/2L1127).

131. Glemba-Ovidskiy, O.A.; Yefremov, N.M.; Popov, R.G. (). Various schematics for industrial gasdynamic lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 11-12.

132. Grin', Yu.I.; Testov, V.G.; Golub, V.V.; Naboko, I.M. (IRE, IVTAN). Population inversion in transient rarefaction waves behind the shear of a supersonic nozzle. DANKA, v. 277, no. 3, 1984, 600-603.

133. Karnyushin, V.N. (). Gasdynamic and gas-discharge aspects in the optimization of flow-through lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 54-56.

134. Karpukhin, V.T.; Novoselov, A.G.; Chernyshev, S.M.; Sharkov, V.F. (). Effect of gasdynamic inhomogeneities on the inversion characteristics of CO2 gasdynamic lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 57-58.

135. Karpukhin, V.T.; Novoselov, A.G.; Chernyshev, S.M.; Sharkov, V.F. (). Correct determination of the specific energy output of CO2 gasdynamic lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 61-62.

136. Kudryavtsev, Ye.M. (FIAN). Carbon dioxide, nitrous oxide and carbon disulfide thermal gasdynamic lasers in the IR. FIAN. Dissertation, 1985, 51 p.

137. Kulikov, S.V.; Skrebkov, O.V.; Vasil'yev, V.M. (). Calculation of the chemically and vibrationally nonequilibrium flow of the N2O + CO + He mixture under CO2-gasdynamic conditions. KHFID, 1983. (Cited in Soviet Journal of Chemical Physics, no. 8, 1985, 1724-1730).

138. Vorob'yev, M.V.; Novikov, S.S.; Svetlichnyy, I.V.; Shagov, P.N. (). Investigation of laser-active media on combustion products of heterogeneous systems under the conditions of a pulsed gasdynamic laser on a shock tube. KHFID, 1983. (Cited in Soviet Journal of Chemical Physics, no. 8, 1985, 1709-1715).

4. Excimer

139. Izmaylov, I.A.; Gol'denberg, A.B. (IPANUk). Theoretical study on a photochemical XeO laser excited by a photobleaching wave. KVELA, no. 28, 1985, 3-14.

140. Lakoba, I.S.; Lozovskiy, P.M.; Chernov, S.P.; Essel'bakh, P.B. (MGU). Selective effect of xenon on the violet spectrum of a cyanogen system. VMUFA, no. 1, 1985, 16-20.

141. Marovski, G.; Kanayev, A.V. (FIAN). A comparative analysis of broad-band excimer lasers with optical and electron pumping. KVEKA, no. 1, 1985, 180-183.

5. Dye Vapor

D. CHEMICAL LASERS

1. Miscellaneous

142. Konoplev, N.A.; Stepanov, A.A.; Shcheglov, V.A. (FIAN). Effect of isotopic composition on the energy distribution products of the reaction of hydrogen atoms with bromine monochloride molecules. KRSFA, no. 2, 1985, 17-21.

2. Fluorine + Hydrogen (Deuterium)

143. Agroskin, V.Ya.; Vasil'yev, G.K.; Gur'yev, V.I.; Kirpach, A.B.; Kir'yanov, V.I.; Lukashenko, S.V.; Martirosov, V.A.; Shekhtman, I.N. (SKBAPNTO). Pulsed chemical laser developed at the Special Design Bureau for Analytical Instrument Manufacture, Academy of Sciences USSR. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 10.

144. Gordon, Ye.B.; Matyushenko, V.I.; Pavlenko, V.S.; Sizov, V.D. (IKhF). Chemical H2+F2 laser triggered by an excimer lamp. KVEKA, no. 1, 1985, 220-223.

3. Photodissociation

145. Korol'kov, K.S.; Nosach, O.Yu.; Orlov, Ye.P. (FIAN). Relative stability of iodine photodissociation lasers to the development of stimulated enthalpy scattering of active mixtures. KVEKA, no. 1, 1985, 184-186.

146. Zrodnikov, V.S.; Klementov, A.D.; Petrukhin, Ye.A.; Podsosonnyy, A.S. (FIAN). Study on UV absorption spectra for mercury bromide vapors in the 220-320nm range. KRSFA, no. 2, 1985, 13-16.

4. Transfer

5. Oxygen + Iodine

147. Basov, N.G.; Kryukov, P.G.; Yuryshev, N.N. (FIAN). Periodic pulsed operation of a chemical oxygen-iodine laser. FIAN. Preprint, no. 54, 1985, 21 p.

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Hydrogen

E. COMPONENTS

1. Miscellaneous

148. Vysin, I.; Stanek, J. (). Geometry of optical elements of pulsed lasers. JMKOA, no. 6, 1984, 159-165. (RZFZA, 85/2L808).

2. Resonators

a. Design and Performance

149. Akirtava, D.O.; Konev, Yu.B. (). Efficient method for designing unstable resonators for industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 39-40.

150. Anan'yev, Yu.A. (). Complex eikonal and its use. DANKA, v. 279, no. 4, 1984, 1087-1091.

151. Bel'tyugov, V.N.; Kuznetsov, A.A.; Ochkin, V.N.; Sobolev, N.N.; Troitskiy, Yu.V.; Udalov, Yu.B. (FIAN, IAESOAN). Frequency-selective properties of a waveguide resonator with a diffraction grating. FIAN. Preprint, no. 72, 1985, 44 p.

152. Boyev, V.V.; Borisovskiy, V.Ye.; Bychkov, V.A.; Gavryushenko, B.S.; Gerasimov, A.N.; Skvortsov, B.V.; Ukolov, V.V. (). Use of aspherical optics to improve the quality of radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 28-29.

153. Kosinskiy, Yu.I.; Lipatov, M.M.; Pugach, I.P.; Filippov, V.M. (). Ring resonator. OTIZD, no. 31, 1984, 1109841. (RZRAB, 85/2Ye535).

154. Patek, M.; Khapalyuk, A.P. (BGU). Open resonator with periodically spaced lenses. VBMFA, no. 1, 1985, 19-23.

155. Voytovich, A.P.; Ovseychuk, S.I.; Runets, L.P. (IFANB). Decrease in the Q-factor of a laser resonator during variation in its optical length. DBLRA, no. 10, 1984, 883-886.

156. Wolski, R.; Szczepanski, P.; Wojdak, W.; Wolinski, W. (). Analysis of the properties of KNdP(sub4)O(subl2)/ KLaP(sub4)O(subl2) thin film structures with a triangular and rectangular grating resonator. OPAPB, no. 4 [in English], 1984, 431-440. (RZRAB, 85/2Ye527).

157. Zakharov, M.I.; Prilepskikh, V.D. (NIIGAiK). Characteristics of an anisotropic three-mirror laser resonator. VINITI. Deposit, no. 7036-84, 31 Oct 1984, 18 p. (RZRAB, 85/2Ye532).

b. Mode Kinetics

158. Adonts, G.G.; Dzhotyan, G.P.; Kanetsyan, E.G. (). Polarizational optical multistability in nonlinear Fabry-Perot cavities. OPAPB, no. 4 [in English], 1984, 339-345. (RZRAB, 85/2Ye525).

159. Chetverikov, V.I. (). Effect of perturbations in the discharge current on the beat frequency of circularly polarized opposed waves in a Zeeman ring laser with a reversible support. OPSPA, v. 58, no. 2, 1985, 285-292.

160. Dorofeyev, I.A.; Sokholov, V.A. (LGU). Beat frequency of opposed waves in a mode-locked two-mode ring laser with a two-isotope active medium. VINITI. Deposit, no. 6668-84, 12 Oct 1984, 28 p. (RZFZA, 85/2L1070).

161. Dotsenko, A.V.; Korniyenko, L.S.; Kravtsov, N.V.; Lariontsev, Ye.G.; Shelayev, A.N. (NIIYaF). The use of a self-modulation regime in a ring laser to measure optical non-reciprocity. KVEKA, no. 2, 1985, 383-385.

162. Glova, A.F.; Kachurin, O.R.; Lebedev, F.V. (). Synchronization of radiation in elements of a multibeam laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 29-30.

163. Gryszko, T.; Jankiewicz, Z. (). Modes in resonators with resonant reflectors. OPAPB, no. 4 [in English], 1984, 363-371. (RZRAB, 85/2Ye526).

164. Ishchenko, Ye.F.; Sokolov, A.L (). Perturbation of linear eigenstates of polarization. OPSPA, v. 57, no. 3, 1984, 400-403.

165. Vorontsov, V.I.; Kanchenko, V.A.; Solomin, A.V.; Shpak, I.V. (). Experimental study on the characteristics of a ring laser in a mode locking zone. UFZHA, no. 9, 1984, 1408-1410. (RZFZA, 85/2L1224).

166. Zakharov, M.I.; Prilepskikh, V.D. (NIIGAiK). Frequency selection in lasers by means of an anisotropic reflecting interferometer. VINITI. Deposit, no. 6435-84, 28 Sep 1984, 10 p. (RZFZA, 85/1L1105).

3. Pump Sources

167. Barsuk, V.A.; Vorotyntsev, Ye.V.; Lunev, Ye.I.; Nesterenko, V.M. (). Experimental studies on the work capacity of electrode elements under operating conditions of fast-flow CO2 lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 53.

168. Belyy, M.U.; Baran, V.M.; Kononchuk, G.L.; Yakunov, A.V. (KGU). Transfer of excitation between fine-structure components of atomic particles. Intracavity optical pumping. KVELA, no. 28, 1985, 101-104.

169. Bleyvas, I.N.; Galitskaya, I.I.; Yegorova, G.I.; Zusmanovskiy, S.A.; Simonov, K.G. (). E-beam intended primarily for gas lasers. OTIZD, no. 1, 1985, 1080668.

170. Bleyvas, I.N.; Galitskaya, I.I.; Zusmanovskiy, S.A.; Simonov, K.G.; Treshchikova, D.S. (). E-beam. OTIZD, no. 1, 1985, 1080671.

171. Blokhin, V.I.; Gerasimov, V.F.; Golubev, V.S.; Dmitriyev, K.I.; Dremin, V.Ye.; Pashkin, S.V.; Shulakov, V.N. (). Research and development of a gas-discharge chamber for a fast-flow open-cycle industrial CO2 laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 53-54.

172. Bokhan, P.A.; Sorokin, A.R. (ITF). Open discharge generating an e-beam: mechanism, properties, and use for pumping medium-pressure lasers. ZTEFA, no. 1, 1985, 88-95.

173. Bondarenko, A.V.; Lebedev, F.V.; Smakotin, M.M. (). Degrees of sectioning of electrode elements in a longitudinal discharge. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 47-48.

174. Bondarenko, A.V.; Lebedev, F.V.; Smakotin, M.M. (). Effect of turbulence on the stability of a longitudinal discharge in a flow. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 44-45.

175. Bulatov, O.G.; Petrosyan, N.N.; Shitov, V.A. (). Optimization of the power supply of an industrial laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 51-52.

176. Erbs, H.; Daniel, J.; Golz, G.; Gynz-Rekowski, H.von; Mitschke, M.; Schoepp, H. (). Electrode for pulse discharges and method for its fabrication. Patent GDR, no. 207834, 14 Mar 1984. (RZRAB, 85/2Ye578).

177. Gerasev, S.A.; Korotayev, N.V.; Nikitin, A.M.; Opre, V.M. (). Pulsed power supply systems for industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 49-50.

178. Gordeyev, P.G.; Kalinov, A.A.; Komarov, S.V. (). High-voltage pulsed power supply. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 50-51.

179. Gordeyev, P.G.; Polulyakh, V.P.; Rumyantsev, P.P. (). Power supply for a two-chamber periodic pulsed industrial laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 48-49.

180. Mineyev, A.P. (IOF). Controlling the lasing parameters of a gas-discharge laser by means of a magnetic field. IOF. Preprint, no. 66, 1985, 17 p.

181. Moeller, B.; Meisel, J. (). Control circuit for the output power of a light-emitting diode. Patent GDR, no. 208027, 21 Mar 1984. (RZRAB, 85/2Ye579).

182. Niz'yev, V.G.; Polulyakh, V.P. (). Stability of a sectioned discharge at a low number of external couplings. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 46-47.

183. Polyakov, N.P.; Rumyantsev, P.P.; Sinenko, V.V.; Tikhomirov, S.I.; Yarushkin, Yu.Ya. (). Magnetothyristor power supplies for periodic pulsed industrial gas lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 14.

184. Vikharev, A.L.; Ivanov, O.A.; Stepanov, A.N. (IPF). Multiple pulsed microwave breakdown in intersecting wave beams. IVYRA, no. 1, 1985, 36-42.

185. Zusmanovskiy, S.A.; Karmazin, V.G.; Rebrov, S.I.; Simonov, K.G. (). E-beam. OTIZD, no. 1, 1985, 1064830.

4. Cooling Systems

5. Deflectors

186. Grib, A.F.; Gusak, N.A.; Kamach, Yu.E.; Ovchinnikov, V.M. (). Asymmetry of distortions of the controlled field in a quadrupole deflector. OPSPA, v. 57, no. 4, 1984, 711-715.

187. Kryzhanovskiy, V.I.; Chertkov, A.A.; Malinov, V.A.; Nikitin, V.V.; Chernov, V.N.; Charukhchev, A.V. (). Contrast of laser pulses formed by electrooptical deflectors. KVEKA, no. 2, 1985, 372-375.

188. Shirokov, A.M.; Leonov, A.M.; Shulyak, V.V. (ITK; BGU). Optimizing a piezoceramic optical deflector. DBLRA, no. 8, 1984, 709-712.

6. Attenuators

189. Ventskovskiy, B.A.; Gavrikov, V.K.; Kovtun, I.I.; Tikhonov, A.M. (). Attenuators of high-power optical radiation based on light scattering materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 27-28.

7. Collimators

8. Diffraction Gratings

190. Abdulin, A.Z.; Gumen, A.A.; Posledovich, N.R.; Tkachenko, V.M. (BGU). Modelling diffraction gratings with multidemsional structures using liquid crystals. VBMFA, no. 1, 1985, 26-28.

191. Korn, G.; Polze, S.; Guetter, R.; Schaefer, L.; Tesch, L. (German Democratic Republic). The diffraction characteristics of holographic gratings at a grazing angle of incidence. KVEKA, no. 1, 1985, 223-225.

192. Korsunov, V.V. (). Analysis of the diffraction properties of echelettes, allowing for the behavior of the e-m field near the edge. OPSPA, v. 57, no. 3, 1984, 548-551.

193. Kostyshin, M.T.; Mustafin, K.S.; Romanenko, P.F.; Stronskiy, A.V.; Kostyshina, A.P.; Indutnyy, I.Z.; Seleznev, V.A.; Levitskaya, L.A. (IPANUk). Recording of high-frequency holographic diffraction gratings on photosensitive As(sub2)Se(sub3)-As(sub2)S(sub3)-Ag systems. KVELA, no. 28, 1985, 90-95.

194. Kostyshin, M.T.; Romanenko, P.F.; Stronskiy, A.V.; Indutnyy, I.Z. (ToPI). Photosensitive semiconductor-metal systems as a medium for recording high-frequency holographic diffraction gratings. Mendeleyevskaya konferentsiya ToPI, Tomsk, 21-22 Feb 1984. Materialy. ONIITEkhim. Deposit, no. 919KhP-84, 18 Sep 1984, 32-34. (RZFZA, 85/1L797).

195. Masychev, V.I.; Sysoyev, V.K. (IOF). Optimization of a diffraction grating for a tunable CO laser. IOF. Preprint, no. 8, 1985, 8 p.

196. Skalsky, M.; Miler, M.; Triskowa, M. (). Method for fabricating diffraction gratings with sinusoidal relief in SCR-11 positive photoresists. Author's certificate Czechoslovakia, no. 214436, 1 Jan 1984. (RZRAB, 85/2Ye665).

9. Focusers

197. Dement'yev, A.S.; Domarkene, D.P. (IFANLi). The focusing of radiation by a prism raster. KVEKA, no.1, 1985, 197-201.

198. Goncharskiy, A.V.; Danilov, V.V.; Popov, V.V.; Sisakyan, Ye.V.; Sisakyan, I.N.; Stepanov, V.V. (). Plane optics in problems of laser technology. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 26-27.

10. Windows

199. Musa, G.; Popescu, A.; Cormos, A.; Lungu, C.P.; Tinis, V.; Gita, L. (). Method for depositing glass frits on the solderable surface of gas laser tubes and windows. Patent Romania, no. 81232, 30 Jan 1983. (RZRAB, 85/2Ye590).

11. Polarizers

12. Beam Shapers

13. Lenses

14. Filters

200. Janulewicz, K.; Jarocki, R. (). Three-nanosecond pulse transmission in SF2 buffered by C(sub2)H(sub5)OH and freon 502 at 10.6 um. OPAPB, no. 4 [in English], 1984, 373-376. (RZRAB, 85/2Ye707).

201. Mal'khanov, O.V.; Cheremiskin, I.V.; Chekhlova, T.K. (). Filtering properties of a ring thin-film resonator. OPSPA, v. 58, no. 2, 1985, 420-423.

15. Beam Splitters

202. Pun'ko, N.N.; Fillipov, V.V. (). Splitting of a totally reflected incident beam into two elliptically polarized beams. OPSPA, vol. 58, no. 1, 1985, 125-129.

16. Mirrors

203. Andreyevskiy, L.M.; Latyshev, Yu.V. (). Power reflectors based on silicon. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 35-36.

204. Borisova, M.S.; Chernykh, Ye.N. (). Dielectric mirror with a ferromagnetic substrate. OPSPA, v. 57, no. 3, 1984, 543-545.

205. Dolgushin, V.V.; Yeremeyev, I.A.; Nekrasov, Yu.I. (TyumII). Scanning device. OTIZD, no. 16, 1984, 1089539. (RZRAB, 85/1Ye181).

206. Dovgiy, Ya.O.; Mykytyuk, B.V. (). Development of a circular diagram method for practical use in designing multilayer thin-film systems. OPSPA, v. 58, no. 2, 1985, 432-436.

207. Fischer, L.; Specht, E. (). Mirror polygon. Patent GDR, no. 208239, 28 Mar 1984. (RZRAB, 85/2Ye271).

208. Gavryushenko, B.S.; Kurochkin, Yu.V.; Skvortsov, B.V.; Ukolov, V.V.; Yudin, S.P. (). Thermophysics in the operation of metal optics in industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 34-35.

209. Generalov, N.A.; Moskalev, V.S.; Podenok, S.Ye.; Yudina, I.O. (). Device for measuring the surface curvature of mirrors. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 30-31.

210. Golokoz, P.P.; Oboznenko, Yu.L.; Pugach, I.P. (KGU). Radiation spectrum of a laser with an acoustooptic mirror in the resonator. UkrNIINTI. Deposit, no. 1739Uk-84, 19 Oct 1984, 21 p. (DERUD, 2/85, 841).

211. Golovey, M.I.; Yegorov, Yu.A.; Yefimova, I.L.; Kazhidub, A.V.; Kortunov, V.N.; Lada, A.V.; Loya, V.Yu.; Sumerin, V.V.; Ul'yanov, V.A. (). Study on KCl optical elements with protective coatings. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 37-38.

212. Goncharov, I.G.; Grachev, A.P.; Dedushenko, K.B.; Zverkov, M.V.; Mamayev, A.N. (MIFI). The effect of an external mirror on the radiation characteristics of a semiconductor laser. KVEKA, no. 2, 1985, 397-400.

213. Gurevich, S.A.; Karpov, S.Yu.; Portnoy, Ye.L. (FTI). Spectral dependence of the coefficient of reflection of a Bragg mirror. PZTFD, no. 15, 1984, 945-949.

214. Pelyukhova, Ye.B. (). Effect of the coefficient of reflection of the input mirror of an oscillator, on the steady-state operation of a coupled amplifier-oscillator system. OPSPA, v. 58, no. 2, 1985, 414-419.

215. Rubanov, V.S.; Severikov, V.N.; Shevtsova, A.I. (IFANB). Effect of mirror anisotropy and the orientation of a Brewster plate on the characteristics of ring laser radiation. DBLRA, no. 12, 1984, 1086-1089.

216. Vorontsov, M.A.; Kudryashov, A.V.; Nazarkin, S.I.; Shmal'gauzen, V.I. (). Flexible mirrors for problems in laser technology. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 35.

217. Zhukova, Ye.M.; Kornev, V.V.; Kostyuk, V.K.; Nasel'skiy, S.P.; Pavlova, I.A.; Khalilov, V.Kh. (). Spectral and lasing characteristics of quartz ceramic laser reflectors with a glazed surface. IVNMA, no. 5, 1984, 837-840. (RZFZA, 85/1L679).

17. Detectors

218. Ganichev, S.D.; Terent'yev, Ya.V.; Yaroshetskiy, I.D. (FTI). Photodetectors based on the effect of increasing the current of carriers by photons for the far infared and submillimeter spectral region. PZTFD, no. 1, 1985, 46-48.

219. Goepel, K.; Foerster, G. (). Optical signal detection circuit. Patent GDR, no. 208278, 28 Mar 1984. (RZRAB, 85/1Ye431).

220. Grosu, N.D.; Popescu, E.; Stoenescu, Gh.; Vasile, E. (). Effect of temperature on the operation of silicon avalanche photodiodes. SCEFA, no. 9, 1984, 844-850. (RZFZA, 85/2L785).

221. Komashchenko, V.N.; Fedorus, G.A.; Fursenko, V.D.; Sheynkman, M.K. (). Research and development of photoelectric semiconductor instruments based on A(sup2)B(sup6) compounds. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 144-151.

222. Kormilin, V.A.; Martyshevskiy, Yu.V.; Palad'yev, V.A. (TIASUR). TV analyzer for the cross-section of a laser beam. PRTEA, no. 1, 1985, 242.

223. Pilipovich, V.A.; Yesman, A.K.; Kuleshov, V.K.; Posed'ko, V.S. (). Modeling the operation of a photoelectric sensor under real conditions. DBLRA, no. 9, 1984, 788-791. (RZFZA, 85/1L641).

224. Stoyanov, D.V. (). Statistical characteristics of a signal restored from photon counting receivers [in English]. CRABA, no. 6, 1984, 749-752. (RZFZA, 85/1L638).

225. Wolf, L. (). Device for producing optically efficient semiconductor detector structures. Patent GDR, no. 205305, 21 Dec 1983. (RZRAB, 85/2Ye545).

18. Modulators

226. Alekseyev, E.I.; Bazarov, Ye.N.; Izrayelyan, V.G.; Kovalenko, V.G. (IRE). The depolarization of monochromatic radiation by means of an electrooptical modulator. KVEKA, no. 1, 1985, 174-176.

227. Dumarevskiy, Yu.D.; Kovtonyuk, N.F.; Kompanets, I.N.; Parfenov, A.V.; Petrovicheva, G.A.; Savin, A.I. (FIAN). Refocusing effect: mechanism for forming images in optical systems with a spatial phase modulator. KRSFA, no. 8, 1984, 48-51. (RZFZA, 85/1L554).

228. Il'ichev, N.N.; Kostesha, A.V.; Kushch, N.P.; Malyutin, A.A.; Novikov, I.V. (IOF). Control of laser parameters by a shutter in a compound resonator. KVEKA, no. 2, 1985, 446-448.

229. Insarova, N.I.; Olefir, G.I. (). Converting the shape of light pulses by a thin plane parallel layer of absorbing material. ZPSBA, v. 42, no. 2, 1985, 255-259.

230. Kabelka, V.I.; Milyauskas, A.A.; Moteyunas, R.V. (IFANLi). Control devices and analog-digital converters for automation of CAMAC reference systems for laser probing of the atmosphere. PRTEA, no. 1, 1985, 103-106.

231. Kasheta, S.S.; Zimarin, O.I. (). Study on the electrooptic properties of various design variations of magnetic focusing-deflecting systems. RADID, no. 3, 1984, 94-101. (RZRAB, 85/2Ye269).

232. Korda, I.M.; Rubinov, A.N. (). Laser with a color-center-crystal passive switch for pumping of dyes. ZPSBA, v. 42, no. 2, 1985, 325-327.

233. Kovalev, I.S.; Lukashev, V.M.; Sobolevskiy, A.F. (). Analyzing the parameters of a high-speed waveguide electroopotic traveling-wave modulator. VABFA, no. 3, 1984, 96-99. (RZFZA, 85/2L860).

234. Petrov, M.P.; Kapustin, V.A.; Khomenko, A.V. (). Processing of time-varying images. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 126-132.

235. Shlyagin, M.G.; Khomenko, A.V.; Bryksin, V.V.; Korovin, L.I.; Petrov, M.P. (FTI). Mechanisms of nonlinear phenomena in a PRIZ space-time light modulator. ZTEFA, no. 1, 1985, 119-126.

236. Val'shin, A.M.; Gordiyenko, V.M.; Danilov, Ye.O.; Kovrigin, A.I. (MGU). Short pulse generation in the 10 um region. KVEKA, no. 2, 1985, 437-439.

237. Velikovich, A.L.; Garkavenko, A.S.; Golubev, G.P.; Kalendin, V.V.; Levinskiy, B.N. (VNITsISPiV). Modulation of argon laser radiation by broadening the excitation level in a CdS crystal. KVEKA, no. 2, 1985, 419-422.

238. Yakobi, Yu.A.; Grigor'yev, P.V.; Malov, A.N.; Rudnitskiy, A.L.; Soloukhin, R.I.; Studenikin, Yu.Ye.; Fedorov, S.Yu. (ITMO). Tunable lasers with spatial intracavity separation of the lines of lasing. KVEKA, no. 2, 1985, 351-354.

239. Zanadvorov, N.P.; Flegontov, Yu.A. (). Designing controlled apodizing diaphragms using the Pockels effect. OPSPA, v. 57, no. 3, 1984, 527-531.

F. NONLINEAR OPTICS

1. General Theory

240. Abdullayev, G.B.; Sakharov, V.N.; Aleskerov, F.K.; Kakhramanov, K.Sh.; Gryadunov, A.I.; Sadykov, V.A.; Dormidontov, A.A.; Kuznetsov, V.A.; Bukurov, A.Yu.; Talyshkhanov, R.A.; Petrenko, R.A.; Likholit, N.I.; Nedbayev, N.Ya. (IFANAz). Thermostat for a nonlinear optical crystal. PRTEA, no. 1, 1985, 259.

241. Afanas'yev, A.A.; Vlasov, R.A. (). Interaction between a weak light wave being scanned and high-power pumping in a medium with cubic nonlinearity. ZFSBA, v. 42, no. 1, 1985, 90-93.

242. Agranovich, V.M. (ISAN). Transition layer and spatial dispersion effects in surface polariton spectra. Poverkhnostnyye polyaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. NSSAM, ISAN. Moskva, Nauka, 1985, 132-166.

243. Alekseyev, A.I.; Beloborodov, V.N. (). Direct and reverse photon echo in a gas and solid. OPSPA, v. 57, no. 3, 1984, 460-466.

244. Al'tshuler, G.B.; Yermolayev, V.S. (). Nonlinear scattering of light by static optical inhomogeneities. ZPSBA, v. 42, no. 2, 1985, 315-321.

245. Andreyev, A.V.; Yenaki, N.A.; Il'inskiy, Yu.A. (MGU). The role of time lag in the kinetics of superradiation. KVEKA, no. 2, 1985, 273-279

246. Augustov, P.A. (). Dependence of photorefraction on light intensity in LiTaO(sub3)-Fe. LZFTA, no. 4, 1984, 73-77. (RZFZA, 85/1L1133).

247. Bakayev, D.S.; Vdovin, Yu.A.; Yermachenko, V.M.; Yakovlenko, S.I. (). Collisional broadening in a strong resonance field and shape of the absorption line of the probing signal. Nelineynyye elektromagnitnyye yavleniya v veshchestve. MIFI. Moskva, 1984, 3-13. (RZFZA, 85/1L935).

248. Belitskiy, V.I.; Gol'tsev, A.V.; Lang, I.G.; Pavlov, S.T. (). Theory of two-phonon Raman scattering of light in a magnetic field. FTVTA, no. 7, 1984, 2182-2185. (RZFZA, 85/1N370).

249. Bilenko, D.I.; Lodgauz, V.A. (NIIMF). Thermooptic bistability and nonlinear switching waves in vanadium dioxide films. KVEKA, no. 2, 1985, 387-390.

250. Chernobrod, B.M. (). Four-wave interaction in transient cooperative resonance fluorescence. OPSPA, v. 57, no. 3, 1984, 467-471.

251. Demidov, Ye.V.; Romanov, Yu.A. (NIFTI). Nonlinear susceptibility of asymmetric quantum systems. IVYRA, no. 1, 1985, 43-50.

252. Dianov, Ye.M.; Nikonova, E.S.; Serkin, V.N. (IOF). Dynamics of formation and decay of bound states of solitons in fiber lightguides. IOF. Preprint, no. 13, 1985, 31 p.

253. Galanin, M.D. (biographic subject). (FIAN). Mikhail Dmitriyevich Galanin on his 70th birthday. ZPSBA, v. 42, no. 2, 1985, 341-343.

254. Gorshkov, B.G.; Dorozhkin, L.M.; Yepifanov, A.S.; Manenkov, A.A.; Panov, A.A. (IOF). Study on nonlinear absorption of ultraviolet laser radiation in alkali-halide crystals under conditions of optoacoustic generation of nonequilibrium carriers. ZETFA, v. 88, no. 1, 1985, 21-29.

255. Guba, B.S.; Potapov, S.L.; Sedov, B.M. (). Method for amplifying laser radiation. OTIZD, no. 2, 1985, 1090208.

256. Gus'kov, A.P.; Korotchenko, A.I.; Samokhin, A.A. (IOF). Nonlinear pressure response to pulsed irradiation of strongly absorbing condensed media. IOF. Preprint, no. 4, 1985, 11 p.

257. Kazantsev, A.P.; Melikyan, O.G.; Smirnov, V.S.; Yakovlev, V.P. (). Lorentz-Lorentz effect in radiative interactions of atoms. Nelineynyye elektromagnitnyye yavleniya v veshchestve. MIFI. Moskva, 1984, 13-21. (RZFZA, 85/1L936).

258. Kosobukin, V.A. (). "Giant" scattering of light by molecules adsorbed on a metal surface. IANFA, no. 7, 1984, 1281-1288. (RZFZA, 85/1L125).

259. Lebedenko, A.N.; Matyushkin, E.V.; Smushkov, V.I. (FTINT). Multi-photon optical absorption in anti-ferromagnetic manganese compounds. FNTED, no. 2, 1985, 200-205.

260. Lebedeva, V.V.; Odintsov, A.I.; Glavatskikh, N.A.; Grin', L.Ye.; Shul'ga, A.G. (). Study on Stark broadening on nonlinear three-level resonances by bound transitions of Ar II. ZPSBA, v. 41, no. 3, 1984, 385-388.

261. Lisitsa, M.P. (). Vibrational resonances and nonlinear optical activity in crystals. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 34-67.

262. Luks, A.; Perina, J.; Perinova, V.; Bertolotti, M.; Sibilia, C. (). Statistical approach to bistable behavior of a nonlinear system in a stationary field. CZYPA, v. B34, no. 8, 1984, 855-861. (RZFZA, 85/2L1077).

263. Nguyen Hoang Xuan; Zimmermann, R. (). Nonlinear exciton transmission in CdS. Nonhomogeneous and nonstationary model calculations. PSSBB, v. B124, no. 1, 1984, 191-200. (RZFZA, 85/1N375).

264. Petrov, N.S.; Shakin, V.A. (). Nonlinear reflection of p-polarized light. ZPSBA, v. 41, no. 2, 1984, 277-283. (RZFZA, 85/2L1254).

265. Potapov, S.K.; Derbov, V.L.; Bukatin, A.F. (). Theory of four-photon scattering under conditions of intense rseonant excitation. ZPSBA, v. 42, no. 1, 1985, 94-100.

266. Reshetin, V.P. (ITMO). The stability of the transmission and reflection of light by non-linear media. KVEKA, no. 2, 1985, 280-288.

267. Semioshko, V.N. (). Device for measuring the anisotropy of the coefficient of absorption and nonlinear refractive index. OTIZD, no. 1, 1985, 1072722.

268. Sen, P.K. (). Nonlinear absorption in III-V semiconductors. PSSBB, v. B124, no. 1, 1984, 117-125. (RZFZA, 85/1N374).

269. Shameyeva, T.Yu. (MGU). Optimization in the problem of propagating an optical beam in an inhomogeneous medium. Moskovskiy universitet. Vestnik. Seriya 15. Vychislitel'naya matematika i kibernetika, 1985, no. 1, 12-19.

270. Smirnov, D.F.; Troshin, A.S. (). Sub-Poisson statistics of luminescence photons of impurity centers in crystals due to cooperative processes. OPSPA, v. 57, no. 2, 1984, 181-183.

271. Titov, A.N. (). Theory on an inverted Lamb dip in a strong field. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1984, 34-48. (RZFZA, 85/1L939).

272. Vasil'yev, A.V.; Nekrasov, V.Yu.; Polyakov, A.A.; Trukhin, V.N.; Yaroshetskiy, I.D. (FTI). Frequency shift and spectral broadening of picosecond light pulses during their propagation in semiconductors. PZTFD, no. 1, 1985, 34-38.

273. Vavilova, O.S.; Gulyayev, S.N. (). Stokes band broadening during Raman scattering in a quartz fiber optic in the presence of four-photon parametric processes. OPSPA, vol. 58, no. 1, 1985, 195-197.

274. Zakhidov, E.A. (IOF). Four-photon nonlinear processes in glass fiber lightguides. IOF. Dissertation, 1984, 19 p.

2. Frequency Conversion

275. Andreyev, Yu.M.; Voyevodin, V.G.; Gribenyukov, A.I.; Zyryanov, O.Ya.; Ippolitov, I.I.; Morozov, A.N.; Sosin, A.V.; Khmel'nitskiy, G.S. (). ZnGeP(sub2) second harmonic generator for a CO2 laser. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 113-119.

276. Arkhipkin, V.G.; Geller, Yu.I.; Popov, A.K.; Provorov, A.S. (IFSOAN). Four-wave frequency mixing in gas-filled waveguides. IFSOAN. Preprint, no. 289F, 1984, 11 p. (RZFZA, 85/2Zh19).

277. Balakhnin, A.G.; Basharov, A.M.; Manykin, E.A. (). Coherent transition phenomena due to phase modulation of a light wave in two-photon resonance. OPSPA, v. 57, no. 3, 1984, 507-513.

278. Batishche, S.A.; Burakov, V.S.; Gladushchak, V.I.; Gurlenya, V.I.; Mostovnikov, V.A.; Moshkalev, S.A.; Tarasenko, N.V.; Shreyder, Ye.Ya. (FTI). Efficient frequency conversion under nonresonant conditions at the Lyman-alpha wavelength of hydrogen. ZTEFA, no. 2, 1985, 335-342.

279. Bocharova, N.G.; Rakova, Ye.V.; Semiletov, S.A. (IKAN). Effect of annealing on the near-surface domain grain structure (0001) of lithium niobate. KRISA, no. 1, 1985, 114-118.

280. Bokut', B.V.; Kazak, N.S.; Lugina, A.S.; Miklavskaya, Ye.M.; Nadenenko, A.V.; Pavlenko, V.K.; Sannikov, Yu.A. (). Second harmonic generation under vector synchronism by diverging laser beams. ZPSBA, v. 42, no. 2, 1985, 202-206.

281. Bokut', B.V.; Penyaz', V.A.; Serdyukov, A.N. (GomGU). Synchronous second harmonic generation in gyrotropic crystals with dispersion curve crossed principal values of the dielectric permittivity tensor. DBLRA, no. 1, 1985, 31-33.

282. Bol'shov, L.A.; Reshetin, V.P. (ITMO). The efficiency of doubling the frequency of infrared radiation in periodic laminated media. KVEKA, no. 1, 1985, 108-114.

283. Geyfman, I.N.; Zavorotnyy, V.F.; Liberts, G.V.; Kundzin'sh, M.A.; Krulikovskiy, B.K.; Poplavko, Yu.M. (IPANUk). Phase transition in [K(1-x):Li(x)]TaO(sub3). FTVTA, no. 1, 1985, 63-68.

284. Kruglik, G.S.; Skripko, G.A.; Shkadarevich, A.P.; Kondratyuk, N.V.; Zhdanov, E.A.; Zabaznov, A.M. (). Highly efficient Al(sub2)O(sub3):Ti(sup3+) crystal laser frequency converter. ZPSBA, v. 42, no. 1, 1985, 126-128.

285. Leonov, A.P.; Voronkova, V.I.; Stefanovich, S.Yu.; Yanovskiy, V.K. (NIFKhI). Evidence for a ferroelectric transition in KTiOPO(sub4) crystals. PZTFD, no. 2, 1985, 85-89

286. Liberts, G.V.; Kapostin'sh, P.P.; Zvirgzds, Yu.A. (NIIFTT). Evidence of super-transient effects in barium titanate using a second harmonic optical scattering method and small angle x-ray scattering. IANFA, no. 2, 1985, 259-262.

287. Myslivets, S.A.; Lukinykh, V.F.; Popov, A.K.; Slabko, V.V. (). Interference of resonant ninth order and nonresonant seventh order processes during seventh harmonic generation of neodymium laser radiation in mercury vapors. OPSPA, vol. 58, no. 1, 1985, 122-124.

288. Pakhomov, V.I.; Sil'nitskaya, G.B.; Semin, G.K.; Gerken, V.A.; Kalashnikova, I.I. (IONKh). Structural perfection of CsH(sub2)AsO(sub4) crystals. IVNMA, no. 1, 1985, 158-159.

3. Parametric Processes

289. Abroskina, O.N.; Kitayeva, G.Kh.; Penin, A.N. (MGU). Effective brightness of zero fluctuations of an electromagnetic vacuum under parametric scattering of light. DANKA, v. 280, no. 3, 1985, 584-586.

290. Lunchev, V.A.; Magnitskiy, S.A.; Malakhova, V.I.; Tarasevich, A.P.; Tunkin, V.G.; Yakubovich, S.D. (MGU). Narrowband picosecond optical parametric oscillator with injection of frequency tunable radiation from a semiconductor laser. KVEKA, no. 2, 1985, 403-404.

291. Martynov, A.A.; Pogosov, O.K.; Chizhikov, V.I. (KubU). Effect of inhomogeneity in nonlinear crystals on the efficiency of parametric frequency converters. VINITI. Deposit, no. 6526-84, 3 Oct 1984, 26 p. (RZFZA, 85/1L1150).

4. Stimulated Scattering

a. Miscellaneous Scattering

292. Bel'dyugin, I.M.; Zolotarev, M.V.; Sviridov, K.A. (). The effect of the spectral line of the vibrations of a medium on the temporal characteristics of stimulated scattering. KVEKA, no. 1, 1985, 208-210.

293. Goryunova, G.F.; Yakimenko, I.P. (ITeFUk). Stimulated scattering of electromagnetic waves in plasma molecular systems. ITeFUk. Preprint, no. 132R, 1984, 39 p. (RZFZA, 85/2G37).

294. Pilipetskiy, A.N.; Shkunov, V.V. (IPMe). Calculation of the threshold and conversion coefficient during stimulated scattering in an intensifying medium. KVEKA, no. 2, 1985, 428-430.

295. Potapov, S.K.; Derbov, V.L.; Bukatin, A.F. (SGU). The role of multi-photon processes in four-photon scattering during intense bichromatic pumping. KVEKA, no. 1, 1985, 171-174.

b. Raman

296. Agal'tsov, A.M.; Gorelik, V.S.; Sushchinskiy, M.M. (). Hyper-Raman scattering in crystals induced by a copper vapor laser. OPSPA, v. 58, no. 2, 1985, 386-389.

297. Bol'shov, L.A.; Yelkin, N.N.; Likhanskiy, V.V.; Persiantsev, M.I. (). Features of the coherent amplification of the radiation in the direction of pumping during resonant stimulated Raman scattering. ZETFA, vol. 88, no. 1, 1985, 47-59.

298. Bondarev, V.N.; Kuklov, A.B. (NIIFOd). Theory on Raman scattering of light by superionic conductors. UFZHA, no. 2, 1985, 198-200.

299. Dovgiy, B.P.; Marchevskiy, F.N.; Strizhevskiy, V.L. (KGU). Effect of diffraction on stimulated Raman emission of light beams in a resonator. KVELA, no. 28, 1985, 24-31.

300. Gorban', I.S.; Gubanov, V.A.; Salivon, G.I.; Yanchuk, Z.Z. (KGU). Raman scattering of light and Davydov splitting of vibrational modes of elementary packet layers in zinc phosphide and cadmium phosphide crystals. UFZHA, no. 2, 1985, 202-211.

301. Gorobchenko, V.S.; Ogurtsova, L.A.; Pokrovskaya, F.S. (FTINT). Stimulated Raman scattering in some molecular crystals. UFZHA, no. 1, 1985, 53-56.

302. Korniyenko, N.Ye.; Steba, A.M.; Strizhevskiy, V.L. (). Theory on the generation of Stokes and anti-Stokes waves under nonmonochromatic pumping. OPSPA, v. 57, no. 3, 514-520.

303. Nesterova, Z.V.; Aleksandrov, I.V.; Petrovskiy, G.T. (GOI). Stimulated Raman scattering of light by the microscopic defects of the structure of quartz fiber light guides. DANKA, vol. 279, no. 3, 1984, 609-613

304. Orlovich, V.A. (IFANB). Stimulated Raman scattering in the resonator of a giant pulsed ruby laser. VBSFA, no. 1, 1985, 69-74.

305. Shamrov, N.I. (). Effects of phase relaxation in nonresonant cooperative Raman scattering. OPSPA, v. 57, no. 4, 1984, 627-633.

306. Trifonov, N.Yu. (BPI). Method for evaluating the intensity of lines and measuring the geometry of molecules using resonant Raman scattering. DBLRA, no. 10, 1984, 894-896.

307. Venkin, G.V.; Yesikov, D.A.; Maleyev, D.I.; Mikheyev, G.M. (MGU). Study on stimulated Raman scattering by the Q(sub12)[1] transition of vibrationally excited hydrogen molecules. VINITI. Deposit, no. 5701-85, 7 Aug 1984, 26 p. (RZFZA, 85/1L1172).

308. Vokhnik, O.M.; Zykanova, I.V.; Odintsov, V.I.; Rogacheva, L.F. (MGU). Decrease in the efficiency of stimulating Raman scattering in a resonator during stimulated Brillouin scattering--mode interaction. VMUFA, no. 1, 1985, 89-92.

c. Brillouin

309. Adzhemyan, L.Ts.; Romanov, V.P.; Salikhov, T.Kh. (). Effect of double scattering by a Brillouin doublet shape near the critical point of lamination. OPSPA, v. 58, no. 2, 1985, 339-345.

310. Burlak, G.N.; Grimal'skiy, V.V.; Kotsarenko, N.Ya. (KGU). Possibility of modeconversion during direct stimulated Brillouin scattering in optical fiber lightguides. ZTEFA, no. 1, 1985, 203-205.

311. Buzyalis, R.R.; Dement'yev, A.S.; Kosenko, Ye.K. (IFANLi). Experimental study on stimulated Brillouin scattering of focused beams operating in a periodic pulsed mode. LFSBA, no. 1, 1985, 68-79.

312. Kitayeva, V.F.; Sidorov, T.A.; Sobolev, N.N.; Titova, T.V.; Fedorovich, V.Yu. (FIAN). Brillouin scattering in Na2O-CaO-SiO2 system glasses and their elastic and photoelastic constants. FIAN. Preprint, no. 33, 1985, 16 p.

313. Odintsov, V.I. (). Theory of stimulated Brillouin scattering with wideband pumping. OPSPA, v. 58, no. 2, 1985, 331-338.

314. Zaskal'ko, O.P.; Zozulya, A.A.; Kyzylasov, Yu.I.; Panaioti, N.N.; Silin, V.P.; Tikhonchuk, V.T.; Fabelinskiy, I.L. (FIAN). Stimulated Brillouin scattering with distributed feedback. FIAN. Preprint, no. 139, 1984, 24 p. (RZFZA, 85/2L1291).

315. Zharikov, Ye.V.; Kitayeva, V.F.; Kosheleva, I.V.; Yershova, L.M.; Kalitin, S.P.; Osiko, V.V.; Sobolev, N.N. (FIAN). Study on gadolinium-scandium-gallium garnet single crystals using a Brillouin scattering method. KRSFA, no. 1, 1985, 23-26.

d. Rayleigh

5. Self-focusing

316. Zolot'ko, A.S.; Kitayeva, V.F.; Kroo, N.; Sobolev, N.N.; Chillag, L. (Csillag, L). (FIAN). Temperature and time characteristics of aberrational self-focusing of light beams in 5TsB nematic liquid crystals. FIAN. Preprint, no. 37, 1985, 20 p.

6. Acoustic Interaction

317. Anikin, V.I.; Zaytsev, S.V.; Korol'kov, V.I.; Shevtsov, V.M. (UDN). Study on textured waveguide zinc oxide films for planar acoustooptic devices. PZTFD, no. 15, 1984, 922-925.

318. Aristov, Yu.V.; Rysakov, V.M. (). Three-dimensional diffraction of light by sound and its use for analyzing the distribution of amplified sound in piezosemiconductors . OPSPA, v. 57, no. 4, 1984, 663-670.

319. Bulakh, G.I.; Burbelo, R.M.; Kucherov, I.Ya. (KGU). Study on the photoacoustic effect in semiconductors. UkrNIINTI. Deposit, no. 1618Uk-84, 3 Oct 1984, 11 p. (RZFZA, 85/1N364).

320. Deyev, V.N.; Pyatakov, P.A. (). Photoacoustic effect with memory. PZTFD, no.2, 1985, 76-80.

321. Domarkas, A.; Drichko, I.L.; Diakonov, A.M.; Ciplys, D. (). Acoustoelectric instability and acoustooptic interaction in indium antimonide [in English]. APSVC, no. 5, 1984, 285-290. (RZFZA, 85/2N466).

322. Kikkarin, S.M.; Petrov, D.V.; Tsarev, A.V.; Yakovkin, I.V. (IFPSOAN). The dispersion of the efficiency of the acoustooptical interaction in Ti:LiNbO waveguides. KVEKA, no. 1, 1984, 135-139.

323. Lyamshev, M.L. (IOF). Laser thermooptic generation of sound in liquids with a free surface. IOF. Dissertation, 1985, 19 p.

324. Nakhmanson, G.S. (). Accuracy in estimating the parameters of random signal spectra in background noise in acoustooptic spectrum analyzers. RATEA, no. 9, 1984, 49-52. (RZFZA, 85/1Zh152).

325. Nguyen Van Hieu; Ha Vinh Tan (). Polariton effect in nonlinear acoustooptic phenomena. PSSBB, v. B125, no. 1, 1984, 245-250. (RZFZA, 85/1L1246).

326. Petrov, D.V.; Chtyroki, I. (). Optimal parameters for single-mode LiNbO(sub3):Ti waveguides for colinear acoustooptic interaction. KVEKA, no. 1, 1985, 104-107.

327. Ponomarev, Yu.N. (). Nonlinear optoacoustic spectroscopy of atmospheric gases. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 119-140.

328. Vinogradov, E.L.; Kapustina, O.A.; Reshetov, V.N.; Svet, V.D.; Yakovenko, G.N. (AKIN; NIKFI). Study on the characteristics of an optical microphone based on nematic liquid crystal. AKZHA, no. 1, 1985, 17-21.

329. Vinokurov, S.A (). Determining the optical and thermophysical characteristics of condensed media by optoacoustic methods (review). ZPSBA, v. 42, no. 1, 1985, 5-16.

330. Vinokurov, S.A. (). Harmonic analysis in optoacoustic spectroscopy. OPSPA, v. 57, no. 3, 1984, 553-556. (RZFZA, 85/2L751).

331. Vizev, F.L.; Pustovoyt, V.I. (). Acoustooptic control of the polarization plane. MTRLB, no. 2, 1985, 49-52.

332. Vladimirtsev, Yu.V.; Glebova, N.N.; Golenishchev-Kutuzov, V.A.; Migachev, S.A. (KazFTI). Study on the acoustic properties of crystals using the photoacoustic effect. AKZHA, no. 1, 1985, 27-30.

G. SPECTROSCOPY OF LASER MATERIALS

333. Afanasiadi, L.Sh.; Dyumayev, K.M.; Yegorova, N.P.; Krasovitskiy, B.M.; Tur, I.N.; Lebedev, S.A.; Savvina, L.P. (). Spectral luminescent and lasing properties of quinoline analogs of 2,5-diaryloxazoles. ZPSBA, v. 42, no. 1, 1985, 40-44.

334. Antonov, Ye.N.; Antonova, L.I.; Yeliseyev, V.V.; Turundayevskiy, V.B. (). Limits to the detection of gas components of a laser mixture by IR spectroscopy. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 198.

335. Boyko, I.I.; Boyko, T.N.; Bonch-Bruyevich, A.M.; Markina, T.A.; Razumova, T.K.; Starobogatov, I.O. (). Pyrilic salts with complex substitutes. Spectral characteristics as a function of structure. OPSPA, vol. 58, no. 1, 1985, 56-63.

336. Gorban', I.S.; Gumenyuk, A.F.; Degoda, V.Ya. (). The f-d spectra of Nd3+ in Y(sub3)Al(sub5)O(subl2). OPSPA, v. 58, no. 2, 1985, 464-466.

337. Litvinchuk, A.P.; Tarasov, G.G. (IPANUk). Lattice dynamics of multicomponent semiconductor solid solutions. KVELA, no. 28, 1985, 56-67.

H. ULTRASHORT PULSE GENERATION

338. Al'tshuler, G.B.; Dul'neva, Ye.G.; Karasev, V.B.; Okishev, A.V.; Telegin, L.S. (). The generation of subpicosecond pulses in a neodymium glass laser with a solid-state-liquid phototropic shutter. PZTFD, no. 4, 1985, 234-237.

339. Komarov, K.P.; Kuch'yanov, A.S.; Labusov, V.A.; Ugozhayev, V.D. (IAESOAN). Steady-state ultrashort pulses from passive mode lock in a ruby laser. PZTFD, no. 3, 1985, 168-173.

340. Nesterova, Z.V.; Aleksandrov, I.V. (). Shock waves from picosecond pulse envelopes in isotropic liquids. ZETFA, v. 88, no. 1, 1985, 96-106.

341. Telegin, L.S.; Chirkin, A.S. (MGU). The reversal and reconstruction of the shapes of ultrashort light pulses. KVEKA, no. 1, 1985, 166-168.

342. Varnavskiy, O.P.; Golovlev, V.V.; Kirkin, A.N.; Mozharovskiy, A.M. (FIAN). Change in the shape of a weak ultrashort pulse during its passage through an inverted medium with slow phase relaxation. ZFPRA, v. 41, no. 1, 1985, 9-11.

343. Vasil'yev, P.P.; Morozov, V.N. (FIAN). Theory of picosecond pulse generation by an injection laser with an external resonator in a mode synchronization regime. KVEKA, no. 2, 1985, 331-338.

344. Volenko, V.V.; Ivanov, A.F.; Myalitsin, L.A.; Osadchuk, L.A.; Saukov, A.I. (). Forming nanosecond and subnanosecond laser pulses using fast flow optical switches. PRTEA, no. 1, 1985, 170-173.

345. Yegorov, K.D.; Petnikova, V.M.; Pleshanov, S.A.; Shuvalov, V.V. (MGU). Picosecond pulse generation in dye lasers with single-pulse pumping. KVEKA, no. 1, 1985, 41-47.

346. Zaporozhchenko, V.A.; Kachinskiy, A.V.; Tylets, N.A.; Grits, S.I.; Shiyenok, Yu.F. (IFANB). Electrooptic control system for an actively mode-locked periodic pulsed laser. IFANB. Preprint, no. 334, 1984, 50-51. (RZRAB, 85/2Ye267).

347. Zaporozhchenko, V.A.; Kachinskiy, A.V.; Tylets, N.A.; Grits, S.I.; Shiyenok, Yu.F. (IFANB). Five-channel radio pulse generator for controlling actively mode-locked laser systems. IFANB. Preprint, no. 334, 1984, 48-49. (RZRAB, 85/2Ye255).

J. CRYSTAL GROWING

348. Bespalov, V.I.; Katsman, V.I. (). Growing large water-soluble crystals for laser optics. VANSA, no. 9, 1984, 11-14. (RZFZA, 85/1L670).

K. THEORETICAL ASPECTS OF ADVANCED LASERS

349. Baciu, G.; Niculescu, V.I.R. (). Gain derivation in single particle analysis of free-electron lasers [in English]. RRPQA, no. 4, 1984, 351-355. (RZFZA, 85/2L1064).

350. Bogacheva, S.P.; Veresh, M.F.; Zapesochnyy, I.P.; Rogulich, V.S.; Starodub, V.P. (UzhGU). Population inversion of levels in lithium and cesium in a plasma jet. UFZHA, no. 2, 1985, 186-189.

351. Ginzburg, N.S. (IPF). Nonlinear theory of free-electron lasers with an oncoming signal wave. ZTEFA, no. 1, 1985, 47-52.

352. Ginzburg, N.S.; Kubarev, V.A.; Cherepenin, V.A. (IPF). Stimulated scattering of waves by a relativistic electron beam in the presence of a uniform magnetic field: nonlinear theory of the effect of a double cyclotron resonance. ZTEFA, no. 1, 1985, 53-59.

353. Kolesnikov, L.Ya.; Rubashkin, A.L.; Sanin, V.M. (KhFTI). Determining the degree of polarization of coherent bremsstrahlung [of ultrarelativistic electrons]. UFZHA, no. 9, 1984, 1296-1303. (RZRAB, 85/2Ye695).

354. Maksimov, P.P.; Tsvyk, A.I.; Shestopalov, V.P. (IRFEANUk). Effect of Doppler de-excitation of retarded electron energy in a diffraction radiation generator. DANKA, v. 280, no. 6, 1985, 1353-1356.

355. Murashova, V.A.; Pashchenko, G.S.; Yakimenko, M.N. (FIAN). Polarization of scattered radiation during the interaction of laser photons with relativistic electrons. ZETFA, v. 88, no. 2, 1985, 336-341.

356. Malyshevskiy, V.S. (). "Stimulated" emission effect from the scattering of channeled electrons by point defects. FTVTA, no. 5, 1984, 1551-1552. (RZFZA, 85/1L76).

357. Serov, A.V. (FIAN). Cross-sectional beam distribution of energy emitted from particles in a free-electron laser. KRSFA, no. 1, 1985, 11-14.

358. Yel'chaninov, A.S.; Korovin, S.D.; Mesyats, G.A.; Rostov, V.V. (ISE). Stimulated undulator emission in a highly efficient operating mode. PZTFD, no. 18, 1984, 1113-1117.

L. GENERAL LASER THEORY

359. Akhiyezer, A.I.; Merenkov, N.P. (KhFTI). Scattering of a photon by an electronmoving in the field of a plane periodic electromagnetic wave. ZETFA, v. 88, no. 1, 1985, 72-83.

360. Akhiyezer, A.I.; Rekalo, M.P. (KhFTI). Odd-P nuclear forces and the radiative capture of deuterons by alpha particles. DANKA, v. 280, no. 1, 1985, 83-87.

361. Boyev, V.V.; Bychkov, V.A.; Kurochkin, Yu.V.; Skvortsov, B.V.; Stepanov, V.V.; Ukolov, V.V. (). Operation of an industrial laser in an oscillator-amplifier mode. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 40-41.

362. Bukhenskiy, M.F.; Semenov, A.S. (). Fourth International School on Coherent Optics, Bechyne, Czechoslovakia, 12-22 Sep 1983. KVEKA, no. 1, 1985, 229-237.

363. Bykov, V.P. (IOF). Quantum oscillator states. IOF. Preprint, no. 20, 1985, 26 p.

364. Lyubimov, V.V.; Semenov, V.Ye. (). An evaluation of the effect of scattering on the wings of the radiation pattern for a plane-resonator laser. KVEKA, no. 2, 1985, 369-372.

365. Novikov, L.N. (UrPI). Parametric resonance induced by modulation of the polarization of the pumping light. IVYRA, no. 11, 1984, 1487-1488.

366. Piekara, A. (interviewee). (). Interview with Arkadiusz Piekara, student of nonlinear phenomena, promoter of work on masers and lasers in Poland. PSTFA, no. 3, 1984, 287-303. (RZFZA, 85/2L1033).

367. Pokrovskiy, L.A. (VNITsISPiV). Solving systems of Lorentz equations in the asymptotic limit of a large Rayleigh number. I. Lorentz system in a simple quantum model of a laser and an averaging method for approximating it. TMFZA, no. 2, 1985, 272-290.

368. Samson, A.M. (). Variety of lasing modes, polystability and hysteresis phenomena in lasers with bleachable filters (review). ZPSBA, v. 42, no. 2, 1985, 181-192.

369. Sherstobitov, V.Ye. (). The possibility of compensating for small-scale inhomogenieties by means of a Zernike cell. KVEKA, no. 1, 1985, 91-95.

370. Yelyutin, P.V. (MGU). A quantum non-linear oscillator in a harmonic field. DANKA, vol. 279, no. 2, 1984, 342-344.

II. LASER APPLICATIONS

A. BIOLOGICAL EFFECTS

371. Akopyan, V.S.; Danileyko, Yu.K.; Danilov, V.A.; Naumidi, L.P.; Popov, V.V.; Sisakyan, I.N. (IOF). The use of plane non-axially-symmetric focusers in laser opthalmosurgery. KVEKA, no. 2, 1985, 401-402.

372. Akopyan, V.S.; Kazakova, Ye.L. (). Effect of "traction" methods of laser therapy on the hydrodynamics of the eye in primary open-angle glaucoma. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 182-183.

373. Ambartsumyan, R.V.; Bredikis, Yu.Yu.; Brekhov, Ye.I.; Zdradovskiy, S.R.; Korepanov, V.I.; Malyshev, B.N.; Skobelkin, O.K. (). Laser cardiosurgery. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 175-176.

374. Androshchuk, T.M.; Bagdykov, M.G.; Glushko, A.B.; Kolomoyets, V.Ye.; Lysenko, S.P.; Mikhalevskiy, V.S.; Shaposhnikov, A.V. (). Laser therapeutic devices for controlling the effectiveness of wound regeneration. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 192-193.

375. Balashova, T.A.; Gavrishchenko, V.P.; Gavrishchenko, Yu.V.; Pekarskiy, V.V. (). Effect of laser radiation on blood and development of a laser endoscope for diagnostics of the cardiovascular system. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 193-194.

376. Bashilov, V.P.; Yeliseyenko, V.I.; Utkin, V.V. (). Clinical use of a unilinear suture during laser operations on the stomach. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 178-179.

377. Belyayev, A.A.; Brekhov, Ye.I.; Petrov, S.V.; Safronov, A.M.; Skobelkin, O.K.; Sokolov, L.K.; Titova, T.M.; Shapovalov, A.M. (). Use of laser photodestruction on obturating tumors of the gastrointestinal tract. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 173-174.

378. Belyayev, A.A.; Petrov, S.I.; Tartynskiy, S.I.; Titova, T.M.; Shapovalov, A.M. (). Using laser endoscopic photocoagulation to halt gastrointestinal hemorrhages and polypectomy. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 180.

379. Bol'shunov, A.V.; Yermakov, N.V.; Kasparov, A.A. (). Use of lasers in the treatment of edothelial-epithelial dystrophy of the cornea of the eye. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 184-185.

380. Bondar', G.G. (). Neurophysiological effects of laser irradiation of the retina. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 187-188.

381. Boychenko, I.A.; Grimblatov, V.M.; Didenko, L.B.; Kalenyuk, M.D.; Naygus, Ya.S.; Rymbez, I.N. (). Indications for the use of laser therapy in gynecology. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 190.

382. Brekhov, Ye.I.; Brykov, V.I.; Safronov, A.M.; Sugrobov, S.P. (). Completion of radical operations on the left half of the colon complicated by inoperable cancer. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 174-175.

383. Brekhov, Ye.I.; Korepanov, V.I.; Litvin, G.D.; Yakimenko, A.P. (). Laser scalpel in surgery of extrahepatic bile tracts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 173.

384. Brekhov, Ye.I.; Skobelkin, O.K.; Chegin, V.M. (). Lasers and gnotobiological method for treatment of eventrations and postoperative peritonitis. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 176.

385. Brekhov, Ye.I.; Skobelkin, O.K.; Smol'yaninov, M.V. (). Laser mechanical suturing instruments in reconstructive surgery of the esophagus. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 176-177.

386. Brekhov, Ye.I.; Skobelkin, O.K.; Tupelekin, V.N. (). Use of new laser instruments in surgery of the gastrointestinal tract. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 181.

387. Brykov, V.I.; Korepanov, V.I.; Safronov, A.M.; Sugrobov, S.P.; Tayts, R.N. (). New method for forming deferred anastomosis on the colon. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 179-180.

388. Bulyakova, N.V. (IEMEZh). The effect of a helium-neon laser in different irradiation regimes on cornea cells after the action of ionizing radiation. DANKA, vol. 279, no. 2, 1984, 499-501.

389. Buylin, V.A. (). Laser reflexotherapy of postoperative paresis of the intestines. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 175.

390. Derbenev, V.A.; Kalinnikov, V.V.; Ovsyankin, V.M.; Petushkov, V.V.; Tartynskiy, S.I.; Chegin, V.M. (). Lasers in prophylactics and treatment of suppurative complicatons in abdominal surgery. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 177-178.

391. Gamaleya, N.F.; Milyanovskiy, A.I.; Polishchuk, Ye.I. (). Laser and cryogenic effects in the treatment of precancerous diseases of the cervix. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 189.

392. Golubenko, Yu.V.; Yevstigneyev, A.R.; Rakina, N.S. (). Effect of sensitizers on the optical characteristics of non-metals and biomaterials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 171-172.

393. Grimblatov, V.M.; Kalenyuk, M.D.; Kokhno, Yu.S.; Titkov, V.D.; Khomyuk, O.V. (). Use of laser therapy in the treatment of peptic ulcers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 188.

394. Gukasyan, G.B.; Chamorovskiy, S.K.; Pikulenko, A.Ya.; Kukarskikh, G.P.; Krendeleva, T.Ye.; Pashchenko, V.Z.; Rubin, A.B. (MGU). Rapid phases in the generation of a photoinduced electric potential on a membrane of liposomes with a photosystem I reactive center of higher plants. DANKA, v. 280, no.6, 1985, 1452-1455.

395. Il'ina, T.S.; Litvinova, G.G.; Shmyreva, V.F. (). Variations of laser action on the drainage zone of the eye after sinusotomy. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 185-186.

396. Kalendo, G.S.; Karu, T.Y.; Lobko, V.V. (). Stimulation of vital activity of cells in the dormant phase of growth by low-intensity visible light. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 169-170.

397. Karu, T.Y.; Lobko, V.V.; Lyapunova, T.S.; Meysel', M.N.; Peskin, A.V.; Pomoshchnikova, N.A.; Fedoseyeva, G.Ye. (). Changes in the activity of various enzymes in yeasts under He-Ne laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 168-169.

398. Karu, T.Y.; Lobko, V.V.; Tiflova, O.A. (). Effect of visible light on the growth of bacteria. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 168.

399. Lysenkov, N.V.; Povstyanoy, N.Ye.; Timen, A.Ye. (). Low-energy laser treatment of suppurative diseases of soft tissues. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 190-191.

400. Mogilevich, L.I.; Nepokoychitskiy, A.G. (). Laws governing the destruction of concrements by laser radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 194-195.

401. Mozherenkov, V.P.; Ukhaneva, G.L.; Kharchenko, L.N.; Chentsova, O.B. (). Photostimulation for improving visual functions in maculodystrophies. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 186.

402. Nedz'ved', G.K.; Panteleyev, V.V.; Solovey, N.V.; Tanin, L.V. (). Differentiated application of laser acupuncture for neurological manifestations of lumbar osteochondrosis. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 191-192.

403. Pinchuk, V.G.; Isakov, V.L. (). Study on the effects of neodymium laser radiation on biological tissues. DANKA, vol. 279, no. 5, 1984, 1257-1260.

404. Popova, M.F.; Zubkova, S.M.; Laprun, I.B.; Bulyakova, N.V.; Domareva, O.P.; Samokhvalova, N.S.; Azarova, V.S. (IEMEZh). Effect of laser radiation on regeneration processes under ionizing radiation conditions. DANKA, v. 279, no. 6, 1984, 1504-1507.

405. Pustovalov, V.K.; Khorunzhiy, I.A. (). Calculating the thermal effect of intense optical radiation on biological tissue. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 170-171.

406. Slonimskiy, Yu.B.; Chetverukhin, A.P. (). CO2 laser treatment of progressive keratoconus. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 183-184.

407. Tartynskiy, S.I.; Titova, T.M. (). Use of lasers in abdominal surgery in conjunction with cryodestruction. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 174.

408. Uzdenskiy, A.B. (). Study on the mechanism of laser action on nerve cells. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 167.

409. Vitkus, K.; Kanapenas, R.; Klimas, V.; Olekas, Yu.; Urbas, A.; Yuodishyus, Y. (). Use of the LGN-502 laser for microcapillary anastomosis. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 182.

410. Volodin, V.G.; Avramenko, B.I.; Khokhlov, I.V.; Lisovskaya, Z.I.; Mostovnikov, V.A.; Lobazov, A.F.; Fomina, Zh.N.; Vanakh, P.V. (IFANB; IGTANB). Mutagenic efficacy of laser radiation during irradiation of vegetable plants. DBLRA, no. 9, 1984, 847-849.

411. Voroshkevich, A.A.; Kalinnikov, V.V.; Chegin, V.M. (). Laser cutaneous plastic surgery. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 172-173.

412. Vyzhelevskiy, V.P.; Koshelev, V.N.; Papayev, V.A.; Puzanov, B.N. (). Laser therapeutic device. OTIZD, no. 6, 1985, 1139447.

413. Yeliseyenko, V.I.; Degtyarev, M.K.; Chegin, V.M. (). Study on changes in microcapillaries of subcutaneous cells in the region of laser damage by means of vegetable peroxidase. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 178.

414. Zhuravlev, V.A.; Koshelev, V.N.; Litvin, G.D. (). Surgery of the liver, pancreas and spleen by laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 180-181.

415. Zyryanova, T.N.; Lavrova, V.M.; Lobanov, V.V.; Lobazov, A.F.; Mostovnikov, V.A.; Pikulev, A.T.; Khokhlov, I.V. (BGU). Clinical and experimental regulation of biological processes with low-intensity laser radiation. VBBKA, no. 1, 1985, 26-29.

B. COMMUNICATIONS SYSTEMS

416. Aleshin, G.V.; Urvachev, V.I.; Prytkov, V.I. (). Synthesis of laser communication lines with super-narrow directional patterns of the radiators. Rasprostraneniye i difraktsiya radiovoln v millimetrovykh i submillimetrovykh diapazonakh. IRFEANUk. Kiyev, 1984, 84-91. (RZFZA, 85/2Zh444).

417. Andrushko, L.M.; Naumenko, K.P. (OEISKF). Propagation of surface modes in ring type lightguides. KVELA, no. 28, 1985, 95-98.

418. Avdoshin, Ye.S.; Korol'kov, O.A.; Frolov, S.M. (). Acoustooptic fiber transducer. PRTEA, no. 5, 1984, 242. (RZFZA, 85/2Zh510).

419. Baars, G. (). Device for controlling a defined damping of lightguides. Patent GDR, no. 208237, 28 Mar 1984. (RZRAB, 85/2Ye588).

420. Baars, G.; Forbrig, B. (). Device for mode corrected input of light. Patent GDR, no. 207825, 14 Mar 1984. (RZRAB, 85/2Ye414).

421. Babukova, M.V.; Glebov, L.B. (). The interference of waveguide modes with the same polarization in diffusion glass waveguides. KVEKA, no. 1, 1985, 189-192.

422. Bergmann, H. (). Integrated optics: status and trends. BITOA, no. 10, 1984, 299-304. (RZRAB, 85/2Ye402).

423. Beyer, J.; Ermisch, R. (). Device for axial centering of fiber lightguides. Patent GDR, no. 208236, 28 Mar 1984. (RZRAB, 85/2Ye381).

424. Borisova, P.I.; Vorob'yev, Yu.V.; Derikov, N.Z.; Zakharchenko, V.N.; Ismagilova, E.A.; Karpov, V.V. (KGU). Device for measuring the time constants of high-speed photodiodes. PRTEA, no. 1, 1985, 222-223.

425. Dianov, Ye.M.; Nikonova, Z.S.; Serkin, V.N. (IOF). Amplification of solitons during stimulated Raman scattering in fiberoptic communication lines. IOF. Preprint, no. 57, 1985, 16 p.

426. Ebel, J.; Hart, H.; Schilder, D. (). Method and device for determining the optical properties of lightguide fibers. Patent GDR, no. 208726, 4 Apr 1984. (RZRAB, 85/2Ye490).

427. Gel'fman, D.N.; Yur'yev, Yu.V.; Semenov, V.I.; Ostrovskiy, A.I (). Multichannel lightguide coupler. OTIZD, no. 29, 1984, 1107085. (RZRAB, 85/2Ye364).

428. Goncharenko, A.M.; Goncharenko, L.K. (). Rotating Gaussian light beams in circular self-focusing lightguides. VBSFA, no. 4, 1984, 54-57. (RZFZA, 85/1L56).

429. Goncharenko, A.M.; Karpenko, V.A.; Mogilevich, V.N.; Sotskiy, A.B. (IFANBMo). Theory on channelled optical waveguides. DBLRA, no. 2, 1985, 127-129.

430. Gurevich, S.A.; Portnoy, Ye.L.; Ryvkin, B.S.; Timofeyev, F.N. (FTI). The optical commutation of a high-frequency signal by the radiation of a semiconductor laser. PZTFD, no. 1, 1985, 53-56.

431. Il'in, V.G.; Karapetyan, G.O.; Remizov, N.V.; Petrovskiy, G.T.; Polyanskiy, M.N. (). Optics of graded index optical fiber. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 106-121.

432. Junghanns, F.; Weissbach, B. (). Coupler for optical fiber ends. Patent GDR, no. 208235, 28 Mar 1984. (RZRAB, 85/2Ye377).

433. Kashchey, V.A. (). Propagation of a synchronized optical pulse train in an irregular multimode optical waveguide. IVUZB, no. 1, 1985, 8-12.

434. Khaytun, F.I.; Shemshedinov, R.B. (). Optimization of the pulse rate in detecting optical signal fluctuations. RATEA, no. 9, 1984, 88-91. (RZRAB, 85/1Ye774).

435. Kiselev, S.N.; Balayev, V.I.; Pyatakhin, V.I. (VNIIYaGG). External modulation in information and measuring systems with fiberoptic communication lines. VINITI. Deposit, no. 7719-84, 4 Dec 1984, 74 p. (RZFZA, 85/2L829).

436. Krivoshlykov, A.Yu.; Sakhno, S.P.; Tymchik, G.S. (KPIA). Digital correction of nonlinear distortions in the video signal of charge coupled device image detectors. IVUBA, no. 1, 1985, 88-92.

437. Kurbatov, L.N.; Zargar'yants, M.N.; Grudin, O.M. (). The optical transmission and reflection of a groove with specular walls in a semiconductor waveguide. KVEKA, no. 1, 1985, 149-151.

438. Landa, K.A.; Petrovskiy, G.T.; Mishin, A.V.; Gumennyy, S.A. (KeGU). Appearance of phase splitting in mode spectra and in profiles of the refractive index of waveguides. FKSTD, no. 1, 1985, 110-113.

439. Landa, K.A.; Yanina, T.I. (KeGU). Graded index waveguides consisting of titanium flint glass. ZTEFA, no. 9, 1984, 1831-1833.

440. Lochmann, D. (). Lightguide technology offers a new way for efficient information transmission. BITOA, no. 8, 1984, 245-246. (RZRAB, 85/2Ye451).

441. Majewski, A.; Pelzner, E. (). Characteristic equations for TE and TM waveguide modes [in English]. BAPTA, no. 11-12, 1982, 563-566. (RZRAB, 85/1Ye223).

442. Mal'tsev, V.P.; Shatrov, A.D. (). Effect of variations in the refractive index profile on the dispersion of multimode fibers. RAELA, no. 10, 1984, 2064-2067. (RZFZA, 85/2Zh471).

443. Pankov, D.; Angelova, M.; Komarov, L. (). Coding and decoding of information in fiberoptic communications systems. Sb. nauch. tr. radioelektron. i suobsht. tekhn. [in Bulgarian], no. 1, 1984, 17-22. (RZRAB, 85/1Ye352).

444. Petrovskiy, G.T.; Red'ko, V.P.; Khomchenko, A.V. (IFANB). Homogeneous thin-film optical glass waveguides. ZTEFA, no. 10, 1984, 2045-2047.

445. Petrovskiy, G.T.; Red'ko, V.P.; Sorokovykh, A.L.; Khomchenko, A.V.; Shteyngart, L.M. (). Obtaining homogeneous thin-film optical lightguides from quartz glass. ZPSBA, v. 42, no. 1, 1985, 147-149.

446. Pruzhanovskiy, V.A. (). Pass band of a hollow metallooptic waveguide. OPSPA, vol. 58, no. 1, 1985, 178-183.

447. Romaniuk, R. (). Design and parameters of multimode lightguide demultiplexers. EKNTB, no. 6, 1984, 28-31. (RZFZA, 85/2Zh509).

448. Shatalov, F.A.; Gukov, G.B. (MFTI). Experimental studies on the instability of a microwave envelope of radiation in fiber lightguides. Konferentsiya molodykh uchenykh MFTI, 9th, Dolgoprudnyy, 21 Mar - 7 Apr 1984. Trudy. Part 1. VINITI. Deposit, no. 6028-84, 28 Aug 1984, 35-40. (DERUD, 1/85, 333).

449. Sirakov, V. (). Fiberoptic systems: do they have a future? Suobshteniya [in Bulgarian], no. 7, 1984, 23-26. (RZRAB, 85/1Ye313).

450. Surazynski, L; Szustakowski, M. (). Analysis of the distribution of the refractive index in a multimode anisotropic electrooptic waveguide. BWATA, no. 9, 1984, 17-25. (RZRAB, 85/2Ye276).

451. Vagov, V.A.; Vaydkhaze, F.; Zhukov, G.P.; Sirotin, A.P. (). Using fiberoptic communications to organize the exchange of information between computers operating as components of experimental devices. CMSYaEle, 11th, Bratislava, 6-12 Sep 1983. Dubna, 1984, 422-426. (RZFZA, 85/1V569).

452. Yeskin, K.F.; Magdina, I.I.; Ryzhevnin, V.N. (). Developing a simple element for coupling a planar waveguide with an optical fiber. OPSPA, v. 58, no. 2, 1985, 449-451.

453. Zatykin, A.A.; Morshnev, S.K.; Frantsesson, A.V. (IRE). A thermooptical fiber switch. KVEKA, no. 1, 1985, 211-213.

C. BEAM PROPAGATION

1. Theory

454. Abdullayev, S.S.; Akhmadzhanov, T.; Mirzayev, A.T. (TashGU). Time coherence of laser radiation transmitted through a multimode waveguide. KVEKA, no. 1, 1985, 157-159.

455. Amstislavskiy, Ya.Ye. (). Experiments on the interference of scattered light beams. Sbornik nauchno-metodicheskikh statey po fizike, no. 11, Moskva, 1984, 65-70. (RZFZA, 85/1A189).

456. Belea, A.; Popescu, I.I. (). Some consequences of Lorentz transformation in optics [in English]. RRPQA, no. 5, 1984, 409-420. (RZFZA, 85/1L3).

457. Bel'govskiy, I.M.; Korniyenko, G.N.; Vinogradova, Ye.K.; Davydova, A.B.; Yenikolopov, N.S. (). Study on fluctuations in the polarizability of macroscopically homogeneous media while scattering coherent radiation. OPSPA, v. 57, no. 4, 1984, 647-651.

458. Braslavskaya, M.V. (). Propagation of light through a hollow lightguide. SVETA, no. 11, 1984, 17-18. (RZFZA, 85/2L61).

459. Bufetov, I.A.; Prokhorov, A.M.; Fedorov, V.B.; Fomin, V.K. (IOF). The threshold conditions for the ignition and propagation of an optical discharge in the beam of a neodymium laser. ZTEFA, no. 1, 1985, 96-102.

460. Dolgov, O.V.; Finkel'shteyn, V.Yu. (FIAN). Dynamics of an "equidistant zone-level" system in a field with a fluctuating frequency. FIAN. Preprint, no. 38, 1985, 36 p.

461. Golubenko, G.A.; Sychugov, V.A. (IOF). Geometric optic approach to the problem of noncollinear propagation of light in a corrugated waveguide. IOF. Preprint, no. 59, 1985, 19 p.

462. Goncharskiy, A.V.; Sisakyan, I.N.; Stepanov, V.V. (MGU). Solvability of some inverse problems of laser radiation focusing. DANKA, vol. 279, no. 1, 1984, 68-71.

463. Goncharskiy, A.V.; Stepanov, V.V. (MGU). Existence of continuous solutions in problems of in problems of electromagnetic radiation focusing. DANKA, v. 279, no. 4, 1984, 788-792.

464. Gonyayev, V.V.; Kalinin, M.I. (). Collisionless transfer equation for photons in a moving medium. TMFZA, v. 61, no. 2, 1984, 312-320. (RZFZA, 85/2L12).

465. Gornyy, M.B.; Markman, D.L.; Matisov, B.G. (LPI). Agitation of hyperfine sublevels of the ground state from the capture of resonant optical radiation. ZTEFA, no. 9, 1984, 1861-1864.

466. Krepelka, J.; Perina, J.; Stepanek, P.; Kopak, C. (). Photon statistics of light scattered by a small number of particles. CZYPA, v. B34, no. 8, 1984, 862-869. (RZFZA, 85/1L25).

467. Krivoshlykov, S.G.; Petrov, N.I.; Sisakyan, I.N. (IOF). Formalism of a density matrix in problems on the propagation of optical fields in weakly inhomogeneous media. IOF. Preprint, no. 10, 1985, 24 p.

468. Marinescu, N.; Nistor, R. (). Quantum description of guided waves. RRPQA, no. 4, 1984, 339-340. (RZFZA, 85/2L60).

469. Mihalache, D.; Totia, H. (). S-polarized nonlinear surface and guided waves in an asymmetric layered structure. RRPQA, no. 4, 1984, 365-374. (RZFZA, 85/2L63).

470. Misevich, V.S. (). Experiment for determining anisotropy in the speed of light. VINITI. Deposit, no. 6624-84, 11 Oct 1984, 12 p. (RZFZA, 85/1L5).

471. Nemes, G.; Teodorescu, I.E.; Nemes, M. (). Phase space treatment of optical beams. Central Institute of Physics, Romania, no. LOP 43 [in English], 1984, 36 p. (RZFZA, 85/2L4).

472. Rinkevichyus, B.S.; Timofeyev, A.S. (MEI). Evaluating the optical system in a laser Doppler anemometer. IVUBA, no. 2, 1985, 53-60.

473. Rubtsova, I.L.; Khizhnyak, A.I. (). Multibeam reflection from a medium with cubic nonlinearity. UFZHA, no. 9, 1984, 1312-1316. (RZFZA, 85/2L1293).

474. Shameyeva, T.Yu. (). Optimal control of the process of propagation of optical radiation in optically inhomogenious media. VINITI. Deposit, no. 7484-84, 23 Nov 1984, 45-46. (RZFZA, 85/2L3).

475. Spikhal'skiy, A.A. (IOF). Effect of temperature on the propagation process of surface e-m waves [in English]. IOF. Preprint, no. 147, 1984, 15 p. (RZFZA, 85/2Zh469).

476. Spikhal'skiy, A.A. (IOF). Wave resonant conversion on a dissipative distributed coupling structure. IOF. Preprint, no. 6 [in English], 1985, 18 p.

2. Propagation in the Atmosphere

477. Aleshkevich, V.A.; Kozhoridze, G.D.; Matveyev, A.N.; Terziyeva, S.I. (MGU). The refraction by wind of a partially coherent light beam. KVEKA, no. 1, 1985, 192-196.

478. Arays, Ye.A.; Yakovlev, N.Ye. (IOA). Laser probing of the atmosphere. Subchapter in book: Avtomatizatsiya analiticheskikh vychisleniy v nauchnykh issledovaniyakh (Automation of analytical calculations in scientific research). IOA. Novosibirsk, Nauka, 1985, 201-218.

479. Aref'yev, V.N.; Visheratin, K.N. (). Absorption coefficients of CO2 laser radiation by sulfur hexafluoride, ethyl alcohol and ammonia. VINITI. Deposit, no. 7126-84, 5 Nov 1984, 6 p. (ZPSBA, v. 42, no. 1, 1985, 150).

480. Arshinov, Yu.F.; Bobrovnikov, S.M.; Zuyev, V.Ye.; Mitev, V.M. (Bulgaria) (). Measuring the temperature of the atmosphere by lidar in terms of the rotational Raman spectra of N2 and O2. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 94-107.

481. Ashkinadze, D.A.; Belobrovik, V.I. (). Laser ranging studies on pollution fields in the air basin of a petrochemical refinery. Okhrana okruzhayushchey sredy, no. 2, Minsk , 1983, 29-32. (Referativnyy sbornik. Sistemy, pribory i metody kontrolya kachestva okruzhayushchey sredy, 2/85, 2.84.37).

482. Astafurov, V.G.; Glazov, G.N. (IOA). The effect of the coherent properties of an optical field on photon counter statistics. KVEKA, no. 1, 1985, 143-145.

483. Balandin, S.F.; Ivanov, Yu.V.; Kopytin, Yu.D. (). Electric conductivity of a plasma from the optical breakdown of dusty air. VINITI. Deposit, no. 7263-84, 12 Nov 1984, 8 p. (RZFZA, 85/2G283).

484. Balandin, S.F.; Kopytin, Yu.D. (). Experimental study on nonlinear distortions of ranging signals in model polydisperse media. Part 1. VINITI. Deposit, no. 6775-85, 18 Oct 1984, 53 p. (RZFZA, 85/1L1196).

485. Banakh, V.A.; Boronoyev, V.V.; Gomboyev, N.Ts.; Zubritskiy, E.V.; Malygina, G.F. (). Optical and meteorological studies on the internal scale of atmospheric turbulence. Rasprostraneniye elektromagnetnykh voln opticheskogo i radiodiapazonov. BIYeN. Ulan-Ude, 1985, 92-102.

486. Baranova, Ye.N.; Yunoshev, L.S. (). The MRS-TB universal program [for measurements of light refraction in the atmosphere]. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1984, 117-120. (RZFZA, 85/2L1013).

487. Batoroyev, A.S.; Boronoyev, V.B.; Dashinimayev, V.D.; Zandanova, G.I.; Poplavukhin, V.N.; Trubacheyev, E.A.; Tsydypov, Ch.Ts. (). Determining the effective gradient of the refractive index for air by an optical method. CMSRURES. Ulan Ude, 1983, 64-66. (RZRAB, 85/1Ye468).

488. Belkin, N.D.; Belozerov, A.Ye.; Matyukhin, V.F. (). Features of a polynomial representation of atmospheric phase distortions. KVEKA, no. 2, 1985, 407-410.

489. Boronoyev, V.V.; Trubacheyev, E.A. (). Determining the structural characteristics of atmospheric turbulence in a spherical partially coherent wave. Rasprostraneniye elektromagnetnykh voln opticheskogo i radiodiapazonov. BIYeN. Ulan-Ude, 1985, 103-108.

490. Borovoy, A.G.; Vagin, N.N. (IOA). Propagation of laser radiation through precipitation. IFAOA, no. 1, 1985, 93-95.

491. Budnik, A.P.; Popov, A.G. (IEM). Propagation of laser absorption waves during optical breakdown. IEM. Trudy, no. 34(109), 1985, 12-19.

492. Bukatyy, V.I.; Kobolov, A.A.; Tel'nikhin, A.A. (AlGU). Laser excitation of a discharge in air. ZTEFA, no. 2, 1985, 312-318.

493. Bukatyy, V.I.; Tel'nikhin, A.A. (AlGU). Gasdischarge plasma initiated in air by pulsed radiation. IVUFA, no. 2, 1985, 9-13.

494. Bunkin, A.F.; Vlasov, D.V.; Mirkamilov, D.M.; Slobodyanin, V.P. (IOF). Airborne laser probing of the turbidity profile and mapping of the phytoplankton distribution. DANKA, v. 279, no. 2, 1984, 335-337.

495. Chaykovskiy, A.P.; Shcherbakov, V.N.; Ivanov, A.P. (). Determining the integral characteristics of the density function of the size distribution of the submicron fraction of aerosols from optical measurement data. DBLRA, no. 9, 1984, 792-795. (RZFZA, 85/1L64).

496. Geyko, O.N.; Goncharuk, V.F.; Mazan, Ye.G.; Mikhaylov, V.V.; Razlivanov, A.I.; Tokhtuyev, Ye.G. (GGO). Hydrocarbon sample gas analyzer. GGO. Trudy, no. 477, 1984, 139-144.

497. Gordon, V.M.; Ivanov, Ye.K.; Kuksinskiy, V.D.; Milyayev, V.B. (GGO). Experimental evaluation of methods for local and remote monitoring of the composition of industrial pollutants. GGO. Trudy, no. 477, 1984, 135-138.

498. Goryachev, B.V.; Mogil'nitskiy, S.B.; Petrova, O.Yu.; Savel'yev, B.A. (ToPI). Method for calculating the brightness fields of radiation in a cloudy atmosphere. VINITI. Deposit, no. 7396-84, 20 Nov 1984, 34 p. (RZFZA, 85/2L1011).

499. Grishin, A.I.; Matviyenko, G.G. (IOA). Characteristics of laser probing of the atmosphere along horizontal and low-inclination paths over the surface of water. IFAOA, no. 2, 1985, 214-215.

500. Ippolitov, I.I.; Klimkin, V.M.; Mitchenkov, V.M.; Sokovikov, V.G.; Shelevoy, V.D. (). Experimental study on a Raman lidar with an excimer laser. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 107-112.

501. Ippolitov, I.I.; Komarov, V.S.; Mitsel', A.A. (). Optometeorological model of the atmosphere for modeling lidar measurements and calculating the propagation of radiation. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 4-44.

502. Lukin, V.P.; Melamud, A.E.; Mironov, V.L. (). Experimental study on the effect of atmospheric refraction on the operation of laser reference systems. VINITI. Deposit, no. 6778-84, 18 Oct 1984, 20 p. (RZFZA, 85/1L879).

503. Marichev, V.N.; Mitsel', A.A.; Ippolitov, I.I. (). Analysis of potential possibilities for laser probing of atmospheric gases by differential absorption. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 44-57.

504. Marichev, V.N.; Yel'nikov, A.V.; Kuzin, A.Ya. (). Possibilities of using c-w radiation in laser probing of the atmosphere. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 85-94.

505. Mikhalevich, V.G.; Pokazeyev, K.V.; Solntsev, M.V. (IOF; MGU). Laser Doppler velocimetric study on the drift current at the starting point for generation of wind turbulence. IFAOA, no. 2, 1985, 191-195.

506. Nadeyev, A.I.; Shelevoy, K.D. (IOA). The S-4T photon counting system for laser probing of the atmosphere. VINITI. Deposit, no. 6950-84, 29 Oct 1984, 22 p. (RZFZA, 85/1L637).

507. Ponomarev, Yu.N.; Ponomareva, S.B. (). Optical model of a molecular atmosphere for intense pulsed CO2 laser radiation at 10.6 um. VINITI. Deposit, no. 6779-84, 18 Oct 1984, 19 p. (RZFZA, 85/1L878).

508. Prishivalko, A.P.; Astaf'yeva, L.G.; Veremchuk, M.S.; Ledneva, G.P. (). Study on the efficiency of radiation absorption and distribution of heat sources inside weakly absorptive two-layer particles of an aqueous aerosol under optical resonance conditions. ZPSBA, v. 42, no. 1, 1985, 103-108.

509. Pustovalov, V.K.; Romanov, G.S. (NIIPFP). Evaporization of diffuse drops by intense optical radiation with the temperature dependence of thermophysical parameters factored in. DBLRA, no. 1, 1985, 50-53.

510. Savchenko, A.V.; Smirnov, V.V. (IEM). Ion exchange mechanism between the hydrosphere and the atmosphere by impurities. IFAOA, no. 1, 1985, 32-41.

511. Telegin, G.V.; Fomin, V.V. (). Absorption of infrared radiation in the 3.5 - 5.0 um window of transparency. ZPSBA, v. 41, no. 2, 1984, 300-302.

512. Vdovin, V.A.; Sorokin, Yu.M. (GGU). The gas dynamical regimes of an aerosol microjet in a light field. ZTEFA, no. 2, 1985, 319-325.

513. Vorobey, N.P.; Kul'panovich, A.K.; Nikolayev, L.V.; Khutko, I.S.; Chaykovskiy, A.N.; Cherednichenko, A.B. (IFANB). The L-3 dual-wave lidar for atmospheric research. IFANB. Preprint, no. 334, 1984, 14-16. (RZRAB, 85/2Ye754).

514. Voyshvillo, N.A.; Anokhin, Yu.A. (). Color of a planar layer of a medium, subject to Rayleigh scattering. IFAOA, no. 9, 1984, 872-873.

515. Yermolenko, I.N.; Lazareva, T.G. (IONKhANB). Effect of electric field on the structure of cellulose materials. DBLRA, no. 1, 1985, 62-65.

516. Yunoshev, L.S. (). Regular refraction in a three-dimensional model. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1984, 111-116. (RZFZA, 85/2L1012).

517. Zagnit'ko, A.V.; Kirsh, A.A. (). Dipole charge of highly dispersed aerosols. ZFKHA, no. 1, 1985, 172-178.

518. Zakirov, Sh.Kh.; Mirzayev, A.T.; Sharakhimov, M.Sh.; Shayakhov, R.F. (TashGU). ISP-1 device for measuring the structure of the refractive index in the atmosphere. PRTEA, no. 1, 1985, 244.

519. Zasavitskiy, I.I.; Kosichkin, Yu.V.; Nakhutin, A.I.; Okuntsev, N.Yu.; Perov, A.N.; Shotov, A.P. (IOF). Use of diode lasers for measuring the CO2 content in the atmosphere. IOF. Preprint, no. 14, 1985, 30 p.

520. Zhukov, A.F.; Kabanov, M.V.; Tsvyk, R.Sh. (IOA). Dispersion of intensity fluctuations in laser beams during a snowfall. IFAOA, no. 2, 1985, 147-153.

521. Zuyev, V.V. (). Lidar probing of the gas components of the atmosphere by differential absorption. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 57-75.

522. Zuyev, V.V.; Marichev, V.N. (). Probing the humidity field of the atmosphere by tunable ruby lasers. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 75-85.

523. Zuyev, V.Ye. (biographic subject). (IOA). Vladimir Yevseyevich Zuyev on his 60th birthday. ZPSBA, v. 42, no. 1, 1985, 165-166.

3. Propagation in Liquids

524. Baulin, Ye.V.; Fadeyev, V.V. (MGU). Remote laser probing: using kinetic spectroscopy with continuous Raman calibration to determine the stratification of parameters in aqueous media. VINITI. Deposit, no. 5841-84, 15 Aug 1984, 15 p. (DERUD, 1/85, 696).

525. Dmitriyev, A.P.; Dreyden, G.V.; Ostrovskiy, Yu.I.; Etinberg, M.I. (FTI). Profile of a shock wave formed in a liquid during the collapse of a spherical bubble. ZTEFA, no. 2, 1985, 384-387.

526. Gladush, G.G.; Levchenko, Ye.B.; Niz'yev, V.G.; Seydgazov, R.D. (). Eddy motions of a liquid under the action of laser radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 128-129.

527. Zakharov, A.K.; Gol'din, Yu.A. (IOAN). Allowance for scattering in laser probe measurements of the index of light absorption by seawater. IFAOA, no. 7, 1984, 661-664.

4. Adaptive Optics

528. Anufriyev, A.V.; Bakut, P.A.; Zimin, Yu.A.; Tolmachev, A.I. (). Using sharpness functions to compensate for phase distortions. KVEKA, no. 2, 1985, 441-443.

529. Artyunov, V.A.; Slobodyan, S.M. (TIASUR). Study on charge-coupled device--wavefront sensors in adaptive optical systems for focusing radiation. PRTEA, no. 1, 1985, 160-162.

530. Arutyunyan, V.M.; Adonts, G.G.; Aramyan, A.R.; Ishkhanyan, S.P.; Kanetsyan, E.G.; Papazyan, T.A.; Sarkisyan, S.M. (). Phase conjugation in three-level resonant media. OPAPB, no. 4 [in English], 1984, 347-354. (RZRAB, 85/2Ye51).

531. Bakut, P.A.; Ryakhin, A.D.; Sviridov, K.N.; Ustinov, N.D. (). Phasing of multiaperture optical systems. OPSPA, v. 58, no. 2, 1985, 445-448.

532. Degtyarev, A.A.; Soyfer, V.A. (KuAI). Adaptive algorithm for nonlinear identification of the parameters and state of a thermal field. VINITI. Deposit, no. 6679-84, 15 Oct 1984, 13 p. (RZFZA, 85/1A392).

533. Gavryushenko, B.S.; Golubev, V.S.; Novikov, V.V.; Shanin, O.I. (). Adaptive optics in industrial laser facilities. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 25-26.

534. Glushenkova, O.P.; Ivakhnik, V.V.; Nikonov, V.I. (KuyGU). Quality of wavefront reversal under four-photon parametric interaction with angular tilting. KVEKA, no. 2, 1985, 439-441.

535. Kleymenov, V.V.; Korniyenko, A.A. (). Adaptive optical aperture probing systems. ZRBEA, no. 1, 1985, 56-69.

536. Koryakovskiy, A.S.; Marchenko, V.M.; Prokhorov, A.M. (FIAN). Interferometry of composite mirrors based on the Talbot effect. KRSFA, no. 1, 1985, 3-6.

537. Kovalev, A.A.; Lavrovskiy, L.A.; Levashkevich, L.V.; Morgun, Yu.F. (). Periodic pulsed ruby oscillator-amplifier system with wavefront reversal by a stimulated Brillouin mirror. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 43-44.

538. Kozhevnikova, I.N.; Sukhorukov, A.P.; Trofimov, V.A. (MGU). Compensation for nonlinear distortions of optical beams in a moving medium. IVUFA, no. 2, 1985, 13-19.

539. Kravchenko, V.I.; Levchenko, Ye.G.; Sokolov, V.A (IFANUk). Adaptive optical elements of dispersion laser resonators. PZTFD, no. 3, 1985, 161-165.

540. Malakhov, M.N.; Prilepskiy, B.V. (). Method for determining the profile of a wavefront by information from a Hartman-type detector. OPSPA, v. 58, no. 2, 1985, 455-456.

541. Sukhorukov, A.P.; Trofimov, V.A.; Shameyeva, T.Yu. (MGU). Compensation for nonlinear distortions of light beams by an adaptive flexible mirror with various control geometries. KVEKA, no. 2, 1985, 355-360.

542. Vdovin, V.A.; Sorokin, Yu.M.; Davydov, V.I. (GGU). The possibility for optimizing the thermal self-action in a moving, Defocusing medium by amplitude-phase correction methods. KVEKA, no. 1, 1985, 54-59.

543. Yaroslavskiy, L.P. (). Adaptive methods for image processing. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 141-145.

544. Yeliseyev, A.B.; Ivanov, V.V.; Rozhdestvin, V.N.; Cherkasov, A.S. (). Possibility of using the wavefront reversal effect in industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 31-32.

545. Yerokhin, A.I.; Kovalev, V.I.; Mikheyev, P.A.; Fayzullov, F.S. (FIAN). Quality of wavefront reversal of multifrequency radiation during four-wave mixing. KVEKA, no. 1, 1985, 186-189.

D. COMPUTER TECHNOLOGY

546. Belovolov, M.I.; Golovin, N.I.; Golovina, T.N.; Dianov, Ye.M.; Karpov, V.I.; Kryukov, A.P.; Kuznetsov, A.A.; Prokhorov, A.M. (IOF). Dynamic on-line fiber lightguide memory. KVEKA, no. 1, 1985, 214-216.

547. Gluz, Ye.D.; Pupykin, A.S. (). Method for keying holographic information into a YeS computer. Metody i sredstva obrabotki fizicheskoy informatsii. VNIFTRI. Moskva, 1983, 69-73. (RZFZA, 85/2A230).

548. Ivanov, A.A.; Maksimov, G.M.; Nechayev, Yu.S. (IFVE). Preparation of input information for a laser raster plotter. IFVE. Preprint, no. 144, 1984, 12 p. (RZFZA, 85/1L1279).

549. Ivanov, A.A.; Nechayev, Yu.S.; Yakovleva, T.G. (IFVE). Device for controlling an acoustooptic modulator in a laser raster plotter. IFVE. Preprint, no. 145, 1984, 7 p. (RZFZA, 85/2L862).

550. Krupitskiy, E.I. (). Hybrid optoelectronic complexes for image processing. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 132-140.

551. Nazvanov, V.F.; Novikov, A.V. (). Nonlinear processing of optical signals by means of photoconductor-liquid crystal structures. VINITI. Deposit, no. 7221-84, 12 Nov 1984, 93-99. (RZFZA, 85/2L835).

552. Yerokhovets, V.K. (ITK). Analysis of the information characteristics of a type 2D holographic archival memory. VABFA, no. 1, 1985, 85-92.

553. Zolotarev, A.I. (FIAN). Matching spatial filtering based on injection lasers. FIAN. Dissertation, 1985, 20 p.

E. HOLOGRAPHY

554. Alfimov, M.V. (). Prospects in phototechnology. VANSA, no. 8, 1984, 98-107. (RZFZA, 85/1L808).

555. Angel'skiy, O.V.; Yatsenko, V.V.; Derkach, D.I. (). Possibility of optimal selection of exposure time for holographic recording of objects through transient scattering media. ZPSBA, v. 42, no. 1, 1985, 118-122.

556. Berdinskiy, A.A.; Gaynutdinov, L.R.; Lukin, A.V.; Mustafin, K.S.; Rafikov, R.A.; Strel'nikov, Yu.P. (). Method of producing relief holograms with stepped band profiles. OTIZD, no. 7, 1985, 1141373.

557. Bonozak, B.; Dabrowski, J. (). Use of lasers and holography in teaching optics. Part 1. Huygens-Fresnel principle. Experiments in using laser light in holography [in Polish]. Acta UL. Folia physica, no. 3, 1984, 107-131. (RZFZA, 85/1A137).

558. Borodkina, M.S.; Malakhova, I.A.; Chel'tsova, T.V.; Cherkasov, Yu.A.; Kryukov, V.V. (). Photothermoplastic material for information recording. OTIZD, no. 30, 1984, 1108383. (RZRAB, 85/2Ye652).

559. Brodzeli, M.I.; Zver'kov, V.A.; Gilel's, A.M.; Dekanozishvili, G.G.; Yeligulashvili, I.A.; Vannikov, A.V. (IELAN). Holographic characteristics of optically sensitive layers based on ferrocene and carbon tetrabromide. ZNPFA, no. 1, 1985, 5-9.

560. Cherkasov, Yu.A. (). Photothermoplastic process and problems of iconics. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 166-181.

561. Dukhopel, I.I.; Zelenina, L.I.; Kryukov, V.V.; Postnikov, A.A.; Chel'tsova, T.V. (). Effect of deformation properties on the photosensitivity of photothermoplastic films. ZNPFA, no. 5, 1984, 376-378. (RZFZA, 85/1L846).

562. Kandidova, O.V.; Lemanov, V.V.; Sukharev, B.V. (FTI). Self-diffraction of light in lithium niobate waveguides. ZTEFA, no. 9, 1984, 1748-1754.

563. Karamin, V.G.; Korzhenevich, L.F.; Levin, G.G.; Mil'shteyn, S.G. (). Algorithm for digital processing of holographic images for measuring geometric sizes of small particles. Metody i sredstva obrabotki fizicheskoy informatsii. VNIFTRI. Moskva, 1983, 29-38. (RZFZA, 85/2A252).

564. Klibanov, M.V.; Volostnikov, V.G.; Kotlyar, V.V. (KuyGU). Theorems of the uniqueness of the phase problem in optics. DANKA, vol. 279, no. 6, 1984, 1348-1351.

565. Klimenko, I.S.; Ryabukho, V.P.; Feduleyev, B.V. (MFTI). The role of the speckle fine structure in localizing the interference bands which arise during superposition of speckle fields. ZTEFA, no. 2, 1985, 417-419.

566. Korolev, A.Ye.; Nazarov, V.N.; Stasel'ko, D.I. (). Study on the sensitivity and resolving power of resonant atomic media with uniformly broadened absorption lines. ZTEFA, no. 1, 1985, 111-118.

567. Korolev, A.Ye.; Stasel'ko, D.I. (). Experimental study on recording dynamic holograms at the limit of the resonant atomic absorption curve. OPSPA, vol. 58, no. 1, 1985, 147-152.

568. Korzinin, Yu.L.; Sukhanov, V.I. (). Diffraction efficiency of a 3D phase hologram of a diffuse object. OPSPA, vol. 58, no. 1, 1985, 142-146.

569. Kostyshin, M.T. (). Effect of photographic sensitivity in a system of thin semiconductor and metal layers, or stimulated by diffusion radiation. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 192-200.

570. Lipatov, Yu.S.; Grishchenko, V.K.; Gudzera, S.S. (). Liquid oligomer compositions in quantum electronics and holography. VNUKA, no. 2, 1985, 21 p.

571. Lokshin, V.I.; Folomeyev, Yu.A. (). Method for copying holograms. OTIZD, no. 7, 1985, 1141374.

572. Miroshnikov, M.M. (). Iconics: science of imaging. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 4-28.

573. Mokhun', I.I.; Roslyakov, S.N. (). Study on the qualitative characteristics of holographic images reconstructed without use of a reference. ZPSBA, v. 42, no. 1, 1985, 113-117.

574. Morozov, N.V. (MelIMSKh). Transformational properties of reflection holograms. ZTEFA, no. 9, 1984, 1742-1747.

575. Mush, B.S.; Al'tman, L.S. (). Signal processing in quasi-holographic systems as an inverse problem. RAELA, no. 7, 1984, 1242-1251.

576. Nakhodkin, N.G.; Bazhenov, M.Yu.; Kuvshinskiy, N.G. (). Image quality control in thermoplastic media. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 182-187.

577. Obukhovskiy, V.V.; Stoyanov, A.V. (). Photoinduced Rayleigh scattering in crystals. OPSPA, v. 58, no. 2, 1985, 378-385.

578. Parshin, Ye.A.; Pleskach, A.V.; Yakubov, Yu.R. (). Holographic device for a bubble chamber. OTIZD, no. 6, 1985, 1140091.

579. Saari, P.; Rebane, A. (). Space time holography of pulsed light fields in highly selective photochromic media. ETFMB, no. 3, 1984, 322-332. (RZFZA, 85/2L926).

580. Sander, Ye.A.; Shkunov, V.V.; Shoydin, S.A. (IPMe). The experimental observation of the spatial resonance of a speckle field with non-uniformities of the index of refraction. ZETFA, vol. 88, no. 1, 1985, 116-119.

581. Sander, Ye.A.; Shoydin, S.A. (). Recording holograms in dynamic relaxationless media. OPSPA, vol. 58, no. 1, 1985, 200-202.

582. Vlasov, N.G.; Lisin, O.G.; Savilova, Yu.I. (VNIIOFI). Simplified method for analyzing holographic interferograms of diffusely reflected objects. ZTEFA, no. 10, 1984, 2037-2039.

583. Vlasov, N.G.; Presnyakov, Yu.P.; Savilova, Yu.I. (). Redefinition of the correlation between transverse and longitudinal magnifications. Metody i sredstva obrabotki fizicheskoy informatsii. VNIFTRI. Moskva, 1983, 18-22. (RZFZA, 85/2L931).

584. Voronin, Ye.N. (). Electrodynamic generality of radioholographic problems. RAELA, no. 10, 1984, 1906-1916. (RZRAB, 85/2Ye788).

585. Zarubin, A.M.; Larkin, A.I. (MIFI). Stereoscopic exposure method. OTIZD, no. 6, 1985, 1140085.

586. Zhdanovich, S.N.; Kovalev, A.A. (). Using pulsed IR solid-state laser radiation to display holographic recording on photothermoplastic materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 207-208.

F. LASER-INDUCED CHEMICAL REACTIONS

587. Abakumov, G.A.; Polyakov, B.I.; Simonov, A.P.; Chuyko, L.S.; Yaroslavtsev, V.T. (). Stepped photoionization of molecules and photodissociation of molecular ions of benzene and some of its derivatives in the gas phase. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 163-164.

588. Abdushelishvili, G.I.; Abzianidze, T.G.; Yeshazarov, A.S.; Tkeshelashvili, G.I.; Tsinadze, T.B. (). Effect of a resonant buffer gas on the characteristics of the IR multiphoton dissociation process of 2-chloroethenyl dichloroborane. AENGA, v. 57, no. 3, 1984, 203-204. (RZFZA, 85/1L1244).

589. Akulin, V.M. (IOF). Excitation of a degenerate level-band system by radiation with varying frequency. ZETFA, v. 87, no. 4, 1984, 1182-1191.

590. Aleksandrov, V.Ye.; Dolgolaptev, A.V.; Ioffe, V.B.; Levin, B.V. (). Combustion of porous systems using single pulsed laser radiation. FGVZA, no. 1, 1985, 58-61.

591. Aleksandrov, Ye.I.; Tsipilev, V.P. (). Study on the effect of excitational pulse length on the sensitivity of lead azide to laser radiation. FGVZA, no. 6, 1984, 104-109.

592. Alimpiyev, S.S.; Sartakov, B.G. (IOF). Specifics of the processes of collisional exchange of vibrational and rotational energy in polyatomic molecules. IOF. Preprint, no. 63, 1985, 49 p.

593. Amel'kin, S.V.; Orayevskiy, A.N. (FIAN). E.O. anharmonism and IR multiphoton excitation of molecular vibration. KRSFA, no. 1, 1985, 15-18.

594. Arutyunyan, A.G.; L'vov, K.M.; Mnatsakanyan, A.O.; Oganesyan, V.A.; Shakhnazaryan, N.V. (NIIFKS). Mechanisms for the formation of amino acid radicals in a field of laser radiation. KVEKA, no. 1, 1985, 115-119.

595. Averson, A.E.; Alekseyev, M.V.; Borisov, V.P.; Kochakov, V.D. (). Effect of orientation on the combustion of PMMA using laser radiation. FGVZA, no. 1, 1985, 61-63.

596. Bagratashvili, V.N.; Burimov, V.N.; Deyev, L.Ye.; Zabolotnykh, A.V.; Kuz'min, M.V.; Noskov, V.I.; Sviridov, A.P.; Shaydurov, V.S. (). Synthesis of organofluoric compounds by nonequilibrium IR laser photochemistry. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 164-165.

597. Bagratashvili, V.N.; Burimov, V.N.; Sviridov, A.P. (NITsTLAN). Change in the shape of a high-power IR laser pulse during its passage through an absorbing molecular gas. KVEKA, no. 2, 1985, 426-428.

598. Bakhramov, S.A.; Milyavskaya, I.Kh.; Khabibullayev, P.K. (). Laser acceleration of the solidifying process of epoxy resin. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 166-167.

599. Bakhramov, S.A.; Milyavskaya, I.Kh.; Khabibullayev, P.K. (). Laser action on polymer materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 161-162.

600. Barmashenko, B.D. (IPANUk). Theoretical model of photostimulated combustion of disperse mixtures in an optical resonator. KVELA, no. 28, 1985, 14-24.

601. Belinskiy, A.V. (MIIGAiK). Optical systems for coherent processing of photographic information. ZNPFA, no. 1, 1985, 9-13.

602. Beterov, I.M.; Kurochkin, V.L.; Yudelevich, I.G. (). Determining trace concentrations of indium in ultra-pure materials by laser stepped photoionization from the metastable 5p(sup2)P(su b3/2) state. ZPSBA, v. 42, no. 1, 1985, 17-20.

603. Bunkin, F.V.; Galaktionov, V.A.; Kirichenko, N.A.; Kurdyumov, S.P.; Samarskiy, A.A. (). Nonlinear problem of laser thermochemistry. DANKA, v. 279, no. 4, 1985, 838-842.

604. Davtyan, A.M.; Drampyan, R.Kh.; Movsesyan, M.Ye. (IFI). Diamagnetism of slightly ionized potassium vapor by nonresonant laser radiation. KVEKA, no. 1, 1985, 48-53.

605. Delone, N.B.; Kiyan, I.Yu.; Kraynov, V.P.; Tugushev, V.I. (). Multiphoton decay of negative ions with electrons in the s-state. OPSPA, v. 58, no. 2, 1985, 262-267.

606. Gershenzon, Yu.M.; Kishkovich, O.P.; Rozenshteyn, V.B.; Bedzhanyan, Yu.P. (IKhF). Chain bifurcation mechanism of the H(sub2)O(sub2)+NF(sub2) reaction. DANKA, vol. 280, no. 3, 1985, 656-657.

607. Kirichenko, N.A. (IOF). Asymptotically stable solutions of some nonlinear equations. DANKA, v. 280, no. 3, 1985, 579-583.

608. Levin, P.P.; Vago, Yu.; Gal, D.; Kuz'min, V.A. (). Study on quenching of the triplet state of triphenylamine duroquinone by laser photolysis. KHFID, no. 10, 1984, 1380-1385. (RZFZA, 85/1L286).

609. Nastoyashchiy, A.F. (). Optical breakdown near a solid surface due to ion-molecular reactions. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 130-131.

610. Osmanov, R.R. (MGU). Study on IR multiphoton dissociation of methanol by laser-induced fluorescence. Konferentsiya molodykh uchenykh Khimicheskogo fakul'teta MGU, Moskva, 1-3 Feb 1984. Materialy. Part 3. VINITI. Deposit, no. 6054-84, 30 Aug 1984, 381-384. (DERUD, 1/85, 106).

611. Piven', B.T. (CherkPI). Nature of the Hershel effect in underexposed regions in photolayers. UFZHA, no. 1, 1985, 49-51.

612. Skachkov, A.N. (). Synthesis in reactions of laser-vaporized matter. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 165-166.

613. Strakovskiy, L.G. (). Centralizing mechanism in the detonation of certain secondary explosives using a monochromatic light pulse. FGVZA, no. 1, 1985, 41-45.

614. Tikhomirov, S.A.; Tolstorozhev, G.V. (IFANB). Picosecond dynamics of photoionization of polyenic compounds in the gas and condensed phases. KHFID, 1983. (Cited in Soviet Journal of Chemical Physics, no. 6, 1985, 1410-1416).

615. Trakhtenberg, L.I.; Milikh, G.M. (). Dissociation of polyatomic molecules under the action of IR laser radiation (review). KHVKA, no. 5, 1984, 387-411. (RZFZA, 85/2L1306).

616. Tursunov, A.T.; Eshkabilov, N.B. (). Study on the Rydberg constant for gallium atoms using laser stepped photoionization. OPSPA, vol. 58, no. 1, 1985, 27-31.

617. Ungureanu, C.; Mercea, V.; Sarbu, R. (). Separation of deuterium by selective laser dissociation. SCEFA, no. 7, 1984, 559-586. (RZFZA, 85/1G352).

618. Velichko, A.M.; Gordon, Ye.B.; Nadeykin, A.A.; Nikitin, A.I.; Tal'roze, V.L. (IKhF). Role of secondary chemical reactions during multiphoton dissociation of trifluoroiodomethane molecules. KHVKA, no. 1, 1985, 73-78.

G. MEASUREMENT OF LASER PARAMETERS

619. Abashev, Yu.G.; Yelkin, G.A. (). Use of a single-crystal molybdenum foil in atomic-beam cesium frequency standard detectors. Issledovaniya v oblasti izmereniy vremeni i chastoty. VINIFTRI. Moskva, 1984, 53-59. (RZRAB, 85/2Ye604).

620. Abashev, Yu.G.; Yukhvidin, Ya.A.; Yevseyeva, L.I.; Plyusinina, E.N. (). Efficient cross-section of cesium atom collisions in atomic-beam frequency standards. Issledovaniya v oblasti izmereniy vremeni i chastoty. VINIFTRI. Moskva, 1984, 48-53. (RZRAB, 85/2Ye605).

621. Ageykin, V.A.; Antonov, Ye.N.; Mishke, B.A.; Panina, N.A.; Fetisov, S.P.; Shelemin, Ye.B.; Yakovlev, V.A. (). Feed-through meter for measuring the radiation parameters of industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 19-20.

622. Alekseyev, V.A.; Basov, N.G.; Gubin, M.A.; Nikitin, V.V.; Protsenko, Ye.D. (). Study on the frequency stability of a two-mode He-Ne/CH4 laser. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1984, 10-25. (RZFZA, 851L1093).

623. Alekseyev, V.A.; Sobel'man, I.I. (FIAN). Effect of collisions of atoms with the walls of the storage bulb, on the frequency of a hydrogen maser. KVEKA, no. 1, 1985, 10-21.

624. Amerov, A.K.; Nevpryaga, Ye.G.; Ovechko, V.S. (KGU). Correlation method for measuring the parameters of laser radiation. UFZHA, no. 2, 1985, 212-216.

625. Anan'yev, Yu.A.; Izakson, G.M.; Shekhtman, V.N. (). Interferometric control of the flow of the active medium in industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 21-22.

626. Andreyev, S.P.; Gudelev, V.G.; Morozov, I.A.; Kireyev, A.S.; Yasinskiy, V.M. (IFANB). The SKIF-1 laser radiation spectrum analyzer. IFANB. Preprint, no. 334, 1984, 33-34. (RZRAB, 85/1Ye473).

627. Azharonok, V.V.; Krat'ko, L.Ye.; Kukla, A.G.; Sinyavskiy, V.A.; Chubrik, N.I.; Shimanovich, V.D. (). Automated complex for prompt diagnostics of the operating parameters of industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 23-24.

628. Bondarchik, L.A.; Prudnikov, V.I.; Runets, L.P.; Smirnov, A.Ya. (IFANB). Attachment for controlling the radiation spectrum of lasers with a wide amplification band. IFANB. Preprint, no. 334, 1984, 19-20. (RZRAB, 85/2Ye574).

629. Burakov, V.S.; Vasil'yev, N.N.; Gorelenko, A.Ya.; Sivenkova, V.Ye.; Shkadarevich, A.P. (). Study on the polarization characteristics of laser radiation with dye-activated polymer elements. ZPSBA, v. 42, no. 1, 1985, 35-40.

630. Chernov, Ye.A. (). Using thermooptic transducers for diagnostics of high-power IR lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 24-25.

631. Denisov, A.F.; Yegorov, M.M.; Kosakovskiy, A.G.; Onishchenko, A.G. (). Oscillography of ultrashort pulses of coherent radiation. RADID, no. 2, 1984, 44-49. (RZFZA, 85/2L771).

632. Didyk, L.A. (KhIRE). Thermal losses in a calorimeter with a liquid absorber. IVUBA, no. 2, 1985, 91-96.

633. Domnin, Yu.S.; Malimon, A.N.; Tatarenkov, V.M.; Shumyatskiy, P.S. (). Radiooptic frequency bridge for a state standard of time and frequency. Issledovaniya v oblasti izmereniy vremeni i chastoty. VINIFTRI. Moskva, 1984, 26-29. (RZRAB, 85/2Ye606).

634. Garshev, V.I.; Gurzheyev, Ye.A.; Yegorov, Yu.A.; Kazhidub, A.V.; Kortunov, V.N.; Makretsov, S.I.; Sumerin, V.V. (). Bolometric power meter for industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 20-21.

635. Gladyr', V.I.; Malkin, V.B.; Pan'shin, I.A.; Podpalyy, Ye.A.; Shamayev, K.F. (). Accuracy characteristics of stripe domain type thermomagnetic recorders. ZNPFA, no. 5, 1984, 383-384. (RZFZA, 85/1L832).

636. Gontar', V.G.; Gul'ko, O.I.; Kolpakov, A.A. (). Structure of a microprocessor control system for industrial laser complexes. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 16.

637. Kopica, M.; Strzelec, M.; Trzesowski, Z. (). Preliminary results of the heterodyne measurements of weak 10.6 um signals by room-temperature HgCdTe photodetectors. OPAPB, no. 4 [in English], 1984, 377-389. (RZRAB, 85/2Ye598).

638. Kozachenko, M.L.; Aleynikov, V.S.; Sanferova, L.I.; Khatyrev, N.P.; Yakovlev, V.A. (). Using converters with graphite detection elements to measure the energy of CO2 laser pulses. MTRLB, no. 1, 1985, 31-37.

639. Kozlov, S.A.; Logachev, V.A. (). Theoretical analysis of the discrimination characteristics of a two-circuit automatic frequency control system in a quantum frequency standard. IVYRA, no. 8, 1984, 976-984. (RZRAB, 85/1Ye479).

640. Kozlov, S.A.; Logachev, V.A.; Martynov, V.V. (). Analysis of a two-circuit automatic frequency control system in a quantum frequency standard. IVYRA, no. 9, 1984, 1206-1208. (RZRAB, 85/2Ye603).

641. Nadezhdinskiy, A.I.; Stepanov, Ye.V.; Zasavitskiy, I.I.; Kosichkin, Yu.V.; Shotov, A.P. (IOF). Measurement of the frequency fluctuation parameters of a periodic pulsed diode laser. KVEKA, no. 2, 1985, 385-387.

642. Orlov, A.S.; Sviridov, A.S.; Seleznev, V.V.; Tarayev, S.P. (). System for adjusting the optical path of industrial lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 32-33.

643. Paritskiy, L.G; Tuchkevich, V.M. (FTI). The limiting parameters of a semiconductor ionization type photographic system. PZTFD, no. 4, 1985, 197-200.

644. Popescu, Gh. (). He-Ne laser frequency stabilization. New modular electronic system [in English]. RRPQA, no. 5, 1984, 431-443. (RZFZA, 851L1092).

645. Popescu, Gh. (). Optoelectronic mode selector for long He-Ne lasers. RRPQA, no. 4, 1984, 341-349. (RZFZA, 85/2L1216).

646. Rakhimov, R.M.; Badrutdinov, O.R.; Fishman, I.S.; Leybov, V.N. (KazGU). Matrix analyzer of the cross-sectional radiation intensity distribution in a laser beam. PRTEA, no. 1, 1985, 164-166.

647. Stoiga, M.; Apostol, I.; Apostol, D.; Craciu, D.; Hening, A.; Mihailescu, I.N. (). Simple low cost recording technique of IR light signals [in English]. RRPQA, no. 5, 1984, 427-430. (RZFZA, 85/1L871).

648. Tillack, B. (). Method for determining the cross-section and profile of CO2 laser radiation. Patent GDR, no. 209275, 25 Apr 1984. (RZRAB, 85/2Ye599).

649. Titov, A.N. (). Resonance shape, field broadening and Doppler square-law effect for beam type spectroscopes. Issledovaniya v oblasti izmereniy vremeni i chastoty. VINIFTRI. Moskva, 1984, 30-33. (RZFAB, 85/2Ye607).

650. [illegible]chuk, A.M.; Khil'ko, A.V.; Petrov, M.V. (). Probability of intra-center spontaneous radiative and nonradiative transitions between multiplets in Ho3+ [illegible] lithium ytterbium fluoride crystals. OPSPA, [illegible]. 58, no. 1, 1985, 91-97.

[illegible], V.A.; Zaslavskiy, V.Ya.; Neofitnyy, M.V. Measuring the spatial structure of radiation from [illegible] lasers by means of diffractional couplers. [illegible]ye lazerov v narodnom khozyaystve. CVKPLNKh, [illegible], 17-20 May 1985. Tezisy dokladov. GKNT, [illegible], NITsTLAN. Moskva, Nauka, 1985, 22-23.

652. Zaslavskiy, V.Ya. (). Threshold recording for measuring the amplitude phase characteristics of lasaer radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 211-212.

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

653. Akatova, T.Yu.; Belyayevskiy, O.A.; Goncharov, S.G.; Gusev, V.K.; Zavadskiy, V.M.; Il'in, V.S.; Opendak, M.G.; Razdobarin, G.T.; Khalilov, M.A.; Shakhovets, K.G.; Shil'nikov, A.N. (FTI). Laser measurements of radial distributions of electron concentration and temperature in the Tuman-3. FTI. Preprint, no. 899, 1984, 17 p. (RZFZA, 85/1G205).

654. Akhmadeyev, N.Kh.; Akhmetova, N.A.; Nigmatulin, R.I. (). The structure of shock wave flows with phase transitions in iron near a free surface. ZPMFA, no. 6, 1984, 113-119.

655. Akhmedzhanov, I.M.; Kiselev, A.V.; Prokhorov, A.M.; Shcherbakov, Ye.A. (IOF). The aberrational distortions of a spherical, geodesic, waveguide Ti:LiNb(sub3) lens. KVEKA, no. 2, 1985, 390-392.

656. Aleksandrov, B.F.; Devlikamova, L.A. (KuAI). Holographic interference studies on vibration supports. Konferentsiya molodykh uchenykh KuAI, 3rd, Kuybyshev, 23-27 Apr 1984. Trudy. VINITI. Deposit, no. 6077-84, 5 Sep 1984, 25-31. (DERUD, 1/85, 435).

657. Androsov, A.M.; Vygon, V.G.; Ustinov, N.D. (). Reconstruction of images of rotating bodies of arbitrary angular sizes. I. Structure of the Doppler spectra and reconstruction of images from projections. KVEKA, no. 2, 1985, 259-265.

658. Androsov, A.M.; Vygon, V.G.; Ustinov, N.D. (). Reconstruction of images of rotating bodies of arbitrary angular sizes. II. Doppler interferometry. KVEKA, no. 2, 1985, 266-268.

659. Androsov, A.M.; Vygon, V.G.; Ustinov, N.D. (). Reconstruction of images of rotating bodies of arbitrary angular sizes. III. Dynamic Doppler approach. KVEKA, no. 2, 1985, 269-272.

660. Arakelov, A.G.; Berozashvili, Yu.N.; Gekker, I.R.; Karkashadze, D.D.; Loza, O.T.; Machavariani, S.Z.; Mkheidze, G.P.; Natsvlishvili, A.G.; Savin, A.A.; Chirakadze, A.A.; Tsagareli, R.V.; Tsopp, L.E. (IOF). Use of the electrooptic Pockels effect for absolute measurements of high powers in the centimeter wavelength range. IOF. Preprint, no. 11, 1985, 14 p.

661. Artyushenko, V.G.; Voytsekhovskiy, V.V.; Korniyenko, L.S.; Lisitskiy, I.S.; Rybaltovskiy, A.O. (). Effect of ionizing radiation on optical properties of thallium halides in the 0.36 to 15 um range. PSSAB, v. A85, no. 1, 1984, 167-171. (RZFZA, 85/2L798).

662. Baars, G.; Forbrig, B. (). Device for measuring backscatter in lightguides. Patent GDR, no. 207823, 14 Mar 1984. (RZRAB, 85/2Ye495).

663. Bagirov, A.A.; Pashayan, R.A. (). Possibility of holographic conversion of a seismic wave field. RAGEA, no. 100, 1985, 22-28.

664. Bakanov, L.V.; Vorob'yev, B.A.; Zubarev, A.N.; Kochurov, A.G.; Lebedev, V.D.; Logak, L.G.; Naydenkov, A.F.; Sokolov, V.P. (OIYaI). Holographic proton beam bubble chamber. OIYaI. Preprint, no. R13-84-285, 1984, 10 p. (RZFZA, 85/2V535).

665. Balazs, J.; Tutto, P.; Serenyi, M. (). Calorimeter for measuring losses in fiber lightguides. FNMKA, no. 8, 1984, 225-228. (RZRAB, 85/1Ye379).

666. Barbonie, T.; Necsoiu, T.; Zisu, T.; Stan, Gh. (). Computer for remote single-pulse laser telemetry. SCEFA, no. 6, 1984, 542-549. (RZFZA, 85/2L1385).

667. Bazhenov, S.N.; Grigor'yev, N.F.; Saradzhishvili, S.E. (LPI). Computer-aided quality analysis and identification of crystals of a complex geometric shape. LPI. Trudy, no. 398, 1984, 29-31.

668. Bel'govskiy, I.M.; Vinogradova, Ye.K.; Davydova, A.B. (). Using coherent radiation to study fluctuations in polarizability of light scattering media. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 210-211.

669. Belyayev, V.K.; Degtyareva, V.P.; Dubovoy, I.A.; Chevokin, V.K. (FIAN). Still photography of fast-flow processes using a linear-feed camera. KRSFA, no. 2, 1985, 22-25.

670. Bergmann, H. (). Wave optic sensors: new possibilities for measurement of test data. BITOA, no. 8, 1984, 243-245,256. (RZRAB, 85/2Ye472).

671. Berzin, V.A. (UEIIZhT). Fiberoptic device for monitoring the clearance between the steps in a moving escalator. TsNIITEIMPS. Deposit, no. 2887ZhD-84, 20 Aug 1984, 8 p. (DERUD, 1/85, 71).

672. Berzin, V.A. (UEIIZhT). Fiberoptic device for monitoring wear in the body of the steps in a moving escalator. TsNIITEIMPS. Deposit, no. 2886ZhD-84, 20 Aug 1984, 8 p. (DERUD, 1/85, 70).

673. Berzin, V.A. (UEIIZhT). Fiberoptic device for monitoring wear in the plating of the steps in a moving escalator. TsNIITEIMPS. Deposit, no. 2885ZhD-84, 20 Aug 1984, 7 p. (DERUD, 1/85, 69).

674. Bondarev, V.V.; Brzhozovskiy, B.M.; Dobryakov, V.A.; Ignat'yev, A.A.; Martynov, V.V. (). Two-coordinate laser interferometer for a precision lathe. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 203-204.

675. Bonozak, B.; Dabrowski, J. (). Use of lasers and holography in teaching optics. Mechanism for the appearance of the image in a microscope. Introduction to spatial filtering [in Polish]. Acta UL. Folia physica, no. 3, 1984, 133-143. (RZFZA, 85/1A190).

676. Brovkovich, V.G.; Dashkevich, V.I.; Tyushkevich, B.N. (). Using a two-pulsed ruby laser to test the vibration strength of products. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 205-206.

677. Chmutin, A.M.; Zotov, N.M.; Chuyko, V.A.; Khoroshavin, A.A. (VolGU). Doppler method for operational control of the diameter of a laser beam. IVUBA, no. 2, 1985, 61-64.

678. Demin, V.V.; Donchenko, V.A. (). Using holography to study aerodisperse systems. VINITI. Deposit, no. 7262-84, 12 Nov 1984. (RZFZA, 85/2L934).

679. Denchev, O.Ye.; Zhiglinskiy, A.G.; Ryazanov, N.S.; Samokhin, A.N. (LGU). Method and device for determining the optical density of phase objects. OTIZD, no. 6, 1985, 1139977.

680. Engelage, D.; Proske, D.; Birkenstock, N. (). Use of a fiberoptic lightguide for measuring physical sizes. Patent GDR, no. 206296, 18 Jan 1984. (RZFZA, 85/2L874).

681. Fischer, P. (). Method and device for improving the color reproduction in optical instruments. Patent GDR, no. 207582, 7 Mar 1984. (RZRAB, 85/1Ye772).

682. Golikov, A.P.; Gurari, M.L.; Prytkov, S.I. (). Using a holographic shift interferometer for technological and certification control of optical elements. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 200-201.

683. Goriletskiy, V.I.; Leybovich, V.S.; Nemenov, V.A.; Radkevich, A.V.; Eydel'man, L.G. (VNIIMono; TsNIIKA). Measuring the shape of a crystallization front under the effect of perturbation in the process of drawing-out alkali-halide single crystals from a melt. IVNMA, no. 1, 1985, 115-118.

684. Grevtsev, N.V.; Zemskov, K.I.; Kazaryan, M.A.; Matveyev, V.M.; Petrash, G.G.; Skripnichenko, A.S. (). Laser processing of objects with simultaneous visual control. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 196.

685. Grigor'yev, V.A.; Mukhtarov, R.I.; Petrosyan, Ye.R. (). Controlling the content of polar and paramagnetic gases by multimode tunable lasers and molecular filters. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 209-210.

686. Gudelev, V.G.; Popov, P.N.; Yasinskiy, V.M. (IFANB). The Faza device for measuring optical phase anisotropy. IFANB. Preprint, no. 334, 1984, 17-18. (RZRAB, 85/1Ye481).

687. Gulyayev, Yu.V.; Kopylov, Yu.L.; Kravchenko, V.B.; Kucha, V.V.; Kutsayenko, V.V.; Potapov, V.T.; Shpilevskiy, R.V. (IRE). Fiberoptic electric field sensor. ZTEFA, no. 9, 1984, 1820-1822.

688. Gulyayev, Yu.V.; Proklov, V.V.; Shlifer, A.L.; Yudin, G.A. (). The frequency shift of radiation in a fiber light guide. PZTFD, no. 3, 1985, 149-152.

689. Gurari, M.L.; Mamakina, S.V. (). Correlation analysis of steady-state and transient light scattering media. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 212-213.

690. Gusev, V.G.; Kopytin, Yu.D. (IOA). Device for multiplex recording and reconstruction of images. OTIZD, no. 25, 1984, 1101779. (RZRAB, 85/1Ye548).

691. Gutin, M.A.; Troitskiy, Yu.V. (). Band properties of a multibeam reflection interferometer. OPSPA, v. 58, no. 2, 1985, 441-444.

692. Ivanov, V.K.; Personov, R.I.; Razumova, N.V. (). Stark effect on narrow dips as a method for measuring homogeneous phononless linewidths. OPSPA, vol. 58, no. 1, 1985, 6-8.

693. Izotova, V.F.; Saprykin, P.I.; Tuchin, V.V.; Shubochkin, L.P. (). Lasers in retinometry. ZRBEA, no. 1, 1985, 91-99.

694. Kamardin, I.F.; Gorbatov, I.A.; Kurbanov, M. (TashGU). Demonstration of localization of interference bands of the same inclination. TashGU. Trudy, no. 721, 1983, 48-50. (RZFZA, 85/2A77).

695. Keprt, J.; Vejbor, P. (). Study on tire vibrations by time average holography [in English]. AUONA, no. 22, 1983, 47-56. (RZRAB, 85/2Ye801).

696. Kizlik, B.; Szustakowski, M.; Turczynski, K. (). Possibility of using multimode lightguides for interferometric detection of acoustic fields. EKNTB, no. 6, 1984, 31-32. (RZFZA, 85/2L693).

697. Klochko, T.R.; Ostaf'yev, V.A.; Tymchik, G.S. (). Using coherent acoustooptic spectrum analyzers to measure the signal parameters of the SPID system in metal processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 206-207.

698. Kolomeyets, S.D.; Krivoshlykov, A.Yu.; Ostaf'yev, V.A.; Tymchik, G.S. (). Flexible automated system for controlling the wear of digital-program-controlled lathe cutting tools by laser diffractometry. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 204-205.

699. Koronkevich, V.P.; Korol'kov, V.P.; Pal'chikova, I.G.; Poleshchuk, A.G.; Sedukhin, A.G.; Churin, Ye.G.; Yurlov, Yu.I. (). Optical diffraction elements. Technology of fabrication. Application. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 199-200

700. Krobka, N.I.; Sviridov, M.V. (). The effect of a random frequency base in a ring laser on the accuracy in measuring rotation. KVEKA, no. 1, 1985, 363-367.

701. Kudinov, N.V.; Markov, P.I. (). Fiberoptic angular coordinate converter. IVUBA, no. 8, 1984, 90-95. (RZFZA, 85/1L765).

702. Kukudzhanov, A.R. (). Possibility of detecting flares by cryogenic laser photoacoustic spectroscopy. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 199.

703. Kurochkin, A.P.; Ostrovskiy, A.G. (). Device for determining the directional pattern of an antenna. OTIZD, no. 2, 1985, 1134919.

704. Lash, A.A.; Yundev, D.N. (IVTAN). Submillimeter laser interferometer with interference field visualization. PRTEA, no. 1, 1985, 162-164.

705. Lazareva, G.V.; Natarovskiy, S.N. (LITMO). Method for evaluating lens rasters with complex lens element constructions. IVUBA, no. 2, 1985, 70-77.

706. Lebedeva, N.N.; Salamov, B.G.; Pokasova, N.S. (). Scattering of visible light in SrTiO(sub3) single crystals. VINITI. Deposit, no. 6767-84, 18 Oct 1984, 12 p. (RZFZA, 85/1L393).

707. The LH-83 hand-held laser rangefinder. TVOOB, no. 2, 1985, 40.

708. Linchevskiy, I.V. (). Problems of using fiber lightguides in interferometric sensors. KVELA, no. 28, 1985, 79-90.

709. Livshits, G.Sh. (). Fiber lightguides in nephelometers. SVETA, no. 11, 1984, 7-8. (RZFZA, 85/2L876).

710. Lopatkin, V.N.; Sidoryuk, O.Ye.; Skvortsov, L.A. (). Laser modulation photothermal radiometry: a new method for measuring small absorptions in the volumes of materials and in coatings. KVEKA, no. 2, 1985, 339-346.

711. Lyamkina, N.E.; Troitskiy, Yu.V. (). Evaluating the combined phase parameters of multiple dielectric layers. OPSPA, vol. 58, no. 1, 1985, 157-161.

712. Lyamshev, L.M.; Smirnov, Yu.Yu. (AKIN). Fiber optic measuring hydrophone. AKZHA, no. 1, 1985, 140-141.

713. Mirinoyatov, M.M.; Rikhsiyeva, Sh.T. (TashGU). Perfecting methods for measuring the rotation of the plane of polarization of light in a lab class. TashGU. Trudy, no. 721, 1983, 35-36. (RZFZA, 85/2A78).

714. Mishchenko, Yu.V. (). Interference device for remote measurement of small translations. OTIZD, no. 5, 1985, 1138642.

715. Mukhtarov, R.I.; Petrosyan, Ye.R. (). Gas-discharge CO2 laser instrument for measuring the concentrations of polar molecules in industrial gases and air. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 162-163.

716. Nagibina, I.M.; Aleksandrov, S.A. (). Study on phase distributions in interference fields. OPSPA, vol. 58, no. 1, 1985, 153-156.

717. Nevdakh, V.V.; Orlov, L.N.; Pivovarchik, V.F.; Shumilin, V.N. (IFANB). The Saturn automated laser complex. IFANB. Preprint, no. 334, 1984, 6-9. (RZRAB, 85/1Ye469).

718. Osetskaya, V.K.; Bazakutsa, V.A.; Voinova, L.G.; Pavlyak, Ya.S. (KhPI). Effect of impurities and external effects on the structure and optical properties of amorphous Tl-As-S(Se) system films. UFZHA, no. 1, 1985, 76-79.

719. Ovod, V.I.; Shloko, V.Ya. (). Monodispersion of an investigated flow in a measuring device for optical and electrical analysis of microparticles. MTRLB, no. 2, 1985, 52-58.

720. Panasyuk, L.M.; Vorob'yev, V.G.; Belyayeva, L.N. (). Sensitometric characteristics of photothermoplastic carriers during recording of images with a carrier frequency. Opticheskoye izob razheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 194-200.

721. Petru, F.; Vesela, Z. (). Principles for detecting interference signals in laser interferometers. JMKOA, no. 8, 1984, 207-210. (RZFZA, 85/2L1395).

722. Petru, F.; Vesela, Z. (). Principles for detecting interference signals in laser interferometers. JMKOA, no. 7, 1984, 177-182. (RZFZA, 85/2L1396).

723. Petrukhin, V.P.; Nelin, A.I.; Minenkov, I.I. (NIMI). Study on a laser differential photometer for monitoring magnetic processing of water systems. VINITI. Deposit, no. 6680-84, 15 Oct 1984, 5 p. (RZFZA, 85/1L1277).

724. Polijaniuk, A. (). Scanning acoustic microscope. PAUKA, no. 6, 1984, 165-167,191,192. (RZFZA, 85/2P171).

725. Popescu, Gh.; Blanaru, C.; Brumfeld, A. (). The Lasinterf T-20 laser interferometric transducer for a digital display in a rangefinding system. SCEFA, no. 6, 1984, 528-537. (RZFZA, 85/2L1393).

726. Pushkin, S.B. (). Preliminary state standard of time and frequency from certification results in 1983. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1984, 4-9. (RZFZA, 85/2A88).

727. Rassokha, A.A. (KhAI). Speckle holographic study on the strength of a thin plexiglas plate with cracks under stress. PKMKA, no. 1, 1985, 120-122.

728. Rivlin, L.A.; Semenov, A.T.; Shelkov, N.V. (VNIIOFI). The stabilization of the output signal in a two-wave fiber-optical interferometer with multimode lightguides. KVEKA, no. 1, 1985, 201-205.

729. Shaposhnikov, A.V.; Glushko, A.B.; Kolomoyets, V.Ye.; Mikhalevskiy, V.S. (RMEDI). Device for evaluating the treatment of wound surfaces from the coefficient of reflection. OTIZD, no. 5, 1985, 1138113.

730. Sushkov, A.S. (TsNIIGAiK). Angle refractometer. OTIZD, no. 5, 1985, 1138714.

731. Sviridov, M.V. (). Operation of a ring laser with random frequency substitution. RAELA, no. 10, 1984, 1971-1976. (RZFZA, 85/1L1280).

732. Uryadov, V.N.; Sinkevich, V.I.; Alishev, Ya.V.; Mar'yenkov, A.A. (). Device for measuring the distance to the site of damage in a fiber lightguide. OTIZD, no. 25, 1984, 1101766. (RZRAB, 85/2Ye488).

733. Vagner, Ye.T. (). Flexible automated readjustable laser systems for control in machine building. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 201-202.

734. Vishnyakov, G.N.; Gil'man, G.A.; Levin, G.G. (). Tomogram reconstruction in a limited number of projections. Iteration methods. OPSPA, v. 58, no. 2, 1985, 406-413.

735. Yepishin, V.A.; Maslov, V.A.; Ryabykh, V.N.; Svich, V.A.; Topkov, A.N. (). Study on submillimeter laser resonance and guiding systems for plasma diagnostics. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 208-209.

736. Yesepkina, N.A.; Ryzhkov, N.F.; Pruss-Zhukovskiy, S.V.; Kotov, Yu.A.; Shishkin, A.I.; Grachev, V.G.; Kochergina, I.A.; Abramyan, L.E. (LSAO). Acoustooptic spectrometer for radioastronomy. LSAO. Preprint, no. 11, 1984, 35 p. (RZFZA, 85/1Zh486).

737. Zemlyanskiy, V.M.; Chudesov, A.P. (). Using lasers to control the purity of aviation fuels. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 202-203.

2. Laser-Excited Optical Effects

738. Abdul'manov, R.R.; Vorob'yev, V.M. (MGPI). Formation of dilatons in transparent polymer materials under laser irradiation. VINITI. Deposit, no. 6390-84, 25 Sep 1984, 12 p. (RZFZA, 85/2Ye1043).

739. Abramov, A.P.; Abramova, I.N.; Gerlovin, I.Ya.; Razumova, I.K. (). Scattering of terra-Hertz phonons in YAG crystals. FTVTA, no. 1, 1985, 18-24.

740. Agranovich, V.M.; Kravnov, V.Ye.; Leskova, T.A. (ISAN). Surface polariton scattering by fluctuations in the order parameter near phase transition points. Poverkhnostnyye polyaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. NSSAM, ISAN. Moskva, Nauka, 1985, 360-373.

741. Akhmanov, A.S.; Baryshnikov, A.A.; Zholudev, I.S.; Polyakov, G.A. (IAE). The diagnostics of the vibrational excitation of ethanol molecules by an infrared fluorescence method. KVEKA, no. 2, 1985, 361-363.

742. Akhmanov, S.A.; Bagratashvili, V.N.; Golubkov, V.V. Zgurskiy, A.V.; Ishchenko, A.A.; Krikunov, S.A.; Spiridonov, V.P.; Tunkin, V.G. (). Obtaining picosecond pulses of fast electrons in an EMR-100 electron diffraction camera by means of photoemission in a laser field. PZTFD, no. 3, 1985, 157-161.

743. Al'tshuler, G.B.; Yermolayev, V.S. (). Phase effects during the reflection of light from the boundary of media with similar refractive indices. OPSPA, vol. 58, no. 1, 1985, 3-5.

744. Apanasevich, S.P.; Karpushko, F.V.; Sinitsyn, G.V. (IFANB). Spatial hysteresis and switching waves in thin-film semiconductor interferometers. KVEKA, no. 2, 1985, 143-146.

745. Arutyunyan, V.M.; Agadzhanyan, S.A.; Muradyan, A.Zh.; Oganyan, A.A.; Papazyan, T.A. (). Induced optical anisotropy in a rhodamine 6G solution under two-photon resonance conditions. OPSPA, v. 58, no. 2, 1985, 459-461.

746. Ashmontas, S.; Shirmulis, E. (IFANLi). Intracavity heating of charge carriers by CO2 laser radiation. LFSBA, no. 1, 1985, 80-85.

747. Bagdasarov, Kh.S.; Bogdanov, N.Ya.; Uyukin, Ye.M. (IKAN). Thermally induced optical damage in LiNbO(sub3). KVEKA, no. 2, 1985, 246-247.

748. Bakayev, D.S.; Vdovin, Yu.A.; Yermachenko, V.M.; Yakovlenko, S.I. (MIFI). The spectrum of the absorption of a weak signal by an atom in a strong field. KVEKA, no. 1, 1985, 126-134.

749. Bakhtizin, R.Z.; Yumaguzin, Yu.M. (). Field dependence of the photoemission current from tungsten. PFKMD, no. 10, 1984, 49-53. (RZFZA, 85/2Zh640).

750. Baysa, D.F.; Kolendritskiy, D.D.; Mal'tsev, S.V. (IFANUk). The optical anomalies in proustite during a structural phase transition of the first kind. ZFPRA, vol. 41, no. 3, 1985, 87-89.

751. Becker, W. (). Device for measuring luminescence damping functions by time-correlated individual photon counting. Patent GDR, no. 205522, 28 Dec 1983. (RZFZA, 85/2L745).

752. Blashkov, V.I. (LGU). Laser pumping of a gas-discharge plasma in a He-CO mixture. VINITI. Deposit, no. 6906-84, 25 Oct 1984, 13 p. (RZFZA, 85/1L114).

753. Blokhin, A.P.; Tolkachev, V.A. (). Rotational depolarization of luminescence by two-photon excitation. VBSFA, no. 4, 1984, 58-66. (RZFZA, 85/1L1236).

754. Bulyshev, A.Ye; Preobrazhenskiy, N.G. (). Impedance response of an electrodeless radio-frequency discharge to optical excitation. DANKA, vol. 279, no. 6, 1984, 1357-1359.

755. Dykman, I.M.; Tomchuk, P.M. (IFANUk, IPANUk). Superlattice of heated carriers formed in semiconductors by coherent light beams. UFZHA, no. 1, 1985, 40-48.

756. Ebralidze, T.D.; Megrelishvili, R.Sh.; Bazadze, M.A. (). Phase modulation of self-imaging in the Talbot effect. OPSPA, vol. 58, no. 1, 1985, 197-199.

757. Fridkin, V.M.; Lazarev, V.G.; Shlenskiy, A.L. (IKAN). Effect of a magnetic field on a circulating photovoltaic current in germanium sillenite single crystals. ZFPRA, v. 41, no. 4, 1985, 153-155.

758. Gavanin, V.A.; Maksimov, V.A.; Obidin, A.Z.; Pechenov, A.N.; Popov, Yu.M.; Frolov, V.A. (FIAN). Using streamer semiconductor lasers to study the transitional characteristics of pulsed photoelements. PRTEA, no. 1, 1985, 153-155.

759. Gaydyalis, V.; Yelenskis, L.; Kalade, Yu.; Montrimas, E.; Yuryavichyus, D. (). Photodischarging of organic electrophotographic layers under short pulse illumination. LFSBA, no. 4, 1984, 70-79. (RZFZA, 85/2L985).

760. Glebov, L.B.; Nikonorov, N.V.; Petrovskiy, G.T. (GOI). New type of photosensitivity: cooperative generation of color centers. DANKA, v. 280, no. 5, 1985, 1110-1114.

761. Golubev, G.P.; Dneprovskiy, V.S.; Kovalyuk, Z.D.; Stadnik, V.A. (MGU). Change in the optical bistability in GaSe. FTVTA, no. 2, 1985, 432-439.

762. Golubev, G.P.; Dneprovskiy, V.S.; Kiselev, Ye.A.; Kovalyuk, Z.D.; Stadnik, V.A. (MGU). Optical bistability for excitons in GaSe at low levels of excitation. DANKA, vol. 280, no. 3, 1985, 591-593.

763. Gordeyev, S.V.; Chirtsov, A.S. (). Study on transitions between excited states of cadmium atoms during collisions with atoms. OPSPA, v. 57, no. 3, 1984, 408-412.

764. Gul'binas, Y.A.; Zhilenis, A.A.; Krauyalis, R.Yu.; Maldutis, E.K.; Reksnis, Yu.Y.; Yatsinavichyus, S.Y. (IFANLi). Laboratory device for measuring the absorption of IR radiation. PRTEA, no. 1, 1985, 260.

765. Gushchin, V.S.; Krinchik, G.S.; Mill', B.V.; Feoktistova, Ye.Yu.; Tsidayeva, N.I. (MGU). Faraday effect in neodymium-containing garnets. FTVTA, no. 2, 1985, 449-454.

766. Gushchin, Ye.M.; Lebedev, A.N.; Somov, S.V. (MIFI). Simulation of charged particle tracks in radiation detectors using x-ray and laser beams. PRTEA, no. 1, 1985, 7-23.

767. Huant, S.; Dmowski, L.; Baj, M.; Brunhl, I.C. (). Intraconduction band magnetooptical study of InSb under hydrostatic pressure. PSSBB, v. B125, no. 1, 1984, 215-219. (RZFZA, 85/2N461).

768. Karlov, N.V.; Orlov, A.N.; Petrov, Yu.N.; Prokhorov, A.M. (IOF). Diffusion outflow of a gas absorbed by a surface into a vacuum through a membrane with a single thin channel. ZTEFA, no. 2, 1985, 343-347.

769. Karlov, N.V.; Prokhorov, A.M. (). Quantum electronics and molecules. Nauka i chelovechestvo 1984 [Science and man 1984]. Moskva, 1984, 189-199. (RZFZA, 85/2D275).

770. Kask, N.Ye.; Kovalev, M.A.; Fedorov, G.M.; Chopornyak, D.B. (NIIYaF). Microwave absorption in a volume of glass heated by laser radiation. FKSTD, no. 1, 1985, 68-74.

771. Kleinefeld, Th.; Von der Osten, W. (). Localized and free biexcitons in silver bromide. PSSBB, v. B125, no. 1, 1984, 293-303. (RZFZA, 85/2N796).

772. Klinskikh, A.F.; Rapoport, L.P. (). Nonadiabatic effects in resonant Raman scattering by diatomic molecules. OPSPA, v. 58, no. 2, 1985, 318-323.

773. Kuznetsov, I.V.; Miller, M.B. (OIYaI). Method for measuring the parameters of spontaneous fission of atomic nuclei. OTIZD, no. 1, 1984, 1065890. (RZFZA, 85/2V381).

774. Levin, V.A.; Leybenzon, A.S. (). Modeling explosive crystallization of a thin germanium film. FGVZA, no. 1, 1985, 107-110.

775. Litovchenko, V.G.; Dmitruk, N.L.; Korbutyak, D.V. (). Polariton and collective phenomena at interfaces of polar semiconductors. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 222-231.

776. Lutoshkin, V.I. (). Optical nutation effect in Jahn-Teller molecules. TEKHA, no. 3, 1984, 342-347. (RZFZA, 85/2I1040).

777. Malyutenko, V.K. (). Magnetic concentration phenomena in a semiconductor plasma. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 232-237.

778. Medved', S.Ye.; Yakovlev, Ya.A. (). Laser adjustment of thick-film ruthenium resistors. PRSUB, no. 1, 1985, 42-43.

779. Merlin, R.N. (FTI). Surface phonon polaritons in dielectrics and semiconductors. Poverkhnostnyye poliaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. NSSAM, ISAN. Moskva, Nauka, 1985, 11-53.

780. Paramonov, G.K.; Savva, V.A. (IFANB). Effect of the duration and shape of an IR laser pulse on the dynamics of coherent excitation of a molecular vibrational mode. KVEKA, no. 1, 1985, 29-40.

781. Plekhanov, A.I.; Rautian, S.G.; Safonov, V.P.; Chernobrod, B.M. (IAESOAN). Study on the nature of frequency-angular diffusion of high-power quasi-resonant radiation. ZETFA, v. 88, no. 2, 1985, 426-435.

AD-A191 361 BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS NUMBER 75 JANUARY - FEBRUARY 1985(U) DEFENSE INTELLIGENCE AGENCY WASHINGTON DC DIRECTORATE FOR SCI.. MAY 86 2/2

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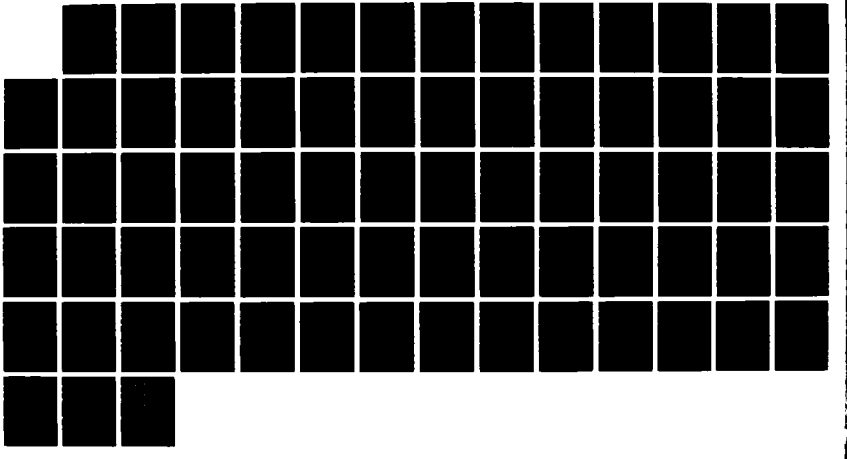

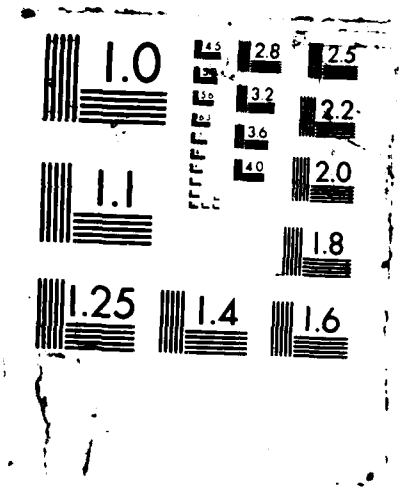
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782. Ryumtsev, Ye.I.; Agafonov, M.A.; Rotinyan, T.A.; Tsvetkov, V.N. (LGU). Mechanisms for dispersing the Kerr effect in an isotropic phase of liquid crystals. DANKA, vol. 279, no. 6, 1984, 1367-1372.

783. Sal'kov, Ye.A. (). Physical properties of A(sup2)B(sup6) compounds under extreme conditions. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 125-143.

784. Sapozhnikov, M.N.; Alekseyev, V.I. (NIIBIKhS). The selective excitation of luminescence of impurity centers in a solid body: a theoretical model and experiment. DANKA, vol. 279, no. 2, 1984, 358-363.

785. Schwan, L.O.; Florian, R.; Schmid, D.; Betz, E.; Schrof, W.; Walker, B.; Port, H. (). Dynamics of the optical excitation-deexcitation cycle of negative oxygen molecule ion centers in KCl. PSSBB, v. B124, no. 2, 1984, 741-745. (RZFZA, 85/1L498).

786. Sheyfot, A.I. (). Motion of moderately large solid aerosol particles in a field of laser radiation. Problemy mekhaniki geterogennykh sred (Problems of mechanics of heterogeneous media). MFTI. VINITI. Deposit, no. 5964-84, 22 Aug 1984, 75-81. (DERUD, 1/85, 275).

787. Shmelev, G.M.; Nguyen Khong Shon, Tsurkan, G.I. (KiGU). Photostimulated even acoustoelectric effect. IVUFA, no. 2, 1985, 84-88.

788. Solomko, A.A.; Gayday, Yu.A.; Dovzhenko, A.V.; Karpenko, A.N. (). Optical study on spin waves parametrically excited by nonperpendicular pumping. OPSPA, vol. 58, no. 1, 1985, 106-110.

789. Strek, W. (). Effect of a laser field on radiationless transitions [in English]. ATPLB, v. A61, no. 1-2, 1982, 193-199. (RZFZA, 85/1L943).

790. Teteris, J. (). Photoinduced optical absorption in As-Se. PSSAB, v. A83, no. 1, 1983, K47-K50. (RZFZA, 85/1L361).

791. Tkachenko, A.K. (). Photoelectric properties of ZnP(sub2) under internal and surface excitation. DLPLA, no. 26, 1984, 73-75. (RZFZA, 85/2N476).

792. Vaksman, M.A. (). Light-induced drift in a gas as a method for studying surface scattering of particles. PFKMD, no. 11, 1984, 38-40. (RZFZA, 85/2L540).

793. Vas'ko, F.T.; Gribnikov, Z.S.; Dykman, I.M. (). Some contemporary aspects in the theory of hot electrons. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 18-27.

794. Vaychaytis, V.I.; Ignatavichyus, M.V.; Kudryashov, V.A.; Pimenov, Yu.N.; Ustinov, N.D. (). The features of four-photon parametric luminescence during non-collinear two-frequency excitation. ZFPRA, vol. 41, No. 2, 1985, 66-68.

795. Vendik, I.B.; Yermolenko, A.N.; Yesipov, V.V.; Kaplunov, M.G.; Plotkin, L.S.; Semkin, V.N.; Serebryakova, Ye.A. (LETI). Response to a temperature gradient in the presence of a current density gradient in tetrathiotetracene films. ZTEFA, no. 1, 1985, 224-226.

796. Vinogradov, Ye.A.; Zhizhin, G.N.; Yudson, V.I. (ISAN). Thermostimulated surface polariton emission. Poverkhnostnyye polyaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. NSSAM, ISAN. Moskva, Nauka, 1985, 105-131.

797. Vorob'yev, S.A.; Kuznetsov, M.F.; Pogrebnyak, A.D. (). Observation of pulsed radio-frequency radiation from solids under the action of laser radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 197.

798. Yakub, L.I. (UrPI). Optical orientation of atoms by light pulses. Nauchno-tekhnicheskaya konferentsiya UrPI. Teoreticheskaya fizika, 7th, Sverdlovsk, 7-10 Feb 1984. Materialy. VINITI. Deposit, no. 6607-84, 8 Oct 1984, 8-13. (RZFZA, 85/1L109).

799. Yaremko, A.M. (IPANUk). Passage of intense electromagnetic radiation through crystals in an exciton absorption region. KVELA, no. 28, 1985, 49-56.

800. Zelenskiy, A.N.; Kokhanovskiy, S.A. (). Study on the process of polarization of protons during overcharging by optically oriented sodium atoms. CMSSYaFV, Protivno, 14-17 Sep 1983. Serpukhov, 1984, 39-52. (RZFZA, 85/1V358).

801. Zhizhin, G.N.; Moskaleva, M.A.; Shomina, Ye.V.; Yakovlev, V.A. (ISAN). Propagation of surface electromagnetic waves over metal surfaces. Poverkhnostnyye polyaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. NSSAM, ISAN. Moskva, Nauka, 1985, 70-104.

802. Zhizhin, G.N.; Yakovlev, V.A. (ISAN). Excitation resonance of a transition layer with surface polaritons. Poverkhnostnyye polyaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. NSSAM, ISAN. Moskva, Nauka, 1985, 190-206.

3. Laser Spectroscopy

803. Akhmedzhanov, I.M.; Prokhorov, A.M.; Shcherbakov, Ye.A. (IOF). A prototype of an integrated optics spectrum analyzer. PZTFD, no. 2, 1985, 65-68.

804. Aleksandrov, E.N. (IKhF). Kinetic resonance fluorescence spectroscopy in gas phase reactions. KHFID, 1983. (Cited in Soviet Journal of Chemical Physics, no. 2, 1985, 363-384).

805. Alimpiyev, S.S.; Nikiforov, S.M.; Sartakov, B.G.; Khokhlov, E.M.; Shtarkov, A.L. (IOF). Bichromatic excitation of molecules in an intense infrared laser field. KVEKA, no. 2, 1985, 434-436.

806. Alimpiyev, S.S.; Zasavitskiy, I.I.; Kosichkin, Yu.V.; Nadezhdinskiy, A.I.; Stepanov, Ye.V.; Tishchenko, A.Yu.; Khokhlov, E.M.; Khusnutdinov, A.N.; Shotov, A.P. (IOF). Diode laser spectroscopy of collisional broadening of absorption lines of polyatomic molecules. Correlation method of study. IOF. Preprint, no. 23, 1985, 31 p.

807. Andreyev, S.P.; Burakov, V.S.; Misakov, P.Ya.; Naumenkov, P.A.; Nemchenko, V.A.; Raykov, S.N.; Spitsyn, I.G.; Starikov, G.L.; Uzunbadzhakov, A.S. (IFANB). The Analiz-2 intracavity laser spectrometer. IFANB. Preprint, no. 334, 1984, 10-11. (RZRAB, 85/1Ye474).

808. Anik'yev, A.A.; Gorelik, V.S. (FIAN). Bound states of optical phonons in Raman spectra of ammonium chloride. FIAN. Preprint, no. 44, 1985, 39 p.

809. Anik'yev, A.A.; Gorelik, V.S.; Umarov, B.S. (). Evidence of resonant interaction of a soft mode with two-phonon excitations in the Raman spectra of quartz. FTVTA, no. 9, 1984, 2772-2778. (RZFZA, 85/1Ye274).

810. Antipin, V.A.; Parshin, G.S.; Kazakov, V.P. (IKhANBF). Fluctuations of chemiluminescence in a S - Cr(sub2)O(sub7)(sup2-) - UO(sub2)(sup2+) system in concentrated sulfuric acid. KNKTA, no. 1, 1985, 23-30.

811. Avarmaa, R.; Suysalu, A. (). Using the optogalvanic effect to calibrate wavelengths in fine-structure spectroscopy. ETFMB, no. 3, 1984, 333-338. (RZFZA, 85/2L752).

812. Baltrameyunas, R.; Baubinas, R.; Vaytkus, Yu.; Gavryushin, V.; Rachyukaytis, G. (VilGU). Nonlinear absorption spectroscopic analysis of deep levels in ZnSe single crystals. FTVTA, no. 2, 1985, 371-378.

813. Baranov, A.V.; Petrov, V.I. (). Profile for exciting Raman scattering in perylene adsorbed on colloidal silver particles. OPSPA, vol. 58, no. 1, 1985, 227-229.

814. Baulin, Ye.V.; Fadeyev, V.V. (MGU). Evaluating the effect of fluorescence saturation during remote probing of an aqueous medium. IFAOA, no. 1, 1985, 105-107.

815. Belyy, M.U.; Kushnirenko, I.Ya.; Nedel'ko, S.G.; Sakun, V.P. (). Spectral kinetic properties of luminescence centers in frozen aqueous solutions of alkali-halide salts with NO(sup -)(sub2) anion impurities. OPSPA, v. 58, no. 2, 1985, 367-372.

816. Bogdanov, V.L.; Klochkov, V.P.; Stolbova, O.V. (). Effect of optical absorption by excited molecules on the fluorescence spectra of perylene solutions in Shpolsky matrices. OPSPA, vol. 58, no. 1, 1985, 85-90.

817. Bulychev, V.P.; Ladvishchenko, Yu.M. (). Measuring and evaluating the broadening and shift of vibrational-rotational lines of v(sub2) and 2v(sub2)-v(sub2) bands in ammonia. OPSPA, vol. 58, no. 1, 1985, 74-78.

818. Bunkin, F.V.; Luk'yanchuk, B.S.; Morozova, Ye.A.; Shafeyev, G.A. (). Steady-state luminescence spectra of molecular gases under c-w CO2 laser irradiation. OPSPA, v. 58, no. 2, 1985, 355-360.

819. Burov, L.I.; Goncherenok, I.I. (BGU). Induced anisotropy effects in media with double optical resonance. VBMFA, no. 1, 1985, 5-8.

820. Danchuk, V.D.; Tsyashchenko, Yu.P. (). Temperature behavior of the Raman spectra of molecular impurity ions in alkali halide single crystals. OPSPA, vol. 58, no. 1, 1985, 98-101.

821. Dimitrov, G.; Petrakiev, A. (). Possibility of increasing the intensity of spectral lines in laser microspectrum analysis [in German]. Scripta Facultatis scientiarum naturalium UJEP Brunensis. Physica, no. 1-2, 1984, 59-65. (RZFZA, 85/1L623).

822. Dobryakov, V.V.; Monyakin, A.P. (MGU). Determining the lifetime of B(supl)Pi(v=0) and C(supl)Sigma(v=1) states of the SrO molecule by laser fluorescence. VINITI. Deposit, no. 6939-84, 26 Oct 1984, 5 p. (RZFZA, 85/1L203).

823. Gad'mashi, Z.P.; Suslikov, L.M.; Voroshilov, Yu.V.; Khudoliy, V.A.; Seykovskaya, L.A.; Slivka, V.Yu. (UzhGU). Optical phonons in Hg(sub3)Te(sub2)Cl(sub2) crystals. FTVTA, no. 2, 1985, 566-570.

824. Gavrilko, T.A.; Puchkovskaya, G.A.; Polivanov, Yu.N.; Yaremko, A.M. (IPANUk; IFANUk). Characteristics of the temperature dependence of bands of bound states in the vibrational spectra of crystals with Fermi resonance. UFZHA, no. 1, 1985, 29-36.

825. Gayzhauskas, E.; Lukshas, A. (). Effect of pulse fluctuations on the sensitivity and resolving power of a picosecond absorption spectrometer. CSSPSpek, 3rd, Minsk, 28-30 Sep 1983. Materialy. Minsk, 1984, 283-286. (RZFZA, 85/2L728).

826. Geller, Yu.I.; Timchenko, Ye.V. (). Spectroscopy of autoionization resonances by nonlinear frequency subtraction. OPSPA, v. 57, no. 4, 1984, 1861-1864.

827. German, M.; Kovba, L.M. (). Structure of hexagonal phase A(subn)B(subn-1)O(sub3n). ZNOKA, no. 2, 1985, 317-322.

828. Goncharov, A.F.; Makarenko, I.N.; Stishov, S.M. (IKAN). The Raman scattering of light in diamond at pressures up to 72 GPa. ZFPRA, vol. 41, no. 4, 150-153

829. Gorelik, V.S.; Sushchinskiy, M.M.; Khashimov, R.N. (FIAN). Resonant Raman scattering of light by submicron epitaxial films and implanted silicon layers. FIAN. Preprint, no. 15, 1985, 18 p.

830. Ivanov, S.G. (). Intracavity laser spectrometer for determining rare-earth ions in solution. ZPSBA, v. 42, no. 1, 1985, 154-159.

831. Kholodenkov, L.Ye.; Makhanek, A.G. (). Two-photon luminescence excitation spectra of Eu3+ in yttrium aluminum garnet. PSSBB, v. B124, no. 1, 1984, 365-374. (RZFZA, 85/1L502).

832. Konovalov, I.P.; Petrovskiy, V.N.; Protsenko, Ye.D.; Rurukin, A.N. (). Enhancing the sensitivity of a two-mode gas laser spectrometer by a transverse magnetic field. OPSPA, v. 58, no. 2, 1985, 437-440.

833. Korobeynik, G.S.; Letokhov, V.S.; Montanari, S.G.; Tumanova, L.M. (ISAN). Laser spectrochromatographic analysis of the components of petroleum. KVEKA, no. 1, 1985, 120-125.

834. Koyava, V.T.; Sakovich, V.V.; Sarzhevskiy, A.M. (). Effect of intermolecular interactions on the "elementary" fluorescence spectra of complex molecule solutions. OPSPA, v. 58, no. 2, 1985, 346-349.

835. Kuritsyn, Yu.A.; Vedeneyeva, G.V.; Koloshnikov, V.G.; Krivtsun, V.M.; Pak, I.; Snegirev, Ye.P.; Britov, A.D.; Zasavitskiy, I.I.; Shotov, A.P. (ISAN). Automated tunable diode laser IR spectrometer and its application. ISAN. Preprint, no. 14, 1983(1984), 18 p. (RZFZA, 85/2L723).

836. Larchev, V.I.; Mel'nik, N.N.; Popova, S.V.; Skrotskaya, G.G.; Talenskiy, O.N. (FIAN). Effect of high pressure on structural disorder of tetrahedral semiconductors during hardening from melt. KRSFA, no. 1, 1985, 7-10.

837. Letokhov, V.S. (ISAN). Laser spectroscopy of individual atoms and molecules. PRIRA, no. 2, 1985, 15-25.

838. Mamedov, A.A.; Smirnov, V.A.; Shcherbakov, I.A. (). Analysis of the resonant luminescence spectra of Nd3+ in alpha-Gd(sub2)S(sub3) semiconductor single crystals. FTVTA, no. 8, 1984, 2405-2407. (RZFZA, 85/1L500).

839. Nikonenko, Ye.A.; Olikov, I.I.; Marenkova, I.N.; Margolin, L.N.; Reznikova, L.A. (UrPI). Thermal dehydration of hopeite. ZNOKA, no. 1, 1985, 25-29.

840. Panteleyev, V.V.; Petukh, M.L.; Rozantsev, V.A.; Yankovskiy, A.A. (IFANB). Laser device for atomic spectrum analysis. IFANB. Preprint, no. 334, 1984, 12-13. (RZRAB, 85/1Ye644).

841. Panteleyev, V.V.; Petukh, M.L.; Rozantsev, V.A.; Shirokanov, A.D.; Yankovskiy, A.A. (). Using lasers to monitor the chemical composition of materials by atomic spectrum analysis. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 160-161.

842. Parshutkin, V.V.; Yaroslavtsev, A.B.; Prozorovskaya, Z.N.; Mun, A.I. (MGU; MordGU). State of water in granular tin hydroxide. ZNOKA, no. 1, 1985, 56-59.

843. Petnikova, V.M.; Pleshanov, S.A.; Shuvalov, V.V. (MGU). The identification of relaxation mechanisms in the non-linear spectroscopy of electron resonances of semiconductors. ZETFA, vol. 88, no. 2, 1985, 360-371

844. Plotnichenko, V.G.; Sysoyev, V.K. (FIAN). Impurity absorption by chalcogenide glasses in the region of CO laser radiation. FKSTD, no. 1, 1985, 105-107.

845. Ryabchikov, I.D.; Reyf, F.G.; Orlova, G.P.; Ishkov, Yu.M. (GIBF; IGYeM). Number of metals in a paleohydrotherm as determined from results of laser spectral analysis of fluoride impurities. GRMAA, no. 1, 1985, 102-105.

846. Salomatov, V.N.; Mysovskiy, S.N. (MGU). Feasibility of studying nonrelaxed ground states of irradiating centers with large collisional losses using picosecond laser spectroscopy. VMUFA, no. 1, 1985, 94-96.

847. Syrus, V.P.; Mikhaylov, A.V. (). Tunable spectrometer with high time-resolution, pumped by a concentrated Nd phosphate glass laser. CSSPSpek, 3rd, Minsk, 28-30 Sep 1983. Materialy. Minsk, 1984, 260-265. (RZFZA, 85/2L727).

848. Tumaykin, A.M.; Turtsmanovich, V.I. (OmPI). Using elliptically polarized waves in the spectroscopy of media with an induced isotropy. IVYRA, no 1, 1985, 51-55.

849. Valakh, M.Ya.; Litvinchuk, A.P.; Tarasov, G.G. (IPANUk). Laser Raman scattering in multicomponent A(sup2)B(sup6) semiconductor solid solutions. KVELA, no. 28, 1985, 68-79.

850. Venkin, G.V.; Mikheyev, G.M. (MGU). Stimulated Raman scattering spectroscopy of the excited vibrational states of the hydrogen molecule. KVEKA, no. 2, 1985, 394-397.

851. Vodop'yanov, L.K.; Kengerlinskiy, L.Yu.; Vinogradova, G.Z. (IONKh). Study on the structure of P-Se system glass using a Raman scattering method. FKSTD, no. 1, 1985, 75-78.

852. Vodop'yanov, L.K.; Turyanina, I.D.; Rudish, V.M.; Kengerlinskiy, L.Yu.; Orlyukas, A.S.; Khiminets, V.V.; Mikuchenkis, V.F. (UzhGU). Electrical conductivity and structure of [AgAsS(sub2)](subx)[AgI](subl-x) glass. FKSTD, no. 1, 1985, 107-110.

853. Voytovich, A.P.; Mashko, V.V. (). Effect of the type of transition in an absorptive medium and polarization of the lasing radiation, on the sensitivity of intracavity laser spectroscopy. ZPSBA, v. 42, no. 1, 1985, 128-131.

854. Yelyutin, S.O.; Zakharov, S.M.; Zuykov, V.A.; Manykin, E.A.; Samartsev, V.V. (MIFI; KazFTI). Space-time correlations of coherent optical pulses in the photon echo phenomenon. ZETFA, v. 88, no. 2, 1985, 401-406.

855. Yevseyev, A.V.; Puretskiy, A.A.; Tyakht, V.V. (). Vibrational distribution formed during infrared multiphoton excitation of CF(sub2)HCl molecules. ZETFA, vol. 88, no. 1, 1985, 60-71.

856. Zakharova, O.S.; Dobreva, D.D.; Ignatova, L.A.; Kravchenko, V.V.; Petrov, K.I. (). Vibrational spectra of ML(sub2)Cl(sub2) complexes where M = Zn, Cd, Co, or Ni, and L = 5-methyl-1-phenylhexahydro-1,2,5- triazine-2-thione. KOKHD, no. 9, 1984, 1182-1186. (RZFZA, 85/1L181).

857. Zolin, V.F.; Markushev, V.M.; Sobolev, A.T.; Tsaryuk, V.I. (IRE). Electron-vibrational spectra of Eu3+ and Nd3+ in garnet. IVNMA, no. 2, 1985, 286-290.

858. Zolotovitskaya, E.S.; Shevchenko, V.K. (). Using laser microspectrum analysis to determine activating additives in alkali-halide single crystals. ZPSBA, v. 42, no. 1, 1985, 20-24.

J. BEAM-TARGET INTERACTION

1. Miscellaneous Targets

859. Abil'siitov, G.A.; Golubev, V.S. (). Automated industrial laser complexes. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 63.

860. Abil'siitov, G.A.; Gontar', V.G. (). Prospects for the comprehensive automation and robotization of industrial laser complexes. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 63-64.

861. Ageyev, V.A.; Safronov, A.N.; Khlopkov, Yu.V. (). Ways for improving the efficiency of laser materials processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 65-66.

862. Andriyakhin, V.M.; Bus'ko, V.N.; Vengrinovich, V.D.; Legotin, S.D.; Yakunin, V.P. (). Nondestructive control of the parameters of laser-hardened layers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 140-141.

863. Andriyakhin, V.M.; Il'in, N.N.; Kurochkin, Yu.V.; Kushel', A.A.; Tekanova, N.T. (). Systematic approach to the optimization of the technology of laser hardening. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 64-65.

864. Anishchenko, A.N.; Aulin, V.V.; Balakir, S.E.; Digilov, M.Yu.; Zvonkov, S.D.; Kostikov, V.I.; Malyuchkov, O.T. (). Formation of adhesively strong joints of graphite with corundum and fianite under laser irradiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 136-137.

865. Astapchik, S.A.; Bushik, S.V. (). Determining the critical velocities of the heating of perlite. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 158-159.

866. Avanesov, V.S.; Mokhov, I.V. (). Mechanical processing of hard-to-work materials with laser preheating of the shearable layer. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 67-68.

867. Azarov, V.V.; Alchangyan, S.V.; Atroshchenko, L.V.; Bogdanova, T.I.; Khodeyeva, N.V.; Shcherbina, Ye.V. (). Growth and study on the properties of rare-earth-doped LiIO(sub3) single crystals. IVNMA, no. 9, 1984, 1564-1566. (RZFZA, 85/2L801).

868. Azarov, V.V.; Atroshchenko, L.V.; Danileyko, Yu.K.; Kolybayeva, M.I.; Minayev, Yu.P.; Nikolayev, V.N.; Sidorin, A.V.; Zakharkin, B.I. (IOF). Effect of structural defects on the internal laser radiation resistance of KDP single crystals. KVEKA, no. 1, 1985, 151-154.

869. Babuk, V.V.; Barshay, I.L.; Mashkov, Ye.A. (). Effect of laser radiation on the surface quality of parts consisting of powder materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 154-155.

870. Bandurkin, V.V.; Kurochkin, Yu.V.; Opara, B.K.; Stepanov, V.V. (). Improving the wear resistance of surfaces under laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 74-75.

871. Beblaya, T.S.; Galinich, V.I.; Tokarev, V.S.; Kharchenko, N.P.; Shevchenko, L.A. (). Laser heat treatment of oxide systems. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 78-79.

872. Belen'kiy, A.M.; Budanov, A.D.; Vasil'tsov, V.V.; Grigor'yants, A.G.; Zabelin, A.M.; Morozenkov, A.A.; Savchuk, A.N.; Fromm, V.A. (). Cutting by linearly polarized laser radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 116-117.

873. Belov, M.M.; Zhvavyy, S.P.; Koleshko, V.M. (). Laser heating of multilayer structures. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 142-143.

874. Bogomolov, S.I.; Gavryushenko, B.S.; Lyubchenko, A.M.; Khalboshin, A.P. (). Study on the absorption of IR radiation dependent on polarization and angle of incidence. Primeneniye lazerov v narodnom khozyaystve CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 123-124.

875. Budnevich, M.I.; Vinogradov, B.A.; Lyubovitskiy, V.P.; Uladinov, A.B. (). Industrial laser complex for fabricating printed circuit boards. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 215-216.

876. Danileyko, Yu.K.; Zharikov, Ye.V.; Laptev, V.V.; Minayev, Yu.P.; Nikolayev, V.N.; Sidorin, A.V.; Toropkin, G.N.; Shcherbakov, I.A. (IOF). Laser radiation resistance of gadolinium-scandium-gallium garnet active elements. KVEKA, no. 2, 1985, 430-432.

877. Dan'shchikov, Ye.V.; Symshakov, V.A.; Lebedev, F.V.; Ryazanov, A.V. (). Near-surface plasma in a c-w CO2 laser beam. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 125-126.

878. Galich, G.A.; Zaika, V.V.; Kravchenko, V.I.; Samusenko, I.I. (IFANUk). Technological processing of materials by sweep-laser radiation. Part 1. Laser trimming of thick-film resistors. KVELA, no. 28, 1985, 31-39.

879. Gapopov, S.V (). Laser metal coating of films. VANSA, no. 12, 1984, 3-10.

880. Gavrikov, V.K.; Kovtun, I.I. (). The dynamics of the thermal destruction of composite materials under the action of optical radiation. FKOMA, no. 6, 1984, 21-23.

881. Gladush, G.G.; Levchenko, Ye.B.; Niz'yev, V.G.; Seydgazov, R.D. (). Mechanism in the formation of deep channels in a polymer under CO2 laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 147.

882. Goncharov, V.K.; Karaban', V.I. (). Shielding of laser radiation by erosion products. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 141-142.

883. Gorodnichev, S.P.; Koylyshov, U.K.; Sultangazin, U.M.; Kharin, S.N. (). Majorant functions method in solving problems of laser heating with phase transition of matter. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 146.

884. Grigor'yants, A.G.; Lipgart, V.R. (). Ways for accelerating the process of solving problems on the stress deformed state during laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 82.

885. Grigor'yants, A.G.; Polevoy, G.V.; Sokolov, A.A. (). Kinetic energy of the gas jet in the processing zone during laser cutting. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 122-123.

886. Grigor'yev, V.P,; Gudkov, V.K.; Mirkin, L.I. (). The surface structure during laser cutting for fiber cellulose materials with polymer coatings. FKOMA, no. 1, 1985, 18-19.

887. Gutman, M.B.; Lipov, V.Ya.; Rubin, G.K.; Seleznev, Yu.N. (). Improving the efficiency of laser heat treatment, allowing for the use of absorptive coatings. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 139-140.

888. Il'in, N.N.; Kurochkin, Yu.V.; Soldatov, V.F.; Stepanov, V.V.; Sharavin, S.I. (). Modification of surface microrelief by laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 137-138.

889. Isakov, V.V.; Sgibnev, V.V.; Solov'yev, A.A. (). Combined methods of laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 69.

890. Koldunov, M.F. (NIOPIK). Statistical theory of optical breakdown. Analysis of instability in inversion problems. DANKA, v. 277, no. 6, 1984, 1384-1387.

891. Kondrashov, S.V.; Pilipetskiy, N.F.; Savanin, S.Yu.; Shkunov, V.V. (IPMe). Periodic structures on a surface of laser cracks. PZTFD, no. 3, 1985, 153-156.

892. Konov, V.I.; Tokarev, V.N. (IOF). Size effects in laser irradiation of periodic surface structures. IOF. Preprint, no. 70, 1985, 52 p.

893. Kosyrev, F.K.; Chikneyan, G.K. (). Study on the process of destructure of stone by a laser beam. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 144-145.

894. Kotlyarov, V.P.; Kovalenko, V.S. (). Development of laser industrial processes. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 69-71.

895. Kovalenko, M.D.; Romanenko, S.V.; Sheyndlin, M.A. (). Using laser heating to study the properties of refractory materials at extreme pressures and temperatures. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 135.

896. Kozlov, I.M.; Romanov, G.S.; Stankevich, Yu.A.; Teterev, A.V. (). Role of condensed phase particles in processes at laser radiation absorptive surfaces. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 124-125.

897. Kreychman, B.M.; Perfilov, M.Ye.; Filimonenko, V.N. (). Study on the process of laser sintering of electrophoretic composite coatings with a metal matrix. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 81-82.

898. Kurochkin, Yu.V.; Medvedev, I.V.; Stepanov, V.V.; Stroganov, G.A. (). Increasing the fatigue strength during laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 84.

899. Mazhukin, V.I.; Samokhin, A.A. (IPM). Transient vaporization kinetics of matter under the action of intense radiation. IPM. Preprint, no. 109, 1984, 25 p. (RZFZA, 85/1Ye1104).

900. Pristrem, A.M.; Demchuk, A.V.; Danilovich, N.I. (MRI). Athermal crystallization mechanism during the pulsed annealing of silicon. PZTFD, no. 3, 1985, 177-181.

901. Romanov, G.S.; Stankevich, Yu.A. (). Numerical modeling of processes accompanying the action of laser radiation on absorptive obstructions. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 213-214.

902. Romanov, I.M.; Ivlev, G.D.; Budkevich, B.A.; Pilipovich, V.A.; Ges', I.A.; Zhvavyy, S.P. (IEANBel). The effect of pulsed laser radiation on the characteristics of electrochromic films. PZTFD, no. 2, 1985, 122-125.

903. Shorin, V.P.; Zhuravlev, O.A.; Mordasov, V.I. (KuAI). Development of a laser industrial device and its use for processing sheet materials. VINITI. Deposit, no. 6860-84, 24 Oct 1984, 23 p. (DERUD, 2/85, 796).

904. Szwedowski, A. (). Effect of the production technology of NaCl(sub2) optical elements on their operation with pulsed CO2 lasers. JMKOA, no. 8, 1984, 215-216,214. (RZFZA, 85/2L807).

905. Timan, B.L.; Fesenko, V.M. (). Thermoelastic stresses in a laser-irradiated disk. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 145.

906. Vasil'tsov, V.V.; Zabelin, A.M.; Zakharkina, O.L.; Lebedev, F.V.; Minbayev, K.F.; Morozenkov, A.A.; Ryazanov, A.V.; Shakirov, R.G.; Chekin, S.K. (). States of a near-surface plasma in a c-w CO2 laser beam. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 126-127.

907. Vaynberg, L.P.; Grigor'yev, V.P.; Gudkov, V.K. (). Laser technology in the wood pulp and paper industry. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 73.

908. Veselovskiy, I.A.; Zhiryakov, B.M.; Korotchenko, A.I.; Samokhin, A.A. (IOF). Effect of phase transitions on the photoacoustic effect from laser action on condensed media. KVEKA, no. 2, 1985, 381-382.

909. Vinogradov, B.A.; Kopylov, V.B.; Tiranov, V.G.; Uspenskiy, D.M. (). Changes in the physicomechanical properties of synthetic high-polymer fiber under laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 148-149.

910. Vinogradov, V.L.; Kirillin, A.V.; Kostanovskiy, A.V. (). Effect of laser radiation on aluminum nitride ceramics. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 79-80.

911. Vishnevetskaya, I.A.; Gol'dfarb, L.N.; Gryaznov, M.R.; Prozorova, N.I.; Sukhova, Ye.Ye. (). Laser surface hardening of wear-resistant powder construction materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 77.

912. Vladimirtsev, Yu.V.; Glebova, N.N.; Golenishchev-Kutuzov, V.A. (KazFTI). The effect of defects on the optical stability of lithium iodate crystals. KVEKA, no. 1, 1985, 226-227.

913. Vladimirtsev, Yu.V.; Glebova, N.N.; Golenishchev-Kutuzov, A.V.; Mugachev, S.A.; Solovarov, N.K. (KazFTI). Role of the photorefractive effect in decreasing the threshold for optical breakdown in ferroelectric crystals. FTVTA, no. 2, 1985, 547-548.

914. Volkov, A.I.; Ivanov, V.V.; Mityagin, A.Yu.; Panteleyev, V.V. (). Physical chemical aspects in the process of recrystallization of amorphous and finely dispersed silicon under laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 148.

915. Yefimov, Yu.P.; Lazneva, E.F.; Tyutikov, A.M. (). Effect of laser and heat processing on laser-stimulated emission from the surface of lithium fluoride single crystals. PFKMD, no. 11, 1984, 64-68. (RZFZA, 85/2Zh653).

916. Yeliseyev, A.B.; Zagidullin, R.Sh.; Ivanov, V.V.; Kalinnikov, P.Yu. (). Effect on heating of heat conducting materials in the form of a laser pulse envelope. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 143-144.

917. Zhiryakov, B.M.; Malinin, V.G.; Obesnyuk, V.F. (). The dynamic photoelastic properties of epoxy resin above the limit of elasticity. ZPMFA, no. 6, 1984, 145-148.

918. Zhuravlev, A.I.; Filimonenko, V.N. (). Laser hardening of heterogeneous tungsten and titanium carbide materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 83-84.

2. Metal Targets

919. Abil'siitov, G.A.; Grigor'yants, A.G.; Grinin, V.V.; Kazhidub, A.V.; Korotkov, V.Ye.; Makretsov, S.I.; Rudakov, Yu.S.; Sumerin, V.V.; Fedorov, V.G.; Shanchurov, V.M. (). Using a CO2 laser to weld VNS-2 steel sheet structures. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 105-106.

920. Abrayev, Ch.; Dekhtyar, I.Ya.; Madatova, E.G.; Nishchenko, M.M. (). Positron annihilation in laser-irradiated copper alloys. Metallofizika, no. 4, 1984, 49-52. (RZFZA, 85/2Ye1047).

921. Agranat, M.B.; Ashitkov, S.I. (VNIIOFI). The excitation of hot electrons in a metal by the radiation from a CO2 laser. PZTFD, no. 2, 1985, 104-108.

922. Akulina, G.A.; Mechetner, B.Kh.; Tsyrlin, E.S.; Shnypkin, A.G. (). Laser hardening of machine tool parts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 87-88.

923. Alimov, D.T.; Bobyrev, V.A.; Bunkin, F.V.; Zhuravskiy, V.L.; Luk'yanchuk, B.S.; Morozova, Ye.A.; Ubaydullayev, S.A.; Khabibullayev, P.K. (IOF). Nonequilibrium kinetics in the growth of grains of an oxide layer during laser heating of metals in air. DANKA, v. 279, no. 4, 1984, 871-876.

924. Anisimov, V.N.; Arutyunyan, R.V.; Baranov, V.Yu.; Bol'shov, L.A.; Goloviznin, V.M.; Malyuta, D.D.; Koptelova, N.A.; Korshunov, V.K.; Sebrant, A.Yu. (). Effect of the space and time structure of radiation on the hydrodynamics of motion of the melt under pulsed action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 133-134.

925. Anisimov, V.N.; Yedneral, N.V.; Kopetskaya, I.Ch.; Malyuta, D.D.; Polukhin, V.P.; Persiyanov, S.V.; Sebrant, A.Yu. (). Laser plasma synthesis of refractory metal carbides. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 86.

926. Antonov, A.A.; Generalov, N.A.; Zimakov, V.P.; Kosynkin, V.D.; Chernyshev, G.N. (). Laser welding of low-carbon steels. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 100-101.

927. Apostol, I.; Mihailescu, I.N.; Mihailescu, M. (). Evolution of the light front of a spark induced by TEA-CO2 laser radiation on the surface of a metallic target in a vacuum [in English]. RRPQA, no. 6, 1984, 537-546. (RZFZA, 85/2G284).

928. Arutyunyan, R.V.; Baranov, V.Yu.; Bol'shov, L.A.; Dolgov, V.A.; Malyuta, D.D.; Mezhevov, V.S.; Stepanova, M.A. (). Study on the physical laws governing the processing of metals by periodic pulsed CO2 lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 131-132.

929. Arutyunyan, R.V.; Bol'shov, L.A. (). Processes in the doping of metals from the plasma of optical breakdown of gases under pulsed periodic CO2 laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 75-76.

930. Arutyunyan, R.V.; Bol'shov, L.A.; Vityukov, V.V.; Kiselev, V.P. (IAE). Computational and theoretical study on periodic pulsed operating modes of laser action on solid materials. IAE. Preprint, no. 4023/16, 1984, 20 p. (RZFZA, 85/2L1322).

931. Aulin, V.V.; Anishchenko, A.N.; Balakir, S.E.; Digalov, M.Yu.; Zvonkov, S.D.; Malyuchkov, O.T. (). Effect of laser processing on the properties and structure of borated layers in steel. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 150-151.

932. Avraamov, Yu.S.; Grechin, A.N.; Katolichuk, V.A. (). Laser processing of iron-copper composite materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 85.

933. Avramchenko, P.F.; Velichko, O.A.; Lobanov, L.M.; Lysak, V.V.; Molchan, I.V. (). Laser welding of T-joints in high-strength aluminum alloy structures. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 105.

934. Avrasin, E.T.; Kessel'man, V.S.; Frolov, A.B. (). The calculation of the mechanical stresses which arise in metals during the action of a laser pulse. FKOMA, no. 1, 1985, 43-46.

935. Azarenkov, N.A.; Zaginaylov, G.I.; Kondratenko, A.N. (KhGU). Surface waves at a plasma-metal boundary propagating along a magnetic field. UFZHA, no. 2, 1985, 231-233.

936. Babikova, Yu.F.; Bykovskiy, Yu.A.; Mamontov, A.N.; Nevolin, V.N.; Petrikin, Yu.V.; Fominskiy, V.Yu. (MIFI). Study on the structures of surface alloys of chromium with tin formed by ionic and laser alloying methods. ZTEFA, no. 2, 1985, 431-434.

937. Balysheva, I.A.; Krylov, N.A.; Mil'rud, S.R.; Semenov, S.A. (). Laser powder surfacing of high-speed steels. Their structure and properties. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 114.

938. Baneyeva, M.I.; Borovikov, N.V.; Gladush, G.G.; Drobyazko, S.V.; Myl'nikov, G.D.; Myanko, V.I.; Pavlovich, Yu.V.; Senatorov, Yu.M. (). Formation and crystallization of seams during pericdic pulsed laser welding. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 111-112.

939. Baranov, G.A.; Glukhikh, V.A.; Dolbenko, Ye.T.; Yegorov, M.F.; Surkov, A.V. (). Prospects and problems in using laser welding for fabricating power generators. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 71-72.

940. Baranov, V.Yu.; Kopetskiy, Ch.V.; Kraposhin, V.S.; Il'in, A.I.; Malyuta, D.D.; Matveyeva, L.A.; Sebrant, A.Yu. (). Structure of the surface layer of carbon-saturated iron during laser thermochemical processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 159.

941. Basov, N.G.; Bertyayev, B.I.; Zavestovskaya, I.N.; Igoshin, V.I.; Katulin, V.A. (). Advantages of thermal holding cycles during laser quenching of steels. Kinetic and thermophysical models. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 100.

942. Begrambekov, L.B.; Zakharov, A.M.; Tel'kovskiy, V.G. (). The change of the coefficient of diffuse scattering of metallic surfaces as a result of ion irradiation. FKOMA, no. 6, 1984, 16-20.

943. Belen'kiy, A.M.; Budanov, A.D.; Vasil'tsov, V.V.; Gulyayeva, T.V.; Mayorov, V.S.; Morozenkov, A.A.; Oris, V.Ya.; Savchuk, A.N.; Safonov, A.N. (). Development of methods for laser hardening of machine and instrument parts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 93-94.

944. Belunik, A.I.; Grigor'yants, A.G.; Zhulev, V.I.; Mokhna, A.P. (). Study on the flow of melted metal during gas laser cutting. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 119-120.

945. Bertyayev, B.I.; Zavestovskaya, I.N.; Igoshin, V.I.; Katulin, V.A. (FIAN). Theoretical analysis of phase and structural transitions in steels under laser heat hardening. FIAN. Preprint, no. 90, 1985, 12 p.

946. Bobrovitskiy, V.S.; Medres, B.S.; Solov'yev, A.A. (). Laser doping of steels and alloys. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 91.

947. Borodachev, A.S.; Gutman, M.B.; Divinskiy, V.V.; Medvedovskaya, L.A.; Rubin, G.K. (). Technology of laser hardening of machine building parts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 86-87.

948. Borodina, G.G.; Kopetskiy, Ch.V.; Kosyrev, F.K.; Kraposhin, V.S. (). Structure of tool steels under laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 153.

949. Boyko, V.I.; Bunkin, F.V.; Kirichenko, N.A.; Luk'yanchuk, B.S.; Pet'kov, V.N.; Tsarev, Ye.R. (IOF). Generation of nonequilibrium defects under laser heating of metals. IOF. Preprint, no. 12, 1985, 22 p.

950. Bunkin, F.V.; Kirichenko, N.A.; Luk'yanchuk, B.S.; Sapetskiy, A.N.; Simakin, A.V.; Shafeyev, G.A. (). Reconstruction of metals from oxides under the action of laser radiation. PFKMD, no. 9, 1984, 112-118. (RZFZA, 85/1Ye1121).

951. Chaplanov, A.M. (). Oriented growth of oxides on metal substrates under laser action. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 135-136.

952. Dergobuzov, D.A.; Kozlov, G.I.; Litvinov, V.N.; Mikhin, N.M.; Obishchenko, L.N.; Sokurenko, A.D. (). Effect of laser hardening routines on the physicomechanical properties and wear-resistance of surface layers of metals. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 149-150.

953. Devoyno, O.G.; Ivashko, V.S.; Spiridonov, N.V. (). Obtaining a composite surface layer by means of laser processing of boride coatings. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 97.

954. Drozdov, Yu.N.; Zhuchkov, V.M.; Maznev, S.F. (). Using laser technology to increase the thermal stability of thin-walled metal parts. VMASA, no. 1, 1985, 3-4.

955. Dubrovskaya, Ye.A.; Kraposhin, V.S. (). Effect of laser quenching routines on the microstructure of carbon steels. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 153-154.

956. Dumbadze, T.N.; Loladze, T.N.; Man'ko, P.A.; Mil'rud, S.R.; Mogilyanskiy, D.N.; Semenov, S.A.; Semiletova, Ye.F.; Churin, B.N. (). Laser surface doping of carbon steels by a VK-type cermet mixture. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 94-95.

957. Dyatel, V.P. (). Precision of laser processing intensified by an electric discharge. TEOPA, no. 1, 1985, 49-50.

958. Garashchuk, V.P.; Korol', A.M. (). Estimating the allowable amount of instability of technological parameters in CO2 laser welding. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 112-113.

959. Gladush, G.G.; Moryashchev, S.F.; Startsev, A.A.; Yavokhin, A.N. (). Effect of a plasma flare on the effective coefficient of absorption of energy by a target from a steady-state laser beam. KVEKA, no. 2, 1985, 414-416.

960. Golubev, V.L.; Grigor'yants, A.G.; Sayapin, V.P.; Fromm, V.A. (). Periodic pulsed laser welding. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 104-105.

961. Golubev, V.S.; Aleshin, A.V.; Novikov, A.A. (). Laser processing of components with sputtered powder surfaces. TEOPA, no. 1, 1985, 46-47.

962. Goykhman, V.Kh.; Smirnov, V.S. (). Parameters of a laser flare occurring during laser processing of beryllium. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 129-130.

963. Grechir, A.N. (). Wear of wrought iron after laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 98.

964. Grigor'yants, A.G.; Safonov, A.N.; Baldokhin, Yu.V.; Tarasenko, V.M. (). The structure and properties of ShKh 15 steel after laser processing. FKOMA, no. 6, 1984, 24-28.

965. Grishko, V.F.; Deriglazova, I.F.; Ladanov, V.A.; Litovchenko, A.N.; Mitin, V.I.; Mul'chenko, B.F.; Nikitina, A.V.; Roytenburg, D.I. (). Laser processing of truck parts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 88-89.

966. Gruzina, E.P.; Nikitin, A.A.; Lyasotskiy, I.V.; Safonov, A.N.; Tarasenko, V.M.; Tolpygo, V.K. (). Study on the structure of ShKh-15 steel processed by a c-w CO2 laser. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 96-97.

967. Gureyev, D.M.; Kulakov, G.A.; Kozlov, V.V.; Yares'ko, S.I. (). Formation of heterogeneous surface layers by laser radiation in high-strength steel parts. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 157-158.

968. Gusev, S.M.; Danilovich, V.V.; Kirko, V.I.; Kozlov, V.F.; Provorov, A.S.; Sizykh, A.G.; Sorokin, A.V.; Shishkin, A.A. (). Effect of laser radiation on plastically deformed steels. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 80-81.

969. Gutman, M.B.; Gurvich, L.O.; Lipov, V.Ya.; Rubin, G.K. (). Selecting the optimal parameters for laser heat treatment of steel. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 214-215.

970. Isakov, S.A.; Kartoshkin, V.M.; Lyakhovich, L.S. (). Obtaining boride layers during laser heating. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 90.

971. Isakov, S.A.; Lyakhovich, L.S.; Pakhadnya, V.P. (). Possibility of obtaining heat-resistant layers during laser carburizing of steel. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 89.

972. Ivanov, V.V.; Khutsishvili, M.G.; Chernyshev, G.G. (). Formation of seams in laser welding using the gasdynamic effect. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 109-110.

973. Ivanov, V.Ya.; Rakin, S.M.; Shiganov, I.N. (). Laser welding of light alloys. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 107-108.

974. Kalachev, O.I.; Mikheyev, A.Yu.; Tikhomirov, A.V. (). Study on the technological parameters of the process of laser cutting of steel by means of YAG lasers. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 120-121.

975. Kanapenas, R.-M.V.; Vaytkevichyus, M.Yu. (IFANLi). Features of the laser cutting of blanks for drills. KVEKA, no. 1, 1985, 154-156

976. Kantayeva, R.N.; Kim, Ye.I.; Krasnov, Ya.A. (). Evaluating the effect of hysteresis processes in laser heat hardening of steel and cast iron products. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 99.

977. Kapel'yan, S.N.; Morgun, Yu.F. (BPI; IEANBel). Heating a metal surface with laser radiation with the temperature dependence of the reflection coefficient factored in. VBSFA, no. 1, 1985, 100-105.

978. Kardapolova, M.A.; Spiridonov, N.V.; Chachin, V.N. (). Study on composite coatings based on laser-fused self-fluxing alloys. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 113.

979. Kolchanov, E.A.; Belyayev, G.Ya. (). Laser hardening of TN-20 hard alloy. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 92-93.

980. Kolyano, Yu.M.; Kokora, A.N.; Bernar, I.I.; Tetushkin, S.P.; Makhorkin, I.N. (). The temperature fields in the elements of cotton gin equipment during continuous laser treatment. FKOMA, no. 1, 1985, 33-42.

981. Komarova, N.F. (MPI). Possibilities of using laser hardening for the blades of paper cutting machines. TsNIITEIlegpishchemash. Deposit, no. 477ml-84, 24 Oct 1984, 7 p. (DERUD, 2/85, 280).

982. Kopetskiy, Ch.V. (). Some present-day trends in the development of technology. VANSA, no. 1, 1985, 50-64.

983. Koronkevich, V.P.; Poleshchuk, A.G.; Churin, Ye.G.; Yurlov, Yu.I. (IAESOAN). Selective etching of thin chromium films irradiated by a laser. PZTFD, no. 3, 1985, 144-148.

984. Levchenko, Ye.B.; Frunze, A.Kh.; Yavokhin, A.N. (). Minimal speed for c-w CO2 laser welding of metals. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 103-104.

985. Levchenko, Ye.B.; Turygin, A.Yu. (). Effect of surface disturbances on the depth of laser welding of metals. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 101-102.

986. Makshantsev, B.I.; Rovinskiy, R.Ye.; Rogalin, V.Ye. (VNIIOFI). The effect of dielectric formations on the surface of a metal on optical breakdown. KVEKA, no. 1, 1985, 22-28.

987. Man'ko, P.A.; Mil'rud, S.R.; Semenov, S.A. (). Development of a highly productive process for laser powder surfacing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 115-116.

988. Markevich, M.I.; Chaplanov, A.M. (IEANBel). Feasibility of hardening aluminum films with laser processing. FMMTA, no. 2, 1985, 405-407.

989. Mayorov, V.S.; Safonov, A.N.; Tarasenko, V.M. (). Study on the structure and properties of alloys during laser processing and developoment of technology for hardening of industrial products. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 156-157.

990. Mazanko, V.F.; Pogorelov, A.Ye. (). Migration of cesium atoms in iron under laser action. Metallofizika, no. 4, 1984, 108-109. (RZFZA, 85/1Yel122).

991. Min'ko, L.Ya.; Chivel', Yu.A.; Chumakov, A.N. (). Initial plasma formation from the action of laser radiation on absorptive materials under plane geometry conditions in the disintegration of the forming plasma. ZPSBA, v. 42, no. 1, 1985, 55-61.

992. Mironov, L.G.; Cherkashin, A.P. (). Laser welding of Kovar stainless steel. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 106-107.

993. Orlov, A.S.; Orlova, A.I.; Seleznev, V.V.; Tarayev, S.P. (). Laser processing of a cutting instrument with an electric-spark coating. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 91-92.

994. Panarin, V.Ye.; Shurin, A.K.; Khandros, E.L. (). Changes in the structure of eutectic steels under the action of high-speed heat processes. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 151-152.

995. Protasevich, V.A. (). Effect of laser processing on the structure and properties of self-fluxing alloy coatings. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 155-156.

996. Rozniakowski, K. (Rozhnyakovskiy, K.); Wlodarczyk, S. (Vlodarchik, S.); Drobnik A. (Poland). Determination of the temperature of Steel 45 irradiated by neodymium laser pulses. KVEKA, no. 1, 1985, 205-207.

997. Semichev, A.Ya.; Tochilkin, V.A.; Toshchev, A.M.; Usanov, Yu.Ya. (). Effect of aberrations on the efficiency of the laser welding process. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 108-109.

998. Silenok, A.S. (IOF). Heating of metals under conditions of near-surface gas breakdown by CO2 laser radiation. IOF. Dissertation, 1985, 23 p.

999. Smirnov, V.S.; Tsibul'skiy, I.A. (). Diagnostics of the melting process using the properties of a plasma flare during welding by a high-power CO2 laser beam. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 132-133.

1000. Vaytkyavichyus, M.Yu.; Kanapenas, R.M.V. (). Study on gas laser cutting of bars. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 116.

1001. Vedenov, A.A.; Gladush, G.G.; Drobyazko, S.V.; Pavlovich, Yu.V.; Senatorov, Yu.M. (). Physical laws governing the deep melting of metals by periodic pulsed CO2 laser radiation. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 127-128.

1002. Vedenov, A.A.; Gladush, G.G.; Drobyazko, S.V.; Pavlovich, Yu.V.; Senatorov, Yu.M. (). Physical laws governing the interaction of periodic pulsed CO2 laser radiation with metals. KVEKA, no. 1, 1985, 60-67.

1003. Velichko, O.A.; Molchan, I.V.; Avramchenko, P.F.; Kareta, N.L.; Panasenko, A.I.; Zima, V.S. (). Hardening of cast iron sleeves in diesel locomotive engines by a CO2 laser beam. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 77-78.

1004. Vengrinovich, V.L.; Astapchik, S.A.; Babushkin, V.B.; Velichko, O.A.; Avramchenko, P.F. (). Nondestructive control the structural zones of laser hardening. FKOMA, No. 6, 1984, 10-15.

1005. Vlasova, I.S.; Kosynkin, V.D.; Kuligin, G.B.; Fedorov, V.G. (). Study on the tendency of high-strength steels to form cold cracks during laser welding. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 110-111.

1006. Vorob'yev, S.A.; Kozhevnikov, D.V.; Nesterenko, V.P.; Pogrebnyak, A.D.; Kuznetsov, M.F. (). Laser prediction of the strength of hard alloy instrument materials. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 66-67.

1007. Vsevolodov, B.A.; Kvint, G.Yu.; Mil'rud, S.R.; Semenov, S.A. (). Laser hardening of AK-4 aluminum alloy on the LT1-2 device. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 95-96.

1008. Zulayev, V.B.; Kokora, A.N.; Maksimenkov, V.I.; Rybin, V.I.; Sapozhnikov, V.I. (). Robotized laser industrial complex for processing the cap bars of textile carding machines. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 72.

3. Dielectric Targets

1009. Babadzhan, Ye.I.; Kosachev, V.V.; Lokhov, Yu.N. (). Role of absorbing microinclusions in the mechanism of laser breakdown of broadband dielectrics. FKOMA, no. 1, 1985, 20-25.

1010. Ganyuchenko, V.M.; Lopota, V.A.; Nesterov, V.A.; Pimnev, S.V.; Smirnov, N.V.; Fiskin, Ye.M. (). Laser cutting of fused quartz and quartzoid glass products. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 117-118.

1011. Gavryushenko, B.S.; Kurochkin, Yu.V.; Lyubchenko, A.M.; Khalboshin, A.P. (). Use of dielectric SiO coatings in laser processing. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 138-139.

1012. Grigor'yants, A.G.; Sokolov, A.A.; Tret'yakov, V.M.; Shcherbachenko, A.A. (). Effect of the composition of the gas medium on the character of the process of laser cutting of dielectrics. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 118-119.

1013. Grigor'yants, A.G.; Sokolov, A.A.; Fromm, V.A. (). Study on the effect of the degree of radiation focusing on the efficiency of the process of laser cutting of layered plastics. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 121-122.

1014. Kask, N.Ye.; Korniyenko, L.S.; Fedorovich, O.V. (NIIYaF). A thermochemical model for an optical discharge in glasses. KVEKA, no. 1, 1985, 80-90.

1015. Romanov, G.S.; Stankevich, Yu.A. (NIIPFP). Establishment of steady-state vaporization of nonlinearly absorbing glass under the action of monochromatic radiation. ZTEFA, no. 1, 1985, 137-141.

4. Semiconductor Targets

1016. Akhoyan, A.P.; Korsundkaya, N.Ye.; Markevich, I.V.; Shabliy, I.Yu. (IPANUk). Nature of residual conductivity and switching effects which arise in CdS crystals during laser irradiation. UFZHA, no. 1, 1985, 143-146.

1017. Dvurechenskiy, A.V.; Groetzschei, R.; Igonina, N.M. (). Diffusion of impurities in an undercooled melt of pulse heated ion-implanted silicon. PSSAB, v. A84, no. 1, 1984, 171-177. (RZFZA, 85/2Ye1020).

1018. Gamalya, I.A.; Danileyko, V.M.; Kryuchin, A.A.; Petrov, V.V.; Sokolov, L.S.; Tsulaya, A.V.; Yudin, G.Yu. (IPMEn). Laser heating of absorptive semiconductor films. KVELA, no. 28, 1985, 39-49.

1019. Kalinushkin, V.P.; Manenkov, A.A.; Mikhaylova, G.N.; Sokolov, S.Yu. (IOF). The absorption of 10.6 micron laser radiation in an electron-hole condensate in germanium. DANKA, vol. 279, no. 1, 1984, 88-90.

1020. Savitskiy, G.V.; Kiyak, S.G.; Gafiychuk, V.V.; Narol'skiy, A.F. (IPPMM). Kinetics of heating semiconductors with millisecond laser pulses. UFZHA, no. 2, 1985, 260-263.

1021. Varshava, S.S.; Gavchak, V.O.; Kurechko, P.S.; Kushnir, Z.O. (LvPI). Study on the structure of craters formed under laser irradiation of GaAs. UkrNIINTI. Deposit, no. 1630Uk-84, 4 Oct 1984, 15 p. (RZFZA, 85/1Yel115).

1022. Zaginey, A.A. (IPPMM). Photothermal annealing and recrystallization of surface layers of HgTe. Konferentsiya molodykh uchenykh IPPMM, 10th, L'vov, 15-17 May 1984. Materialy. Part 1. VINITI. Deposit, no. 7196-84, 10 Nov 1984, 78-82. (RZFZA, 85/1Yel117).

K. PLASMA GENERATION AND DIAGNOSTICS

1023. Afanas'yev, Yu.V.; Ibrayev, R.A.; Kanavin, A.P.; Chetverushkin, B.N. (FIAN). Numerical modeling of the generation of a current in a laser flare plasma. KVEKA, no. 2, 1985, 392-394.

1024. Afanas'yev, Yu.V.; Shlyaptsev, V.N. (FIAN). Kinetic and hydrodynamic theory on the formation of population inversion in a multicharged laser plasma containing neon-like ions. FIAN. Preprint, no. 40, 1985, 29 p.

1025. Afanas'yev, Yu.V.; Sklizkov, G.V. (). Heavy ion accelerators and their use in inertial thermonuclear fusion. VANSA, No. 1, 1985, 107-110.

1026. Aleksandrova, I.V.; Allin, A.P.; Basov, N.G.; Borisenko, N.G.; Bochkarev, V.N.; Bykovskiy, N.Ye.; Valuyev, A.D.; Vasin, B.L.; Galichiy, A.A.; Goetz, K. (Getts, K.); Huenckel, H. (Gunkel', Kh.); Danilov, A.Ye.; Ivanov, V.V.; Ivanov, B.Yu.; Isakov, A.I.; Kalashnikov, M.P.; Koresheva, Ye.R.; Kruglov, B.V.; Kusch, S. (Kush, S.); Mazur, M.Yu.; Maksimchuk, A.M.; Merkul'yev, Yu.A.; Mikhaylov, Yu.A.; Nikitenko, A.I.; Orlov, V.V.; Osetrov, V.P.; Puzyrev, V.N.; Ricker, R. (Riker, R).; Rode, A.V.; Savchenko, S.M.; Senatskiy, Yu.V.; Solodkov, V.M.; Subbotin, L.K.; Fedotov, S.I.; Foerster, E. (Ferster, E.); Tsvetkov, M.Yu.; Tsygankov, A.A.; Chaushanskiy, S.A.; Schoennagel, H. (Shennagel', Kh.); Shishkina, L.I.; Junge, K. (Yunge, K). (FIAN). Study on the Del'fin-1 laser plasma system. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 22-41.

1027. Aleksandrova, I.V.; Basov, N.G.; Danilov, A.Ye.; Demishev, S.V.; Mikhaylov, Yu.A.; Fedotov, S.I.; Khitrov, A.L. (FIAN). Ultimate possibilities of a laser method for heating spherical targets. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 42-59.

1028. Avtonomov, V.P.; Geondzhian, Yu.G.; Orlov, A.V.; Sklizkov, G.V.; Subbotin, L.K.; Chekmarev, A.M. (FIAN). Measuring the dose characteristics of negative x-ray resists by means of a laser plasma soft x-ray source. FIAN. Preprint, no. 74, 1985, 15 p.

1029. Balashov, Yu.V.; Ivanov, P.I.; Managadze, G.G. (IKGr). Measuring the temperature of a laser plasma from the intensity of braking continuum radiation. AKZHA, no. 1, 1985, 77-80.

1030. Baranov, V.Yu.; Koval'skiy, N.G.; Sebrant, A.Yu. (). Conference on the Interaction of Radiation, Plasma and Electron Beams with Matter, Protvino, Feb 1984. AENGA, v. 57, no. 3, 1984, 214-215. (RZFZA, 85/1G1).

1031. Basov, N.G.; Danilov, A.Ye.; Duennebier, G. (Dyunnebiyer, G.); Kalashnikov, M.P.; Kusch, S. (Kush, S.); Mikhaylov, Yu.A.; Reinicke, W. (Raynike, V.); Ricker, R. (Riker, R.); Savchenko, S.M.; Sklizkov, G.V.; Fedotov, S.I.; Schoennagel, H. (Shennagel', Kh.); Schwider, J. (Shvider, Y.); Junge, K. (Yunge, K.). (FIAN). System for concentration of radiation in the Del'fin-1 multichannel laser device for heating and compression of thermonuclear target s in experiments on laser fusion. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 3-21.

1032. Basov, N.G.; Rozanov, V.B. (). Soviet and English scientists discuss the problems of laser thermonuclear fusion. VANSA, no. 2, 1985, 114-124.

1033. Basov, N.G.; Vergunova, G.A.; Rozanov, V.B. (FIAN). Possibility of obtaining population inversion in the UV under optical pumping. KVEKA, no. 2, 1985, 248-258.

1034. Baygarin, K.A.; Gubanov, Ye.M. (IAE). Optical system for probing a near-electrode plasma in the diode of the Angara-1 accelerator by means of a nitrogen laser. IAE. Preprint, no. 3947/14, 1984, 12 p. (RZFZA, 85/1G142).

1035. Belousov, V.I.; Derzhiyev, V.I.; Korneychuk, V.I.; Yakovlenko, S.I. (IOF). Disintegration of a plasma cluster with impurities. IOF. Preprint, no. 93, 1985, 22 p.

1036. Borovskiy, A.V.; Korobkin, V.V.; Mukhtarov, Ch.K. (IOF). Amplification of light at hydrogen ion transitions in a low-temperature plasma. KVEKA, no. 2, 1985, 289-293.

1037. Borovskiy, A.V.; Korobkin, V.V.; Mukhtarov, Ch.K. (IOF). Amplification of light at the 3-2 hydrogen ion transition in a freely disintegrating plasma cluster of cylindrical shape, allowing for reabsorption at the 2-1 and 3-1 transitions. IOF. Preprint, no. 21, 1985, 26 p.

1038. Borovskiy, A.V.; Korobkin, V.V.; Mukhtarov, Ch.K. (IOF). Amplification of light at transitions of H ions during free disintegration of thin plasma clusters in a cylindric configuration. Adiabatic disintegration. IOF. Preprint, no. 157, 1984, 42 p. (RZFZA, 85/2L1204).

1039. Bykovskiy, N.Ye.; Ivanov, V.V.; Lisunov, V.V.; Senatskiy, Yu.V. (FIAN). Polarization and intensity distribution of radiation during reflection of a laser beam from a transparent spherical shell. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 162-168.

1040. Bykovskiy, N.Ye.; Ivanov, V.V.; Senatskiy, Yu.V. (FIAN). Intensity profiles of local disturbances in a laser beam while propagating in a nonlinear medium. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 150-161.

1041. Cojocaru, E. (). Background gas pressure dependence of self-generated magnetic fields in laser produced plasmas [in English]. RRPQA, no. 5, 1984, 465-470. (RZFZA, 85/1G423).

1042. Danilychev, V.A.; Semenova, L.V.; Kholin, I.V.; Chugunov, A.Yu. (FIAN). Comparison of experimental and theoretical spectra in studies on satellite structures of resonance lines of multicharged helium-like ions. FIAN. Preprint, no. 58, 1985, 17 p.

1043. Derzhiyev, V.I.; Mayorov, S.A.; Yakovlenko, S.I. (IOF). Jump in the populations of ion levels at a shock wave front in a recombining plasma. ZTEFA, no. 2, 1985, 379-382.

1044. Fisher, V.I. (OGU). The mechanism for the formation of a plasma mirror in a resonator. ZETFA, vol. 88, no. 2, 1985, 436-444.

1045. Fisher, V.I. (OGU). The suppression of an electron avalanche before a plasma-air contact boundary. PZTFD, no. 2, 1985, 218-220.

1046. Gamaliy, Ye.G.; Gus'kov, S.Yu.; Rozanov, V.B. (FIAN). Optimization of the parameters of spherical targets for experiments in laser fusion. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 60-65.

1047. Gamaliy, Ye.G.; Lebo, I.G.; Rozanov, V.B. (FIAN). Spontaneous magnetic fields in sperical laser targets. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 66-96.

1048. Goncharov, S.F.; Pashinin, P.P.; Serov, R.V.; Smirnov, A.V.; Chvykov, V.V. (IOF). The formation of synchronized light pulses for the diagnostics of a laser plasma by means of a two-path Pockels cell. KVEKA, no. 2, 1985, 378-381.

1049. Gorbunov, L.M.; Shirokov, A.S. (FIAN). The development of a self-focusing instability in a semirestricted plasma. KEVKA, no. 1, 1985, 146-149.

1050. Gorokhov, A.A.; Zapysov, A.L.; Zuyev, A.I.; Izrailev, I.M.; Komarov, V.M.; Kryuchenkov, V.B.; Lykov, V.A.; Podgornov, V.A.; Charukhchev, A.V. (). A shift of the recombination jump in the spectra of x-ray radiation from laser targets. KVEKA, no. 2, 1985, 444-445.

1051. Gus'kov, S.Yu.; Rozanov, V.B. (FIAN). The dependence of the degree of flattening of a spherical target on the temporal shape and duration of a laser pulse. KVEKA, no. 2, 1985, 410-413.

1052. Knyazev, B.A.; Lebedev, S.V.; Mekler, K.I. (IYaFSOAN). Laser vaporization with subsequent photoionization: method for obtaining a plasma cloud with given composition of elements. IYaFSOAN. Preprint, no. 99, 1984, 20 p. (RZFZA, 85/1L1207).

1053. Koresheva, Ye.R.; Nikitenko, A.N. (FIAN). Study on the dynamics of the behavior of a cryolayer in targets with a thermal gradient present. KRSFA, no. 1, 1985, 37-40.

1054. Krousky, E.; Renner, O. (). X-ray spectrograph with vertical focusing for diagnostics of a laser plasma. CKCFA, v. A34, no. 4, 1984, 372-374. (RZFZA, 85/2G376).

1055. Lukomskiy, N.G.; Polishchuk, V.A.; Chayka, M.P. (). "Latent" anisotropy of collisions in a low-temperature plasma. OPSPA, v. 58, no. 2, 1985, 474-475.

1056. Pirogovskiy, P.Ya. (IOF). Schlieren photographic study on the region of interaction of a laser plasma with a solid surface. IOF. Preprint, no. 24, 1985, 15 p.

1057. Rayzer, Yu.P.; Surzhikov, S.T. (IPMe). One dimensional numerical study on a c-w optical discharge in an atmosphere of air. TVYTA, no. 1, 1985, 29-35.

1058. Silin, P.V. (FIAN). Nonlinear theory on travelling e-m waves in a moving plasma. KRSFA, no. 1, 1985, 27-32.

1059. Silin, V.P. (FIAN). Absorption of radiation by a turbulent laser plasma. UFNAA, vol. 145, no. 2, 1985, 225-253.

1060. Volkova, R.A.; Kruglyakova, L.V.; Myshetskaya, Ye.Ye.; Tishkin, V.F.; Tyurina, N.N.; Favorskiy, A.P.; Shashkov, M.Yu. (IPM). SAFRA [Russian acronym for System for Automation of Physical Calculations]. Functional expansion. ATLANT program for solving two-dimensional problems of controlled laser fusion. Instructions. IPM. Preprint, no. not given, 1985, 64 p.

1061. Volovski, Ye.; Voryna, E.; Denus, S.; Yerokhin, A.A.; Zakharenkov, Yu.A.; Mruz, V.; Sklizkov, G.V.; Farny, Yu.; Shikanov, A.S. (FIAN). Mass-spectrometric study on plasma density in the Kal'mar. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 125-149.

1062. Yefimov, Yu.A.; Mandel'shtam, T.S.; Murzin, V.N.; Chebotarev, A.P.; Chebotarev, M.P. (FIAN). Cyclotron resonance of hot current carriers in germanium in strong electric and magnetic fields. FIAN. Preprint, no. 52, 1985, 26 p.

1063. Yerokhin, A.A.; Zakharenkov, Yu.A.; Zorev, N.N.; Sklizkov, G.V.; Shikanov, A.S. (FIAN). Methods for optical probing of an inhomogeneous plasma. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 97-124.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

1064. Ablekov, V.K.; Kolyadin, S.A.; Frolov, A.V. (). High-resolution optical systems. Vysokorazreshayushchiye opticheskiye sistemy. Moskva, Mashinostroyeniye, 1985, 176 p.

1065. Achasov, O.V.; Kudryavtsev, N.N.; Novikov, S.S.; Soloukhin, R.I.; Fomin, N.A. (ITMO, MFTI). Diagnostics of nonequilibrium states in molecular lasers. Diagnostika neravnovesnykh sostoyaniy v molekulyarnykh lazerakh. Minsk, Nauka i tekhnika, 1985, 208 p.

1066. Agranovich, V.M.; Mills, D.L. (U.S.) (eds). (). Surface polaritons. Electromagnetic waves on surfaces and interfaces of media. Poverkhnostnnyye polyaritony. Elektromagnitnyye volny na poverkhnostyakh i granitsakh razdela sred. Series: Sovremennyye problemy nauki o kondensirovannykh sred (Current problems on the science of condensed media). NSSAM, ISAN. Moskva, Nauka, 1985, 526 p.

1067. Akhayan, A.A. (ed). (LGPI). Interaction of electrons and photons with solids. Vzaimodeystviye elektronov i fotonov s tverdym telom. LGPI. Leningrad, 1984, 110 p. (RZFZA, 85/2N292).

1068. Andrushko, L.M.; Grodnev, I.I.; Panfilov, I.P. (). Fiberoptic communication lines. Volokonno-opticheskiye linii svyazi. Moskva, Radio i svyaz', 1985, 136 p.

1069. Bokova, N.A.; Yeliseyev, A.A.; Popova, T.N. (TGU). Technology of spectroscopy. Tekhnika spektroskopii. TGU. Tomsk, 1983, 76 p. (KLDBD, 1/85, 163).

1070. Burkov, V.I. (MFTI). Diffraction and propagation of electromagnetic waves. Difraktsiya i rasprostraneniye elektromagnitnykh voln. MFTI. Moskva, 1984, 135 p. (RZFZA, 85/2Zh220).

1071. Bykov, R.Ye.; Gurevich, S.B. (). Analysis and processing of color and three-dimensional images. Analiz i obrabotka tsvetnykh i ob"yemnykh izobrazheniy. Moskva, Radio i svyaz', 1984, 248 p. (RZFZA, 85/2L831).

1072. Bystritskiy, V.M.; Didenko, A.N. (). High-power ion beams. Moshchnyye ionnyye puchki. Moskva, Energoatomizdat, 1984, 152 p. (RZFZA, 85/1G139).

1073. Bystrov, Yu.A.; Litvak, I.I.; Persianov, G.M. (). Electronic instruments for displaying information. Elektronnyye pribory dlya otobrazheniya informatsii. Moskva, Radio i svyaz', 1985, 240 p.

1074. Chibisov, K.V. (ed). (). Optical images and recording media. Opticheskoye izobrazheniye i registriruyushchiye sredy. CVKOIRSr, Leningrad, 27-29 Apr 1982. NSFPRI, IELAN, GOI, FTI. UNFKA, no. 23, 1985, 206 p.

1075. Chistov, Ye.D.; et al. (VTsNIIOT). Methodical instructions for evaluating harmful production factors in laser processing of various polyvinyl chloride and metal materials. Metodicheskiye ukazaniya po otsenke vrednykh proizvodstvennykh faktorov pri lazernoy obrabotke nekotorykh polivinilkhloridnykh i metallicheskikh materialov. VTsNIIOT. Moskva, 1984, 61 p. (KLDBD, 2/85, 1907).

1076. Dorozhkin, N.N.; et al. (INDMASh). Laser radiation in the technology for hardening fast-wearing surfaces of machine parts. Lazernoye izlucheniye v tekhnologii uprochneniya bystroiznashivayushchikhsya poverkhnostey detaley mashin. INDMASh. Minsk, 1984, 40 p. (KLDBD, 2/85, 1913).

1077. Dubovik, A.S. (). Photographic recording of fast-flow processes. Fotograficheskaya registratsiya bystro-protekayushchikh protsessov. 3rd ed. revised. Moskva, Nauka, 1984, 320 p. (RZFZA, 85/1L807).

1078. Electronic and laser instruments. Elektronnyye i lazernyye pribory. IFANB. SKTBOPIFANB. Preprint, no. 334, 1984, 53 p. (RZFZA, 85/1L532).

1079. Golubev, V.S. (ed). (). Use of lasers in the national economy. All-Union conference, Zvenigorod, 17-20 May 1985. Summaries of the reports. Primeneniye lazerov v narodnom khozyaystve. CVKPLNKh, Zvenigorod, 17-20 May 1985. Tezisy dokladov. GKNT, MNTSPLT, NITsTLAN. Moskva, Nauka, 1985, 232 p.

1080. Golubkov, V.S.; Yevtikhiyev, N.N.; Papulovskiy, V.F. (). Integrated optics in information technology. Integral'naya optika v informatsionnoy tekhnike. Moskva, Energoatomizdat, 1985, 152 p.

1081. Kaczmarek, F. (). European Optical Conference (EOC '83): Optics in Science and Practice, Rudzyna near Leszno, 30 May - 4 Jun 1983. CEOConfr [all in English]. OPAPB, no. 4, 1984, 332-505. (RZFZA, 85/2L1).

1082. Kartashev, V.P.; Kotov, V.I. (). Fundamentals of magnetooptics of charged particle beams. Osnovy magnitnoy optiki puchkov zaryazhennykh chastits. Moskva, Energoatomizdat, 1984, 152 p. (RZFZA, 85/1V386).

1083. Khadzhi, P.I. (author); Moskalenko, S.A. (ed). (IPFANM). Nonlinear optical processes in a system of excitons and biexcitons in semiconductors. Nelineynyye opticheskiye protsessy v sisteme eksitonov i bieksitonov v poluprovodnikakh. IPFANM. Kishinev, Shtiintsa, 1985, 214 p.

1084. Konyukhov, N.Ye.; Plyut, A.A.; Markov, P.I. (). Optoelectronic control and measuring devices. Optoelektronnyye kontrol'no-izmeritel'nyye ustroystva. Moskva, Energoatomizdat, 1985, 152 p.

1085. Kotletsov, B.N. (). Microimages. Optical methods for preparation and control. Mikroizobrazheniya. Opticheskiye metody polucheniya i kontrolya. Leningrad, Mashinostroyeniye, 1985, 240 p.

1086. Kozelkin, V.V.; Usol'tsev, I.F. (). Fundamentals of infrared technology. Osnovy infrakrasnoy tekhniki. 3rd edition revised and enlarged. Moskva, Mashinostroyeniye, 1985, 264 p.

1087. Kuz'mina, I.P.; Nikitenko, V.A. (). Zinc oxide. Preparation and optical properties. Okis' tsinka. Polucheniye i opticheskiye svoystva. Moskva, Nauka, 1984, 166 p. (RZFZA, 85/1L673).

1088. Laser absorption methods for analyzing microconcentrations in gases. Lazernyye absorbtsionnyye metody analiza mikrokontsentratsiy gazov. MIFI. Moskva, Energoatomizdat, 1984, 132 p. (RZFZA, 85/2L1384).

1089. Luk'yanenko, S.F.; Makogon, M.M.; Sinitsa, L.N. (authors); Makushkin, Yu.S. (ed). (IOA). Intracavity laser spectroscopy. Fundamentals of the method and application. Vnutrirezonatornaya lazernaya spektroskopiya. Osnovy metoda i primeneniya. IOA. Novosibirsk, Nauka, 1985, 121 p.

1090. Maslov, V.P. (MIEM). Mathematical problems in integrated optics. Matematicheskiye voprosy integral'noy optiki. MIEM. Moskva, 1983, 130 p. (KLDBD, 1/85, 164).

1091. Methods and means for processing physical information. Metody i sredstva obrabotki fizicheskoy informatsii. Moskva, 1983, 94 p. (RZFZA, 85/2A30).

1092. Optoelectronic instruments. Optiko-elektronnyye pribory. MVTU. Trudy, no. 419, 81 p. (RZFZA, 85/2L657).

1093. Physical methods for studying transparent inhomogeneities. Fizicheskiye metody issledovaniya prozrachnykh neodnorodnostey. Moskva, Dom nauchno-tekhnicheskogo propagandy, 1984, 49 p. (RZFZA, 85/1L533).

1094. Research in the field of time and frequency measurements. Issledovaniya v oblasti izmereniy vremeni i chastoty. VNIFTRI. Moskva, 1984, 137 p. (RZFZA, 85/2A87).

1095. Ryabov, S.G.; Toropkin, G.N.; Usol'tsev, I.F. (authors); Stel'makh, M.F. (ed). (). Quantum electronics instruments. Pribory kvantovoy elektroniki. 2nd edition revised and enlarged. Moskva, Radio i svyaz', 1985, 280 p.

1096. Samokhvalov, I.V. (ed). (IOA). Spectroscopic methods for probing the atmosphere. Spektroskopicheskiye metody zondirovaniya atmosfery. IOA. Novosibirsk, Nauka, 1985, 144 p.

1097. Sklizkov, G.V. (ed). (FIAN). Optics of high-power lasers for research on laser fusion. Optika moshchnykh lazerov dlya issledovaniy po lazernomu termoyadernomu sintezu. FIAN. Trudy, no. 149, 1985, 172 p.

1098. Snitko, O.V. (ed). (IPANUk). Institute of Semiconductors, Academy of Sciences Ukrainian SSR. Institut poluprovodnikov. Kiyev, Naukova dumka, 1985, 152 p.

1099. Snitko, O.V. (ed). (IPANUk). Physical fundamentals of semiconductor electronics. Fizicheskiye osnovy poluprovodnikovoy elektroniki. IPANUk. Kiyev, Naukova dumka, 1985, 304 p.

1100. Sobolev, N.N. (ed). (FIAN). E-beam-excited molecules in a nonequilibrium plasma. Elektronno-vozbuzhdennyye molekuly v neravnovesnoy plazme. FIAN. Trudy, no. 157, 1985, 188 p.

1101. Sobolev, V.V. (). Excitons and bands in alkali-halide crystals. Eksitony i zony shchelochno-galoidnykh kristallov. Kishinev, Shtiintsa, 1984, 302 p. (RZFZA, 85/1N620).

1102. Troitskiy, Yu.V. (author); Nesterikhin, Yu.Ye. (ed). (IAESOAN). Multibeam reflected light interferometers. Mnogoluchevyye interferometry otrazhennogo sveta. Novosibirsk, Nauka, 1985, 208 p.

1103. Ultrafast processes in spectroscopy. Symposium, 3rd, Minsk, 28-30 Sep 1983. Papers. Sverkhbystryye protsessy v spektroskopii. CSSPSpek, 3rd, Minsk, 28-30 Sep 1983. Materialy. Minsk, 1984. (RZRAB, 85/2Ye673).

1104. Vaynshteyn, B.K. (ed). (IKAN). Methodological problems in crystallography. Metodologicheskiye problemy kristallografii. IKAN. Moskva, Nauka, 1985, 296 p.

1105. Yeletskiy, A.V.; Smirnov, B.M. (). Physical processes in gas lasers. Fizicheskiye protsessy v gazovykh lazerakh. Moskva, Energoatomizdat, 1985, 152 p.

1106. Zhizhin, G.N.; Mavrin, B.N.; Shabanov, V.F. (). Optical vibrational spectra of crystals. Opticheskiye kolebatel'nyye spektry kristallov. Moskva, Nauka, 1984, 232 p. (RZFZA, 85/1L323).

1107. Zhukov, A.A. (ed). (KhabGPI). Effect of electromagnetic radiation on solids. Vliyaniye elektromagnitnogo izlucheniya na tverdyye tela. KhabGPI. Khabarovsk, 1984, 147 p. (RZFZA, 85/1Ye9).

1108. Zolotarev, V.M.; Morozov, V.N.; Smirnov, Ye.V. (). Optical constants of natural and industrial media. Opticheskiye postoyannye prirodnykh i tekhnicheskikh sred. Leningrad, Khimiya, 1984, 215 p. (RZFZA, 85/1L127).

1109. Zuyev, V.Ye.; Peresypkin, V.I.; Fadeyev, V.Ya.; Kaloshin, G.A.; Konstantinov, R.S. (authors); Kabanov, M.V. (ed). (IOA). Laser devices for aiding ship navigation. Lazernyye ustroystva dlya obespecheniya sudovozhdeniya. IOA. Novosibirsk, Nauka, 1985, 128 p.

IV. SOURCE ABBREVIATIONS

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

AENGA	Atomnaya energiya (CTC)
AKZHA	Akusticheskiy zhurnal (CTC)
APSVC	Acta physica slovaca
ATPLB	Acta physica polonica. Series A
AUONA	Acta Universitatis Palackianae Olomucensis. Facultas rerum naturalium. Physica (Olomouc)
BAPTA	Bulletin de l'Academie Polonaise des Science`s. Serie des Sciences Techniques
BITOA	Bild und Ton (East Berlin)
BWATA	Biuletyn Wojskowej akademii technicznej imeni Jaroslawa Dabrowskiego
CEOConfr	European Optical Conference
CKCFA	Ceskoslovensky casopis pro fysiku
CMSRURES	Mezhvedomstvennoye soveshchaniye po rasprostraneniyu ul'trakorotkikh radiovoln i elektromagnitnogo sovmestimosti
CMSSYaFV	Mezhdunarodnyy seminar po spinovym yavleniyam v fizike vysokikh energiy
CMSYaEle	Mezhdunarodnyy simpozium po yadernoy elektronike
CRABA	Bulgarska akademiya na naukite. Doklady
CSSPSpek	Simpozium: Sverkhbystryye protsessy v spektroskopii
CVKOIRSr	Vsesoyuznaya konferentsiya: Opticheskoye izobrazheniye i registriruyushchiye sredy
CVKPLNKh	Vsesoyuznaya konferentsiya: Primeneniye lazerov v narodnom khozyaystve
CZYPA	Czechoslovak Journal of Physics

DANKA	Akademiya nauk SSSR. Doklady (CTC)
DBLRA	Akademiya nauk BSSR. Doklady
DERUD	Deponirovannyye nauchnyye raboty (formerly: Deponirovannyye rukopisi. Bibliograficheskiy ukazatel'. Yestyesvennyye i tochnyye nauki, tekhnika)
DLPLA	Dielektriki i poluprovodniki (sbornik, Kiyev)
ETFMB	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
FGVZA	Fizika goreniya i vzryva (CTC)
FKOMA	Fizika i khimiya obrabotki materialov
FKSTD	Fizika i khimiya stekla (CTC)
FMMTA	Fizika metallov i metallovedeniye (CTC)
FNMKA	Finomechanika, mikrotechnika (Budapest)
FNTED	Fizika nizkikh temperatur (Kiyev) (CTC)
FTVTA	Fizika tverdogo tela (CTC)
FZKAA	Fizika (Yugoslavia)
GRMAA	Geologiya rudnykh mestorozhdeniy
IANFA	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya (CTC)
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
IVNMA	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy (CTC)
IVUBA	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVUZB	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)

JMKOA	Jemna mechanika a optika
KHFID	Khimicheskaya fizika (CTC)
KHVKA	Khimiya vysokikh energiy (CTC)
KLDBD	Knizhnaya letopis'. Dopolnitel'nyy vypusk. Knigi i broshyuri (KLDVA prior to 1982)
KNKTA	Kinetika i kataliz (CTC)
KOKHD	Koordinatsionnaya khimiya (Moskva)(CTC)
KRISA	Kristallografiya (CTC)
KRSFA	Kratkiye soobshcheniya po fizike (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)
KVELA	Kvantovaya elektronika (sbornik, Kiyev)
LFSBA	Litovskiy fizicheskiy sbornik (CTC)
LZFTA	Akademiya nauk Latviyskoy SSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk
MTRLB	Metrologiya
OPAPB	Optica applicata (Poland)
OPSPA	Optika i spektroskopiya (CTC)
OPTED	Optoelektronika i poluprovodnikovaya tekhnika (Kiyev)
OTIZD	Otkrytiya, izobreteniya (formerly included in OIPOB)
PAUKA	Pomiary, automatyka, kontrola
PFKMD	Poverkhnost'. Fizika, khimiya, mekhanika (Moskva)
PKMKA	Prikladnaya mekhanika (Kiyev)
PRIRA	Priroda
PRSUB	Pribory i sistemy upravleniya (CTC)
PRTEA	Pribory i tekhnika eksperimenta (CTC)

PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PSTFA	Postepy fizyki
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)
RADID	Nauchnyye trudy vysshikh uchebnykh zavedeniy Litovskoy SSR. Radioelektronika (Kaunas)
RAELA	Radiotekhnika i elektronika (journal, Moskva)(CTC)
RAGEA	Razvedochnaya geofizika (Moskva)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RRPQA	Revue Roumaine de Physique
RZFZA	Referativnyy zhurnal. Fizika
RZRAB	Referativnyy zhurnal. Radiotekhnika
SAKNA	Akademiya nauk Gruzinskoy SSR. Soobshcheniya
SCEFA	Studii si cercetari de fizica
SVETA	Svetotekhnika
TEKHA	Teoreticheskaya i eksperimental'naya khimiya (CTC)
TEOPA	Tekhnologiya i organizatsiya proizvodstva
TMFZA	Teoreticheskaya i matematicheskaya fizika (CTC)
TVOOB	Tekhnika i vooruzheniye (CTC)
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
UFZHA	Ukrainskiy fizicheskiy zhurnal (CTC)
UNFKA	Uspekhi nauchnoy fotografii (sbornik, Moskva)
VABFA	Belorusskiy universitet. Vestnik. Seriya fiziko-tekhnicheskikh nauk

VANSA	Akademiya nauk SSSR. Vestnik (CTC)
VBBKA	Belorusskiy universitet. Vestnik. Seriya 2. Biologiya, khimiya, geografiya
VBMFA	Belorusskiy universitet. Vestnik. Seriya 1. Matematika, fizika, mekhanika
VBSFA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
VMASA	Vestnik mashinostroyeniya
VMUFA	Moskovskiy universitet. Vestnik. fizika, astronomiya (CTC)
VNUKA	Akademiya nauk Ukrayns'koy RSR. Visnyk
ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)
ZFKHA	Zhurnal fizicheskoy khimii (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNOKA	Zhurnal neorganicheskoy khimii (CTC)
ZNPFA	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii (CTC)
ZPMFA	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki (CTC)
ZPSBA	Zhurnal prikladnoy spektroskopii (CTC)
ZRBEA	Zarubezhnaya radioelektronika
ZTEFA	Zhurnal tekhnicheskoy fiziki (CTC)

V. AUTHOR AFFILIATIONS

AKIN
Akusticheskiy institut AN SSSR
Acoustics Institute, Academy of Sciences USSR

AlGU
Altayskiy gos universitet
Altai State University, Barnaul

BGU
Belorusskiy gos universitet
Belorussian State University

BGUNIIFP
NII fiziko-khimicheskikh problem Belorusskogo gos universiteta
Scientific Research Institute of Physical Chemistry Problems at Belorussian State University, Minsk

BIYeN
Buryatskiy institut yestestvennykh nauk SOAN SSSR
Buryat Institute of Natural Sciences, Siberian Branch of the Academy of Sciences USSR

BPI
Belorusskiy politekhnicheskiy institut
Belorussian Polytechnical Institute, Minsk

CherkPI
Cherkasskiy pedagogicheskiy institut
Cherkassky Pedagogical Institute

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

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

FTINT
Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR
Physicotechnical Institute of Low Temperature Physics, Academy of Sciences Ukrainian SSR, Khar'kov

GGO
Glavnaya geofizicheskaya observatorya imeni A. I. Voyeykova
Main Geophysical Observatory imeni A. I. Voyeykov, Leningrad

GGU
Gor'kovskiy gos universitet
Gor'kiy State University

GIBF
Geologicheskiy institut SOAN SSR. Buryatskiy filial.
Geological Institute. Academy of Science USSR. Siberian Branch. Buryat Affiliate (Ulan-Ude).

GIFTI
  Gor'kovskiy issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom gos universite
  Gor'kiy Physicotechnical Research Institute at Gor'kiy State University
GKNT
  Gosudarstvennyy komitet Soveta Ministrov SSSR po nauke i tekhnike
  State Committee on Science and Technology, Council of Ministers USSR
GOI
  Gosudarstvennyy opticheskiy institut im Vavilova
  State Optical Institute imeni Vavilov, Leningrad
GomGU
  Gomel'skiy gosudarstvennyy universitet.
  Gomel' State University.
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
IAFAEst
  Institut astrofiziki i fiziki atmosfery AN EstSSR
  Institute of Astrophysics and Physics of the Atmosphere, Academy of Sciences Estonian SSR, Tallin
IEANBel
  Institut elektroniki AN BSSR
  Institute of Electronics, Academy of Sciences Belorussian SSR, Minsk
IELAN
  Institut elektrokhimii AN SSSR
  Institute of Electrochemistry, Academy of Sciences USSR
IEM
  Institut eksperimental'noy meteorologii
  Institute of Experimental meteorology, Obninsk
IEMEZh
  Institut evolyutsionnoy morfologii i ekologii zhivotnykh im A.N. Severtsova AN SSSR
  Institute of Evolutionary Morphology and Animal Ecology imeni Severtsov, Academy of Sciences USSR, Moscow
IFANAz
  Institut fiziki AN AzSSR
  Institute of Physics, Academy of Sciences Azerbaydzhan SSR
IFANB
  Institut fiziki AN BSSR
  Institute of Physics, Academy of Sciences Belorussian SSR, Minsk

IFANBMO
Mogilevskiy filial Instituta fiziki AN BSSR
Mogilev Branch of the Institute of Physics, Academy of Sciences Belorussian SSR

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

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

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

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

IGTANB
Institut genetiki i tsitologii AN BSSR
Institut of Genetics and Cytology, Academy of Sciences Belorussian SSR

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

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

IKGr
Institut kibernetiki AN GruzSSR
Institute of Cybernetics, Academy of Sciences Georgian SSR

IKhANBF
Institut khimii Bashkirskogo filiala AN SSSR
Institute of Chemistry, Bashkir Branch Academy of Sciences USSR

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

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

INDMASh
Institut problem nadezhnosti i dolgovechnosti mashin AN BSSR
Institute for Problems of Reliability and Durability of Machines, Academy of Sciences Belorussian SSR, Minsk

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

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

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

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

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

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

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

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

IPMEn
Institut problem modelirovaniya v energetike AN UkrSSR
Institute for Problems of Modeling in Power Engineering, Academy of Sciences Ukrainian SSR, Kiev

IPPMM
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

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

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

ITK
Institut tekhnicheskoy kibernetiki AN BSSR
Institute of Technical Cybernetics, Academy of Sciences Belorussian SSR

ITMO
Institut teplo- i massoobmena AN BSSR
Institute of Heat and Mass Exchange, Academy of Sciences Belorussian SSR

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

IYaFSOAN
Institut yadernoy fiziki SOAN
Institute of Nuclear Physics, Siberian Branch Academy of Sciences USSR, Novosibirsk

KAI
Kazanskiy aviatsionnyy institut
Kazan' Aviation Institute

KazFTI
  Kazanskiy fiziko-tekhnicheskiy institut AN SSSR
  Kazan' Physicotechnical Institute, Academy of
    Sciences USSR
KazGU
  Kazakhskiy gos universitet
  Kazakh State University, Alma Ata
KeGU
  Kemerovskiy gos universitet
  Kemerov State University
KGU
  Kiyevskiy gos universitet
  Kiev State University
KhabGPI
  Khabarovskiy gos pedagogicheskiy institut
  Khabarovsk State Pedagogical Institute
KhAI
  Khar'kovskiy aviatsionnyy institut
  Khar'kov Aviation Institute
KhFTI
  Khar'kovskiy fiziko-tekhnicheskiy institut AN UkrSSR
  Khar'kov Physicotechnical Institute, Academy of Sciences
    Ukrainian SSR
KhGU
  Khar'kovskiy gos universitet
  Khar'kov State University
KhIRE
  Khar'kovskiy institut radioelektroniki
  Khar'kov Institute of Radioelectronics
KhPI
  Khar'kovskiy politekhnicheskiy institut
  Khar'kov Polytechnic Institute
KiGU
  Kishinveskiy gos universitet
  Kishinev State University
KPIA
  Kiyevskiy politekhnicheskiy institut`
  Kiev Polytechnic Institute
KuAI
  Kuybyshevskiy aviatsionnyy institut
  Kuybyshev Aviation Institute
KubU
  Kubanskiy gos universitet
  Kuban' State University
KuyGU
  Kuybyshevskiy gos universitet
  Kuybyshev State University
LETI
  Leningradskiy elektrotekhnicheskiy institut
  Leningrad Electric Engineering Institute

LGPI
Leningradskiy gos pedagogicheskiy institut
Leningrad State Pedagogical Institute

LGU
Leningradskiy gos universitet
Leningrad State University

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

LPI
Leningradskiy politekhnicheskiy institut
Leningrad Polytechnic Institute

LSAO
Spetsial'naya astrofizicheskaya observatoriya
Leningradskogo filiala AN SSSR
Special Astrophysical Observatory, Leningrad
Branch Academy of Sciences USSR

LvPI
L'vovskiy politekhnicheskiy institut
L'vov Polytechnic Institute

MEI
Moskovskiy energeticheskiy institut
Moscow Power Engineering Institute

MelIMSKh
Melitopol'skiy institut mekhanizatsii sel'skogo
khozyaystva
Melitopol Institute for Mechanization of Agriculture

MFTI
Moskovskiy fiziko-tekhnicheskiy institut
Moscow Physicotechnical Institute

MGPI
Moskovskiy gos pedagogicheskiy institut
Moscow State Pedagogical Institute

MGU
Moskovskiy gos universitet
Moscow State University

MIEM
Moskovskiy institut elektronnogo mashinostroyeniya
Moscow Institute of Electronic Machinery

MIFI
Moskovskiy inzhenerno-fizicheskiy institut
Moscow Engineering Physics Institute

MIIGAiK
Moskovskiy institut inzhenerov geodezii,
aerofotos"yemki i kartografii
Moscow Institute of Engineers of Geodesy,
Aerial Photography and Cartography

MNTSPLT
Mezhduvedomstvennyy nauchno-tekhnicheskiy sovet po problemam lazernoy tekhnologii AN SSSR
Interdisciplinary Scientific and Technical Council on Problems of Laser Technology, Academy of Sciences USSR

MordGU
Mordovskiy gos universitet
Mordovian State University, Saransk

MPI
Moskovskiy poligraficheskiy institut
Moscow Printing Institute

MRI
Minskiy radiotekhnicheskiy institut
Minsk Radio Engineering Institute

MVTU
Moskovskoye vyssheye tekhnicheskoye uchilishche im Baumana
Moscow Higher Technical College imeni Bauman

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

NIIBIKhS
NII po biologicheskim ispytaniyam khimicheskikh soyedineniy
Scientific Research Institute for Biological Tests of Chemical Compounds, Kupavna, Moscow Region

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

NIIFOd
NII fiziki Odesskogo gos universiteta
Scientific Research Institute of Physics of Odessa State University

NIIFTT
NII fiziki tverdogo tela Latviyskogo GU
Scientific Research Institut of Solid State Physics of the Latvian State University, Riga

NIIGAiK
Novosibirskiy institut inzhenerov geodezii, aerofotos"yemki i kartografii
Novosibirsk Institute for Engineers of Geodesy, Aerial Surveying and Cartography

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

NIIPFI
NII prikladnoy fiziki pri Irkustskom gos universitete
Scientific Research Institute of Applied Physics at Irkutsk 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

NIKFI
NI kinofotoinstitut
Scientific Research Institute of Motion Pictures and Photography, Moscow

NIMI
Novocherkasskiy inzhenerno-meliorativnyy institut
Novocherkassk Reclamation Engineering Institute

NIOPIK
NII organicheskikh poluproduktov i krasiteley
Scientific Research Instituteof Organic Intermediates and Dyes, Moscow

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

NSFPRI
Nauchnyy sovet po probleme "Fotograficheskiye protsessy registratsii informatsii" AN SSSR
Scientific Council on Photographic Processes in Information Recording, Academy of Sciences USSR

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

OEISKF
Kiyevskiy filial Odesskogo elektrotekhnicheskogo instituta svyazi
Kiev Branch of the Odessa Electrotechnical Institute of Communications

OGU
Odesskiy gos universitet
Odessa State University

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

OmPI
Omskiy politekhnicheskiy institut
Omsk Polytechnic Institute

ONIITEkhim
Otdeleniye NII tekhniko-ekonomicheskikh issledovaniy khimicheskoy promyshlennosti
Department of Scientific Research Institute of Technical Economic Studies of the Chemical Industry, Cherkassy

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

RMEDI
Rostovskiy meditsinskiy institut
Rostov Medical Institute

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

SGU
Saratovskiy gos universitet
Saratov State University

SKBAPNTO
Spetsial'noye konstruktorskoye byuro analiticheskogo priborostroyeniya Nauchno-tekhnicheskogo obshchestva AN SSSR
Special Design Bureau for Analytical Instrument Manufacture of the Scientific and Technical Society, Academy of Sciences USSR

SKTBOPIFANB
Spetsial'noye konstruktorsko-tekhnologicheskoye byuro s opytnym proizvodstvom Instituta fiziki AN BSSR
Special Design and Technological Bureau with Trial Production of the Institute of Physics, Academy of Sciences Belorussian SSR

TashGU
Tashkentskiy gos universitet
Tashkent State University

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

ToPI
Tomskiy politekhnicheskiy institut
Tomsk Polytechnic Institute

TsNIIGAiK
Tsentral'nyy NII geodezii, aerofotos"yemki i kartografii
Central Scientific Research Institute of Geodesy, Aerial Photography and Cartography, Moscow

TsNIIKA
Gosudarstvennyy vsesoyuznyy tsentral'nyy NII kompleksnoy avtomatizatsii
State All-Union Central Scientific Research Institute of Comprehensive Automation

TsNIITEIlegpishchemash
TsNII informatsii i tekhniko-ekonomicheskikh issledovaniy mashinostroyeniya dlya legkoy i pishchevoy promyshlennosti i bytovykh priborov
Central Scientific Research Institute of Information and Technical Economic Studies on Machine Building for Light Industry, the Food Industry, and Household Appliances, Moscow

TsNIITEIMPS
TsNII informatsii, tekhniko-ekonomicheskikh issledovaniy i propagandy zheleznodorozhnogo transporta Ministerstva putey soobshcheniya SSSR
Central Scientific Research Institute of Information, Technical Economic Studies and Propaganda for Railroad Transportation, Ministry of Railroads USSR

TyumII
Tyumenskiy industrial'nyy institut
Tyumen Industrial Institut

UDN
Universitet druzhby narodov im Lumumby
University of friendship Among Peoples imeni Lumumba, Moscow

UEIIZhT
Ural'skiy elektromekhanicheskiy institut inzhenerov zheleznodorozhnogo transporta
Ural Electromechanical Institute for Railroad Transport Engineers, Sverdlovsk

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 politekhnicheskiy institut
Ural Polytechnical Institute, Sverdlovsk

UzhGU
Uzhgorodskiy gos universitet
Uzhgorod State University

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

VNIIMono
VNII monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv
All-Union Scientific Research Institute of Single Crystals, Scintillation Materials and Extra Pure Chemical Substances, Khar'kov

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

VNIIYaGG
VNII yadernoy geofiziki i geokhimii
All-Union Scientific Research Institute of Nuclear Geophysics and Geochemistry, Moscow

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

VolGU
Volgogradskiy gos universitet
Volgograd State University

VTsNIIOT
Vsesoyuznyy tsentral'nyy NII okhrany truda
All-Union Central Scientific Research Institute of Occupational Health, Moscow

VI. AUTHOR INDEX

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