AD-A018 903

SOVIET DEVELOPMENTS IN MATERIAL SCIENCE NUMBER 1, JANUARY - JUNE 1975

S. Hibben, et al

Informatics, Incorporated

Prepared for:

Defense Advanced Research Projects Agency
Defense Supply Service

30 November 1975

SOVIET DEVELOPMENTS IN MATERIAL SCIENCE

No. 1, January - June 1975

Sponsored By

Defense Advanced
Research Projects Agency

SOVIET DEVELOPMENTS IN MATERIAL SCIENCE

No. 1, January - June 1975

Sponsored By

Defense Advanced
Research Projects Agency

DARPA Order No. 3097

November 30, 1975

DARPA Order No. 3097
Program Code No. P6L10, P6D10, P6E20, P6G10
Name of Contractor:
Informatics Inc.
Effective Date of Contract:
September 1, 1975
Contract Expiration Date:
November 30, 1975
Amount of Contract: $100,617

Contract No. MDA-903-76C-0099
Principal Investigator:
Stuart G. Hibben
Tel: (301) 770-3000
Program Manager:
Ruth Ness
Tel: (301) 770-3000
Short Title of Work:
"Material Science"

This research was supported by the Defense Advanced Research Projects Agency and was monitored by the Defense Supply Service - Washington, under Contract No. MDA-903-76C-0099. The views and conclusions contained in this document are those of the author and should not be interpreted as necessarily representing the official policies, either express or implied, of the Defense Advanced Research Projects Agency or the United States Government.

informatics inc
Information Systems Company
6000 Executive Boulevard
Rockville, Maryland 20852
(301) 770-3000

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Soviet Developments in Material Science No. 1, January - June 1975		5. TYPE OF REPORT & PERIOD COVERED Scientific . . . Interim 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) S. Hibben, J. Kourilo		8. CONTRACT OR GRANT NUMBER(s) MDA-903-76C-0099
9. PERFORMING ORGANIZATION NAME AND ADDRESS Informatics Inc. 6000 Executive Boulevard Rockville, Maryland 20852		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS DARPA Order No. 3097 Program Code No. P6L10, P6D10, P6E20, P6G10
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Advance Research Projects Agency/TAO 1400 Wilson Boulevard Arlington, Virginia 22209		12. REPORT DATE November 30, 1975 13. NUMBER OF PAGES 90
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) Defense Supply Service - Washington Room 1D245, Pentagon Washington, D. C. 20310		15. SECURITY CLASS. (of this report) UNCLASSIFIED 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

Scientific . . . Interim

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Superconductivity,	Semiconducting thin film
Compound Semiconductor,	Composite Material
Chalcopyrite,	Polymer
Semiconductor glass,	Ceramics
Organic Semiconductor	Refractories

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This is a combined bibliography of Soviet articles published in the first half of 1975 on the topics of superconductivity, semiconductors, composite materials and high temperature ceramics. Articles on basic research in these fields have been primarily included, rather than applications of them.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

INTRODUCTION

This is a combined bibiliography of Soviet articles published in the first half of 1975 on the topics of superconductivity, semiconductors, composite materials and high temperature ceramics. Articles on basic research in these fields have been primarily included, rather than applications of them.

The bibliography is intended as a data base from which pertinent entries can be selected by users for broader treatment. The cited Russian source material, unless parenthesized, is available in the original at Informatics, Inc. A list of commonly used source abbreviations is included.

TABLE OF CONTENTS

Part I. Superconductivity

1. Abraimov, V.V., V.P. Soldatov, and V.I. Startsev. Effect of nickel paramagnetic admixture on weakening of lead during transition to superconducting state. ZhETF P, v. 21, no. 12, 1975, 705 - 708.

2. Abraimov, V.V., V.P. Soldatov, and V.I. Startsev. Temperature dependence of the weakening effect in pure lead involved in the superconducting transition. ZhETF, v. 68, no. 6, 1975, 2185 - 2194.

3. Akimenko, A.I., I.K. Yanson, and V.S. Solov'yev. Josephson junction as a heterodyne-mixer in millimeter wave-band. RiE, no. 5, 1975, 1118 - 1120.

4. Akimenko, A.I., V.S. Solov'yev, and I.K. Yanson. High-frequency threshold of Josephson non-stationary effect. ZhETF P, v. 21, no. 10, 1975, 592 - 595.

5. Alekseyevskiy, N.Ye., and Ye.P. Krasnoperov. Influence of quenching on critical temperatures of $Nb_3Al_{1-x}Ge_x$ Alloys. FMM, v. 34, no. 4, 1975, 872 - 873.

6. Alekseyevskiy, N. Ye., Ye. P. Krasnoperov, and V. L. Sedov. Interaction between positrons and chains of niobium atoms in Nb_3Al. DAN SSSR, v. 222, no. 5, 1975, 1061 - 1063.

7. Anders, E. Ye., B. Ya. Sukharevskiy, and L.S. Shestachenko. Thermal conductivity and temperature dependence of energy gap in superconductors with a high content of impurity atoms. IN: Fiz.-tekhn. institut nizk. temperatur AN UkSSR. Trudy, no. 30, 1974, 65 - 92. (RZhF, 3/75, no. 3E1061).

8. Antsygina, T.N., Ye. N. Bratus', and A.V. Svidzinskiy. Josephson current across an SNS junction in the presence of a magnetic field. IN: Fiz.nizk. temperatur, v. 1, no. 1, 1975, 49 - 56. (RZhF, 6/75, no. 6E1091).

9. Aronov, A.G., and R. Katilyus. Kinetics of fluctuations in pure superconductors. ZhETF, v. 68, no. 6, 1975, 2208 - 2223.

10. Artemenko, S.N., and A.F. Volkov. Thermal e.m.f. in superconductors. ZhETF P, v. 21, no. 11, 1975, 662 - 665.

11. Aslamazov, L.G., and A.I. Larkin. The Josephson effect in wide-area superconducting junctions. ZhETF, v. 68, no. 2, 1975, 766 - 775.

12. Atovmyan, L.O., V.V. Tkachev, M.L. Khidekel', and L.A. Shchepinov. Synthesis and crystal structure of niobium (IV) tetrakis (O, O'-diisopropyl dithio-phosphate). Koordinatsionnaya khimiya, no. 3, 1975, 342 - 343.

13. Avakyan, R.S., A.N. Vystavkin, V.N. Gubankov, and V.D. Shtykov. Mixing of microwaves in superconducting point junctions, using Josephson self-oscillations. RiE, no. 1, 1975, 216 - 219.

14. Avakyan, R.S., V.N. Gubanov, and N.M. Margolin. On limit "cut-off" frequency of niobium-niobium point superconducting junctions. FTT, no. 2, 1975, 566 - 569.

15. Baru, V.G., and A.A. Sukhanov. New types of instability from nonequilibrium excitation of superconductors. ZhETF P, v. 21, no. 4, 1975, 209 - 212.

16. Bar'yakhtar, V.G., and V.P. Seminozhenko. Electron relaxation in superconductors under current. IN: Sb. Mekhanizmy relaksatsion. yavleniy v tverd. telakh. Kaunas, 1974, 36 - 38. (RZhF, 3/75, no. 3E1026).

17. Basov, N.G., ed. Elektronnyye kharakteristiki i elektron-fononnyye vzaimodeystviya sverkhprovo dyashchikh metallov i splavov [Electronic characteristics and electron-phonon interactions in superconducting metals and alloys]. Fizicheskiy institut imeni P.N. Lebedev, Trudy, v. 82, 1975, 102 p.

18. Belogolovskiy, M.A., A.A. Galkin, and V.M. Svistunov. Relation between $2[Gr]_0 T_c$ and phonon spectrum of a superconductor. FTT, no. 1, 1975, 145 - 149.

19. Belogolovskiy, M.A., Yu. M. Ivanchenko, and Yu. V. Medvedev. Evidence of electron-phonon interactions on tunneling curves of normal junctions. ZhETF P, v. 21, no. 12, 1975, 701 - 704.

20. Bezuglyy, A.I., I.O. Kulik, and Yu. N. Mitsay. Theory of superconducting junctions with an interlayer of normal metal. IN: Fiz. nizk. temperatur, v. 1, no. 1, 1975, 57 - 67. (RZhF, 6/75, no. 6E1092).

21. Bogachek, E.N., G.A. Gogodze, and I.O. Kulki. Doubling of the period of flux quantization in hollow superconducting cylinders, due to quantum effects in the normal state. Phys. st. solidi (b), v. 67, no. 1, 1975, 287 - 290. (RZhF, 6/75, no. 6E1047).

22. Brankov, I.G. and N.S. Tonchev. An exact solution for a superconductor model with allowance for electron-hole pairing. IN: Ob'yedin. institut yader.issled. Lab. teor. fiz. Preprint R4-8150. Dubna, 1974, 16 p. (RZhF, 2/75, no. 2E741).

23. Brazovskiy, S.A. and I. Ye. Dzyaloshinskiy. Type one transition in MnO and renormalization group ("scaling"). ZhETF P, v. 21, no. 6, 1975, 360 - 364.

24. Bulayzvskiy, L.N., A.A. Gusseynov, O.N. Yeremenko, V.N. Topnikov, and I.F. Shchegolev. Low-temperature specific heat of TCNQ complexes with asymmetric cations. FTT, no. 3, 1975, 781 - 786.

25. Bulayevskiy, L.N. and A.I. Rusinov. Absence of paramagnetic threshold of H_{c211} in layered superconductors without inversion center. ZhETF P, v. 21, no. 2, 1975, 147 - 149.

26. Bulayevskiy, L.N. The structural (Peierls) transition in quasi-one dimensional crystals. UFN, v. 115, no. 2, 1975. 263 - 300.

27. Cheyshvili, O.D. Surface fluctuation conductivity in bulk superconductors. IN: Fiz. nizk. temperatur, v. 1, no. 2, 1975, 177 - 182. (RZhF, 6/75, no. 6E1079).

28. Darinskiy, B.M., V.S. Postnikov, and G. Ye. Shunin. Structure of superconductor T-matrix in the region of superconducting transition. IN: Sb. Mekhanizmy relaksatsion. yavleniy v tverd. telakh. Kaunas, 1974, 42 - 43. (RZhF, 2/75, no. 2E788).

29. Dettmann, R. Hysteresis of the vanadium-insulation-lead Josephson tunnel junction. PhSS (a), v. 28, no. 1, 1975, K21 - K24.

30. Dubovsky, L.B. and A.N. Kozlov. Description of coulomb interaction in superconductivity theory and calculation of T_c. ZhETF, v. 68, no. 6, 1975, 2224 - 2235.

31. Dubrovskaya, L.B. and S.Z. Nazarova. Superconductivity of niobium monocarbide-molybdenum solid solutions and the effect of high hydrostatic pressure. ZhETF, v. 68, no. 1, 1975, 238 - 240.

32. Dzhikayev, Yu. K. Thermoelectric phenomena in the mixed state of superconductors. ZhETF, v. 68, no. 1, 1975, 295 - 307.

33. Estrin, Yu. Z. Inertial model of the plasticity increase effect at superconducting transition. IN: Fiz. nizk. temperatur, v. 1, no. 1, 1975, 91 - 97. (RZh Metal 15I, 5/75, no. 5I319).

34. Fil', V.D., V.I. Denisenko, and P.A. Bezuglyy. Nonlinear absorption of sound in superconducting gallium. ZhETF P, v. 21, no. 12, 1975, 693 - 696.

35. Gabovich, A.M. and D.P. Moiseyev. Superconductivity in laminated semiconductor structures. FTT, no. 1, 1975, 269 - 273.

36. Gabovich, A.M. and E.A. Pashitsky. Co-existence of superconducting and dielectric phases in quasi-unidimensional systems. UFZh, no. 6, 1975, 1041 - 1043.

37. Gabovich, A.M. and E.A. Pashitskiy. Existence of mixed phase of "superconductor-exciton dielectrics" in intrinsic semimetals. FTT, no. 6, 1975, 1584 - 1591.

38. Galayko, V.P. Kinetic equations for relaxation processes in superconducting alloys. TMF, v. 23, no. 1, 1975, 111 - 120.

39. Galayko, V.P. Microscopic theory of resistive current states in superconducting channels. ZhETF, v. 68, no. 1, 1975, 223 - 237.

40. Galayko. V.P. Relaxation of electrons on the admixtures in superconductors. TMF, v. 22, no. 3, 1975, 375 - 390.

41. Galkin, A.A., V.M. Svistunov, Yu. F. Revenko, and V.M. Mostovoy. Tunneling studies of superconducting In-Sn Alloys. FTT, no. 5, 1975, 1490 - 1493.

42. Gal'perin, Yu. M., V.L. Gurevich, and V.I. Kozub. Thermoelectric effect in superconductors. IN: Sb. Materialy 6-v Zimn. Shkoly-po fiz. poluprovodnikov, 1975, Leningrad, 1974, 85 - 102. (RZhF, 6/75, no. 6E1074).

43. Gasparyan, R.A. Nuclear spin relaxation in superconductors with magnetic impurities. FMM, v. 39, no. 4, 1975, 686 - 690.

44. Geylikman, B.T., V.Z. Kresin, and N.F. Masharov. Critical temperature and energy gap in strongly coupled superconductors. Part 2. IN: Fiz. nizk. temperatur, v. 1, no. 2, 1975, 154 - 165. (RZhF, 6/75, no. 6E1041).

45. Gindin, I.A., Ya. D. Starodubov, and V.K. Aksenov. Structure of niobium single crystals deformed in normal and superconducting states. FTT, no. 4, 1975, 1012 - 1015.

46. Gindin, I.A., Ya. D. Starodubov, V.P. Lebedev, and N.S. Gubin. Influence of size factor on weakening of lead in superconducting state. FTT, no. 4, 1975, 1190 - 1192.

47. Golovashkin, A.I., K.V. Mitsen, and G.P. Motulevich. Experimental investigation of the nonequilibrium state of superconductors excited by lasers. ZhETF, v. 68, no. 4, 1968, 1408 - 1412.

48. Golub, A.A. and V.A. Chernobay. Effect of fluctuations on nuclear spin relaxation rate in layered superconductors in the presence of a constant magnetic field. IN: Sb. stat. metody issled. sistem mnogikh chastits. Kishinev, 1974, 3 - 5. (RZhF, 4/75, no. 4E1136).

49. Golyanov, V.M., M.I. Mikheyeva, and M.B. Tsetlin. Oscillations of the critical temperature in superconductor-dielectric thin film layer structures. ZhETF, v. 68, no. 2, 1975, 736 - 742.

50. Goncharov, I.N. and I.S. Khukhareva. Measurement of the viscous friction coefficient of the vortices in Nb-80% Zr superconducting alloy near T_c. PSS (b), v. 65, no. 1, K67 - K69. (RZhF, 4/75, no. 4E1131).

51. Goncharov, I.N., G. D. Dorofeyev, A. Nikitin, I. V. Petrov, D. Frichevski, and I.S. Khukhareva. Study of $\rho_f(H, T)$ of the type II superconductors. Ob'yedin. institut yader. issled. Lab. vysok. energ. Preprint 8-8015, Dubna, 1974, 23 p. (RZhF, 2/75, no. 2E766).

52. Gorin, Yu. N. and G.I. Mayevskiy. Nonlinear kinetic inductance in superconducting thin films in the case of gapless superconductivity. IN: Izv. Leningr. elektrotekhn. in-ta, no. 161, 1975, 59 - 62. (RZhF, 6/75, no. 6E1080).

53. Gor'kov, L.P. and O.N. Dorokhov. Temperature dependence of phonon frequency in Nb_3Sn and V_3Si. ZhETF P, v. 21, no. 11, 1975, 656 - 660.

54. Gruzin, P.L., Yu. F. Bychkov, I.A. Yevstyukhina, and L.A. Alekseyev. Nuclear gamma resonance study of the state of Sn^{119} nuclei in Nb-base superconducting compounds. IN: Sb. prikl. yader. spektroskopiya. Moskva, 1974, no. 4, 12 - 16. (RZhF, 3/75, no. 3E1025).

55. Gubankov, V.N. and K. K. Likharev. Superconductivity electronics (review). RiE, no. 1, 1975, 1 - 27.

56. Gubankov, V.N., L.S. Kuz'min, K.K. Likharev, and V.K. Semenov. "Non-Josephson" radiation in a cavity with a superconducting Josephson junction. ZhETF, v. 68, no. 6, 1975, 2301 - 2314.

57. Gubankov, V.N., V.P. Koshelets, and G.A. Ovsyannikov. U.H.F. Josephson radiation detected in thin film superconducting bridges. ZhETF P, v. 21, no. 8, 1975, 489 - 494.

58. Gurevich, L.E. and Ye. T. Krylov. Influence of excitation dragging by phonons on the thermal conductivity of pure superconductors. ZhETF, v. 68, no. 4, 1975, 1337 - 1348.

59. Gvozdikov, M.M. and I.I. Fal'ko. Energy spectrum of superconductors with defects possessing spherical and cylindrical symmetry of the potential of interaction with conductivity electrons. TMF, v. 22, no. 2, 1975, 269 - 277.

60. Heim, J. and H. Bretschneider. Some experiemental studies of the TCNQ charge-transfer complexes with a high electrical conductivity. IN: Pr. nauk. Inst. chem. organ. i fiz.PWr, no. 7, 1974, 264 - 268. (RZhKh 19AB, 11/75, no. 11B763).

61. Igoshin, F.F., A.P. Kir'yanov, V.N. Topnikov, and I.F. Shchegolyev. Metal--dielectric transition in the (NMP) (TCNQ) complex. ZhETF, v. 68, no. 3, 1975, 1203 - 1207.

62. Ilina, M. A. and Y. S. Itskevich. Superconductivity of bismuth telluride at high pressure. F. T. T., no. 1, 1975, 154 - 157.

63. Izyumov, Yu. A., V. Ye. Naysh, and V. N. Syromyatnikov. Lattice anomalies in high-temperature superconducting compounds of A15 and C15 types. FMM, v. 39, no. 3, 1975, 455 - 460.

64. Kadykova, G. N. and M. M. Gadzoyeva. Effect of zirconium on phase transitions in Ti-Nb alloys. IAN. Metally, no. 2, 1975, 198 - 204.

65. Karakozov, A. Ye., Ye. Maksinev, and S. A. Mashkov. Effect of the frequency dependence of the electron-phonon interaction spectral function on thermodynamic properties of superconductors. ZhETF, v. 68, no. 5, 1975, 1937 - 1950.

66. Khidekel, M. L. and E. B. Yagubskiy. New organic metals represented by the complexes of tetraselenotetracene with 7, 7, 8, 8-tetracyanoquinodimethane. IAN Khim, no. 5, 1975, 1213.

67. Khlus, V. A. and I. O. Kulik. Fluctuations and quantum interference effect in weakly coupled superconducting systems. ZhTF, v. 45, no. 3, 1975, 449 - 458.

68. Kirschner, I. Flux creep dynamics of the quasi-elastically bound vortices in type II superconductors. Acta phys. Acad. sci. hung, v. 36, no. 2, 1974, 149 - 153. (RZhF, 2/75, no. no. 2E758).

69. Kon, L. Z. and V. A. Moskalenko. Electron state density of superconducting alloys with non-magnetic transition metal impurities. FMM, v. 39, no. 5, 1975.

70. Kon, L. Z. Thermoelectric effect in superconductors with paramagnetic impurity. FTT, no. 6, 1975, 1711 - 1714.

71. Kosgyin, M. Yu., Yu. N. Novikov, and R. A. Stukan. Application of shock waves in structure determination of layered graphite compounds. FTT, no. 6, 1975, 1803 - 1805.

72. Kresin, V. Z. and V. A. Litovchenko. Anisotropic thermal effect in superconductors. ZhETF P, v. 21, no. 1, 1975. 42 - 45.

73. Kreydenko, F. S., Ye. M. Sokolovskaya, V. S. Zubchenko, and V. Ya. Markiv, Study of the Zr-V-Ga system. LAN. Metally, no. 2, 1975, 205 - 208.

74. Kristofel', N. N. Possible relationship between dynamic lattice instability and superconductivity in semiconductors. FTT, no. 5, 1975, 1414 - 1416.

75. Krivnov, V. Ya. and A. A. Ovchinnikov. Paramagnetism of TTF-TCNQ high-conductivity crystals. ZhETFP, v. 21, no. 12, 1975, 696 - 700.

76. Krivnov, V. Ya., I. A. Misurkin, A. A. Ovchinnikov, and A. F. Shvets. Thermodynamics of quasi-one-dimensional high-conductivity systems. FMiM, v. 34, no. 2, 1975, 250 - 256.

77. Krylov, I. P. Resistance of indium in the intermediate state involving a nonuniform concentration of the normal phase. ZhETF, v. 68, no. 4, 1975, 1556 - 1568.

78. Kulik, I. O. and A. N. Omel'yanchuk. Current flow in long superconducting bridges. ZhETF, v. 68, no. 6, 1975, 2139 - 2148.

79. Kulik, I. O. and A. N., Omel'yanchuk. Microscopic theory of Josephson effect in superconducting bridges. ZhETF P, v. 21, no. 4, 1975, 216 - 219.

80. Kupriyanov, M. Yu. and K. K. Likharev. U.H.F. impedance of superconductors in the mixed state. ZhETF, v. 68, no. 4, 1975, 1506 - 1513.

81. Landa, P. S., and N. D. Tarankova. Current-voltage characteristics of Josephson junctions. RiE, no. 2, 1975, 353 - 359.

82. Larkin, A. I. and Yu. N. Ovchinnikov. Nonlinear conductivity of superconductors in the mixed state. ZhETF, v. 68, no. 5, 1975, 1915 - 1927.

83. Likharev, K. K., and L. A. Yakobson. Dynamic properties of finite-length superconducting filaments. ZhETF, v. 68, no. 3, 1975, 1150 - 1160.

84. Likharev, K. K. On properties of a Josephson triode. RiE, no. 3, 1975, 660 - 662.

85. Lyubovskaya, R. N., M. Z. Aldoshina, V. Ya. Rodionov, T. A. Chibisova, and M. L. Khidekel'. Complexes of dibenzotetrathiafulvalene with tetracyanoquinodimethane. AN. Khim., no. 1, 1975, 177 - 179.

86. Marnalny, A. A., V. A. Pervakov, and V. I. Khotkerich. Vacancy effect on superconducting transition temperature in aluminum and molybdenum. (Brief communication). IN: Fiz. nizk temperatur, v. 1, no. 3, 1975, 318 - 329. (RZh Metal 15I, 7/75, no. 7I333).

87. Mkrtchyan, G. S. and V. V. Shmidt. Pinning of a vortex lattice at the interface of two superconductors and the critical current. ZhETF, v. 68, no. 1, 1975, 186 - 195.

88. Moiseyev, D. P., Ye. L. Semyonova, and S. K. Uvarova. Superconductivity in a Zr-Ir system. FMM, v. 39, no. 6, 1975 1163 - 1167.

89. Moskalenko, V. A. Energy gap degeneration in a two-band superconductor. FMM, v. 39, no. 6, 1975, 1145 - 1149.

90. Motulevich, G. P., A. I. Golovashkin and A. A. Shubin. Optically determined electronic characteristics of certain superconducting transition metals and their alloys. IN: Sb. Elektron. struktrura perekhod. met., ikh splavov i soyedin. Kiyev, 1974, 311 - 314. (RZhF, 4/75, no. 4E1100).

91. Novak, D. Some new data on superconducting magnets. Fiz.szemle, v. 24, no. 5, 1974, 150 - 156. (RZhF, 2/75, no. 2E822).

92. Palistrant, M. Ye. Effect of topological change of the Fermi surface on thermodynamic properties of a two-band superconductor. IN: Sb. Stat. metody issled. sistem mnogikh chastits. Kishinev, 1974, 8 - 24. (RZhF, 4/75, no. 4E1102).

93. Pan, V. M. and V. I. Latysheva. Superconductivity of niobium-aluminum-titanium alloys. IN: Metallofizika. Resp. mezhved. sb., no. 57, 1975, 74 - 77. (RZh Metal 15I, 7/75, no. 7I336).

94. Pan, V. M., V. P. Aleksyevskiy, A. G. Popov, Yu. I. Beletskiy, L. M. Yupko, and V. V. Yarosh. Nb_3Si, a new high-temperature superconductor. ZhETFP, v. 21, no. 8, 1975, 494 - 496.

95. Pashitskiy, E. A., and A. S. Shpigel'. "Zero sound" in superconductors. UFZh, no. 3, 1975, 514 - 516.

96. Pavlyuk, V. A., V. A. Bystrov, and V. M. Dmitriev. Electromagnetic energy radiation by a Josephson junction. system through a semitransparent shield. RiE, no. 2, 1975, 445 - 448.

97. Postnikov, V. S., V. Ye. Miloshenko, G. Ye Shunin, and Ye. I. Shukhalov, Characteristics of internal friction in superconductors at transition. IN: Sv. Mekhanizmy relaksatsion. yavleniy v tverd. telakh. Kaunas, 1974, 138 - 142. (RZh Metal 15I, 1/75, no. 1I357).

98. Pyatiletov, Yu. S. Isotopic effect in superconductors with complex lattice. FMM, v. 39, no. 5, 1975, 932 - 936.

99. Salnikov, B. V., and A. N. Men'. Concentration dependence of properties of superconducting compounds. FTT, no. 1, 1975, 158 - 160.

100. Seminozhenko, V. P. Relaxation and thermal conductivity of superconductors with dislocations. IN: Sb. Mekhanizmy relaksation. yavleniy v tverd. telakh. Kaunas, 1974, 39 - 42. (RZhF, 2/75, no. 2E776).

101. Shchetkin, I. S., T. N. Kharchenko, and G. I. Tarasenko. Heat capacity of Nb+7.23 at. % Ti near the phase transition into the superconducting state. UFZh, no. 3, 1975. 367 - 370.

102. Shumeyko, V. S. Nonlinear absorption of electromagnetic radiation in a London superconductor. IN: Fiz. nizk. temperatur, v. 1, no. 2, 1975, 166 - 167. (RZhF, 6/75, no. 6E1073).

103. Sirota, N. N. and N. M. Shimanskaya. Superconductivity and structure of alloys of the vanadium-niobium-tantalum system. DAN SSSR, v. 222, no. 5, 1975, 1089 - 1092.

104. Sirota, N. N. and Ye. K. Stribuk. Superconductive properties of vanadium-niobium-molybdenum alloys. DAN SSSR, v. 222, no. 6, 1975, 1329-1331.

105. Surikov, V. I., G. I. Kalishevich, and P. V. Gel'd. Thermodynamic characteristics of Cr_3Si, Cr_3Ge, V_3Si and V_3Ge compounds. ZhFKh, no. 2, 1975, 555 - 556.

106. Teplov, A. A., M. N. Mikheyeva, and V. M. Golyanov. Critical magnetic fields for superconducting technetium films. ZhETF, v. 68, no. 3, 1975, 1108 - 1116.

107. Trifan, A. T. Effects of pressure and paramagnetic impurity on properties of superconductors. IN: Sb. Stat. metody issled. sistem mnogikh chastits. Kishinev, 1974, 24 - 31. (RZhF, 4/75, no. 4E1132).

108. Vaynshteyn, A. I., and I. B. Khriplovich. Neutral currents of weak interactions and the Josephson effect. ZhETF, v.68, no. 1, 1975, 3 - 7.

109. Vedeneyev, S. I., A. I. Golovashkin, I. S. Levchenko, T. A. Leskova and G. P. Motulevich. Study of electronic characteristics of niobium-tin superconducting alloy films. IN: Sb. Elektron. struktura perekhod. met., ikh splavov i soyedin. Kiyev, 1974, 315 - 319. (RZhF, 4/75, no. 4E1142).

110. Vedeneyev, S. I. Tunneling studies of superconducting Nb_3Al films. FTT, no. 3, 1975, 939 - 942.

111. Vinetskiy, V. L., and E. A. Pashitskiy. Superfluidity of the charged Bose gas and bipolar mechanism of superconductivity. UFZh, no. 2, 1975, 338 - 341.

112. Vinetskiy, V. L. and T. I. Semenets. Bipolarons of the intermediate coupling and superconduction of non-metallic crystals. UFZh, no. 3, 1975, 353 - 359.

113. Vladimir, M. I., and V. A. Moskalenko. Thermal conductivity of two-band superconductors. TMF, v. 23, no. 1, 1975, 104 - 110.

114. Vladimir, M. I. Electron states density of a single-band superconductor with paramagnetic impurity. IN: Sb. Stat. metody issled sistem mnogikh chastits. Kishinev, 1974, 31 - 42. (RZhF, 4/75, no. 4E1118).

115. Vladimir, M. I., V. A. Moskalenko and Yu. N. Nika. Thermal conductivity of a two-band superconductor with a low concentration of paramagnetic impurity. IN: Sb. Stat. metody issled. sistem mnogikh chastits. Kishinev, 1974, 42 - 46.

116. Vlasova, R. M., A.I. Gutman, N. F. Kartenko, V. N. Semkin, V. V. Titov, S. M. Khursandova, and A. I. Sherle. Preparation and study of sprayed films of tetracyano-quinodimethane ion-radical salts. IAN Khim., no. 1, 1975, 102 - 108.

117. Volkov, A. F. Nonequilibrium states in superconducting tunnel structures. ZhETF, v. 68, no. 2, 1975, 756 - 765.

118. Yanson, I. K. Critical current and current-voltage characteristic of superconducting microbridges. IN: Fiz. nizk.temperatur, v. 1, no. 2, 1975, 141 - 153. (RZhF, 6/75, no. 6E1097).

119. Yefetov, K. B., and A. I. Larkin. Nonzero spin pairing in layer superconductors and in quasi-one-dimensional superconductors. ZhETF, v. 68, no. 1, 1975, 155 - 163.

120. Yeru, I. I., S. A. Peskovatskiy and A. V. Poladich. Isothermal current-voltage characteristics of long superconducting films. UFZh, no. 6, 1975, 903 - 911.

121. Yeru, I. I., S. A. Peskovatskiy, V. S. Sulima, and V. A. Kashchey. Mixing superfrequency signals having a conversion coefficient greater than one in a long superconducting film. RiE, no. 5, 1975, 1113.

122. Zavaritskiy, N. V. Thermoelectric phenomena in superconductors. UFN, v. 115, no. 3, 1975, 531 - 533.

123. Zil'berman, L. A. Current-voltage characteristic of small Josephson junctions. ZhTF, no. 4, 1975, 871 - 876.

Part II. Semiconductors

124. Abagyan, S. A., G. A. Ivanov, G. A. Korolyeva, Yu. N. Kuznetsov, and Yu. A. Okunev. Manganese, a deep acceptor with high solubility in GaP. FTP, no. 2, 1975, 364-372.

125. Abdullayev, A., N. A. Vitovskiy, T. V. Mashovets, and D. Mustafakulov. Process of formation of structure defects in indium antimonide under γ-irradiation. FTP, no. 2, 1975, 282-286.

126. Abdullayev, A., N. A. Vitovskiy, T. V. Mashovets, and Yu. G. Morozov. Ionization mechanism of structure defect formation in indium antimonide. FTP, no. 1, 1975, 68-75.

127. Ablova, M. A., T. Baydadaeyv, and M. I. Karklina. On brittleness of ρ-PbTe. FTT, no. 2, 1975, 549-550.

128. Agrinskaya, N. V., M. V. Alekseyenko, and O. A. Matveyev. Switching effect in compensated cadmium telluride single crystals. FTP, no. 3, 1975, 519-523.

129. Agrinskaya, N. V., M. V. Alekseyenko, Ye. N. Arkad'yeva, O. A. Matveyev and S. V. Prokof'yev. Peculiarities of the behavior of chlorine in heavily doped CdTe crystals. FTP, no. 2, 1975, 320-324.

130. Akimchenko, I. P., V. S. Vavilov, V. V. Krasnopevtsev, Yu. V. Milyutin, M. Kharshi, and Chan Kim Loy. p-n junction generated in n-type CdS by implantation of antimony ions. FTP, no. 1, 1975, 32-35.

131. Akop'yan, R. M., Yu. N. Berozashvili, A. V. Dundua, and V. I. Imnayshvili. Spontaneous birefrigence in GaAs. FTT, no. 5, 1975, 1493-1495.

132. Akulinichev, V. V., A. S. Volkov, and S. Ye. Kumekov. Interaction of hot electrons with acoustic phonons in InSb-type semiconductors. FTP, no. 5, 1975, 1011-1015.

133. Aleksandrova, G. A., Yu. I. Zavadskiy, and B. V. Kornilov. Current instability in GaAs epitaxial layers compensated by several impurities with deep energy levels. FTP, no. 4, 1975, 747-749.

134. Aleksandrov, L. N. and F. A. Kuznetsov, eds. Protsessy rosta i sinteza poluprovodnikovykh kristallov i plenok (Growth and synthesis of semiconducting crystals and films). Materialy simposiuma (Symposium materials). Novosibirsk, 1975, v. 1.

135. Aleksandrov, L. N., Yu. G. Sidorov, V. M. Zaletin and Ye. A. Krivorotov. Gallium arsenide epitaxial films for microelectronics. Mikroelektronika, v. 3, no. 6, 1974, 493-508. (RZhElektr, 3/75, no. 3B173).

136. Alekseyeva, G. T., B. A. Yefimova, and Yu. A. Logachev. Heat conduction of pseudobinary alloys based on n-PbTe in the 80-300° K temperature region. FTP, no. 1, 1975, 128-130.

137. Aliyev, M. I., A. Z. Daibov, and I. A. Ismailov. Negative magnetoresistance in $Ga_xIn_{1-x}As$ solid solutions. FTP, no. 3, 1975, 567-569.

138. Aliyev, M. I., B. M. Askerov, R. G. Agayeva, A. Z. Daibov, and I. A. Ismailov. Magnetoresistance of n-InSb at quantum limit. FTP, no. 3, 1975, 570-572.

139. Allaberenov, O., N. V. Zotova, and D. N. Nasledov. Determination of free electron concentration in n-InAs crystals by photoluminescence method. IAN TurkSSR. Ser. fiz.-tekhn., khim. i geol. nauk, no. 3, 1975, 109-111.

140. Al'perovich, V. L., A. F. Kravchenko, and A. S. Terekhov. Effect of electron-phonon interaction on the shape of fundamental absorption edge of gallium arsenide. FTP, no. 6, 1975, 1135-1138.

141. Amirkhanov, Kh. I., R. I. Bashirov, and V. A. Yelizarov. Magnetophonon resonance in n-InSb. FTT, no. 1, 1975, 361-363.

142. Andreyev, A. A., M. F. Bulanyy and F. F. Kodzhespirov. Study of crystalline field in A_2B_6-A_2B_6 solid solutions by EPR method. IVUZ Fiz, no. 3, 1975, 160.

143. Andreyev, V. M., V. P. Popov, and A. V. Rybakov. Composition of the vapor phase in epitaxial deposition of GaAs by the chloride method. NM, no. 3, 1975, 403-406.

144. Andrianov, D. G., A. S. Savel'yev, and V. I. Fistul'. Magnetic properties of Fe^{2+} ions in gallium arsenide. FTP, no. 1, 1975, 136-138.

145. Anisimkin, V. I., M. A. Zemlyanitsyn and A. I. Morozov. Some peculiarities of propagation of elastic waves along selected surfaces of CdS and $Bi_{12}GeO_{20}$ crystals. FTT, no. 5, 1975, 1513-1515.

146. Anisimov, B. B., Sh. Z. Dzhamagidze, Yu. A. Mal'tsev and R. R. Shvangiradze. The fundamental absorption edge of some solid solutions in the SnS-PbS system. NM, no. 1, 1975, 166-168.

147. Annayev, R. G., L. L. Mel'nikova, and Kh. M. Amangel'dyyev. Investigation of kinetic parameters of p-GaSb films. IAN TurkSSR. Ser. fiz.-tekhn., khim. i geol.nauk, no. 3, 1975, 102-104.

148. Arkad'yeva, Ye. N., M. I. Guseva, O. A. Matveyev, and V. A. Sladkova. Role of lattice defects in the efficiency of ionic doping of cadmium-telluride crystals. FTP, no. 5, 1975, 853-856.

149. Arkad'yeva, Ye. N., O. A. Matveyev, and S. V. Proko'yev. Effect of the second phase on electric homogeneity and Hall effect in CdTe single crystals. NM, no. 1, 1975, 169-170.

150. Aronzon, B. A., and Ye. Z. Meylikhov. Variation of intrinsic charge-carrier concentration in InSb in a quantizing magnetic field. FTP, no. 1, 1975, 123-125.

151. Arsenid galliya. Sbornik [Gallium arsenide. Collection of articles]. Tomsk universitet, no. 4, 1974, (RZhElektr, 4/75 and 5/75, RZhF, 4/75).

152. Azimov, S. A., ed. Problemy dielektricheskoy elektroniki [Problems of electronics of dielectrics]. Fiziko-tekhnicheskiy institut AN UzSSR. Tashkent, 1974, 530 p. (RZhElektr, 3/75, no. 3B2K).

153. Barybin, A. A., A. A. Zakharov, and N. K. Nedev. Kinetics of chemical transport of GaAs by water vapors. NM, no. 6, 1975, 1005-1011.

154. Barybin, A. A., A. A. Zakharov, and N. K. Nedev. Thermodynamics of chemical transport of GaAs by water vapors. NM, no. 5, 1975, 824-829.

155. Bayramov, B. Kh., and Z. M. Khashkhozhev. Study of anharmonism of lattice vibration of CdS crystals, using light scattering. FTT, no. 5, 1975, 1358-1362.

156. Barakutsa, V. A. and M. P. Vasil'yeva. Study of thermal conductivity and thermoelectric efficiency of $TlSbTe_2$ and PbTe films, and alloys of these compounds. Khar'kov politekhnicheskiy institut, 1974, 15 p. Deposited at VINITI, no. 3185-74, 16 Dec 1974. (RZhF, 4/75, no. 4E1210).

157. Bazakutsa, V. A., N. I. Gnidash, A. K. Kul'chitskaya, and A. V. Salov. Photoelectrical and optical properties of thin films of $M^{1}SbX_{2}^{6}$ ternary chalcogenide compounds. IVUZ Fiz, no. 4, 1975, 42-46.

158. Bazhin, A. I. and Ye. M. Malinenko. Ion emission and luminescence due to interaction of hydrogen atoms with ZnS surface. IVUZ Fiz, no. 6, 1975, 129-130.

159. Belyantsev, A. M., V. A. Kozlov, and V. A. Valov. Nonreciprocal effects in inhomogeneous n-GaAs films in crossed E- and H-fields. PhSS(a), v. 28, no. 1, 1975, 279-282.

160. Benemanskaya, G. V., B. V. Novikov and A. Ye. Cherednichenko. Effect of a subsurface layer on anomalous exciton reflection spectrum of CdS single crystals at 4.2° K. ZhETF P, v. 21, no. 11, 1975, 650-653.

161. Beregulin, Ye. V., D. P. Dvornikov, Ye. L. Ivchenko, and I. D. Yaroshetskiy. Polarization properties and linear-circulation dichroism in nonlinear light absorption in semiconductors of the $A^{II}B^{VI}$ group. FTP, no. 5, 1975, 876-885.

162. Berozashvili, Yu. N., A. V. Dundua, and V. I. Imnayshvili. Effect of temperature on spontaneous electroabsorption in GaAs. FTP, no. 2, 1975, 385-387.

163. Berezhnoy, A. A., and V. Z. Gurevich. Photo-induced anisotropy in zinc selenide crystals. FTT, no. 3, 1975, 777-780.

164. Bigeliyene, T. A., R. U. Kalamarov, R. Kokkozov and G. D. Korshunova. Characteristics of oxygen radiative chemisorption by sulfides with different forbidden gap width. ZhFKh, no. 4, 1975, 957-960.

165. Blaut-Blachev, A. N., L. A. Balagurov, V. V. Karatayev, and E. M. Omel'yanovskiy. Charge carrier recombination in n-InAs at 77°K. FTP, no. 4, 1975, 782-784.

166. Blaut-Blachev, A. N., M. I. Iglitsyn, V. S. Ivleva, and V. I. Selyanina. Study of the recombination properties of n-type InSb. FTP, no. 2, 1975, 374-376.

167. Bletskan, D. I., V. N. Bondarenko, I. F. Kopinets, and M. Yu. Sichka. Electroreflection from GeS laminated crystals. FTP, no. 6, 1975, 1149-1152.

168. Bogdanov, V. I., V. T. Bublik, Yu. Kh. Vekilov, and I. S. Smirnov. Heat capacity and root-mean-square displacements of atoms in materials with sphalerite structure. IVUZ Fiz, no. 5, 1975, 148-150.

169. Bogonostsev, M. A., V. A. Golenishchev-Kutuzov, and N. K. Solovarov. Reasonance interaction of helicons with nuclear spins in InSb. FTT, no. 6, 1975, 1793-1794.

170. Boltaks, B. I., G. S. Kulikov, I. N. Nikulitsa and F. S. Shishiyanu. Diffusion and solubility of Fe in GaAs. NM, no. 2, 1975, 348-350.

171. Boltaks, B. I., T. D. Dzhafarov, Yu. P. Demakov, and I. Ye. Maronchuk. Diffusion, solubility and charge state of zinc in epitaxial layers of $Al_xGa_{1-x}As$ solid solutions. FTP, no. 5, 1975, 825-829.

172. Bonch-Bruyevich, A. M., V. V. Dogadov, B. A. Raykhman, and V. N. Smirnov. Variations in transmission of zinc selenide near the absorption edge under the action of radiation pulses at $\lambda = 10.6\mu$. FTP, no. 2, 1975, 403-404.

173. Borets, A. N., P. P. Puga, and D. V. Chepur. Effect of chain structure and peculiarities of long-wave absorption edge in AsSeI, AsSI and SbSBr glasses. UFZh, no. 2, 1975, 296-303.

174. Bovina, L. A., Yu. N. Saychenko, and V. I. Stafeyev. Galvanomagnetic phenomena in narrow-band $Cd_xHg_{1-x}Te$ at helium temperatures. FTP, no. 1, 1975, 26-31.

175. Brailovskiy, Ye. Yu., I. D. Konozenko, and V. P. Tartachnik. Defects in electron-irradiated GaP. FTP, no. 4, 1975, 769-771.

176. Bratashevskiy, Yu. A. Nature of gap width variation in substitutional solid solutions on a lead chalcogenide base. FTP, no. 2, 1975, 390-391.

177. Bratashevskiy, Yu. A., V. B. Tyutyunnik, I. S. Aver'yanov, and I. M. Nesmelova. Spin resonance in band charge carriers in $Cd_2Hg_{1-x}Te$. FTP, no. 1, 1975, 168-169.

178. Braun, F. A.c. performance of sputtered GeSe thin films. Wiss. Z. Techn. Univ. Dresden, v. 23, no. 2, 1974, 357-363. (RZhElektr, 3/75, no. 3B250)

179. Bredikhin, S. I., and S. Z. Shmurak. Effect of electric field on deformation-induced radiation of ZnS crystals. ZhETF P, v. 21, no. 6, 1975, 342-345.

180. Bredikhin, S. I., Yu. A. Osip'yan, and S. Z. Shmurak. Effect of light of deformation-stimulated light emission from ZnS crystals. ZhETF, v. 68, no. 2, 1975, 750-755.

181. Brodin, M. S., and M. G. Matsko. Special features of emission spectra of ZnTe crystals at high excitation. FTP, no. 6, 1975, 1133-1135.

182. Brodin, M. S., and S. G. Shevel'. Luminescence of $Zn_xCd_{1-x}S$ single crystals under intensive laser excitation. UFZh, no. 3, 1975, 431-435.

183. Brodin, M. S., V. P. Tishchenko, and S. G. Shevel'. Low-temperature luminescence of mixed $Zn_xCd_{1-x}S$ single crystals near the edge of fundamental absorption. FTP, no. 4, 1975, 774-777.

184. Brodovoy, V. A., A. Ch. Gozak, and G. P. Peka. Effect of the ionization switching in semi-insulating GaAs. UFZh, no. 1, 1975, 35-39.

185. Brodovyy, V. A., and M. Z. Derikot. Frenkel-Pool effect in semi-insulating GaAs (Cu). Visnyk. Kyyiv Universytet. Ser. fiz, no. 15, 1974, 75-80, 121. (RZhElektr, 4/75, no. 4B239)

186. Broude, V. L., V. V. Korshunov, I. I. Tartakovskiy and V. B. Timofeyev. Spectral-time characteristics of generation in the P-band region of CdS crystal. FTT, no. 6, 1975, 1753-1757.

187. Brummer, O. and J. Schreiber. Effect of dislocations on luminescence of CdS single crystals. Krist. und Techn., v. 9, no. 7, 1974, 817-829. (RZhElektr, 2/75, no. 2B79).

188. Bryskiewicz, T., and M. A. Herman. A method of determining the liquid phase epitaxial GaAs growth mechanism, based on growth rate measurements. Krist. und Techn. v. 9, no. 7, 1974, 771-778. (RZhElektr, 2/75, no. 2B151).

189. Budzhak, Ya. S., V. Ye. Pryamukhin and O. I. Pecharskaya. Thermal conductivity and Lorentz number for PbSe. UFZh, no. 4, 1975, 679-680.

190. Burdukov, Yu. M., N. V. Zotova, T. Makhanbetaliyev, B. Ya. Mel'tser, and D. N. Nasledov. Effect of fluctuations in local composition of solid solutions on optical and luminescence properties of three-dimensional $Ga_xIn_{1-x}As$ single crystals. FTP, no. 3, 1975, 488-493.

191. Burliy, P. V., I. Ya. Kucherov, M. Yu. Omel'yanenko, and I. V. Ostrovskiy. Study of the conduction effect on the Lamb wave propagation velocity in CdS. UFZh, no. 2, 1975, 327-329.

192. Bykova, T. T., A. N. Danilov and M. S. Davydov. Study of desorption products mass spectra and photoelectric characteristics of chemically-deposited lead selenide layers. Uchenyye zapiski. Leningrad Gosud. Universitet, no. 371, 1974, 3-7. (RZhElektr, 4/75, no. 4B84).

193. Chechurin, S. N., and N. A. Rogachev. Mobility of charge carriers in PbS photoresistors at 300 to 120°K. Uchenyye zapiski. Leningrad. Gosud. Universitet, no. 371, 1974, 74-80. (RZhElektr, 4/75, no. 4B421).

194. Chechurin, S. N., B. Mukk and Kh. Reykhmeyer. Electroluminescence and lifetime of nonequilibrium carriers in lead sulfide photoresistors. Uchenyye zapiski. Leningrad Gosud. Universitet, no. 371, 1974, 68-74. (RZhElektr, 4/75, no. 4B76).

195. Chernyavskiy, B. G., V. B. Levina, A. V. Makiyenko, and N. I. Yakubovich. Temperature dependence of the electroluminescence damping in ZnS-Cu phosphors. IVUZ fiz, no. 5, 1975, 157.

196. Chuzhikov, I. T., V. I. Bedratyy, V. I. Bulakh and Ye. S. Khoroshaylo. Effects of layer structure and atmospheric oxygen on some electric and photoelectric properties of polycrystalline lead telluride photoresistors. IN: Radiotekhnika, Resp. mezhved. temat. nauch-tekhn. sb., no. 31, 1974, 93-97. (RZhElektr, 1/75, no. 1B368)

197. Dashevsky, M. Ya., and L. N. Kolobrodov. Growth of doped gallium arsenide and indium antimonide single crystals in A(111) and B(111) polar directions. Krist., no. 1, 1975, 208-209.

198. Deml, F. A method of obtaining semi-insulating gallium arsenide single crystals from the melt. Czechoslovak patent no. 149791, published 15 Aug 1973. (RZhElektr, 4/75, no. 4B173 P).

199. Dobrovoskiy, V. N., and V. I. Uzhva. Impedance of indium antimonide in transverse magnetic field. FTT, no. 1, 1975, 356-358.

200. Domoryad, I. A., B. T. Kolomiyets, V. M. Lyubin and V. P. Shilo. Effect of γ-irradiation on vitreous As_2Se_3. NM, no. 4, 1975, 743-744.

201. Doronin, V. N., L. A. Yegorov, L. G. Nikolayeva and V. I. Chukalin. An x-ray spectral investigation of single crystals and films of $Pb_{1-x}Sn_xSe$ solid solutions grown by the method of gas-transport reactions. NM, no. 3, 1975, 546-547.

202. Drahokoupil, J. Experimental evidence of the delocalized 3d-electrons in the "cations" of ZnSe and CuBr. Czech. J. Phys., no. 5, 1975, 542-551.

203. Dubovikov, G. S., and A. I. Marbakh. Decomposition kinetics of a CdSe melt under a layer of flux. NM, no. 1, 1975, 41-44.

204. Dyakin, V. V., L. F. Prokopchuk, Ye. A. Sal'kov, and V. A. Khvostov. Long-wavelength optical quenching of photoconduction in cadmium sulphide single crystals. FTP, no. 3, 1975, 583-584.

205. Dyakin, V. V., N. M. Kroleyets, I. V. Markevich, and M. K. Scheynkman. Photochemical reactions in lithium-doped CdS single crystals. FTP, no. 1, 1975, 103-106.

206. Dyakin, V. V., N. M. Krolevets, Ye. A. Sal'koy and V. A. Khvostov. Photoexcitation of orange and red luminescence spectra of silver-doped cadmium sulphide. FTP, no. 3, 1975, 584-585.

207. Effekty pamyati i fotoprovodimosti neodnorodnykh poluprovodnikakh Temat. sbornik [Memory and photoconductivity effects in heterogeneous semiconductors. Collected thematic articles]. Kiyev, 1974, 125 p. (RZhElektr, 4/75, no. 4B417 K).

208. Feltz, A. Introducing heavy metals into chalcogenide glasses. Wiss. Z. F. Schiller Univ. Jena. Math.-naturwiss. R., v. 23, no. 2, 1974, 327-340. (RZhKh 19M, 5/75, no. 5M122)

209. Fesenko, V. M. Double injection in organic solids with allowance for dimerization of carriers. IVUZ Fiz, no. 2, 1975, 153.

210. Fizicheskiye protsessy v geterostrukturakh i nekotorykh soyedineniyakh $A^{II}B^{VI}$ (Physical processes in heterojunctions and certain $A^{II}B^{VI}$ compounds). Sbornik. Izd-vo Shtiintsa. Kishinev, 1974, 144 p.

211. Fizika poluprovodnikovykh soyedineny slozhnogo sostava. Sb. statey (Physics of complex compound semiconductors. Collection of articles). Elista. Kalmytskiy universite, 1974, 186 p. (RZh Elektr, 1/75, no. 1B12 K).

212. Fizika tverdogo tela i poluprovodnikov. (Physics of solid state and semiconductors). III Resp. konf. molodykh uchenykh po fizike, 13-15 maya 1974. Sbornik dokladov. Minsk, 1974, 126 p. (RZhF, 5/75, no. 5E9 K).

213. Fizika tverdogo tela. (Solid state physics). Institut fiziki Sib. Otd. AN SSSR. Krasnoyarsk, 1974, 404 p. (RZhElektr, 5/75, no. 5B1 K).

214. Folmanis, G. E., Ye. V. Dorofeyev, V. P. Zlomanov, Ye. V. Kul'bachevskaya, and O. I. Tananayeva. A study of $Pb_{1-x}Sn_xTe$ polycrystalline thin films. NM, no. 2, 1975, 356-357.

215. Frieser, A., M. Staudte, H. Neumann and U. Flohrer. Study of the Hall factor and extrinsic band conductivity of n-GaAs. Exp. Techn. Phys, v. 22, no. 4, 1974, 273-282. (RZhElektr, 3/75, no. 3B73).

216. Galushchak, M. A. Investigation of solid solution films based on tin telluride and lead chalcogenides on pyroceram substrates. IVUZ Fiz, no. 6, 1975, 157.

217. Gasan-zade, S. G., V. B. Orletskiy, Ye. A. Sal'kov, and G. A. Shepel'skiy. Conduction of $Pb_{1-x}Sn_xTe$ in high electric fields. FTP, no. 2, 1975, 380-383.

218. Gavaleshko, N. P., M. V. Kurik, I. F. Skitsko, and Z. Ye. Ostafiychuk. Absorption edge and forbidden gap of $CdTe_{1-x}Se_x$ crystals. FTT, no. 4, 1975, 1156-1158.

219. Gavaleshko, N. P., R. D. Ivanchuk, M. V. Kurik, I. F. Skitsko, and A. V. Savitskiy. The absorption edge of Fe-doped CdTe. UFZh, no. 3, 1975, 456-459.

220. Gavaleshko, N. P., S. Yu. Paranchich, L. D. Paranchich, and P. I. Babiy. Structure of the conduction band and scattering mechanisms in $Cd_xHg_{1-x}Se$ solid solutions. UFZh, no. 4, 1975, 633-637.

221. Generatsiya SVCh-kolebaniy s ispol'zovaniyem effekta Ganna (Generation of u.h.f. oscillations using the Gunn effect). Materialy Vses. simpoziuma. Novosibirsk, 1974, 511 p. (RZhElektr, 4/75, no. 4B337 K).

222. Genkin, G. M. Acoustooptical effect in $A^{III}B^{V}$ semiconductors in a high magnetic field. FTP, no. 2, 1975, 365-367.

223. Genkin, G. M., and V. V. Zil'berberg. Nonlinear interaction of electromagnetic and hypersonic waves in $A^{III}B^{V}$ piezosemiconductors. FTP, no. 2, 1975, 334-336.

224. Georgiyeva, I. and Ye. Vateva. Photochemical sensitization and aging of CdS single crystals. Godishn. Vissh. tekhn. uchebn. zaved. Fizika, v. 9, no. 1, 1972 (1974), 93-102. (RZhElektr, 5/75, no. 5B121)

225. Gershenzon, Ye. M., L. B. Litvak-Gorskaya, N. A. Serebryakova, and V. B. Smirnova. Concentration of free and bound electrons and special features of cyclotron resonance in pure n-InSb in quantizing magnetic fields. FTP, no. 4, 1975, 669-675.

226. Gertovich, T. S., S. I. Grineva, V. G. Gutsulyak, V. B. Orletskiy, and K. D. Tovstyuk. Optical properties of $Pb_{1-x}Sn_xSe$ single crystals in the region of fundamental-absorption edge. FTP, no. 5, 1975, 1015-1017.

227. Giriat, V., E. A. Neyfel'd, and I. M. Tsidil'kovskiy. Formation of an energy gap in HgTe under the action of a magnetic field. FTP, no. 1, 1975, 188-190.

228. Giriat, V., N. G. Gluzman, L. I. Domanskaya, and I. M. Tsidil'kovskiy. Spectroscopic splitting factor of conduction electrons in $Cd_{0.072}Hg_{0.928}Se$. FTP, no. 5, 1975, 1024-1026.

229. Glazov, V. M., A. I. Kiselev, and I. V. Lebedeva. Solubility and interaction of donor and acceptor-type doping elements in gallium arsenide. FTP, no. 6, 1975, 1085-1091.

230. Glazov, V. M., N. N. Glagoleva, and N. L. Gryazeva. Experimental study on donor-acceptor interaction in gallium antimonide. FTP, no. 1, 1975, 180-183.

231. Glinchuk, K. D., and A. V. Prokhorovich. Temperature quenching of the copper-induced 1.35 eV emission band in p-GaAs. Phys. status solidi (a) v. 25, no. 1, 1974, 323-327. (RZhElektr, 5/75, no. 5B89).

232. Glinchuk, K. D., N. M. Litovchenko, and V. Ye. Rodionov. Energetics of fast recombination channels in GaAs. FTP, no. 4, 1975, 805-808.

233. Golovey, M. I., I. D. Turyanitsa, A. V. Bogdanova, I. P. Mikhal'ko, V. A. Khudoliy, D. G. Semak, and A. A. Kikineshi. Production and properties of glasses of the Ag-Sb-S system. NM, no. 4, 1975, 745-746.

234. Golovey, M. I., I. D. Turyanitsa, A. V. Bogdanova, I. P. Mikhal'ko, V. A. Khudoliy, Yu. V. Voroshilov, and D. G. Semak. Glass-formation and certain physicochemical properties of glasses in the Ag-As-S-I system. UKhZh, no. 5, 1975, 493-494.

235. Golovey, M. I., Ye. G. Miselyuk and D. V. Chepur. Studies in semiconductor materials problems. UFZh, no. 6, 1975, 1044-1046.

236. Golubev, V. G., V. I. Ivanov-Omskiy, and Ye. M. Sheregiy. Fine structure of cyclotron-phonon resonance in InSb. FTT, no. 1, 1975, 185-187.

237. Gorchak, L. V., V. V. Negreskul, Ye. S. Baleka, and A. G. Cheban. Thermoelectromotive force and effective mass of electrons in $GaAs_{1-x}P_x$ solid solutions. FTP, no. 1, 1975, 171-174.

238. Gorelik, S. S. and V. A. Mironenko. Coherent segregations in chromium-doped gallium arsenide single crystals. IN: Nauchn. trudy. Mosk, institut stali i splavov, no. 83, 1974, 104-109. (RZhElektr, 6/75, no. 6B279)

239. Gorodetskiy, I. Ya., G. S. Pekar', A. I. Fedorov, and M. K. Sheynkman. Special features of recombination processes in CdS single crystals heavily doped with indium. FTP, no. 5, 1975, 986-988.

240. Grushko, N. S., and A. A. Gutkin. Application of photocapacitance method for the study of electron-phonon interaction in case of photoionization of deep impurity centers in InP. FTP, no. 1, 1975, 58-62.

241. Grigor'yev, A. N., N. P. Dikiy, P. P. Matyash, L. I. Nikolaychuk, L. I. Pivovar, and N. A. Skakun. Study on radiation-induced imperfections in CdS single crystals using the method of proton backscattering. FTP, no. 6, 1975, 1147-1149.

242. Grinshteyn, P. M., M. Ya. Lipkes, N. S. Rytova, and V. I. Fistul'. Study on the decay kinetics of oversaturated solid solution of tellurium in GaAs. FTP, no. 6, 1975, 1102-1107.

243. Grin', V. F., A. V. Lyubchenko, Ye. A. Sal'kov, and M. K. Sheynkman. Recombination via donor-acceptor complexes in CdS single crystals. FTP, no. 2, 1975, 303-310.

244. Grin', V. F., D. S. Lepsveridze, Ye. A. Sal'kov, and G. A. Shepel'skiy. Change in parameters of electron-phonon interaction in CdS from the effects of uniaxial compression and electric field. ZhETF P, v. 21, no. 7, 1975, 415-418.

245. Grishechkina, S. P., and S. D. Luchinin. Comparative characteristics of current instabilities and recombination radiation from a collisionally ionized n-InSb plasma in a magnetic field. FTP, no. 2, 1975, 231-235.

246. Gritsenko, A. P., E. G. Dubrova and V. N. Molchanov. Growing ZnO single crystals in crucibles made of zinc oxide powder. IN: Fizika tverdogo tela. Resp. mezhved. temat. nauch-tekhn. sb., no. 4, 1974, 22-24. (RZhElektr, 4/75, no. 4B216)

247. Grushko, N. S., E. V. Russu, and S. V. Slobodchikov. Photoconduction of indium phosphide doped with iron and nickel. FTP, no. 2, 1975, 343-347.

248. Gulyayev, Yu. V., I. I. Chusov, and N. G. Yaremenko. Current-voltage characteristic of compensated n-InSb with allowance for the scattering of electrons by optical phonons. FTP, no. 5, 1975, 915-921.

249. Gulyayev, Yu. V., V. A. Popov, V. T. Potapov, V. A. Strakhov, I. I. Chusov, and N. G. Yaremenko. Photoconductivity in compensated n-In-Sb at cyclotron resonance. FTT, no. 1, 1975, 289-297.

250. Gurin, N. T., D. G. Semak, and V. V. Fedak. Threshold switching and local states in chalcogenide glasses. FTP, no. 4, 1975, 761-764.

251. Gurin, N. T., V. V. Khiminets, D. G. Semak, I. D. Turyanitsa, and V. V. Fedak. Vitrification and threshold switching in the Si-As-Te-J system. IVUZ Fiz, no. 4, 1975, 151-154.

252. Gurin, N. T., V. V. Khiminets, D. G. Semak, I. D. Turyanitsa, V. V. Fedak, and D. V. Chepur. Threshold switching in a M-A^{V}-B^{VI}-C^{VII} systems. FTP, no. 1, 1975, 36-40.

253. Guliyeva, Ye. I., L. V. Prokof'yeva, L. S. Stil'bans, and V. I. Tamarchenko. On thermoelectric efficiency of PbTe-SnTe alloys. FTP, no. 6, 1975, 1213-1216.

254. Guseva, M. I., N. V. Zotova, A. V. Koval', and D. N. Nasledov. Radiative recombination in indium arsenide implanted with the IV group elements. FTP, no. 5, 1975, 901-903.

255. Handros, L. I., G. S. Pekar, M. K. Sheinkman, and E. L. Shtrum. Effect of component vapor pressure on electron concentration and mobility in CdS single crystals. Phys. status solidi (a), v. 24, no. 2, 1974, K167-K171. (RZhElektr, 5/75, no. 5B124)

256. Hartmann, H. Growing ZnS, ZnSe, and ZnTe single crystals, using chemical transport reactions. Krist und Techn., v. 9, no. 7, 1974, 743-753. (RZhElektr., 2/75, no. 2B154)

257. Herman, M. A., W. Lewandowski and W. Zahorowski. Luminescence of liquid phase epitaxial $Ga_xIn_{1-x}P$ layers grown on differently doped GaAs substrates. Krist, und Techn. v. 9, no. 10, 1974, K79-K81, (RZhElektr, 6/75, no. 6B99).

258. Hoschl, P., P. Polivka, V. Prosser, and A. Sakalas. Preparation of cadmium telluride single crystals for nuclear detectors. Czech. J. Phys. B., no. 5, 1975, 585-596.

259. Hottmann, H., and M. Schulz. Reflection splitting in RHEED investigations of vacuum-evaporated GaAs layers. Krist. und Techn. v. 9, no. 6, 1974, 661-673, 1974. (RZhElektr, 1/75, no. 1B169).

260. Ignatov, A. V., and V. V. Serdyuk. Effect of field displacement of charged vacancies in cadmium sulfide crystal lattice. IVUZ. Fiz. no. 2, 1975, 56-59.

261. Ignatov, A. V., and V. V. Serdyuk. The field-induced shift of charged vacancies in a crystal lattice of cadmium sulfide. UFZh, no. 4, 1975, 644-648.

262. Ilatovskiy, V. A., and G. G. Komissarov. Comparative characteristics of PcH_2, PcV_2O_5 and PcAlCl phthalocyanins versus pH of the electrolyte and substrate material. ZhFKh, no. 5, 1975, 1352.

263. Ilatovskiy, V. A., and G. G. Komissarov. Comparative characteristics of pigment-coated electrodes of a photovoltaic cell versus the substrate type phthalocyanin, and pH of the electrolyte. ZhFKh, no. 5, 1975, 1353.

264. Ilatovskiy, V. A., L. F. Ovcharov, V. V. Shlyakhova and G. G. Komissarov. Parameters of pigment-coated electrodes and their reproducibility versus conditions of pigment film deposition. ZhFKh, no. 5, 1975, 1352.

265. Ilisavskiy, Yu. V., and D. Chiplis. Nonlinear phenomena during sound propagation in n-InSb at 4.2° K. FTT, no. 4, 1975, 1020-1026.

266. Ippolitova, G. K., and E. M. Omel'yanovskiy. Optical absorption due to intracenter transitions of a Fe^{2+} ion in gallium arsenide. FTP, no. 2, 1975, 236-241.

267. Issledovaniya po fizike poluprovodnikov (Studies in semiconductor physics). Institut fiziki AN AzSSR. Baku, 1974, 133 p. (RZhF, 1/75, no. 1E906 K).

268. Ivanov, S. N., I. M. Kotelyanskiy, and Ye. N. Khazanov. Some questions of absorption of ultrasonic waves in indium antimonide. FTT, no. 1, 1975, 349-356.

269. Ivanov, V. A., K. K. Muravyeva, and I. P. Kalinkin. Investigation of the growth processes, structure and properties of ZnSe epitaxial films. NM, no. 1, 1975, 15-18.

270. Ivanov, V. N., I. V. Kucherenko, V. N. Moiseyenko, M. S. Taktakishvili and A. P. Shotov. Study of Shubnikov-de-Haas oscillations in $Pb_{1-x}Sn_xSe$ Crystals (x = 0.06). FTP, no. 4, 1975, 690-696.

271. Ivanyutin, L. A., N. N. D'yachkova, and A. Yu. Malinin. Analysis of carbon distribution in GaAs, using the method of quasi-chemical reactions. NM, no. 3, 1975, 407-412.

272. Ivashchenko, Yu. N., B. T. Kolomiyets and T. N. Mamontova. Investigations on the mechanism of photoluminescence in vitreous and crystalline As_2Se_3. Phys. status solidi (a). v. 24, no. 1, 1974, 401-407. (RZhElek, 4/75, no. 4B93)

273. Jacobs, K., B. Jacobs, P. Straubel, and E. Butter. Information from aluminium concentration profiles about the growth process in $Ga_{1-x}Al_xAs$ liquid-phase epitaxial layers. Krist. und Techn., v. 9, no. 11, 1974, 1243-1248. (RZhElektr, 6/75, no. 6B280)

274. Karbanov, S. G., I. V. Viktorovskiy, and L. A. Baydakov. Magnetic susceptibility of glasses and crystals in the GeSe-Te system. ZhPKh, no. 6, 1975, 1238-1242.

275. Kazakova, L. A., M. V. Rapoport, B. Ye. Samorukov, and Yu. I. Ukhanov. Study of Faraday effect in n-type gallium phosphide. FTP, no. 1, 1975, 85-90.

276. Khlystovskaya, M. D., G. N. Zotova, L. G. Yelanskaya and Ye. P. Rashevskaya. Properties of InAs-FeAs semiconductor eutectic. NM, no. 3, 1975, 413-417.

277. Khokhlov, V. I., Yu. G. Sidorov, and S. A. Dvoretskiy. Electrophysical properties of nondoped, epitaxial GaAs in the range from 10 to 1100°K. Phys. status solidi (a), v. 25, no. 1, 1974, 311-321. (RZhElektr, 4/75, no. 4B59)

278. Khvostov, V., M. Moin, and E. Salkov. Band-to-band emission from heavily doped CdS. Phys. status solidi (a)., v. 26, no. 1, 1974, 261-265. (RZhElektr, 6/75, no. 6B117)

279. Kichigin, D. A., V. P. Lobachev, and O. A. Mironov. Current-voltage characteristics of n-InSb in quantizing magnetic fields. FTP, no. 5, 1975, 978-980.

280. Kim, V. A., N. V. Siukayev, and Z. S. Slonova. Electromechanical effect in indium phosphide. IVUZ Fiz, no. 6, 1975, 159.

281. Kirovskaya, I. A., and G. M. Mulikova. The GaAs-ZnSe system. NM, no. 6, 1975, 1131-1132.

282. Kiselev, V. A., B. S. Razbirin, I. N. Ural'tsev and V. P. Kochereskho. Additional waves and Fabry-Perot interferences in the region of forbidden exciton in A_2B_6 crystals. FTT, no. 2, 1975, 640-642.

283. Kiyak, B. R., N. N. Krupa, and A. I. Proskura. On the role of defects in switching of conductivity of zinc sulfide single crystals. UFZh, no. 4, 1975, 657-661.

284. Klassen, N. V., L. L. Krasil'nikova, and Yu. A. Osip'yan. Determination of density of different sign dislocations in cadmium sulfide by polarization optical method. FTT, no. 4, 1975, 1118-1122.

285. Kleshinskiy, L. I., Yu. A. Rozenberg and L. V. Chilikanova. Study of the regions of coherent scattering and microdistortions in zinc chalcogenides. IN: Sb. Fizika tverdogo tela, Irkutsk, 1973, 45-51. (RZhElektr, 5/75, no. 5B142).

286. Klimov, B. N., V. A. Ivanchenko, B. S. Pis'mennyy, and G. Yu. Naumenko. Temperature dependence of two-millimeter radiation absorption in n-InSb. FTP, no. 6, 1975, 1142-1144.

287. Klotyn'sh, E. E., and V. K. Petrov. Study on the effective mass of conduction in compensated gallium arsenide. FTP, no. 3, 1975, 561-563.

288. Kocsis, S. Lattice scattering mobility of electrons in GaP. PhSS (a), v. 28, no. 1, 1975, 133-138.

289. Kolesov, B. A., L. A. Borisova, and Z. L. Akkerman. Nature of the 1.24-1.26 ev luminescence band in gallium arsenide doped with copper and oxygen. FTP, no. 2, 1975, 248-252.

290. Kolomiyets, B. T., T. F. Mazets, S. K. Pavlov, and Sh. Sh. Sarsembinov. Temperature lependence of absorption and electro-absorption in crystalline and glass-like As_2Se_3. FTP, no. 4, 1975, 710-717.

291. Kolomiyets, Yu. N., A. F. Kravchenko, and A. M. Palkin. Study of galvanomagnetic properties of n-GaAs epitaxial films in high electric fields at low temperatures. FTP, no. 1, 1975, 99-102.

292. Kolomoytsev, I. P. The First All-Union seminar on epitaxy of A^3B^5 compound semiconductors. TsM, no. 2, 1975, 86.

293. Kopeliovich, E. S., V. N. Maslov, V. Yu. Pepelyayev, V. N. Rukova, V. G. Sidorov, M. D. Shagalov, and Yu. K. Shalabutov. Electrophysical properties of gallium nitride epitaxial layers. FTP, no. 1, 1975, 183-185.

294. Kordos, P. and V. Benc. Preparation from liquid phase and properties of epitaxial GaAs. Slaboproudy obz., v. 35, no. 8, 1974, 355-359. (R ZhElektr, 1/75, no. 1B165).

295. Kornitskiy, A. G., P. S. Kireyev, and N. M. Kondaurov. Photoelectric effect and photoluminescence in CdSe thin epitaxial layers. IVUZ Fiz, no. 3, 1975, 61-66.

296. Korobov, O. Ye., V. N. Maslov, and P. B. Orlov. Preparation of hyperlattice on the basis of a GaP_xAs_{1-x} solid solution. NM, no. 6, 1975, 1133-1134.

297. Korzhuyev, M. A., N. Kh. Abrikosov, and L. Ye. Shelimova. Germanium telluride electrical resistance and thermol emf in the region of phase transition. DAN SSSR, v. 220, no. 2, 1975, 403-406.

298. Kosarev, V. V., and P. V. Tamarin. Drag effect in indium antimonide. FTP, no. 2, 1975, 263-268.

299. Kostylev, S. A., V. A. Shkut and V. Ya. Krys'. Observing hysteresis-free switching and static negative differential resistance in amorphous semiconductor films. ZhETF P, v. 21, no. 4, 1975, 232-235.

300. Kovalyuk, Z. D., A. I. Malik, and A. I. Savchuk. Dispersion of birefringence in $GeSe_2$ single crystals. FTP, no. 6, 1975, 1216-1218.

301. Krasil'nik, Z. F., and V. I. Piskarev. Generation of the second harmonic of millimeter range electromagnetic wave in n-GaAs. FTP, no. 6, 1975, 1189-1190.

302. Kravchenko, A. F., and A. S. Terekhov. Influence of exciton effects on electroabsorption oscillations in gallium arsenide. FTP, no. 1, 1975, 125-128.

303. Krestovnikov, A. N., T. A. Volkova and L. A. Timoshin. Determination of forbidden gap width from transmission spectra of vacuum condensates. NM, no. 5, 1975, 948-949.

304. Krivov, M. A., V. G. Melev, V. N. Klimov, and A. S. Khlystova. Conversion of conduction type in $ZnSnAs_2$. FTP, no. 6, 1975, 1211-1213.

305. Krolevets, N. M., D. S. Lepsveridze, and G. A. Shepel'skiy. Electric field influence on luminescence of CdS single crystals. UFZh, no. 3, 1975, 444-447.

306. Kropman, D. I., and M. K. Sheynkman. Anomalous temperature dependence of dark conduction in (CdS:Cu, Cl) films. FTP, no. 4, 1975, 777-779.

307. Kropman, D. I., and M. K. Sheynkman. Residual conduction in polycrystalline CdS (Cu, Al) films. UFZh, no. 2, 1975, 251-256.

308. Kruglov, V. I., O. F. Vyvenko, and V. V. Rykov. Photodeformation of CdS single crystals. FTT, no. 2, 1975, 611-613.

309. Krylov, K. I., V. T. Prokopenko and A. D. Yas'kov. Use of a CO_2 laser in the study of nonuniform distribution of impurities in a semiconductor. IN: Trudy. Leningrad institut tochnoy mekhaniki i optiki, no. 79, 1975, 97-102. (RZhElektr, 6/75, no. 6B27).

310. Kulakov, M. P. Melting point and vapor pressure of HgS. NM, no. 3, 1975, 553-554.

311. Kurik, M. V., V. S. Manzhara, V. V. Matlak, and I. F. Skitsko. Effect of impurities on optical properties of CdTe. II. Germanium impurity. FTP, no. 5, 1975, 1041.

312. Kushnir, A. S., B. G. Nosachev, S. A. Omel'chenko, I. V. Shtambur and A. Ya. Yakunin. EPR study of structure of ZnSe single crystals. FTT, no. 5, 1975, 1473-1374.

313. Legirovannyye poluprovadniki (Doped semiconductors). Moskva, Institut metallurgii. AN SSSR, 1975, 140 p.

314. Leongardt, G. Comparison between photoelectron and x-ray spectroscopic studies of bands energy structure of GaAs and GaP. FTT, no. 1, 1975, 3-6.

315. Lepsveridze, D. S., I. V. Markevich, G. S. Pekar', and M. K. Sheynkman. Mechanism of the impact effect (mechanically stimulated luminescence) in CdS(Na) crystals possessing residual conductivity. UFZh, no. 5, 1975, 863-864.

316. Leushina, A. P. and M. V. Simonova. An e.m.f. method for determining homogeneity region and defect structure of lead sulfide at 310 C. ZhFKh, no. 5, 1975, 1218-1221.

317. Lisitsa, M. P., A. P. Zakharchuk, V. N. Malinko, N. Ye. Novoseletskiy. S. F. Terekhova, and G. G. Tsebulya. Effect of doping on exciton photoreflection spectra of n-CdTe. FTP, no. 5, 1975, 907-910.

318. Listvin, V. N., V. T. Potapov, A. A. Sokolovskiy, V. A. Strakhov and D. P. Tregub. Dispersion in n-In Sb in the submillimeter region. FTT, no. 6, 1975, 1580-1583.

319. Lomasov, V. N., and O. A. Timofeyev. Controllable memory of photocurrents in PbO layers. FTP, no. 1, 1975, 121-123.

320. Lysenko, V. G., I. Revenko, T. G. Tratas, and V. B. Timofeyev. Radiative recombination of a nonequilibrium electron-hole plasma in CdS crystals. ZhETF, v. 68, no. 1, 1975, 335-346.

321. Magomedov, Kh. A. and N. G. Gasanov. Crystallization of cadmium selenide and telluride epitaxial layers from the vapor phase. Izv. Sev-Kavkaz. nauch. tsentra vyssh. shkoly. Ser. yestestv. nauk, no. 2, 1974, 102-103. (RZhElektr, 2/75, no. 2B161)

322. Magomedova, N. S., O. V. Kolninov, Ye. G. Rukhadze, and Z. V. Zvonkova. Photoelectric property of crystalline modifications of 2-p-dimethylaminobenzylidenindan 1, 3- dione. ZhFKh, no. 5, 1975, 1322-1323.

323. Malovichko, A. V., and S. V. Svechnikov. Electric potential distribution in high-resistance CdS films. UFZh, no. 2, 1975, 205-208.

324. Malovichko, A. V., S. V. Svechnikov, and Ye. P. Shul'ga. Study of dark conduction of high-resistance cadmium sulfide films. UFZh, no. 2, 1975, 209-213.

325. Mamedov, M. G. Breakdown of zinc oxide in an electric field. IN: Sb. nauch. soobshch. Kafedra eksperim i teoret fiziki. Dagestan. universitet, no. 1, 1974, 68-71. (RZhElektr, 1/75, no. 1B119)

326. Marina, L. I., A. Ya. Nashel'skiy, and L. I. Kolesnik. Poluprovodnikovyye fosfidy A^3B^5 i tverdyye rastvory na ikh osnove (A^3B^5 semiconductor phosphides and phosphide-based solid solutions). 1974, 232 p. (RZhElektr, 2/75, no. 2B144 K).

327. Maronchuk, Yu. Ye., A. P. Sherstyakov, and N. A. Yakusheva. Deep impurity levels in tellurium-doped $Al_xGa_{1-x}As$ solid solutions. IVUZ Fiz, no. 4, 1975, 113-114.

328. Materialy shestoy zimn[illegible] shkoly po fizike poluprovodnikov, 20 fevr -2 marta 1975 g. (Proceedings of the sixth winter seminar on physics of semiconductors, 20 February - 2 March 1975). Fiziko-tekhnicheskiy institut. Leningrad, 1974, (sic), 470 p. (RZhElektr, 5/75, no. 5B22 K)

329. Matulenis, A. Yu., Yu. K. Pozhela, Ye. A. Shimulite, and V. Yu. Yutsene. Electron mobility in graded-band epitaxial n-$Al_xGa_{1-x}As$ with a Γ- X junction of different valleys. FTP, no. 3, 1975, 572-575.

330. Mazurkevich, Ya. S., N. I. Zozulya, L. S. Kostyuk, and Yu. I. Zozulya. Etching and certain properties of (111) planes of InSb. NM, no. 4, 1975, 611-616.

331. Melnichuk, I. V., V. G. Nikulitsa and I. M. Rarenko. Application of the method of pendulum bands for studying InSb single crystals. UFZh, no. 1, 1975, 141-143.

332. Meylikhov, Ye. Z., and B. A. Aronzon. Nonlinear propagation of helicons in n-InSb. FTP, no. 4, 1975, 722-725.

333. Migal', V. P. Photoconductivity, photoluminescence, and photoelectret state of ZnSe:Mg single crystals. IN: Sb. Sistemy upr. letatel'nykh apparatov. Khar'kov, no. 2, 1974, 170-173. (RZhElektr, 6/75, no. 6B460)

334. Mikhaylov, V. I., V. M. Zhdanov, and A. D. Tsyganov. Positron annihilation in glass-like As-Se and As-Sn-Se systems. IVUZ Fiz, no. 5, 1975, 131-133.

335. Mikho, V. V., A. P. Fedchuk, and N. V. Vityuk. The mechanism of formation of strong-field static domains in amorphous thin films. FTP, no. 4, 1975, 789-792.

336. Mitvagin, A. Yu., and V. V. Panteleyev. Study of growth of GaAs on (100) Ge, using low energy electron diffraction and Auger spectroscopy. Krist, no. 3, 1975, 622-625.

337. Moin, M. D., G. S. Pekar', Ye. A. Sal'kov, and V. A. Khvostov. Stimulated band-band radiation of CdS single crystals heavily doped with chlorine. FTP, no. 2, 1975, 336-338.

338. Morozova, N. K., M. M. Malov, M. M. Veselkova, and B. A. Kurbatov. Phase transition of oxygen in ZnS singlecrystals from heating in vapors of ZnS components. IVUZ Fiz, no. 5, 1975, 89-94.

339. Morozova, N. K., M. M. Malov, and M. M. Veselkova. Cathodoluminescence of ZnS single crystals heated in vapors of ZnS components. IVUZ Fiz, no. 5, 1975, 84-88.

340. Murav'yeva, K. K., I. P. Kalinkin, N. M. Prikazchikova and A. T. Denisova. Formation of CdSe epitaxial films on mica in a quasi-closed volume. NM, no. 1, 1975, 19-22.

341. Murawski, L., and O. Gzowski. AC conductivity of semiconducting iron-phosphate glasses. Phys. status solidi (a), v. 24, no. 2, 1974, K115-K118. (RZhF, 4/75, no. 4E1822).

342. Murtazin, A. M., and Yu. A. Zarif'yants. Photoconduction of PbS epitaxial films. FTP, no. 2, 1975, 354-356.

343. Myasnikov, I. A., Ye. V. Bol'shun, and B. S. Agayan. The ionization of metal atoms on zinc oxide films and semiconductor detectors. DAN SSSR, v. 220, no. 5, 1975, 1122-1129.

344. Nasredinov, F. S., B. T. Melekh, L. N. Vasil'yev and L. N. Seregina. Crystal-glass transition in $Ge_{0.15}Te_{0.85}$ and its effect on local environment of germanium atoms. FTT, no. 2, 1975, 633-635.

345. Negreskul, V. V., Ye. V. Russu, S. I. Radautsan, and A. G. Cheban. Radiative recombination in doped indium phosphide crystals. FTP, no. 5, 1975, 893-900.

346. Nemchenko, A. M. Effect of IR radiation on electroluminescence spectra of ZnS:Cu single crystals. IVUZ Fiz, no. 3, 1975, 149-151.

347. Nemenov, L. L. and M. S. Sominskiy. Osnovy fiziki i tekhniki poluprovodnikov. (Fundamentals of physics and technology of semiconductors). Leningrad, 1974, 395 p. (RZhElektr, 5/75, no. 5B15 K)

348. Nemnonov, S. A., S. S. Mikhavlova, and V. I. Minin. Electronic structure of NiS and CuS metallic compounds and semiconducting ZnS. FMM, v. 39, no. 6, 1975, 1178-1185.

349. Nesmelova, I. M., N. S. Baryshev, Yu. S. Kharionovskiy, Zh. I. Akhmedova, and V. I. Kosheleva. Effective mass of holes in $Pb_{1-x}Sn_xTe$. FTP, no. 5, 1975, 991-993.

350. Nikitenko, V. A., and M. M. Malov. Sensitized UV luminescence from zinc oxide single crystals. IVUZ Fiz, no. 2, 1975, 50-55.

351. Nikitenko, V. A., M. M. Malov, and P. G. Pas'ko. UV luminescence amplification in zinc oxide single crystals. IVUZ Fiz, no. 2, 1975, 46-49.

352. Nikolayev, I. N., A. P. Shotov, A. F. Volkov, and V. P. Mar'in. "Damping" of the phonon spectrum of $Pb_{1-x}Sn_xTe$ semiconductors on transition to a gapless state. ZhETF P, v. 21, no. 2, 1975, 144-147.

353. Novyye poluprovodnikovyye soyedineniya i ikh svoystva (New compound semiconductors and their properties). Institut prikl. fiziki AN Mold.SSR. Kishinev, 1975, 221 p. (RZhElektr, 6/75, no. 6B11 K)

354. Ol'khovikova, T. I., Yu. Ye. Belousova, O. M. Kaplun, V. V. Makarov, and F. R. Khashimov. Defects appearing in GaP single crystal doped with chromium. FTT, no. 6, 1975, 1814-1816.

355. Omel'yanovskiy, E. M., V. I. Fistul', L. A. Balagurov, V. M. Ivleva, V. V. Karatayev, M. G. Mil'vidskiy, and A. N. Popkov. Behavior of transition metal impurities in $A^{III}B^{V}$ compounds. FTP, no. 3, 1975, 576-578.

356. Orletskiy, V. B., F. F. Sizov, G. V. Lashkarev, and K. D. Tovstyuk. Determination of some band-structural parameters for a $Pb_{0.82}Sn_{0.18}Te$ solid solution. FTP, no. 2, 1975, 269-275.

357. Osipova, V. V. Electrical conductivity and thermal e.m.f. of PbSe epitaxial thin films. IN: Fiz, elektronika. Resp. mezhved. nauchn.-tekhn. Sb. no. 8, 1975, 74-75. (RZhElektr, 5/75, no. 5B126)

358. Ostroborodova, V. V., L. I. Ryabova, and M. V. Semakin. Electron mobility in optically-decompensated oxygen-doped gallium arsenide. FTP, no. 4, 1975, 795-798.

359. Palatnik, L. S., L. G. Petrenko, and A. I. Kopeliovich. Anomalous photovoltaic effect in lead sulphide single crystall films. FTP, no. 5, 1975, 847-852.

360. Palatnik, L. S., L. G. Petrenko, and Yu. A. Volkov. Effect of electronic inhomogeneity on electrical characteristics of PbS single crystal films. Mikroelektronika, v. 3, no. 6, 1974, 559-561. (RZhElektr, 3/75, no. 3B99).

361. Pasynkov, V. V., ed. Poluprovodnikovaya elektronika (Electronics of semiconductors). Leningrad universitet. Mezhvuz. Sb. no. 1, 1974, 181 p. (RZhElektr, 2/75, no. 2B9 K)

362. Pedos, S. I., Ye. D. Yukhtanov, and G. S. Agafonova. A study of crystallization conditions of $Cd_xHg_{1-x}Te$ from mercury solutions. NM, no. 4, 1975, 760-761.

363. Peka, G. N., and Yu. I. Karkhanin. Recombination radiation from gallium arsenide with deep impurity centers in a strong electric field. Visnyk. Kyyiv Universytet. Ser. fiz., no. 15, 1974, 68-74, 121. (RZhElektr, 4/75, no. 4B458).

364. Peka, G. P., L. I. Gorshkov, S. A. Spektro, and L. G. Shepel'. Radiative recombination with participation of deep centers in compensated GaAs. FTP, no. 4, 1975, 818.

365. Pekar, S. I., and M. I. Strashnikova. Spatial dispersion and additional light waves in the region of exciton absorption in CdS. ZhETF, v. 68, no. 6, 1975, 2047-2054.

366. Pelevin, O. V., B. G. Girich, and M. I. Nikolaev. Liquid-phase epitaxy of iron-doped GaAs. NM no. 3, 1975, 542-543.

367. Peredereyeva, S. I., I. G. Orlov and M. I. Cherkashin. Polymer complexes with charge transfer. UKh, no. 4, 1975, 602-621.

368. Petzke, W. H., V. Gottschalch, and E. Butter. Epitaxial deposition of GaAs in the $Ga(CH_3)_3$-AsH_3-H_2-system. (IV). Thermodynamic and kinetic considerations. Krist. und Techn. v. 9, no. 7, 1974, 763-770. (RZhElektr, 2/75, no. 2B149)

369. Poluprovodnikovyye materialy i ikh primeneniye (Semiconducting materials and their applications). Voronezh, 1974, 216 p. (RZhF, 6/75, no. 6E10 K).

370. Poplavnoy, A. S., and V. G. Tyuterev. Dynamics of chalcopyrite crystal lattice in a model of rigid ions. FTT, no. 1, 1975, 313-316.

371. Poplavnoy, A. S., and V. G. Tyuterev. Lattice dynamics of $CuAlS_2$. IVUZ Fiz., no. 6, 1975, 51-57.

372. Preobrarhenskiy, N. I., and A. B. Kolyadin. Electrical conductivity of uranium and thorium diphthalocyanins. ZhFKh, no. 3, 1975, 692-694.

373. Rachkovskaya, G. Ye. and N. M. Bobkova. Study of electrical characteristics of the P_2O_5-Nb_2O_5-TiO_2-Fe_2O_3 glass system. IN: Sb. Proizvodstvo i issled. stekla i silikat. materialov. Yaroslavl', no. 4, 1974, 214-220. (RZhKh 19M, 11/75, no. 11M172).

374. Rizakhanov, M. A., G. M. Gasanbekov, and M. K. Sheynkman. Dependence of the cross-section for electron trapping by trapping centers in CdS: Ag crystals on their energy state. FTP, no. 4, 1975, 779-782.

375. Romanenko, V. N., and V. S. Khefets. Distribution coefficients of impurities in GaAs and its solid solutions with AlAs, prepared by the method of liquid epitaxy. NM, no. 4, 1975, 736-737.

376. Romanenko, V. N., and A. F. Sidorov. Determining the solid-phase solubility in the PbTe-PbS system by the method of diffusion couple. NM, no. 3, 1975, 432-437.

377. Ryachev, A. L., and M. V. Sholkina. Effect of polarization charges on a current in CdS single crystals. IVUZ Fiz, no. 5, 1975, 152-154.

378. Rzhanov, A. V., ed. Elementarnyye fiziko-khimicheskiye protsessy na poverkhnosti monokristallicheskikh poluprovodnikov. (Elemental physicochemical processes on the surface of semiconductor single crystals). Institut fiziki poluprovodnikov. Sib. otd. AN SSSR. Novosibirsk, 1975, 188 p. (RZhElektr, 6/75, no. 6B12 K).

379. Savel'yeva, M. V., I. V. Shakno, V. Ye. Plyushchev, V. S. Minayev and L. N. Kol'ba. Synthesis regions of formation and certain properties of chromium-containing phosphate glasses. NM, no. 5, 1975, 906-910.

380. Seifert, W. and A. Tempel. Gallium nitride epitaxy on corundum, using the $GaCl/NH_3/Ar$ system. Krist, and Techn., v. 9, no. 11, 1974, 1213-1221. (RZhKh 19AB, 11/75, no. 11B638)

381. Semak, D. G., I. D. Turyanitsa, and A. A. Kikineshi. Trapping levels in the crystals and glasses of the Sb-S-I system. NM, no. 6, 1975, 1140-1141.

382. Seregin, P. P., M. A. Sagatov, T. F. Mazets, and L. N. Vasil'yev. The influence of the crystal-glass transition on the state of tin impurity atoms in chalcogenide semiconductors. PSS (a), v. 28, no. 1, 1975, 127-132.

383. Shalimova, K. V., N. K. Morozova, and M. M. Malov. UV spectra of ZnS single crystals doped with donor impurities. NM, no. 4, 1975, 617-622.

384. Sharpov, V. I., A. D. Gerasimov, and Yu. D. Chistyakov. Nonthermal stimulation of processes in a vapor-gaseous phase during gallium arsenide autoepitaxy. IN: Sb. Antiviruyemyye protsessy tekhnol. mikroelektron. Taganrog, no. 1, 1975, 83-90. (RZhElektr, 6/75, no. 6B262)

385. Shibayeva, R. P., and O. V. Yarochkina. Crystalline and molecular structure of the 1:1 complex of dimethyldibenzotetrathiofulvalene and 7, 7, 8, 8-tetracyanoquinodimethane ($C_{16}H_{12}S_4$)($C_{12}H_4N_4$). DAN SSSR, v. 222, no. 1, 1975, 9.-93.

386. Shishiyanu, F. S. Dynamics of formation and kinetics of motion of slow domains in gallium arsenide. FTP, no. 1, 1975, 20-25.

387. Shomodi, K. Determination of temperature dependence of the ratio of mobilities (b) in the measurement of a transverse Nernst-Ettingshausen effect. Temperature dependence of b in InSb. FTP, no. 4, 1975, 726-732.

388. Shtanov, V. I., V. P. Zlomanov, and A. V. Novoselova. A physico-chemical study of the PbSe-$SnSe_2$ system. NM, no. 2, 1975, 358-360.

389. Silinsh, E. A., A. I. Belkind, D. R. Balode, A. J. Biseniece, V. V. Grechov, L. F. Taure, M. V. Kurik, J. I. Vertzymacha, and I. Pek. Photoelectrical properties, energy level spectra and photogeneration mechanisms of pentacene. Phys. status solidi (a), v. 25, no. 1, 1974, 339-347. (RZhElektr, 5/75, no. 5B443)

390. Simionescu, C., T. Lixandru, L. Tataru, and I. Marilu. A method of preparing polyferrocenylacetylene. Rumanian Patent no. 55767, published 15 Sept. 1973. (RZhElektr, 4/75, no. 4B227 P)

391. Simunek, A. The X-ray emission bands of GaP. Czech. J. Phys. B, no. 5, 1975, 603-604.

392. Smirnova, V. B. Observation of an additional peak in cyclotron resonance of impurity electrons in n-InSb. FTP, no. 4, 1975, 676-679.

393. Smyntyna, V. A. and V. V. Serdyuk. Oxygen effect on temperature dependence of electrical conductivity of cadmium selenide thin films. ZhFKh, no. 5, 1975, 1210-1213.

394. Sochilina, I. N., and O. A. Khachaturyan. Lattice vibrations in $Al_xGa_{1-x}Sb$. FTP, no. 2, 1975, 367-368.

395. Solov'yeva, Ye. V., V. V. Karatayev, M. G. Mil'vidskiy, and A. V. Govorkov. Influence of defects interaction on physical properties of gallium arsenide containing impurities of the IV group. FTP, no. 2, 1975, 387-390.

396. Somogyi, M., and A. Barna. Determination of composition and inhomogeneity in $GaAs_{1-x}P_x$ epitaxial layers. Krist und Techn., v. 9, no. 10, 1974, K83-K85. (RZhElektr, 6/75, no. 6B281).

397. Spasov, S. Growing gallium arsenide epitaxial layers from liquid phase, and studying their properties. Godishn. N-i. i proekt.-konstrukt. institut tsvet metallurgiya, no. 10, 1972 (1974), 123-131. 9RZhElektr, 5/75, no. 5B231)

398. Spivakovskiy, S. G., and E. P. Fel'dman. Dislocation bands in the energy spectrum of $A^{III}B^{V}$ type semiconductors. FTP, no. 1, 1975, 192.

399. Starostin, I. A. and V. V. Serdyuk. Photocurrent oscillations in inhomogeneous cadmium-selenide single crystals with linear current-voltage characteristics. FTP, no. 3, 1975, 450-455.

400. Stepanova, N. D., I. P. Kalinkin, and V. A. Sokolov. Oxidation of ZnSe in open air. NM, no. 6, 1975, 1030-1034.

401. Strakhov, L. P., and K. Rashidkhanov. Magnetic susceptibility of CdTe at 20-1400°C. NM, no. 3, 1975, 428-431.

402. Styrov, V. V., A. V. Kharitonov, and V. A. Sokolov. Dependence of radical recombination luminescence of ZnS-Ag phosphors on activator concentration, temperature and partial pressure of atomic and molecular hydrogen. IVUZ Fiz, no. 2, 1975, 156.

403. Styrov, V. V., A. V. Kharitonov, and V. A. Sokolov. Dependence of the output of radical recombination luninescence from ZnS:Ag phosphor upon excitation conditions. IVUZ Fiz, no. 3, 1975, 139-141.

404. Suchkova, N. I., and N. N. Solov'yev. Comparison of the data on EPR signals and high-temperature measurements of Hall effect and electric conductivity of iron-doped GaAs samples. FTP, no. 1, 1975, 156-158.

405. Suchkova, N. I., D. G. Andrianov, E. M. Omel'yanovskiy, Ye. P. Rashevskaya, and N. N. Solov'yev. Properties of nickel-doped gallium arsenide. FTP, no. 4, 1975, 718-721.

406. Sukhov, D. A., and V. S. Myl'nikov. External photoeffect in copper organoacetylenides. FTT, no. 3, 1975, 923-925.

407. Suptitz, P. and I. Willert. Diffusion of gold and silver in amorphous As_2Se_3. PhSS(a), v. 28, no. 1, 1975, 223-226.

408. Sushkov, V.P. and L. A. Shchepetilova. Volume degradation of photoluminescence intensity in gallium arsenide. FTP, no. 4, 1975, 739-741.

409. Sviridov, I. F., and V. A. Presnov. Effect of hydrostatic pressure on ionization energy of donor levels in n-type gallium arsenide. FTP, no. 3, 1975, 445-449.

410. Sviridov. I. F. and V. A. Presnov. Piezoethermal emf in deformed p-GaAs samples. IVUZ Fiz, no. 2, 1975, 105-110.

411. Timofeyevy, O. A., and V. N. Lomasov. Drift mobility of charge carriers in polycrystalline layers of lead oxide. FTT, no. 5, 1975, 1505-1507.

412. Timoshin, I. A ., O. B. Pavlov, K. N. Mamedov and A. F. Mikheyenkov. Isothermal dissociation pressure of saturated vapor over the variable composition phases of the Zn-S-Se quasibinary system. ZhFKh, no. 4, 1975, 1039 1040.

413. Tiptsova-Yakovleva, V. G., A. M. Andreychuk, and Yu. A. Figel'son. The method of layer-by-layer determination of the composition of $Cd_xHg_{1-x}Te$ crystals with the aid of chemical polishing-etching of the surface. NM, no. 5, 1975, 852-855.

414. Tokarev, Ye. F., I. B. Kobyakov, I. P. Kuz'mina, A. N. Lobachev and G. S. Pado. Elastic, dielectric and piezoelectric properties of zincite in 4.2-800°K temperature interval. FTT, no. 4, 1975, 980-986.

415. Tsitsina, N. P., A. P. Fadeyeva, Ye. Ye. Vdovkina, N. S. Baryshev, and I. S. Aver'yanov. Effect of low-temperature annealing on the properties of InSb. NM, no. 5, 1975, 835-838.

416. Ufimtsev, V. B., A. N. Krestovnikov, V. V. Yegorkin, M. S. Mirgalovskaya, M. R. Raukhman and N. G. Sorokina. Behavior of Zn in InSb according to the results obtained in studying thermodynamic properties of InSb-Zn solid solutions. NM, no. 1, 1975, 37-40.

417. Ugay, Ya. A., O. B. Yatsenko, N. V. Maksimenkov, and Ye. M. Averbakh. Preparation of Pbs and CdS films from the aqueous solution of thiourea. NM, no. 5, 1975, 947.

418. Uskov, V. A., V. P. Sorvina and A. B. Fedotov. Effect of complex formation on diffusion of Co in GaAs. NM, no. 6, 1975, 1012-1015.

419. Vakulenko, O. V. and S. G. Kibicheva. IR absorption by free electrons and their mobility in indium arsenide. Visnyk. Kyyiv universytet. ser fiz, no. 15, 1974, 15-19, 117. (RZhElektr, 4/75, no. 4B63)

420. Valyashko, Ye. G., T. B. Pleskacheva and N. D. Tyapkina. Effect of heat treatment on electric parameters and impurity photoconductivity in p-InSb. NM, no. 5, 1975, 1020-1025.

421. Varfolomeyev, A. V., R. P. Seysyan, and R. N. Yakimova. Observation of exciton structure of the fundamental absorption edge in indium arsenide crystals. FTP, no. 4, 1975, 804-805.

422. Vasil'yev, V. A., B. T. Kolomiyets, T. N. Mamontova and G. Khr. Ivanov. Radiative recombination in Ge_2S_3, Ge_2Se_3, and Ge-Pb-S glassy semiconductors. ZhETF P, v. 21, no. 3, 1975, 183-186.

423. Vateva, E. and I. Georgiyeva. The double injection method of determining a parameter of fast recombination centers in A^2B^6 compounds. DAN Bulg, v. 28, no. 6, 1975, 743-745.

424. Verner, V. D. and D. K. Nichugovskiy. Interaction energy of substitutional impurities in gallium arsenide. FTT, no. 4, 1975, 1154-1156.

425. Verner, V. D., D. K. Nichugovskiy and V. V. Paramonov. Electron diffusion scattering due to interaction of tellurium impurity atoms in gallium arsenide. FTT, no. 5, 1975, 1384-1387.

426. Veys, A. N., V. I. Golubeva and Yu. I. Ukhanov. Study of the Faraday effect in n-PbTe. FTP, no. 1, 1975, 176-178.

427. Viktora, B. Measuring electrical parameters of GaP epitaxial films at low temperatures. TESLA electron. v. 7, no. 4, 1974, 107-115. (RZhElektr, 4/75, no. 4B71)

428. Vinogradova, M. N., V. I. Tamarchenko, and L. V. Prokof'yeva. Parameters of a complex valence band and special features of conduction in p-PbTe. FTP, no. 3, 1975, 483-487.

429. Vitrikhovskiy, N. I., A. A. Kipen', O. V. Mykhas'kiv, and G. V. Plyatsko. Energy structure of CdS_xTe_{1-x} mixed single crystals. FTP, no. 6, 1975, 1193-1195.

430. Vityuk, N. V. and V. V. Mikho. Temperature behavior of an electroluminescence excitation level in anthracene films. IVUZ Fiz, no. 5, 1975, 120-122.

431. Vityuk, N. V., A. P. Fedchuk and V. V. Mikho. Anomalous switching effect and polarization mechanism of memory in anthracene-Aluminum oxide film structure. FTT, no. 3, 1975, 951-953.

432. Vlasenko, N. A., S. F. Timashev, V. S. Khomchenko, and M. M. Chumachkova. Field and temperature dependences of Franz-Keldysh shift of emission band in electroluminescent ZnS:Cu, Cl films. UFZh, no. 4, 1975, 662-666.

433. Vlasova, R. M., Yu. G. Nurullayev, L. D. Rozenshteyn, V. N. Semkin, S. K. Kosimi, Kh. S. Karimov, and V. D. Yermakova. The dielectric-metal phase transition in quasi-one-dimensional crystals of TCNQ(TEA+(TCNQ)$_2$) ionic radical salts. FTT, no. 4, 1975, 1169-1171.

434. Vodenicharova, M. The mechanism of electrical conductivity in organic polymer semiconductor thin films. PSS(a), v. 28, no. 1, 1975, 263-268.

435. Voprosy fiziki poluprovodnikov i dielektrikov (elektricheskiye, opticheskiye i lyuministsentnyye svoystva). [Problems of physics of semiconductors and dielectrics (electrical, optical and luminescence properties)]. Kursk Gos. Ped. institut. Nauchnyye trudy, no. 15, (108), Belgorod, 1974, 91 p. (RZhElektr, 1/75, no. 1B11 K).

436. Vorobkalo, F. M., K. D. Glinchuk, and V. F. Kovalenko. Temperature dependence of the direct gap width in $Al_xGa_{1-x}As$ solid solutions. FTP, no. 5, 1975, 998-1001.

437. Vorob'yeva, N. V., Yu. V. Vorob'yev, Yu. I. Karkhanin, and N. G. Fomin. The nature of recombination instability of electric current in gallium arsenide compensated by chromium. FTP, no. 6, 1975, 1053-1058.

438. Vovsi, A. I. and L. P. Strakhov. Light-induced variations of the surface potential of cadmium telluride films. FTP, no. 4, 1975, 771-774.

439. Vsesoyuznaya konferentsiya. Fizicheskiye protsessy v getero-perekhodakh, Kishinev, 30 okt. -1 noyabrya 1974 g. Tezisy [All-Union Conference on physical processes in heterojunctions Kishinev, 30 Oct - 1 Nov., 1974. Theses]. Kishinev, 1974, 160 p. (RZhElektr, 5/75, no. 5B3 K)

440. V Vsesoyuznaya konferentsya po khimicheskoy svyazi v poluprovodnikakh i polumetallakh. 12-14 Noyabrya 1974 g. Tezisy dokl. [The 5th All-Union Conference on Chemical Bonds in Semiconductors and Semimetals. 12 - 14 Nov., 1974. Theses]. Minsk, 1974, 152 p. (RZhElektr, 4/75, no. 4B9 K)

441. Yaremenko, N. G. Conduction in heavily compensated n-InSb at low temperatures. FTP, no. 5, 1975, 840-846.

442. Yasnopol'skiy, N. L, A. P. Balashova, V. M. Turchinskiy, N. S. Lozhkina and L. S. Telegina. Secondary electron emission from GaP and GaAs layers activated by cesium and oxygen. RiE, no. 1, 1975, 150-154.

443. Yeliseyev, P. G. The First All-Union Conference on Physical Processes in Heterojunctions. Kvantovaya elektronika, no. 3, 1975, 623-627.

444. Yemel'yanenko, O. V., K. G. Masagutov, D. N. Nasledov, and I. N. Timchenko. Hopping conduction via impurities in n-InP. FTP, no. 3, 1975, 503-507.

445. Yemel'yanov, A. V., A. V. Nikitin, V. N. Timofeyev and A. N. Shokin. The nature of products of gallium arsenide thermal oxidation. Krist, no. 3, 1975, 611-614.

446. Yershov, O. S. and M. M. Shul'ts. Vitrification and electric conductivity of materials in the $MnO(Mn_2O_3$ - $Fe_2O_3(FeO)$ - SiO_2 system. NM, no. 2, 1975, 318-322.

447. Yershov, O. S., A. M. Pisarevskiy, S. Ye. Volkov, and M. M. Shul'ts. Memory effect on electric properties of ferrosilicate glasses. NM, no. 5, 1975, 939-942.

448. Yevstropov, V. V., A. N. Imenkov, T. P. Lideykis, B. V. Tsarenkov, Yu. M. Shernyakov, and Yu. P. Yakovlev. On the electroluminescence of GaSb epitaxial p-n structures. FTP, no. 6, 1975, 1123-1127.

449. Yudin, S. G., I. S. Averiyanov, Yu. G. Belashov, and I. M. Nesmelova. Homogeneity of single crystals of $Cd_xHg_{1-x}Te$ solid solutions. NM, no. 1, 1975, 171-172.

450. Yunovich, A. E., V. P. Ten, M. S. Fedorov, and A. P. Khramtsov. Induced radiation of lead-chalcogenide thin films and photoexcitation. FTP, no. 5, 1975, 904-906.

451. Zakharov, V. P., I. F. Kopinets, I. M. Migolinets, I. M. Protas, and D. V. Chepur. Preparation, composition and properties of amorphous films of complex chalcohalogenide semiconductors. NM, no. 4, 1975, 626-628.

452. Zargarova, M. I., K. Sh. Kakhramanov, and R. M. Roshal'. The PbS-Sb system. NM, no. 6, 1975, 1138-1139.

453. Zavertannaya, L. S. and A. L. Rvachev. Current-voltage characteristic and photoconductivity of cadmium sulfide compensated single crystals. IN: Dielektriki poluprovodniki. Mezhved. nauch. Sb., no. 6, 1974, 18-26. (RZhElektr, 1/75, no. 1B361).

454. Zharov, S. N. and A. V. Nekrasov. Shift of the intrinsic absorption edge and defect generation in cadmium sulfide thin films. IVUZ Fiz, no. 3, 1975, 160.

455. Zhdanova, V. V., B. F. Gruzinov, P. P. Konstantinov, Ye. Ya. Lev and L. M. Sysoyeva. The temperature of phase transition in GeTe base solid solutions. NM, no. 2, 1975, 365-366.

456. Zhukov, E. G., O. I. Dzhaparidze and S. A. Dembovskiy. Phase diagram of the As_2S_3 - Se system. NM, no. 4, 1975, 739-740.

457. Zigel', V. V. and G. M. Orlova. Low-temperature heat capacity of $GeSe_x$ glasses. ZhPKh, no. 4, 1975, 756-761.

458. Zonshay, Ye. M. and K. Ya. Shtivel'man. Relationship between composition density and concentration of defects in $PbSe_xS_{1-x}$. NM, no. 4, 1975, 634-636.

459. Zot'yev, B. P. and Ye. V. Ivanov. Voltage-current characteristics of GaAs films in a quantized magnetic field. IVUZ Fiz, no. 5, 1975, 50-54.

460. Zot'yev, B. P., Ye. V. Ivanov, and A. F. Kravchenko. Nonlinearity of current in n-GaAs films in a weak electric and a quantizing magnetic field. FTP, no. 1, 1975, 158-160.

461. Zubrinov, I. I. and D. V. Sheloput. Effect of acousto-thermal focusing of laser beam in chalcogenide glasses and proustite. FTT, no. 3, 1975, 944-945.

462. Zverev, L. P., G. M. Min'kov, and N. K. Sumin. Heating of electrons in GaAs at low temperatures. FTP, no. 4, 1975, 767-769.

463. Zykov, A. M., and B. Ye. Samorukov. Behavior of the IV-group elements in gallium phosphide. NM, no. 5, 1975, 819-823.

464. Zykov, A. M., and B. Ye. Samorukov. Electric properties of p-type GaP. FTP, no. 3, 1975, 535-537.

Part III. Composite Materials

465. Bakarinova, V. I. Third All-Union Conference on composite materials. FiKhOM, no. 3, 1975, 158-159.

466. Baranov, V. G., V. V. Krenev and S. Ya. Frenkel'. Superstrong fibers of polyethylene. FTT, no. 5, 1975, 1550-1552.

467. Bolotin, V. V. Problems on the mechanics of composite polymer materials. MP, no. 1, 1975, 126-133.

468. Bugakov, I. I., G. N. Spiridovich and V. L. Fomin. Creep of the soft polymer elements of compound bodies under cyclic temperatures. VLU, Mat., mekh. i astron, no. 2, 1975, 78-84.

469. Bulanov, V. N., A. V. Vasi'yev, I. N. Frantsevich and V. Ya. Shevchenko. Fragmentation of heat-protective material surfaces in the process of ablation. DAN SSSR, v. 220, no. 3, 1975, 571-574.

470. Dushin, M. I., I. G. Zhigun, Ya. D. Aerasin, Yu. N. Ivonin and R. V. Raikov. Effect of application of high-modulus and hollow fibers in fiberglass-reinforced plastics with a spatial cross-linking pattern. MP, no. 3, 1975, 414-420.

471. Eskin, E. A., A. S. Petrov, V. V. Vengzhen and Yu. M. Borisenko. Characteristics of weakening mechanisms of heated reinforced plastics. PP, no. 4, 1975, 76-79.

472. Fedoseyev, D. V., B. V. Deryagin, I. G. Varshavskaya, and A. V. Lavrent'yev. Growing graphite whiskers. DAN SSSR, v. 221, no. 1, 1975, 149-152.

473. Fokin, A. G. and T. D. Shermergor. Effective elastic moduli of anisotropic multilayered composite materials. MP, no. 3, 1975, 408-413.

474. Galushchak, O. V., V. V. Lushchik and S. V. Yur'yev. Failure of epoxy polymers in surface-active media. FKhMM, no. 1, 1975, 110-112.

475. Grigor'yev, K. M., V. I. Storozhev, V. N. Suchkov and I. V. Kozhevnikov. The effect of reinforcement mode on strength of AG-4S glass-reinforced plastic. IN: Sb. Dinamika, prochnost' i dolgovechn. detaley mashin, no. 3, 1974, 77-85. Izhevsk, (RZh Mekh, 5/75, no. 5V1646).

476. Gromov, V. G. Dynamic criterion of stability and supercritical behavior of flexible viscoelastic bodies under thermal load. DAN SSSR, v. 220, no. 4, 1975, 805-808.

477. Gruznova, T. A., M. L. Kerber, M. S. Akutin, N. V. Afanas'yev, T. G. Sokolovskaya, N. G. Spiridonova and G. P. Zhmurko. Molded fiber glass-reinforced material on a modified phenol-formaldehyde oligomer base. Plast. massy, no. 2, 1975, 41-43.

478. Gunyayev, G. M., L. P. Kobets, M. A. Kuznetsova and N. V. Polyakova. Sizing of high-modulus carbon fibers. Plast. massy, no. 4, 1975, 58-61.

479. Gur'yev, A. V., Ya. A. Gokhberg and V. I. Fedorov. Determining strength and plasticity characteristics of multi-layered composites. ZL, no. 5, 1975, 601-604.

480. Isakhanov, G. V., V. V. Vengzhen and V. K. Fedchuk. Regularity in weakening of reinforced plastics under one-sided heating and bending. PP, no. 3, 1975, 47-49.

481. Kanovich, M. Z., S. L. Roginskiy and V. I. Natrusov. The effect of geometry of reinforcing fibers and their packing on strength of glass fiber-reinforced plastics. Plast. massy, no. 2, 1975, 69.

482. Khait, Ye. B. Dynamics of fiber destruction in reinforced material. DAN SSSR, v. 222, no. 3, 1975, 572-574.

483. Kilin, V. S., Ye. M. Cherednik, I. N. Shcheglova, V. S. Ostrovskiy and V. S. Dergunova. Resistance to oxidation of carbon fibers with protective coating. Por Met, no. 2, 1975, 44-47.

484. Kobets, L. P. Investigation of the stability of physical and mechanical properties of carbon fibers. I. Dependence of Young modulus upon the cross-section area of a fiber. MP, no. 3, 1975, 430-436.

485. Kolgadin, V. A. Thermal stresses in laminated glass-reinforced plastics. MP, no. 2, 1975, 373.

486. Kovalev, V. P., V. K. Kramar and G. L. Baranov. Determination of strains in fiberglass-reinforced plastic articles, using microwaves. 1. Investigation of anisotropic properties of glass-reinforced plastics in the microwave region. MP, no. 3, 1975, 533-540.

487. Kurilenko, A. I. Mechanical properties of multicomponent polymer materials. DAN SSSR, v. 220, no. 5, 1975, 1115-1118.

488. Levin, V. M. Determination of effective elastic moduli of composite materials. DAN SSSR, v. 220, no. 5, 1975, 1042-1045.

489. Lipatov, Yu. S., A. Ye. Nesterov, L. M. Sergeyeva, L. V. Karabanova, and T. D. Ignatova. Thermodynamics of mutually penetrating polymer networks. DAN SSSR, v. 220, no. 3, 1975, 637-640.

490. Lipatov, Yu. S., V. F. Rosovitskiy and V. F. Babich. The effect of filler on relaxation time spectra of filled polymer. DAN SSSR, v. 220, no. 6, 1975, 1368-1371.

491. Lukoshevichyus, R. S., R. B. Rikards, G. A. Teters and I. K. Tsypinas. Synthesis of optimal reinforced-plastic cylindrical shells with elastic core under buckling constraints. MP, no. 2, 1975, 285-293.

492. Malyutin, I. S. and A. G. Tarasova. Stability of a laminated cylindrical shell with transversal isotropic core under axial compression. MP, no. 3, 1975, 477-481.

493. Nurusberg, V. L., and R. B. Rikards. Creep buckling of cylindrical shells with viscoelastic core under axial compression. MP, no. 2, 1975, 306-310.

494. Perepelkin, K. Ye., V. V. Korshak, and V. I. Kasatochkin. Estimate of ultimate mechanical properties of a carbyne carbon chain polymer. DAN SSSR, v. 220, no. 6, 1975, 1376-1379.

495. Polilov, A. N., and Ye. I. Stepanychev. The effect of stress concentration on strength of orthogonally-reinforced polymers. Mashinovedeniye, no. 1, 1975, 70-74. (R ZhMekh, 5/75, no. 5V1642)

496. Ponomar', V. V. and A. N. Yagubets. Features of electrochemical coating of continuous graphitic carbon fibers. IAN Mold SSR, no. 2, 1975, 76-80.

497. Regel', V. R., O. F. Pozdnyakov and A. V. Amelin. Mass-spectrometric investigation of the thermal and mechanical degradation of polymers. Review. MP, no. 1, 1975, 16-32.

498. Revyako, M. M., A. N. Sokolov and V. I. Razvenkov. Stabilization of fiberglass-filled polyethylene. ZhPKh, no. 3, 1975, 697-699.

499. Rikards, R. B., and G. A. Teters. Optimization of cylindrical shells of composite material with viscoelastic core under axial compression. MP, no. 3, 1975, 442-446.

500. Sandalov, A. V. and M. Z. Medvedev. The effect of certain structural parameters on strength and stiffness of reinforced plastics under interlayer shear. MP, no. 2, 1975, 258-262.

501. Sandalov, A. V., M. Z. Medvedev, V. F. Zinchenko, and S. N. Belova. Possibility of diagnostics of strength and stiffness of laminated orthogonally reinforced plastics under inter-layer shear. MP, no. 3, 1975, 566-568.

502. Sandalov, A. V., V. A. Leyt, and M. Z. Medvedev. Possibility of using light transmission for non-destructive control of reinforced plastics. MP, no. 3, 1975, 563-565.

503. Sarkisyan, N. Ye. Characteristics of heating SVAM glass-reinforced plastic during testing for multi-cycle fatigue. MP, no. 3, 1975, 571.

504. Savitskiy, G. M. and B. N. Savelova. A method of separating creep into components in glass-reinforced plastics. Sb. trudov. Leningrad. inzh-stroit. institut, no. 105, 1974, 102-108. (RZhMekh, 5/75, no. 5V1648)

505. Shermergor, T. D., and Yu. M. Agrikov. Temperature dependence of specific electric resistance of carbon fibers. NM, no. 4, 1975, 766-768.

506. Shustova, O. A. and G. P. Gladyshev. Mechanism of inhibited thermooxidative destruction of thermostable polymers. DAN SSSR, v. 221, no. 2, 1975, 399-401.

507. Solonenko, V. R. Response of shallow glass-reinforced spherical shells under non-stationary loading. MP, no. 2, 1975, 311-314.

508. Stepanenko, N. D. and B. N. Koveshnikov. Statistical characteristics of logarithmic decrements of glass-reinforced plastic vibrations. MP, no. 3, 1975, 568-570.

509. Strelyayev, V.S . and G. G. Soseliya. Fatigue curves of EF-32-301 fiberglass laminate under asymmetric cycling. Trudy. Nauchn-issl. institut grazhd. aviatsii, no. 104, 1974, 28-33. (RZhMekh, 5/75, no. 5V1651)

510. Strelyayev, V. S. and L. L. Sachkovskaya. Influence of the deformation rate on shear fracture toughness characterics of 27-63 C glass-reinforced plastic. MP, no, 3, 1975, 557-560.

511. Tarnopol'skiy, Yu. M. Thick-walled wound fibrous composite structures. MP, no. 1, 1975, 134-144.

512. Teters, G. A., and R. B. Rikards. Initial imperfections and creep buckling modes of polymer cylindrical shells under prolonged loading. MP, no. 1, 1975, 145-152.

513. The Second All-Union Conference on Growth Kinetics of Whiskers and Films (Voronezh, June 1974). IVUZ Fiz, no. 2, 1975, 152.

514. Tret'yachenko, G. N., V. S. Dzyuba and V. A. Tokarskiy. Study of gas pressure distribution in a nonuniformly heated reinforced plastic under one-sided pressure. PP, no. 5, 1975, 27-29.

515. Tumanov, A. T. Composite materials of the future. VAN, no. 3, 1975, 37-44.

516. Tumanov, A. T., G. M. Gunyayev, V. G. Lyutsau, and Ye. I. Stepanychev. Structure, properties and testing of carbon fiber reinforced plastics. MP, no. 2, 1975, 258-257.

517. Tutan, M. Ya. and A. G. Adamovich. Prognostic of failure processes in fiberglass-reinforced plastics by seismoacoustic technique. 3. Investigation of the dependence of acoustic emission curves in f. g. r. plastics upon the loading rate and temperature during uniaxial tension. MP, no. 2, 1975, 370-372.

518. Umanskiy, Z. S., D. M. Karpinos, L. I. Tuchinskiy, G. V. Bilida, A. Ye. Babenko, Yu. B. Askochenskiy and G. E. Cholovskiy. Certain characteristics of deformation of carbon-reinforced plastics. PP, no. 6, 1975, 70-73.

519. Vil'davskiy, Yu. M. Deformation and stress in reinforcement of fiberglass plastics during manufacture of pre-stressed glass-reinforced polymer-concrete structures. IN: Sb. Simpozium po stekloplastik. armature, 1974. Minsk, 1974, 89-94. (RZhMekh, 5/75, no. 5V1644).

520. Vinogradov, O. S., V. N. Zakharov and V. N. Mozhin. The effect of asymmetry of cyclic loading on strength of fiber glass-reinforced plastics. Plast. massy, no. 2, 1975, 40-41.

521. Vinogradova, L. M., Z. A. Yefremova, A. Ya. Korolev, I. B. Mitrofanov, and A. P. Karpov. High-strength sheet material on a base of oriented polyethyleneterephthalate film. FKhMM, no. 2, 1975, 91-93.

522. Yengalychev, S. A. and N. A. Platonov. Theoretical basis for optimization of specimen shape for testing reinforced plastics in the planar stressed state. IN: Sb. Dinamika, prochnost' i dolgovechn. detaley mashin, no. 3, 1974, 67-76. Izhevsk (RZhMekh, 5/75, no. 5V1655).

523. Zelenev, Yu. V. and G. A. Andrikson. All-Union conference on prognosis of exploitation properties of polymer materials. MP, no. 3, 1975, 573.

Part IV. High-temperature Ceramics

524. Abzgil'din, F. Yu., R. A. Amirov and A. Kh. Biglov. Refractory body. Authors' Certificate no. 404816, published 9 July 1974. (RZhKh 19M, 5/75, no. 5M67 P).

525. Akishev, A. Kh. and S. M. Zubakov. Vysokoplotnyye periklazovyye ogneupory (High-density periclase refractories). Institut metallurgii i obogashcheniya AN KazSSR. Deposit at VINITI no. 2254-74, 14 Aug. 1974, 7p. (RZhKh 19M, 1/75, no. 1M73 Dep.).

526. Akishev, A. Kh., S. M. Zubakov and N. V. Kirchanova. Plotnyye periklazovyye izdeliya melkokristallicheskogo stroyeniy. iz karbonata magniya s dobavkoy khrospinelida. (Dense, fine-crystalline periclase products from magnesium carbonate with chromospinelide additive). Institut metallurgii i obogashcheniya AN KazSSR. Deposit at VINITI no. 2255-74, 14 Aug. 1975, 6p. (RZhKh 19M, 1/75, no. 1M76 Dep.).

527. Antonov, G. I., V. S. Shapovalov, V. P. Nedosvitiy and G. N. Shcherbenko. A body for an electrically fused refractory. Authors' Certificate no. 423776, published 25 Sept. 1974. (RzhKh 19M, 8/75, no. 8M47 P).

528. Antonov, G. I., V. S. Shapovalov, V. P. Nedosvitiy and G. N. Shcherbenko. A body for an electrically fused refractory. Authors' Certificate no. 425878, published 7 Oct. 1974. (RZhKh 19M, 8/75, no. 8M53 P).

529. Avetikov, V. G., M. D. Bershandskaya, S. M. Bystritskaya, V. K. Yeroshev, Z. I. Kolokol'nikova and L. A. Chibizova. A composition for metallizing ceramic products. Authors' Certificate no. 423783, published 25 Sept. 1974. (RZhKh 19M, 8/75, no. 8M34 P).

530. Barkhatov, L. S., D. N. Kagan, M. M. Kenisarin, V. Ya. Chekhovskoy and E. E. Shpil'rayn. Liquid-solid equilibrium temperature of beryllium oxide. TVT, no. 3, 1975, 525-530.

531. Belousenko, A. P., I. I. Spivak, V. P. Vyskrebtsev, O. F. Velina and V. D. Lazarenko. Effect of modifying admixtures on the structure of yttria ceramics. Ogneupory, no. 1, 1975, 53-57.

532. Borisenko, V. A. and V. P. Krashchenko. A unit for testing high-temperature strength of materials, using microhardness and tension-compression methods. Problemy prochnosti, no. 1, 1975, 106-110.

533. Bron, V. A., I. A. Stepanova, V. A. Perepelitsyn and N. A. Mityushov. Effect of a gaseous medium on mineral formation in magnesia refractories. IN: Sb. Vliyaniye gaz. sredy na khim. reaktsii v proizvodstre silikat. materialov. Vil'nyus, 1974, 89-91. (RZhKh 19M, 11/75, no. 11M69).

534. Bron, V. A., V. A. Perepelitsyn, N. A. Mityushov and I. A. Stepanova. Effect of a gaseous medium on physicochemical conversions in fused periclase under heat. IN: Sb. Vliyaniye gaz. sredy na khim. reaktsii v proizvodstve silikat. materialov. Vil'nyus, 1974, 87-88. (RZhKh 19M, 11/75, no. 11M71).

535. Churakova, R. S. and Ye. P. Fedorova. Electrolytical corundum products obtained by slip casting. Vsesoyuznyy institut nauch-issled. i proekt. rabot ogneupornoy promyshlennosti. Trudy, no. 3(46), 1974, 54-61. (RZhKh 19M, 11/75, no. 11M 62).

536. Churakova, R. S., Ye. P. Fedorova, A. A. Borisenko and L. F. Yakovenko. Magnesia refractories obtained by slip casting. Vsesoyuznyy institut nauch-issled. i proekt. rabot ogneupornoy promyshlennosti. Trudy, no. 3(46), 1974, 77-88. (RZhKh 19M, 11/75, no. 11M70).

537. Cwen, A. A high-refractory ceramic for use in the channel of an MHD generator. Szklo i ceram., v. 25, no. 11, 1974, 337-340. (RZhKh 19M, 10/75, no. 10M85).

538. Degtyareva, E. V., I. S. Kaynarskiy and I. L. Boyarina. Weldability of corundum ceramic parts, using a diffusion technique, as a function of ceramic structure. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1. Moskva, 1974, 143-156. (RZhKh 19M, 4/75, no. 4M49).

539. Degtyareva, E. V., I. S. Kaynarskiy, N. V. Pisareva and I. I. Kabakova. Development of process engineering for a dense corundum refractory with enhanced thermal stability. Ogneupory, no. 2, 1975, 40-46.

540. Gavrish, A. M., B. Ya. Sakharevskiy and Ye. I. Zoz. Subsolidus structure of the HfO_2-ZrO_2-CaO system. DAN SSSR, v. 222, no. 6, 1975, 1343-1345.

541. Gavrish, A. M., B. Ya. Sukharevskiy, Ye. I. Zoz, N. V. Gun'ko and A. Ye. Solov'yeva. X-ray and petrographic studies of solid solutions of the ZrO_2-HfO_2-CaO system. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1, Moskva, 1974, 67-74. (RZhKh 19M, 4/75, no. 4M73).

542. German, V. O., Yu. P. Kukota and B. V. Parfenov. Testing of porous cermet electrodes protected by injection of nitrogen with a potassium additive. IN: Sb. Teplotekhn. problemy pryasnogo preobrazov. energii. Kiyev. Nauk. clumka, no. 5, 1974, 62-65. (RZh Elektrotech, 21F, 1/75, no. 1F56).

543. Glushkova, V. B., V. A. Krzhizhanovskaya, V. S. D'yakovskiy, and V. M. Abramova. Effect of HfO_2 dispersity on its interaction with Ln_2O_3. NM, no. 5, 1975, 964-965.

544. Gnesin, G. G. and G. S. Oleynik. Thermodynamic analysis of silicon carbide interaction with combustion products of organic fuels. IN: Sb. Voprosy MGD preobrazov. energii. Kiyev. Nauk. dumka, no. 1, 1974, 94-101. (RZh Elektrotech, 21F, 2/75, no. 2F16).

545. Gnesin, G. G., G. S. Oleynik and N. V. Lesovoy. Service test data on polycrystalline silicon carbide electrodes in the channel of an MHD generator. IN: Sb. Voprosy MGD preobrazov. energii. Kiyev. Nauk. dumka, no. 1, 1974, 101-107. (RZh Elektrotech, 21F, 2/75, no. 2F17).

546. Gnesin, G. G., L. A. Shipilova and G. S. Oleynik. Electric conductivity of polycrystalline silicon carbide. IN: Sb. Voprosy MGD preobrazov. energii. Kiyev. Nauk. dumka, no. 1, 1974, 84-94. (RZh Elektrotech, 21F, 2/75, no. 2F15).

547. Gorda, V. P. and Ye. A. Kuznetsov. Deposition of zirconium and niobium carbides from a three-component gas-vapor mixture. Vysokotemperaturnyye karbidy (High-temperature carbides). Kiyev, Izd-vo Naukova dumka, 1975, 19-28.

548. Grebenkina, V. G., V. N. Sorokin and Yu. P. Yusov. Carbide-base "slug" type composition resistors. Vysokotemperaturnyye Karbidy (High-temperature carbides). Kiyev. Izd-vo Naukova dumka, 1975, 169-173.

549. Grebenyuk, A. A., A. G. Karaulov and T. Ye. Sudarkina. Study of thermomechanical characteristics of refractories made from zirconia-base and magnesia-base materials of technical grade or chemically pure. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1. Moskva, 1974, 50-66. (RZhKh 19M, 4/75, no. 4M70).

550. Gropyanov, V. M., G. V. Drozdetskaya and L. V. Kozlovskiy. Strength characteristics of sintered corundum versus its porosity. Problemy prochnosti, no. 1, 1975, 94-96.

551. Ignatova, T. S., L. V. Uzberg and V. A. Perepelitsyn. Effect of a ZrO_2 admixture on properties of magnesia products. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1. Moskva, 1974, 74-93. (RZhKh 19M, 4/75, no. 4M64).

552. Kamenetskiy, A. B., V. D. Koksharov and I. D. Kashcheyev. Sintering and thermal stability of yttria products. Ural'skiy politekhnicheskiy institut. Trudy, no. 223, 1974, 22-25. (RZhKh 19M, 6/75, no. 6M82).

553. Kaminskiy, F. D., L. V. Kozlovskiy, L. R. Rodionova and A. Ya. Chebotarov. A composition for metallizing ceramics. Authors' Certificate no. 404818, published 9 July 1974. (RZhKh 19M, 8/75, no. 8M35 P).

554. Karaulov, A. G. and I. N. Rudyak. Sintering of zirconia with yttria. Ogneupory, no. 2, 1975, 54-58.

555. Karaulov, A. G. and N. M. Taranukha. A body for refractory products. Authors' Certificate no. 413124, published 30 May 1974. (RZhKh 19M, 2/75, no. 2M54 P).

556. Karaulov, A. G. and N. M. Taranukha. A body for refractory products. Authors' Certificate no. 421666, published 20 Aug. 1974. (RZhKh 19M, 7/75, no. 7M79 P).

557. Karpinos, D. M., V. M. Groshova, G. P. Orlova, Yu. L. Pilipovskiy, V. A. Golenevich, Yu. M. Shamatov and A. I. Gordiyenko. Cermet material. Authors' Certificate no. 420599, published 26 Aug. 1974. (RZhKh 19M, 12/75, no. 12M56 P).

558. Karpinos, D. M., V. M. Grosheva, N. D. Nazarenko and N. I. Vlasko. Refractory material. Authors' Certificate no. 400556, published 1 April 1974. (RZhKh 19M, 3/75, no. 3M40 P).

559. Karpinos, D. M., V. M. Grosheva, Yu. L. Pilipovskiy, V. A. Golenevich and Yu. M Shamatov. Ceramic material. Authors' Certificate no. 415247, published 21 June 1974. (RZhKh 19M, 7/75, no. 7M78 P).

560. Karpinos, D. M., V. N. Pavlikov, G. V. Yefimov, Ye. P. Mikhashchuk and S. G. Tresvyatskiy. Ceramic material. Authors' Certificate no. 408937, published 1 August 1974. (RZhKh 19M, 8/75, no. 8M77 P).

561. Kharitonov, F. Ya., Yu. G. Yesikov, A. I. Lebedev, M. Ye. Surkov and Yu. N. Khudov. Electrode material for an MHD generator, based on neodymium and dysprosium oxide-stabilized zirconia. TVT, no. 1, 1975, 230-232.

562. Kirdysheva, V. S., L. F. Mal'tseva and Ye. Ye. Kotlyar. Certain properties of NbC-WC alloys. Vysokotemperaturnyye karbidy (High-temperature carbides). Kiyev. Izd-vo Naukova dumka, 1975, 173-176.

563. Kunitskiy, Yu. A. Physical properties of some binary boride systems. IN: Sb. Voprosy MGD preobrazov. energii. Kiyev. Nauk. dumka, no. 1, 1974, 108-112. (RZh Elektrotech, 21F, 2/75, no. 2F18).

564. Kuznetsov, A-K. and P. A. Tikhonov. High-temperature refractory material. Authors' Certificate no. 414227, published 5 Aug. 1974. (RZhKh 19M, 9/75, no. 9M93 P).

565. Levitskiy, V. A., V. N. Chentsov, Yu. Khekimov and Ya. I. Gerasimov. Thermodynamics of binary oxide systems. 8. Thermodynamic stability of dysprosium tungstate (Dy_6WO_{12}) and dysprosium oxide interaction with tungsten and tungsten dioxide in vacuum. ZhFKh, no. 3, 1975, 596-600.

566. Makarov, V. N., Ya.V. Klyncharov, S. A. Suvorov and O. G. Gorchenkova. High-temperature refractory material. Authors' Certificate no. 417395, published 12 July 1974. (RZhKh 19M, 7/75, no. 7M77 P).

567. Mel'nik, M. T., N. N. Shapovalova and A. G. Mossur. Concrete of highest refractoriness. Vestnik. Khar'kov. politekhnicheskiy institut, no. 98, 1974, 51-52. (RZhKh 19M, 6/75, no. 6M85).

568. Nemets, I. I., A. I. Nesterov and V. T. Zagoskin. A charge for refractories. Authors' Certificate no. 419494, published 16 Aug. 1974. (RZhKh 19M, 9/75, no. 9M78 P).

569. Nikol'skaya, T. A. and R. G. Avarbe. Characteristics of vaporization of ternary solid solutions in vacuum. Vysokotemperaturnyye karbidy (High-temperature carbides). Kiyev, Izd-vo Naukova dumka, 1975, 58-64.

570. Ogorodnikov, V. V. and N. N. Sverdlik. Experimental study of densification and homogenization of dispersed mixtures in the TiC-ZrC pseudobinary system during sintering and hot forming. Vysokotemperaturnyye karbidy (High-temperature carbides). Kiyev. Izd-vo Naukova dumka, 1975, 112-118.

571. Oleynik, G. S. Activity mechanism of a silicon carbide polycrystalline electrode in the channel of an open-cycle MHD generator. IN: Sb. Teplotechn. problemy pryamogo preobrazov energii. Kiyev. Nauk. dumka, no. 5, 1974, 66-70. (RZh Elektrotech, 21F, 1/75, no. 1F55).

572. Ordan'yan, S. S. and V. I. Unrod. Interaction in the $ZrC-ZrB_2$ system. Por. metal, no. 5, 1975, 61-64.

573. Orlova, I. G., L. A. Dergoputskaya and I. S. Kaynarskiy. Corundum ceramics with reduced shrinkage during firing. Ogneupory, no. 6, 1975, 39-44.

574. Orlova, I. G., N. V. Gun'ko, A. I. Natsenko and I. S. Kaynarskiy. Phase composition and microstructure of corundum-base ceramics versus their thermal stability. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1 Moskva, 1974, 104-128. (RZhKh 19M, 4/75, no. 4M60).

575. Perepelitsyn, V. A., V. A. Bron, I. A. Stepanova and N. A. Mityushov. Characteristics of composition and microstructure of fused periclase. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1. Moskva, 1974, 93-104. (RZhKh 19M, 4/75, no. 4M63).

576. Podchernyayeva, I. A., V. S. Fomenko, L. N. Okhremchuk, N. I. Siman and Yu. A. Kunitskiy. Properties of electrode materials based on refractory compounds. IN: Sb. Stroyeniye, svoystva i primeneniye metallidov. Moskva, Nauka, 1974, 201-205. (RZh Elektrotech, 21F, 1/75, no. 1F53).

577. Poltavtseva, I. S., Yu. P. Kukota, F. I. Zakharov and G. V. Trunov. Porous cermet materials for electrodes with enhanced gas permeability. IN: Sb. Teplotekhn. problemy pryamogo preobrazov. energii. Kiyev. Naukova dumka, no. 5, 1974, 57-62. (RZh Elektrotech, 21F, 1/75, no. 1F54).

578. Poluboyarinov, D. N., M. R. Gordova, I. G. Kuznetsova and N. V. Zakharova. Sintering of AIN ceramics. NM, no. 1, 1975, 72-76.

579. Poluboyarinov, D. N., M. R. Gordova, I. G. Kuznetsova, I. P. Shalamova and V. A. Silayev. Technology and properties of aluminum nitride high-density products. Ogneupory, no. 6, 1975, 44-47.

580. Proizvodstvo spetsial'nykh ogneuporov. (Manufacture of special refractories). Tematicheskiy otraslevoy sbornik no. 1. Moskva, Metallurgiya, 1974, 215p. (RZhKh 19M, 3/75, no. 3M42 K).

581. Rabinkov, L. G. Combining unlike materials. IN: Sb. Proizvodstvo spetsial'nykh ogneuporov, no. 1. Moskva, 1974, 157-163. (RZhKh 19M, 4/75, no. 4M48).

582. Reshetnikov, A. M., R. A. Samokhina and G. A. Parilova. A composition for metallizing ceramics. Authors' Certificate no. 420600, published 26 Aug. 1974. (RZhKh 19M, 9/75, no. 9M68 P).

583. Rutman, D. S., Yu. M. Galkin, G. S. Matveychuk, Yu. S. Toropov and Yu. M. Polezhayev. Use of fusible eutectics for the activation of refractory compounds synthesis. DAN SSSR, v. 221, no. 2, 1975, 405-408.

584. Samsonov, G. V., L. A. Klachkov and I. I. Timofeyev. Thermal expansion of TiC, ZrC and NbC within the homogeneity regions. Vysokotemperaturnyye karbidy (High-temperature carbides). Kiyev, Izd-vo Naukova dumka, 1975, 46-48.

585. Samsonov, G. V., L. I. Prikhod'ko and N. I. Borshch. Obtaining nitride materials through nitriding of aluminum dodecaboride blanks. NM, no. 4, 1975, 657-660.

586. Samsonov, G. V., T. V. Dubovik, T. V. Andreyeva, V. F. Lyash and T. I. Serebryakova. Refractory material. Authors' Certificate no. 380614, published 26 July 1973. (RZhKh 19M, 3/75, no. 3M47 P).

587. Sazonova, M. V., I. B. Ban'kovskaya, and A. A. Appen. Dense dielectric coatings for porous magnesia ceramics. ZhPKh, no. 4, 1975, 822-826.

588. Shevchenko, A. V., V. A. Dubok, L. M. Lopato and L. I. Tyutkalo. A high-temperature refractory material. Authors' Certificate no. 414228, published 6 June 1974. (RZhKh 19M, 3/75, no. 3M64 P).

589. Shevchenko, A. V., V. A. Dubok, L. M. Lopato and L. I. Tyutkalo. A high-temperature refractory material. Authors' Certificate no. 414229, published 5 Aug. 1974. (RZhKh 19M, 9/75, no. 9M92 P).

590. Sheyndlin, A. Ye., D. K. Burenkov, V. I. Zalkind, V. V. Kirilov, B. I. Rastegayev, G. L. Uspenskaya and B. Ya. Shumyatskiy Study of the insulating wall of an MHD channel in a continuous-duty generator. TVT, no. 1, 1975, 151-156.

591. Shvayko-Shvaykovskiy, V. Ye., E. K. Keler, A. I. Leonov, and V. P. Popov. Preparation of solid solutions with electron conductivity on a zirconium dioxide base. DAN SSSR, v. 222, no. 6, 1975, 1350-1352.

592. Sozanski, A. Rare earth metal chromites. Szklo i ceram, v. 25, no. 10, 1974, 303-307. (RZhKh 19M, 7/75, no. 7M76).

593. Strakhov, V. I., V. K. Novikov and L. P. Salova. Sintez, termo-mekhanicheskiye e elektricheskiye svoystva ogneuporov iz ZrO_2, stabilizirovannoy okislami RZE. (Synthesis, thermomechanical and electrical characteristics of ZrO_2 refractories stabilized with rare earths). Leningrad tekhnologicheskiy institut. Deposit at VINITI no. 379-75 Dep, 14 February 1975, 32p. (RZhKh 19M, 12/75, no. 12M88 Dep.).

594. Terekhovskiy, V. I. A charge for ceramic products. Authors' Certificate no. 408933, published 1 Aug. 1974. (RZhKh 19M, 9/75, no. 9M77 P).

595. Terekhovskiy, B. I., S. G. Tresvyatskiy, I. D. Barabanova, N. V. Lesovoy and I. V. Kholodenko. Test data on the ceramic lining of a pilot MHD generator. IN: Sb. Voprosy MGD preobrazov. energii. Kiyev. Nauk. dumka, no. 1, 1974, 57-63. (RZh Elektrotech, 21F, 2/75, no. 2F12).

596. Tikhonov, P. A., A. K. Kuznetsov, E. K. Keler and M. V. Kravchinskaya. Formation stability and electric properties of fluorite-like solid solutions in the ZrO_2-CaO-Y_2O_3 system. NM, no. 4, 1975, 690-694.

597. Tresvyatskiy, S. G., B. I. Terekhovskiy and I. D. Barabanova. A composition for cementing of refractories. Authors' Certificate no. 423775, published 11 Sept. 1974. (RZhKh 19M, 8/75, no. 8M76 P).

598. Voytovich, R. F. and E. A. Pugach. High-temperature oxidation of IVB and VB transition metal carbides. Vysokotemperaturnyye karbidy (High-temperature carbides). Kiyev. Naukova dumka, 1975, 143-156.

599. Zholudov, Ya. S., B. I. Terekhovskiy, A. A. Miroshnichenko and G. F. Gornostayev. Development and study of a composite insulating wall for an MHD channel. IN: Sb. Teplotekhn. problemy pryamogo preobrazov. energii. Kiyev, Naukova dumka, no. 5, 1974, 71-78. (RZh Elektrotekh. 21F, 1/75, no. 1F52).

600. Zhukovskaya, A. Ye. and V. I. Strakhov. The effect of the Y_2O_3 to Al_2O_3 molar ratio on kinetics of yttrium aluminate synthesis. ZhPKh, no. 5, 1975, 1125-1127.

601. Zubakov, S. M. and A. Kh. Akishev. Izucheniye protsessov spekaniya periklazokhromshpinelidnykh okisnykh ogneuporov, poluchennykh iz kvazizernistykh mass. (Study of sintering periclase-chromospinelide oxide refractories obtained from a quasigranular body). Institut metallurgii i obogashcheniya AN KazSSR. Deposit at VINITI no. 2252-74, 14 Aug. 1974, 6p. (RZhKh 19M, 1/75, no. 1M75 Dep.).

602. Zubakov, S. M. and A. Kh. Akishev. Plotnyye periklazovyye ogneupory povyshennoy termicheskoy stoykosti. (Dense periclase refractory with improved thermal stability). Institut metallurgii i obogashcheniya AN KazSSR. Deposit at VINITI no. 2253-74, 14 Aug. 1974, 10p. (RZhKh 19M, 1/75, no. 1M72 Dep.).

603. Zykova, N. M., T. S. Kurakina and A. A. Safonov. Study of the oxide ceramic electrode area affected by electric discharge in a plasma of combustion products. TVT, no. 3, 1975, 630-633.

SOURCE ABBREVIATIONS

AiT	-	Avtomatika i telemekhanika
APP	-	Acta physica polonica
DAN ArmSSR	-	Akademiya nauk Armyanskoy SSR. Doklady
DAN AzSSR	-	Akademiya nauk Azerbaydzhanskoy SSR. Doklady
DAN BSSR	-	Akademiya nauk Belorusskoy SSR. Doklady
DAN SSSR	-	Akademiya nauk SSSR. Doklady
DAN TadSSR	-	Akademiya nauk Tadzhikskoy SSR. Doklady
DAN UkrSSR	-	Akademiya nauk Ukrainskoy SSR. Dopovidi
DAN UzbSSR	-	Akademiya nauk Uzbekskoy SSR. Doklady
DBAN	-	Bulgarska akademiya na naukite. Doklady
EOM	-	Elektronnaya obrabotka materialov
FAiO	-	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana
FGiV	-	Fizika goreniya i vzryva
FiKhOM	-	Fizika i khimiya obrabotka materialov
F-KhMM	-	Fiziko-khimicheskaya mekhanika materialov
FMiM	-	Fizika metallov i metallovedeniye
FTP	-	Fizika i tekhnika poluprovodnikov
FTT	-	Fizika tverdogo tela
FZh	-	Fiziologicheskiy zhurnal
GiA	-	Geomagnetizm i aeronomiya
GiK	-	Geodeziya i kartografiya
IAN Arm	-	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAN Az	-	Akademiya nauk Azerbaydzhanskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk

IAN B	-	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IAN Biol	-	Akademiya nauk SSSR. Izvestiya. Seriya biologicheskaya
IAN Energ	-	Akademiya nauk SSSR. Izvestiya. Energetika i transport
IAN Est	-	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika matematika
IAN Fiz	-	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya
IAN Fizika zemli	-	Akademiya nauk SSSR. Izvestiya. Fizika zemli
IAN Kh	-	Akademiya nauk SSSR. Izvestiya. Seriya khimicheskaya
IAN Lat	-	Akademiya nauk Latviyskoy SSR. Izvestiya
IAN Met	-	Akademiya nauk SSSR. Izvestiya. Metally
IAN Mold	-	Akademiya nauk Moldavskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk
IAN SO SSSR	-	Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya
IAN Tadzh	-	Akademiya nauk Tadzhiksoy SSR. Izvestiya. Otdeleniye fiziko-matematicheskikh i geologo-khimicheskikh nauk
IAN TK	-	Akademiya nauk SSSR. Izvestiya. Tekhnicheskaya kibernetika
IAN Turk	-	Akademiya nauk Turkmenskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh, i geologicheskikh nauk
IAN Uzb	-	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IBAN	-	Bulgarska akademiya na naukite. Fizicheski institut. Izvestiya na fizicheskaya institut s ANEB
I-FZh	-	Inzhenerno-fizicheskiy zhurnal

IiR	-	Izobretatel' i ratsionalizator
ILEI	-	Leningradskiy elektrotekhnicheskiy institut. Izvestiya
IT	-	Izmeritel'naya tekhnika
IVUZ Avia	-	Izvestiya vysshikh uchebnykh zavedeniy. Aviatsionnaya tekhnika
IVUZ Cher	-	Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya
IVUZ Energ	-	Izvestiya vysshikh uchebnykh zavedeniy. Energetika
IVUZ Fiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Fizika
IVUZ Geod	-	Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka
IVUZ Geol	-	Izvestiya vysshikh uchebnykh zavedeniy. Geologiya i razvedka
IVUZ Gorn	-	Izvestiya vysshikh uchebnykh zavedeniy. Gornyy zhurnal
IVUZ Mash	-	Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye
IVUZ Priboro	-	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye
IVUZ Radioelektr	-	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVUZ Radiofiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika
IVUZ Stroi	-	Izvestiya vysshikh uchebnykh zavedeniy. Stroitel'stvo i arkhitektura
KhVE	-	Khimiya vysokikh energiy
KiK	-	Kinetika i kataliz
KL	-	Knizhnaya letopis'
Kristall	-	Kristallografiya
KSpF	-	Kratkiye soobshcheniya po fizike

LZhS	-	Letopis' zhurnal'nykh statey
MiTOM	-	Metallovedeniye i termicheskaya obrabotka materialov
MP	-	Mekhanika polimerov
MTT	-	Akademiya nauk SSSR. Izvestiya. Mekhanika tverdogo tela
MZhiG	-	Akademiya nauk SSSR. Izvestiya. Mekhanika zhidkosti i gaza
NK	-	Novyye knigi
NM	-	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy
NTO SSSR	-	Nauchno-tekhnicheskiye obshchestva SSSR
OiS	-	Optika i spektroskopiya
OMP	-	Optiko-mekhanicheskaya promyshlennost'
Otkr izobr	-	Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki
PF	-	Postepy fizyki
Phys abs	-	Physics abstracts
PM	-	Prikladnaya mekhanika
PMM	-	Prikladnaya matematika i mekhanika
PSS	-	Physica status solidi
PSU	-	Pribory i sistemy upravleniya
PTE	-	Pribory i tekhnika eksperimenta
Radiotekh	-	Radiotekhnika
RiE	-	Radiotekhnika i elektronika
RZhAvtom	-	Referativnyy zhurnal. Avtomatika, telemekhanika i vychislitel'naya tekhnika
RZhElektr	-	Referativnyy zhurnal. Elektronika i yeye primeneniye

RZhF	-	Referativnyy zhurnal. Fizika
RZhFoto	-	Referativnyy zhurnal. Fotokinotekhnika
RZhGeod	-	Referativnyy zhurnal. Geodeziya i aeros"-yemka
RZhGeofiz	-	Referativnyy zhurnal. Geofizika
RZhInf	-	Referativnyy zhurnal. Informatics
RZhKh	-	Referativnyy zhurnal. Khimiya
RZhMekh	-	Referativnyy zhurnal. Mekhanika
RZhMetrolog	-	Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZhRadiot	-	Referativnyy zhurnal. Radiotekhnika
SovSciRev	-	Soviet science review
TiEKh	-	Teoreticheskaya i eksperimental'naya khimiya
TKiT	-	Tekhnika kino i televideniya
TMF	-	Teoreticheskaya i matematicheskaya fizika
TVT	-	Teplofizika vysokikh temperatur
UFN	-	Uspekhi fizicheskikh nauk
UFZh	-	Ukrainskiy fizicheskiy zhurnal
UMS	-	Ustalost' metallov i splavov
UNF	-	Uspekhi nauchnoy fotografii
VAN	-	Akademiya nauk SSSR. Vestnik
VAN BSSR	-	Akademiya nauk Belorusskoy SSR. Vestnik
VAN KazSSR	-	Akademiya nauk Kazakhskoy SSR. Vestnik
VBU	-	Belorusskiy universitet. Vestnik
VNDKh SSSR	-	VNDKh SSSR. Informatsionnyy byulleten'
VLU	-	Leningradskiy universitet. Vestnik. Fizika, khimiya
VMU	-	Moskovskiy universitet. Vestnik. Seriya fizika, astronomiya

ZhETF	-	Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhETF P	-	Pis'ma v Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhFKh	-	Zhurnal fizicheskoy khimii
ZhNiPFiK	-	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii
ZhNKh	-	Zhurnal neorganicheskoy khimii
ZhPK	-	Zhurnal prikladnoy khimii
ZhPMTF	-	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki
ZhPS	-	Zhurnal prikladnoy spektroskopii
ZhTF	-	Zhurnal tekhnicheskoy fiziki
ZhVMMF	-	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki
ZL	-	Zavodskaya laboratoriya