

Юрий Михайлович Гуфан



(25 июля 1940 — 18 сентября 2020)

Ушел из жизни доктор физико-математических наук, профессор Южного федерального университета (ЮФУ) Юрий Михайлович Гуфан. Он был выдающимся ученым и замечательным, высокопрофессиональным педагогом, наставником и учителем, воспитал достойную плеяду исследователей в области физики.

Юрий Михайлович окончил Ростовский государственный университет в 1962 году, в 1966 году - аспирантуру Института физических проблем АН СССР. С 1966 года работал в Институте физико-технических и радиотехнических измерений.

С 1972 года работал в Институте физики Ростовского государственного университета, затем в НИИ Физики ЮФУ. Стаж его работы в университете - более 50 лет. Преподавал дисциплины "Физика магнитных явлений", "Структурные фазовые переходы в наноматериалах", "Термодинамическая теория фазовых переходов". С 1991 года - профессор.

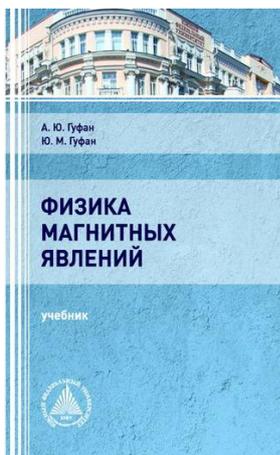


Юрий Михайлович занимался изучением фазовых переходов. В 1967 году защитил кандидатскую диссертацию "Нелокализованные спиновые плотности в антиферромагнетиках и смежные вопросы", а в 1983 году - докторскую диссертацию "Феноменологическая теория структурных фазовых переходов, описываемых сильно нелинейными флуктуационными потенциалами". Юрий Михайлович - автор трёх монографий и более 150 научных статей по теоретической физике. Подготовил 16 кандидатов и четырех докторов наук, был представителем Российского фонда фундаментальных исследований на Северном Кавказе.

<https://sfedu.ru/news/63654>

Учебник и монографии

1. А.Ю. Гуфан, Ю.М. Гуфан, Физика магнитных явлений. Учебник. Ростов-на-Дону-Таганрог: Изд-во Южного федерального ун-та, 2020.
2. Ю.М. Гуфан, В.П. Дмитриев, С.Б. Рошаль, В.И. Снежков, Фазы Ландау в плотноупакованных структурах. Сев.-Кавк. науч. центр высш. шк. Ростов-на-Дону: Изд-во Ростовского ун-та, 1990.
3. Ю.М. Гуфан, Структурные фазовые переходы. М.: Наука, 1982.
4. Ю.М. Гуфан, Термодинамическая теория фазовых переходов. Ростов-на-Дону: Изд-во Ростовского ун-та, 1982.



Избранные статьи

1. BOULBITCH, A; GUFAN, YM; KORZHENEVSKII, AL.
CRACK-TIP PROCESS ZONE AS A BIFURCATION PROBLEM
PHYSICAL REVIEW E 96(1), - (2017)
2. PASHCHENKO, AV; PASHCHENKO, VP; REVENKO, YF; PROKOPENKO, VK; SHEMYAKOV, AA; LEVCHENKO, GG; PISMENOVA, NE; KITAEV, VV; GUFAN, YM; SIL'CHEVA, AG; DYAKONOV, VP.
STRUCTURE, PHASE TRANSITIONS, MN-55 NMR, FE-57 MOSSBAUER STUDIES AND MAGNETORESISTIVE PROPERTIES OF LA0.6SR0.3MN1.1-XFEXO3
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 369, 122-126 (2014)
3. OSIPENKO, IA; KUKIN, OV; GUFAN, AY; GUFAN, YM.
MANY-ATOM INTERACTIONS IN THE THEORY OF HIGHER ORDER ELASTIC MODULI: A GENERAL THEORY
PHYSICS OF THE SOLID STATE 55(12), 2405-2412 (2013)
4. PASHCHENKO, AV; PASHCHENKO, VP; REVENKO, YF; PROKOPENKO, VK; MAZUR, AS; TURCHENKO, VA; BURKHOVETSKII, VV; SIL'CHEVA, AG; KONSTANTINOV, PP; GUFAN, YM.
STRUCTURAL AND MAGNETIC HETEROGENEITIES, PHASE TRANSITIONS, MN-55 NMR, AND MAGNETORESISTIVE PROPERTIES OF LA0.6SR0.3-XBIXMN1.1O3
PHYSICS OF THE SOLID STATE 55(2), 321-325 (2013)
5. GUFAN, AY; KUKIN, OV; GUFAN, YM; SMOLIN, AY.
MODELS OF THREE-PARTICLE INTERACTIONS AND THEORY OF NONLINEAR DEFORMATIONS OF CRYSTALS
PHYSICS OF THE SOLID STATE 54(4), 820-833 (2012)
6. GUFAN, YM; KUKIN, OV; SMOLIN, AY.
A NEW METHOD FOR CALCULATING THREE-PARTICLE INTERACTION IN THE THEORY OF MODULUS ELASTICITY
BULLETIN OF THE RUSSIAN ACADEMY OF SCIENCES. PHYSICS 75(9), 1267 (2011)

7. VERBENKO, IA; GUFAN, YM; KUBRIN, SP; AMIROV, AA; PAVELKO, AA; ALESHIN, VA; SHILKINA, LA; RAZUMOVSKAYA, ON; REZNICHENKO, LA; OSIPENKO, IA; SARYCHEV, DA; BATDALOV, AB.
THE CRYSTAL AND GRAIN STRUCTURE AND PHYSICAL PROPERTIES OF BI1-XAFE03 (A = LA, ND) SOLID SOLUTIONS
BULLETIN OF THE RUSSIAN ACADEMY OF SCIENCES. PHYSICS 74(8), 1141 (2010)
8. GUFAN, YM; PAVLENKO, AV; REZNICHENKO, LA; ANDRYUSHIN, KP; BUNINA, OA; ZAVOROTNEV, YD; ZAKHARCHENKO, IN; KONSTANTINOV, GM; KUBRIN, SP; KUPRINA, YA; OSIPENKO, IA; PASHCHENKO, AV; RAZUMOVSKAYA, ON; SADKOV, AN; SARYCHEV, DA; SIMONENKO, SA.
DIELECTRIC, MAGNETOELECTRIC, STRUCTURE, AND DISSIPATIVE PROPERTIES AND THE MOSSBAUER EFFECT IN PBF1/2NB1/2O3 CERAMICS IN WIDE FREQUENCY AND TEMPERATURE RANGES
BULLETIN OF THE RUSSIAN ACADEMY OF SCIENCES. PHYSICS 74(8), 1130 (2010)
9. GUFAN, KY; KOLESOVA, RV; GUREVICH, MY; GUFAN, YM.
THE THEORY OF THE LOCAL STRUCTURE OF SOLID SOLUTIONS OF OXIDES WITH PEROVSKITE STRUCTURE: EXAMPLE OF PB-2(FENB)O-6
CRYSTALLOGRAPHY REPORTS 54(1), 74-81 (2009)
10. GUFAN, AY; GUFAN, YM; JIAO, Z; XU, XF.
THEORY OF THE STRUCTURE AND PROPERTIES OF ALPHA-PARATELLURITE (TEO2)
PHYSICS OF THE SOLID STATE 48(2), 348-353 (2006)
11. GUFAN, YM; SERGIENKO, IA; URAZHDIN, S; STRYUKOV, MB.
IMPROPER SUPERCONDUCTIVITY IN UNIAXIAL CRYSTALS WITH WEAK ANISOTROPY IN THE BASAL PLANE
CRYSTALLOGRAPHY REPORTS 47(6), 1016-1022 (2002)
12. GUFAN, YM; SERGIENKO, IA; SADKOV, AN; STRYUKOV, MB.
ROLE OF IMPROPER DEFORMATIONS IN FORMATION OF PHASE DIAGRAMS OF AG-AU BINARY ALLOYS
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 66(6), 797-801 (2002)
13. GUFAN, AY; GUFAN, YM; NAKAMURA, K; PRUS, YV; SARTORI, GF; VALENTE, G.
HOW STRONG IS INFLUENCE OF CRISTAL FIELD ON COOPER PAIR CONDENSATE IN YBA2CU3O7-Y?
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 66(6), 783-790 (2002)
14. SERGIENKO, IA; GUFAN, YM; URAZHDIN, S.
PHENOMENOLOGICAL THEORY OF PHASE TRANSITIONS IN HIGHLY PIEZOELECTRIC PEROVSKITES
PHYSICAL REVIEW B 65(14), - (2002)
15. GUFAN, YM; POPOV, AV; SARTORI, G; TALAMINI, V; VALENTE, G; VINBERG, EB.
GEOMETRIC INVARIANT THEORY APPROACH TO THE DETERMINATION OF GROUND STATES OF D-WAVE CONDENSATES IN ISOTROPIC SPACE
JOURNAL OF MATHEMATICAL PHYSICS 42(4), 1533-1562 (2001)
16. NOVGORODOVA, MI; GUFAN, YM; LOSEV, NF; MOSHCENKO, IN.
ENTROPY THEORY OF METAMORPHIC TRANSITIONS IN COALS
CRYSTALLOGRAPHY REPORTS 45(2), 277-281 (2000)
17. GUFAN, AY; GUFAN, YM; PRUS, YV; NAKAMURA, K.
OXYGEN ORDERING IN YBA2CU3O7-Y IN TERMS OF THE LANDAU THEORY
PHYSICS OF THE SOLID STATE 42(10), 1819-1824 (2000)
18. GUFAN, YM; LARIN, ES; NOVGORODOVA, MI; PRUS, YV; SADKOV, AN.
SYMMETRY INDUCED FERROELASTIC ISOSTRUCTURAL PHASE TRANSITION AND SOUND PROPAGATION ANOMALY IN POTASSIUM RICH FELDSPARS
FERROELECTRICS 247(1-3), 225-239 (2000)
19. PRUS, YV; KLIMOVA, EN; GUFAN, YM; KRAMAROV, SO; KATSNELSON, LM; KOVALENKO, MI.
MODEL OF MOLDING OF PIEZOCERAMICS UNDER PRESSURE
FERROELECTRICS 247(1-3), 187-196 (2000)
20. GUFAN, YM; LARIN, ES; SADKOV, AN.

FEATURES OF SOUND PROPAGATION IN THE VICINITY OF "SYMMETRY-DICTATED" ISOSTRUCTURAL PHASE TRANSITIONS IN FERROELASTICS

PHYSICS OF THE SOLID STATE 42(2), 337-344 (2000)

21. GUFAN, YM; LEVCHENKO, IG; RUDASHEVSKII, EG.
MAGNETIC SUSCEPTIBILITY AND MAGNETIC-FIELD PENETRATION-DEPTH ANISOTROPY IN HIGH-TEMPERATURE OXIDE SUPERCONDUCTORS
PHYSICS OF THE SOLID STATE 41(9), 1422-1424 (1999)
22. NAKAMURA, K; GUFAN, AY; GUFAN, YM; RUDASHEVSKII, EG.
EFFECT OF STRUCTURAL PHASE TRANSITIONS ON THE STATE OF THE KUPER CONDENSATE IN YBA₂CU₃O₇-Y. PHASE TRANSITIONS CAUSED BY THE VARIATION OF OXYGEN CONCENTRATION. II. EXPERIMENT
CRYSTALLOGRAPHY REPORTS 44(4), 603-609 (1999)
23. NAKAMURA, K; GUFAN, AY; GUFAN, YM; RUDASHEVSKII, EG.
EFFECT OF STRUCTURAL PHASE TRANSITIONS ON THE STATE OF THE KUPER CONDENSATE IN YBA₂CU₃O₇-Y. PHASE TRANSITIONS CAUSED BY THE VARIATION OF THE OXYGEN CONCENTRATION. I. THEORY
CRYSTALLOGRAPHY REPORTS 44(3), 469-474 (1999)
24. NOVGORODOVA, MI; GUFAN, YM.
PREGRAPHITE PHASE TRANSITION IN SOLID CARBONACEOUS MATTER OF COAL TYPE
DOKLADY AKADEMII NAUK 364(6), 813-815 (1999)
25. KUPIRYANOV, MF; SADKOV, AN; ABDULVAKHIDOV, KG; GUFAN, YM; SALJE, EKH.
THE FEATURES OF THE REAL STRUCTURE OF K_{0.20}NA_{0.78}CA_{0.02}(AL_{1.02}SI_{2.98}O₈) FELDSPAR CRYSTAL
CRYSTALLOGRAPHY REPORTS 43(1), 74-77 (1998)
26. GUFAN, YM; SERGIENKO, IA; KRIVITSKII, OV; SHUVALOV, LA.
QUASI-PROPER TRANSITIONS IN FERROELASTICS AND THE CROSSOVER
CRYSTALLOGRAPHY REPORTS 42(4), 525-533 (1997)
27. VERESHKOV, GM; GUFAN, YM; LEVCHENKO, IG; OKROASHVILI, IT.
IMPROPER SUPERCONDUCTIVITY: THEORY AND EXPERIMENTAL CONSEQUENCES
KRISTALLOGRAFIYA 42(1), 18-25 (1997)
28. GUFAN, YM.
STRUCTURES OF BOSE CONDENSATES WITH NONTRIVIAL PAIRING IN CUBIC CRYSTALS WITH STRONG SPIN-ORBITAL INTERACTIONS .2. THREE-COMPONENT COMPLEX ORDER PARAMETER
KRISTALLOGRAFIYA 41(5), 773-781 (1996)
29. GUFAN, YM.
STRUCTURES OF BOSE CONDENSATE WITH NONTRIVIAL PAIRING AND STRONG SPIN-ORBITAL INTERACTIONS IN CUBIC CRYSTALS .1. TWO-COMPONENT COMPLEX ORDER PARAMETER
KRISTALLOGRAFIYA 41(3), 405-412 (1996)[CRYSTALLOGRAPHY REPORTS 41(3), 381 (1996)]
30. GUFAN, YM.
THE EFFECT OF FERROELASTIC DEFORMATIONS IN THE PARENT PHASE ON THE SUPERCONDUCTING TRANSITION-TEMPERATURE OF YBA₂CU₃O₇-DELTA (VOL 40, PG 203, 1995)
KRISTALLOGRAFIYA 40(4), 768-768 (1995)
31. GUFAN, YM; VERESHKOV, GM.
THE PHENOMENOLOGICAL THEORY OF ANISOTROPIC ALPHA-S PLUS BETA-D-WAVE BOSE-CONDENSED STATE .1. THE PHASES IN UNIAXIAL CRYSTALS CHARACTERIZED BY WEAK ANISOTROPY IN THE BASAL-PLANE
KRISTALLOGRAFIYA 40(3), 397-403 (1995)
32. GUFAN, YM.
MECHANISM FOR SUPERCONDUCTIVITY SUPPRESSION IN THE TETRAGONAL PHASE OF YBA₂CU₃O₇-Y
JETP LETTERS 61(8), 665-671 (1995)
33. GUFAN, YM; VERESHKOV, GM; TOLEDANO, P; METTOUT, B; BOUZERAR, R; LORMAN, V.

- ORDER-PARAMETER SYMMETRIES, PHASE-DIAGRAMS, AND PHYSICAL-PROPERTIES OF 2-DIMENSIONAL UNCONVENTIONAL SUPERCONDUCTORS .2. P-WAVE-PAIRING SUPERCONDUCTIVITY
PHYSICAL REVIEW B 51(14), 9228-9244 (1995)
34. GUFAN, YM; VERESHKOV, GM; TOLEDANO, P; METTOUT, B; BOUZERAR, R; LORMAN, V.
ORDER-PARAMETER SYMMETRIES, PHASE-DIAGRAMS, AND PHYSICAL-PROPERTIES OF 2-DIMENSIONAL UNCONVENTIONAL SUPERCONDUCTORS .1. D-WAVE-PAIRING SUPERCONDUCTIVITY
PHYSICAL REVIEW B 51(14), 9219-9227 (1995)
35. PROKHOROV, AM; VERESHKOV, GM; GUFAN, YM; RUDASHEVSKII, EG.
S-CONDENSATE AND D-CONDENSATE SUPERPOSITIONS IN THE HTSC CRYSTALS WITH STRONG UNIAXIAL CRYSTALLINE FIELDS
DOKLADY AKADEMII NAUK 341(2), 190-193 (1995)
36. AIZENBERG, AY; GUFAN, YM.
INVARIANT-THEORETIC METHOD FOR CALCULATING CLEBSCH-GORDAN-COEFFICIENTS FOR SPACE-GROUPS
KRISTALLOGRAFIYA 40(2), 212-218 (1995)
37. GUFAN, YM.
THE EFFECT OF FERROELASTIC DEFORMATIONS IN THE PARENT PHASE ON THE SUPERCONDUCTING TRANSITION-TEMPERATURE OF YBA₂CU₃O₇-DELTA
KRISTALLOGRAFIYA 40(2), 203-211 (1995) [CRYSTALLOGRAPHY REPORTS 40(2), 181 (1995)]
38. GUFAN, YM.
SUPERCONDUCTING CLASSES GENERATED BY SINGLE IRREDUCIBLE MANY-DIMENSIONAL REPRESENTATION
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 107(3), 855-879 (1995)[JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 80(3), 485 (1995)]
39. GUFAN, YM; MOSHCENKO, IN; OKROSHVILI, IT; RUDASHEVSKII, EG; SNEZHKOVI, VI.
TO A THEORY OF THE LA₂CUO₄ STRUCTURE
KRISTALLOGRAFIYA 40(1), 5-13 (1995) [CRYSTALLOGRAPHY REPORTS 40(1), 1 (1995)]
40. GUFAN, YM; SADKOV, AN; TILES, VM.
PHENOMENOLOGICAL DESCRIPTION OF 3-SUBLATTICE ANTIFERROMAGNETICS IN THE EXCHANGE APPROXIMATION
FIZIKA TVERDOGO TELA 36(11), 3299-3314 (1994)
41. GUFAN, YM.
PHENOMENOLOGICAL THEORY OF PHASE-DIAGRAMS OF UNIAXIAL SEMICONDUCTORS WITH NONTRIVIAL PAIRING
FIZIKA TVERDOGO TELA 36(7), 1888-1889 (1994)
42. AIZENBERG, AY; GUFAN, YM.
PHASE-DIAGRAMS WITH S+ID BOSE-CONDENSATE PHASE IN TETRAGONAL CRYSTALS
FIZIKA TVERDOGO TELA 36(6), 1636-1642 (1994)
43. GUFAN, YM.
CRYSTALLOGRAPHY OF BOSE-CONDENSATES WITH NONTRIVIAL PAIRING IN HEXAGONAL CRYSTALS
KRISTALLOGRAFIYA 39(3), 389-397 (1994) [CRYSTALLOGRAPHY REPORTS 39(3), 337 (1994)]
44. GUFAN, YM; TERNOVSKII, IV.
POLYMORPHISM IN BEO AS A NEW-TYPE OF REENTRANT TRANSITION
FIZIKA TVERDOGO TELA 35(9), 2352-2364 (1993) [PHYSICS OF THE SOLID STATE 35(9), 1165 (1993)]
45. GUFAN, YM; MOSHCENKO, IN; SNEZHKOVI, VI.
THEORY OF REENTRANT PHASE-TRANSITIONS IN THE AGI AND CUBR SUPERIONIC CONDUCTORS
FIZIKA TVERDOGO TELA 35(8), 2086-2098 (1993) [PHYSICS OF THE SOLID STATE 35(8), 1037 (1993)]
46. GUFAN, YM; TERNOVSKY, IV; PANITCH, AE.
EVALUATION OF POSSIBILITY OF FERROELECTRIC PROPERTIES OCCURRENCE FOR BEO-BASED MATERIALS

- IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 57(6), 65-68 (1993)
47. GUFAN, YM; TERNOVSKII, IV.
MECHANISM OF THE B1-B2 REENTRANT TRANSITION IN ALKALI-HALIDE CRYSTALS
FIZIKA TVERDOGO TELA 35(5), 1258-1267 (1993) [PHYSICS OF THE SOLID STATE 35(5), 639 (1993)]
 48. AIZENBERG, AY; GUFAN, YM; PASHININ, PP; PROKHOROV, KA.
PHASE-TRANSITIONS IN LASER WAVE FIELD
FIZIKA NIZKIKH TEMPERATUR 19(2), 181-187 (1993)
 49. MAKAROV, VI; VERESHKOV, GM; GUFAN, YM.
ULTRASONIC SPECTROSCOPY OF LA₂CUO₄ CRYSTAL IN THE VICINITY OF TETRA-ORTHO-PHASE
TRANSITION
FIZIKA NIZKIKH TEMPERATUR 18(4), 412-416 (1992)
 50. AIZENBERG, AY; GUFAN, YM.
ON THE VIOLATION OF THE JAHN-TELLER THEOREM FOR SPACE SYMMETRY GROUPS
FIZIKA TVERDOGO TELA 34(4), 1022-1024 (1992)
 51. VEDYASHKIN, AV; GUFAN, YM.
ON THE POSSIBILITY OF DESCRIPTION OF COMPLEX ORDERED STATES BY APPROXIMATE METHODS - 3-
SUBLATTICE MAGNETS IN THE EXCHANGE APPROXIMATION
FIZIKA TVERDOGO TELA 34(3), 714-723 (1992)
 52. PRISYAZHNY, VD; GUFAN, YM; GRANKINA, AI; MOSHCENKO, IN; SNEZHKO, VI.
CRYSTALLOCHEMICAL ANALYSIS OF SUPERIONIC STATE IN COPPER AND SILVER HALOGENIDES
UKRAINSKII KHIMICHESKII ZHURNAL 58(9), 730-734 (1992)
 53. DMITRIEV, VP; GUFAN, YM; TOLEDANO, P.
THEORY OF THE PHASE-DIAGRAM OF IRON AND THALLIUM - THE BURGERS AND BAIN DEFORMATION
MECHANISMS REVISÉD
PHYSICAL REVIEW B 44(14), 7248-7254 (1991)
 54. METTOUT, B; JAFARI, M; TOLEDANO, P; DMITRIEV, VP; GUFAN, YM.
PHONON-SPECTRA AND RECONSTRUCTIVE TRANSFORMATIONS IN CRYSTALS OF THE ELEMENTS
PHASE TRANSITIONS 31(1-4), 157-166 (1991)
 55. TOLEDANO, P; KATARCI, C; DMITRIEV, VP; ROCHAL, SB; GUFAN, YM.
ICOSAHEDRAL DENSITY WAVES
PHASE TRANSITIONS 32(1-4), 131-137 (1991)
 56. DMITRIEV, VP; GUFAN, YM; ROCHAL, SB; TOLEDANO, P.
THEORY OF THE FORMATION OF QUASI-CRYSTALS
JOURNAL DE PHYSIQUE 51(21), 2399-2405 (1990)
 57. MAKAROV, VI; VERESHKOV, GM; GUFAN, YM; KLOCHKO, VS.
NEW POSSIBILITIES FOR STUDYING THE PHONON-SPECTRA OF CRYSTALS WITH THE PEROVSKITE
STRUCTURE
JETP LETTERS 52(3), 157-160 (1990)
 58. GUFAN, YM; RAFALOVICH, VI.
THEORY OF ORIENTATIONAL PHASE-TRANSITIONS IN DYFE₁-XCOX₃ IN A MAGNETIC-FIELD
FIZIKA TVERDOGO TELA 32(7), 1925-1927 (1990)
 59. PROKHOROV, AM; GUFAN, YM; KRAPIVKA, AE; LUBNIN, EN; MIKHAILOVA, GN; RUDASHEVSKII, EG;
SEFEROV, AS; SUMAROKOV, VN; TARASENKOV, VA; CHISTOV, AG.
MOTION OF HEAVY-IONS IN Y-BA-CU-O HIGH-TC SUPERCONDUCTORS AND SUPERCONDUCTING
CURRENT
JETP LETTERS 51(3), 148-150 (1990)
 60. DMITRIEV, VP; ROCHAL, SB; GUFAN, YM; TOLEDANO, P.
RECONSTRUCTIVE TRANSITIONS BETWEEN ORDERED PHASES - THE MARTENSITIC FCC-HCP AND THE
GRAPHITE-DIAMOND TRANSITIONS
PHYSICAL REVIEW LETTERS 62(21), 2495-2498 (1989)

61. BULLBICH, AA; GUFAN, YM.
PHASE-TRANSITIONS IN DOMAIN-WALLS
FERROELECTRICS 98, 277-290 (1989)
62. BULBICH, AA; GUFAN, YM.
NECESSITY OF SYMMETRY LOWERING OF DOMAIN-WALL NEAR REORDERING PHASE-TRANSITIONS
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 94(6), 121-129 (1988)
63. DMITRIEV, VP; ROCHAL, SB; GUFAN, YM; TOLEDANO, P.
DEFINITION OF A TRANSCENDENTAL ORDER PARAMETER FOR RECONSTRUCTIVE PHASE-TRANSITIONS
PHYSICAL REVIEW LETTERS 60(19), 1958-1961 (1988)
64. BALBASHOV, AM; GUFAN, YM; MARCHUKOV, PY; RUDASHEVSKY, EG.
NATURE OF ENERGY-GAP IN THE SPIN-WAVE SPECTRUM ON SPIN FLOP IN A MAGNETIC-FIELD
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 94(4), 305-313 (1988)
65. GUFAN, YM; DMITRIEV, VP; TOLEDANO, P.
LATENT STRUCTURE SYMMETRY AND REENRANT PHASE-TRANSITIONS
FIZIKA TVERDOGO TELA 30(4), 1057-1064 (1988)
66. DMITRIEV, VP; ROCHAL, SB; GUFAN, YM; TOLEDANO, P.
PHENOMENOLOGICAL THEORY OF THE RECONSTRUCTIVE OH1-D6H4 PHASE-TRANSITION IN BARIUM-TITANATE
FERROELECTRICS 79, 305-308 (1988)
67. BUL'BICH, AA; GUFAN, YM.
INEVITABLE SYMMETRY LOWERING IN A DOMAIN WALL NEAR A RECORDING PHASE TRANSITION
SOVIET PHYSICS - JETP 67(6), 1153 (1988)
68. GRANKINA, AI; GRUDSKII, IM; GUFAN, YM.
THEORY OF SOLID-SOLUTION PRECIPITATION IN THE SELF-CONSISTENT FIELD APPROXIMATION
FIZIKA TVERDOGO TELA 29(11), 3456-3459 (1987)
69. GUFAN, YM; KALITA, VM.
MOLECULAR THEORY OF EXCHANGE METAMAGNETS
FIZIKA TVERDOGO TELA 29(11), 3302-3307 (1987)[SOVIET PHYSICS - SOLID STATE 29(11), 1893 (1987)]
70. GUFAN, YM; KUTIN, EI; LORMAN, VL; PROKHOROV, AM; RUDASHEVSKII, EG.
POSSIBILITY OF AN EXCHANGE-INDUCED LATENT PARAMAGNETISM IN A SYSTEM OF EQUIVALENT IONS
JETP LETTERS 46(6), 287-291 (1987)
71. BALBASHOV, AM; BEREZIN, AG; GUFAN, YM; KOLYADKO, GS; MARCHUKOV, PY; RUDASHEVSKY, EG.
SOFT MODE AND ENERGY-GAP IN SPIN-WAVE SPECTRUM FOR A 2ND-ORDER ORIENTATION PHASE-TRANSITION - AFMR IN YFEO3
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 93(1), 302-315 (1987)[SOVIET PHYSICS - JETP 66(1), 174 (1987)]
72. GUFAN, YM; KUTYIN, EI; LORMAN, VL; SIDORENKO, EN.
ISOSTRUCTURAL PHASE-TRANSITION IN LEAD TITANATE
FIZIKA TVERDOGO TELA 29(3), 756-762 (1987)[SOVIET PHYSICS - SOLID STATE 29(3), 432 (1987)]
73. GUFAN, YM; SADKOV, AN; URUSHADZE, GG.
METAMAGNETIC SOFT MODE IN DOUBLE SUBLATTICE ANTIFERROMAGNETS .2. SPIN DYNAMICS, SUSCEPTIBILITY, THERMODYNAMICS
JOURNAL OF PHYSICS C-SOLID STATE PHYSICS 20(4), 629-644 (1987)
74. GUFAN, YM; RUDASHEVSKII, EG; SADKOV, AN; TSIVTSIVADZE, TA.
KINEMATIC SOFT MODE IN METAMAGNETS IN THE ABSENCE OF PHASE-TRANSITIONS
JETP LETTERS 45(2), 128-131 (1987)
75. GUFAN, YM; LARII, ES.
PHASE-DIAGRAMS WITH 2 INTERACTING ORDER PARAMETERS IN THE PRESENCE OF ISOSTRUCTURAL TRANSITIONS
FIZIKA TVERDOGO TELA 29(1), 8-15 (1987)

76. GUFAN, YM; LARIN, ES.
CHARACTERISTICS OF PHASE DIAGRAMS WITH TWO INTERACTING ORDER PARAMETERS FOR SYSTEMS EXHIBITING ISOSTRUCTURAL TRANSITIONS
SOVIET PHYSICS - SOLID STATE 29(1), 4 (1987)
77. GUFAN, YM; SADKOV, AN.
ANTIFERROMAGNETIC-RESONANCE IN EXCHANGE METAMAGNETS
FIZIKA TVERDOGO TELA 28(10), 2991-2998 (1986)
78. GUFAN, YM; SADKOV, AN; URUSHADZE, GG.
METAMAGNETIC SOFT MODE IN DOUBLE SUBLATTICE ANTIFERROMAGNETS .1. PHASE-DIAGRAM AND SPECTRUM
JOURNAL OF PHYSICS C-SOLID STATE PHYSICS 19(22), 4339-4352 (1986)
79. BALBASHOV, AM; BEREZIN, AG; GUFAN, YM; KOLYADKO, GS; MARCHUKOV, PY; NIKOLAEV, IV;
RUDASHEVSKII, EG.
TOPOLOGY OF PHASE-DIAGRAMS IN SPIN-FLIP PHASE-TRANSITIONS AND THE ANTIFERROMAGNETIC-RESONANCE IN DYSPROSIUM AND YTTRIUM ORTHO-FERRITES
JETP LETTERS 43(4), 259-262 (1986)
80. GUFAN, YM; SADKOV, AN; URUSHADZE, GG.
EXCHANGE METAMAGNETISM THEORY
FIZIKA TVERDOGO TELA 28(2), 451-454 (1986)
81. BALBASHOV, AM; BEREZIN, AG; GUFAN, YM; KOLYADKO, GS; MARCHUKOV, PY; NIKOLAEV, IV;
RUDASHEVSKII, EG.
OBSERVATION OF A GAP IN THE SPIN-WAVE SPECTRUM IN YFeO₃ UPON AN ORIENTATIONAL TRANSITION IN A MAGNETIC-FIELD
JETP LETTERS 41(9), 479-481 (1985)
82. GUFAN, YM; DMITRIEV, VP; ROSHAL, SB; CHERNER, YE.
PHYSICAL ORIGIN OF ORDER PARAMETER AT METAL-SEMICONDUCTOR PHASE-TRANSITION IN VO₂
FIZIKA TVERDOGO TELA 27(6), 1742-1746 (1985)
83. GUFAN, YM; URUSHADZE, GG; SHIROKOV, VB.
A THEORY OF STATIC CONCENTRATIONAL WAVES
FIZIKA TVERDOGO TELA 27(5), 1442-1448 (1985)[SOVIET PHYSICS - SOLID STATE 27(5), 869 (1985)]
84. GUFAN, YM; URUSHADZE, GG; SHIROKOV, VBE.
THEORY OF STATIC CONCENTRATION WAVES FROM THE POINT OF VIEW OF THE THEORY OF CATASTROPHES
SOVIET PHYSICS - DOKLADY 29(8), 654 (1984)
85. GUFAN, YM; DMITRIEV, VP; SADKOV, AN.
THE EFFECT OF PHASE-TRANSITIONS ON THE VIBRATIONAL-SPECTRA OF FERROELECTRIC PEROVSKITES
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 47(4), 692-695 (1983)
86. GUFAN, YM; LORMAN, VL.
MODELS OF ISOSTRUCTURAL TRANSITIONS AND THE PROPERTIES OF SMS UNDER PRESSURE
SOVIET PHYSICS - SOLID STATE 25(4), 598 (1983)
87. GUFAN, YM; DMITRIYEV, VP.
THERMODYNAMIC THEORY OF ORDERING ALLOYS - ROLE OF HETEROPHASE FLUCTUATIONS AND NEW BINARY AND OTHER SUPERSTRUCTURES BASED ON BCC ATOM PACKING
FIZIKA METALLOV I METALLOVEDENIE 53(5), 852-861 (1982)
88. GUFAN, YM; DMITRIYEV, VP.
CUBICAL SUPERSTRUCTURES BASED ON BODY-CENTERED CUBICAL PACKING OF ATOMS
FIZIKA METALLOV I METALLOVEDENIE 53(3), 447-455 (1982)
89. GUFAN, YM; SHIROKOV, VB.
THERMODYNAMIC DESCRIPTION OF HYDROGEN ORDERING IN LAVES PHASES
FIZIKA TVERDOGO TELA 23(11), 3429-3435 (1981)

90. GUFAN, YM; TORGASHEV, VI.
THEORY OF LONG-PERIODIC STRUCTURES - DIMMOCK PHASES
FIZIKA TVERDOGO TELA 23(4), 1129-1135 (1981)[SOVIET PHYSICS - SOLID STATE 23(4), 656 (1981)]
91. GORBUNOV, EV; GUFAN, YM; PETRENKO, NA; CHECHIN, GM.
ON THE THEORY OF PHASE-TRANSITIONS WITH A MULTICOMPONENT TRANSITION PARAMETER AND
THE PROBLEMS OF A THEORY OF TRANSITIONS IN BORACITES
KRISTALLOGRAFIYA 26(1), 7-11 (1981)
92. GUFAN, YM; TORGASHEV, VI.
ON THE PHENOMENOLOGICAL THEORY OF MANY-COMPONENT ORDER PARAMETER CHANGE
FIZIKA TVERDOGO TELA 22(6), 1629-1637 (1980)[SOVIET PHYSICS - SOLID STATE 22(6), 951 (1980)]
93. GUFAN, YM; LARIN, ES.
THEORY OF 2 ORDER PARAMETER PHASE-TRANSITIONS
FIZIKA TVERDOGO TELA 22(2), 463-471 (1980)
94. GUFAN, YM; POPOV, VP.
ON THE THEORY OF PHASE-TRANSITIONS DESCRIBED BY A 4-COMPONENT PARAMETER OF ORDER
KRISTALLOGRAFIYA 25(5), 921-929 (1980)
95. GUFAN, YM; CHECHIN, GM.
CONCERNING THE GEOMETRICAL RESTRICTIONS ON THE CHOICE OF A PARAPHASE IN THE CASE OF A 6-
COMPONENT PARAMETER OF THE ORDER
KRISTALLOGRAFIYA 25(3), 453-459 (1980)[SOVIET PHYSICS - CRYSTALLOGRAPHY 25(3), 261 (1980)]
96. DMITRIEV, VP; GUFAN, YM; POPOV, VP; CHECHIN, GM.
STRUCTURES OF ORDERED ALLOYS WITH HEXAGONAL CLOSE PACKING
PHYSICA STATUS SOLIDI A-APPLIED RESEARCH 57(1), 59-66 (1980)
97. GUFAN, YM; DMITRIYEV, VP.
THERMODYNAMICAL DESCRIPTION OF PHASE-TRANSITIONS INDUCED BY SEVERAL PARAMETERS OF
ORDER
KRISTALLOGRAFIYA 25(1), 14-21 (1980)
98. GUFAN, YM; PROKHOROV, AS; RUDASHEVSKY, EG.
CLOSED DESCRIPTION OF THE MAGNETIZATION AND RESONANT FREQUENCIES OF ANTI-
FERROMAGNETS IN A MAGNETIC-FIELD - NIF2
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 77(6), 2396 (1979)
99. GUFAN, YM; SADKOV, AN.
DETERMINATION OF STATIC AND DYNAMICAL CHARACTERISTICS OF KMN₃ CRYSTAL NEAR THE 2ND
ORDER TRANSITION OF CRUMPLE TYPE
FIZIKA TVERDOGO TELA 21(10), 3066 (1979)[SOVIET PHYSICS - SOLID STATE 21(10), 1764 (1979)]
100. GUFAN, YM; DMITRIEV, VP; POPOV, VP; CHECHIN, GM.
ORDERING TYPE TRANSITIONS IN ALLOYS WITH FCC CLOSE-PACKED STRUCTURE
FIZIKA TVERDOGO TELA 21(2), 554 (1979)[SOVIET PHYSICS - SOLID STATE 21(2), 327 (1979)]
101. GUFAN, YM; DMITRIYEV, VP; TORGASHOV, VI.
SYMMETRY RESTRICTIONS ON CHOOSING A HYPOTHETIC PARAPHASE - LANGBEINITES AS AN EXAMPLE
KRISTALLOGRAFIYA 24(3), 597 (1979)[SOVIET PHYSICS - CRYSTALLOGRAPHY 24(3), 342 (1979)]
102. GUFAN, YM; LARIN, ES.
SINGULAR POINTS ON PHASE-DIAGRAMS OF FERROELASTICS
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 43(8), 1567 (1979)
103. GUFAN, YM; DMITRIYEV, VP; POPOV, VP; CHECHIN, GM.
STRUCTURES OF ORDERED ALLOYS WITH HEXAGONAL CLOSE PACKING
FIZIKA METALLOV I METALLOVEDENIE 46(6), 1133 (1978)
104. GUFAN, YM; LARIN, ES.
DISPERSION OF DIELECTRIC PERMEABILITY IN PROPER FERROELECTRICS WITH CUBIC PARAPHASE NEAR
N-PHASE POINT

- FIZIKA TVERDOGO TELA 20(6), 1725 (1978)[SOVIET PHYSICS - SOLID STATE 20(6), 998 (1978)]
105. GUFAN, YM; LARIN, ES.
PHENOMENOLOGICAL ANALYSIS OF ISOSTRUCTURAL PHASE TRANSITIONS
SOVIET PHYSICS - DOKLADY 23(10), 754 (1978)
106. GUFAN, YM; SHUVALOV, LA.
GROUP-THEORETICAL ANALYSIS OF PHASE-TRANSITION IN RBH₃(SEO₃)₂ FERROELECTRIC
FIZIKA TVERDOGO TELA 17(2), 594 (1975)[SOVIET PHYSICS - SOLID STATE 17(2), (1976)]
107. GUFAN, YM; SAKHNENKO, VP.
THERMODYNAMIC DESCRIPTION OF CRYSTAL PHASE-TRANSITIONS OF 2ND KIND NEAR N-PHASE
POINTS
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 69(4), 1428 (1975)
108. VINBERG, EB; GUFAN, YM; SAKHNENKO, VP; SIROTIN, YI.
CHANGE IN SYMMETRY OF CRYSTALS WITH SPACE GROUP OH1 DURING PHASE-TRANSITIONS
KRISTALLOGRAFIYA 19(1), 21 (1974)
109. GUFAN, YM; SAKHNENKO, VP.
POSSIBLE DIFFERENCE OF MACROSCOPIC PROPERTIES OF CRYSTALS WHEN PHASE-TRANSITIONS WITH
EQUAL CHANGING OF SYMMETRY
FIZIKA TVERDOGO TELA 16(5), 1580 (1974)[SOVIET PHYSICS - SOLID STATE 16(5), 1034 (1974)]
110. VELIKOV, LV; GUFAN, YM; PROKHOROV, AS; RUDASHEVSKII, EG.
PROBLEM OF ADEQUATE PHENOMENOLOGICAL DESCRIPTION OF MAGNETIC DIELECTRICS
DOKLADY AKADEMII NAUK 219(6), 1341 (1974)
111. GUFAN, YM; KOCHARYAN, KN; PROKHOROV, AS; RUDASHEVSKY, EG.
DEPENDENCES OF RESONANCE FREQUENCIES OF ANTIFERROMAGNETIC SUBSTANCES ON MAGNETIC-
FIELD AND AFMR IN COF₂
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 66(3), 1155 (1974)
112. GUFAN, YM; SAKHNENKO, VP.
SOME FEATURES OF PHASE-TRANSITIONS RELATED TO 2-COMPONENT AND 3-COMPONENT ORDER
PARAMETERS
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 63(5), 1909 (1972)
113. GUFAN, YM; SAKHNENKO, VP.
THEORY OF PHASE-TRANSITIONS IN BORACITES
FIZIKA TVERDOGO TELA 14(7), 1915 (1972)[SOVIET PHYSICS - SOLID STATE 14(7), 1660 (1973)]
114. GUFAN, YM.
PHASE TRANSITIONS CHARACTERIZED BY A MULTICOMPONENT ORDER PARAMETER
FIZIKA TVERDOGO TELA 13(1), 225 (1971)[SOVIET PHYSICS SOLID STATE 13(1), 175 (1971)]
115. GUFAN, YM.
THERMODYNAMIC THEORY OF RESONANCE FREQUENCIES OF ANTIFERROMAGNETS
ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI 60(4), 1537 (1971)[SOVIET PHYSICS JETP 33(4),
831 (1971)]
116. GUFAN, YM.
NONLOCALISED SPIN DENSITIES AND SPIN WAVE SPECTRUM
FIZIKA METALLOV I METALLOVEDENIE 27(5), 787 (1969)
117. GUFAN, YM.
INDUCED FERROELECTRIC MAGNETISM IN MAGNETICALLY ORDERED PIEZOELECTRICS
JETP LETTERS 8(5), 167 (1968)
118. GUFAN, Y; DZYALOSHINSKII, IE.
NONLOCALIZED SPIN DENSITIES IN ANTIFERRO-MAGNETIC SUBSTANCES
ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI 52(2), 604 (1967)