

## Статьи

1. Martin, I. Mirebeau, C. Franz, G. Chaboussant, L. N. Fomicheva, and A. V. Tsvyashchenko  
Partial ordering and phase elasticity in the MnGe short-period helimagnet  
PHYSICAL REVIEW B 99, 100402(R) (2019)  
DOI: 10.1103/PhysRevB.99.100402
2. N. Martin, M. Deutsch, T. C. Hansen, M. T. Fernandez-Diaz, L. N. Fomicheva, A. V. Tsvyashchenko, and I. Mirebeau  
Suppression of the bulk high spin–low spin transition by doping the chiral magnet MnGe  
PHYSICAL REVIEW B 100, 060401(R) (2019)  
DOI: 10.1103/PhysRevB.100.060401
3. Nikolay M. Chtchelkatchev, Maria V. Magnitskaya, Vladimir A. Sidorov, Ludmila N. Fomicheva, Alla E. Petrova, Anatoly V. Tsvyashchenko  
Theoretical and experimental study of highpressure synthesized B20-type compounds  $Mn_{1-x}(Co,Rh)_xGe$ .  
Pure Appl. Chem. 91(6), 941–955 (2019)  
DOI: 10.1515/pac-2018-1101
4. Maria Magnitskaya , Nikolay Chtchelkatchev , Anatoly Tsvyashchenko , Denis Salamatin, Sergey Lepeshkin, Liudmila Fomicheva, Mieczysław Budzynski  
Electron and phonon properties of noncentrosymmetric RhGe from ab initio calculations.  
Journal of Magnetism and Magnetic Materials 470, 127–130 (2019).  
DOI: 10.1016/j.jmmm.2017.10.090
5. E. Altynbaev , N. Martin , A. Heinemann, L. Fomicheva, A. Tsvyashchenko, I. Mirebeau, and S. Grigoriev  
Onset of a skyrmion phase by chemical substitution in MnGe-based chiral magnets  
PHYSICAL REVIEW B 101, 100404(R) (2020)  
DOI: 10.1103/PhysRevB.101.100404
6. D. A. Salamatin, N. Martin , V. A. Sidorov, N. M. Chtchelkatchev, M. V. Magnitskaya, A. E. Petrova, I. P. Zibrov, L. N. Fomicheva, Jing Guo, Cheng Huang, Liling Sun, and A. V. Tsvyashchenko  
Dualism of the 4 f electrons and its relation to high-temperature antiferromagnetism in the heavy-fermion compound YbCoC<sub>2</sub>  
PHYSICAL REVIEW B 101, 100406(R) (2020)  
DOI: 10.1103/PhysRevB.101.100406

7. E. G. Iashina, E. V. Altynbaev, L. N. Fomicheva, A. V. Tsvyashchenko, and S. V. Grigoriev  
On the Nature of Defects in  $Mn_{1-x}Fe_xGe$  Compounds Synthesized under High Pressure  
Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques 14, No. 3, pp. 429–433 (2020)  
DOI: 10.1134/S1027451020030209
8. N.M. Chtchelkatchev, M.V. Magnitskaya, A.V. Tsvyashchenko  
Ab initio study of noncentrosymmetric transition-metal monogermanide B20-RhGe synthesized at high temperature and pressure  
Eur. Phys. J. Spec. Top. 229, 167–178 (2020)  
DOI: 10.1140/epjst/e2019-900114-y
9. D. A. Salamatin, V. A. Sidorov, N. M. Chtchelkatchev, M. V. Magnitskaya, N. Martin, A. E. Petrova, L. N. Fomicheva, Jing Guo, Cheng Huang, Yazhou Zhou, Liling Sun, and A. V. Tsvyashchenko  
Pressure influence on the valence and magnetic state of Yb ions in noncentrosymmetric heavy-fermion  $YbNiC_2$   
PHYSICAL REVIEW B 103, 235139 (2021)  
DOI: 10.1103/PhysRevB.103.235139
10. D.O. Skanchenko, E.V. Altynbaev, N. Martin, D.A. Salamatin, R.A. Sadykov, A.V. Tsvyaschenko, S.V. Grigoriev  
Magnetic structure of  $Mn_{0.9}Fe_{0.1}Ge$  compound under quasi-hydrostatic pressure  
Journal of Alloys and Compounds 862, 158606 (2021)  
DOI: 10.1016/j.jallcom.2021.158606
11. Larisa V. Kamaeva, Nikolay M. Chtchelkatchev, Alexey A. Suslov, Maria V. Magnitskaya, Anatoly V. Tsvyashchenko  
Structural and thermal stability of B20-type high-pressure phases FeGe and MnGe  
Journal of Alloys and Compounds 888, 161565 (2021)  
DOI: 10.1016/j.jallcom.2021.161565
12. D.A. Salamatin, A.V. Tsvyashchenko, A.V. Salamatin, A. Velichkov, M.V. Magnitskaya, N.M. Chtchelkatchev, V.A. Sidorov, L.N. Fomicheva, M.V. Mikhin, M.G. Kozin, A.V. Nikolaev, I.L. Romashkina, M. Budzynski  
Hyperfine field studies of the high-pressure phase of noncentrosymmetric superconductor RhGe (B20) doped with hafnium  
Journal of Alloys and Compounds 850, 156601 (2021)  
DOI: 10.1016/j.jallcom.2020.156601
13. S.-H. Baek, V.A. Sidorov, A.V. Nikolaev, T. Klimczuk, F. Ronning, A.V. Tsvyashchenko

Possible quadrupole-order-driven commensurate-incommensurate phase transition in B20 CoGe

Phys. Rev. B 105, 165132 (2022)

DOI: 10.1103/PhysRevB.105.165132

14. D. A. Salamatin, V. A. Sidorov, Z. Surowiec, A. V. Bokov, M. V. Magnitskaya, N. M. Chtchelkachev, M. Wiertel, M. Budzynski, A. V. Tsvyashchenko

The hyperfine magnetic fields and the effect of high pressure on the magnetic transition temperatures of the noncentrosymmetric FeRhGe<sub>2</sub> compound (B20)

J. Phys.: Condens. Matter 34, 424002 (2022)

DOI: 10.1088/1361-648X/ac885d

15. L.V. Kamaeva, M.V. Magnitskaya, A.A. Suslov, A.V. Tsvyashchenko, N.M. Chtchelkatchev

Structural transformations and thermal stability of RhGe synthesized under high temperature and pressure

J. Phys.: Condens. Matter 34, №42, 424001 (19 October 2022)

<https://doi.org/10.1088/1361-648X/ac885c>

16. D.A. Salamatin, K.V. Klementiev, V.N. Krasnorussky, M.V. Magnitskaya, N.M. Chtchelkachev, V.A. Sidorov, A.V. Semeno, A.V. Bokov, M.G. Kozin, A.V. Nikolaev, A.V. Salamatin, A. Velichkov, M.V. Mikhin, M. Budzynski, A.V. Tsvyashchenko

The new high-pressure hexagonal Laves phase of the YbZn<sub>2</sub> compound

Journal of Alloys and Compounds 946 (2023) 16927

DOI: 10.1016/j.jallcom.2023.169275

17. D.A. Salamatin, A.V. Bokov, M.G. Kozin, I.L. Romashkina, A.V. Salamatin, M.V. Mikhin, A.E. Petrova, V.A. Sidorov, A.V. Nikolaev, Z. Fisk, A.V. Tsvyashchenko

Anomalous Positron Lifetime in Single Crystal of Weyl Semimetal CoSi

Crystals 2023, 13, 509

DOI: 10.3390/cryst13030509

18. D.A. Salamatin, S.E. Kichanov, I.E. Kostyleva, L.F. Kulikova, A.V. Bokov, I.P. Zibrov, D.P. Kozlenko, A.V. Tsvyashchenko

The pressure-induced crystal structure transformations in the high-pressure annealed Bi<sub>1-x</sub>TbxFeO<sub>3</sub> compounds (x = 0.05, 0.1 and 0.3)

Appl. Phys. Lett. 122, 211905 (2023)

<https://doi.org/10.1063/5.0149444>

19. A.V. Bokov, M.V. Magnitskaya, D.A. Salamatin, A.V. Tsvyashchenko

57Fe Mössbauer Effect Study of Y(Fe<sub>1-x</sub>Nix)<sub>2</sub> Synthesized under High Pressure

Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, 2023, Vol. 163, No. 3, pp. 350–356

DOI: 10.1134/S1063776123020024

20. D.A. Salamatin, V.N. Krasnorussky, M.V. Magnitskaya, A.V. Semeno, A.V. Bokov, A. Velichkov, Z. Surowiec, A.V. Tsvyashchenko

Some Magnetic Properties and Magnetocaloric Effects in the High-Temperature Antiferromagnet YbCoC<sub>2</sub>

Magnetochemistry 2023, 9, 152

DOI: 10.3390/magnetochemistry9060152

21. А.П. Новиков, А.В. Боков, С.Г. Ляпин, А.В. Цвященко

Ячейка с алмазными наковальнями и внешним нагревом образца для in situ оптических исследований

Физические основы приборостроения. 2023. Т. 12. № 3(49). С. 2-6

DOI: 10.25210/jfop 2303-ROGESC

22. V.N. Krasnorussky, A.V. Semeno, M.A. Anisimov, D.A. Salamatin, A.V. Bokov, N.M. Chtchelkatchev, M.V. Magnitskaya, V.A. Sidorov, A.V. Bogach, A.V. Tsvyashchenko

Study of magnetic, thermodynamic and transport properties of Laves phase NdRh<sub>2</sub>

Journal of Magnetism and Magnetic Materials, Volume 610, 15 November 2024, 172480

<https://doi.org/10.1016/j.jmmm.2024.172480>