

LIST OF PUBLICATIONS

1. M.M. Korshunov, Yu.N. Togushova, and O.V. Dolgov, "Impurities in multiband superconductors", *Usp. Fiz. Nauk* **186**, 1315-1347 (2016)
2. M.M. Korshunov, V.A. Shestakov, and Yu.N. Togushova, "Spin resonance peak in Fe-based superconductors with unequal gaps", *Phys. Rev. B* **94**, 094517 (2016)
3. S.V. Nikolaev, M.M. Korshunov, "Spin and Charge Susceptibilities of the Two-Orbital Model within the Cluster Perturbation Theory for Fe-Based Materials", *J. Supercond. Nov. Magn.* **29**, 3093-3097 (2016)
4. Yu.N. Togushova, V.A. Shestakov, and M.M. Korshunov, "Impurity-Induced Smearing of the Spin Resonance Peak in Fe-Based Superconductors", *J. Low Temp. Phys.* **185**, 481-487 (2016)
5. M.M. Korshunov, Yu.N. Togushova, O.V. Dolgov, "Uniform Impurity Scattering in Two-Band s_{\pm} and s_{++} Superconductors", *J. Supercond. Nov. Magn.* **29**, 1089-1095 (2016)
6. P.D. Grigoriev, M.M. Korshunov, T.I. Mogilyuk, "Slow In-Plane Magnetoresistance Oscillations in Multiband Quasi-Two-Dimensional Metals", *J. Supercond. Nov. Magn.* **29**, 1127-1132 (2016)
7. M.M. Korshunov, D.V. Efremov, A.A. Golubov, and O.V. Dolgov, "Unexpected impact of magnetic disorder on multiband superconductivity", *Phys. Rev. B* **90**, 134517 (2014)
8. M.M. Korshunov, "Superconducting state in iron-based materials and spin-fluctuation pairing theory", *Physics-Uspekhi* **57**, 813–819 (2014)
9. M.M. Korshunov, Y.N. Togushova, I. Eremin, and P.J. Hirschfeld, "Spin-Orbit Coupling in Fe-Based Superconductors", *J. Supercond. Nov. Magn.* **26**, 2873–2874 (2013)
10. S. Ovchinnikov, M. Korshunov, S. Nikolaev, E. Shneyder, and A. Krinitzyn, "Normal and Superconducting Properties of Cuprates in Multielectron Theory", *J. Supercond. Nov. Magn.* **26**, 2831–2835 (2013)
11. S.G. Ovchinnikov, M.M. Korshunov, I.A. Makarov, and E.I. Shneyder, "Quantum Phase Transitions and Superconductivity in Single and Two-Layer Cuprates in the Multiband Theory of Hubbard Fermions", *J. Supercond. Nov. Magn.* **26**, 2607–2609 (2013)
12. O.V. Dolgov, D.V. Efremov, M.M. Korshunov, A. Charnukha, A.V. Boris, and A.A. Golubov, "Multiband Description of Optical Conductivity in Ferropnictide Superconductors", *J. Supercond. Nov. Magn.* **26**, 2637–2640 (2013)
13. M.M. Korshunov, Y.N. Togushova, and I. Eremin, "Three-orbital Model for Fe-Pnictides", *J. Supercond. Nov. Magn.* **26**, 2665–2668 (2013)
14. S.G. Ovchinnikov, I.A. Makarov, E.I. Shneyder, Yu.N. Togushova, V.A. Gavrichkov, and M.M. Korshunov, "Magnetic mechanisms of pairing in strongly correlated electron system of copper oxides", Chapter (pp.93-144) in the book "Recent Advances in Superconductivity Research", ed. by C.B. Taylor, 321 p., ISBN: 978-1-62618-406-0, Nova Science Publishers Inc. New York, 2013
15. A.G. Gavriluk, V.V. Struzhkin, S.G. Ovchinnikov, Y.Yu, M.M. Korshunov, A.M. Mironovich, J.-F. Lin, and C. Jin, "P-T phase diagram of iron arsenide superconductor $\text{NdFeAsO}_{0.88}\text{F}_{0.12}$ ", *EPL* **100**, 46005 (2012)

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18. G. Cao, M.M. Korshunov, Y. Gao, M. Le Tacon, D.J. Singh, and C. Lin, "Anomalous In-Plane Electronic Scattering in Charge Ordered Na_{0.41}CoO₂*0.6H₂O", *Phys. Rev. Lett.* **108**, 236401 (2012)
19. S. Maiti, M.M. Korshunov, and A.V. Chubukov, "Gap symmetry in KFe₂As₂ and the cos 40° gap component in LiFeAs", *Phys. Rev. B* **85**, 014511 (2012)
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22. D.V. Efremov, M.M. Korshunov, O.V. Dolgov, A.A. Golubov, and P.J. Hirschfeld, "Disorder-induced transition between s_± and s₊₊ states in two-band superconductors", *Phys. Rev. B* **84**, 180512(R) (2011)
23. P.J. Hirschfeld, M.M. Korshunov, and I.I. Mazin, "Gap symmetry and structure of Fe-based superconductors", *Rep. Prog. Phys.* **74**, 124508 (2011)
24. S. Maiti, M.M. Korshunov, T.A. Maier, P.J. Hirschfeld, and A.V. Chubukov, "Evolution of the superconducting state of Fe-based compounds with doping", *Phys. Rev. Lett.* **107**, 147002 (2011)
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30. D.N. Argyriou, A. Hiess, A. Akbari, I. Eremin, M.M. Korshunov, Jin Hu, Bin Qian, Zhiqiang Mao, Yiming Qiu, Collin Broholm, and W. Bao "Incommensurate itinerant

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31. M.M. Korshunov, E.V. Zakharova, I.A. Nekrasov, Z.V. Pchelkina, and S.G. Ovchinnikov, "The Fermi surface and the role of electronic correlations in Sm_{2-x}Ce_xCuO₄", *J. Phys.: Condens. Matter* **22**, 015701 (2010)
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36. M.M. Korshunov and I. Eremin, "Theory of magnetic excitations in iron-based layered superconductors", *Phys. Rev. B* **78**, 140509(R) (2008)
37. D. Parker, O.V. Dolgov, M.M. Korshunov, A.A. Golubov, and I.I. Mazin, "Extended s_± scenario for the nuclear spin-lattice relaxation rate in superconducting pnictides", *Phys. Rev. B* **78**, 134524 (2008)
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57. S.G. Ovchinnikov, M.M. Korshunov, and E.I. Shneyder, "Effect of Short Antiferromagnetic Correlations on the Normal and Superconducting Properties in Copper Oxides", *Solid State Phenomena* **168-169**, 561 (2011)

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66. M.M. Korshunov, V.A. Shestakov, Yu.N. Togushova, "Comparison of experimental data on the spin resonance frequency and gap magnitudes in Fe-based superconductors", *Journal of Magnetism and Magnetic Materials* (2016), <http://dx.doi.org/10.1016/j.jmmm.2016.12.082>