

Publications list

1. Z.Z. Alisultanov, E.G. Idrisov, Towards the theory of types III and IV non-Hermitian Weyl fermions, *Preprint arXiv:2110.13714* (2021)
2. Z.Z. Alisultanov, The induced by an electromagnetic field coexistence of types I and II spectra in Weyl semimetals, *Scientific Reports* **8** (1), 1-8 (2018)
3. Z.Z. Alisultanov, Relativistic mechanism of chiral magnetic current in Weyl semimetals with tilted dispersion, *Journal of Physics: Condensed Matter* **32** (11), 115502 (2019)
4. Z.Z. Alisultanov, Pseudo Landau levels and quantum oscillations in strained Weyl semimetals, *Annals of Physics* **392**, 196-205 (2018)
5. Z.Z. Alisultanov, G.B. Ragimkhanov, Fractional-differential approach to the study of instability in a gas discharge, *Chaos, Solitons & Fractals* **107**, 39-42 (2018)
6. Z.Z. Alisultanov, L.S. Paixao, M.S. Reis, Oscillating magnetocaloric effect of a multilayer graphene, *Applied Physics Letters* **105** (23), 232406 (2014)
7. Z.Z. Alisultanov, Effect of a transverse electric field on the Landau bands in a Weyl semimetal, *JETP Letters* **105** (7), 442-446 (2017)
8. Z.Z. Alisultanov, Strain-induced orbital magnetization in a Weyl semimetal, *JETP Letters* **107** (4), 254-258 (2018)
9. Z.Z. Alisultanov, N.A. Demirov, G.M. Musaev, A.M. Khabibulaeva, Influence of electric field on the quantum oscillations in the Weyl semimetals, *Solid State Communications* **268**, 32-37 (2017)
10. Z.Z. Alisultanov, Hybrid Weyl semimetal under crossed electric and magnetic fields: field tuning of spectrum type, *Physics Letters A* **382** (44), 3211-3215 (2018)
11. G.O. Abdullaev, Z.Z. Alisultanov, Electronic spectrum of bilayer graphene with broken P-symmetry of both intra- and inter-layers, *Physica E: Low-dimensional Systems and Nanostructures* **123**, 114192 (2020)
12. Z.Z. Alisultanov, Landau levels in graphene in crossed magnetic and electric fields: Quasi-classical approach, *Physica B: Condensed Matter* **438**, 41-44 (2014)
13. Z.Z. Alisultanov, Oscillations of magnetization in graphene in crossed magnetic and electric fields, *JETP letters* **99** (4), 232-236 (2014)
14. Z.Z. Alisultanov, M.S. Reis, Quantum capacitance oscillations in graphene under crossed magnetic and electric fields, *Europhysics Letters* **113** (2), 28004 (2016)
15. Z.Z. Alisultanov, The thermodynamics of electrons and the thermoelectric transport in epitaxial graphene on the size-quantized films, *Physica E: Low-dimensional Systems and Nanostructures* **69**, 89-95 (2015)
16. L.S. Paixão, Z.Z. Alisultanov, M.S. Reis, Oscillating adiabatic temperature change of 2D diamagnetic materials, *Journal of magnetism and magnetic materials* **368**, 374-378 (2014)
17. Z.Z. Alisultanov, R.P. Meilanov, L.S. Paixao, M.S. Reis, Oscillating magnetocaloric effect in quantum nanoribbons, *Physica E: Low-dimensional Systems and Nanostructures* **65**, 44-50 (2015)
18. Z.Z. Alisultanov, On the theory of Nernst–Ettingshausen oscillations in monolayer and bilayer graphene, *Physics Letters A* **378** (30-31), 2329-2331 (2014)
19. Z.Z. Alisultanov, M.S. Reis, On the quantum magnetic oscillations of electrical and thermal conductivities of graphene, *Solid State Communications* **234**, 26-30 (2016)
20. Z.Z. Alisultanov, R.P. Meilanov, Quantum kinetic equations of the system “graphene+ dimensionally quantized film”, *Theoretical and Mathematical Physics* **172** (3), 1278-1288 (2012)

21. Z.Z. Alisultanov, M.S. Reis, Magneto-oscillations on specific heat of graphene monolayer, *Physics Letters A* **380** (3), 470-474 (2016)
22. N. Ma, Z.Z. Alisultanov, M.S. Reis, External mechanisms for valley polarisation and its effect on the magnetisation of graphene: strain and electric field, *Journal of Magnetism and Magnetic Materials* **482**, 178-185 (2019)
23. Z.Z. Alisultanov, Calculation of electron spectra and some problems in the thermodynamics of graphene layers, *Journal of Experimental and Theoretical Physics* **122** (2), 341-360 (2016)
24. Z.Z. Alisultanov, Thermodynamics of electrons in the graphene bilayer, *Journal of Experimental and Theoretical Physics* **119** (2), 300-310 (2014)
25. Z.Z. Alisultanov, On quantum oscillations in a tunable graphene bilayer, *JETP letters* **104** (3), 188-192 (2016)
26. Z.Z. Alisultanov, Electronic properties of a weyl semimetal in crossed magnetic and electric fields, *Journal of Experimental and Theoretical Physics* **125** (5), 836-849 (2017)
27. Z.Z. Alisultanov, Oscillating magnetocaloric effect in size-quantized diamagnetic film, *Journal of Applied Physics* **115** (11), 113913 (2014)
28. Z.Z. Alisultanov, M.S. Reis, Graphene infrared light emitting diode (GILED), *Preprint arXiv:1608.05388* (2016)
29. Z.Z. Alisultanov, Electron spectrum of double-sheet graphene with broken equivalence of sublattices within layers, *JETP letters* **103** (9), 598-602 (2016)
30. Z.Z. Alisultanov, Anomalous increase in the thermopower in a graphene monolayer formed on a tunable graphene bilayer, *JETP letters* **98** (2), 111-114 (2013)