

Список научных публикаций ведущей организации Федеральное государственное бюджетное учреждение науки Институт физики полупроводников им. А.В. Ржанова
Сибирского отделения Российской академии наук
по теме диссертации соискателя

1. V. M. Kovalev, A. V. Parafilo, O. V. Kibis, and I. G. Savenko, Role of Coulomb interaction in the valley photogalvanic effect, *Phys. Rev. B* 109, 245414 (2024)
2. A. V. Snegirev, V. M. Kovalev, and M. V. Entin, Photogalvanic effect induced by intervalley relaxation in a strained two-dimensional Dirac monolayer, *Phys. Rev. B* 109, 085422 (2024)
3. G. M. Gusev, A. D. Levin, E. B. Olshanetsky, Z. D. Kvon, V. M. Kovalev, M. V. Entin, and N. N. Mikhailov, Interaction-dominated transport in two-dimensional conductors: From degenerate to partially degenerate regime, *Phys. Rev. B* 109, 035302 (2024)
4. D. Khudaiberdiev, Z. D. Kvon, M. V. Entin, D. A. Kozlov, N. N. Mikhailov, and M. Ryzhkov, Mesoscopic Conductance Fluctuations in 2D HgTe Semimetal, *Nanomaterials* 13, (2023)
5. K. Sonowal, A. V. Parafilo, M. V. Boev, V. M. Kovalev, and I. G. Savenko, Second-harmonic generation in fluctuating Ising superconductors, *2D Materials* 10, 045004 (2023)
6. G. M. Gusev, Z. D. Kvon, D. A. Kozlov, E. B. Olshanetsky, M. V. Entin, and N. N. Mikhailov, Transport through the network of topological channels in HgTe based quantum well, *2D Materials* 9, 015021 (2022)
7. M. V. Entin and V. M. Kovalev, Nonlinear circular valley photogalvanic effect, *Phys. Rev. B* 104, 075424 (2021)
8. I. Vakulchyk, V. M. Kovalev, and I. G. Savenko, Nonequilibrium theory of the photoinduced valley Hall effect, *Phys. Rev. B* 103, 035434 (2021)
9. O. V. Kibis, M. V. Boev, and V. M. Kovalev, Light-induced bound electron states in two-dimensional systems: Contribution to electron transport, *Phys. Rev. B* 102, 075412 (2020)
10. З. Д. Квон, Д. А. Козлов, Е. Б. Ольшанецкий, Г. М. Гусев, Н. Н. Михайлов, С. А. Дворецкий, Топологические изоляторы на основе HgTe, *Усп. физ. наук* 190, 673-692 (2020)
11. S. U. Piatrusha, E. S. Tikhonov, Z. D. Kvon, N. N. Mikhailov, S. A. Dvoretsky, and V. S. Khrapai, Topological Protection Brought to Light by the Time-Reversal Symmetry Breaking, *Phys. Rev. Lett.* 123, 056801 (2019)
12. V. M. Kovalev, W.-K. Tse, M. V. Fistul, and I. G. Savenko, Valley Hall transport of photon-dressed quasiparticles in two-dimensional Dirac semiconductors, *New Journal of Physics* 20, 083007 (2018)
13. M. V. Entin, M. M. Mahmoodian, and L. I. Magarill, Linearity of the edge states energy spectrum in the 2D topological insulator, *EPL (Europhysics Letters)* 118, 57002 (2017)
14. L. I. Magarill and M. V. Entin, Circular photogalvanic effect caused by the transitions between edge and 2D states in a 2D topological insulator, *JETP Letters* 104, 771--775 (2016)

15. M. V. Entin and L. I. Magarill, Edge absorption and circular photogalvanic effect in 2D topological insulator edges, *Pis'ma Zh. Eksp. Teor. Fiz.* 103, 804 (2016)
16. M. V. Entin and L. I. Magarill, Localization of edge electrons in a 2D topological insulator strip, *JETP Letters* 100, 566--569 (2015)
17. L. I. Magarill and M. V. Entin, Photocurrent in a two-dimensional ribbon with the conic electron spectrum, *JETP Letters* 102, 599--602 (2015)
18. A. Kononov, S. V. Egorov, Z. D. Kvon, N. N. Mikhailov, S. A. Dvoretsky, and E. V. Deviatov, Evidence on the macroscopic length scale spin coherence for the edge currents in a narrow HgTe quantum well, *JETP Letters* 101, 814--819 (2015)
19. B. Olshanetsky, E., D. Kvon, Z. M. Gusev, G., D. Levin, A., E. Raichev, O., N. Mikhailov, N., and A. Dvoretsky, S., Persistence of a Two-Dimensional Topological Insulator State in Wide HgTe Quantum Wells, *Phys. Rev. Lett.* 114, 126802 (2015)
20. M. V. Entin, L. I. Magarill, and D. L. Shepelyansky, Theory of resonant photon drag in monolayer graphene, *Phys. Rev. B* 81, 165441 (2010)