

## Publications

### Review papers

- R1 I.L. Aleiner and A.I. Larkin,  
*Divergence of classical trajectories and quantum chaos*, Special issue of Chaos, Solitons & Fractals, **8**, 1179 (1997).
- R2 B.L. Altshuler, M.E. Gershenson, and I.L. Aleiner,  
*Phase Relaxation of Electrons in Disordered Conductors*, Physica E, **1 - 3**, 58 (1998).
- R3 I.L. Aleiner, P.W. Brouwer, and L.I. Glazman  
*Quantum Effects in Coulomb Blockade*, Physics Reports. **358/5-6**, 309-440 (2002).
- R4 I. Aleiner, B. Narozhny, and G. Zala  
*Interaction corrections in 2D disordered systems: From intermediate to low temperatures*, Proceedings of the International School of Physics “Enrico Fermi”, Course CLI, IoS Press, (2003);
- R5 D.M. Basko, I. L. Aleiner, and B.L. Altshuler,  
*On the problem of many-body localization*, contribution to the book ”Problems of condensed matter physics”

### Preprints

- P1 I.L. Aleiner and L.I. Glazman,  
*Quantum Coulomb blockade in chaotic systems*, cond-mat/9612138, (unpublished).
- P2 B.N. Narozhny and I.L. Aleiner,  
*Phase Fluctuations and Non-Equilibrium Josephson Effect*, cond-mat/9906400, (unpublished).
- P3 I.L. Aleiner, B. L. Altshuler, and Y. M. Galperin  
*On the critical temperature of two-channel Kondo model: Reply to cond-mat/0009283*, cond-mat/0102513.
- P5 A. Mitra, I. Aleiner, and A. J. Millis  
*Phonon effects in molecular transistors*, cond-mat/0302132.
- P6 F. Fumarola, I.L. Aleiner, B.L. Altshuler  
*Bound State of Ultracold Fermions in the Spin Imbalanced Normal State*, cond-mat/0703003.

### Regular papers

- Cheianov V.V., Aleiner I.L., and Falko V.I.  
*Gapped Bilayer Graphene: A Tunable Strongly Correlated Band Insulator*, Phys. Rev. Lett. **109**, 106801-1 – 106801-5 (2012);
- Lemonik Y., Aleiner I., and Fal’ko V.I.  
*Competing nematic, antiferromagnetic, and spin-flux orders in the ground state of bilayer graphene*, Phys. Rev. B **109**, 245451-1 – 245451-18 (2012);
- Aleiner I. L., Altshuler B. L., and Rubo Y. G.  
*Radiative coupling and weak lasing of exciton-polariton condensates*, Phys. Rev. B, **85**, 121301-1 – 121301-5 (2012);
- Aleiner I.L., Altshuler B. L., and Efetov K. B.  
*Localization and critical diffusion of quantum dipoles in two dimensions*, Phys. Rev. Lett, **107**, 076401-1 – 076401-5 (2011);
- Mucha-Kruczynski Marcin; Aleiner Igor L., and Fal’ko Vladimir I.  
*Landau levels in deformed bilayer graphene at low magnetic fields*, Solid State Communications, **151**, 1088 - 1093 (2011);

6. Mucha-Kruczynski Marcin; Aleiner Igor L., and Fal'ko Vladimir I.  
*Strained bilayer graphene: Band structure topology and Landau level spectrum*, Phys. Rev. B, **84**, 041404-1 – 041404-4 (2011);
7. I.L. Aleiner, B.L. Altshuler, G.V. Shlyapnikov,  
*Finite temperature phase transition for disordered weakly interacting bosons in one dimension*, Nature Physics, **v 6**, 900-904 (2010);
8. S.V.Syzranov, I.L. Aleiner, B.L. Altshuler, K.B. Efetov,  
*Coulomb interaction and first order superconductor-insulator transition*, Phys. Rev. Lett. **105**, 137001-1 – 137001-4 (2010).
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*Spontaneous symmetry breaking and Lifshitz transition in bilayer graphene*, Phys. Rev. B, **82**, 201408-1 – 201408-4, (2010);
10. Boris L. Altshuler, Vladimir E. Kravtsov, Igor V. Lerner, and Igor L. Aleiner  
*Jumps in Current-Voltage Characteristics in Disordered Films*, Phys. Rev. Lett. **102**, 176803-1 – 176803-4 (2009).
11. Matthew S. Foster and Igor L. Aleiner  
*Slow imbalance relaxation and thermoelectric transport in graphene*, Phys. Rev. B **79**, 085415-1 – 085415-14 (2009).
12. Matthew S. Foster, Igor L. Aleiner  
*Graphene via large N: A renormalization group study*, Phys. Rev. B **77**, 195413-1 – 195413-24 (2008).
13. D.M. Basko, I.L. Aleiner,  
*Interplay of Coulomb and electron-phonon interactions in graphene*, Phys. Rev. B **77**, 041409-1 – 041409-4 (2008).
14. I.L. Aleiner, D.E. Kharzeev, A.M. Tselik  
*Spontaneous symmetry breaking in graphene subjected to in-plane magnetic field*, Phys. Rev. B **76**, 195415-1 – 195415-27 (2007).
15. V.V. Cheianov, V.I. Fal'ko, B.L. Altshuler, and I.L. Aleiner,  
*Random resistor network model of minimal conductivity in graphene*, Phys. Rev. Lett **99**, 176801-1 – 176801-4 (2007).
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23. Y. Ahmadian, G. Catelani, I.L. Aleiner, *Spin Related Effects in Transport Properties of "Open" Quantum Dots*, Phys. Rev. B **72**, 245315-1 – 245315-27 (2005).
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