Jozsef Cserti

List of Publications by Year
in descending order

72 papers	1,791 citations	21 h-index (331670)
41 g-index (276875)	72 all docs	72 docs citations
72 times ranked	1324 citing authors	

#	Article	IF	Citations
1	Application of the lattice Green's function for calculating the resistance of an infinite network of resistors. American Journal of Physics, 2000, 68, 896-906.	0.7	219
2	Unified description ofZitterbewegungfor spintronic, graphene, and superconducting systems. Physical Review B, 2006, 74, .	3.2	173
3	Role of the Trigonal Warping on the Minimal Conductivity of Bilayer Graphene. Physical Review Letters, 2007, 99, 066802.	7.8	122
4	Caustics due to a Negative Refractive Index in Circular Graphene $p\text{−}n$ Junctions. Physical Review Letters, 2007, 99, 246801.	7.8	107
5	Minimal longitudinal dc conductivity of perfect bilayer graphene. Physical Review B, 2007, 75, .	3.2	88
6	Perturbation of infinite networks of resistors. American Journal of Physics, 2002, 70, 153-159.	0.7	73
7	Bound states in inhomogeneous magnetic field in graphene: Semiclassical approach. Physical Review B, 2008, 78, .	3.2	58
8	Diverging dc conductivity due to a flat band in a disordered system of pseudospin-1 Dirac-Weyl fermions. Physical Review B, 2013, 88, .	3.2	57
9	Trigonal warping and anisotropic band splitting in monolayer graphene due to Rashba spin-orbit coupling. Physical Review B, 2010, 82, .	3.2	51
10	Uniform tiling with electrical resistors. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 215201.	2.1	51
11	Frequency-dependent magneto-optical conductivity in the generalized $\alpha\text{−}\mathcal{T}_3$ Physical Review B, 2017, 95, .	3.2	50
12	Josephson current in ballistic superconductor-graphene systems. Physical Review B, 2010, 82, .	3.2	47
13	General theory of Zitterbewegung. Physical Review B, 2010, 81, .	3.2	46
14	Thermally activated dislocation unpinning and a theory of the anomalous yield behavior in L12 compounds. Scripta Metallurgica Et Materialia, 1992, 27, 481-486.	1.0	39
15	Exploring the graphene edges with coherent electron focusing. Physical Review B, 2010, 81, .	3.2	36
16	A simple model for the vibrational modes in honeycomb lattices. European Journal of Physics, 2004, 25, 723-736.	0.6	27
17	Electronic and spin properties of Rashba billiards. Physical Review B, 2004, 70, .	3.2	26
18	Multiple scattering theory for superconducting heterostructures. Physical Review B, 2015, 91, .	3.2	26

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19	Transfer matrix approach for the Kerr and Faraday rotation in layered nanostructures. Journal of Physics Condensed Matter, 2016, 28, 375802.	1.8	23
20	Topological and trivial magnetic oscillations in nodal loop semimetals. Physical Review B, 2018, 97, .	3.2	23
21	Effect of the band structure topology on the minimal conductivity for bilayer graphene with symmetry breaking. Physical Review B, 2012, 85, .	3.2	22
22	Advanced Simulation of Conductance Histograms Validated through Channel-Sensitive Experiments on Indium Nanojunctions. Physical Review Letters, 2011, 107, 276801.	7.8	20
23	Nonthermal broadening in the conductance of double quantum dot structures. Physical Review B, 2007, 76, .	3.2	18
24	On the pinning mechanism of screw dislocations in L12 compounds. Scripta Metallurgica Et Materialia, 1992, 27, 487-492.	1.0	17
25	Proximity-Induced Subgaps in Andreev Billiards. Physical Review Letters, 2002, 89, 057001.	7.8	17
26	Electron flow in circular<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>n</mml:mi><mml:mtext>â''</mml:mtext><mml:mi>p</mml:mi></mml:mrow></mml:math>junction of bilayer graphene. Physical Review B, 2009, 80, .	3.2	17
27	Effect of sublattice asymmetry and spin-orbit interaction on out-of-plane spin polarization of photoelectrons. Physical Review B, 2011, 83, .	3.2	17
28	Relation between Zitterbewegung and the charge conductivity, Berry curvature, and the Chern number of multiband systems. Physical Review B, 2010, 82, .	3.2	16
29	Intraband electron focusing in bilayer graphene. New Journal of Physics, 2012, 14, 063028.	2.9	16
30	Two-dimensional electron scattering in regions of nonuniform spin-orbit coupling. Physical Review B, 2006, 74, .	3.2	15
31	Chiral currents in gold nanotubes. Physical Review B, 2010, 81, .	3.2	15
32	Effective description of the gap fluctuation for chaotic Andreev billiards. Physical Review B, 2004, 70, .	3.2	14
33	Ring-shaped Andreev billiards in quantizing magnetic fields. Physical Review B, 2004, 69, .	3.2	13
34	Rashba billiards. European Physical Journal B, 2006, 54, 189-200.	1.5	13
35	Excitation spectra for Andreev billiards of box and disk geometries. Physical Review B, 2002, 66, .	3.2	12
36	Andreev drag effect via magnetic quasiparticle focusing in normal-superconductor nanojunctions. Physical Review B, 2006, 74, .	3.2	12

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37	Electronic standing waves on the surface of the topological insulator Bi2Te3. Physical Review B, 2012, 86, .	3.2	12
38	Magnetic field oscillations of the critical current in long ballistic graphene Josephson junctions. Physical Review B, 2016, 93, .	3.2	12
39	Quantum and semiclassical study of magnetic quantum dots. Physical Review B, 2005, 71, .	3.2	11
40	Andreev edge channels and magnetic focusing in normal-superconductor systems: A semiclassical analysis. Physical Review B, 2007, 76, .	3.2	11
41	Effect of symmetry class transitions on the shot noise in chaotic quantum dots. Physical Review B, 2007, 75, .	3.2	11
42	Emergence of bound states in ballistic magnetotransport of graphene antidots. Physical Review B, 2014, 90, .	3.2	11
43	Nonuniversal behavior of the parity effect in monovalent atomic wires. Physical Review B, 2006, 73, .	3.2	10
44	Prediction of superconducting transition temperatures of heterostructures based on the quasiparticle spectrum. Physical Review B, 2016, 94, .	3.2	10
45	Tunable Lyapunov exponent in inverse magnetic billiards. Physical Review E, 2003, 67, 065202.	2.1	8
46	Logarithmic contribution to the density of states of rectangular Andreev billiards. Physical Review B, 2003, 67, .	3.2	8
47	Bound states in Andreev billiards with soft walls. Physical Review B, 2005, 72, .	3.2	8
48	Quantum-Classical Correspondence in the Wave Functions of Andreev Billiards. Physical Review Letters, 2006, 96, 237002.	7.8	8
49	Graphene Andreev billiards. Physical Review B, 2009, 80, .	3.2	7
50	Protected edge states in silicene antidots and dots in magnetic field. Physical Review B, 2015, 91, .	3.2	7
51	First principles based proximity effect of superconductor–normal metal heterostructures. Journal of Physics Condensed Matter, 2016, 28, 495701.	1.8	7
52	Stability of anisotropic liquid-solid interfaces. Acta Metallurgica, 1986, 34, 1029-1034.	2.1	6
53	Diffraction in the semiclassical description of mesoscopic devices. Chaos, Solitons and Fractals, 1997, 8, 1031-1045.	5.1	6
54	Crossover from regular to chaotic behavior in the conductance of periodic quantum chains. Physical Review B, 1998, 57, R15092-R15095.	3.2	6

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55	Andreev bound states for a superconducting-ferromagnetic box. Physical Review B, 2004, 69, .	3.2	6
56	Competition of topological and topologically trivial phases in patterned graphene based heterostructures. Physical Review B, 2020, 101, .	3.2	5
57	Andreev bound states for cake shape superconducting–normal systems. Journal of Physics Condensed Matter, 2004, 16, 6737-6746.	1.8	4
58	Skew scattering due to intrinsic spin-orbit coupling in a two-dimensional electron gas. Physical Review B, 2007, 76, .	3.2	4
59	Catastrophe optics of caustics in single and bilayer graphene: Fine structure of caustics. Physica Status Solidi (B): Basic Research, 2010, 247, 2949-2952.	1.5	4
60	Stress-assisted instability in two-dimensional dislocation systems. Physical Review B, 1999, 60, 6175-6178.	3.2	3
61	Negative Length Orbits in Normal-Superconductor Billiard Systems. Physical Review Letters, 2000, 85, 3704-3707.	7.8	3
62	Weak localization correction to the density of transmission eigenvalues in the presence of magnetic field and spin-orbit coupling for a chaotic quantum dot. Physical Review B, 2006, 74, .	3.2	2
63	Monte Carlo studies of two-dimensional dislocation systems in applied external stress. Modelling and Simulation in Materials Science and Engineering, 1998, 6, 507-519.	2.0	1
64	Quantized invariant tori in Andreev billiards of mixed phase space. Physical Review B, 2006, 73, .	3.2	1
65	Finite-size effects on the minimal conductivity in graphene with Rashba spin–orbit coupling. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 75, 1-6.	2.7	1
66	Magic Number Theory of Superconducting Proximity Effects and Wigner Delay Times in Graphene-Like Molecules. Journal of Physical Chemistry C, 2019, 123, 6812-6822.	3.1	1
67	Quantum Interference and Nonequilibrium Josephson Currents in Molecular Andreev Interferometers. Nanomaterials, 2020, 10, 1033.	4.1	1
68	Semiclassical quantization of circular billiard in homogeneous magnetic field: Berry-Tabor approach. International Journal of Mathematics and Mathematical Sciences, 2001, 26, 269-280.	0.7	0
69	Spectral determinant method for interacting N-body systems including impurities. Physical Review B, 2002, 65, .	3.2	0
70	Geometry dependence of the conductance oscillations of monovalent atomic chains. Physica Status Solidi (B): Basic Research, 2007, 244, 677-684.	1.5	0
71	Reprint of : Finite-size effects on the minimal conductivity in graphene with Rashba spin–orbit coupling. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 82, 216-221.	2.7	0
72	Current distribution in magnetically confined 2DEG: semiclassical and quantum mechanical treatment. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 265301.	2.1	0