Fabrizio Dolcini

List of Publications by Citations

57 papers	1,125 citations	20 h-index	32 g-index
67 ext. papers	1,340 ext. citations	3.3 avg, IF	4.91 L-index

#	Paper	IF	Citations
57	Phonon-induced backscattering in helical edge states. *Physical Review Letters*, **2012**, 108, 086602	7.4	92
56	Full electrical control of charge and spin conductance through interferometry of edge states in topological insulators. *Physical Review B*, **2011**, 83,	3.3	73
55	Transport properties of single-channel quantum wires with an impurity: Influence of finite length and temperature on average current and noise. *Physical Review B*, **2005**, 71,	3.3	70
54	Renormalization group approach for the scattering off a single Rashba impurity in a helical liquid. *Physical Review B*, **2012**, 86,	3.3	65
53	Andreev reflection in graphene nanoribbons. *Physical Review B*, **2009**, 79,	3.3	61
52	Topological Josephson ?0 junctions. *Physical Review B*, **2015**, 92,	3.3	57
51	Appearance of fractional charge in the noise of nonchiral Luttinger liquids. *Physical Review Letters*, **2004**, 92, 226405	7.4	57
50	Wigner-function formalism applied to semiconductor quantum devices: Failure of the conventional boundary condition scheme. *Physical Review B*, **2013**, 88,	3.3	49
49	Derivation of nonlinear single-particle equations via many-body Lindblad superoperators: A density-matrix approach. *Physical Review B*, **2014**, 90,	3.3	31
48	Oscillatory nonlinear conductance of an interacting quantum wire with an impurity. *Physical Review Letters*, **2003**, 91, 266402	7.4	31
47	Signatures of Majorana bound states in transport properties of hybrid structures based on helical liquids. *Physical Review B*, **2014**, 89,	3.3	30
46	Electron tunneling into a quantum wire in the Fabry-P□ot regime. *Physical Review B*, **2009**, 79,	3.3	28
45	Symmetry-protected topological phases of one-dimensional interacting fermions with spin-charge separation. *Physical Review B*, **2017**, 95,	3.3	25
44	Blockade and counterflow supercurrent in exciton-condensate Josephson junctions. *Physical Review Letters*, **2010**, 104, 027004	7.4	23
43	Photoexcitation of electron wave packets in quantum spin Hall edge states: Effects of chiral anomaly from a localized electric pulse. *Physical Review B*, **2016**, 94,	3.3	22
42	Tunnel junction of helical edge states: Determining and controlling spin-preserving and spin-flipping processes through transconductance. *Physical Review B*, **2014**, 89,	3.3	21
41	Interplay between energy dissipation and reservoir-induced thermalization in nonequilibrium quantum nanodevices. *Physical Review B*, **2013**, 88,	3.3	21

40	Switching the sign of Josephson current through Aharonov-Bohm interferometry. *Physical Review B* , **2007**, 75,	3.3	21
39	Multiple Andreev reflections in a quantum dot coupled to superconducting leads: Effect of spin-orbit coupling. *Physical Review B*, **2008**, 78,	3.3	20
38	Signature of interaction in dc transport of ac-gated quantum spin Hall edge states. *Physical Review B*, **2012**, 85,	3.3	19
37	Temperature and filling dependence of the superconducting phase in the Penson-Kolb-Hubbard model. *Physical Review B*, **2000**, 62, 2315-2320	3.3	19
36	Weak localization in electric-double-layer gated few-layer graphene. *2D Materials*, **2017**, 4, 035006	5.9	18
35	Josephson current in a four-terminal superconductor/exciton-condensate/superconductor system. *Physical Review B*, **2011**, 84,	3.3	15
34	Finite-temperature properties of the Hubbard chain with bond-charge interaction. *Physical Review B*, **2002**, 66,	3.3	15
33	Results on the symmetries of integrable fermionic models on chains. *Nuclear Physics B*, **2001**, 592, 563-596	2.8	14
32	Appearance of the universal value e2/h of the zero-bias conductance in a Weyl semimetal-superconductor junction. *Physical Review B*, **2018**, 97,	3.3	13
31	Wigner-function formalism applied to semiconductor quantum devices: Need for nonlocal scattering models. *Physical Review B*, **2017**, 96,	3.3	13
30	A ballistic quantum ring Josephson interferometer. *Nanotechnology*, **2013**, 24, 245201	3.4	12
29	Quantum phases of one-dimensional Hubbard models with three- and four-body couplings. *Physical Review B*, **2013**, 88,	3.3	12
28	Magnetic field effects on a nanowire with inhomogeneous Rashba spin-orbit coupling: Spin properties at equilibrium. *Physical Review B*, **2018**, 98,	3.3	10
27	Noise and current correlations in tunnel junctions of quantum spin Hall edge states. *Physical Review B*, **2015**, 92,	3.3	10
26	Dispersionless propagation of electron wavepackets in single-walled carbon nanotubes. *Applied Physics Letters*, **2015**, 106, 243101	3.4	10
25	Interplay between Rashba interaction and electromagnetic field in the edge states of a two-dimensional topological insulator. *Physical Review B*, **2017**, 95,	3.3	9
24	Electron-phonon coupling in metallic carbon nanotubes: Dispersionless electron propagation despite dissipation. *Physical Review B*, **2015**, 92,	3.3	9
23	Band and filling-controlled transitions in exactly solved electronic models. *Physical Review B*, **2001**, 63,	3.3	9

22	Quench-induced dynamical phase transitions and synchronization in the Bose-Hubbard model. *Physical Review B*, **2019**, 99,	3.3	8
21	Dynamics of a SQUID ratchet coupled to a nanomechanical resonator. *Physical Review B*, **2009**, 79,	3.3	8
20	Exact thermodynamics of an extended Hubbard model of single and paired carriers in competition. *Physical Review B*, **2002**, 65,	3.3	7
19	Nanotransformation and current fluctuations in exciton condensate junctions. *Physical Review Letters*, **2012**, 108, 156401	7.4	6
18	INTEGRABLE EXTENDED HUBBARD HAMILTONIANS FROM SYMMETRIC GROUP EQUATIONS. *International Journal of Modern Physics B*, **2000**, 14, 1719-1728	1.1	6
17	Adiabatic magnetization of superconductors as a high-performance cooling mechanism. *Physical Review B*, **2009**, 80,	3.3	5
16	Photoexcitation in two-dimensional topological insulators. *European Physical Journal: Special Topics* , **2018**, 227, 1323-1344	2.3	5
15	Effects of disorder on electron tunneling through helical edge states. *Physical Review B*, **2014**, 90,	3.3	4
14	Negativity of the excess noise in a quantum wire capacitively coupled to a gate. *Physical Review B*, **2007**, 75,	3.3	4
13	Majorana-like localized spin density without bound states in topologically trivial spin-orbit coupled nanowires. *Physical Review B*, **2020**, 101,	3.3	3
12	Challenges towards the simulation of GaN-based LEDs beyond the semiclassical framework **2016**,		3
11	Coherent charge and spin oscillations induced by local quenches in nanowires with spin-orbit coupling. *Physical Review B*, **2019**, 100,	3.3	2
10	Correlation length and the scaling parameter in the renormalization group. *Physical Review E*, **1998**, 57, 2594-2601	2.4	2
9	EXTENDED HUBBARD HAMILTONIAN WITH (SUPER)SYMMETRIES: ADDITIVE POLYNOMIAL R-MATRIX FOR SOME INTEGRABLE CASES. *International Journal of Modern Physics B*, **1999**, 13, 2953-2960	1.1	2
8	Microscopic treatment of energy dissipation and decoherence via many-body Lindblad superoperators. *Journal of Physics: Conference Series*, **2015**, 647, 012027	0.3	1
7	Tuning excess noise by Aharonov–Bohm interferometry. *Chemical Physics*, **2010**, 375, 291-295	2.3	1
6	dc Josephson effect in metallic single-walled carbon nanotubes. *Solid State Communications*, **2007**, 144, 551-556	1.6	1
5	Confinement versus interface bound states in spin-orbit coupled nanowires. *European Physical Journal Plus*, **2020**, 135, 1	3.1	0

4	Electron–phonon dissipation in quantum nanodevices. *Journal of Computational Electronics*, **2016**, 15, 1170-1178	1.8
3	Phonon-induced quantum diffusion in Carbon-based materials. *Journal of Physics: Conference Series*, **2015**, 647, 012045	0.3
2	The electro-magnetostatic Aharonov–Bohm effect as a tool to tune the Josephson current. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 2091-2092	3
1	Role of the equilibrium size of Kadanoff blocks in the loop-expansion technique. *Physical Review E*, **1998**, 58, 5461-5466	2.4