Rosa Lopez

List of Publications by Year in Descending Order

82 papers	2,552 citations	29 h-index	48 g-index
89 ext. papers	2,767 ext. citations	4 avg, IF	5.22 L-index

#	Paper	IF	Citations
82	Quantum consensus dynamics by entangling Maxwell demon. *New Journal of Physics*, **2022**, 24, 033028	2.9	0
81	Beating Carnot efficiency with periodically driven chiral conductors.. *Nature Communications*, **2022**, 13, 2512	17.4	0
80	Subgap spectrum for an interacting hybrid superconducting quantum dot. *Physical Review B*, **2020**, 101,	3.3	1
79	Thermoelectric transport through interacting quantum dots in graphene. *European Physical Journal: Special Topics*, **2019**, 227, 1969-1979	2.3	4
78	Nonlinear chiral refrigerators. *Physical Review B*, **2019**, 99,	3.3	9
77	Effective Equilibrium in Out-of-Equilibrium Interacting Coupled Nanoconductors. *Entropy*, **2019**, 22,	2.8	1
76	Engineering drag currents in Coulomb coupled quantum dots. *New Journal of Physics*, **2018**, 20, 023038	2.9	7
75	Anomalous Joule law in the adiabatic dynamics of a quantum dot in contact with normal-metal and superconducting reservoirs. *Physical Review B*, **2018**, 98,	3.3	2
74	Aharonov-Bohm and Aharonov-Casher effects for local and nonlocal Cooper pairs. *Physical Review B* , **2018**, 97,	3.3	1
73	Thermally Driven Out-of-Equilibrium Two-Impurity Kondo System. *Physical Review Letters*, **2018**, 121, 096801	7.4	6
72	Chiral Maxwell demon in a quantum Hall system with a localized impurity. *Physical Review B*, **2017**, 96,	3.3	7
71	Fate of the spin-12 Kondo effect in the presence of temperature gradients. *Physical Review B*, **2017**, 96,	3.3	12
70	Nonlinear electric and thermoelectric Andreev transport through a hybrid quantum dot coupled to ferromagnetic and superconducting leads. *European Physical Journal B*, **2017**, 90, 1	1.2	0
69	Dynamical Coulomb blockade of thermal transport. *Physical Review B*, **2017**, 95,	3.3	17
68	Large thermoelectric power and figure of merit in a ferromagnetic quantum dot superconducting device. *Physical Review B*, **2016**, 94,	3.3	25
67	Reprint of : Quantum point contacts as heat engines. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 82, 310-313	3	2
66	A hybrid superconducting quantum dot acting as an efficient charge and spin Seebeck diode. *New Journal of Physics*, **2016**, 18, 093024	2.9	8

65	Nonlinear phenomena in quantum thermoelectrics and heat. *Comptes Rendus Physique*, **2016**, 17, 1060-1071	1.4	41
64	Cotunneling Drag Effect in Coulomb-Coupled Quantum Dots. *Physical Review Letters*, **2016**, 117, 066602	7.4	32
63	Shiba states and zero-bias anomalies in the hybrid normal-superconductor Anderson model. *Physical Review B*, **2015**, 91,	3.3	72
62	Cross thermoelectric coupling in normal-superconductor quantum dots. *Physical Review B*, **2015**, 91,	3.3	18
61	Quantum point contacts as heat engines. *Physica E: Low-Dimensional Systems and Nanostructures*, **2015**, 74, 447-450	3	4
60	Heat asymmetries in nanoscale conductors: The role of decoherence and inelasticity. *Physical Review B*, **2015**, 91,	3.3	13
59	Time-dependent heat flow in interacting quantum conductors. *Physical Review B*, **2015**, 92,	3.3	10
58	Thermoelectric effect in the Kondo dot side-coupled to a Majorana mode. *European Physical Journal B*, **2015**, 88, 1	1.2	6
57	Nonlinear spin-thermoelectric transport in two-dimensional topological insulators. *Physical Review B*, **2014**, 90,	3.3	25
56	Majorana mode stacking, robustness and size effect in cylindrical nanowires. *European Physical Journal B*, **2014**, 87, 1	1.2	3
55	Orbital caloritronic transport in strongly interacting quantum dots. *New Journal of Physics*, **2014**, 16, 015003	2.9	8
54	Thermoelectric effects in quantum Hall systems beyond linear response. *Journal of Physics: Conference Series*, **2014**, 568, 052016	0.3	8
53	Thermoelectrical detection of Majorana states. *Physical Review B*, **2014**, 89,	3.3	38
52	Nonequilibrium spin-current detection with a single Kondo impurity. *Physical Review B*, **2013**, 88,	3.3	16
51	Proposal for a local heating driven spin current generator. *Applied Physics Letters*, **2013**, 103, 172401	3.4	5
50	Scattering theory of nonlinear thermoelectric transport. *Physical Review Letters*, **2013**, 110, 026804	7.4	96
49	Transport measurement of Andreev bound states in a Kondo-correlated quantum dot. *Physical Review Letters*, **2013**, 110, 076803	7.4	50
48	Kondo effect in a quantum dot side-coupled to a topological superconductor. *Physical Review B*, **2013**, 87,	3.3	69

47	Nonlinear heat transport in mesoscopic conductors: Rectification, Peltier effect, and Wiedemann-Franz law. *Physical Review B*, **2013**, 88,	3.3	62
46	Magnetic-field asymmetry of nonlinear thermoelectric and heat transport. *New Journal of Physics*, **2013**, 15, 105012	2.9	13
45	Emergence of Majorana modes in cylindrical nanowires. *Europhysics Letters*, **2013**, 103, 37004	1.6	17
44	SU(3) Kondo effect in spinless triple quantum dots. *Physical Review B*, **2013**, 87,	3.3	20
43	Dynamic thermoelectric and heat transport in mesoscopic capacitors. *Physical Review B*, **2013**, 88,	3.3	32
42	Noise and fluctuation relations of a spin diode. *Nanoscale Research Letters*, **2013**, 8, 246	5	1
41	Magnetic-field instability of Majorana modes in multiband semiconductor wires. *Physical Review B*, **2012**, 86,	3.3	49
40	Fluctuation relations for spintronics. *Physical Review Letters*, **2012**, 108, 246603	7.4	25
39	Transport through Majorana nanowires attached to normal leads. *New Journal of Physics*, **2012**, 14, 083020	2.9	14
38	Tunable Kondo effect in a double quantum dot coupled to ferromagnetic contacts. *Physical Review Letters*, **2012**, 108, 166605	7.4	37
37	Effect of many-body correlations on mesoscopic charge relaxation. *Physical Review B*, **2011**, 83,	3.3	36
36	Josephson current in carbon nanotubes with spin-orbit interaction. *Physical Review Letters*, **2011**, 107, 196801	7.4	17
35	Kramers polarization in strongly correlated carbon nanotube quantum dots. *Physical Review B*, **2011**, 83,	3.3	12
34	Kondo effect in spin-orbit mesoscopic interferometers. *Physical Review B*, **2010**, 81,	3.3	15
33	Magnetoasymmetric transport in a mesoscopic interferometer: From the weak to the strong coupling regime. *Physical Review B*, **2010**, 81,	3.3	17
32	Transport properties of a molecule embedded in an Aharonov-Bohm interferometer. *Physical Review B*, **2010**, 81,	3.3	6
31	Mesoscopic Coulomb drag, broken detailed balance, and fluctuation relations. *Physical Review Letters*, **2010**, 104, 076801	7.4	93
30	Multichannel effects in Rashba quantum wires. *Physical Review B*, **2010**, 81,	3.3	24

29	Josephson current in strongly correlated double quantum dots. *Physical Review Letters*, **2010**, 105, 116803	7.4	34
28	Two-impurity Anderson model revisited: Competition between Kondo effect and reservoir-mediated superexchange in double quantum dots. *Physical Review B*, **2010**, 81,	3.3	15
27	Localized magnetic states in Rashba dots. *Physical Review B*, **2009**, 79,	3.3	16
26	Spin polarized current from localized Rashba interaction in a quantum wire. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 2123-2127		5
25	Local spin polarization in a quantum wire induced by the Rashba interaction. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1479-1480	3	1
24	SU(4) Kondo Effect in a Mesoscopic Interferometer. *Mathematics in Industry*, **2008**, 421-425	0.2	
23	Evanescent states in quantum wires with Rashba spin-orbit coupling. *Physical Review B*, **2007**, 76,	3.3	16
22	Josephson current through a Kondo molecule. *Physical Review B*, **2007**, 75,	3.3	23
21	From Coulomb blockade to the Kondo regime in a Rashba dot. *Physical Review B*, **2007**, 76,	3.3	44
20	Pair tunneling and shot noise through a single molecule in a strong electron-phonon coupling regime. *Physical Review B*, **2007**, 76,	3.3	17
19	Mesoscopic charge relaxation. *Physical Review Letters*, **2006**, 97, 206804	7.4	116
18	Kondo effects in carbon nanotubes: From SU(4) to SU(2) symmetry. *Physical Review B*, **2006**, 74,	3.3	78
17	Probing spin and orbital Kondo effects with a mesoscopic interferometer. *Physical Review B*, **2005**, 71,	3.3	93
16	Rashba interaction in quantum wires with in-plane magnetic fields. *Physical Review B*, **2005**, 72,	3.3	55
15	Spintronic Transport and Kondo Effect in Quantum Dots. *Journal of Superconductivity and Novel Magnetism*, **2005**, 18, 251-260		8
14	SU(4) Kondo effect in carbon nanotubes. *Physical Review Letters*, **2005**, 95, 067204	7.4	125
13	Three-terminal transport through a quantum dot in the Kondo regime: Conductance, dephasing, and current-current correlations. *Physical Review B*, **2005**, 71,	3.3	44
12	Ruderman-Kittel-Kasuya-Yosida and magnetic-field interactions in coupled Kondo quantum dots. *Physical Review Letters*, **2005**, 94, 086602	7.4	94

11	Shot noise in strongly correlated double quantum dots. *Physical Review B*, **2004**, 69,	3.3	55
10	Kondo effect in a quantum dot coupled to ferromagnetic leads: a numerical renormalization group analysis. *Physical Review Letters*, **2004**, 92, 056601	7.4	156
9	Nonequilibrium spintronic transport through an artificial Kondo impurity: conductance, magnetoresistance, and shot noise. *Physical Review Letters*, **2003**, 90, 116602	7.4	144
8	Dynamical instability of electric-field domains in ac-driven superlattices. *Physical Review B*, **2003**, 67,	3.3	12
7	Andreev drag effect in ferromagnetic-normal-superconducting systems. *Physical Review B*, **2003**, 68,	3.3	46
6	Photo-assisted dynamical transport in multiple quantum wells. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 12, 319-322	3	1
5	Transport in quantum dots in the Kondo regime under the influence of an AC potential. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 12, 810-814	3	
4	Nonequilibrium transport through double quantum dots: Kondo effect versus antiferromagnetic coupling. *Physical Review Letters*, **2002**, 89, 136802	7.4	133
3	Low-temperature transport in ac-driven quantum dots in the Kondo regime. *Physical Review B*, **2001**, 64,	3.3	44
2	AC transport through a quantum dot: from Kondo to Coulomb-blockade behaviour. *Physica E: Low-Dimensional Systems and Nanostructures*, **2000**, 6, 379-381	3	2
1	Kondo Effect in ac Transport through Quantum Dots. *Physical Review Letters*, **1998**, 81, 4688-4691	7.4	67