Colin Benjamin

List of Publications by Year
in descending order

62	716	567144 15	580701 25
papers	citations	h-index	g-index

63	63	63	587
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Testing quantum speedups in exciton transport through a photosynthetic complex using quantum stochastic walks. Physical Chemistry Chemical Physics, 2022, 24, 2601-2613.	1.3	3
2	Josephson quantum spin thermodynamics. Journal of Physics Condensed Matter, 2022, , .	0.7	1
3	Stability of Majorana bound states in the presence of spin-flip scattering. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 126, 114389.	1.3	0
4	Entanglement and quantum strategies reduce congestion costs in Pigou networks. Physica A: Statistical Mechanics and Its Applications, 2021, 574, 126013.	1.2	1
5	Order from chaos in quantum walks on cyclic graphs. Physical Review A, 2021, 104, .	1.0	5
6	Exciting odd-frequency equal-spin triplet correlations at metal-superconductor interfaces. Physical Review B, 2021, 104, .	1.1	2
7	Magic angle twisted bilayer graphene as a highly efficient quantum Otto engine. Physical Review B, 2021, 104, .	1.1	8
8	Is the essence of a quantum game captured completely in the original classical game?. Physica A: Statistical Mechanics and Its Applications, 2021, 584, 126360.	1.2	0
9	A thermodynamic probe of the topological phase transition in epitaxial graphene based Floquet topological insulator. Journal of Applied Physics, 2021, 130, 205105.	1.1	0
10	Disordered contacts can localize chiral edge electrons. Journal of Physics and Chemistry of Solids, 2020, 139, 109313.	1.9	0
11	Thermodynamic susceptibility as a measure of cooperative behavior in social dilemmas. Chaos, 2020, 30, 093117.	1.0	3
12	The emergence of cooperation in the thermodynamic limit. Chaos, Solitons and Fractals, 2020, 135, 109762.	2.5	4
13	Shot noise as a probe for the pairing symmetry of iron pnictide superconductors. Europhysics Letters, 2020, 132, 47002.	0.7	1
14	Optimal Quantum Refrigeration in Strained Graphene. Journal of Physical Chemistry C, 2019, 123, 22858-22864.	1.5	8
15	Triggers for cooperative behavior in the thermodynamic limit: A case study in Public goods game. Chaos, 2019, 29, 053131.	1.0	12
16	Quantized Josephson phase battery. Europhysics Letters, 2019, 126, 57002.	0.7	29
17	Entanglement renders free riding redundant in the thermodynamic limit. Physica A: Statistical Mechanics and Its Applications, 2019, 521, 607-613.	1.2	6
18	Disordered contacts can localize helical edge electrons. Journal of Physics Condensed Matter, 2019, 31, 34LT01.	0.7	0

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19	Spin-flip scattering engendered quantum spin torque in a Josephson junction. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180775.	1.0	0
20	Quantum Nash equilibrium in the thermodynamic limit. Quantum Information Processing, 2019, 18, 1.	1.0	6
21	Designing a highly efficient graphene quantum spin heat engine. Scientific Reports, 2019, 9, 6018.	1.6	13
22	Tuning the 0 âˆ' Ï€ Josephson junction with a magnetic impurity: Role of tunnel contacts, exchange coupling, e âˆ' e interactions and high-spin states. Scientific Reports, 2018, 8, 5208.	1.6	6
23	Helical thermoelectrics and refrigeration. Physical Review E, 2018, 97, 022114.	0.8	18
24	Role of helical edge modes in the chiral quantum anomalous Hall state. Scientific Reports, 2018, 8, 1335.	1.6	3
25	Are thermal fluctuations the sole reason for finite longitudinal resistance in quantum anomalous Hall experiments?. Journal of Physics Condensed Matter, 2018, 30, 37LT01.	0.7	1
26	Yu-Shiba-Rusinov bound states induced by a spin flipper in the vicinity of a s-wave superconductor. Scientific Reports, 2018, 8, 11949.	1.6	12
27	Characterizing a high spin magnetic impurity via Andreev reflection spectroscopy. European Physical Journal B, 2018, 91, 1.	0.6	0
28	Playing a true Parrondo's game with a three-state coin on a quantum walk. Europhysics Letters, 2018, 122, 40004.	0.7	34
29	Implementing Parrondoâ€™s paradox with two-coin quantum walks. Royal Society Open Science, 2018, 5, 171599.	1.1	30
30	Strained-graphene-based highly efficient quantum heat engine operating at maximum power. Physical Review E, 2017, 96, 032118.	0.8	24
31	Probing helicity and the topological origins of helicity via non-local Hanbury-Brown and Twiss correlations. Scientific Reports, 2017, 7, 6954.	1.6	14
32	Fragility of Nonlocal Edge-Mode Transport in the Quantum Spin Hall State. Physical Review Applied, 2016, 6, .	1.5	11
33	Topologically induced fractional Hall steps in the integer quantum Hall regime ofMoS₂. Nanotechnology, 2016, 27, 385203.	1.3	1
34	A scheme to realize the quantum spin-valley Hall effect in monolayer graphene. Carbon, 2016, 110, 304-312.	5.4	27
35	Adiabatically twisting a magnetic molecule to generate pure spin currents in graphene. Journal of Physics Condensed Matter, 2016, 28, 035305.	0.7	5
36	Are quantum spin Hall edge modes more resilient to disorder, sample geometry and inelastic scattering than quantum Hall edge modes?. Journal of Physics Condensed Matter, 2016, 28, 145303.	0.7	11

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37	Strain designed Josephson Ï€ -junction qubits with topological insulators. Europhysics Letters, 2015, 110, 50003.	0.7	5
38	Do quantum strategies always win?. Quantum Information Processing, 2015, 14, 4027-4038.	1.0	18
39	Persistent currents in absence of magnetic field in graphene nanorings: The ambiguous role of inter valley scattering. Applied Physics Letters, 2014, 104, 053112.	1.5	4
40	How to detect a genuine quantum pump effect in graphene?. Applied Physics Letters, 2013, 103, 043120.	1.5	10
41	Can dephasing generate non-local spin correlations?. Europhysics Letters, 2011, 96, 67001.	0.7	5
42	Detecting Majorana bound states. Physical Review B, 2010, 81, .	1.1	45
43	Ï€junction qubit in monolayer graphene. Physical Review B, 2009, 79, .	1.1	8
44	Positive cross correlations of noise in superconducting hybrid structures: Roles of interfaces and interactions. Physical Review B, 2008, 77, .	1.1	45
45	Detecting entangled states in graphene via crossed Andreev reflection. Physical Review B, 2008, 78, .	1.1	51
46	Entangled states in graphene-detection and use. Journal of Physics: Conference Series, 2008, 129, 012005.	0.3	0
47	Controllable Ï€ junction in a Josephson quantum-dot device with molecular spin. European Physical Journal B, 2007, 57, 279-289.	0.6	31
48	Crossed Andreev reflection as a probe for the pairing symmetry of ferromagnetic superconductors. Physical Review B, 2006, 74, .	1.1	19
49	Detecting a true quantum pump effect. European Physical Journal B, 2006, 52, 403-410.	0.6	7
50	Resolving the order parameter of high-Tcsuperconductors through quantum pumping spectroscopy. Physical Review B, 2005, 71, .	1.1	2
51	Nonlocal pure spin current injection via quantum pumping and crossed Andreev reflection. Physical Review B, 2005, 72, .	1.1	15
52	Quantum spin pumping with adiabatically modulated magnetic barriers. Physical Review B, 2004, 69, .	1.1	61
53	EQUILIBRIUM CURRENTS IN A QUANTUM DOUBLE RING SYSTEM: A NON-TRIVIAL ROLE OF SYSTEM-RESERVOIR COUPLING. International Journal of Modern Physics B, 2004, 18, 3343-3353.	1.0	2
54	Features in evanescent Aharonov-Bohm interferometry. Physical Review B, 2003, 68, .	1.1	15

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55	A COMPARATIVE STUDY OF SOME MODELS OF INCOHERENCE AT THE MESOSCOPIC SCALE. International Journal of Modern Physics B, 2003, 17, 4733-4748.	1.0	3
56	Dephasing via stochastic absorption: A case study in Aharonov-Bohm oscillations. Physical Review B, 2002, 65, .	1.1	17
57	STUDY OF QUANTUM CURRENT ENHANCEMENT, EIGENENERGY SPECTRA AND MAGNETIC MOMENTS IN A MULTIPLY CONNECTED SYSTEM AT EQUILIBRIUM. International Journal of Modern Physics B, 2002, 16, 1787-1805.	1.0	4
58	Wave attenuation model for dephasing and measurement of conditional times. Pramana - Journal of Physics, 2002, 59, 385-395.	0.9	2
59	Wave attenuation to clock sojourn times. Solid State Communications, 2002, 121, 591-595.	0.9	11
60	Survival of Î¦0/2 periodicity in presence of incoherence in asymmetric Aharonovâ€“Bohm rings. Solid State Communications, 2002, 124, 331-334.	0.9	5
61	ROLE OF QUANTUM ENTANGLEMENT DUE TO A MAGNETIC IMPURITY ON CURRENT MAGNIFICATION EFFECT IN MESOSCOPIC OPEN RINGS. Modern Physics Letters B, 2001, 15, 19-26.	1.0	12
62	Current magnification effect in mesoscopic systems at equilibrium. Physical Review B, 2001, 64, .	1.1	20