

# Dario Bercioux

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

1,892  
citations

279701

23  
h-index

254106

43  
g-index

61  
all docs

61  
docs citations

61  
times ranked

1636  
citing authors

#	ARTICLE	IF	CITATIONS
1	Corner modes of the breathing kagome lattice: Origin and robustness. <i>Physical Review B</i> , 2022, 105, .	1.1	18
2	Energy density as a probe of band representations in photonic crystals. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 314002.	0.7	6
3	Superconducting Proximity Effect in $d$ -Wave Cuprate/Graphene Heterostructures. <i>Annalen Der Physik</i> , 2022, 534, .	0.9	8
4	Higher-order topology in plasmonic Kagome lattices. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	26
5	Quantum network approach to spin interferometry driven by Abelian and non-Abelian fields. <i>Physical Review B</i> , 2021, 103, .	1.1	4
6	Topological Characterization of Photonic Crystals. , 2021, , .		0
7	Metallic carbon nanotube quantum dots with broken symmetries as a platform for tunable terahertz detection. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	5
8	Topological photonics: Mistaken paradigms and new opportunities. , 2021, , .		0
9	Tutorial: Computing Topological Invariants in 2D Photonic Crystals. <i>Advanced Quantum Technologies</i> , 2020, 3, 1900117.	1.8	63
10	Long-Range Propagation and Interference of $d$ -wave Superconducting Pairs in Graphene. <i>Physical Review Letters</i> , 2020, 125, 087002.	2.9	12
11	Wave-particle duality of electrons with spin-momentum locking. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	1
12	Living on the edge: Topology, electrostatics, and disorder. <i>Physical Review Research</i> , 2020, 2, .	1.3	11
13	Volkov-Pankratov states in topological graphene nanoribbons. <i>Physical Review Research</i> , 2020, 2, .	1.3	9
14	Robustness of topological corner modes in photonic crystals. <i>Physical Review Research</i> , 2020, 2, .	1.3	53
15	Optical Hall response of bilayer graphene: Manifestation of chiral hybridized states in broken mirror symmetry lattices. <i>Physical Review Research</i> , 2020, 2, .	1.3	5
16	Spin-orbit interaction and snake states in a graphene p-n junction. <i>Physical Review B</i> , 2019, 100, .	1.1	3
17	Robust zero-energy modes in an electronic higher-order topological insulator. <i>Nature Materials</i> , 2019, 18, 1292-1297.	13.3	158
18	Time-evolution patterns of electrons in twisted bilayer graphene. <i>Physical Review B</i> , 2019, 99, .	1.1	13

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19	Quantum Transport Properties of an Exciton Insulator/Superconductor Hybrid Junction. <i>Advanced Quantum Technologies</i> , 2019, 2, 1800049.	1.8	2
20	Quantum fractals. <i>Nature Physics</i> , 2019, 15, 111-112.	6.5	7
21	Engineering fragile topology in photonic crystals: Topological quantum chemistry of light. <i>Physical Review Research</i> , 2019, 1, .	1.3	62
22	Confined electron and hole states in semiconducting carbon nanotube sub-10 nm artificial quantum dots. <i>Carbon</i> , 2018, 132, 304-311.	5.4	5
23	Quasiparticle cooling using a topological insulator-superconductor hybrid junction. <i>European Physical Journal: Special Topics</i> , 2018, 227, 1361-1375.	1.2	3
24	Solitons in One-Dimensional Lattices with a Flat Band. <i>Annalen Der Physik</i> , 2017, 529, 1600262.	0.9	16
25	Solid-state platforms. <i>Nature Physics</i> , 2017, 13, 628-629.	6.5	3
26	Transport Properties of an Electron-Hole Bilayer in Contact with a Superconductor Hybrid Junction. <i>Physical Review Letters</i> , 2017, 119, 067001.	2.9	5
27	Andreev spectrum of a Josephson junction with spin-split superconductors. <i>Europhysics Letters</i> , 2016, 115, 67001.	0.7	4
28	Focus on nonequilibrium fluctuation relations: from classical to quantum. <i>New Journal of Physics</i> , 2015, 17, 020201.	1.2	4
29	Quantum transport in Rashba spin-orbit materials: a review. <i>Reports on Progress in Physics</i> , 2015, 78, 106001.	8.1	163
30	Rashba spin-orbit interaction in graphene armchair nanoribbons. <i>European Physical Journal B</i> , 2013, 86, 1.	0.6	21
31	Adiabatic pumping in the quasi-one-dimensional triangle lattice. <i>Physical Review B</i> , 2013, 87, .	1.1	5
32	Proposal for an on-demand source of polarized electrons into the edges of a topological insulator. <i>Physical Review B</i> , 2013, 88, .	1.1	41
33	Pseudo-spin filter in metallic single-walled carbon nanotubes. , 2012, , .		0
34	Rashba spin-orbit-interaction-based quantum pump in graphene. <i>Applied Physics Letters</i> , 2012, 101, 122405.	1.5	26
35	Topological phases for fermionic cold atoms on the Lieb lattice. <i>Physical Review A</i> , 2011, 83, .	1.0	186
36	Defect-induced multicomponent electron scattering in single-walled carbon nanotubes. <i>Physical Review B</i> , 2011, 83, .	1.1	16

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37	Dirac-Weyl electrons in a periodic spin-orbit potential. Europhysics Letters, 2011, 96, 27006.	0.7	13
38	Barrier transmission of Dirac-like pseudospin-one particles. Physical Review B, 2011, 84, .	1.1	133
39	Topology-induced phase transitions in quantum spin Hall lattices. Physical Review A, 2011, 83, .	1.0	43
40	Dynamics of a qubit coupled to a dissipative nonlinear quantum oscillator: An effective-bath approach. Physical Review A, 2011, 83, .	1.0	10
41	Pseudospin-dependent scattering in carbon nanotubes. Physical Review B, 2011, 84, .	1.1	4
42	Spin-orbit based coherent spin ratchets. Chemical Physics, 2010, 375, 276-283.	0.9	4
43	Spin-resolved scattering through spin-orbit nanostructures in graphene. Physical Review B, 2010, 81, .	1.1	97
44	Electron tunneling into a quantum wire in the Fabry-Pérot regime. Physical Review B, 2009, 79, .	1.1	34
45	Electron Scattering in Intrananotube Quantum Dots. Physical Review Letters, 2009, 102, 245505.	2.9	19
46	Charge ratchet from spin flip: Space-time symmetry paradox. Physical Review B, 2009, 80, .	1.1	5
47	Massless Dirac-Weyl fermions in a $T^3$ optical lattice. Physical Review A, 2009, 80, .	1.0	175
48	Interplay between quantum dissipation and an in-plane magnetic field in the spin ratchet effect. Physical Review B, 2008, 78, .	1.1	8
49	Quantum Dissipative Rashba Spin Ratchets. Physical Review Letters, 2008, 100, 230601.	2.9	29
50	Zeeman ratchets: pure spin current generation in mesoscopic conductors with non-uniform magnetic fields. New Journal of Physics, 2007, 9, 401-401.	1.2	26
51	Bloch's theory in periodic structures with Rashba's spin-orbit interaction. Europhysics Letters, 2007, 80, 27003.	0.7	15
52	Coherent spin ratchets: A spin-orbit based quantum ratchet mechanism for spin-polarized currents in ballistic conductors. Physical Review B, 2007, 76, .	1.1	24
53	Rashba quantum wire: exact solution and ballistic transport. Journal of Physics Condensed Matter, 2007, 19, 186227.	0.7	43
54	Zeeman ratchets for ballistic spin currents. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4235-4238.	0.8	12

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55	The spin-double refraction in two-dimensional electron gas. Superlattices and Microstructures, 2005, 37, 337-340.	1.4	2
56	Rashba effect in quantum networks. Physical Review B, 2005, 72, .	1.1	49
57	Signatures of spin-related phases in transport through regular polygons. Physical Review B, 2005, 72, .	1.1	27
58	Rashba-Effect-Induced Localization in Quantum Networks. Physical Review Letters, 2004, 93, 056802.	2.9	60
59	Spin polarization of electrons with Rashba double-refraction. Journal of Physics Condensed Matter, 2004, 16, 9143-9154.	0.7	52
60	Ground state features of the Fröhlich model. European Physical Journal B, 2003, 36, 65-73.	0.6	9
61	Conductance of a large point contact with Rashba effect. European Physical Journal B, 2003, 36, 365-375.	0.6	35