

Charles A Downing

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

856
citations

516710

16
h-index

477307

29
g-index

36
all docs

36
docs citations

36
times ranked

728
citing authors

#	ARTICLE	IF	CITATIONS
1	On a solution of the Schrödinger equation with a hyperbolic double-well potential. <i>Journal of Mathematical Physics</i> , 2013, 54, .	1.1	87
2	Topological collective plasmons in bipartite chains of metallic nanoparticles. <i>Physical Review B</i> , 2017, 95, .	3.2	83
3	Zero-energy states in graphene quantum dots and rings. <i>Physical Review B</i> , 2011, 84, .	3.2	80
4	One-dimensional Coulomb problem in Dirac materials. <i>Physical Review A</i> , 2014, 90, .	2.5	49
5	Bielectron vortices in two-dimensional Dirac semimetals. <i>Nature Communications</i> , 2017, 8, 897.	12.8	48
6	Searching for confined modes in graphene channels: The variable phase method. <i>Physical Review B</i> , 2012, 86, .	3.2	45
7	Massless Dirac fermions in two dimensions: Confinement in nonuniform magnetic fields. <i>Physical Review B</i> , 2016, 94, .	3.2	41
8	Quasichiral Interactions between Quantum Emitters at the Nanoscale. <i>Physical Review Letters</i> , 2019, 122, 057401.	7.8	40
9	Topological plasmons in dimerized chains of nanoparticles: robustness against long-range quasistatic interactions and retardation effects. <i>European Physical Journal B</i> , 2018, 91, 1.	1.5	38
10	Topological Phases of Polaritons in a Cavity Waveguide. <i>Physical Review Letters</i> , 2019, 123, 217401.	7.8	38
11	Optimal traps in graphene. <i>Physical Review B</i> , 2015, 92, .	3.2	31
12	Magnetic quantum dots and rings in two dimensions. <i>Physical Review B</i> , 2016, 94, .	3.2	29
13	Localization of massless Dirac particles via spatial modulations of the Fermi velocity. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 315301.	1.8	29
14	Nonradiative limitations to plasmon propagation in chains of metallic nanoparticles. <i>Physical Review B</i> , 2016, 94, .	3.2	26
15	Retardation effects on the dispersion and propagation of plasmons in metallic nanoparticle chains. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 025301.	1.8	25
16	Chiral Current Circulation and PT Symmetry in a Trimer of Oscillators. <i>ACS Photonics</i> , 2020, 7, 3401-3414.	6.6	18
17	Radiative frequency shifts in nanoplasmonic dimers. <i>Physical Review B</i> , 2017, 96, .	3.2	16
18	Searching for kagome multi-bands and edge states in a predicted organic topological insulator. <i>Nanoscale</i> , 2021, 13, 5216-5223.	5.6	16

#	ARTICLE	IF	CITATIONS
19	Two-electron atom with a screened interaction. <i>Physical Review A</i> , 2017, 95, .	2.5	15
20	Nanohelices as superlattices: Bloch oscillations and electric dipole transitions. <i>Physical Review B</i> , 2016, 94, .	3.2	14
21	Asymmetric coupling between two quantum emitters. <i>Physical Review A</i> , 2020, 102, .	2.5	14
22	Polaritonic Tamm states induced by cavity photons. <i>Nanophotonics</i> , 2020, 10, 513-521.	6.0	13
23	Zero-€Energy Vortices in Dirac Materials. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800584.	1.5	12
24	Plasmonic modes in cylindrical nanoparticles and dimers. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, 20200530.	2.1	9
25	Exceptional points in oligomer chains. <i>Communications Physics</i> , 2021, 4, .	5.3	9
26	Trapping Charge Carriers in Low-Dimensional Dirac Materials. <i>International Journal of Nanoscience</i> , 2019, 18, 1940001.	0.7	7
27	Doublons, topology and interactions in a one-dimensional lattice. <i>Scientific Reports</i> , 2021, 11, 12540.	3.3	6
28	Quantum topology in the ultrastrong coupling regime. <i>Scientific Reports</i> , 2022, 12, .	3.3	4
29	Electromagnetic Properties of Nanohelices. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2016, , 27-44.	0.3	3
30	Extreme renormalisations of dimer eigenmodes by strong light-€matter coupling. <i>New Journal of Physics</i> , 2020, 22, 103001.	2.9	3
31	Non-reciprocal population dynamics in a quantum trimer. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20210507.	2.1	3
32	Excitons and interband terahertz transitions in narrow-gap carbon nanotubes. , 2013, , .		2
33	Terahertz Optoelectronics of Quantum Rings and Nanohelices. <i>Semiconductors</i> , 2018, 52, 1813-1816.	0.5	2
34	Terahertz Applications of Non-Simply-Connected and Helical Nanostructures. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2019, , 201-214.	0.3	1