

# 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	Quantum topology in the ultrastrong coupling regime. Scientific Reports, 2022, 12, .	3.3	4
2	Searching for kagome multi-bands and edge states in a predicted organic topological insulator. Nanoscale, 2021, 13, 5216-5223.	5.6	16
3	Doublons, topology and interactions in a one-dimensional lattice. Scientific Reports, 2021, 11, 12540.	3.3	6
4	Non-reciprocal population dynamics in a quantum trimer. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20210507.	2.1	3
5	Exceptional points in oligomer chains. Communications Physics, 2021, 4, .	5.3	9
6	Chiral Current Circulation and PT Symmetry in a Trimer of Oscillators. ACS Photonics, 2020, 7, 3401-3414.	6.6	18
7	Asymmetric coupling between two quantum emitters. Physical Review A, 2020, 102, .	2.5	14
8	Plasmonic modes in cylindrical nanoparticles and dimers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200530.	2.1	9
9	Polaritonic Tamm states induced by cavity photons. Nanophotonics, 2020, 10, 513-521.	6.0	13
10	Extreme renormalisations of dimer eigenmodes by strong light-matter coupling. New Journal of Physics, 2020, 22, 103001.	2.9	3
11	Terahertz Applications of Non-Simply-Connected and Helical Nanostructures. NATO Science for Peace and Security Series B: Physics and Biophysics, 2019, , 201-214.	0.3	1
12	Zero-Energy Vortices in Dirac Materials. Physica Status Solidi (B): Basic Research, 2019, 256, 1800584.	1.5	12
13	Trapping Charge Carriers in Low-Dimensional Dirac Materials. International Journal of Nanoscience, 2019, 18, 1940001.	0.7	7
14	Quasichiral Interactions between Quantum Emitters at the Nanoscale. Physical Review Letters, 2019, 122, 057401.	7.8	40
15	Topological Phases of Polaritons in a Cavity Waveguide. Physical Review Letters, 2019, 123, 217401.	7.8	38
16	Terahertz Optoelectronics of Quantum Rings and Nanohelices. Semiconductors, 2018, 52, 1813-1816.	0.5	2
17	Topological plasmons in dimerized chains of nanoparticles: robustness against long-range quasistatic interactions and retardation effects. European Physical Journal B, 2018, 91, 1.	1.5	38
18	Retardation effects on the dispersion and propagation of plasmons in metallic nanoparticle chains. Journal of Physics Condensed Matter, 2018, 30, 025301.	1.8	25

#	ARTICLE	IF	CITATIONS
19	Two-electron atom with a screened interaction. <i>Physical Review A</i> , 2017, 95, .	2.5	15
20	Topological collective plasmons in bipartite chains of metallic nanoparticles. <i>Physical Review B</i> , 2017, 95, .	3.2	83
21	Radiative frequency shifts in nanoplasmonic dimers. <i>Physical Review B</i> , 2017, 96, .	3.2	16
22	Bielelectron vortices in two-dimensional Dirac semimetals. <i>Nature Communications</i> , 2017, 8, 897.	12.8	48
23	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
24	Electromagnetic Properties of Nanohelices. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2016, , 27-44.	0.3	3
25	Massless Dirac fermions in two dimensions: Confinement in nonuniform magnetic fields. <i>Physical Review B</i> , 2016, 94, .	3.2	41
26	Nonradiative limitations to plasmon propagation in chains of metallic nanoparticles. <i>Physical Review B</i> , 2016, 94, .	3.2	26
27	Magnetic quantum dots and rings in two dimensions. <i>Physical Review B</i> , 2016, 94, .	3.2	29
28	Nanohelices as superlattices: Bloch oscillations and electric dipole transitions. <i>Physical Review B</i> , 2016, 94, .	3.2	14
29	Optimal traps in graphene. <i>Physical Review B</i> , 2015, 92, .	3.2	31
30	One-dimensional Coulomb problem in Dirac materials. <i>Physical Review A</i> , 2014, 90, .	2.5	49
31	On a solution of the Schrödinger equation with a hyperbolic double-well potential. <i>Journal of Mathematical Physics</i> , 2013, 54, .	1.1	87
32	Excitons and interband terahertz transitions in narrow-gap carbon nanotubes. , 2013, , .		2
33	Searching for confined modes in graphene channels: The variable phase method. <i>Physical Review B</i> , 2012, 86, .	3.2	45
34	Zero-energy states in graphene quantum dots and rings. <i>Physical Review B</i> , 2011, 84, .	3.2	80