

Charles A Downing

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

856
citations

586496

16
h-index

536525

29
g-index

36
all docs

36
docs citations

36
times ranked

827
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Quantum topology in the ultrastrong coupling regime. <i>Scientific Reports</i> , 2022, 12, . | 1.6 | 4 |
| 2 | Searching for kagome multi-bands and edge states in a predicted organic topological insulator. <i>Nanoscale</i> , 2021, 13, 5216-5223. | 2.8 | 16 |
| 3 | Doublons, topology and interactions in a one-dimensional lattice. <i>Scientific Reports</i> , 2021, 11, 12540. | 1.6 | 6 |
| 4 | Non-reciprocal population dynamics in a quantum trimer. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20210507. | 1.0 | 3 |
| 5 | Exceptional points in oligomer chains. <i>Communications Physics</i> , 2021, 4, . | 2.0 | 9 |
| 6 | Chiral Current Circulation and PT Symmetry in a Trimer of Oscillators. <i>ACS Photonics</i> , 2020, 7, 3401-3414. | 3.2 | 18 |
| 7 | Asymmetric coupling between two quantum emitters. <i>Physical Review A</i> , 2020, 102, . | 1.0 | 14 |
| 8 | Plasmonic modes in cylindrical nanoparticles and dimers. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, 20200530. | 1.0 | 9 |
| 9 | Polaritonic Tamm states induced by cavity photons. <i>Nanophotonics</i> , 2020, 10, 513-521. | 2.9 | 13 |
| 10 | Extreme renormalisations of dimer eigenmodes by strong light-matter coupling. <i>New Journal of Physics</i> , 2020, 22, 103001. | 1.2 | 3 |
| 11 | 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. | 0.2 | 1 |
| 12 | Zero-Energy Vortices in Dirac Materials. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800584. | 0.7 | 12 |
| 13 | Trapping Charge Carriers in Low-Dimensional Dirac Materials. <i>International Journal of Nanoscience</i> , 2019, 18, 1940001. | 0.4 | 7 |
| 14 | Quasichiral Interactions between Quantum Emitters at the Nanoscale. <i>Physical Review Letters</i> , 2019, 122, 057401. | 2.9 | 40 |
| 15 | Topological Phases of Polaritons in a Cavity Waveguide. <i>Physical Review Letters</i> , 2019, 123, 217401. | 2.9 | 38 |
| 16 | Terahertz Optoelectronics of Quantum Rings and Nanohelices. <i>Semiconductors</i> , 2018, 52, 1813-1816. | 0.2 | 2 |
| 17 | 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. | 0.6 | 38 |
| 18 | Retardation effects on the dispersion and propagation of plasmons in metallic nanoparticle chains. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 025301. | 0.7 | 25 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Two-electron atom with a screened interaction. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 15 |
| 20 | Topological collective plasmons in bipartite chains of metallic nanoparticles. <i>Physical Review B</i> , 2017, 95, . | 1.1 | 83 |
| 21 | Radiative frequency shifts in nanoplasmonic dimers. <i>Physical Review B</i> , 2017, 96, . | 1.1 | 16 |
| 22 | Bielectron vortices in two-dimensional Dirac semimetals. <i>Nature Communications</i> , 2017, 8, 897. | 5.8 | 48 |
| 23 | Localization of massless Dirac particles via spatial modulations of the Fermi velocity. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 315301. | 0.7 | 29 |
| 24 | Electromagnetic Properties of Nanohelices. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2016, , 27-44. | 0.2 | 3 |
| 25 | Massless Dirac fermions in two dimensions: Confinement in nonuniform magnetic fields. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 41 |
| 26 | Nonradiative limitations to plasmon propagation in chains of metallic nanoparticles. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 26 |
| 27 | Magnetic quantum dots and rings in two dimensions. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 29 |
| 28 | Nanohelices as superlattices: Bloch oscillations and electric dipole transitions. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 14 |
| 29 | Optimal traps in graphene. <i>Physical Review B</i> , 2015, 92, . | 1.1 | 31 |
| 30 | One-dimensional Coulomb problem in Dirac materials. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 49 |
| 31 | On a solution of the Schrödinger equation with a hyperbolic double-well potential. <i>Journal of Mathematical Physics</i> , 2013, 54, . | 0.5 | 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, . | 1.1 | 45 |
| 34 | Zero-energy states in graphene quantum dots and rings. <i>Physical Review B</i> , 2011, 84, . | 1.1 | 80 |