# Hugh O H Churchill

List of Publications by Year
in descending order



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|---|---|---|---|
| 29 papers | 4,344 citations | 361296 20 h-index | 477173 29 g-index |
| 29 all docs | 29 docs citations | 29 times ranked | 7252 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Optoelectronic devices based on electrically tunable pâ€“n diodes in a monolayer dichalcogenide. Nature Nanotechnology, 2014, 9, 262-267. | 15.6 | 1,270 |
| 2 | Superconductor-nanowire devices from tunneling to the multichannel regime: Zero-bias oscillations and magnetoconductance crossover. Physical Review B, 2013, 87, . | 1.1 | 657 |
| 3 | Intrinsic Electronic Transport Properties of High-Quality Monolayer and Bilayer MoS<sub>2</sub>. Nano Letters, 2013, 13, 4212-4216. | 4.5 | 558 |
| 4 | Phosphorus joins the family. Nature Nanotechnology, 2014, 9, 330-331. | 15.6 | 528 |
| 5 | A Ge/Si heterostructure nanowire-based double quantum dot with integrated charge sensor. Nature Nanotechnology, 2007, 2, 622-625. | 15.6 | 287 |
| 6 | Electronâ€“nuclear interaction in 13C nanotube double quantum dots. Nature Physics, 2009, 5, 321-326. | 6.5 | 151 |
| 7 | Relaxation and Dephasing in a Two-Electron<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="bold">C</mml:mi><mml:mprescripts /><mml:none /><mml:mn>13</mml:mn></mml:mmultiscripts></mml:math>Nanotube Double Quantum Dot. Physical Review Letters, 2009, 102, 166802. | 2.9 | 124 |
| 8 | Electronic Transport of Encapsulated Graphene and WSe<sub>2</sub> Devices Fabricated by Pick-up of Prepatterned hBN. Nano Letters, 2015, 15, 1898-1903. | 4.5 | 115 |
| 9 | Two-Dimensional Disorder in Black Phosphorus and Monochalcogenide Monolayers. Nano Letters, 2016, 16, 1704-1712. | 4.5 | 96 |
| 10 | Correlation of pH-dependent surface interaction forces to amino acid adsorption: Implications for the origin of life. American Mineralogist, 2004, 89, 1048-1055. | 0.9 | 93 |
| 11 | Carbon nanotubes for coherent spintronics. Materials Today, 2010, 13, 18-26. | 8.3 | 64 |
| 12 | Magnetic field dependence of Pauli spin blockade: A window into the sources of spin relaxation in silicon quantum dots. Physical Review B, 2012, 86, . | 1.1 | 52 |
| 13 | Toward Single Atom Chains with Exfoliated Tellurium. Nanoscale Research Letters, 2017, 12, 488. | 3.1 | 52 |
| 14 | Modulation Doping via a Two-Dimensional Atomic Crystalline Acceptor. Nano Letters, 2020, 20, 8446-8452. | 4.5 | 44 |
| 15 | Tuning Infrared Plasmon Resonance of Black Phosphorene Nanoribbon with a Dielectric Interface. Scientific Reports, 2018, 8, 3224. | 1.6 | 36 |
| 16 | High anisotropy of lateral alignment in multilayered (In,Ga)Asâ•GaAs(100) quantum dot structures. Journal of Applied Physics, 2004, 96, 6908-6911. | 1.1 | 35 |
| 17 | Spin-orbit effects in carbon-nanotube double quantum dots. Physical Review B, 2010, 82, . | 1.1 | 34 |
| 18 | Exfoliation energy, quasiparticle band structure, and excitonic properties of selenium and tellurium atomic chains. Physical Review B, 2018, 98, . | 1.1 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Low-temperature infrared spectroscopy ofH2in crystallineC60. Physical Review B, 2006, 73, . | 1.1 | 22 |
| 20 | Cryogenic apparatus for diffuse reflection infrared spectroscopy with high-pressure capabilities. Review of Scientific Instruments, 2006, 77, 093110. | 0.6 | 20 |
| 21 | Gate-Defined Accumulation-Mode Quantum Dots in Monolayer and Bilayer WSe2. Physical Review Applied, 2020, 13, . | 1.5 | 18 |
| 22 | Integration of multi-layer black phosphorus into photoconductive antennas for THz emission. Journal of Applied Physics, 2020, 128, 063104. | 1.1 | 10 |
| 23 | Black phosphorus photoconductive terahertz antenna: 3D modeling and experimental reference comparison. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1367. | 0.9 | 9 |
| 24 | Giant topological Hall effect in centrosymmetric tetragonal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>2</mml:mn> Physical Review B, 2021, 104, . | 1.1 | 9 |
| 25 | g-tensor control in bent carbon nanotube quantum dots. Physical Review B, 2014, 89, . | 1.1 | 7 |
| 26 | Growth and Strain Engineering of Trigonal Te for Topological Quantum Phases in Non-Symmorphic Chiral Crystals. Crystals, 2019, 9, 486. | 1.0 | 5 |
| 27 | Gate voltage and doping effects on near-field radiation heat transfer in plasmonic heterogeneous pairs of graphene and black phosphorene. RSC Advances, 2019, 9, 29173-29181. | 1.7 | 5 |
| 28 | Exfoliation and Analysis of Large-area, Air-Sensitive Two-Dimensional Materials. Journal of Visualized Experiments, 2019, , . | 0.2 | 5 |
| 29 | Array of Graphene Variable Capacitors on 100 mm Silicon Wafers for Vibration-Based Applications. Membranes, 2022, 12, 533. | 1.4 | 5 |