Hugh O H Churchill

List of Publications by Year in Descending Order

28 papers	3,652 citations	19 h-index	29 g-index
29 ext. papers	4,039 ext. citations	8 avg, IF	5.6 L-index

#	Paper	IF	Citations
28	Array of Graphene Variable Capacitors on 100 mm Silicon Wafers for Vibration-Based Applications. *Membranes*, **2022**, 12, 533	3.8	0
27	Black phosphorus photoconductive terahertz antenna: 3D modeling and experimental reference comparison. *Journal of the Optical Society of America B: Optical Physics*, **2021**, 38, 1367	1.7	2
26	Gate-Defined Accumulation-Mode Quantum Dots in Monolayer and Bilayer WSe2. *Physical Review Applied*, **2020**, 13,	4.3	8
25	Modulation Doping via a Two-Dimensional Atomic Crystalline Acceptor. *Nano Letters*, **2020**, 20, 8446-8452	11.5	16
24	Integration of multi-layer black phosphorus into photoconductive antennas for THz emission. *Journal of Applied Physics*, **2020**, 128, 063104	2.5	4
23	Growth and Strain Engineering of Trigonal Te for Topological Quantum Phases in Non-Symmorphic Chiral Crystals. *Crystals*, **2019**, 9, 486	2.3	3
22	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	3.7	2
21	Exfoliation and Analysis of Large-area, Air-Sensitive Two-Dimensional Materials. *Journal of Visualized Experiments*, **2019**,	1.6	3
20	Tuning Infrared Plasmon Resonance of Black Phosphorene Nanoribbon with a Dielectric Interface. *Scientific Reports*, **2018**, 8, 3224	4.9	22
19	Exfoliation energy, quasiparticle band structure, and excitonic properties of selenium and tellurium atomic chains. *Physical Review B*, **2018**, 98,	3.3	20
18	Toward Single Atom Chains with Exfoliated Tellurium. *Nanoscale Research Letters*, **2017**, 12, 488	5	36
17	Two-Dimensional Disorder in Black Phosphorus and Monochalcogenide Monolayers. *Nano Letters*, **2016**, 16, 1704-12	11.5	82
16	Electronic transport of encapsulated graphene and WSe2 devices fabricated by pick-up of prepatterned hBN. *Nano Letters*, **2015**, 15, 1898-903	11.5	98
15	Two-dimensional crystals: phosphorus joins the family. *Nature Nanotechnology*, **2014**, 9, 330-1	28.7	444
14	g-tensor control in bent carbon nanotube quantum dots. *Physical Review B*, **2014**, 89,	3.3	6
13	Optoelectronic devices based on electrically tunable p-n diodes in a monolayer dichalcogenide. *Nature Nanotechnology*, **2014**, 9, 262-7	28.7	1065
12	Intrinsic electronic transport properties of high-quality monolayer and bilayer MoS2. *Nano Letters*, **2013**, 13, 4212-6	11.5	483

List of Publications

11	Superconductor-nanowire devices from tunneling to the multichannel regime: Zero-bias oscillations and magnetoconductance crossover. *Physical Review B*, **2013**, 87,	3.3	576
10	Magnetic field dependence of Pauli spin blockade: A window into the sources of spin relaxation in silicon quantum dots. *Physical Review B*, **2012**, 86,	3.3	40
9	Spin-orbit effects in carbon-nanotube double quantum dots. *Physical Review B*, **2010**, 82,	3.3	32
8	Carbon nanotubes for coherent spintronics. *Materials Today*, **2010**, 13, 18-26	21.8	60
7	Relaxation and dephasing in a two-electron 13C nanotube double quantum dot. *Physical Review Letters*, **2009**, 102, 166802	7.4	110
6	Electron□nuclear interaction in 13C nanotube double quantum dots. *Nature Physics*, **2009**, 5, 321-326	16.2	139
5	A Ge/Si heterostructure nanowire-based double quantum dot with integrated charge sensor. *Nature Nanotechnology*, **2007**, 2, 622-5	28.7	252
4	Cryogenic apparatus for diffuse reflection infrared spectroscopy with high-pressure capabilities. *Review of Scientific Instruments*, **2006**, 77, 093110	1.7	20
3	Low-temperature infrared spectroscopy of H2 in crystalline C60. *Physical Review B*, **2006**, 73,	3.3	20
2	High anisotropy of lateral alignment in multilayered (In,Ga)As□GaAs(100) quantum dot structures. *Journal of Applied Physics*, **2004**, 96, 6908-6911	2.5	31
1	Correlation of pH-dependent surface interaction forces to amino acid adsorption: Implications for the origin of life. *American Mineralogist*, **2004**, 89, 1048-1055	2.9	78