Joseph Salfi

List of Publications by Year
in descending order

32 papers	809 citations	471061 17 h-index	525886 27 g-index
32 all docs	32 docs citations	32 times ranked	1025 citing authors

#	Article	IF	Citations
1	Spatially resolving valley quantum interference of a donor in silicon. Nature Materials, 2014, 13, 605-610.	13.3	90
2	Quantum simulation of the Hubbard model with dopant atoms in silicon. Nature Communications, 2016, 7, 11342.	5.8	81
3	Electrical properties of Ohmic contacts to ZnSe nanowires and their application to nanowire-based photodetection. Applied Physics Letters, 2006, 89, 261112.	1.5	70
4	Transport and strain relaxation in wurtzite InAsâ€“GaAs core-shell heterowires. Applied Physics Letters, 2011, 98, .	1.5	57
5	Direct observation of single-charge-detection capability of nanowire field-effect transistors. Nature Nanotechnology, 2010, 5, 737-741.	15.6	49
6	Spatial metrology of dopants in silicon with exact lattice site precision. Nature Nanotechnology, 2016, 11, 763-768.	15.6	45
7	Roadmap on quantum nanotechnologies. Nanotechnology, 2021, 32, 162003.	1.3	45
8	Optimal operation points for ultrafast, highly coherent Ge hole spin-orbit qubits. Npj Quantum Information, 2021, 7, .	2.8	45
9	Charge-Insensitive Single-Atom Spin-Orbit Qubit in Silicon. Physical Review Letters, 2016, 116, 246801.	2.9	44
10	Engineering long spin coherence times of spinâ€“orbit qubits in silicon. Nature Materials, 2021, 20, 38-42.	13.3	40
11	Probing the Spin States of a Single Acceptor Atom. Nano Letters, 2014, 14, 1492-1496.	4.5	36
12	Quantum computing with acceptor spins in silicon. Nanotechnology, 2016, 27, 244001.	1.3	31
13	Room temperature single nanowire ZnTe photoconductors grown by metal-organic chemical vapor deposition. Applied Physics Letters, 2010, 97, 063510.	1.5	29
14	Readout and control of the spin-orbit states of two coupled acceptor atoms in a silicon transistor. Science Advances, 2018, 4, eaat9199.	4.7	26
15	Probing the Gateâˆ'Voltage-Dependent Surface Potential of Individual InAs Nanowires Using Random Telegraph Signals. ACS Nano, 2011, 5, 2191-2199.	7.3	20
16	Spatially resolved resonant tunneling on single atoms in silicon. Journal of Physics Condensed Matter, 2015, 27, 154203.	0.7	20
17	Two-electron states of a group-V donor in silicon from atomistic full configuration interactions. Physical Review B, 2018, 97, .	1.1	18
18	Donor hyperfine Stark shift and the role of central-cell corrections in tight-binding theory. Journal of Physics Condensed Matter, 2015, 27, 154207.	0.7	16

#	Article	IF	Citations
19	Entanglement control and magic angles for acceptor qubits in Si. Applied Physics Letters, 2018, 113, .	1.5	11
20	Hole spin echo envelope modulations. Physical Review B, 2019, 100, .	1.1	6
21	Scanned Single-Electron Probe inside a Silicon Electronic Device. ACS Nano, 2020, 14, 9449-9455.	7.3	6
22	Towards visualisation of central-cell-effects in scanning tunnelling microscope images of subsurface dopant qubits in silicon. Nanoscale, 2017, 9, 17013-17019.	2.8	5
23	Electrical characteristics and photocurrent spectral response of Si nanowires p-i-n junctions. Optics Express, 2011, 19, 5464.	1.7	4
24	Novel characterization of dopant-based qubits. MRS Bulletin, 2021, 46, 616-622.	1.7	4
25	Shallow dopant pairs in silicon: An atomistic full configuration interaction study. Physical Review B, 2022, 105, .	1.1	4
26	Transport and optical response of single nanowires. Journal of Materials Science: Materials in Electronics, 2009, 20, 480-486.	1.1	3
27	(Invited) Optical Response of II-VI ZnSe Nanowires. ECS Transactions, 2010, 28, 193-202.	0.3	2
28	Carrier transport in molecular beam epitaxially grown GaAs/InAs core-shell nanowires. , 2010, , .		2
29	Electrical characteristics and photocurrent spectral response of Si nanowires p-i-n junctions. , 2010, , .		0
30	Probing a single acceptor in a silicon nanotransistor. , 2014, , .		0
31	A single-atom spin-orbit qubit in Si (Conference Presentation). , 2016, , .		0
32	Certification of spin-based quantum simulators. Physical Review A, 2020, 101, .	1.0	0