Lloyd C L Hollenberg

List of Publications by Year
in descending order

288	16,799	23565 58	16650 123
papers	citations	h-index	g-index

292	292	292	10187
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The nitrogen-vacancy colour centre in diamond. Physics Reports, 2013, 528, 1-45.	25.6	1,947
2	Electric-field sensing using single diamond spins. Nature Physics, 2011, 7, 459-463.	16.7	942
3	Silicon quantum electronics. Reviews of Modern Physics, 2013, 85, 961-1019.	45.6	892
4	A single-atom transistor. Nature Nanotechnology, 2012, 7, 242-246.	31.5	730
5	Quantum phase transitions of light. Nature Physics, 2006, 2, 856-861.	16.7	662
6	Single-shot readout of an electron spin in silicon. Nature, 2010, 467, 687-691.	27.8	623
7	Quantum measurement and orientation tracking of fluorescent nanodiamonds inside living cells. Nature Nanotechnology, 2011, 6, 358-363.	31.5	552
8	Electronic Properties and Metrology Applications of the Diamond<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>NV</mml:mi></mml:mrow><mml:mrow><mml:mo>â^’</mml:mo></m under Pressure. Physical Review Letters, 2014, 112, 047601.	7.8	302
9	Ohmâ€™s Law Survives to the Atomic Scale. Science, 2012, 335, 64-67.	12.6	291
10	Gate-induced quantum-confinement transition of a single dopant atom in a siliconÂFinFET. Nature Physics, 2008, 4, 656-661.	16.7	287
11	Charge-based quantum computing using single donors in semiconductors. Physical Review B, 2004, 69, .	3.2	271
12	Stark Shift Control of Single Optical Centers in Diamond. Physical Review Letters, 2006, 97, 083002.	7.8	261
13	Theory of the ground-state spin of the NV<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>â^’</mml:mo></mml:msup></mml:math>center in diamond. Physical Review B, 2012, 85, .	3.2	249
14	Coherent electronic transfer in quantum dot systems using adiabatic passage. Physical Review B, 2004, 70, .	3.2	247
15	Surface code quantum computing with error rates over 1%. Physical Review A, 2011, 83, .	2.5	240
16	Dynamical decoupling of a single-electron spin at room temperature. Physical Review B, 2011, 83, .	3.2	210
17	Two-dimensional architectures for donor-based quantum computing. Physical Review B, 2006, 74, .	3.2	209
18	A surface code quantum computer in silicon. Science Advances, 2015, 1, e1500707.	10.3	193

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19	The negatively charged nitrogen-vacancy centre in diamond: the electronic solution. New Journal of Physics, 2011, 13, 025019.	2.9	187
20	Quantum imaging of current flow in graphene. Science Advances, 2017, 3, e1602429.	10.3	185
21	Electrostatically defined serial triple quantum dot charged with few electrons. Physical Review B, 2007, 76, .	3.2	170
22	High spatial and temporal resolution wide-field imaging of neuron activity using quantum NV-diamond. Scientific Reports, 2012, 2, 401.	3.3	141
23	Sensing of Fluctuating Nanoscale Magnetic Fields Using Nitrogen-Vacancy Centers in Diamond. Physical Review Letters, 2009, 103, 220802.	7.8	127
24	Towards Practical Classical Processing for the Surface Code. Physical Review Letters, 2012, 108, 180501.	7.8	127
25	Temperature shifts of the resonances of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi mathvariant="normal">NV</mml:mi><mml:mo>â^'</mml:mo></mml:msup></mml:math>center in diamond. Physical Review B, 2014, 90, .	3.2	127
26	Spin blockade and exchange in Coulomb-confined silicon double quantum dots. Nature Nanotechnology, 2014, 9, 430-435.	31.5	117
27	Surface Code Quantum Communication. Physical Review Letters, 2010, 104, 180503.	7.8	115
28	Detection of atomic spin labels in a lipid bilayer using a single-spin nanodiamond probe. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10894-10898.	7.1	113
29	Non-Neurotoxic Nanodiamond Probes for Intraneuronal Temperature Mapping. ACS Nano, 2017, 11, 12077-12086.	14.6	113
30	Monitoring ion-channel function in real time through quantum decoherence. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18777-18782.	7.1	112
31	High Precision Quantum Control of Single Donor Spins in Silicon. Physical Review Letters, 2007, 99, 036403.	7.8	108
32	Scanning quantum decoherence microscopy. Nanotechnology, 2009, 20, 495401.	2.6	99
33	Spatially resolving valley quantum interference of a donor in silicon. Nature Materials, 2014, 13, 605-610.	27.5	90
34	Detection of nanoscale electron spin resonance spectra demonstrated using nitrogen-vacancy centre probes in diamond. Nature Communications, 2016, 7, 10211.	12.8	89
35	Architectural design for a topological cluster state quantum computer. New Journal of Physics, 2009, 11, 083032.	2.9	84
36	Quantum simulation of the Hubbard model with dopant atoms in silicon. Nature Communications, 2016, 7, 11342.	12.8	81

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37	Spatial coherent transport of interacting dilute Bose gases. Physical Review A, 2008, 77, .	2.5	80
38	Architecture for high-sensitivity single-shot readout and control of the electron spin of individual donors in silicon. Physical Review B, 2009, 80, .	3.2	80
39	Scanning Nanospin Ensemble Microscope for Nanoscale Magnetic and Thermal Imaging. Nano Letters, 2016, 16, 326-333.	9.1	79
40	Nash equilibria in quantum games with generalized two-parameter strategies. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 363, 381-388.	2.1	77
41	AbÂInitioElectronic and Optical Properties of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi><mml:mo>â^'</mml:mo><mml:msup><mml:mi>V</mml:mi><mml:mo>â^'</mml:mo></mml:msup> in Diamond. Physical Review Letters, 2008, 101, 226403.	7.8	77
42	Spatial mapping of band bending in semiconductor devices using in situ quantum sensors. Nature Electronics, 2018, 1, 502-507.	26.0	77
43	Entanglement in a 20-Qubit Superconducting Quantum Computer. Scientific Reports, 2019, 9, 13465.	3.3	77
44	Maximizing the Hilbert Space for a Finite Number of Distinguishable Quantum States. Physical Review Letters, 2004, 92, 097901.	7.8	76
45	Global control and fast solid-state donor electron spin quantum computing. Physical Review B, 2005, 72, .	3.2	76
46	Towards a picosecond transform-limited nitrogen-vacancy based single photon source. Optics Express, 2008, 16, 6240.	3.4	76
47	Spin properties of dense near-surface ensembles of nitrogen-vacancy centers in diamond. Physical Review B, 2018, 97, .	3.2	76
48	Nano-manipulation of diamond-based single photon sources. Optics Express, 2009, 17, 11287.	3.4	75
49	Magneto-optical imaging of thin magnetic films using spins in diamond. Scientific Reports, 2016, 6, 22797.	3.3	75
50	Evidence for Primal sp² Defects at the Diamond Surface: Candidates for Electron Trapping and Noise Sources. Advanced Materials Interfaces, 2019, 6, 1801449.	3.7	75
51	Electron exchange coupling for single-donor solid-state spin qubits. Physical Review B, 2003, 68, .	3.2	71
52	Donor electron wave functions for phosphorus in silicon: Beyond effective-mass theory. Physical Review B, 2005, 72, .	3.2	70
53	Quantum phase transitions in photonic cavities with two-level systems. Physical Review A, 2008, 77, .	2.5	68
54	Photonic module: An on-demand resource for photonic entanglement. Physical Review A, 2007, 76, .	2.5	65

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55	Electron paramagnetic resonance microscopy using spins in diamond under ambient conditions. Nature Communications, 2017, 8, 458.	12.8	65
56	Identifying an experimental two-state Hamiltonian to arbitrary accuracy. Physical Review A, 2005, 71, .	2.5	64
57	Measurable Quantum Geometric Phase from a Rotating Single Spin. Physical Review Letters, 2012, 108, 240403.	7.8	64
58	Ambient nanoscale sensing with single spins using quantum decoherence. New Journal of Physics, 2013, 15, 073042.	2.9	61
59	Progress in silicon-based quantum computing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1451-1471.	3.4	60
60	Ultrasensitive diamond magnetometry using optimal dynamic decoupling. Physical Review B, 2010, 82, .	3.2	58
61	Atomically engineered electron spin lifetimes of 30 s in silicon. Science Advances, 2017, 3, e1602811.	10.3	57
62	Two-electron spin correlations in precision placed donors in silicon. Nature Communications, 2018, 9, 980.	12.8	57
63	Orbital Stark effect and quantum confinement transition of donors in silicon. Physical Review B, 2009, 80, .	3.2	56
64	Charge State Control and Relaxation in an Atomically Doped Silicon Device. Nano Letters, 2007, 7, 2000-2003.	9.1	55
65	Quantum gate forQswitching in monolithic photonic-band-gap cavities containing two-level atoms. Physical Review A, 2006, 73, .	2.5	54
66	Quantum probe hyperpolarisation of molecular nuclear spins. Nature Communications, 2018, 9, 1246.	12.8	53
67	Demonstration of non-Markovian process characterisation and control on a quantum processor. Nature Communications, 2020, 11, 6301.	12.8	53
68	A highly efficient two level diamond based single photon source. Applied Physics Letters, 2009, 94, 203107.	3.3	52
69	Loss of spin entanglement for accelerated electrons in electric and magnetic fields. Physical Review A, 2009, 79, .	2.5	52
70	Tuning a Spin Bath through the Quantum-Classical Transition. Physical Review Letters, 2012, 108, 200402.	7.8	52
71	Spatial adiabatic passage in a realistic triple well structure. Physical Review B, 2008, 77, .	3.2	51
72	Microscopic Imaging of the Stress Tensor in Diamond Using in Situ Quantum Sensors. Nano Letters, 2019, 19, 4543-4550.	9.1	51

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73	Numerical study of hydrogenic effective mass theory for an impurity P donor in Si in the presence of an electric field and interfaces. Physical Review B, 2003, 68, .	3.2	48
74	Quantum-error correction on linear-nearest-neighbor qubit arrays. Physical Review A, 2004, 69, .	2.5	48
75	Two loop calculation of the ï‰-ï•mass splitting. Physical Review C, 1992, 46, 2057-2065.	2.9	47
76	Imaging Domain Reversal in an Ultrathin Van der Waals Ferromagnet. Advanced Materials, 2020, 32, e2003314.	21.0	47
77	Reconfigurable quantum metamaterials. Optics Express, 2011, 19, 11018.	3.4	45
78	Highly tunable exchange in donor qubits in silicon. Npj Quantum Information, 2016, 2, .	6.7	45
79	Spatial metrology of dopants in silicon with exact lattice site precision. Nature Nanotechnology, 2016, 11, 763-768.	31.5	45
80	Deterministic optical quantum computer using photonic modules. Physical Review A, 2008, 78, .	2.5	44
81	Gate-induced<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>g</mml:mi></mml:math>-factor control and dimensional transition for donors in multivalley semiconductors. Physical Review B, 2009, 80, .	3.2	44
82	Electronic structure of realistically extended atomistically resolved disordered Si:P<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î´</mml:mi></mml:math>-doped layers. Physical Review B, 2011, 84, .	3.2	44
83	Wide-band nanoscale magnetic resonance spectroscopy using quantum relaxation of a single spin in diamond. Physical Review B, 2016, 94, .	3.2	44
84	Magnetically sensitive nanodiamond-doped tellurite glass fibers. Scientific Reports, 2018, 8, 1268.	3.3	44
85	Quantum-information transport to multiple receivers. Physical Review A, 2006, 73, .	2.5	43
86	In vivo imaging and tracking of individual nanodiamonds in drosophila melanogaster embryos. Biomedical Optics Express, 2014, 5, 1250.	2.9	43
87	Scalability of Shorâ€™s algorithm with a limited set of rotation gates. Physical Review A, 2004, 70, .	2.5	42
88	High-speed quantum gates with cavity quantum electrodynamics. Physical Review A, 2008, 78, .	2.5	42
89	Analytic solutions to the central-spin problem for nitrogen-vacancy centers in diamond. Physical Review B, 2014, 90, .	3.2	42
90	Single-spin readout for buried dopant semiconductor qubits. Physical Review B, 2004, 69, .	3.2	36

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91	Scheme for direct measurement of a general two-qubit Hamiltonian. Physical Review A, 2006, 73, .	2.5	36
92	Asymmetric quantum error correction via code conversion. Physical Review A, 2008, 77, .	2.5	36
93	Time evolution of the one-dimensional Jaynes-Cummings-Hubbard Hamiltonian. Physical Review A, 2009, 80, .	2.5	36
94	Impact of Surface Functionalization on the Quantum Coherence of Nitrogen-Vacancy Centers in Nanodiamonds. ACS Applied Materials & Interfaces, 2018, 10, 13143-13149.	8.0	36
95	Generation and verification of 27-qubit Greenberger-Horne-Zeilinger states in a superconducting quantum computer. Journal of Physics Communications, 2021, 5, 095004.	1.2	36
96	Slot-waveguide cavities for optical quantum information applications. Optics Express, 2009, 17, 7295.	3.4	34
97	High-performance diamond-based single-photon sources for quantum communication. Physical Review A, 2009, 80, .	2.5	34
98	Enhanced Widefield Quantum Sensing with Nitrogen-Vacancy Ensembles Using Diamond Nanopillar Arrays. ACS Applied Materials & Interfaces, 2020, 12, 13421-13427.	8.0	33
99	Identifying a two-state Hamiltonian in the presence of decoherence. Physical Review A, 2006, 73, .	2.5	32
100	Experimental implementation of a four-player quantum game. New Journal of Physics, 2010, 12, 063031.	2.9	32
101	Engineered valley-orbit splittings in quantum-confined nanostructures in silicon. Physical Review B, 2011, 83, .	3.2	32
102	Towards practical classical processing for the surface code: Timing analysis. Physical Review A, 2012, 86, .	2.5	32
103	Improved Current Density and Magnetization Reconstruction Through Vector Magnetic Field Measurements. Physical Review Applied, 2020, 14, .	3.8	32
104	Plaquette expansion in lattice Hamiltonian models. Physical Review D, 1993, 47, 1640-1644.	4.7	31
105	Superadiabatic quantum state transfer in spin chains. Physical Review A, 2017, 95, .	2.5	31
106	Quantum measurement of a rapidly rotating spin qubit in diamond. Science Advances, 2018, 4, eaar7691.	10.3	31
107	Wholeâ€Device Entanglement in a 65â€Qubit Superconducting Quantum Computer. Advanced Quantum Technologies, 2021, 4, 2100061.	3.9	30
108	Noninvasive Spatial Metrology of Single-Atom Devices. Nano Letters, 2013, 13, 1903-1909.	9.1	29

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109	Scalable error correction in distributed ion trap computers. Physical Review A, 2006, 74, .	2.5	28
110	Band structure, phase transitions, and semiconductor analogs in one-dimensional solid light systems. Physical Review A, 2009, 80, .	2.5	28
111	Ab initio calculation of valley splitting in monolayer Î´-doped phosphorus in silicon. Nanoscale Research Letters, 2013, 8, 111.	5.7	28
112	Atomistic modeling of metallic nanowires in silicon. Nanoscale, 2013, 5, 8666.	5.6	28
113	Laser Modulation of Superconductivity in a Cryogenic Wide-field Nitrogen-Vacancy Microscope. Nano Letters, 2020, 20, 1855-1861.	9.1	28
114	Advances in the Surface Functionalization of Nanodiamonds for Biological Applications: A Review. ACS Applied Nano Materials, 2021, 4, 9985-10005.	5.0	28
115	Atomistic simulations of adiabatic coherent electron transport in triple donor systems. Physical Review B, 2009, 80, .	3.2	27
116	Spin-Lattice Relaxation Times of Single Donors and Donor Clusters in Silicon. Physical Review Letters, 2014, 113, 246406.	7.8	27
117	Quantum Magnetic Imaging of Iron Biomineralization in Teeth of the Chiton Acanthopleura hirtosa. Small Methods, 2020, 4, 1900754.	8.6	27
118	Electric field reduced charging energies and two-electron bound excited states of single donors in silicon. Physical Review B, 2011, 84, .	3.2	26
119	Nanoscale magnetometry through quantum control of nitrogenâ€“vacancy centres in rotationally diffusing nanodiamonds. New Journal of Physics, 2013, 15, 013041.	2.9	26
120	Towards single-molecule NMR detection and spectroscopy using single spins in diamond. Physical Review B, 2014, 89, .	3.2	26
121	A quantum spin-probe molecular microscope. Nature Communications, 2016, 7, 12667.	12.8	26
122	Microwave-free nuclear magnetic resonance at molecular scales. Nature Communications, 2017, 8, 15950.	12.8	26
123	The vocal tract and the sound of a didgeridoo. Nature, 2005, 436, 39-39.	27.8	25
124	Robust controlled-NOT gate in the presence of large fabrication-induced variations of the exchange interaction strength. Physical Review A, 2007, 76, .	2.5	25
125	Coherent tunneling adiabatic passage with the alternating coupling scheme. Nanotechnology, 2009, 20, 405402.	2.6	25
126	Effective mass theory of monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î´</mml:mi></mml:math>doping in the high-density limit. Physical Review B, 2012, 85, .	3.2	24

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127	Magnetic pseudo-fields in a rotating electronâ€“nuclear spin system. Nature Physics, 2017, 13, 1070-1073.	16.7	24
128	Vocal tract resonances and the sound of the Australian didjeridu (yidaki) I. Experiment. Journal of the Acoustical Society of America, 2006, 119, 1194.	1.1	23
129	Top-down pathways to devices with few and single atoms placed to high precision. New Journal of Physics, 2010, 12, 065016.	2.9	23
130	Quantum-dot cellular automata using buried dopants. Physical Review B, 2005, 71, .	3.2	22
131	Electrical readout of a spin qubit without double occupancy. Physical Review B, 2005, 71, .	3.2	22
132	Lifetime-Enhanced Transport in Silicon due to Spin and Valley Blockade. Physical Review Letters, 2011, 107, 136602.	7.8	22
133	Nanoscale sensing and imaging in biology using the nitrogen-vacancy center in diamond. MRS Bulletin, 2013, 38, 162-167.	3.5	22
134	Probe and control of the reservoir density of states in single-electron devices. Physical Review B, 2010, 81, .	3.2	21
135	Valley interference and spin exchange at the atomic scale in silicon. Nature Communications, 2020, 11, 6124.	12.8	21
136	Coherent electron transport by adiabatic passage in an imperfect donor chain. Physical Review B, 2010, 82, .	3.2	20
137	Quantum computed moments correction to variational estimates. Quantum - the Open Journal for Quantum Science, 0, 4, 373.	0.0	20
138	Subspace confinement: how good is your qubit?. New Journal of Physics, 2007, 9, 384-384.	2.9	19
139	Equivalence between Bell inequalities and quantum minority games. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 521-524.	2.1	19
140	Polarization Transfer to External Nuclear Spins Using Ensembles of Nitrogen-Vacancy Centers. Physical Review Applied, 2021, 15, .	3.8	19
141	Prospects for nuclear spin hyperpolarization of molecular samples using nitrogen-vacancy centers in diamond. Physical Review B, 2021, 103, .	3.2	19
142	Quantum Support Vector Machines for Continuum Suppression in B Meson Decays. Computing and Software for Big Science, 2021, 5, 1.	2.9	19
143	Fast quantum search algorithms in protein sequence comparisons:â€‚Quantum bioinformatics. Physical Review E, 2000, 62, 7532-7535.	2.1	18
144	Single-qubit operations on the Kane quantum computer. Nanotechnology, 2002, 13, 570-575.	2.6	18

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145	Ab initio calculation of energy levels for phosphorus donors in silicon. Scientific Reports, 2017, 7, 6010.	3.3	18
146	Two-electron states of a group-V donor in silicon from atomistic full configuration interactions. Physical Review B, 2018, 97, .	3.2	18
147	Proximity-Induced Artefacts in Magnetic Imaging with Nitrogen-Vacancy Ensembles in Diamond. Sensors, 2018, 18, 1290.	3.8	18
148	Imaging Graphene Field-Effect Transistors on Diamond Using Nitrogen-Vacancy Microscopy. Physical Review Applied, 2019, 12, .	3.8	18
149	Analytic solution for the ground-state energy of the extensive many-body problem. Physical Review B, 1996, 54, 16309-16312.	3.2	17
150	Precision characterization of two-qubit Hamiltonians via entanglement mapping. Journal of Physics A, 2006, 39, 14649-14658.	1.6	17
151	Strain and electric field control of hyperfine interactions for donor spin qubits in silicon. Physical Review B, 2015, 91, .	3.2	17
152	Spinâ€“orbit coupling in silicon for electrons bound to donors. Npj Quantum Information, 2018, 4, .	6.7	17
153	Optimising Matrix Product State Simulations of Shor's Algorithm. Quantum - the Open Journal for Quantum Science, 0, 3, 116.	0.0	17
154	General nonperturbative estimate of the energy density of lattice Hamiltonians. Physical Review D, 1994, 50, 3382-3386.	4.7	16
155	Ab initio thermodynamics calculation of the relative concentration of NV<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>â^’</mml:mo></mml:msup></mml:math>and NV<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>0</mml:mn></mml:msup></mml:math> defects in diamond. Physical Review B, 2013, 85, .	3.2	16
156	AbÂInitioElectronic Properties of Monolayer Phosphorus Nanowires in Silicon. Physical Review Letters, 2013, 110, 126802.	7.8	16
157	Rapid, Highâ€Resolution Magnetic Microscopy of Single Magnetic Microbeads. Small, 2019, 15, 1805159.	10.0	16
158	Plaquette expansion proof and interpretation. European Physical Journal B, 1994, 95, 531-539.	1.5	15
159	Error rate of the Kane quantum computer controlled-NOT gate in the presence of dephasing. Physical Review A, 2003, 67, .	2.5	15
160	Optically induced spin-to-charge transduction in donor-spin readout. Physical Review B, 2005, 72, .	3.2	15
161	Information Free Quantum Bus for Generating Stabiliser States. Quantum Information Processing, 2007, 6, 229-242.	2.2	15
162	Non-Abelian geometric phase in the diamond nitrogen-vacancy center. Physical Review A, 2014, 90, .	2.5	15

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163	Simulations of Shorâ€™s algorithm using matrix product states. Quantum Information Processing, 2017, 16, 1.	2.2	15
164	Framework for atomic-level characterisation of quantum computer arrays by machine learning. Npj Computational Materials, 2020, 6, .	8.7	15
165	Observation of a Quantum Phase from Classical Rotation of a Single Spin. Physical Review Letters, 2020, 124, 020401.	7.8	15
166	Two-dimensional XXZ model ground-state properties using an analytic Lanczos expansion. Physical Review B, 1997, 55, 10412-10419.	3.2	14
167	Theory of the microwave spectroscopy of a phosphorus-donor charge qubit in silicon: Coherent control in theSi:Pquantum-computer architecture. Physical Review B, 2006, 74, .	3.2	14
168	Single photon quantum non-demolition measurements in the presence of inhomogeneous broadening. New Journal of Physics, 2009, 11, 093005.	2.9	14
169	A Tight-Binding Study of Single-Atom Transistors. Small, 2015, 11, 374-381.	10.0	14
170	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:m -limited sensing of static magnetic fields via fast rotation of quantum spins. Physical Review B, 2018, 98, .	3.2	14
171	Apparent delocalization of the current density in metallic wires observed with diamond nitrogen-vacancy magnetometry. Physical Review B, 2019, 99, .	3.2	14
172	Comparison of different methods of nitrogen-vacancy layer formation in diamond for wide-field quantum microscopy. Physical Review Materials, 2020, 4, .	2.4	14
173	Surface code quantum error correction incorporating accurate error propagation. Quantum Information and Computation, 2011, 11, 8-18.	0.3	14
174	Quantum magnetic imaging of iron organelles within the pigeon cochlea. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
175	Vocal tract resonances and the sound of the Australian didjeridu (yidaki). III. Determinants of playing quality. Journal of the Acoustical Society of America, 2007, 121, 547-558.	1.1	13
176	Nonvanishing effect of detuning errors in dynamical-decoupling-based quantum sensing experiments. Physical Review A, 2019, 99, .	2.5	13
177	Pulse shaping by coupled cavities: Single photons and qudits. Physical Review A, 2009, 80, .	2.5	12
178	Thermodynamic stability of neutral Xe defects in diamond. Physical Review B, 2010, 82, .	3.2	12
179	Stark tuning of the charge states of a two-donor molecule in silicon. Nanotechnology, 2011, 22, 225202.	2.6	12
180	Voltage control of exchange coupling in phosphorus doped silicon. Journal of Physics Condensed Matter, 2004, 16, 5697-5704.	1.8	11

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181	Mapping Donor Electron Wave Function Deformations at a Sub-Bohr Orbit Resolution. Physical Review Letters, 2009, 103, 106802.	7.8	11
182	Through the quantum chicane. Nature Physics, 2012, 8, 113-114.	16.7	11
183	Electronic properties of multiple adjacentÎ´-doped Si:P layers: The approach to monolayer confinement. Physical Review B, 2012, 86, .	3.2	10
184	Magnetic noise from ultrathin abrasively deposited materials on diamond. Physical Review Materials, 2018, 2, .	2.4	10
185	Chemistry beyond the Hartreeâ€“Fock energy via quantum computed moments. Scientific Reports, 2022, 12, .	3.3	10
186	Plaquette expansion of the two-dimensional antiferromagnetic Heisenberg model. Physical Review B, 1994, 50, 1275-1277.	3.2	9
187	The effects of J-gate potential and interfaces on donor exchange coupling in the Kane quantum computer architecture. Journal of Physics Condensed Matter, 2004, 16, 1011-1023.	1.8	9
188	Vocal tract resonances and the sound of the Australian didjeridu (yidaki) II. Theory. Journal of the Acoustical Society of America, 2006, 119, 1205.	1.1	9
189	Cross-talk compensation of hyperfine control in donor-qubit architectures. Nanotechnology, 2006, 17, 4572-4580.	2.6	9
190	Performance Optimization for Drift-Robust Fidelity Improvement of Two-Qubit Gates. Physical Review Applied, 2021, 15, .	3.8	9
191	Plaquette expansion of the Heisenberg and XY chains. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 182, 238-243.	2.1	8
192	Velocity-tuned resonances in the diffraction of atoms by an evanescent field. Physical Review A, 1994, 49, 3100-3103.	2.5	8
193	General non-perturbative mass gap to first order in. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 361, 81-86.	4.1	8
194	Thermal noise in a solid state quantum computer. Journal Physics D: Applied Physics, 2002, 35, 2499-2502.	2.8	8
195	Modelling of electrostatic gate operations in the Kane solid state quantum computer. Microelectronics Journal, 2002, 33, 1053-1058.	2.0	8
196	Environmentally Mediated Coherent Control of a Spin Qubit in Diamond. Physical Review Letters, 2017, 118, 167204.	7.8	8
197	High precision single qubit tuning via thermo-magnetic field control. Applied Physics Letters, 2018, 112, .	3.3	8
198	Quantum Bath Control with Nuclear Spin State Selectivity via Pulse-Adjusted Dynamical Decoupling. Physical Review Letters, 2019, 123, 210401.	7.8	8

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