

# Mikhail D Lukin

## List of Publications by Year in descending order

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305  
papers

65,128  
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394

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327  
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times ranked

33238  
citing authors

#	ARTICLE	IF	CITATIONS
1	Logical quantum processor based on reconfigurable atom arrays. <i>Nature</i> , 2024, 626, 58-65.	36.2	87
2	Telecom Networking with a Diamond Quantum Memory. <i>PRX Quantum</i> , 2024, 5, .	9.3	10
3	Enhancing detection of topological order by local error correction. <i>Nature Communications</i> , 2024, 15, .	13.2	4
4	Control and Entanglement of Individual Rydberg Atoms near a Nanoscale Device. <i>Physical Review Letters</i> , 2024, 132, .	8.0	1
5	Entanglement of nanophotonic quantum memory nodes in a telecom network. <i>Nature</i> , 2024, 629, 573-578.	36.2	6
6	Controlled interlayer exciton ionization in an electrostatic trap in atomically thin heterostructures. <i>Nature Communications</i> , 2024, 15, .	13.2	0
7	Two-axis twisting using Floquet-engineered XYZ spin models with polar molecules. <i>Nature</i> , 2024, 633, 332-337.	36.2	0
8	Improving metrology with quantum scrambling. <i>Science</i> , 2023, 380, 1381-1384.	20.9	26
9	Non-Abelian Floquet Spin Liquids in a Digital Rydberg Simulator. <i>Physical Review X</i> , 2023, 13, .	9.1	13
10	High-fidelity parallel entangling gates on a neutral-atom quantum computer. <i>Nature</i> , 2023, 622, 268-272.	36.2	83
11	Characterizing two-dimensional superconductivity via nanoscale noise magnetometry with single-spin qubits. <i>Physical Review B</i> , 2022, 105, .	3.3	15
12	Single-spin qubit magnetic spectroscopy of two-dimensional superconductivity. <i>Physical Review Research</i> , 2022, 4, .	3.6	13
13	Dispersive optical systems for scalable Raman driving of hyperfine qubits. <i>Physical Review A</i> , 2022, 105, .	2.5	11
14	Resonantly enhanced polariton wave mixing and parametric instability in a Floquet medium. <i>Journal of Chemical Physics</i> , 2022, 156, 174110.	3.1	4
15	A quantum processor based on coherent transport of entangled atom arrays. <i>Nature</i> , 2022, 604, 451-456.	36.2	295
16	Quantum optimization of maximum independent set using Rydberg atom arrays. <i>Science</i> , 2022, 376, 1209-1215.	20.9	159
17	Bulk and boundary quantum phase transitions in a square Rydberg atom array. <i>Physical Review B</i> , 2022, 105, .	3.3	19
18	Enhancing Generative Models via Quantum Correlations. <i>Physical Review X</i> , 2022, 12, .	9.1	18

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19	Hardware-Efficient, Fault-Tolerant Quantum Computation with Rydberg Atoms. <i>Physical Review X</i> , 2022, 12, .	9.1	49
20	Beam steering at the nanosecond time scale with an atomically thin reflector. <i>Nature Communications</i> , 2022, 13, .	13.2	7
21	Quantum phases of Rydberg atoms on a kagome lattice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.6	107
22	Excitons in a reconstructed moiré potential in twisted WSe <sub>2</sub> /WSe <sub>2</sub> homobilayers. <i>Nature Materials</i> , 2021, 20, 480-487.	26.6	128
23	Micron-Scale NV-NMR Spectroscopy with Signal Amplification by Reversible Exchange. <i>PRX Quantum</i> , 2021, 2, .	9.3	30
24	Quantum Computer Systems for Scientific Discovery. <i>PRX Quantum</i> , 2021, 2, .	9.3	164
25	Development of Quantum Interconnects (QICs) for Next-Generation Information Technologies. <i>PRX Quantum</i> , 2021, 2, .	9.3	209
26	Quantum Simulators: Architectures and Opportunities. <i>PRX Quantum</i> , 2021, 2, .	9.3	286
27	Higgs-Mediated Optical Amplification in a Nonequilibrium Superconductor. <i>Physical Review X</i> , 2021, 11, .	9.1	23
28	Electrically controlled emission from singlet and triplet exciton species in atomically thin light-emitting diodes. <i>Physical Review B</i> , 2021, 103, .	3.3	34
29	Controlling Interactions between Quantum Emitters Using Atom Arrays. <i>Physical Review Letters</i> , 2021, 126, 223602.	8.0	24
30	Efficient Entanglement of Spin Qubits Mediated by a Hot Mechanical Oscillator. <i>Physical Review Letters</i> , 2021, 126, 250505.	8.0	14
31	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. <i>Nature</i> , 2021, 595, 48-52.	36.2	118
32	Prediction of Toric Code Topological Order from Rydberg Blockade. <i>Physical Review X</i> , 2021, 11, .	9.1	101
33	Fast Preparation and Detection of a Rydberg Qubit Using Atomic Ensembles. <i>Physical Review Letters</i> , 2021, 127, 050501.	8.0	27
34	Quantum phases of matter on a 256-atom programmable quantum simulator. <i>Nature</i> , 2021, 595, 227-232.	36.2	553
35	Discrete Time-Crystalline Order Enabled by Quantum Many-Body Scars: Entanglement Steering via Periodic Driving. <i>Physical Review Letters</i> , 2021, 127, 090602.	8.0	32
36	Quantum sampling algorithms, phase transitions, and computational complexity. <i>Physical Review A</i> , 2021, 104, .	2.5	7

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37	Quantum Sampling Algorithms for Near-Term Devices. Physical Review Letters, 2021, 127, 100504.	8.0	11
38	A low-noise telecom interface for silicon-vacancy quantum network nodes. , 2021, , .		0
39	Probing topological spin liquids on a programmable quantum simulator. Science, 2021, 374, 1242-1247.	20.9	357
40	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe <sub>2</sub> /MoSe <sub>2</sub> bilayers. Nature Nanotechnology, 2020, 15, 750-754.	30.5	114
41	Quantum many-body scars from virtual entangled pairs. Physical Review B, 2020, 101, .	3.3	69
42	Repulsive photons in a quantum nonlinear medium. Nature Physics, 2020, 16, 921-925.	11.8	28
43	Rotons in optical excitation spectra of monolayer semiconductors. Physical Review B, 2020, 101, .	3.3	11
44	Electrically Tunable Valley Dynamics in Twisted $WS_2$ Bilayers. Physical Review Letters, 2020, 124, 217403.	8.0	109
45	Probing and manipulating embryogenesis via nanoscale thermometry and temperature control. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14636-14641.	7.6	83
46	Hyperpolarization-Enhanced NMR Spectroscopy with Femtomole Sensitivity Using Quantum Defects in Diamond. Physical Review X, 2020, 10, .	9.1	38
47	Emerging Two-Dimensional Gauge Theories in Rydberg Configurable Arrays. Physical Review X, 2020, 10, .	9.1	67
48	Theory of dipole radiation near a Dirac photonic crystal. Physical Review A, 2020, 101, .	2.5	22
49	Complex Density Wave Orders and Quantum Phase Transitions in a Model of Square-Lattice Rydberg Atom Arrays. Physical Review Letters, 2020, 124, 103601.	8.0	54
50	Wigner crystals in two-dimensional transition-metal dichalcogenides: Spin physics and readout. Physical Review B, 2020, 101, .	3.3	11
51	Experimental demonstration of memory-enhanced quantum communication. Nature, 2020, 580, 60-64.	36.2	379
52	Quantum metasurfaces with atom arrays. Nature Physics, 2020, 16, 676-681.	11.8	103
53	One-Way Quantum Repeater Based on Near-Deterministic Photon-Emitter Interfaces. Physical Review X, 2020, 10, .	9.1	66
54	Quantum optomechanics of a two-dimensional atomic array. Physical Review A, 2020, 101, .	2.5	21

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55	Quantum Approximate Optimization Algorithm: Performance, Mechanism, and Implementation on Near-Term Devices. <i>Physical Review X</i> , 2020, 10, .	9.1	348
56	Controlling Excitons in an Atomically Thin Membrane with a Mirror. <i>Physical Review Letters</i> , 2020, 124, 027401.	8.0	60
57	Topological Quantum Optics Using Atomlike Emitter Arrays Coupled to Photonic Crystals. <i>Physical Review Letters</i> , 2020, 124, 083603.	8.0	57
58	Strong Coupling of Two Individually Controlled Atoms via a Nanophotonic Cavity. <i>Physical Review Letters</i> , 2020, 124, 063602.	8.0	73
59	Fermionic formalism for driven-dissipative multilevel systems. <i>Physical Review A</i> , 2020, 101, .	2.5	16
60	Single-Spin Magnetomechanics with Levitated Micromagnets. <i>Physical Review Letters</i> , 2020, 124, 163604.	8.0	68
61	Optical Control of a Single Nuclear Spin in the Solid State. <i>Physical Review Letters</i> , 2020, 124, 153203.	8.0	14
62	Robust Dynamic Hamiltonian Engineering of Many-Body Spin Systems. <i>Physical Review X</i> , 2020, 10, .	9.1	65
63	Quantum Metrology with Strongly Interacting Spin Systems. <i>Physical Review X</i> , 2020, 10, .	9.1	67
64	Asymmetric photoelectric effect: Auger-assisted hot hole photocurrents in transition metal dichalcogenides. <i>Nanophotonics</i> , 2020, 10, 105-113.	6.3	4
65	Optical Interferometry with Quantum Networks. <i>Physical Review Letters</i> , 2019, 123, 070504.	8.0	87
66	Quantum-assisted telescope arrays. <i>Physical Review A</i> , 2019, 100, .	2.5	39
67	Quantum simulation and optimization in hot quantum networks. <i>Physical Review B</i> , 2019, 99, .	3.3	7
68	Quantum Network Nodes Based on Diamond Qubits with an Efficient Nanophotonic Interface. <i>Physical Review Letters</i> , 2019, 123, 183602.	8.0	153
69	An integrated nanophotonic quantum register based on silicon-vacancy spins in diamond. <i>Physical Review B</i> , 2019, 100, .	3.3	126
70	Parallel Implementation of High-Fidelity Multiqubit Gates with Neutral Atoms. <i>Physical Review Letters</i> , 2019, 123, 170503.	8.0	366
71	Hybrid architecture for engineering magnonic quantum networks. <i>Physical Review A</i> , 2019, 100, .	2.5	20
72	Quantum convolutional neural networks. <i>Nature Physics</i> , 2019, 15, 1273-1278.	11.8	674

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73	Origins of Diamond Surface Noise Probed by Correlating Single-Spin Measurements with Surface Spectroscopy. Physical Review X, 2019, 9, .	9.1	122
74	Periodic Orbits, Entanglement, and Quantum Many-Body Scars in Constrained Models: Matrix Product State Approach. Physical Review Letters, 2019, 122, 040603.	8.0	228
75	Probing Quantum Thermalization of a Disordered Dipolar Spin Ensemble with Discrete Time-Crystalline Order. Physical Review Letters, 2019, 122, 043603.	8.0	38
76	Electrically Tunable Exciton-Plasmon Coupling in a $WSe_2$ Monolayer Embedded in a Plasmonic Crystal Cavity. Nano Letters, 2019, 19, 3543-3547.	9.5	37
77	Emergent $SU(2)$ Dynamics and Perfect Quantum Many-Body Scars. Physical Review Letters, 2019, 122, 220603.	8.0	218
78	Quantum acousto-optic control of light-matter interactions in nanophotonic networks. Physical Review A, 2019, 99, .	2.5	21
79	Quantum Kibble-Zurek mechanism and critical dynamics on a programmable Rydberg simulator. Nature, 2019, 568, 207-211.	36.2	330
80	Integrating Neural Networks with a Quantum Simulator for State Reconstruction. Physical Review Letters, 2019, 123, 230504.	8.0	98
81	Large-scale uniform optical focus array generation with a phase spatial light modulator. Optics Letters, 2019, 44, 3178.	3.3	49
82	Quantum interference of electromechanically stabilized emitters in nanophotonic devices. , 2019, , .		0
83	An integrated quantum network node in diamond. , 2019, , .		0
84	Strain control of silicon-vacancy centers in diamond nanophotonic devices. , 2019, , .		0
85	A nanophotonic interface to long-lived quantum memories in diamond. , 2019, , .		0
86	Large Excitonic Reflectivity of Monolayer $MoSe_2$ in Hexagonal Boron Nitride. Physical Review Letters, 2018, 120, 037402.	8.0	177
87	Electrical control of charged carriers and excitons in atomically thin materials. Nature Nanotechnology, 2018, 13, 128-132.	30.5	147
88	High-resolution magnetic resonance spectroscopy using a solid-state spin sensor. Nature, 2018, 555, 351-354.	36.2	284
89	Dynamically induced many-body localization. Physical Review B, 2018, 97, .	3.3	13
90	Probing one-dimensional systems via noise magnetometry with single spin qubits. Physical Review B, 2018, 98, .	3.3	18

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91	Quantum Nonlinear Optics in Atomically Thin Materials. Physical Review Letters, 2018, 121, 123606.	8.0	41
92	Quantum optics in Maxwell's fish eye lens with single atoms and photons. Physical Review A, 2018, 98, .	2.5	11
93	High-Fidelity Control and Entanglement of Rydberg-Atom Qubits. Physical Review Letters, 2018, 121, 123603.	8.0	296
94	Strain engineering of the silicon-vacancy center in diamond. Physical Review B, 2018, 97, .	3.3	186
95	All-optical nanoscale thermometry with silicon-vacancy centers in diamond. Applied Physics Letters, 2018, 112, .	3.2	110
96	Controlling the coherence of a diamond spin qubit through its strain environment. Nature Communications, 2018, 9, 2012.	13.2	130
97	Phonon Networks with Silicon-Vacancy Centers in Diamond Waveguides. Physical Review Letters, 2018, 120, 213603.	8.0	133
98	Solid-state magnetic traps and lattices. Physical Review B, 2018, 97, .	3.3	2
99	Critical Thermalization of a Disordered Dipolar Spin System in Diamond. Physical Review Letters, 2018, 121, 023601.	8.0	115
100	Numerical study of the chiral $\mathbb{Z}_3$ quantum phase transition in one spatial dimension. Physical Review A, 2018, 98, .	2.5	70
101	Sensing Coherent Dynamics of Electronic Spin Clusters in Solids. Physical Review Letters, 2018, 120, 243604.	8.0	14
102	Symmetry-protected collisions between strongly interacting photons. Nature, 2017, 542, 206-209.	36.2	65
103	Observation of discrete time-crystalline order in a disordered dipolar many-body system. Nature, 2017, 543, 221-225.	36.2	741
104	Depolarization Dynamics in a Strongly Interacting Solid-State Spin Ensemble. Physical Review Letters, 2017, 118, 093601.	8.0	95
105	Scalable focused ion beam creation of nearly lifetime-limited single quantum emitters in diamond nanostructures. Nature Communications, 2017, 8, 15376.	13.2	154
106	Cooperative Resonances in Light Scattering from Two-Dimensional Atomic Arrays. Physical Review Letters, 2017, 118, 113601.	8.0	207
107	Efficient quantum computation in a network with probabilistic gates and logical encoding. Physical Review A, 2017, 95, .	2.5	5
108	Universal photonic quantum computation via time-delayed feedback. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11362-11367.	7.6	124

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109	Optical and microwave control of germanium-vacancy center spins in diamond. <i>Physical Review B</i> , 2017, 96, .	3.3	133
110	A method for directional detection of dark matter using spectroscopy of crystal defects. <i>Physical Review D</i> , 2017, 96, .	4.8	55
111	Fiber-Coupled Diamond Quantum Nanophotonic Interface. <i>Physical Review Applied</i> , 2017, 8, .	3.8	125
112	Optimized architectures for long distance quantum communication. , 2017, , .		0
113	Photonic band structure of two-dimensional atomic lattices. <i>Physical Review A</i> , 2017, 96, .	2.5	61
114	Probing many-body dynamics on a 51-atom quantum simulator. <i>Nature</i> , 2017, 551, 579-584.	36.2	1,579
115	Silicon-Vacancy Spin Qubit in Diamond: A Quantum Memory Exceeding 10Âms with Single-Shot State Readout. <i>Physical Review Letters</i> , 2017, 119, 223602.	8.0	324
116	Dynamical Engineering of Interactions in Qudit Ensembles. <i>Physical Review Letters</i> , 2017, 119, 183603.	8.0	39
117	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. <i>Nature Nanotechnology</i> , 2017, 12, 856-860.	30.5	280
118	Magnetic noise spectroscopy as a probe of local electronic correlations in two-dimensional systems. <i>Physical Review B</i> , 2017, 95, .	3.3	39
119	Topological Quantum Optics in Two-Dimensional Atomic Arrays. <i>Physical Review Letters</i> , 2017, 119, 023603.	8.0	151
120	Quantum Nonlinear Optics with a Germanium-Vacancy Color Center in a Nanoscale Diamond Waveguide. <i>Physical Review Letters</i> , 2017, 118, 223603.	8.0	230
121	Critical Time Crystals in Dipolar Systems. <i>Physical Review Letters</i> , 2017, 119, 010602.	8.0	114
122	Dynamics of quantum information in many-body localized systems. <i>Physical Review B</i> , 2017, 96, .	3.3	25
123	Superresolution optical magnetic imaging and spectroscopy using individual electronic spins in diamond. <i>Optics Express</i> , 2017, 25, 11048.	3.4	44
124	Diamond optomechanical crystals. <i>Optica</i> , 2016, 3, 1404.	9.3	130
125	Dicke phase transition without total spin conservation. <i>Physical Review A</i> , 2016, 94, .	2.5	38
126	Quasi-Many-Body Localization in Translation-Invariant Systems. <i>Physical Review Letters</i> , 2016, 117, 240601.	8.0	122



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127	Effective Field Theory for Rydberg Polaritons. <i>Physical Review Letters</i> , 2016, 117, 113601.	8.0	35
128	An integrated diamond nanophotonics platform for quantum-optical networks. <i>Science</i> , 2016, 354, 847-850.	20.9	609
129	Adiabatic Quantum Search in Open Systems. <i>Physical Review Letters</i> , 2016, 117, 150501.	8.0	23
130	Quantum Network of Atom Clocks: A Possible Implementation with Neutral Atoms. <i>Physical Review Letters</i> , 2016, 117, 060506.	8.0	30
131	Optical magnetic detection of single-neuron action potentials using quantum defects in diamond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14133-14138.	7.6	430
132	Noise-resistant optimal spin squeezing via quantum control. <i>Physical Review A</i> , 2016, 93, .	2.5	29
133	Narrow-Linewidth Homogeneous Optical Emitters in Diamond Nanostructures via Silicon Ion Implantation. <i>Physical Review Applied</i> , 2016, 5, .	3.8	137
134	NMR technique for determining the depth of shallow nitrogen-vacancy centers in diamond. <i>Physical Review B</i> , 2016, 93, .	3.3	108
135	Quantum Metrology Enhanced by Repetitive Quantum Error Correction. <i>Physical Review Letters</i> , 2016, 116, 230502.	8.0	129
136	Optimal architectures for long distance quantum communication. <i>Scientific Reports</i> , 2016, 6, 20463.	3.4	286
137	Collective atomic scattering and motional effects in a dense coherent medium. <i>Nature Communications</i> , 2016, 7, 11039.	13.2	149
138	Topological bands with a Chern number $C$ and dipolar exchange interactions. <i>Physical Review A</i> , 2015, 91, .	2.5	29
139	Effects of molecular resonances on Rydberg blockade. <i>Physical Review A</i> , 2015, 92, .	2.5	29
140	State-selective intersystem crossing in nitrogen-vacancy centers. <i>Physical Review B</i> , 2015, 91, .	3.3	100
141	Long-distance entanglement distribution using individual atoms in optical cavities. <i>Physical Review A</i> , 2015, 92, .	2.5	28
142	Coulomb Bound States of Strongly Interacting Photons. <i>Physical Review Letters</i> , 2015, 115, 123601.	8.0	60
143	Heralded Quantum Gates with Integrated Error Detection in Optical Cavities. <i>Physical Review Letters</i> , 2015, 114, 110502.	8.0	41
144	Visible-frequency hyperbolic metasurface. <i>Nature</i> , 2015, 522, 192-196.	36.2	474

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145	All-optical control of a single electron spin in diamond. <i>Physical Review A</i> , 2015, 91, .	2.5	26
146	Nanoscale NMR spectroscopy and imaging of multiple nuclear species. <i>Nature Nanotechnology</i> , 2015, 10, 129-134.	30.5	221
147	Phonon-Induced Population Dynamics and Intersystem Crossing in Nitrogen-Vacancy Centers. <i>Physical Review Letters</i> , 2015, 114, 145502.	8.0	139
148	Single-cell magnetic imaging using a quantum diamond microscope. <i>Nature Methods</i> , 2015, 12, 736-738.	19.6	169
149	Efficient Readout of a Single Spin State in Diamond via Spin-to-Charge Conversion. <i>Physical Review Letters</i> , 2015, 114, 136402.	8.0	168
150	Electron-phonon processes of the silicon-vacancy centre in diamond. <i>New Journal of Physics</i> , 2015, 17, 043011.	2.9	214
151	Efficient fiber-optical interface for nanophotonic devices. <i>Optica</i> , 2015, 2, 70.	9.3	127
152	All-Optical Initialization, Readout, and Coherent Preparation of Single Silicon-Vacancy Spins in Diamond. <i>Physical Review Letters</i> , 2014, 113, 263602.	8.0	225
153	Atom-like crystal defects: From quantum computers to biological sensors. <i>Physics Today</i> , 2014, 67, 38-43.	0.4	100
154	High quality-factor optical nanocavities in bulk single-crystal diamond. <i>Nature Communications</i> , 2014, 5, 5718.	13.2	205
155	Scattering resonances and bound states for strongly interacting Rydberg polaritons. <i>Physical Review A</i> , 2014, 90, .	2.5	80
156	Many-Body Dynamics of Dipolar Molecules in an Optical Lattice. <i>Physical Review Letters</i> , 2014, 113, 195302.	8.0	171
157	Many-Body Localization in Dipolar Systems. <i>Physical Review Letters</i> , 2014, 113, 243002.	8.0	213
158	Interferometric Probes of Many-Body Localization. <i>Physical Review Letters</i> , 2014, 113, 147204.	8.0	154
159	Magnetic Resonance Detection of Individual Proton Spins Using Quantum Reporters. <i>Physical Review Letters</i> , 2014, 113, 197601.	8.0	171
160	Enhanced Antiferromagnetic Exchange between Magnetic Impurities in a Superconducting Host. <i>Physical Review Letters</i> , 2014, 113, 087202.	8.0	60
161	Indistinguishable Photons from Separated Silicon-Vacancy Centers in Diamond. <i>Physical Review Letters</i> , 2014, 113, 113602.	8.0	346
162	Quantum systems under control. <i>Science</i> , 2014, 345, 272-273.	20.9	6

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163	Coherent Optical Transitions in Implanted Nitrogen Vacancy Centers. Nano Letters, 2014, 14, 1982-1986.	9.5	176
164	Quantum nonlinear optics—photon by photon. Nature Photonics, 2014, 8, 685-694.	23.1	571
165	Quantum interference between independent reservoirs in open quantum systems. Physical Review A, 2014, 89, .	2.5	36
166	Ultrafast and Fault-Tolerant Quantum Communication across Long Distances. Physical Review Letters, 2014, 112, 250501.	8.0	215
167	Cross Modulation of Two Laser Beams at the Individual-Photon Level. Physical Review Letters, 2014, 113, 113603.	8.0	8
168	Heisenberg-Limited Atom Clocks Based on Entangled Qubits. Physical Review Letters, 2014, 112, 190403.	8.0	96
169	A quantum network of clocks. Nature Physics, 2014, 10, 582-587.	11.8	479
170	Nanophotonic quantum phase switch with a single atom. Nature, 2014, 508, 241-244.	36.2	458
171	Quantum Error Correction for Metrology. Physical Review Letters, 2014, 112, 150802.	8.0	200
172	Phase diagram and excitations of a Shiba molecule. Physical Review B, 2014, 90, .	3.3	34
173	Nanometre-scale thermometry in a living cell. Nature, 2013, 500, 54-58.	36.2	1,494
174	Coupling of NV Centers to Photonic Crystal Nanobeams in Diamond. Nano Letters, 2013, 13, 5791-5796.	9.5	173
175	Phonon cooling and lasing with nitrogen-vacancy centers in diamond. Physical Review B, 2013, 88, .	3.3	120
176	Single-Photon Nonlinear Optics with Graphene Plasmons. Physical Review Letters, 2013, 111, 247401.	8.0	174
177	Attractive photons in a quantum nonlinear medium. Nature, 2013, 502, 71-75.	36.2	338
178	Dissipative Preparation of Spin Squeezed Atomic Ensembles in a Steady State. Physical Review Letters, 2013, 110, 120402.	8.0	141
179	Nanoscale magnetic imaging of a single electron spin under ambient conditions. Nature Physics, 2013, 9, 215-219.	11.8	340
180	Single-photon nonlinearities in two-mode optomechanics. Physical Review A, 2013, 87, .	2.5	154

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181	Topologically protected quantum state transfer in a chiral spin liquid. Nature Communications, 2013, 4, 1585.	13.2	69
182	Timekeeping with electron spin states in diamond. Physical Review A, 2013, 87, .	2.5	56
183	Phonon-Induced Spin-Spin Interactions in Diamond Nanostructures: Application to Spin Squeezing. Physical Review Letters, 2013, 110, 156402.	8.0	234
184	Polaronic model of two-level systems in amorphous solids. Physical Review B, 2013, 87, .	3.3	41
185	Realizing Fractional Chern Insulators in Dipolar Spin Systems. Physical Review Letters, 2013, 110, 185302.	8.0	174
186	Collectively Enhanced Interactions in Solid-State Spin Qubits. Physical Review Letters, 2013, 110, 067601.	8.0	23
187	Keldysh approach for nonequilibrium phase transitions in quantum optics: Beyond the Dicke model in optical cavities. Physical Review A, 2013, 87, .	2.5	181
188	Quantum logic between remote quantum registers. Physical Review A, 2013, 87, .	2.5	35
189	Preparation of nonequilibrium nuclear spin states in double quantum dots. Physical Review B, 2013, 88, .	3.3	14
190	Coherence and Raman Sideband Cooling of a Single Atom in an Optical Tweezer. Physical Review Letters, 2013, 110, 133001.	8.0	181
191	Robustness of quantum memories based on Majorana zero modes. Physical Review B, 2013, 88, .	3.3	42
192	Continuous mode cooling and phonon routers for phononic quantum networks. New Journal of Physics, 2012, 14, 115004.	2.9	146
193	Environment-assisted metrology with spin qubits. Physical Review A, 2012, 85, .	2.5	19
194	Efficient photon detection from color centers in a diamond optical waveguide. Physical Review B, 2012, 85, .	3.3	135
195	Unforgeable noise-tolerant quantum tokens. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16079-16082.	7.6	45
196	Free-Standing Mechanical and Photonic Nanostructures in Single-Crystal Diamond. Nano Letters, 2012, 12, 6084-6089.	9.5	218
197	Dissipative phase transition in a central spin system. Physical Review A, 2012, 86, .	2.5	255
198	Topological Flat Bands from Dipolar Spin Systems. Physical Review Letters, 2012, 109, 266804.	8.0	99

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199	Nanoplasmonic Lattices for Ultracold Atoms. <i>Physical Review Letters</i> , 2012, 109, 235309.	8.0	109
200	Measuring mechanical motion with a single spin. <i>New Journal of Physics</i> , 2012, 14, 125004.	2.9	33
201	Integrated Diamond Networks for Quantum Nanophotonics. <i>Nano Letters</i> , 2012, 12, 1578-1582.	9.5	187
202	Reservoir engineering and dynamical phase transitions in optomechanical arrays. <i>Physical Review A</i> , 2012, 86, .	2.5	82
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