

# Mikhail D Lukin

## List of Publications by Year in descending order

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313  
papers

61,730  
citations

506

128  
h-index

849

244  
g-index

315  
all docs

315  
docs citations

315  
times ranked

24670  
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing two-dimensional superconductivity via nanoscale noise magnetometry with single-spin qubits. <i>Physical Review B</i> , 2022, 105, .	1.1	14
2	Single-spin qubit magnetic spectroscopy of two-dimensional superconductivity. <i>Physical Review Research</i> , 2022, 4, .	1.3	12
3	Dispersive optical systems for scalable Raman driving of hyperfine qubits. <i>Physical Review A</i> , 2022, 105, .	1.0	8
4	Resonantly enhanced polariton wave mixing and parametric instability in a Floquet medium. <i>Journal of Chemical Physics</i> , 2022, 156, 174110.	1.2	3
5	A quantum processor based on coherent transport of entangled atom arrays. <i>Nature</i> , 2022, 604, 451-456.	13.7	213
6	Quantum optimization of maximum independent set using Rydberg atom arrays. <i>Science</i> , 2022, 376, 1209-1215.	6.0	124
7	Bulk and boundary quantum phase transitions in a square Rydberg atom array. <i>Physical Review B</i> , 2022, 105, .	1.1	15
8	Enhancing Generative Models via Quantum Correlations. <i>Physical Review X</i> , 2022, 12, .	2.8	13
9	Hardware-Efficient, Fault-Tolerant Quantum Computation with Rydberg Atoms. <i>Physical Review X</i> , 2022, 12, .	2.8	37
10	Beam steering at the nanosecond time scale with an atomically thin reflector. <i>Nature Communications</i> , 2022, 13, .	5.8	6
11	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, .	3.3	86
12	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.	13.3	109
13	Micron-Scale NV-NMR Spectroscopy with Signal Amplification by Reversible Exchange. <i>PRX Quantum</i> , 2021, 2, .	3.5	27
14	Quantum Computer Systems for Scientific Discovery. <i>PRX Quantum</i> , 2021, 2, .	3.5	142
15	Development of Quantum Interconnects (QICs) for Next-Generation Information Technologies. <i>PRX Quantum</i> , 2021, 2, .	3.5	172
16	Quantum Simulators: Architectures and Opportunities. <i>PRX Quantum</i> , 2021, 2, .	3.5	229
17	Higgs-Mediated Optical Amplification in a Nonequilibrium Superconductor. <i>Physical Review X</i> , 2021, 11, .	2.8	18
18	Controlling quantum many-body dynamics in driven Rydberg atom arrays. <i>Science</i> , 2021, 371, 1355-1359.	6.0	186

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19	Electrically controlled emission from singlet and triplet exciton species in atomically thin light-emitting diodes. <i>Physical Review B</i> , 2021, 103, .	1.1	26
20	Controlling Interactions between Quantum Emitters Using Atom Arrays. <i>Physical Review Letters</i> , 2021, 126, 223602.	2.9	22
21	Efficient Entanglement of Spin Qubits Mediated by a Hot Mechanical Oscillator. <i>Physical Review Letters</i> , 2021, 126, 250505.	2.9	11
22	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. <i>Nature</i> , 2021, 595, 48-52.	13.7	98
23	Prediction of Toric Code Topological Order from Rydberg Blockade. <i>Physical Review X</i> , 2021, 11, .	2.8	77
24	Fast Preparation and Detection of a Rydberg Qubit Using Atomic Ensembles. <i>Physical Review Letters</i> , 2021, 127, 050501.	2.9	25
25	Quantum phases of matter on a 256-atom programmable quantum simulator. <i>Nature</i> , 2021, 595, 227-232.	13.7	458
26	Discrete Time-Crystalline Order Enabled by Quantum Many-Body Scars: Entanglement Steering via Periodic Driving. <i>Physical Review Letters</i> , 2021, 127, 090602.	2.9	28
27	Quantum sampling algorithms, phase transitions, and computational complexity. <i>Physical Review A</i> , 2021, 104, .	1.0	6
28	Quantum Sampling Algorithms for Near-Term Devices. <i>Physical Review Letters</i> , 2021, 127, 100504.	2.9	10
29	Entanglement transport and a nanophotonic interface for atoms in optical tweezers. <i>Science</i> , 2021, 373, 1511-1514.	6.0	52
30	A low-noise telecom interface for silicon-vacancy quantum network nodes. , 2021, , .		0
31	Probing topological spin liquids on a programmable quantum simulator. <i>Science</i> , 2021, 374, 1242-1247.	6.0	293
32	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe <sub>2</sub> /MoSe <sub>2</sub> bilayers. <i>Nature Nanotechnology</i> , 2020, 15, 750-754.	15.6	106
33	Quantum many-body scars from virtual entangled pairs. <i>Physical Review B</i> , 2020, 101, .	1.1	63
34	Repulsive photons in a quantum nonlinear medium. <i>Nature Physics</i> , 2020, 16, 921-925.	6.5	26
35	Rotons in optical excitation spectra of monolayer semiconductors. <i>Physical Review B</i> , 2020, 101, .	1.1	11
36	Electrically Tunable Valley Dynamics in Twisted $WS_2$ Bilayers. <i>Physical Review Letters</i> , 2020, 124, 217403.	2.9	89

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37	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.	3.3	77
38	Hyperpolarization-Enhanced NMR Spectroscopy with Femtomole Sensitivity Using Quantum Defects in Diamond. Physical Review X, 2020, 10, .	2.8	34
39	Emerging Two-Dimensional Gauge Theories in Rydberg Configurable Arrays. Physical Review X, 2020, 10, .	2.8	63
40	Theory of dipole radiation near a Dirac photonic crystal. Physical Review A, 2020, 101, .	1.0	21
41	Complex Density Wave Orders and Quantum Phase Transitions in a Model of Square-Lattice Rydberg Atom Arrays. Physical Review Letters, 2020, 124, 103601.	2.9	46
42	Wigner crystals in two-dimensional transition-metal dichalcogenides: Spin physics and readout. Physical Review B, 2020, 101, .	1.1	8
43	Experimental demonstration of memory-enhanced quantum communication. Nature, 2020, 580, 60-64.	13.7	325
44	Quantum metasurfaces with atom arrays. Nature Physics, 2020, 16, 676-681.	6.5	98
45	One-Way Quantum Repeater Based on Near-Deterministic Photon-Emitter Interfaces. Physical Review X, 2020, 10, .	2.8	61
46	Quantum optomechanics of a two-dimensional atomic array. Physical Review A, 2020, 101, .	1.0	18
47	Quantum Approximate Optimization Algorithm: Performance, Mechanism, and Implementation on Near-Term Devices. Physical Review X, 2020, 10, .	2.8	293
48	Controlling Excitons in an Atomically Thin Membrane with a Mirror. Physical Review Letters, 2020, 124, 027401.	2.9	55
49	Topological Quantum Optics Using Atomlike Emitter Arrays Coupled to Photonic Crystals. Physical Review Letters, 2020, 124, 083603.	2.9	53
50	Strong Coupling of Two Individually Controlled Atoms via a Nanophotonic Cavity. Physical Review Letters, 2020, 124, 063602.	2.9	66
51	Fermionic formalism for driven-dissipative multilevel systems. Physical Review A, 2020, 101, .	1.0	16
52	Single-Spin Magnetomechanics with Levitated Micromagnets. Physical Review Letters, 2020, 124, 163604.	2.9	60
53	Optical Control of a Single Nuclear Spin in the Solid State. Physical Review Letters, 2020, 124, 153203.	2.9	13
54	Robust Dynamic Hamiltonian Engineering of Many-Body Spin Systems. Physical Review X, 2020, 10, .	2.8	54

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55	Quantum Metrology with Strongly Interacting Spin Systems. <i>Physical Review X</i> , 2020, 10, .	2.8	52
56	Asymmetric photoelectric effect: Auger-assisted hot hole photocurrents in transition metal dichalcogenides. <i>Nanophotonics</i> , 2020, 10, 105-113.	2.9	2
57	Generation and manipulation of Schrödinger cat states in Rydberg atom arrays. <i>Science</i> , 2019, 365, 570-574.	6.0	375
58	Optical Interferometry with Quantum Networks. <i>Physical Review Letters</i> , 2019, 123, 070504.	2.9	74
59	Quantum-assisted telescope arrays. <i>Physical Review A</i> , 2019, 100, .	1.0	35
60	Quantum simulation and optimization in hot quantum networks. <i>Physical Review B</i> , 2019, 99, .	1.1	7
61	Quantum Network Nodes Based on Diamond Qubits with an Efficient Nanophotonic Interface. <i>Physical Review Letters</i> , 2019, 123, 183602.	2.9	133
62	Electrical control of interlayer exciton dynamics in atomically thin heterostructures. <i>Science</i> , 2019, 366, 870-875.	6.0	255
63	An integrated nanophotonic quantum register based on silicon-vacancy spins in diamond. <i>Physical Review B</i> , 2019, 100, .	1.1	111
64	Parallel Implementation of High-Fidelity Multiqubit Gates with Neutral Atoms. <i>Physical Review Letters</i> , 2019, 123, 170503.	2.9	329
65	Hybrid architecture for engineering magnonic quantum networks. <i>Physical Review A</i> , 2019, 100, .	1.0	19
66	Quantum convolutional neural networks. <i>Nature Physics</i> , 2019, 15, 1273-1278.	6.5	554
67	Origins of Diamond Surface Noise Probed by Correlating Single-Spin Measurements with Surface Spectroscopy. <i>Physical Review X</i> , 2019, 9, .	2.8	107
68	Periodic Orbits, Entanglement, and Quantum Many-Body Scars in Constrained Models: Matrix Product State Approach. <i>Physical Review Letters</i> , 2019, 122, 040603.	2.9	208
69	Probing Quantum Thermalization of a Disordered Dipolar Spin Ensemble with Discrete Time-Crystalline Order. <i>Physical Review Letters</i> , 2019, 122, 043603.	2.9	33
70	Electrically Tunable Exciton-Plasmon Coupling in a $\text{WSe}_2$ Monolayer Embedded in a Plasmonic Crystal Cavity. <i>Nano Letters</i> , 2019, 19, 3543-3547.	4.5	32
71	Emergent $\text{SU}(2)$ Dynamics and Perfect Quantum Many-Body Scars. <i>Physical Review Letters</i> , 2019, 122, 220603.	2.9	201
72	Quantum acousto-optic control of light-matter interactions in nanophotonic networks. <i>Physical Review A</i> , 2019, 99, .	1.0	20

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73	Quantum Kibbleâ€Zurek mechanism and critical dynamics on a programmable Rydberg simulator. Nature, 2019, 568, 207-211.	13.7	298
74	Integrating Neural Networks with a Quantum Simulator for State Reconstruction. Physical Review Letters, 2019, 123, 230504.	2.9	90
75	Electron-phonon instability in graphene revealed by global and local noise probes. Science, 2019, 364, 154-157.	6.0	47
76	Large-scale uniform optical focus array generation with a phase spatial light modulator. Optics Letters, 2019, 44, 3178.	1.7	39
77	Quantum interference of electromechanically stabilized emitters in nanophotonic devices. , 2019, , .		0
78	An integrated quantum network node in diamond. , 2019, , .		0
79	Strain control of silicon-vacancy centers in diamond nanophotonic devices. , 2019, , .		0
80	A nanophotonic interface to long-lived quantum memories in diamond. , 2019, , .		0
81	Observation of three-photon bound states in a quantum nonlinear medium. Science, 2018, 359, 783-786.	6.0	99
82	Large Excitonic Reflectivity of Monolayer $\text{MoSe}_2$ in Hexagonal Boron Nitride. Physical Review Letters, 2018, 120, 037402.	2.9	165
83	Electrical control of charged carriers and excitons in atomically thin materials. Nature Nanotechnology, 2018, 13, 128-132.	15.6	142
84	High-resolution magnetic resonance spectroscopy using a solid-state spin sensor. Nature, 2018, 555, 351-354.	13.7	270
85	Dynamically induced many-body localization. Physical Review B, 2018, 97, .	1.1	13
86	Probing one-dimensional systems via noise magnetometry with single spin qubits. Physical Review B, 2018, 98, .	1.1	17
87	Quantum Nonlinear Optics in Atomically Thin Materials. Physical Review Letters, 2018, 121, 123606.	2.9	39
88	Quantum optics in Maxwell's fish eye lens with single atoms and photons. Physical Review A, 2018, 98, .	1.0	11
89	High-Fidelity Control and Entanglement of Rydberg-Atom Qubits. Physical Review Letters, 2018, 121, 123603.	2.9	274
90	Photon-mediated interactions between quantum emitters in a diamond nanocavity. Science, 2018, 362, 662-665.	6.0	189

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91	Strain engineering of the silicon-vacancy center in diamond. <i>Physical Review B</i> , 2018, 97, .	1.1	171
92	All-optical nanoscale thermometry with silicon-vacancy centers in diamond. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	100
93	Controlling the coherence of a diamond spin qubit through its strain environment. <i>Nature Communications</i> , 2018, 9, 2012.	5.8	120
94	Phonon Networks with Silicon-Vacancy Centers in Diamond Waveguides. <i>Physical Review Letters</i> , 2018, 120, 213603.	2.9	125
95	Solid-state magnetic traps and lattices. <i>Physical Review B</i> , 2018, 97, .	1.1	2
96	Critical Thermalization of a Disordered Dipolar Spin System in Diamond. <i>Physical Review Letters</i> , 2018, 121, 023601.	2.9	107
97	Numerical study of the chiral $\mathbb{Z}_3$ quantum phase transition in one spatial dimension. <i>Physical Review A</i> , 2018, 98, .	1.0	64
98	Sensing Coherent Dynamics of Electronic Spin Clusters in Solids. <i>Physical Review Letters</i> , 2018, 120, 243604.	2.9	14
99	Magnetic resonance spectroscopy of an atomically thin material using a single-spin qubit. <i>Science</i> , 2017, 355, 503-507.	6.0	110
100	Symmetry-protected collisions between strongly interacting photons. <i>Nature</i> , 2017, 542, 206-209.	13.7	65
101	Observation of discrete time-crystalline order in a disordered dipolar many-body system. <i>Nature</i> , 2017, 543, 221-225.	13.7	689
102	Depolarization Dynamics in a Strongly Interacting Solid-State Spin Ensemble. <i>Physical Review Letters</i> , 2017, 118, 093601.	2.9	86
103	Scalable focused ion beam creation of nearly lifetime-limited single quantum emitters in diamond nanostructures. <i>Nature Communications</i> , 2017, 8, 15376.	5.8	141
104	Cooperative Resonances in Light Scattering from Two-Dimensional Atomic Arrays. <i>Physical Review Letters</i> , 2017, 118, 113601.	2.9	196
105	Efficient quantum computation in a network with probabilistic gates and logical encoding. <i>Physical Review A</i> , 2017, 95, .	1.0	5
106	Universal photonic quantum computation via time-delayed feedback. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11362-11367.	3.3	117
107	Optical and microwave control of germanium-vacancy center spins in diamond. <i>Physical Review B</i> , 2017, 96, .	1.1	125
108	A method for directional detection of dark matter using spectroscopy of crystal defects. <i>Physical Review D</i> , 2017, 96, .	1.6	54

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109	Fiber-Coupled Diamond Quantum Nanophotonic Interface. <i>Physical Review Applied</i> , 2017, 8, .	1.5	115
110	Optimized architectures for long distance quantum communication. , 2017, , .		0
111	Photonic band structure of two-dimensional atomic lattices. <i>Physical Review A</i> , 2017, 96, .	1.0	57
112	Probing many-body dynamics on a 51-atom quantum simulator. <i>Nature</i> , 2017, 551, 579-584.	13.7	1,463
113	Silicon-Vacancy Spin Qubit in Diamond: A Quantum Memory Exceeding 10 $\mu$ s with Single-Shot State Readout. <i>Physical Review Letters</i> , 2017, 119, 223602.	2.9	300
114	Dynamical Engineering of Interactions in Qudit Ensembles. <i>Physical Review Letters</i> , 2017, 119, 183603.	2.9	36
115	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. <i>Nature Nanotechnology</i> , 2017, 12, 856-860.	15.6	270
116	Magnetic noise spectroscopy as a probe of local electronic correlations in two-dimensional systems. <i>Physical Review B</i> , 2017, 95, .	1.1	37
117	Topological Quantum Optics in Two-Dimensional Atomic Arrays. <i>Physical Review Letters</i> , 2017, 119, 023603.	2.9	145
118	Quantum Nonlinear Optics with a Germanium-Vacancy Color Center in a Nanoscale Diamond Waveguide. <i>Physical Review Letters</i> , 2017, 118, 223603.	2.9	218
119	Critical Time Crystals in Dipolar Systems. <i>Physical Review Letters</i> , 2017, 119, 010602.	2.9	107
120	Dynamics of quantum information in many-body localized systems. <i>Physical Review B</i> , 2017, 96, .	1.1	24
121	Superresolution optical magnetic imaging and spectroscopy using individual electronic spins in diamond. <i>Optics Express</i> , 2017, 25, 11048.	1.7	42
122	Diamond optomechanical crystals. <i>Optica</i> , 2016, 3, 1404.	4.8	125
123	Dicke phase transition without total spin conservation. <i>Physical Review A</i> , 2016, 94, .	1.0	37
124	Quasi-Many-Body Localization in Translation-Invariant Systems. <i>Physical Review Letters</i> , 2016, 117, 240601.	2.9	116
125	Effective Field Theory for Rydberg Polaritons. <i>Physical Review Letters</i> , 2016, 117, 113601.	2.9	35
126	An integrated diamond nanophotonics platform for quantum-optical networks. <i>Science</i> , 2016, 354, 847-850.	6.0	570



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127	Adiabatic Quantum Search in Open Systems. Physical Review Letters, 2016, 117, 150501.	2.9	21
128	Quantum Network of Atom Clocks: A Possible Implementation with Neutral Atoms. Physical Review Letters, 2016, 117, 060506.	2.9	29
129	Optical magnetic detection of single-neuron action potentials using quantum defects in diamond. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14133-14138.	3.3	397
130	Noise-resistant optimal spin squeezing via quantum control. Physical Review A, 2016, 93, .	1.0	28
131	Narrow-Linewidth Homogeneous Optical Emitters in Diamond Nanostructures via Silicon Ion Implantation. Physical Review Applied, 2016, 5, .	1.5	131
132	NMR technique for determining the depth of shallow nitrogen-vacancy centers in diamond. Physical Review B, 2016, 93, .	1.1	107
133	Quantum Metrology Enhanced by Repetitive Quantum Error Correction. Physical Review Letters, 2016, 116, 230502.	2.9	125
134	Optimal architectures for long distance quantum communication. Scientific Reports, 2016, 6, 20463.	1.6	262
135	Collective atomic scattering and motional effects in a dense coherent medium. Nature Communications, 2016, 7, 11039.	5.8	145
136	Atom-by-atom assembly of defect-free one-dimensional cold atom arrays. Science, 2016, 354, 1024-1027.	6.0	534
137	Nuclear magnetic resonance detection and spectroscopy of single proteins using quantum logic. Science, 2016, 351, 836-841.	6.0	387
138	Topological bands with a Chern number $C$ and dipolar exchange interactions. Physical Review A, 2015, 91, .	1.0	25
139	Effects of molecular resonances on Rydberg blockade. Physical Review A, 2015, 92, .	1.0	29
140	State-selective intersystem crossing in nitrogen-vacancy centers. Physical Review B, 2015, 91, .	1.1	91
141	Long-distance entanglement distribution using individual atoms in optical cavities. Physical Review A, 2015, 92, .	1.0	28
142	Coulomb Bound States of Strongly Interacting Photons. Physical Review Letters, 2015, 115, 123601.	2.9	55
143	Heralded Quantum Gates with Integrated Error Detection in Optical Cavities. Physical Review Letters, 2015, 114, 110502.	2.9	41
144	Visible-frequency hyperbolic metasurface. Nature, 2015, 522, 192-196.	13.7	453

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145	All-optical control of a single electron spin in diamond. <i>Physical Review A</i> , 2015, 91, .	1.0	24
146	Nanoscale NMR spectroscopy and imaging of multiple nuclear species. <i>Nature Nanotechnology</i> , 2015, 10, 129-134.	15.6	215
147	Probing Johnson noise and ballistic transport in normal metals with a single-spin qubit. <i>Science</i> , 2015, 347, 1129-1132.	6.0	130
148	Phonon-Induced Population Dynamics and Intersystem Crossing in Nitrogen-Vacancy Centers. <i>Physical Review Letters</i> , 2015, 114, 145502.	2.9	127
149	Single-cell magnetic imaging using a quantum diamond microscope. <i>Nature Methods</i> , 2015, 12, 736-738.	9.0	161
150	Efficient Readout of a Single Spin State in Diamond via Spin-to-Charge Conversion. <i>Physical Review Letters</i> , 2015, 114, 136402.	2.9	162
151	Electron-phonon processes of the silicon-vacancy centre in diamond. <i>New Journal of Physics</i> , 2015, 17, 043011.	1.2	203
152	Efficient fiber-optical interface for nanophotonic devices. <i>Optica</i> , 2015, 2, 70.	4.8	119
153	All-Optical Initialization, Readout, and Coherent Preparation of Single Silicon-Vacancy Spins in Diamond. <i>Physical Review Letters</i> , 2014, 113, 263602.	2.9	216
154	Atom-like crystal defects: From quantum computers to biological sensors. <i>Physics Today</i> , 2014, 67, 38-43.	0.3	97
155	High quality-factor optical nanocavities in bulk single-crystal diamond. <i>Nature Communications</i> , 2014, 5, 5718.	5.8	196
156	Scattering resonances and bound states for strongly interacting Rydberg polaritons. <i>Physical Review A</i> , 2014, 90, .	1.0	78
157	Many-Body Dynamics of Dipolar Molecules in an Optical Lattice. <i>Physical Review Letters</i> , 2014, 113, 195302.	2.9	162
158	Many-Body Localization in Dipolar Systems. <i>Physical Review Letters</i> , 2014, 113, 243002.	2.9	204
159	Interferometric Probes of Many-Body Localization. <i>Physical Review Letters</i> , 2014, 113, 147204.	2.9	153
160	Magnetic Resonance Detection of Individual Proton Spins Using Quantum Reporters. <i>Physical Review Letters</i> , 2014, 113, 197601.	2.9	167
161	Enhanced Antiferromagnetic Exchange between Magnetic Impurities in a Superconducting Host. <i>Physical Review Letters</i> , 2014, 113, 087202.	2.9	53
162	Indistinguishable Photons from Separated Silicon-Vacancy Centers in Diamond. <i>Physical Review Letters</i> , 2014, 113, 113602.	2.9	333

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163	Quantum systems under control. <i>Science</i> , 2014, 345, 272-273.	6.0	6
164	Coherent Optical Transitions in Implanted Nitrogen Vacancy Centers. <i>Nano Letters</i> , 2014, 14, 1982-1986.	4.5	169
165	Quantum nonlinear optics—Photon by photon. <i>Nature Photonics</i> , 2014, 8, 685-694.	15.6	539
166	Quantum interference between independent reservoirs in open quantum systems. <i>Physical Review A</i> , 2014, 89, .	1.0	35
167	Ultrafast and Fault-Tolerant Quantum Communication across Long Distances. <i>Physical Review Letters</i> , 2014, 112, 250501.	2.9	204
168	Cross Modulation of Two Laser Beams at the Individual-Photon Level. <i>Physical Review Letters</i> , 2014, 113, 113603.	2.9	8
169	Heisenberg-Limited Atom Clocks Based on Entangled Qubits. <i>Physical Review Letters</i> , 2014, 112, 190403.	2.9	92
170	A quantum network of clocks. <i>Nature Physics</i> , 2014, 10, 582-587.	6.5	435
171	Nanophotonic quantum phase switch with a single atom. <i>Nature</i> , 2014, 508, 241-244.	13.7	448
172	Quantum Error Correction for Metrology. <i>Physical Review Letters</i> , 2014, 112, 150802.	2.9	192
173	Phase diagram and excitations of a Shiba molecule. <i>Physical Review B</i> , 2014, 90, .	1.1	31
174	Nanometre-scale thermometry in a living cell. <i>Nature</i> , 2013, 500, 54-58.	13.7	1,440
175	Coupling of NV Centers to Photonic Crystal Nanobeams in Diamond. <i>Nano Letters</i> , 2013, 13, 5791-5796.	4.5	170
176	Phonon cooling and lasing with nitrogen-vacancy centers in diamond. <i>Physical Review B</i> , 2013, 88, .	1.1	115
177	Single-Photon Nonlinear Optics with Graphene Plasmons. <i>Physical Review Letters</i> , 2013, 111, 247401.	2.9	172
178	Attractive photons in a quantum nonlinear medium. <i>Nature</i> , 2013, 502, 71-75.	13.7	331
179	Dissipative Preparation of Spin Squeezed Atomic Ensembles in a Steady State. <i>Physical Review Letters</i> , 2013, 110, 120402.	2.9	139
180	Nanoscale magnetic imaging of a single electron spin under ambient conditions. <i>Nature Physics</i> , 2013, 9, 215-219.	6.5	330

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181	Single-photon nonlinearities in two-mode optomechanics. <i>Physical Review A</i> , 2013, 87, .	1.0	146
182	Topologically protected quantum state transfer in a chiral spin liquid. <i>Nature Communications</i> , 2013, 4, 1585.	5.8	67
183	Timekeeping with electron spin states in diamond. <i>Physical Review A</i> , 2013, 87, .	1.0	52
184	Phonon-Induced Spin-Spin Interactions in Diamond Nanostructures: Application to Spin Squeezing. <i>Physical Review Letters</i> , 2013, 110, 156402.	2.9	226
185	Polaronic model of two-level systems in amorphous solids. <i>Physical Review B</i> , 2013, 87, .	1.1	38
186	Coupling a Single Trapped Atom to a Nanoscale Optical Cavity. <i>Science</i> , 2013, 340, 1202-1205.	6.0	393
187	Realizing Fractional Chern Insulators in Dipolar Spin Systems. <i>Physical Review Letters</i> , 2013, 110, 185302.	2.9	167
188	Collectively Enhanced Interactions in Solid-State Spin Qubits. <i>Physical Review Letters</i> , 2013, 110, 067601.	2.9	23
189	Keldysh approach for nonequilibrium phase transitions in quantum optics: Beyond the Dicke model in optical cavities. <i>Physical Review A</i> , 2013, 87, .	1.0	176
190	Quantum logic between remote quantum registers. <i>Physical Review A</i> , 2013, 87, .	1.0	35
191	Preparation of nonequilibrium nuclear spin states in double quantum dots. <i>Physical Review B</i> , 2013, 88, .	1.1	14
192	Coherence and Raman Sideband Cooling of a Single Atom in an Optical Tweezer. <i>Physical Review Letters</i> , 2013, 110, 133001.	2.9	166
193	Robustness of quantum memories based on Majorana zero modes. <i>Physical Review B</i> , 2013, 88, .	1.1	39
194	Continuous mode cooling and phonon routers for phononic quantum networks. <i>New Journal of Physics</i> , 2012, 14, 115004.	1.2	143
195	Environment-assisted metrology with spin qubits. <i>Physical Review A</i> , 2012, 85, .	1.0	19
196	Efficient photon detection from color centers in a diamond optical waveguide. <i>Physical Review B</i> , 2012, 85, .	1.1	130
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