

Jaewook Ahn

List of Publications by Year in descending order

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64
papers

873
citations

516710

16
h-index

477307

29
g-index

65
all docs

65
docs citations

65
times ranked

952
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning identification of symmetrized base states of Rydberg atoms. <i>Frontiers of Physics</i> , 2022, 17, 1.	5.0	2
2	Rydberg quantum wires for maximum independent set problems. <i>Nature Physics</i> , 2022, 18, 755-759.	16.7	19
3	Finding the Maximum Independent Sets of Platonic Graphs Using Rydberg Atoms. <i>PRX Quantum</i> , 2022, 3, .	9.2	12
4	Imaging three-dimensional single-atom arrays all at once. <i>Optics Express</i> , 2021, 29, 4082.	3.4	4
5	EIT Cooling of Atoms in Optical Dipole Traps. , 2021, , .		0
6	Quantum simulation of Cayley-tree Ising Hamiltonians with three-dimensional Rydberg atoms. <i>Physical Review Research</i> , 2021, 3, .	3.6	15
7	Rydberg Atom Entanglements in the Weak Coupling Regime. <i>Physical Review Letters</i> , 2020, 124, 033603.	7.8	36
8	Quantum Ising Hamiltonian Programming in Trio, Quartet, and Sextet Qubit Systems. <i>PRX Quantum</i> , 2020, 1, .	9.2	17
9	Space-variant holographic imaging for 3D Rydberg quantum simulators. , 2020, , .		0
10	Berry-phase gates for fast and robust control of atomic clock states. <i>Physical Review Research</i> , 2020, 2, .	3.6	3
11	Coherent and dissipative dynamics of entangled few-body systems of Rydberg atoms. <i>Physical Review A</i> , 2019, 99, .	2.5	33
12	Gerchberg-Saxton algorithm for fast and efficient atom rearrangement in optical tweezer traps. <i>Optics Express</i> , 2019, 27, 2184.	3.4	44
13	Qubit leakage suppression by ultrafast composite pulses. <i>Optics Express</i> , 2019, 27, 3944.	3.4	3
14	Interferometric implementation of Rydberg-atom entanglements. , 2019, , .		0
15	Quantum Few-body Dynamics of Rydberg Atom Clusters. , 2019, , .		0
16	Direct frequency-comb spectroscopy of $6s2S1/2 \leftrightarrow 8s2S1/2$ transitions of atomic cesium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 035001.	1.5	2
17	Detailed Balance of Thermalization Dynamics in Rydberg-Atom Quantum Simulators. <i>Physical Review Letters</i> , 2018, 120, 180502.	7.8	80
18	Quantum Computing Systems: A Brief Overview. <i>Journal of the Korean Physical Society</i> , 2018, 73, 841-845.	0.7	3

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19	Subpicosecond X rotations of atomic clock states. Physical Review A, 2018, 97, .	2.5	5
20	Ultrafast spatial coherent control methods for transition pathway resolving spectroscopy of atomic rubidium. Optics Express, 2018, 26, 1324.	3.4	2
21	Defect-free atomic array formation using the Hungarian matching algorithm. Physical Review A, 2017, 95, .	2.5	30
22	Robust two-level system control by a detuned and chirped laser pulse. Physical Review A, 2017, 96, .	2.5	10
23	Single-laser-pulse implementation of arbitrary XYZ rotations of an atomic qubit. Physical Review A, 2017, 96, .	2.5	3
24	Selective excitation in a three-state system using a hybrid adiabatic-nonadiabatic interaction. Physical Review A, 2016, 94, .	2.5	5
25	Terahertz transmission resonances in complementary multilayered metamaterial with deep subwavelength interlayer spacing. Applied Physics Letters, 2016, 108, 201103.	3.3	4
26	Three-dimensional rearrangement of single atoms using actively controlled optical microtraps. Optics Express, 2016, 24, 9816.	3.4	44
27	Quantum dynamics of a two-state system induced by a chirped zero-area pulse. Physical Review A, 2016, 93, .	2.5	6
28	In situ single-atom array synthesis using dynamic holographic optical tweezers. Nature Communications, 2016, 7, 13317.	12.8	163
29	Coherent control of resonant two-photon transitions by counterpropagating ultrashort pulse pairs. Physical Review A, 2015, 92, .	2.5	6
30	Rabi oscillations of Morris-Shore transformed N -state systems by elliptically polarized ultrafast laser pulses. Physical Review A, 2015, 91, .	2.5	5
31	THz near-field spectral encoding imaging using a rainbow metasurface. Scientific Reports, 2015, 5, 14403.	3.3	21
32	Nonparaxial aberrations in the optical Talbot effect probed by quantum-dot fluorescence tomography. Physical Review A, 2015, 91, .	2.5	1
33	Spectro-spatial coherent control of ultrafast laser interaction with atomic vapor. , 2015, , .		0
34	Lattice Vibrations of Natural Seraphinite Gemstone Probed by Terahertz Time-Domain Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 1021-1027.	3.1	7
35	THz near-field spectral encoding imaging using a rainbow metasurface. , 2015, , .		2
36	Strong optical phonon mode of natural seraphinite probed by terahertz time-domain spectroscopy. , 2015, , .		0

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37	Ultrafast Ramsey interferometry to implement cold atomic qubit gates. Scientific Reports, 2015, 4, 5867.	3.3	19
38	Ultrafast laser-driven Rabi oscillations of a trapped atomic vapor. Optics Letters, 2015, 40, 510.	3.3	13
39	Subwavelength silicon through-hole arrays as an all-dielectric broadband terahertz gradient index metamaterial. Applied Physics Letters, 2014, 105, .	3.3	36
40	Quantum interference control of a four-level diamond-configuration quantum system. Physical Review A, 2013, 88, .	2.5	16
41	Review of cold Rydberg atoms and their applications. Journal of the Korean Physical Society, 2013, 63, 867-876.	0.7	31
42	Ultrafast Rabi flopping in a three-level energy ladder. Optics Letters, 2012, 37, 3378.	3.3	11
43	Subwavelength silicon honeycomb structure for tailored index in terahertz broadband region. , 2012, , .		0
44	Coherent control of multiphoton-ionization passage of excited-state rubidium atoms. Physical Review A, 2012, 86, .	2.5	5
45	Optical repumping of triplet-Pstates enhances magneto-optical trapping of ytterbium atoms. Physical Review A, 2012, 85, .	2.5	15
46	Ultrafast terahertz transmission ellipsometry of YMn2O5 electromagnons. Applied Physics Letters, 2012, 101, 242911.	3.3	1
47	Highly luminescing multi-shell semiconductor nanocrystals InP/ZnSe/ZnS. Applied Physics Letters, 2012, 101, 073107.	3.3	45
48	Terahertz phase microscopy in the sub-wavelength regime. Applied Physics Letters, 2012, 100, 161110.	3.3	9
49	Sub-wavelength terahertz microscopy using spectro-temporal phase analysis. , 2011, , .		0
50	Strong-field quantum control of 2 + 1 photon absorption of atomic sodium. Optics Express, 2011, 19, 2266.	3.4	15
51	Quantum control in two-dimensional Fourier-transform spectroscopy. Physical Review A, 2011, 84, .	2.5	7
52	Coherent transients mimicked by two-photon coherent control of a three-level system. Physical Review A, 2011, 83, .	2.5	10
53	Strong-field two-photon transition by phase shaping. Physical Review A, 2010, 82, .	2.5	16
54	Ultrafast near-infrared spectroscopic study of coherent phonons in the phase-separated manganite $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ Physical Review B, 2010, 81, .	3.2	11

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55	Strong spin-lattice coupling in multiferroic hexagonal manganite YMnO ₃ probed by ultrafast optical spectroscopy. Applied Physics Letters, 2010, 97, 031914.	3.3	20
56	Effect of nonuniform continuum density of states on a Fano resonance in semiconductor quantum wells. Physical Review B, 2009, 80, .	3.2	1
57	Modulation-limited interference terahertz shapes via one-dimensional multilayer structures. , 2009, , .		0
58	NONLOCALITY IMPROVES DEUTSCH ALGORITHM. International Journal of Quantum Information, 2009, 07, 603-614.	1.1	0
59	THE CONFLICT BETWEEN BELL'S CHSH INEQUALITY AND BELL'S MERMIN INEQUALITY. Modern Physics Letters A, 2008, 23, 2967-2977.	1.2	4
60	Optimization of photonic crystal interfaces for high efficiency coupling of terahertz waves. , 2008, , .		0
61	Optimal Cd Molar Fraction in Zn _{1-x} Cd _x Te Terahertz Emitters. , 2007, , .		0
62	Elaboration of Linear-optical Implementations of Quantum Algorithms with Single and Double-photon Entangled States. , 2007, , .		0
63	Optimal Cd molar fraction in Zn _{1-x} Cd _x Te terahertz emitters. , 2007, , .		0
64	Rydberg Wire Gates for Universal Quantum Computation. Frontiers in Physics, 0, 10, .	2.1	1