

Shannon Whitlock

List of Publications by Year in descending order

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54
papers

2,068
citations

218677

26
h-index

233421

45
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55
all docs

55
docs citations

55
times ranked

1475
citing authors

#	ARTICLE	IF	CITATIONS
1	Observing the Dynamics of Dipole-Mediated Energy Transport by Interaction-Enhanced Imaging. <i>Science</i> , 2013, 342, 954-956.	12.6	187
2	Quantum simulation and computing with Rydberg-interacting qubits. <i>AVS Quantum Science</i> , 2021, 3, .	4.9	144
3	Full Counting Statistics of Laser Excited Rydberg Aggregates in a One-Dimensional Geometry. <i>Physical Review Letters</i> , 2014, 112, 013002.	7.8	116
4	Spatially resolved excitation of Rydberg atoms and surface effects on an atom chip. <i>Physical Review A</i> , 2010, 81, .	2.5	115
5	Crossover from 2D to 3D in a Weakly Interacting Fermi Gas. <i>Physical Review Letters</i> , 2011, 106, 105304.	7.8	113
6	Two-dimensional array of microtraps with atomic shift register on a chip. <i>New Journal of Physics</i> , 2009, 11, 023021.	2.9	88
7	Sub-Poissonian Statistics of Rydberg-Interacting Dark-State Polaritons. <i>Physical Review Letters</i> , 2013, 110, 203601.	7.8	86
8	Interaction Enhanced Imaging of Individual Rydberg Atoms in Dense Gases. <i>Physical Review Letters</i> , 2012, 108, 013002.	7.8	85
9	Condensate Splitting in an Asymmetric Double Well for Atom Chip Based Sensors. <i>Physical Review Letters</i> , 2007, 98, 030402.	7.8	80
10	Correlated Exciton Transport in Rydberg-Dressed-Atom Spin Chains. <i>Physical Review Letters</i> , 2015, 115, 093002.	7.8	76
11	Detection of small atom numbers through image processing. <i>Physical Review A</i> , 2010, 82, .	2.5	72
12	Spontaneous Avalanche Ionization of a Strongly Blockaded Rydberg Gas. <i>Physical Review Letters</i> , 2013, 110, 045004.	7.8	71
13	Relaxation of an Isolated Dipolar-Interacting Rydberg Quantum Spin System. <i>Physical Review Letters</i> , 2018, 120, 063601.	7.8	54
14	Lattice of microtraps for ultracold atoms based on patterned magnetic films. <i>Physical Review A</i> , 2007, 76, .	2.5	51
15	Quantum Simulation of Energy Transport with Embedded Rydberg Aggregates. <i>Physical Review Letters</i> , 2015, 114, 123005.	7.8	51
16	Signatures of self-organized criticality in an ultracold atomic gas. <i>Nature</i> , 2020, 577, 481-486.	27.8	50
17	Unitary and Nonunitary Quantum Cellular Automata with Rydberg Arrays. <i>Physical Review Letters</i> , 2020, 124, 070503.	7.8	41
18	Realization of a Rydberg-Dressed Ramsey Interferometer and Electrometer. <i>Physical Review Letters</i> , 2019, 122, 053601.	7.8	37

#	ARTICLE	IF	CITATIONS
19	Box traps on an atom chip for one-dimensional quantum gases. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 155002.	1.5	36
20	Periodic array of Bose-Einstein condensates in a magnetic lattice. <i>Physical Review A</i> , 2014, 89, .	2.5	33
21	A permanent magnetic film atom chip for Bose-Einstein condensation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, 27-36.	1.5	32
22	Preparation of hundreds of microscopic atomic ensembles in optical tweezer arrays. <i>Npj Quantum Information</i> , 2020, 6, .	6.7	32
23	Sub-Poissonian Atom-Number Fluctuations by Three-Body Loss in Mesoscopic Ensembles. <i>Physical Review Letters</i> , 2010, 104, 120402.	7.8	30
24	Simulating quantum spin models using Rydberg-excited atomic ensembles in magnetic microtrap arrays. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 074001.	1.5	29
25	Glassy Dynamics in a Disordered Heisenberg Quantum Spin System. <i>Physical Review X</i> , 2021, 11, .	8.9	29
26	An experimental approach for investigating many-body phenomena in Rydberg-interacting quantum systems. <i>Frontiers of Physics</i> , 2014, 9, 571-586.	5.0	27
27	Optimized magnetic lattices for ultracold atomic ensembles. <i>New Journal of Physics</i> , 2010, 12, 103029.	2.9	24
28	Collective Excitation of Rydberg-Atom Ensembles beyond the Superatom Model. <i>Physical Review Letters</i> , 2014, 113, 233002.	7.8	24
29	Uncovering the nonequilibrium phase structure of an open quantum spin system. <i>Physical Review A</i> , 2018, 98, .	2.5	24
30	Perpendicularly magnetized, grooved GdTbFeCo microstructures for atom optics. <i>Journal Physics D: Applied Physics</i> , 2005, 38, 4015-4020.	2.8	21
31	Longitudinal character of atom-chip-based rf-dressed potentials. <i>Physical Review A</i> , 2008, 77, .	2.5	21
32	Effect of magnetization inhomogeneity on magnetic microtraps for atoms. <i>Physical Review A</i> , 2007, 75, .	2.5	20
33	Fully permanent magnet atom chip for Bose-Einstein condensation. <i>Physical Review A</i> , 2008, 77, .	2.5	19
34	Semianalytical model for nonlinear absorption in strongly interacting Rydberg gases. <i>Physical Review A</i> , 2014, 89, .	2.5	18
35	Sub-micron period lattice structures of magnetic microtraps for ultracold atoms on an atom chip. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 115002.	2.8	18
36	Versatile, high-power 460 nm laser system for Rydberg excitation of ultracold potassium. <i>Optics Express</i> , 2017, 25, 14829.	3.4	17

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37	Two-body interactions and decay of three-level Rydberg-dressed atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 03LT02.	1.5	16
38	Epidemic growth and Griffiths effects on an emergent network of excited atoms. Nature Communications, 2021, 12, 103.	12.8	13
39	Density matrix reconstruction of three-level atoms via Rydberg electromagnetically induced transparency. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 164002.	1.5	12
40	Magnetic lattices for ultracold atoms and degenerate quantum gases. Science Bulletin, 2016, 61, 1097-1106.	9.0	12
41	Diffusive to Nonergodic Dipolar Transport in a Dissipative Atomic Medium. Physical Review Letters, 2019, 123, 213606.	7.8	10
42	UBRIphotometry of globular clusters in the Leo group galaxy NGC 3379. Monthly Notices of the Royal Astronomical Society, 2003, 345, 949-959.	4.4	8
43	Scanning magnetoresistance microscopy of atom chips. Review of Scientific Instruments, 2008, 79, 023702.	1.3	7
44	Radio-frequency spectroscopy of a linear array of Bose-Einstein condensates in a magnetic lattice. Physical Review A, 2015, 91, .	2.5	7
45	Fabricating atom chips with femtosecond laser ablation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 085301.	1.5	4
46	Hydrodynamic Stabilization of Self-Organized Criticality in a Driven Rydberg Gas. Physical Review Letters, 2021, 126, 123401.	7.8	3
47	BOSE-EINSTEIN CONDENSATES ON A PERMANENT MAGNETIC FILM ATOM CHIP. , 2005, , .		2
48	Two-dimensional spectroscopy of Rydberg gases. New Journal of Physics, 2020, 22, 073040.	2.9	1
49	BOSE-EINSTEIN CONDENSATES ON MAGNETIC FILM MICROSTRUCTURES. , 2008, , .		1
50	Dynamics of Bose-Einstein condensates in an asymmetric double-well. , 2007, , .		0
51	Permanent magnet atom chips for BEC and microtrap arrays. , 2007, , .		0
52	ARRAY OF MESOSCOPIC ENSEMBLES ON A MAGNETIC ATOM CHIP. , 2010, , .		0
53	Trapping of ultracold atoms in a 10 μm-period permanent magnetic lattice. , 2011, , .		0
54	Fabrication of Atom Chips with Femtosecond Laser Ablation. , 2007, , .		0