Kevin J Weatherill

List of Publications by Citations

36 papers	1,533 citations	18 h-index	39 g-index
42 ext. papers	1,781 ext. citations	3.9 avg, IF	4.3 L-index

#	Paper	IF	Citations
36	Cooperative atom-light interaction in a blockaded Rydberg ensemble. *Physical Review Letters*, **2010**, 105, 193603	7.4	354
35	Storage and control of optical photons using Rydberg polaritons. *Physical Review Letters*, **2013**, 110, 103001	7.4	202
34	Nonequilibrium phase transition in a dilute Rydberg ensemble. *Physical Review Letters*, **2013**, 111, 113901	7.4	141
33	A giant electro-optic effect using polarizable dark states. *Nature Physics*, **2008**, 4, 890-894	16.2	132
32	Laser frequency stabilization to excited state transitions using electromagnetically induced transparency in a cascade system. *Applied Physics Letters*, **2009**, 94, 071107	3.4	73
31	Electromagnetically induced transparency of an interacting cold Rydberg ensemble. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2008**, 41, 201002	1.3	67
30	Microwave dressing of Rydberg dark states. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2011**, 44, 184020	1.3	54
29	Quantum interference in interacting three-level Rydberg gases: coherent population trapping and electromagnetically induced transparency. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2011**, 44, 184018	1.3	47
28	NONLINEAR OPTICS USING COLD RYDBERG ATOMS. *Annual Review of Cold Atoms and Molecules*, **2013**, 301-350		44
27	Narrow absorptive resonances in a four-level atomic system. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2009**, 42, 075503	1.3	44
26	Polarization spectroscopy of an excited state transition. *Optics Letters*, **2012**, 37, 118-20	3	44
25	Three-photon electromagnetically induced transparency using Rydberg states. *Optics Letters*, **2012**, 37, 3858-60	3	42
24	Driven-dissipative many-body systems with mixed power-law interactions: Bistabilities and temperature-driven nonequilibrium phase transitions. *Physical Review A*, **2016**, 94,	2.6	30
23	Optical coherences and wavelength mismatch in ladder systems. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2013**, 46, 245001	1.3	25
22	Intrinsic optical bistability in a strongly driven Rydberg ensemble. *Physical Review A*, **2016**, 93,	2.6	23
21	Realization of the manipulation of ultracold atoms with a reconfigurable nanomagnetic system of domain walls. *Nano Letters*, **2012**, 12, 4065-9	11.5	22
20	Spatially selective loading of an optical lattice by light-shift engineering using an auxiliary laser field. *New Journal of Physics*, **2006**, 8, 11-11	2.9	20

19	Subnatural linewidths in two-photon excited-state spectroscopy. *Physical Review A*, **2012**, 85,	2.6	19
18	Fast and quasideterministic single ion source from a dipole-blockaded atomic ensemble. *Physical Review Letters*, **2013**, 110, 213003	7.4	17
17	Optical non-linearity in a dynamical Rydberg gas. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2011**, 44, 184019	1.3	17
16	Full-Field Terahertz Imaging at Kilohertz Frame Rates Using Atomic Vapor. *Physical Review X*, **2020**, 10,	9.1	16
15	Electro-optic control of atom-light interactions using Rydberg dark-state polaritons. *Physical Review A*, **2008**, 77,	2.6	16
14	Fast switching of alkali atom dispensers using laser-induced heating. *Review of Scientific Instruments*, **2005**, 76, 093102	1.7	13
13	Observation of interference effects via four-photon excitation of highly excited Rydberg states in thermal cesium vapor. *Optics Letters*, **2015**, 40, 5570-3	3	10
12	Dressed-state electromagnetically induced transparency for light storage in uniform-phase spin waves. *Physical Review A*, **2016**, 94,	2.6	10
11	A versatile and reliably reusable ultrahigh vacuum viewport. *Review of Scientific Instruments*, **2009**, 80, 026105	1.7	9
10	Piezoelectrically actuated time-averaged atomic microtraps. *Applied Physics Letters*, **2012**, 101, 023115	3.4	9
9	Nanomagnetic engineering of the properties of domain wall atom traps. *Journal of Applied Physics*, **2011**, 110, 123918	2.5	7
8	Probing an excited-state atomic transition using hyperfine quantum-beat spectroscopy. *Physical Review A*, **2014**, 90,	2.6	6
7	A simple model for calculating magnetic nanowire domain wall fringing fields. *Journal Physics D: Applied Physics*, **2012**, 45, 095002	3	6
6	Design and characterization of a field-switchable nanomagnetic atom mirror. *Journal of Applied Physics*, **2010**, 108, 043906	2.5	6
5	Probing interactions of thermal Sr Rydberg atoms using simultaneous optical and ion detection. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2017**, 50, 115002	1.3	3
4	Single-photon stored-light Ramsey interferometry using Rydberg polaritons. *Optics Letters*, **2020**, 45, 5888-5891	3	1
3	High-Speed THz Imaging for Production Line Monitoring **2019**,		1
2	Collectively Encoded Rydberg Qubit. *Physical Review Letters*, **2021**, 127, 063604	7.4	1

1 Three-photon electromagnetically induced transparency using Rydberg states: erratum. *Optics Letters*, **2013**, 38, 1853 3