C H Raymond Ooi

List of Publications by Year in descending order

139 papers	2,149 citations	236612 25 h-index	264894 42 g-index
143 all docs	143 docs citations	143 times ranked	1421 citing authors

#	Article	IF	Citations
1	Directed Spontaneous Emission from an Extended Ensemble ofNAtoms: Timing Is Everything. Physical Review Letters, 2006, 96, 010501.	2.9	337
2	Photonic band gap in a superconductor-dielectric superlattice. Physical Review B, 2000, 61, 5920-5923.	1.1	111
3	Quantum metrology with entangled spin-coherent states of two modes. Physical Review A, 2012, 86, .	1.0	94
4	Light-to-matter entanglement transfer in optomechanics. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2821.	0.9	86
5	Non-locality Correlation in Two Driven Qubits Inside an Open Coherent Cavity: Trace Norm Distance and Maximum Bell Function. Scientific Reports, 2019, 9, 19632.	1.6	67
6	Quantum coherence and entanglement partitions for two driven quantum dots inside a coherent micro cavity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 125905.	0.9	54
7	Nickel oxide nanoparticles as a saturable absorber for an all-fiber passively Q-switched erbium-doped fiber laser. Laser Physics, 2017, 27, 065105.	0.6	53
8	Correlation of photon pairs from the double Raman amplifier: Generalized analytical quantum Langevin theory. Physical Review A, 2007, 75, .	1.0	50
9	Corrosion and bioactivity performance of graphene oxide coating on Ti Nb shape memory alloys in simulated body fluid. Materials Science and Engineering C, 2016, 68, 687-694.	3.8	47
10	Polariton gap in a superconductorâ€“dielectric superlattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 259, 413-419.	0.9	45
11	High-Performance Dye-Sensitized Solar Cells Based on Morphology-Controllable Synthesis of ZnOâ€“ZnS Heterostructure Nanocone Photoanodes. PLoS ONE, 2015, 10, e0123433.	1.1	45
12	Ethanol solution sensor based on ZnO/PSi nanostructures synthesized by catalytic immersion method at different molar ratio concentrations: An electrochemical impedance analysis. Sensors and Actuators A: Physical, 2015, 236, 11-18.	2.0	45
13	Facile synthesis of vertically aligned cone-shaped ZnO/ZnS core/shell arrays using the two-step aqueous solution approach. Materials Letters, 2015, 147, 34-37.	1.3	44
14	Synthesis of needle-shape ZnO-ZnS core-shell heterostructures and their optical and field emission properties. Electronic Materials Letters, 2015, 11, 957-963.	1.0	43
15	Optical properties of well-aligned ZnO nanostructure arrays synthesized by an electric field-assisted aqueous solution method. Ceramics International, 2014, 40, 11193-11198.	2.3	42
16	Well-aligned ZnO nanoneedle arrays grown on polycarbonate substrates via electric field-assisted chemical method. Materials Letters, 2015, 146, 65-68.	1.3	41
17	A novel method for synthesis of well-aligned hexagonal cone-shaped ZnO nanostructures in field emission applications. Materials Letters, 2014, 125, 147-150.	1.3	39
18	Time-Bandwidth Problem in Room Temperature Slow Light. Physical Review Letters, 2006, 96, 023602.	2.9	38

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19	Single-mode and intermodal higher-order nonclassicalities in two-mode Bose-Einstein condensates. Physical Review A, 2014, 89, .	1.0	38
20	Nonclassicality generated by photon annihilation-then-creation and creation-then-annihilation operations. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 1532.	0.9	36
21	Improving quantum microscopy and lithography via Raman photon pairs: II. Analysis. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S816-S820.	1.4	31
22	Do multipartite correlations speed up adiabatic quantum computation or quantum annealing?. Quantum Information Processing, 2016, 15, 3081-3099.	1.0	29
23	Beam splitter entangler for nonlinear bosonic fields. Laser Physics, 2012, 22, 1449-1454.	0.6	28
24	Theory of femtosecond coherent anti-Stokes Raman backscattering enhanced by quantum coherence for standoff detection of bacterial spores. Physical Review A, 2005, 72, .	1.0	26
25	Global versus local quantum correlations in the Grover search algorithm. Quantum Information Processing, 2016, 15, 833-849.	1.0	26
26	Quantum correlations of quadratic optomechanical oscillator. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2390.	0.9	24
27	Entanglement between exciton and mechanical modes via dissipation-induced coupling. Physical Review A, 2015, 92, .	1.0	24
28	Continuous source of phase-controlled entangled two-photon laser. Physical Review A, 2007, 76, .	1.0	23
29	Temperature dependent resonances in superconductor photonic crystal. Journal of Applied Physics, 2011, 110, .	1.1	23
30	Geometric phase and entanglement for a single qubit interacting with deformed-states superposition. Quantum Information Processing, 2013, 12, 2177-2188.	1.0	23
31	Intermodal entanglement in Raman processes. Physical Review A, 2013, 87, .	1.0	20
32	Tunable optical response in a hybrid quadratic optomechanical system coupled with single semiconductor quantum well. Quantum Information Processing, 2022, 21, 1.	1.0	20
33	Controlling quantum resonances in photonic crystals and thin films with electromagnetically induced transparency. Physical Review B, 2010, 81, .	1.1	19
34	Intense nonclassical light: Controllable two-photon Talbot effect. Physical Review A, 2010, 81, .	1.0	18
35	Echo and ringing of optical pulse in finite photonic crystal with superconductor and dispersive dielectric. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 458.	0.9	18
36	Dynamics for two atoms interacting with intensity-dependent two-mode quantized cavity fields in the ladder configuration. Physical Review A, 2012, 86, .	1.0	18

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37	Passively Q-switched erbium-doped fibre laser using cobalt oxide nanocubes as a saturable absorber. Journal of Modern Optics, 2017, 64, 1315-1320.	0.6	18
38	Femtoseconds soliton mode-locked erbium-doped fiber laser based on nickel oxide nanoparticle saturable absorber. Chinese Optics Letters, 2017, 15, 100602.	1.3	18
39	Quantum correlations between a pair of Raman photons from a single atom under arbitrary excitation condition. Physical Review A, 2005, 72, .	1.0	15
40	Nonlocality in pure and mixed n-qubit X states. Quantum Information Processing, 2016, 15, 1553-1567.	1.0	15
41	Two-photon correlation in a cascade amplifier: Propagation effects via a simple model, nonclassical regimes, and validity of neglecting Langevin noise. Physical Review A, 2007, 76, .	1.0	14
42	Nonclassicality of vortex Airy beams in the Wigner representation. Physical Review A, 2011, 84, .	1.0	14
43	Photoionization spectra by intense linear, circular, and elliptic polarized lasers. Physical Review A, 2012, 86, .	1.0	14
44	Controlling Double Quantum Coherence and Electromagnetic Induced Transparency with Plasmonic Metallic Nanoparticle. Plasmonics, 2013, 8, 891-898.	1.8	14
45	Single-photon superradiance and radiation trapping by atomic shells. Physical Review A, 2016, 93, .	1.0	13
46	Theoretical and experimental studies on a Q-switching operation in an erbium-doped fiber laser using vanadium oxide as saturable absorber. Laser Physics, 2018, 28, 085106.	0.6	12
47	Quenching the collective effects on the two-photon correlation from two double-Raman atoms. Physical Review A, 2007, 75, .	1.0	11
48	Coherent effects on two-photon correlation and directional emission of two two-level atoms. Physical Review A, 2007, 75, .	1.0	11
49	Quantum information approach to the azurite mineral frustrated quantum magnet. Quantum Information Processing, 2016, 15, 2839-2850.	1.0	11
50	EVOLUTION AND COLLAPSE OF A LORENTZ BEAM IN KERR MEDIUM. Progress in Electromagnetics Research, 2011, 121, 39-52.	1.6	10
51	Theory of coherent antiâ€Stokes Raman scattering for mesoscopic particle with complex molecules: angularâ€dependent spectrum. Journal of Raman Spectroscopy, 2009, 40, 714-725.	1.2	9
52	Photoelectron angular distributions of excited atoms in intense laser fields. Physical Review A, 2014, 90, .	1.0	9
53	Laser cooling of molecules via single spontaneous emission. European Physical Journal D, 2003, 22, 259-267.	0.6	8
54	Fluctuation statistics of mesoscopic Bose-Einstein condensates: Reconciling the master equation with the partition function to reexamine the Uhlenbeck-Einstein dilemma. Physical Review A, 2006, 74, .	1.0	8

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55	Role of noise operators on two-photon correlations in an extended coherent Raman medium. Physical Review A, 2007, 75, .	1.0	8
56	Continuous-variable entanglement and two-mode squeezing in a single-atom Raman laser. Physical Review A, 2012, 85, .	1.0	8
57	Two-photon correlation of photon pairs: near field and polarization effects (Plenary Paper). , 2005, , .		7
58	Geometric phase and entanglement of Raman photon pairs in the presence of photonic band gap. Journal of Applied Physics, 2015, 117, .	1.1	7
59	Analytical band Monte Carlo analysis of electron transport in silicene. Semiconductor Science and Technology, 2016, 31, 065012.	1.0	7
60	Computing the maximum violation of a Bell inequality is an NP-problem. Quantum Information Processing, 2016, 15, 2649-2659.	1.0	7
61	Real-time path-integral approach for dissipative quantum dot-cavity quantum electrodynamics: impure dephasing-induced effects. Journal of Physics Condensed Matter, 2017, 29, 055701.	0.7	7
62	Effects of spontaneously generated coherence on two-photon correlation in a double-cascade scheme. Physical Review A, 2007, 75, .	1.0	6
63	Controlling irreversibility and directionality of light via atomic motion: optical transistor and quantum velocimeter. New Journal of Physics, 2008, 10, 123024.	1.2	6
64	Surface polaritons with arbitrary magnetic and dielectric materials: new regimes, effects of negative index, and superconductors. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 2691.	0.9	6
65	Methods for monitoring scour from large-diameter heat probe tests. Structural Health Monitoring, 2016, 15, 38-49.	4.3	6
66	General electromagnetic density of modes for a one-dimensional photonic crystal. Physical Review E, 2000, 62, 7405-7409.	0.8	5
67	Rotational cooling of polar molecules by Stark-tuned cavity resonance. Physical Review A, 2003, 68, .	1.0	5
68	Two-photon correlation of radiation emitted by two excited atoms: Detailed analysis of a dicke problem. Laser Physics, 2007, 17, 956-964.	0.6	5
69	Laser cooling of molecules by zero-velocity selection and single spontaneous emission. Physical Review A, 2010, 82, .	1.0	5
70	Pulse propagation in a medium of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î›</mml:mi></mml:math>-type atoms. Physical Review A, 2012, 86, .	1.0	5
71	Quantum entanglement criteria. Journal of Modern Optics, 2013, 60, 589-597.	0.6	5
72	Collapse and revivals in the Jaynes-Cummings model: An analysis based on the Mollow transformation. Physical Review A, 2014, 89, .	1.0	5

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73	Effects of ultrashort laser pulses on angular distributions of photoionization spectra. Scientific Reports, 2017, 7, 6739.	1.6	5
74	Directional property of radiation emitted from entangled atoms. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 1658-1662.	0.9	4
75	Controlling the repulsive Casimir force with the optical Kerr effect. Physical Review A, 2012, 86, .	1.0	4
76	Nonclassical photon correlation of nanoparticle in a microcavity. Physical Review A, 2012, 85, .	1.0	4
77	The conservative system of N atoms coupled with one photon. Annals of Physics, 2015, 360, 207-227.	1.0	4
78	Momentum spread of spontaneously decaying cold gas in thermal radiation. Physical Review A, 2002, 66, .	1.0	3
79	Injection time effects on LWI with microwave driven non-degenerate ground states. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 29, 111-118.	1.3	3
80	Effects of chirped laser pulses on nonclassical correlations and entanglement of photon pairs. Physical Review A, 2008, 77, .	1.0	3
81	Superintense fields from multiple ultrashort laser pulses retroreflected in circular geometry. Journal of Applied Physics, 2010, 107, 043110.	1.1	3
82	NEAR-FIELD AND PARTICLE SIZE EFFECTS IN COHERENT RAMAN SCATTERING. Progress in Electromagnetics Research, 2011, 117, 479-494.	1.6	3
83	Modeling temperature-dependent shift of photoluminescence peak of In(Ga)As quantum dots with acoustic and optical phonons as two oscillators. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1182.	0.9	3
84	Quantum dynamics and spectra of vibrational Raman-resonance fluorescence in a two-mode cavity. Physical Review A, 2015, 92, .	1.0	3
85	Quantum spectra of Raman photon pairs from a mesoscopic particle. Physical Review A, 2015, 91, .	1.0	3
86	Quantum Thermodynamics of Photo and Solar Cells. , 2011, , .		3
87	Extended photon correlation in a negative-temperature medium. Physical Review A, 2008, 77, .	1.0	2
88	Preservation of Bosonic commutation relation: Explicit evaluation of quantum Langevin operator products. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 407-410.	1.3	2
89	Gravitational force of a Bessel light beam in a slow light medium. Laser Physics, 2013, 23, 035003.	0.6	2
90	Nonclassical dynamics with time- and intensity-dependent coupling. Quantum Information Processing, 2013, 12, 2103-2120.	1.0	2

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91	Controlling laser spectra in a phaseonium photonic crystal using maser. Applied Physics B: Lasers and Optics, 2013, 112, 115-121.	1.1	2
92	Atom and quantum oscillator coupled by the vacuum field: Radiation pattern, emission spectrum, and decay dynamics. Physical Review A, 2016, 93, .	1.0	2
93	Quantum particle interacting with a metallic particle: Spectra from quantum Langevin theory. Physical Review A, 2017, 95, .	1.0	2
94	Quantum plasmonics of finite-size particles with coherent anti-Stokes Raman scattering. Physical Review A, 2019, 99, .	1.0	2
95	Molecular Boseâ€“Einstein condensates: effects of molecular rotations on transition temperature and heat capacity. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 145301.	0.6	2
96	Dynamics of Kerr-like medium with two-mode intensity-dependent cavity fields. Laser Physics, 2019, 29, 015202.	0.6	2
97	Numerical modeling of ultracompact folded photonic crystal waveguide Machâ€“Zehnder interferometer thermo-optic switch. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 183.	0.9	2
98	Multispectral sparkling of microbubbles with a focused femtosecond laser. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2072.	0.9	2
99	Nonclassicality of the two-photon laser with Kerr nonlinearity. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 820.	0.9	2
100	Enhanced resonances by waveguide wrapping of a bulbed microring resonator. Applied Optics, 2022, 61, 3279.	0.9	2
101	Quantum coherence effects in a Raman amplifier. Journal of Modern Optics, 2011, 58, 11-13.	0.6	1
102	Single-photon pulse propagation in and into a medium of two-level atoms: Microscopic Fresnel equations. Physical Review A, 2011, 84, .	1.0	1
103	Superconducting Photonic Crystal with Nanostrips for Mid-Infrared Applications. , 2011, , .		1
104	Orientation dependent coherent anti-Stokes Raman scattering of cylindrical microparticle with focused lasers. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2427.	0.9	1
105	Nonlinear photonic crystal: effects of negative refractive indices and dispersion in the resonant region. Journal of Optics (United Kingdom), 2013, 15, 055102.	1.0	1
106	Reexamination of the purity entanglement measure: Peculiarities of a truly thermodynamic quantum correlation measure. Physical Review A, 2015, 92, .	1.0	1
107	Locality and classicality: role of entropic inequalities. Quantum Information Processing, 2015, 14, 3115-3137.	1.0	1
108	Higher-order squeezing oscillations in Jaynesâ€“Cummings model of a pair of cold atoms. Indian Journal of Physics, 2015, 89, 883-888.	0.9	1

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109	Probing infinity in bounded two-dimensional electrostatic systems. Chaos, 2016, 26, 073113.	1.0	1
110	Intricate Plasma-Scattered Images and Spectra of Focused Femtosecond Laser Pulses. Scientific Reports, 2016, 6, 32056.	1.6	1
111	Mesoscopic quantum correlations of Raman photon pairs from a microparticle. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1311.	0.9	1
112	Squeezed momentum distributions of relativistic electrons in intense laser fields with arbitrary polarization. Physical Review A, 2020, 101, .	1.0	1
113	A two-photon laser in a Kerr-like medium with cross-Kerr and intensity-dependent coupling. Laser Physics, 2020, 30, 115205.	0.6	1
114	Measuring Gravitational Effect of Superintense Laser by Spin-Squeezed Bose-Einstein Condensates Interferometer. Chinese Physics B, 0, , .	0.7	1
115	Crosstalk noise suppression in slow light for time-bandwidth product. , 2005, , .		0
116	Publisher's Note: Quantum correlations between a pair of Raman photons from a single atom under arbitrary excitation condition [Phys. Rev. A72, 043811 (2005)]. Physical Review A, 2005, 72, .	1.0	0
117	Directional Property of Radiation Emitted from Entangled Atoms. , 2007, , .		0
118	Publisher's Note: Correlation of photon pairs from the double Raman amplifier: Generalized analytical quantum Langevin theory [Phys. Rev. A75, 013820 (2007)]. Physical Review A, 2007, 75, .	1.0	0
119	Femtosecond Coherent Anti-Stokes Raman Spectroscopy (CARS) As Next Generation Nonlinear LIDAR Spectroscopy and Microscopy. , 2009, , .		0
120	Superintense laser fields in circular array: effects of phase andÂpulse jitters. Applied Physics B: Lasers and Optics, 2010, 101, 825-833.	1.1	0
121	Near-Field CARS with Micro- and Nano-Particle. , 2010, , .		0
122	Switching the negative refractive index and surface wavevector of superconducting metamaterials. , 2011, , .		0
123	Exact transient photon correlation with arbitrary laser pulses. Physical Review A, 2011, 84, .	1.0	0
124	Conversion of heat to light using Townesâ€™ maser-laser engine: Quantum optics and thermodynamic analysis. Physical Review A, 2011, 83, .	1.0	0
125	Generalized momentum of tunnelling ionization of hydrogenic atom in linearly polarized laser. , 2012, , .		0
126	Nonlinear photonic crystal with negative index materials. , 2012, , .		0

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127	Ultrashort pulse propagation and nonlinear frequency conversion in superconducting and magnetic photonic crystal. Applied Physics B: Lasers and Optics, 2013, 112, 193-201.	1.1	0
128	Weak gravitational field of Bessel beam. , 2013, , .		0
129	Surface polariton with arbitrary dielectric and magnetic materials: New regimes and SP resonance in large frequency range. , 2013, , .		0
130	Quantum optical properties in plasmonic systems. AIP Conference Proceedings, 2015, , .	0.3	0
131	Coherently Tunable Triangular Trefoil Phaseonium Metamaterial. Scientific Reports, 2016, 6, 21083.	1.6	0
132	Laser control of giant optical absorption and gain in quantum plasmonic particles. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1234.	0.9	0
133	Real-time path-integral approach for dissipative quantum dot-cavity quantum electrodynamics: impure dephasing-induced effects (2017 J. Phys.: Condens. Matter 29 055701). Journal of Physics Condensed Matter, 2018, 30, 019501.	0.7	0
134	Large-scale structure formation in ionic solution and its role in electrolysis and conductivity. PLoS ONE, 2019, 14, e0213697.	1.1	0
135	Spatial inhomogeneity of the absorption and re-emission properties of an optically active medium in a resonator. , 2019, , .		0
136	Light absorption by interacting atomic gas in quantum optical regime. Journal of Chemical Physics, 2021, 155, 044105.	1.2	0
137	Effects of Atomic Motion on the Controllable Nonclassical Photon Statistics. , 2007, , .		0
138	Quantum System Near Metallic Particle. , 2015, , 1-5.		0
139	Quantum System Near Metallic Particle. , 2016, , 3403-3407.		0