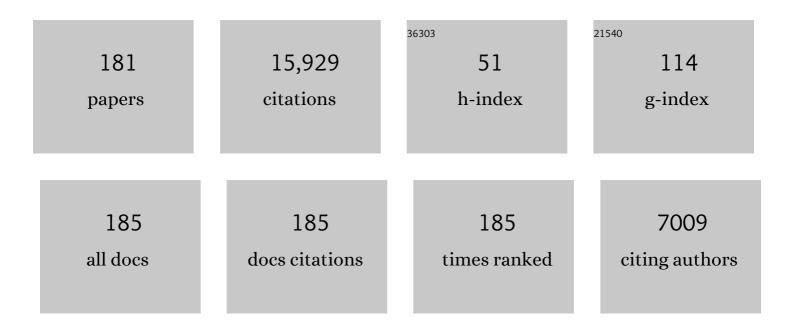
List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2327165/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Unconditional Quantum Teleportation. , 1998, 282, 706-709.		2,440
2	Experimental long-lived entanglement of two macroscopic objects. Nature, 2001, 413, 400-403.	27.8	980
3	Quantum interface between light and atomic ensembles. Reviews of Modern Physics, 2010, 82, 1041-1093.	45.6	969
4	Experimental demonstration of quantum memory for light. Nature, 2004, 432, 482-486.	27.8	727
5	Quantum teleportation between light and matter. Nature, 2006, 443, 557-560.	27.8	644
6	Generation of a Superposition of Odd Photon Number States for Quantum Information Networks. Physical Review Letters, 2006, 97, 083604.	7.8	496
7	Entanglement Generated by Dissipation and Steady State Entanglement of Two Macroscopic Objects. Physical Review Letters, 2011, 107, 080503.	7.8	465
8	Spin Squeezed Atoms: A Macroscopic Entangled Ensemble Created by Light. Physical Review Letters, 1999, 83, 1319-1322.	7.8	459
9	Quantum memories. European Physical Journal D, 2010, 58, 1-22.	1.3	420
10	Optical detection of radio waves through a nanomechanical transducer. Nature, 2014, 507, 81-85.	27.8	382
11	Spectroscopy with squeezed light. Physical Review Letters, 1992, 68, 3020-3023.	7.8	361
12	Quantum Noise Limited and Entanglement-Assisted Magnetometry. Physical Review Letters, 2010, 104, 133601.	7.8	328
13	Mesoscopic atomic entanglement for precision measurements beyond the standard quantum limit. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10960-10965.	7.1	322
14	Ultracoherent nanomechanical resonators via soft clamping and dissipation dilution. Nature Nanotechnology, 2017, 12, 776-783.	31.5	293
15	Quantum Communication between Atomic Ensembles Using Coherent Light. Physical Review Letters, 2000, 85, 5643-5646.	7.8	268
16	Nonclassical Excitation for Atoms in a Squeezed Vacuum. Physical Review Letters, 1995, 75, 3426-3429.	7.8	260
17	Spin Squeezing in an Ensemble of Atoms Illuminated with Squeezed Light. Physical Review Letters, 1997, 79, 4782-4785.	7.8	229
18	Cavity-assisted squeezing of a mechanical oscillator. Physical Review A, 2009, 79, .	2.5	178

#	Article	IF	CITATIONS
19	Deterministic quantum teleportation between distant atomic objects. Nature Physics, 2013, 9, 400-404.	16.7	162
20	Establishing Einstein-Poldosky-Rosen Channels between Nanomechanics and Atomic Ensembles. Physical Review Letters, 2009, 102, 020501.	7.8	155
21	Quantum back-action-evading measurement of motion in a negative mass reference frame. Nature, 2017, 547, 191-195.	27.8	153
22	High purity bright single photon source. Optics Express, 2007, 15, 7940.	3.4	149
23	Atomic spectroscopy with squeezed light for sensitivity beyond the vacuum-state limit. Applied Physics B, Photophysics and Laser Chemistry, 1992, 55, 279-290.	1.5	148
24	Quantum Benchmark for Storage and Transmission of Coherent States. Physical Review Letters, 2005, 94, 150503.	7.8	147
25	Quantum non-demolition detection of strongly correlated systems. Nature Physics, 2008, 4, 50-54.	16.7	144
26	Atomic Quantum State Teleportation and Swapping. Physical Review Letters, 2000, 85, 5639-5642.	7.8	142
27	Quantum Information with Continuous Variables of Atoms and Light. , 2007, , .		141
28	Frequency doubling with KNbO_3 in an external cavity. Optics Letters, 1991, 16, 1400.	3.3	140
29	85% efficiency for cw frequency doubling from 108 to 054 μm. Optics Letters, 1992, 17, 640.	3.3	138
30	Entanglement-assisted atomic clock beyond the projection noise limit. New Journal of Physics, 2010, 12, 065032.	2.9	135
31	Quantum Noise of an Atomic Spin Polarization Measurement. Physical Review Letters, 1998, 80, 3487-3490.	7.8	130
32	Dissipatively driven entanglement of two macroscopic atomic ensembles. Physical Review A, 2011, 83, .	2.5	130
33	Quantum memory for entangled continuous-variable states. Nature Physics, 2011, 7, 13-16.	16.7	130
34	Spin Squeezing of Atomic Ensembles via Nuclear-Electronic Spin Entanglement. Physical Review Letters, 2008, 101, 073601.	7.8	119
35	Narrow-band frequency tunable light source of continuous quadrature entanglement. Physical Review A, 2002, 66, .	2.5	114
36	Coherent Backscattering of Light Off One-Dimensional Atomic Strings. Physical Review Letters, 2016, 117, 133604.	7.8	112

#	Article	IF	CITATIONS
37	Light-matter quantum interface. Physical Review A, 2004, 70, .	2.5	95
38	Generation of a squeezed state of an oscillator by stroboscopic back-action-evading measurement. Nature Physics, 2015, 11, 389-392.	16.7	92
39	Hybrid Long-Distance Entanglement Distribution Protocol. Physical Review Letters, 2010, 105, 160501.	7.8	89
40	Multimode optomechanical system in the quantum regime. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 62-66.	7.1	89
41	Recording Quantum Properties of Light in a Long-Lived Atomic Spin State: TowardsQuantum Memory. Physical Review Letters, 2002, 89, 057903.	7.8	79
42	Optical cavity cooling of mechanical modes of a semiconductor nanomembrane. Nature Physics, 2012, 8, 168-172.	16.7	79
43	Blue-light-induced infrared absorption in KNbO_3. Journal of the Optical Society of America B: Optical Physics, 1994, 11, 2023.	2.1	76
44	Directly Estimating Nonclassicality. Physical Review Letters, 2011, 106, 010403.	7.8	75
45	Entanglement between distant macroscopic mechanical and spin systems. Nature Physics, 2021, 17, 228-233.	16.7	71
46	Laser Cooling and Optical Detection of Excitations in aLCElectrical Circuit. Physical Review Letters, 2011, 107, 273601.	7.8	68
47	Generation and Detection of a Sub-Poissonian Atom Number Distribution in a One-Dimensional Optical Lattice. Physical Review Letters, 2014, 113, 263603.	7.8	68
48	High quality anti-relaxation coating material for alkali atom vapor cells. Optics Express, 2010, 18, 5825.	3.4	64
49	Quantum-noise-limited interferometric measurement of atomic noise: Towards spin squeezing on the Cs clock transition. Physical Review A, 2005, 71, .	2.5	60
50	Polarization-based light-atom quantum interface with an all-optical trap. Physical Review A, 2009, 79, .	2.5	58
51	Nondestructive Probing of Rabi Oscillations on the Cesium Clock Transition near the Standard Quantum Limit. Physical Review Letters, 2008, 100, 103601.	7.8	56
52	Efficient quantum memory and entanglement between light and an atomic ensemble using magnetic fields. Physical Review A, 2006, 73, .	2.5	53
53	The squeeze goes on. Nature, 2008, 453, 45-46.	27.8	53
54	Magnetocardiography on an isolated animal heart with a room-temperature optically pumped magnetometer. Scientific Reports, 2018, 8, 16218.	3.3	53

#	Article	IF	CITATIONS
55	Quantum memory for images: A quantum hologram. Physical Review A, 2008, 77, .	2.5	52
56	Non-invasive detection of animal nerve impulses with an atomic magnetometer operating near quantum limited sensitivity. Scientific Reports, 2016, 6, 29638.	3.3	52
57	Two-photon spectroscopy of the 6S_1/2 → 6D_5/2 transition of trapped atomic cesium. Optics Letters, 1994, 19, 1474.	3.3	50
58	Squeezing the limit: quantum benchmarks for the teleportation and storage of squeezed states. New Journal of Physics, 2008, 10, 113014.	2.9	50
59	Atoms as nonlinear mixers for detection of quantum correlations at ultrahigh frequencies. Physical Review A, 1997, 55, R1605-R1608.	2.5	49
60	Characterizing the spin state of an atomic ensemble using the magneto-optical resonance method. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 5-14.	1.4	49
61	Demonstration of suppressed phonon tunneling losses in phononic bandgap shielded membrane resonators for high-Q optomechanics. Optics Express, 2014, 22, 6810.	3.4	49
62	Spin squeezing of atomic ensembles by multicolor quantum nondemolition measurements. Physical Review A, 2009, 79, .	2.5	45
63	Teleportation and spin squeezing utilizing multimode entanglement of light with atoms. Physical Review A, 2005, 72, .	2.5	44
64	Multimode entanglement of light and atomic ensembles via off-resonant coherent forward scattering. Physical Review A, 2005, 71, .	2.5	44
65	Quantum Polarization Spectroscopy of Ultracold Spinor Gases. Physical Review Letters, 2007, 98, 100404.	7.8	42
66	Conditions for spin squeezing in a cold87Rb ensemble. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, S548-S552.	1.4	41
67	Trajectories without quantum uncertainties. Annalen Der Physik, 2015, 527, A15.	2.4	41
68	Light qubit storage and retrieval using macroscopic atomic ensembles. Physical Review A, 2006, 74, .	2.5	39
69	Einstein-Podolsky-Rosen-correlated atomic ensembles. Physical Review A, 1999, 59, 4202-4205.	2.5	38
70	Generation of two-mode squeezed and entangled light in a single temporal and spatial mode. Optics Express, 2009, 17, 14444.	3.4	38
71	Overcoming the Standard Quantum Limit in Gravitational Wave Detectors Using Spin Systems with a Negative Effective Mass. Physical Review Letters, 2018, 121, 031101.	7.8	37
72	Rayleigh superradiance and dynamic Bragg gratings in an end-pumped Bose-Einstein condensate. Physical Review A, 2008, 78, .	2.5	35

#	Article	IF	CITATIONS
73	Inhibited light-induced absorption in KNbO_3. Optics Letters, 1995, 20, 2270.	3.3	34
74	Scalable photonic network architecture based on motional averaging in room temperature gas. Nature Communications, 2016, 7, 11356.	12.8	34
75	Single-layer graphene on silicon nitride micromembrane resonators. Journal of Applied Physics, 2014, 115, 054513.	2.5	33
76	Entanglement transfer from light to atoms. Journal of Modern Optics, 2000, 47, 2599-2614.	1.3	31
77	Long-Lived Entanglement Generation of Nuclear Spins Using Coherent Light. Physical Review Letters, 2020, 124, 043602.	7.8	30
78	Generating a Superposition of Spin States in an Atomic Ensemble. Physical Review Letters, 2003, 91, 060401.	7.8	29
79	Deterministic Atom–Light Quantum Interface. Advances in Atomic, Molecular and Optical Physics, 2007, 54, 81-130.	2.3	29
80	High-Q optomechanical GaAs nanomembranes. Applied Physics Letters, 2011, 99, 243102.	3.3	29
81	Frequency metrology by use of quantum interference. Optics Letters, 1996, 21, 1688.	3.3	28
82	Room-temperature single-photon source with near-millisecond built-in memory. Nature Communications, 2021, 12, 3699.	12.8	27
83	Transient optical absorption in KNbO3 crystals irradiated with pulsed electron beam. Solid State Communications, 1997, 104, 327-330.	1.9	26
84	Fock-state view of weak-value measurements and implementation with photons and atomic ensembles. Physical Review A, 2011, 83, .	2.5	26
85	Long-lived non-classical correlations towards quantum communication at room temperature. Communications Physics, 2018, 1, .	5.3	26
86	Quantum Cloning of a Coherent Light State into an Atomic Quantum Memory. Physical Review Letters, 2004, 93, 180501.	7.8	24
87	Nondestructive interferometric characterization of an optical dipole trap. Physical Review A, 2007, 75, .	2.5	24
88	Atomic nonclassicality quasiprobabilities. Physical Review A, 2012, 86, .	2.5	24
89	Quantum interference of a single spin excitation with a macroscopic atomic ensemble. Physical Review A, 2014, 89, .	2.5	24
90	Quantum interference in two-photon excitation with squeezed and coherent fields. Physical Review A, 1999, 59, 676-690.	2.5	22

#	Article	IF	CITATIONS
91	Inhomogeneous light shift effects on atomic quantum state evolution in non-destructive measurements. New Journal of Physics, 2008, 10, 053032.	2.9	22
92	Spectral theory of quantum memory and entanglement via Raman scattering of light by an atomic ensemble. Physical Review A, 2007, 75, .	2.5	21
93	Quantum information at the interface of light with atomic ensembles and micromechanical oscillators. Quantum Information Processing, 2011, 10, 839-863.	2.2	21
94	Entanglement and spin squeezing in a network of distant optical lattice clocks. Physical Review A, 2016, 93, .	2.5	21
95	High efficiency second harmonic generation with a low power diode laser. Applied Physics B: Lasers and Optics, 1997, 64, 383-386.	2.2	20
96	Effect of Light Assisted Collisions on Matter Wave Coherence in Superradiant Bose-Einstein Condensates. Physical Review Letters, 2012, 108, 090401.	7.8	20
97	Robust entanglement generation by reservoir engineering. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 124021.	1.5	20
98	Phonon counting thermometry of an ultracoherent membrane resonator near its motional ground state. Optica, 2020, 7, 718.	9.3	20
99	Mapping a quantum state of light onto atoms. Journal of Optics B: Quantum and Semiclassical Optics, 2001, 3, S83-S92.	1.4	19
100	Single-passage readout of atomic quantum memory. Physical Review A, 2006, 73, .	2.5	19
101	Quantum volume hologram. Physical Review A, 2010, 81, .	2.5	19
102	Toward quantum state tomography of a single polariton state of an atomic ensemble. New Journal of Physics, 2013, 15, 015002.	2.9	19
103	Unconditional Steady-State Entanglement in Macroscopic Hybrid Systems by Coherent Noise Cancellation. Physical Review Letters, 2018, 121, 103602.	7.8	19
104	Detection of low-conductivity objects using eddy current measurements with an optical magnetometer. Physical Review Research, 2019, 1, .	3.6	19
105	Dissipative versus dispersive coupling in quantum optomechanics: Squeezing ability and stability. Physical Review A, 2018, 97, .	2.5	18
106	Time gating of heralded single photons for atomic memories. Optics Letters, 2009, 34, 3872.	3.3	17
107	Gravitational wave detection beyond the standard quantum limit using a negative-mass spin system and virtual rigidity. Physical Review D, 2019, 100, .	4.7	17
108	Experimental quantum key distribution with proven security against realistic attacks. Journal of Modern Optics, 2001, 48, 1921-1942.	1.3	16

#	Article	IF	CITATIONS
109	High-fidelity teleportation between light and atoms. Physical Review A, 2006, 74, .	2.5	14
110	Quantum memory and teleportation using macroscopic gas samples. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 223001.	1.5	14
111	In-situ dual-port polarization contrast imaging of FaradayÂrotation in a high optical depth ultracold 87Rb atomic ensemble. European Physical Journal D, 2012, 66, 1.	1.3	14
112	Ultra low-noise differential ac-coupled photodetector for sensitive pulse detection applications. Measurement Science and Technology, 2009, 20, 055301.	2.6	13
113	Heater Self-Calibration Technique for Shape Prediction of Fiber Tapers. Journal of Lightwave Technology, 2014, 32, 1886-1891.	4.6	13
114	Magnetic resonance imaging with optical preamplification and detection. Scientific Reports, 2019, 9, 18173.	3.3	13
115	Sensitive optomechanical transduction of electric and magnetic signals to the optical domain. Optics Express, 2019, 27, 18561.	3.4	13
116	Dipole force free optical control and cooling of nanofiber trapped atoms. Optics Letters, 2017, 42, 4315.	3.3	12
117	Diffraction effects on light–atomic-ensemble quantum interface. Physical Review A, 2005, 71, .	2.5	11
118	Exciton-mediated photothermal cooling in GaAs membranes. New Journal of Physics, 2012, 14, 085024.	2.9	10
119	Quantum Memory Assisted Probing of Dynamical Spin Correlations. Physical Review Letters, 2012, 108, 065302.	7.8	10
120	Quantum Teleportation of Dynamics and Effective Interactions between Remote Systems. Physical Review Letters, 2013, 111, 020501.	7.8	9
121	Entanglement and quantum teleportation with multi-atom ensembles. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1391-1399.	3.4	8
122	Breakdown of the Classical Description of a Local System. Physical Review Letters, 2012, 108, 233601.	7.8	8
123	Semi-classical dynamics of superradiant Rayleigh scattering in a Bose–Einstein condensate. Journal of Modern Optics, 2016, 63, 1886-1897.	1.3	8
124	Experimental quantum key distribution with proven security against realistic attacks. Journal of Modern Optics, 2001, 48, 1921-1942.	1.3	8
125	A dynamic operation of a PIN photodiode. Applied Physics Letters, 2015, 106, 031115.	3.3	7
126	Cavity-enhanced sum-frequency generation of blue light with near-unity conversion efficiency. Optics Express, 2020, 28, 3975.	3.4	7

#	Article	IF	CITATIONS
127	Squeezing with for atomic physics and spectroscopy. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1997, 9, 239-246.	0.9	6
128	Fundamental noise of an atomic spin measurement. Journal of Modern Optics, 1997, 44, 1917-1928.	1.3	6
129	Flight of the qubit. Nature, 2004, 428, 129-130.	27.8	6
130	Echo spectroscopy of atomic dynamics in a Gaussian trap via phase imprints. European Physical Journal D, 2008, 50, 67-73.	1.3	6
131	Squeezing of atomic quantum projection noise. Journal of Modern Optics, 2009, 56, 1993-1998.	1.3	6
132	Carrier-mediated optomechanical forces in semiconductor nanomembranes with coupled quantum wells. Physical Review B, 2018, 98, .	3.2	6
133	Atomic Continuous Variable Processing and Light-Atoms Quantum Interface. , 2003, , 231-265.		6
134	Heralded amplification for precision measurements with spin ensembles. Physical Review A, 2011, 84, .	2.5	5
135	Measurement and simulation of atomic motion in nanoscale optical trapping potentials. Applied Physics B: Lasers and Optics, 2020, 126, 1.	2.2	5
136	Quantum Optics With Strong Coupling. , 1994, , .		4
137	Spectroscopy on a modulated magneto-optical trap. Optics Letters, 1998, 23, 25.	3.3	4
138	High-frequency broadband laser phase noise cancellation using a delay line. Optics Express, 2021, 29, 6935.	3.4	4
139	Entanglement transfer from light to atoms. Journal of Modern Optics, 2000, 47, 2599-2614.	1.3	4
140	Deterministic Quantum Interface between Light and Atomic Ensembles. , 2007, , 513-551.		4
141	Quantum Measurement in Quantum Opticsa. Annals of the New York Academy of Sciences, 1995, 755, 87-90.	3.8	3
142	Quantum noise of cold atomic spins illuminated with non-classical light. Optics Express, 1998, 2, 93.	3.4	3
143	Atomic entanglement on a grand scale. Physics World, 2002, 15, 33-37.	0.0	3
144	Dissipative optomechanical coupling with a membrane outside of an optical cavity. Physical Review A, 2021, 103, .	2.5	3

#	Article	IF	CITATIONS
145	Optical Detection of Radio Waves Through a Nanomechanical Transducer. , 2014, , .		3
146	Squeezing produced by the nth harmonic generation inside a laser resonator. Optics Communications, 1990, 77, 247-252.	2.1	2
147	Quantum Teleportation with Atomic Ensembles and Coherent Light. , 2002, , 351-357.		2
148	Quantum limits encountered in atomic spin measurements. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2003, 58, 999-1010.	2.9	2
149	Atoms, Photons and Entanglement for Quantum Information Technologies. Procedia Computer Science, 2011, 7, 52-55.	2.0	2
150	Distant Entanglement of Macroscopic Gas Samples. , 2005, , 353-372.		2
151	Quantum memory for images with feedback. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1	1	4_rgBT /Ovei
152	Quantum state transfer between light and matter via teleportation. Laser and Photonics Reviews, 2010, 4, 685-696.	8.7	1
153	Entanglement Generated by Dissipation. , 2011, , .		1
154	Cavity enhanced quantum limited magnetometry. , 2014, , .		1
155	Calibration of spin-light coupling by coherently induced Faraday rotation. Optics Express, 2021, 29, 23637.	3.4	1
156	Effect of coherent blue light on fetal pig xenotransplants. Transplantation Proceedings, 1992, 24, 549-50.	0.6	1
157	Trajectories Without Quantum Uncertainties in Composite Systems with Disparate Energy Spectra. PRX Quantum, 2022, 3, .	9.2	1
158	Spectroscopy with nonclassical light. AIP Conference Proceedings, 1993, , .	0.4	0
159	Two-photon excitation of three-level atoms in a squeezed vacuum. Progress in Crystal Growth and Characterization of Materials, 1996, 33, 335-338.	4.0	0
160	Quantum Interface Between Light and Atomic Ensembles. , 0, , 515-535.		0
161	Quantum teleportation between light and matter. , 2007, , .		0
162	Quantum teleportation between light and matter. , 2007, , .		0

#	Article	IF	CITATIONS
163	Spin squeezing experiments in a cold ensemble of <sup>87</sup> Rb. , 2007, , .		Ο
164	Entanglement of multiparty stabilizer, symmetric, and antisymmetric states. , 2009, , .		0
165	ROOM-TEMPERATURE ATOMIC ENSEMBLES FOR QUANTUM MEMORY AND MAGNETOMETRY. , 2010, , .		0
166	Quantum Noise Limited and Entanglement-Assisted Magnetometry. , 2010, , .		0
167	Quantum memory, entanglement and sensing with room temperature atoms. Journal of Physics: Conference Series, 2011, 264, 012022.	0.4	0
168	Optoelectronic cooling of mechanical modes in a semiconductor nanomembrane. , 2011, , .		0
169	Optical readout of coupling between a nanomembrane and an LC circuit at room temperature. , 2013, , .		0
170	Quantum noise, squeezing, and entanglement in radiofrequency optical magnetometers. , 0, , 40-59.		0
171	Single-Photon Source with Near-Millisecond Memory based on Room-Temperature Atomic Vapour. , 2021, , .		0
172	Quantum Light - Matter Interactions with Cold Ensembles. , 2007, , .		0
173	Deterministic Quantum Interface between Light and Room Temperature Atomic Ensembles. , 2007, , .		0
174	Quantum Atom Optics with Spin Polarized Atomic Ensembles. , 2007, , .		0
175	Entanglement for Metrology with Atomic Ensembles. , 2009, , .		0
176	Quantum optical interface for atoms and electro-mechanical systems. , 2011, , .		0
177	On-chip RF-to-optical transducer (Conference Presentation). , 2016, , .		0
178	Quantum Back Action Evading Measurements in a Spin-Mechanics Hybrid System. , 2017, , .		0
179	Multimode Quantum Optomechanics with Ultra-coherent Nanomechanical Resonators. , 2017, , .		0
180	The Copenhagen Conference: Quantum Limits of Knowledge. Quantum Studies: Mathematics and Foundations, 2020, 7, 195-195.	0.9	0

#	Article	IF	CITATIONS
	Double-Resonant Sum-Frequency Generation of Blue Light with Near-Unity Quantum Conversion Efficiency. , 2020, , .		0