Jun Ye

List of Publications by Year
in descending order

440 papers	45,419 citations	1371 108 h-index	2178 202 g-index
449 all docs	449 docs citations	449 times ranked	20047 citing authors

#	Article	IF	Citations
1	A High Phase-Space-Density Gas of Polar Molecules. Science, 2008, 322, 231-235.	12.6	1,570
2	Dark Matter Search Results from a One Ton-Year Exposure of XENON1T. Physical Review Letters, 2018, 121, 111302.	7.8	1,517
3	Optical atomic clocks. Reviews of Modern Physics, 2015, 87, 637-701.	45.6	1,421
4	Cold and ultracold molecules: science, technology and applications. New Journal of Physics, 2009, 11, 055049.	2.9	1,060
5	Direct Link between Microwave and Optical Frequencies with a 300 THz Femtosecond Laser Comb. Physical Review Letters, 2000, 84, 5102-5105.	7.8	1,030
6	Colloquium: Femtosecond optical frequency combs. Reviews of Modern Physics, 2003, 75, 325-342.	45.6	913
7	An optical lattice clock with accuracy and stability at the 10âˆ’18 level. Nature, 2014, 506, 71-75.	27.8	822
8	Quantum-State Controlled Chemical Reactions of Ultracold Potassium-Rubidium Molecules. Science, 2010, 327, 853-857.	12.6	775
9	First Dark Matter Search Results from the XENON1T Experiment. Physical Review Letters, 2017, 119, 181301.	7.8	757
10	Observation of dipolar spin-exchange interactions with lattice-confined polar molecules. Nature, 2013, 501, 521-525.	27.8	671
11	Systematic evaluation of an atomic clock at 2 Ã— 10âˆ’18 total uncertainty. Nature Communications, 2015, 6, 6896.	12.8	584
12	Two-orbital S U(N) magnetism with ultracold alkaline-earth atoms. Nature Physics, 2010, 6, 289-295.	16.7	572
13	A sub-40-mHz-linewidth laser based on a silicon single-crystal optical cavity. Nature Photonics, 2012, 6, 687-692.	31.4	571
14	Sr Lattice Clock at 1 Ã— 10 ^{â€“16} Fractional Uncertainty by Remote Optical Evaluation with a Ca Clock. Science, 2008, 319, 1805-1808.	12.6	500
15	Dipolar collisions of polar molecules in the quantum regime. Nature, 2010, 464, 1324-1328.	27.8	494
16	Cavity opto-mechanics using an optically levitated nanosphere. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1005-1010.	7.1	493
17	Broadband Cavity Ringdown Spectroscopy for Sensitive and Rapid Molecular Detection. Science, 2006, 311, 1595-1599.	12.6	447
18	A quantum network of clocks. Nature Physics, 2014, 10, 582-587.	16.7	435

#	Article	IF	Citations
19	Delivering the same optical frequency at two places: accurate cancellation of phase noise introduced by an optical fiber or other time-varying path. Optics Letters, 1994, 19, 1777.	3.3	431
20	Phase-Coherent Frequency Combs in the Vacuum Ultraviolet via High-Harmonic Generation inside a Femtosecond Enhancement Cavity. Physical Review Letters, 2005, 94, 193201.	7.8	420
21	Controlling the quantum stereodynamics of ultracold bimolecular reactions. Nature Physics, 2011, 7, 502-507.	16.7	395
22	Direct frequency comb spectroscopy in the extreme ultraviolet. Nature, 2012, 482, 68-71.	27.8	385
23	Ultrasensitive detections in atomic and molecular physics: demonstration in molecular overtone spectroscopy. Journal of the Optical Society of America B: Optical Physics, 1998, 15, 6.	2.1	368
24	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1.5</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:mi>Î¼< mathvariant="normal">m</mml:mi></mml:mrow></mml:mrow></mml:math> Lasers with Sub-10ÂmHz Linewidth. Physical Review Letters, 2017, 118, 263202.	7.8	359
25	Light Dark Matter Search with Ionization Signals in XENON1T. Physical Review Letters, 2019, 123, 251801.	7.8	344
26	Quantum State Engineering and Precision Metrology Using State-Insensitive Light Traps. Science, 2008, 320, 1734-1738.	12.6	343
27	Trapping of Single Atoms in Cavity QED. Physical Review Letters, 1999, 83, 4987-4990.	7.8	330
28	Remote transfer of ultrastable frequency references via fiber networks. Review of Scientific Instruments, 2007, 78, 021101.	1.3	323
29	2D Magneto-Optical Trapping of Diatomic Molecules. Physical Review Letters, 2013, 110, 143001.	7.8	323
30	Cold molecules: Progress in quantum engineering of chemistry and quantum matter. Science, 2017, 357, 1002-1010.	12.6	320
31	Absolute measurement of a long, arbitrary distance to less than an optical fringe. Optics Letters, 2004, 29, 1153.	3.3	305
32	Excess electronic recoil events in XENON1T. Physical Review D, 2020, 102, .	4.7	302
33	Precision Measurement of the Electronâ€™s Electric Dipole Moment Using Trapped Molecular Ions. Physical Review Letters, 2017, 119, 153001.	7.8	298
34	Tenfold reduction of Brownian noise in high-reflectivity optical coatings. Nature Photonics, 2013, 7, 644-650.	31.4	297
35	Cold Molecule Spectroscopy for Constraining the Evolution of the Fine Structure Constant. Physical Review Letters, 2006, 96, 143004.	7.8	295
36	Phase-stabilized, 15 W frequency comb at 28â€“48 Î¼m. Optics Letters, 2009, 34, 1330.	3.3	294

#	Article	IF	Citations
37	Compact, thermal-noise-limited optical cavity for diode laser stabilization at 1Ã—10^â ̃15. Optics Letters, 2007, 32, 641.	3.3	291
38	Spectroscopic observation of SU(<i>N</i>)-symmetric interactions in Sr orbital magnetism. Science, 2014, 345, 1467-1473.	12.6	290
39	Demonstration of 4.8â€‰Ã—â€‰10â ̃17 stability at 1â€‰s for two independent optical clocks. Nature Photonics, 2019, 13, 714-719.	31.4	287
40	Cavity-enhanced optical frequency comb spectroscopy: application to human breath analysis. Optics Express, 2008, 16, 2387.	3.4	286
41	A Fermi-degenerate three-dimensional optical lattice clock. Science, 2017, 358, 90-94.	12.6	283
42	Prospects for a Millihertz-Linewidth Laser. Physical Review Letters, 2009, 102, 163601.	7.8	277
43	New Limits on Coupling of Fundamental Constants to Gravity Using<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Sr</mml:mi><mml:mprescripts /><mml:none /><mml:mn>87</mml:mn></mml:mmultiscripts></mml:math>Optical Lattice Clocks. Physical Review Letters, 2008, 100, 140801.	7.8	261
44	Efficient state transfer in an ultracold dense gas of heteronuclear molecules. Nature Physics, 2008, 4, 622-626.	16.7	258
45	Tunable Superfluidity and Quantum Magnetism with Ultracold Polar Molecules. Physical Review Letters, 2011, 107, 115301.	7.8	257
46	United Time-Frequency Spectroscopy for Dynamics and Global Structure. Science, 2004, 306, 2063-2068.	12.6	244
47	Gravitational wave detection with optical lattice atomic clocks. Physical Review D, 2016, 94, .	4.7	242
48	Phase-Coherent Optical Pulse Synthesis from Separate Femtosecond Lasers. Science, 2001, 293, 1286-1289.	12.6	241
49	Precision Test of Mass-Ratio Variations with Lattice-Confined Ultracold Molecules. Physical Review Letters, 2008, 100, 043201.	7.8	239
50	Optical frequency comb with submillihertz linewidth and more than 10ÂW average power. Nature Photonics, 2008, 2, 355-359.	31.4	233
51	Mid-infrared Fourier transform spectroscopy with a broadband frequency comb. Optics Express, 2010, 18, 21861.	3.4	230
52	Quantum Simulators: Architectures and Opportunities. PRX Quantum, 2021, 2, .	9.2	229
53	Controlling the Hyperfine State of Rovibronic Ground-State Polar Molecules. Physical Review Letters, 2010, 104, 030402.	7.8	224
54	Optical frequency synthesis based on mode-locked lasers. Review of Scientific Instruments, 2001, 72, 3749-3771.	1.3	218

#	Article	IF	Citations
55	Quantum Computing with Alkaline-Earth-Metal Atoms. Physical Review Letters, 2008, 101, 170504.	7.8	218
56	Long-Lived Dipolar Molecules and Feshbach Molecules in a 3D Optical Lattice. Physical Review Letters, 2012, 108, 080405.	7.8	207
57	Hyperfine structure and absolute frequency of the ^87Rb 5P_3/2 state. Optics Letters, 1996, 21, 1280.	3.3	206
58	Cavity-Enhanced Direct Frequency Comb Spectroscopy: Technology and Applications. Annual Review of Analytical Chemistry, 2010, 3, 175-205.	5.4	202
59	A degenerate Fermi gas of polar molecules. Science, 2019, 363, 853-856.	12.6	198
60	Simple and compact 1-Hz laser system via an improved mounting configuration of a reference cavity. Optics Letters, 2005, 30, 1815.	3.3	195
61	Spinâ€“orbit-coupled fermions in an optical lattice clock. Nature, 2017, 542, 66-70.	27.8	195
62	Strong Coupling of a Mechanical Oscillator and a Single Atom. Physical Review Letters, 2009, 103, 063005.	7.8	192
63	JILA SrI optical lattice clock with uncertainty of $2.0 imes 10^{-18}$. Metrologia, 2019, 56, 065004.	1.2	184
64	Constraining the Spin-Dependent WIMP-Nucleon Cross Sections with XENON1T. Physical Review Letters, 2019, 122, 141301.	7.8	183
65	Characterization of high-finesse mirrors: Loss, phase shifts, and mode structure in an optical cavity. Physical Review A, 2001, 64, .	2.5	179
66	Radio Frequency Magneto-Optical Trapping of CaF with High Density. Physical Review Letters, 2017, 119, 103201.	7.8	172
67	Vacuum-ultraviolet frequency combs from below-threshold harmonics. Nature Physics, 2009, 5, 815-820.	16.7	171
68	Ultrasensitive frequency-modulation spectroscopy enhanced by a high-finesse optical cavity: theory and application to overtone transitions of C_2H_2 and C_2HD. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 2255.	2.1	170
69	Delivery of high-stability optical and microwave frequency standards over an optical fiber network. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 1459.	2.1	167
70	Realizing Fractional Chern Insulators in Dipolar Spin Systems. Physical Review Letters, 2013, 110, 185302.	7.8	167
71	New frontiers for quantum gases of polar molecules. Nature Physics, 2017, 13, 13-20.	16.7	167
72	Resolving the gravitational redshift across a millimetre-scale atomic sample. Nature, 2022, 602, 420-424.	27.8	167

#	Article	IF	Citations
73	High-sensitivity coherent anti-Stokes Raman scattering microscopy with two tightly synchronized picosecond lasers. Optics Letters, 2002, 27, 1168.	3.3	164
74	Creation of a low-entropy quantum gas of polar molecules in an optical lattice. Science, 2015, 350, 659-662.	12.6	164
75	Comparison of Two Independent Sr Optical Clocks with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>1</mml:mn><mml:mo mathvariant="bold">Ã—</mml:mo><mml:msup><mml:mn>10</mml:mn><mml:mrow><mml:mo>âˆ'</mml:mo><mml:mn>17</mml:mn at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mn>10</mml:mn><mml:mn>3</mml:mn></mml:msup><mml:mtext>â€‰</mml:mtext><mml:mte mathvariant="bold">s</. Physical Review Letters, 2012, 109, 230801.	7.8	162
76	Many-Body Dynamics of Dipolar Molecules in an Optical Lattice. Physical Review Letters, 2014, 113, 195302.	7.8	162
77	Systematic Study of theSr87Clock Transition in an Optical Lattice. Physical Review Letters, 2006, 96, 033003.	7.8	161
78	Evaporative cooling of the dipolar hydroxyl radical. Nature, 2012, 492, 396-400.	27.8	160
79	Sr87Lattice Clock with Inaccuracy below10âˆ'15. Physical Review Letters, 2007, 98, 083002.	7.8	159
80	Optical frequency combs: From frequency metrology to optical phase control. IEEE Journal of Selected Topics in Quantum Electronics, 2003, 9, 1041-1058.	2.9	158
81	Search for Light Dark Matter Interactions Enhanced by the Migdal Effect or Bremsstrahlung in XENON1T. Physical Review Letters, 2019, 123, 241803.	7.8	158
82	The XENON1T dark matter experiment. European Physical Journal C, 2017, 77, 1.	3.9	157
83	Cavity-enhanced direct frequency comb spectroscopy. Applied Physics B: Lasers and Optics, 2008, 91, 397-414.	2.2	155
84	Molecular Iodine Clock. Physical Review Letters, 2001, 87, 270801.	7.8	153
85	Magneto-optical Trap for Polar Molecules. Physical Review Letters, 2008, 101, 243002.	7.8	153
86	A Quantum Many-Body Spin System in an Optical Lattice Clock. Science, 2013, 341, 632-636.	12.6	152
87	Quantum-Noise-Limited Optical Frequency Comb Spectroscopy. Physical Review Letters, 2011, 107, 233002.	7.8	145
88	Collective atomic scattering and motional effects in a dense coherent medium. Nature Communications, 2016, 7, 11039.	12.8	145
89	Phase Space Manipulation of Cold Free Radical OH Molecules. Physical Review Letters, 2003, 91, 243001.	7.8	143
90	Magnetoelectrostatic Trapping of Ground State OH Molecules. Physical Review Letters, 2007, 98, 253002.	7.8	142

#	Article	IF	Citations
91	Optical Atomic Coherence at the 1-Second Time Scale. Science, 2006, 314, 1430-1433.	12.6	141
92	Nuclear spin effects in optical lattice clocks. Physical Review A, 2007, 76, .	2.5	140
93	The absolute frequency of the⁸⁷Sr optical clock transition. Metrologia, 2008, 45, 539-548.	1.2	139
94	Suppression of Collisional Shifts in a Strongly Interacting Lattice Clock. Science, 2011, 331, 1043-1046.	12.6	138
95	3D Magneto-Optical Trap of Yttrium Monoxide. Physical Review Letters, 2018, 121, 213201.	7.8	137
96	Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	136
97	Alkaline-Earth-Metal Atoms as Few-Qubit Quantum Registers. Physical Review Letters, 2009, 102, 110503.	7.8	135
98	Cavity-enhanced optical frequency comb spectroscopy in the mid-infrared application to trace detection of hydrogen peroxide. Applied Physics B: Lasers and Optics, 2013, 110, 163-175.	2.2	134
99	High-performance near- and mid-infrared crystalline coatings. Optica, 2016, 3, 647.	9.3	132
100	Stabilization and frequency measurement of the I/sub 2/-stabilized Nd:YAG laser. IEEE Transactions on Instrumentation and Measurement, 1999, 48, 583-586.	4.7	130
101	Imaging Optical Frequencies with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>100</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:mi>Î¼ Precision and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1.1</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:mi>Î¼ mathvariant="normal">m</mml:mi></mml:mrow></mml:math> Resolution. Physical Review Letters, 2018, 120, 103201.	7.8	128
102	Reduction of residual amplitude modulation to 1 Ã— 10^-6 for frequency modulation and laser stabilization. Optics Letters, 2014, 39, 1980.	3.3	125
103	Rabi spectroscopy and excitation inhomogeneity in a one-dimensional optical lattice clock. Physical Review A, 2009, 80, .	2.5	124
104	Absolute frequency atlas of molecular I/sub 2/ lines at 532 nm. IEEE Transactions on Instrumentation and Measurement, 1999, 48, 544-549.	4.7	117
105	Suppressing the Loss of Ultracold Molecules Via the Continuous Quantum Zeno Effect. Physical Review Letters, 2014, 112, 070404.	7.8	117
106	Mode-locked fiber laser frequency-controlled with an intracavity electro-optic modulator. Optics Letters, 2005, 30, 2948.	3.3	115
107	Coherent Optical Phase Transfer over a 32-km Fiber with 1Âs Instability at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mn>10</mml:mn><mml:mrow><mml:mo>âˆ’</mml:mo><mml:mn>17</mml:mn></mml:mrow>< Physical Review Letters, 2007, 99, 153601.	7.8	115
108	Subfemtosecond timing jitter between two independent, actively synchronized, mode-locked lasers. Optics Letters, 2002, 27, 312.	3.3	114

#	Article	IF	Citations
109	Continuously tunable, precise, single frequency optical signal generator. Optics Express, 2002, 10, 515.	3.4	111
110	Efficient output coupling of intracavity high-harmonic generation. Optics Letters, 2008, 33, 1099.	3.3	111
111	Measurement of Optical Feshbach Resonances in an Ideal Gas. Physical Review Letters, 2011, 107, 073202.	7.8	111
112	Crystalline optical cavity at 4â€‰â€‰K with thermal-noise-limited instability and ultralow drift. Optica, 2019, 6, 240.	9.3	111
113	Mid-Infrared Time-Resolved Frequency Comb Spectroscopy of Transient Free Radicals. Journal of Physical Chemistry Letters, 2014, 5, 2241-2246.	4.6	110
114	Precision Metrology Meets Cosmology: Improved Constraints on Ultralight Dark Matter from Atom-Cavity Frequency Comparisons. Physical Review Letters, 2020, 125, 201302.	7.8	109
115	Femtosecond pulse amplification by coherent addition in a passive optical cavity. Optics Letters, 2002, 27, 1848.	3.3	107
116	High-Accuracy Optical Clock via Three-Level Coherence in Neutral BosonicSr88. Physical Review Letters, 2005, 94, 173002.	7.8	106
117	Production of cold formaldehyde molecules for study and control of chemical reaction dynamics with hydroxyl radicals. Physical Review A, 2006, 73, .	2.5	106
118	Half-minute-scale atomic coherence and high relative stability in a tweezer clock. Nature, 2020, 588, 408-413.	27.8	106
119	Gas-phase broadband spectroscopy using active sources: progress, status, and applications [Invited]. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 104.	2.1	105
120	Introduction to Ultracold Molecules: New Frontiers in Quantum and Chemical Physics. Chemical Reviews, 2012, 112, 4801-4802.	47.7	104
121	Collisional Stability of Fermionic Feshbach Molecules. Physical Review Letters, 2008, 100, 143201.	7.8	103
122	Contribution of thermal noise to frequency stability of rigid optical cavity via Hertz-linewidth lasers. Physical Review A, 2006, 73, .	2.5	102
123	Mid-infrared virtually imaged phased array spectrometer for rapid and broadband trace gas detection. Optics Letters, 2012, 37, 3285.	3.3	102
124	Single-atom cavity QED and optomicromechanics. Physical Review A, 2010, 81, .	2.5	101
125	Sub-Doppler optical frequency reference at 1064 Î¼m by means of ultrasensitive cavity-enhanced frequency modulation spectroscopy of a C_2HD overtone transition. Optics Letters, 1996, 21, 1000.	3.3	100
126	Molecular Beam Collisions with a Magnetically Trapped Target. Physical Review Letters, 2008, 101, 203203.	7.8	100

#	Article	IF	Citations
127	Probing Interactions Between Ultracold Fermions. Science, 2009, 324, 360-363.	12.6	99
128	Synthetic Spin-Orbit Coupling in an Optical Lattice Clock. Physical Review Letters, 2016, 116, 035301.	7.8	99
129	Full observation of single-atom dynamics in cavity QED. Applied Physics B: Lasers and Optics, 1999, 68, 1095-1108.	2.2	98
130	Vibration-induced elastic deformation of Fabry-Perot cavities. Physical Review A, 2006, 74, .	2.5	98
131	Narrow Line Photoassociation in an Optical Lattice. Physical Review Letters, 2006, 96, 203201.	7.8	98
132	Cooling and trapping of atomic strontium. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 968.	2.1	96
133	Precision Spectroscopy of Polarized Molecules in an Ion Trap. Science, 2013, 342, 1220-1222.	12.6	96
134	Ultracold polar molecules near quantum degeneracy. Faraday Discussions, 2009, 142, 351.	3.2	95
135	Seconds-scale coherence on an optical clock transition in a tweezer array. Science, 2019, 366, 93-97.	12.6	95
136	Heteronuclear molecules in an optical dipole trap. Physical Review A, 2008, 78, .	2.5	92
137	Heisenberg-Limited Atom Clocks Based on Entangled Qubits. Physical Review Letters, 2014, 112, 190403.	7.8	92
138	Continuous probing of cold complex molecules with infrared frequency comb spectroscopy. Nature, 2016, 533, 517-520.	27.8	92
139	Phase-matched extreme-ultraviolet frequency-comb generation. Nature Photonics, 2018, 12, 387-391.	31.4	92
140	Nonlinear phase noise generated in airâ€"silica microstructure fiber and its effect on carrier-envelope phase. Optics Letters, 2002, 27, 445.	3.3	91
141	Optical frequency comb spectroscopy. Faraday Discussions, 2011, 150, 23.	3.2	90
142	Simple piezoelectric-actuated mirror with 180 kHz servo bandwidth. Optics Express, 2010, 18, 9739.	3.4	89
143	Direct frequency comb measurement of OD + CO â†' DOCO kinetics. Science, 2016, 354, 444-448.	12.6	86
144	Cold heteromolecular dipolar collisions. Physical Chemistry Chemical Physics, 2011, 13, 19059.	2.8	85

#	Article	IF	Citations
145	Anisotropic Polarizability of Ultracold Polar<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">K</mml:mi><mml:mprescripts /><mml:none /><mml:mn>40</mml:mn></mml:mmultiscripts><mml:mmultiscripts><mml:mi>Rb</mml:mi><mml:mprescripts /><mml:none /><mml:mn>87</mml:mn></mml:mmultiscripts></mml:math>Molecules. Physical Review Letters, 2012, 109, 230403.	7.8	85
146	Cavity-ringdown molecular spectroscopy based on an optical frequency comb at 145-165 Î¼m. Optics Letters, 2007, 32, 307.	3.3	84
147	Cavity-enhanced similariton Yb-fiber laser frequency comb: 3Ã—10^14 W/cm^2 peak intensity at 136 MHz. Optics Letters, 2007, 32, 2870.	3.3	84
148	Detailed analysis of coherence collapse in semiconductor lasers. IEEE Journal of Quantum Electronics, 1993, 29, 2421-2432.	1.9	83
149	Accuracy Comparison of Absolute Optical Frequency Measurement between Harmonic-Generation Synthesis and a Frequency-Division Femtosecond Comb. Physical Review Letters, 2000, 85, 3797-3800.	7.8	83
150	Direct Frequency Comb Measurements of Absolute Optical Frequencies and Population Transfer Dynamics. Physical Review Letters, 2005, 95, 023001.	7.8	81
151	Precision Spectroscopy and Density-Dependent Frequency Shifts in Ultracold Sr. Physical Review Letters, 2005, 94, 153001.	7.8	80
152	Cold State-Selected Molecular Collisions and Reactions. Annual Review of Physical Chemistry, 2014, 65, 501-518.	10.8	80
153	Long-term carrier-envelope phase coherence. Optics Letters, 2002, 27, 1436.	3.3	79
154	Direct frequency comb spectroscopy. Advances in Atomic, Molecular and Optical Physics, 2008, 55, 1-60.	2.3	78
155	Extreme Nonlinear Optics in a Femtosecond Enhancement Cavity. Physical Review Letters, 2011, 107, 183903.	7.8	78
156	Sub-Doppler molecular-iodine transitions near the dissociation limit (523â€"498 nm). Optics Letters, 2002, 27, 571.	3.3	77
157	Control of the frequency comb from a modelocked Erbium-doped fiber laser. Optics Express, 2002, 10, 1404.	3.4	77
158	Narrow line cooling and momentum-space crystals. Physical Review A, 2004, 70, .	2.5	77
159	Chemical Imaging of Photoresists with Coherent Anti-Stokes Raman Scattering (CARS) Microscopy. Journal of Physical Chemistry B, 2004, 108, 1296-1301.	2.6	77
160	Extreme ultraviolet radiation with coherence time greater than 1Âs. Nature Photonics, 2014, 8, 530-536.	31.4	77
161	Rotational State Microwave Mixing for Laser Cooling of Complex Diatomic Molecules. Physical Review Letters, 2015, 114, 223003.	7.8	77
162	Ultrastable Silicon Cavity in a Continuously Operating Closed-Cycle Cryostat at 4ÂK. Physical Review Letters, 2017, 119, 243601.	7.8	77

#	Article	IF	Citations
163	Laser slowing of CaF molecules to near the capture velocity of a molecular MOT. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 174001.	1.5	75
164	SAGE: A proposal for a space atomic gravity explorer. European Physical Journal D, 2019, 73, 1.	1.3	75
165	Remote transfer of a high-stability and ultralow-jitter timing signal. Optics Letters, 2005, 30, 1225.	3.3	74
166	Period-doubling route to chaos in a semiconductor laser with weak optical feedback. Physical Review A, 1993, 47, 2249-2252.	2.5	73
167	Synchronization of two passively mode-locked, picosecond lasers within 20 fs for coherent anti-Stokes Raman scattering microscopy. Review of Scientific Instruments, 2002, 73, 2843-2848.	1.3	72
168	Precise Control of Molecular Dynamics with a Femtosecond Frequency Comb. Physical Review Letters, 2007, 98, 113004.	7.8	72
169	Variational Spin-Squeezing Algorithms on Programmable Quantum Sensors. Physical Review Letters, 2019, 123, 260505.	7.8	72
170	Prospects for the cavity-assisted laser cooling of molecules. Physical Review A, 2008, 77, .	2.5	70
171	Frequency Measurements of Superradiance from the Strontium Clock Transition. Physical Review X, 2018, 8, .	8.9	70
172	High Resolution Atomic Coherent Control via Spectral Phase Manipulation of an Optical Frequency Comb. Physical Review Letters, 2006, 96, 153001.	7.8	69
173	Control of Four-Level Quantum Coherence via Discrete Spectral Shaping of an Optical Frequency Comb. Physical Review Letters, 2008, 100, 203001.	7.8	69
174	Output coupling methods for cavity-based high-harmonic generation. Optics Express, 2006, 14, 8189.	3.4	68
175	Broadband optical frequency comb generation with a phase-modulated parametric oscillator. Optics Letters, 1999, 24, 1747.	3.3	67
176	Precision phase control of an ultrawide-bandwidth femtosecond laser:â€ƒa network of ultrastable frequency marks across the visible spectrum. Optics Letters, 2000, 25, 1675.	3.3	67
177	Ultrasensitive spectroscopy, the ultrastable lasers, the ultrafast lasers, and the seriously nonlinear fiber: a new alliance for physics and metrology. IEEE Journal of Quantum Electronics, 2001, 37, 1482-1492.	1.9	67
178	Rovibrational quantum state resolution of the C ₆₀ fullerene. Science, 2019, 363, 49-54.	12.6	67
179	Extreme-ultraviolet frequency combs for precision metrology and attosecond science. Nature Photonics, 2021, 15, 175-186.	31.4	67
180	Absolute frequency of the molecular iodine transition R(56)32-0 near 532 nm. IEEE Transactions on Instrumentation and Measurement, 1995, 44, 151-154.	4.7	66

#	Article	IF	Citations
181	Narrow Line Cooling: Finite Photon Recoil Dynamics. Physical Review Letters, 2004, 93, 073003.	7.8	66
182	Sub-Doppler Cooling and Compressed Trapping of YO Molecules at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î¼</mml:mi><mml:mi mathvariant="normal">K</mml:mi></mml:mrow></mml:math> Temperatures. Physical Review X, 2020, 10, .	8.9	65
183	Demonstration of a HeNe/CH_4-based optical molecular clock. Optics Letters, 2005, 30, 570.	3.3	64
184	OH hyperfine ground state: From precision measurement to molecular qubits. Physical Review A, 2006, 74, .	2.5	64
185	Ultrabroadband coherent supercontinuum frequency comb. Physical Review A, 2011, 84, .	2.5	64
186	Resonant collisional shielding of reactive molecules using electric fields. Science, 2020, 370, 1324-1327.	12.6	64
187	Sub-10-femtosecond active synchronization of two passively mode-locked Ti:sapphire oscillators. Physical Review A, 2001, 64, .	2.5	63
188	Precise measurements of optical cavity dispersion and mirror coating properties via femtosecond combs. Optics Express, 2005, 13, 882.	3.4	62
189	Dipolar evaporation of reactive molecules to below the Fermi temperature. Nature, 2020, 588, 239-243.	27.8	62
190	Light scattering from dense cold atomic media. Physical Review A, 2016, 94, .	2.5	61
191	Flexible and rapidly configurable femtosecond pulse generation in the mid-IR. Optics Letters, 2003, 28, 370.	3.3	60
192	Piecewise Adiabatic Population Transfer in a Molecule via a Wave Packet. Physical Review Letters, 2008, 101, 023601.	7.8	60
193	Emergence of multi-body interactions in a fermionic lattice clock. Nature, 2018, 563, 369-373.	27.8	60
194	Controlling dipole-dipole frequency shifts in a lattice-based optical atomic clock. Physical Review A, 2004, 69, .	2.5	59
195	Determination of Sr properties for a high-accuracy optical clock. Physical Review A, 2008, 78, .	2.5	59
196	Highly selective terahertz optical frequency comb generator. Optics Letters, 1997, 22, 301.	3.3	58
197	Precise frequency transfer through a fiber network by use of 15-Âµm mode-locked sources. Optics Letters, 2004, 29, 1554.	3.3	58
198	Focus on Cold and Ultracold Molecules. New Journal of Physics, 2009, 11, 055009.	2.9	58

#	Article	IF	Citations
199	Optical Spectrum Analyzer with Quantum-Limited Noise Floor. Physical Review Letters, 2013, 111, 093604.	7.8	58
200	Ultrastable laser with average fractional frequency drift rate below 5 Ã— 10^â’19/s. Optics Letters, 2014, 39, 5102.	3.3	56
201	Two Clock Transitions in Neutral Yb for the Highest Sensitivity to Variations of the Fine-Structure Constant. Physical Review Letters, 2018, 120, 173001.	7.8	56
202	Single-Stage Sub-Doppler Cooling of Alkaline Earth Atoms. Physical Review Letters, 2003, 90, 193002.	7.8	55
203	Cold free-radical molecules in the laboratory frame. Physical Review A, 2004, 70, .	2.5	55
204	A dipolar gas of ultracold molecules. Physical Chemistry Chemical Physics, 2009, 11, 9626.	2.8	54
205	Direct absorption imaging of ultracold polar molecules. Physical Review A, 2010, 81, .	2.5	54
206	Full phase stabilization of a Yb:fiber femtosecond frequency comb via high-bandwidth transducers. Optics Letters, 2012, 37, 2196.	3.3	53
207	Dynamics of interacting fermions under spinâ€“orbit coupling in an optical lattice clock. Nature Physics, 2018, 14, 399-404.	16.7	53
208	Probing many-body interactions in an optical lattice clock. Annals of Physics, 2014, 340, 311-351.	2.8	52
209	Tuning of dipolar interactions and evaporative cooling in a three-dimensional molecular quantum gas. Nature Physics, 2021, 17, 1144-1148.	16.7	52
210	Power optimization of XUV frequency combs for spectroscopy applications [Invited]. Optics Express, 2011, 19, 23483.	3.4	51
211	Cooling of a single atom in an optical trap inside a resonator. Physical Review A, 2001, 64, .	2.5	50
212	Broadband molecular spectroscopy with optical frequency combs. Journal of Molecular Spectroscopy, 2019, 355, 66-78.	1.2	50
213	Broadband velocity modulation spectroscopy of HfF+: Towards a measurement of the electron electric dipole moment. Chemical Physics Letters, 2012, 546, 1-11.	2.6	49
214	Search for Electronic Recoil Event Rate Modulation with 4 Years of XENON100 Data. Physical Review Letters, 2017, 118, 101101.	7.8	49
215	Cavity ringdown heterodyne spectroscopy: High sensitivity with microwatt light power. Physical Review A, 2000, 61, .	2.5	48
216	Intensity-related dynamics of femtosecond frequency combs. Optics Letters, 2003, 28, 851.	3.3	48

#	Article	IF	Citations
217	Prospects for precision measurements of atomic helium using direct frequency comb spectroscopy. European Physical Journal D, 2008, 48, 43-55.	1.3	48
218	Dynamics in a two-level atom magneto-optical trap. Physical Review A, 2002, 66, .	2.5	47
219	Photoassociation adiabatic passage of ultracold Rb atoms to form ultracoldRb2molecules. Physical Review A, 2007, 75, .	2.5	47
220	Rotation dependence of electric quadrupole hyperfine interaction in the ground state of molecular iodine by high-resolution laser spectroscopy. Journal of the Optical Society of America B: Optical Physics, 2001, 18, 379.	2.1	46
221	Prospects for application of ultracold<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>molecules in precision measurements. Physical Review A, 2009, 79, .	2.5	45
222	Hydrogen-Peroxide-Enhanced Nonthermal Plasma Effluent for Biomedical Applications. IEEE Transactions on Plasma Science, 2012, 40, 1984-1991.	1.3	45
223	Picosecond-pulse amplification with an external passive optical cavity. Optics Letters, 2003, 28, 1835.	3.3	44
224	Satellite-Satellite Laser Links for Future Gravity Missions. Space Science Reviews, 2003, 108, 377-384.	8.1	43
225	High-repetition-rate coherent femtosecond pulse amplification with an external passive optical cavity. Optics Letters, 2004, 29, 2812.	3.3	43
226	Cancellation of Stark Shifts in Optical Lattice Clocks by Use of Pulsed Raman and Electromagnetically Induced Transparency Techniques. Physical Review Letters, 2006, 97, 233001.	7.8	43
227	Spin squeezing in optical lattice clocks via lattice-based QND measurements. New Journal of Physics, 2008, 10, 073014.	2.9	43
228	Ultrasensitive multispecies spectroscopic breath analysis for real-time health monitoring and diagnostics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	43
229	Precision stabilization of femtosecond lasers to high-finesse optical cavities. Physical Review A, 2004, 69, .	2.5	42
230	Doublon dynamics and polar molecule production in an optical lattice. Nature Communications, 2016, 7, 11279.	12.8	42
231	Ultralow-jitter, 1550-nm mode-locked semiconductor laser synchronized to a visible optical frequency standard. Optics Letters, 2003, 28, 813.	3.3	41
232	Inelastic collisions and density-dependent excitation suppression in a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>87</mml:mn></mml:msup></mml:math>Sr optical lattice clock. Physical Review A, 2011, 84, .	2.5	40
233	Atoms and molecules in the search for time-reversal symmetry violation. Nature Reviews Physics, 2019, 1, 510-521.	26.6	40
234	Measurement of mirror birefringence at the sub-ppm level: Proposed application to a test of QED. Physical Review A, 2000, 62, .	2.5	39

#	Article	IF	Citations
235	Detailed studies and control of intensity-related dynamics of femtosecond frequency combs from mode-locked Ti:sapphire lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2003, 9, 1018-1024.	2.9	39
236	Orthogonal control of the frequency comb dynamics of a mode-locked laser diode. Optics Letters, 2003, 28, 2405.	3.3	39
237	Passively mode-locked glass waveguide laser with 14-fs timing jitter. Optics Letters, 2003, 28, 2411.	3.3	39
238	Efficient Stark deceleration of cold polar molecules. European Physical Journal D, 2004, 31, 351-358.	1.3	39
239	Polar molecules in the quantum regime. Physics Today, 2011, 64, 27-31.	0.3	39
240	Optical Feshbach resonances: Field-dressed theory and comparison with experiments. Physical Review A, 2015, 92, .	2.5	39
241	Thermodynamics of a deeply degenerate SU(N)-symmetric Fermi gas. Nature Physics, 2020, 16, 1216-1221.	16.7	38
242	Frequency comparison of /sup 127/I/sub 2/-stabilized Nd:YAG lasers. IEEE Transactions on Instrumentation and Measurement, 1999, 48, 532-536.	4.7	37
243	Tomography of a supersonically cooled molecular jet using cavity-enhanced direct frequency comb spectroscopy. Chemical Physics Letters, 2009, 468, 1-8.	2.6	37
244	Precision Test of the Limits to Universality in Few-Body Physics. Physical Review Letters, 2019, 123, 233402.	7.8	37
245	Experimental Constraint on Axionlike Particles over Seven Orders of Magnitude in Mass. Physical Review Letters, 2021, 126, 171301.	7.8	37
246	Optical phase locking in the microradian domain:?potential applications to NASA spaceborne optical measurements. Optics Letters, 1999, 24, 1838.	3.3	36
247	Mitigation of loss within a molecular Stark decelerator. European Physical Journal D, 2008, 48, 197-209.	1.3	36
248	Optical Interferometers with Reduced Sensitivity to Thermal Noise. Physical Review Letters, 2008, 101, 260602.	7.8	36
249	Material radioassay and selection for the XENON1T dark matter experiment. European Physical Journal C, 2017, 77, 1.	3.9	36
250	Removing krypton from xenon by cryogenic distillation to the ppq level. European Physical Journal C, 2017, 77, 1.	3.9	35
251	Ultrastable optical frequency reference at 1.064 Î¼m using a C/sub 2/HD molecular overtone transition. IEEE Transactions on Instrumentation and Measurement, 1997, 46, 178-182.	4.7	34
252	Analysis of trace impurities in semiconductor gas viaÂcavity-enhanced direct frequency comb spectroscopy. Applied Physics B: Lasers and Optics, 2010, 100, 917-924.	2.2	34

#	Article	IF	Citations
253	Operating a ⁸⁷Sr optical lattice clock with high precision and at high density. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 416-425.	3.0	34
254	Prospects for a narrow line MOT in YO. New Journal of Physics, 2015, 17, 055008.	2.9	34
255	Demonstration of a Timescale Based on a Stable Optical Carrier. Physical Review Letters, 2019, 123, 173201.	7.8	34
256	Absolute frequency measurement of the iodine-stabilized He-Ne laser at 633Ânm. Applied Physics B: Lasers and Optics, 2001, 72, 221-226.	2.2	33
257	Highly phase stable mode-locked lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2003, 9, 1002-1010.	2.9	33
258	Absolute-frequency measurement of the iodine-based length standard at 514.67Ânm. Applied Physics B: Lasers and Optics, 2002, 74, 597-601.	2.2	31
259	Nonlinear dynamics inside femtosecond enhancement cavities. Optics Express, 2005, 13, 1672.	3.4	31
260	Extreme nonlinear response of ultranarrow optical transitions in cavity QED for laser stabilization. Physical Review A, 2011, 84, .	2.5	30
261	Engineering Quantum States of Matter for Atomic Clocks in Shallow Optical Lattices. Physical Review Letters, 2019, 123, 123401.	7.8	30
262	Applications of Optical Cavities in Modern Atomic, Molecular, and Optical Physics. Advances in Atomic, Molecular and Optical Physics, 2003, , 1-83.	2.3	29
263	Quantum Network of Atom Clocks: A Possible Implementation with Neutral Atoms. Physical Review Letters, 2016, 117, 060506.	7.8	29
264	Online ^{222} 222 Rn removal by cryogenic distillation in the XENON100 experiment. European Physical Journal C, 2017, 77, 1.	3.9	29
265	Phase-stabilized 100ÂmW frequency comb near 10Î¼m. Applied Physics B: Lasers and Optics, 2018, 124, 128.	2.2	29
266	Investigation of a grating-based stretcher/compressor for carrier-envelope phase stabilized fs pulses. Optics Express, 2004, 12, 3493.	3.4	28
267	Phase-coherent multilevel two-photon transitions in cold Rb atoms: Ultrahigh-resolution spectroscopy via frequency-stabilized femtosecond laser. Physical Review A, 2000, 63, .	2.5	27
268	Broadband phase noise suppression in a Yb-fiber frequency comb. Optics Letters, 2011, 36, 743.	3.3	27
269	Controlling spin flips of molecules in an electromagnetic trap. Physical Review A, 2017, 96, .	2.5	27
270	Evaluation of heating effects on atoms trapped in an optical trap. Physical Review A, 2000, 61, .	2.5	26

#	Article	IF	Citations
271	Observation of Motion-Dependent Nonlinear Dispersion with Narrow-Linewidth Atoms in an Optical Cavity. Physical Review Letters, 2015, 114, 093002.	7.8	26
272	Broadband velocity modulation spectroscopy of ThF+ for use in a measurement of the electron electric dipole moment. Journal of Molecular Spectroscopy, 2016, 319, 1-9.	1.2	26
273	High Phase-Space Density of Laser-Cooled Molecules in an Optical Lattice. Physical Review Letters, 2021, 127, 263201.	7.8	26
274	Three-photon absorption in optical parametric oscillators based on OP-GaAs. Optics Letters, 2016, 41, 5405.	3.3	25
275	Engineering spin squeezing in a 3D optical lattice with interacting spin-orbit-coupled fermions. Physical Review Research, 2019, 1, .	3.6	25
276	High-resolution frequency standard at 1030 nm for Yb:YAG solid-state lasers. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 927.	2.1	24
277	A second generation of low thermal noise cryogenic silicon resonators. Journal of Physics: Conference Series, 2016, 723, 012031.	0.4	24
278	Stability and absolute frequency of molecular iodine transitions near 532 nm. , 1995, 2378, 22.		23
279	A pulsed, low-temperature beam of supersonically cooled free radical OH molecules. Chemical Physics Letters, 2004, 395, 53-57.	2.6	23
280	Hyperfine interactions and perturbation effects in the B0_u^+(^3Î_u) state of ^127I_2. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 820.	2.1	23
281	Tapered semiconductor amplifiers for optical frequency combs in the near infrared. Optics Letters, 2006, 31, 1337.	3.3	23
282	Synchronization of mode-locked femtosecond lasers through a fiber link. Optics Letters, 2006, 31, 1951.	3.3	23
283	Rulers of light. Scientific American, 2008, 298, 74-81.	1.0	23
284	Testing ultrafast mode-locking at microhertz relative optical linewidth. Optics Express, 2009, 17, 558.	3.4	23
285	State-dependent lattices for quantum computing with alkaline-earth-metal atoms. European Physical Journal D, 2011, 65, 207-217.	1.3	23
286	State-specific detection of trapped HfF+ by photodissociation. Journal of Molecular Spectroscopy, 2014, 300, 12-15.	1.2	23
287	Precision measurement and frequency metrology with ultracold atoms. National Science Review, 2016, 3, 189-200.	9.5	23
288	Observation of Efimov Universality across a Nonuniversal Feshbach Resonance in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">K</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>39</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>. Physical Review Letters, 2020, 125, 243401.	7.8	23

#	Article	IF	Citations
289	Second-Scale Coherence Measured at the Quantum Projection Noise Limit with Hundreds of Molecular Ions. Physical Review Letters, 2020, 124, 053201.	7.8	23
290	Thermally induced self-locking of an optical cavity by overtone absorption in acetylene gas. Journal of the Optical Society of America B: Optical Physics, 1996, 13, 2041.	2.1	22
291	Frequency Comb Velocity-Modulation Spectroscopy. Physical Review Letters, 2011, 107, 093002.	7.8	22
292	Nonlinear spectroscopy of Sr atoms in an optical cavity for laser stabilization. Physical Review A, 2015, 92, .	2.5	22
293	Direct measurements of DOCO isomers in the kinetics of OD + CO. Science Advances, 2018, 4, eaao4777.	10.3	22
294	Phase-coherent synthesis of optical frequencies and waveforms. Applied Physics B: Lasers and Optics, 2002, 74, s27-s34.	2.2	21
295	Entanglement and spin squeezing in a network of distant optical lattice clocks. Physical Review A, 2016, 93, .	2.5	21
296	Thermalization and Sub-Poissonian Density Fluctuations in a Degenerate Molecular Fermi Gas. Physical Review Letters, 2020, 124, 033401.	7.8	21
297	Optical frequency standards and measurement. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 227-231.	4.7	20
298	Experimental implementation of optical clockwork without carrier-envelope phase control. Optics Letters, 2004, 29, 2806.	3.3	20
299	Noncollinear Enhancement Cavity for Record-High Out-coupling Efficiency of an Extreme-UV Frequency Comb. Physical Review Letters, 2020, 125, 093902.	7.8	20
300	Phase stabilization of mode-locked lasers. Journal of Modern Optics, 2005, 52, 201-219.	1.3	19
301	Resolved Atomic Interaction Sidebands in an Optical Clock Transition. Physical Review Letters, 2011, 106, 250801.	7.8	19
302	Microwave state transfer and adiabatic dynamics of magnetically trapped polar molecules. Physical Review A, 2012, 85, .	2.5	19
303	Dynamical Generation of Spin Squeezing in Ultracold Dipolar Molecules. Physical Review Letters, 2021, 126, 113401.	7.8	19
304	An approach to spin-resolved molecular gas microscopy. New Journal of Physics, 2018, 20, 043031.	2.9	18
305	Realizing Hopf Insulators in Dipolar Spin Systems. Physical Review Letters, 2021, 127, 015301.	7.8	18
306	Reactions between layer-resolved molecules mediated by dipolar spin exchange. Science, 2022, 375, 1299-1303.	12.6	18

#	Article	IF	Citations
307	Extensive, high-resolution measurement of hyperfine interactions: precise investigations of molecular potentials and wave functions. Chemical Physics Letters, 2003, 381, 777-783.	2.6	17
308	Direct RF to optical frequency measurements with a femtosecond laser comb. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 552-555.	4.7	16
309	Comparison of independent optical frequency measurements using a portable iodine-stabilized nd:yag laser. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 240-244.	4.7	16
310	PRECISION MEASUREMENT BASED ON ULTRACOLD ATOMS AND COLD MOLECULES. International Journal of Modern Physics D, 2007, 16, 2481-2494.	2.1	16
311	Sensitivity and resolution in frequency comb spectroscopy of buffer gas cooled polyatomic molecules. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	16
312	Optical atomic clock comparison through turbulent air. Physical Review Research, 2020, 2, .	3.6	16
313	Comb-resolved spectroscopy with immersion grating in long-wave infrared. Optics Express, 2019, 27, 1911.	3.4	16
314	Quantum manipulation and measurement of single atoms in optical cavity QED. IEEE Transactions on Instrumentation and Measurement, 1999, 48, 608-612.	4.7	15
315	One-dimensional magneto-optical compression of a cold CaF molecular beam. New Journal of Physics, 2017, 19, 033035.	2.9	15
316	Intrinsic backgrounds from Rn and Kr in the XENON100 experiment. European Physical Journal C, 2018, 78, 1.	3.9	15
317	Cluster State Generation with Spin-Orbit Coupled Fermionic Atoms in Optical Lattices. Physical Review Letters, 2019, 122, 160402.	7.8	15
318	Active synchronization and carrier phase locking of two separate mode-locked femtosecond lasers. Journal of Modern Optics, 2002, 49, 401-409.	1.3	14
319	Electric-field-induced inelastic collisions between magnetically trapped hydroxyl radicals. Molecular Physics, 2013, 111, 1798-1804.	1.7	13
320	Floquet engineering ultracold polar molecules to simulate topological insulators. Physical Review A, 2021, 103, .	2.5	13
321	Cavity-Enhanced Direct Frequency Comb Spectroscopy. Springer Series in Optical Sciences, 2014, , 271-321.	0.7	13
322	Electron-correlation effects in one-dimensional large-bipolaron formation. Physical Review B, 1992, 46, 10710-10720.	3.2	12
323	<title>Portable I2-stabilized Nd:YAG laser for wavelength standards at 532 nm and 1064 nm</title>. , 1998, , .		11
324	Progress on the optical lattice clock. Comptes Rendus Physique, 2015, 16, 499-505.	0.9	10

#	Article	IF	Citations
325	Cavity-Enhanced Field-Free Molecular Alignment at a High Repetition Rate. Physical Review Letters, 2015, 114, 153001.	7.8	10
326	Everything under control. Nature Photonics, 2007, 1, 447-448.	31.4	9
327	Highly Coherent Spectroscopy of Ultracold Atoms and Molecules in Optical Lattices. ChemPhysChem, 2008, 9, 375-382.	2.1	9
328	Precision measurement of fermionic collisions using an ⁸⁷Sr optical lattice clock with 1 Ã— 10⁻¹⁶ inaccuracy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 574-582.	3.0	9
329	Thermal noise and mechanical loss of SiO₂/Ta₂O₅ optical coatings at cryogenic temperatures. Optics Letters, 2021, 46, 592.	3.3	9
330	Dipole-Dipole Frequency Shifts in Multilevel Atoms. Physical Review Letters, 2021, 127, 013401.	7.8	9
331	Issues and applications in ultrasensitive molecular spectroscopy. , 2002, , .		9
332	Pauli blocking of atom-light scattering. Science, 2021, 374, 979-983.	12.6	9
333	Strontium Optical Lattice Clock at JILA. Frequency Control Symposium and Exhibition, Proceedings of the IEEE International, 2007, , .	0.0	8
334	OD + CO â†’ D + CO2 branching kinetics probed with time-resolved frequency comb spectroscopy. Chemical Physics Letters, 2017, 683, 91-95.	2.6	8
335	Visible and ultraviolet laser spectroscopy of ThF. Journal of Molecular Spectroscopy, 2019, 358, 1-16.	1.2	8
336	Fast Apparent Oscillations of Fundamental Constants. Annalen Der Physik, 2020, 532, 1900566.	2.4	8
337	Characterization of the molecular iodine electronic wave functions and potential energy curves through hyperfine interactions in the B0+_u(3Pi_u) state. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 951.	2.1	7
338	A nozzle for high-density supersonic gas jets at elevated temperatures. Review of Scientific Instruments, 2018, 89, 113114.	1.3	7
339	Spectral analyses of <i>trans</i>- and <i>cis</i>-DOCO transients via comb spectroscopy. Molecular Physics, 2018, 116, 3710-3717.	1.7	7
340	Quantum many-body physics with ultracold polar molecules: Nanostructured potential barriers and interactions. Physical Review A, 2020, 102, .	2.5	7
341	Measurement of the ²⁷Al⁺ and ⁸⁷Sr absolute optical frequencies. Metrologia, 2021, 58, 015017.	1.2	7
342	Optical frequency comb spectroscopy. Faraday Discussions, 2011, 150, 23-31; discussion 113-60.	3.2	7

#	Article	IF	Citations
343	Spectroscopy on the electron-electric-dipole-momentâ€“sensitive states of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi mathvariant="normal">ThF</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:math>. Physical Review A, 2022, 105, .	2.5	7
344	Optical clock and ultracold collisions with trapped strontium atoms. Hyperfine Interactions, 2007, 174, 55-64.	0.5	6
345	Ultracold strontium clock: Applications to the measurement of fundamental constant variations. European Physical Journal: Special Topics, 2008, 163, 9-18.	2.6	5
346	Measurement of gravitational time delay using drag-free spacecraft and an optical clock. Proceedings of the International Astronomical Union, 2009, 5, 414-419.	0.0	5
347	Symplectic structure of statistical variational data assimilation. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 756-771.	2.7	5
348	Continuous temporal ion detection combined with time-gated imaging: Normalization over a large dynamic range. Journal of Molecular Spectroscopy, 2020, 368, 111257.	1.2	5
349	1.5 Î¼m Lasers with sub 10 mHz Linewidth. , 2017, , .		5
350	Femtosecond Lasers for Optical Clocks and Low Noise Frequency Synthesis. , 2005, , 225-262.		4
351	Beyond the limits of conventional Stark deceleration. Physical Review Research, 2020, 2, .	3.6	4
352	Synchronization and phase lock of two mode-locked femtosecond lasers. , 2001, , .		3
353	3. Absorption detection at the quantum limit: Probing high-finesse cavities with modulation techniques. Experimental Methods in the Physical Sciences, 2003, 40, 83-127.	0.1	3
354	Accurate removal of RAM from FM laser beams. , 2015, , .		3
355	Enhancing radical molecular beams by skimmer cooling. Physical Chemistry Chemical Physics, 2018, 20, 11615-11621.	2.8	3
356	Satellite-Satellite Laser Links for Future Gravity Missions. Space Sciences Series of ISSI, 2003, , 377-384.	0.0	3
357	Passive cavity enhancement of a femtosecond fiber chirped pulse amplification system to 204W average power. , 2007, , .		3
358	Power Scaling of High-Repetition-Rate HHG. , 2010, , .		3
359	Highly selective terahertz optical frequency comb generator:â€ƒerrata. Optics Letters, 1997, 22, 746.	3.3	2
360	Sub-Doppler molecular-iodine transitions near the dissociation limit (523-498 nm):â€ƒerrata. Optics Letters, 2002, 27, 1076.	3.3	2

#	Article	IF	Citations
361	An exotic quantum object. Nature Physics, 2013, 9, 694-695.	16.7	2
362	Coherent light brightens the quantum science frontier. Physics Today, 2019, 72, 48-49.	0.3	2
363	Disentangling Pauli Blocking of Atomic Decay from Cooperative Radiation and Atomic Motion in a 2D Fermi Gas. Physical Review Letters, 2022, 128, 093001.	7.8	2
364	Applications of Femtosecond Laser Combto Nonlinear Molecular Spectroscopy. Lecture Notes in Physics, 2004, , 275-295.	0.7	1
365	Microwatt-level XUV Frequency Comb via Intracavity High Harmonic Generation. , 2009, , .		1
366	High Brightness XUV Frequency Combs via Intracavity High Harmonic Generation. EPJ Web of Conferences, 2013, 41, 11006.	0.3	1
367	Optical atomic clock. , 2016, , .		1
368	Low-loss crystalline coatings for the near- and mid-infrared. , 2016, , .		1
369	Direct Frequency Comb Spectroscopy with an Immersion Grating. , 2019, , .		1
370	Toward a Tunable VUV Frequency Comb for 229mTh Nuclear Spectroscopy. , 2021, , .		1
371	Detection and manipulation of the transverse motion of neutral molecules in a Stark decelerator. Measurement: Journal of the International Measurement Confederation, 2021, 183, 109888.	5.0	1
372	High resolution atomic coherent control via spectral phase manipulation of an optical frequency comb. , 2006, , .		1
373	PRECISION MEASUREMENT BASED ON ULTRACOLD ATOMS AND COLD MOLECULES. , 2009, , 613-626.		1
374	Cavity-Enhanced Mid-IR Optical Frequency Comb Spectroscopy: Enhanced Time and Spectral Resolution. , 2015, , .		1
375	Quantum manipulation and measurement of single atoms in optical cavity QED. , 0, , .		0
376	Measurement and control of single atom motions in the quantum regime. , 1999, , .		0
377	Real-time tracking and trapping of single atoms in cavity QED. AIP Conference Proceedings, 2001, , .	0.4	0
378	High-resolution Rb two-photon spectroscopy with ultrafast lasers. , 2001, , .		0

#	Article	IF	Citations
379	FROM STABLE LASERS TO OPTICAL-FREQUENCY CLOCKS: Merging the UltraFast and the UltraStable, for a New Epoch of Optical Frequency Measurements, Standards, & Applications. , 2002, , .		0
380	From relative to absolute: optical phase measurement and control in ultrashort pulses. , 0, , .		0
381	Systematical Measurement of Molecular Iodine Hyperfine Transitions in the Wavelength Range of 500-517 Nm. , 2004, , .		0
382	Frequency transfer of optical standards through a fiber network using 1550-nm mode-locked sources. , 0, , .		0
383	Phase Controlled Femtosecond Lasers for Sensitive, Precise, and Wide Bandwidth Nonlinear Spectroscopy. , 2005, , 1-27.		0
384	Optical-Phase Stabilization of 1550-nm Mode-Locked Laser to Optical Atomic Clock with Application to Remote Transfer of Ultralow-Jitter Timing Signal. , 2005, , WB32.		0
385	Coherent amplification of femtosecond pulses with passive enhancement cavities. Springer Series in Chemical Physics, 2005, , 16-18.	0.2	0
386	High Spectral Resolution and Accuracy Studies for a Sr Optical Lattice Clock. , 2006, , .		0
387	Remote synchronization of two mode-locked fiber lasers. , 2006, , .		0
388	Ultra-high resolution spectroscopy with a87Sr optical lattice clock. , 2007, , .		0
389	Strontium optical lattice clock: 10^{−16} uncertainty. , 2008, , .		0
390	Strontium optical lattice clock with high accuracy and stability. , 2008, , .		0
391	10 W average power frequency comb with sub-mHz relative linewidths from an Yb:fiber system. , 2008, , .		0
392	QUANTUM METROLOGY WITH LATTICE-CONFINED ULTRACOLD SR ATOMS. , 2009, , .		0
393	Phase-stabilized, 1.5-W mid-infrared frequency comb. , 2009, , .		0
394	POLAR MOLECULES NEAR QUANTUM DEGENERACY. , 2010, , .		0
395	Prospects for milli-hertz linewidth lasers using collective emission. , 2010, , .		0
396	Quantum metrology — Optical atomic clocks and many-body physics. , 2011, , .		0

#	Article	IF	Citations
397	Broadband Phase-Noise Suppression in a Yb-based Optical Frequency Comb. , 2011, , .		0
398	1.5 Octave Highly Coherent Fiber Frequency Comb. , 2011, , .		0
399	Broadband Direct Frequency Comb Spectroscopy in the Mid-Infrared. , 2011, , .		0
400	Mid-infrared frequency comb spectrometer based on an optical parametric oscillator. , 2011, , .		0
401	Supression of collisional frequency shifts in an optical lattice clock. , 2011, , .		0
402	Coherent transfer over 1.1 spectral octave with a fiber frequency comb. , 2011, , .		0
403	Phase Stabilization of a Yb:fiber Frequency Comb via High-Bandwidth Transducers. , 2012, , .		0
404	87Sr optical lattice clocks at JILA. , 2012, , .		0
405	Thermal noise in optical reference resonators. , 2014, , .		0
406	Prospects for frequency stabilization using collective effects of strontium atoms in an optical cavity. , 2014, , .		0
407	Laser stabilization on velocity dependent nonlinear dispersion of Sr atoms in an optical cavity. , 2015, , .		0
408	Optical cryogenic silicon resonators. , 2016, , .		0
409	Ultrastable lasers based on low thermal noise optical resonators. , 2017, , .		0
410	Silicon Cavity at 4 Kelvin with Thermal Noise Limited Performance. , 2018, , .		0
411	Coherent anti-Stokes Raman scattering microscopy with near-infrared ps pulses synchronized within 50 fs. , 2002, , .		0
412	MERGING TWO INDEPENDENT FEMTOSECOND LASERS INTO ONE. , 2002, , .		0
413	COHERENT OPTICAL FREQUENCY SYNTHESIS AND DISTRIBUTION. , 2002, , .		0
414	Carrier-envelope phase stabilization of ultrashort optical pulses. , 2003, , .		0

#	Article	IF	Citations
415	Ultrafast-Laser Stabilization with Application to Pulse Amplification by Use of Passive Optical Cavities. Springer Series in Optical Sciences, 2004, , 179-184.	0.7	0
416	Carrier-Envelope Phase Stabilization of Modelocked Lasers. Springer Series in Optical Sciences, 2004, , 151-163.	0.7	0
417	Ti:sapphire Lasers for Frequency Metrology Spanning the Visible and Infrared Spectrum Without Nonlinear Fiber. , 2005, , .		0
418	Direct Frequency-Comb Photo-Association of Ultracold Rb2 molecules. , 2006, , .		0
419	Toward Direct Frequency Comb Spectroscopy in Helium: Proposed Measurements and Experimental Progress. , 2006, , .		0
420	High-harmonic Generation at 100 MHz Repetition Frequency using a Femtosecond Enhancement Cavity. Springer Series in Optical Sciences, 2007, , 59-64.	0.7	0
421	Optical clock and ultracold collisions with trapped strontium atoms. , 2007, , 411-420.		0
422	Xe plasma generated by a cavity enhanced Yb-similariton laser based fiber frequency comb. , 2007, , .		0
423	Phase-stabilized, 1.5-W mid-infrared femtosecond optical parametric oscillator for frequency comb spectroscopy. , 2009, , .		0
424	Testing the Broadband Phase Coherence of a Mode Locked Laser at Microhertz Relative Linewidth. , 2009, , .		0
425	High-resolution mid-infrared frequency comb Fourier transform spectrometer. , 2010, , .		0
426	Optical clock with lattice-confined Sr atoms. , 2010, , .		0
427	Coherent frequency combs and spectroscopy â€“ from IR to XUV. , 2011, , .		0
428	High Power Fiber Laser Frequency Combs for XUV Spectroscopy. , 2011, , .		0
429	Precision Measurements with ultra-cold Alkaline Earth Atoms. , 2012, , .		0
430	Fourier Transform Direct Frequency Comb Spectroscopy in the Near- and Mid-Infrared. , 2013, , .		0
431	Crystalline coatings for ultra-low-noise optical cavities. , 2013, , .		0
432	Phase Coherent Extreme Ultraviolet Radiation. , 2013, , .		0

#	Article	IF	Citations
433	Time Resolved Frequency Comb Spectroscopy for Studying Gas Phase Free Radical Kinetics. , 2014, , .		0
434	MolÃ©cules polaires ultrafroides dans le rÃ©gime quantique. , 2014, , 14-18.	0.1	0
435	Probing Buffer-Gas Cooled Molecules with Direct Frequency Comb Spectroscopy in the Mid-Infrared. , 2015, , .		0
436	Advancements in Substrate-Transferred Crystalline Coatings. , 2016, , .		0
437	An optical frequency atomic clock based on quantum matter. , 2018, , .		0
438	Phase-Matched Extreme-Ultraviolet Frequency-Comb Generation. , 2019, , .		0
439	Measuring Optical Frequency Ratios with Uncertainties Below 10â˜’17 via the Boulder Atomic Clock Network. , 2019, , .		0
440	10-18 Optical Atomic Clock Comparisons within the Boulder Atomic Clock Network. , 2020, , .		0