# Jun Ye

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 376 papers | 33,367 citations | 96 h-index | 171 g-index |
| 449 ext. papers | 40,490 ext. citations | 8.7 avg, IF | 7.23 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 376 | Spectroscopy on the electron-electric-dipole-moment-sensitive states of ThF+. *Physical Review A*, **2022**, 105, | 2.6 | 1 |
| 375 | Resolving the gravitational redshift across a millimetre-scale atomic sample.. *Nature*, **2022**, 602, 420-424 | 50.4 | 15 |
| 374 | Disentangling Pauli Blocking of Atomic Decay from Cooperative Radiation and Atomic Motion in a 2D Fermi Gas.. *Physical Review Letters*, **2022**, 128, 093001 | 7.4 | 1 |
| 373 | Reactions between layer-resolved molecules mediated by dipolar spin exchange.. *Science*, **2022**, 375, 1299-1303 | 33.3 | 0 |
| 372 | High Phase-Space Density of Laser-Cooled Molecules in an Optical Lattice.. *Physical Review Letters*, **2021**, 127, 263201 | 7.4 | 2 |
| 371 | Pauli blocking of atom-light scattering. *Science*, **2021**, 374, 979-983 | 33.3 | 3 |
| 370 | Dynamical Generation of Spin Squeezing in Ultracold Dipolar Molecules. *Physical Review Letters*, **2021**, 126, 113401 | 7.4 | 4 |
| 369 | Experimental Constraint on Axionlike Particles over Seven Orders of Magnitude in Mass. *Physical Review Letters*, **2021**, 126, 171301 | 7.4 | 5 |
| 368 | Floquet engineering ultracold polar molecules to simulate topological insulators. *Physical Review A*, **2021**, 103, | 2.6 | 1 |
| 367 | Realizing Hopf Insulators in Dipolar Spin Systems. *Physical Review Letters*, **2021**, 127, 015301 | 7.4 | 2 |
| 366 | Dipole-Dipole Frequency Shifts in Multilevel Atoms. *Physical Review Letters*, **2021**, 127, 013401 | 7.4 | 0 |
| 365 | Thermal noise and mechanical loss of SiO/TaO optical coatings at cryogenic temperatures. *Optics Letters*, **2021**, 46, 592-595 | 3 | 4 |
| 364 | Extreme-ultraviolet frequency combs for precision metrology and attosecond science. *Nature Photonics*, **2021**, 15, 175-186 | 33.9 | 18 |
| 363 | Measurement of the 27Al+ and 87Sr absolute optical frequencies. *Metrologia*, **2021**, 58, 015017 | 2.1 | 1 |
| 362 | Quantum Simulators: Architectures and Opportunities. *PRX Quantum*, **2021**, 2, | 6.1 | 47 |
| 361 | Detection and manipulation of the transverse motion of neutral molecules in a Stark decelerator. *Measurement: Journal of the International Measurement Confederation*, **2021**, 183, 109888 | 4.6 | 0 |
| 360 | 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, | 11.5 | 7 |

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| 359 | Half-minute-scale atomic coherence and high relative stability in a tweezer clock. *Nature*, **2020**, 588, 408-413 | 50.4 | 33 |
| 358 | Dipolar evaporation of reactive molecules to below the Fermi temperature. *Nature*, **2020**, 588, 239-243 | 50.4 | 20 |
| 357 | Resonant collisional shielding of reactive molecules using electric fields. *Science*, **2020**, 370, 1324-1327 | 33.3 | 20 |
| 356 | Sub-Doppler Cooling and Compressed Trapping of YO Molecules at K Temperatures. *Physical Review X*, **2020**, 10, | 9.1 | 23 |
| 355 | Second-Scale Coherence Measured at the Quantum Projection Noise Limit with Hundreds of Molecular Ions. *Physical Review Letters*, **2020**, 124, 053201 | 7.4 | 11 |
| 354 | Continuous temporal ion detection combined with time-gated imaging: Normalization over a large dynamic range. *Journal of Molecular Spectroscopy*, **2020**, 368, 111257 | 1.3 | 1 |
| 353 | Thermalization and Sub-Poissonian Density Fluctuations in a Degenerate Molecular Fermi Gas. *Physical Review Letters*, **2020**, 124, 033401 | 7.4 | 13 |
| 352 | Beyond the limits of conventional Stark deceleration. *Physical Review Research*, **2020**, 2, | 3.9 | 4 |
| 351 | Optical atomic clock comparison through turbulent air. *Physical Review Research*, **2020**, 2, | 3.9 | 4 |
| 350 | Excess electronic recoil events in XENON1T. *Physical Review D*, **2020**, 102, | 4.9 | 128 |
| 349 | Quantum many-body physics with ultracold polar molecules: Nanostructured potential barriers and interactions. *Physical Review A*, **2020**, 102, | 2.6 | 2 |
| 348 | Noncollinear Enhancement Cavity for Record-High Out-Coupling Efficiency of an Extreme-UV Frequency Comb. *Physical Review Letters*, **2020**, 125, 093902 | 7.4 | 8 |
| 347 | Thermodynamics of a deeply degenerate SU(N)-symmetric Fermi gas. *Nature Physics*, **2020**, 16, 1216-1221 | 16.2 | 14 |
| 346 | Observation of Efimov Universality across a Nonuniversal Feshbach Resonance in ^{39}K. *Physical Review Letters*, **2020**, 125, 243401 | 7.4 | 4 |
| 345 | Precision Metrology Meets Cosmology: Improved Constraints on Ultralight Dark Matter from Atom-Cavity Frequency Comparisons. *Physical Review Letters*, **2020**, 125, 201302 | 7.4 | 37 |
| 344 | Fast Apparent Oscillations of Fundamental Constants. *Annalen Der Physik*, **2020**, 532, 1900566 | 2.6 | 4 |
| 343 | Seconds-scale coherence on an optical clock transition in a tweezer array. *Science*, **2019**, 366, 93-97 | 33.3 | 43 |
| 342 | Engineering Quantum States of Matter for Atomic Clocks in Shallow Optical Lattices. *Physical Review Letters*, **2019**, 123, 123401 | 7.4 | 18 |

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| 341 | Coherent light brightens the quantum science frontier. *Physics Today*, **2019**, 72, | 0.9 | 1 |
| 340 | Cluster State Generation with Spin-Orbit Coupled Fermionic Atoms in Optical Lattices. *Physical Review Letters*, **2019**, 122, 160402 | 7.4 | 9 |
| 339 | Visible and ultraviolet laser spectroscopy of ThF. *Journal of Molecular Spectroscopy*, **2019**, 358, 1-16 | 1.3 | 6 |
| 338 | Constraining the Spin-Dependent WIMP-Nucleon Cross Sections with XENON1T. *Physical Review Letters*, **2019**, 122, 141301 | 7.4 | 87 |
| 337 | Demonstration of 4.8 □10□17 stability at 1 s for two independent optical clocks. *Nature Photonics*, **2019**, 13, 714-719 | 33.9 | 143 |
| 336 | Atoms and molecules in the search for time-reversal symmetry violation. *Nature Reviews Physics*, **2019**, 1, 510-521 | 23.6 | 12 |
| 335 | Demonstration of a Timescale Based on a Stable Optical Carrier. *Physical Review Letters*, **2019**, 123, 173201 | 7.4 | 17 |
| 334 | JILA SrI optical lattice clock with uncertainty of $2.0 times 10^{-18}$. *Metrologia*, **2019**, 56, 065004 | 2.1 | 70 |
| 333 | Engineering spin squeezing in a 3D optical lattice with interacting spin-orbit-coupled fermions. *Physical Review Research*, **2019**, 1, | 3.9 | 12 |
| 332 | Comb-resolved spectroscopy with immersion grating in long-wave infrared. *Optics Express*, **2019**, 27, 1911-1921 | 3.3 | 9 |
| 331 | Crystalline optical cavity at 4  K with thermal-noise-limited instability and ultralow drift. *Optica*, **2019**, 6, 240 | 8.6 | 57 |
| 330 | SAGE: A proposal for a space atomic gravity explorer. *European Physical Journal D*, **2019**, 73, 1 | 1.3 | 37 |
| 329 | Direct Frequency Comb Spectroscopy with an Immersion Grating **2019**, | | 1 |
| 328 | Variational Spin-Squeezing Algorithms on Programmable Quantum Sensors. *Physical Review Letters* , **2019**, 123, 260505 | 7.4 | 29 |
| 327 | Precision Test of the Limits to Universality in Few-Body Physics. *Physical Review Letters*, **2019**, 123, 233402 | 7.4 | 10 |
| 326 | Light Dark Matter Search with Ionization Signals in XENON1T. *Physical Review Letters*, **2019**, 123, 251801 | 7.4 | 147 |
| 325 | Search for Light Dark Matter Interactions Enhanced by the Migdal Effect or Bremsstrahlung in XENON1T. *Physical Review Letters*, **2019**, 123, 241803 | 7.4 | 52 |
| 324 | Rovibrational quantum state resolution of the C fullerene. *Science*, **2019**, 363, 49-54 | 33.3 | 42 |

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| 323 | A degenerate Fermi gas of polar molecules. *Science*, **2019**, 363, 853-856 | 33.3 | 110 |
| 322 | Broadband molecular spectroscopy with optical frequency combs. *Journal of Molecular Spectroscopy*, **2019**, 355, 66-78 | 1.3 | 28 |
| 321 | Imaging Optical Frequencies with 100 μHz Precision and 1.1 μm Resolution. *Physical Review Letters*, **2018**, 120, 103201 | 7.4 | 72 |
| 320 | Dynamics of interacting fermions under spin–orbit coupling in an optical lattice clock. *Nature Physics*, **2018**, 14, 399-404 | 16.2 | 35 |
| 319 | Sensitivity and Resolution in Frequency Comb Spectroscopy of Buffer Gas Cooled Polyatomic Molecules **2018**, 647-664 | | 1 |
| 318 | Direct measurements of DOCO isomers in the kinetics of OD + CO. *Science Advances*, **2018**, 4, eaao4777 | 14.3 | 18 |
| 317 | Two Clock Transitions in Neutral Yb for the Highest Sensitivity to Variations of the Fine-Structure Constant. *Physical Review Letters*, **2018**, 120, 173001 | 7.4 | 31 |
| 316 | Phase-stabilized 100 mW frequency comb near 10 μm. *Applied Physics B: Lasers and Optics*, **2018**, 124, 128 | 1.9 | 16 |
| 315 | Intrinsic backgrounds from Rn and Kr in the XENON100 experiment. *European Physical Journal C*, **2018**, 78, 1 | 4.2 | 11 |
| 314 | Frequency Measurements of Superradiance from the Strontium Clock Transition. *Physical Review X*, **2018**, 8, | 9.1 | 36 |
| 313 | Enhancing radical molecular beams by skimmer cooling. *Physical Chemistry Chemical Physics*, **2018**, 20, 11615-11621 | 3.6 | 3 |
| 312 | Phase-matched extreme-ultraviolet frequency-comb generation. *Nature Photonics*, **2018**, 12, 387-391 | 33.9 | 53 |
| 311 | A nozzle for high-density supersonic gas jets at elevated temperatures. *Review of Scientific Instruments*, **2018**, 89, 113114 | 1.7 | 4 |
| 310 | 3D Magneto-Optical Trap of Yttrium Monoxide. *Physical Review Letters*, **2018**, 121, 213201 | 7.4 | 92 |
| 309 | An approach to spin-resolved molecular gas microscopy. *New Journal of Physics*, **2018**, 20, 043031 | 2.9 | 11 |
| 308 | Emergence of multi-body interactions in a fermionic lattice clock. *Nature*, **2018**, 563, 369-373 | 50.4 | 37 |
| 307 | Dark Matter Search Results from a One Ton-Year Exposure of XENON1T. *Physical Review Letters*, **2018**, 121, 111302 | 7.4 | 740 |
| 306 | 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 | 5.4 | 101 |

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| 305 | Spectral analyses of trans- and cis-DOCO transients via comb spectroscopy. *Molecular Physics*, **2018**, 116, 3710-3717 | 1.7 | 5 |
| 304 | Search for Electronic Recoil Event Rate Modulation with 4 Years of XENON100 Data. *Physical Review Letters*, **2017**, 118, 101101 | 7.4 | 39 |
| 303 | Removing krypton from xenon by cryogenic distillation to the ppq level. *European Physical Journal C*, **2017**, 77, 1 | 4.2 | 26 |
| 302 | OD + CO -iD + CO2 branching kinetics probed with time-resolved frequency comb spectroscopy. *Chemical Physics Letters*, **2017**, 683, 91-95 | 2.5 | 8 |
| 301 | One-dimensional magneto-optical compression of a cold CaF molecular beam. *New Journal of Physics*, **2017**, 19, 033035 | 2.9 | 11 |
| 300 | New frontiers for quantum gases of polar molecules. *Nature Physics*, **2017**, 13, 13-20 | 16.2 | 112 |
| 299 | Spin-orbit-coupled fermions in an optical lattice clock. *Nature*, **2017**, 542, 66-70 | 50.4 | 139 |
| 298 | A Fermi-degenerate three-dimensional optical lattice clock. *Science*, **2017**, 358, 90-94 | 33.3 | 182 |
| 297 | Precision Measurement of the Electron Electric Dipole Moment Using Trapped Molecular Ions. *Physical Review Letters*, **2017**, 119, 153001 | 7.4 | 202 |
| 296 | Material radioassay and selection for the XENON1T dark matter experiment. *European Physical Journal C*, **2017**, 77, 1 | 4.2 | 21 |
| 295 | Radio Frequency Magneto-Optical Trapping of CaF with High Density. *Physical Review Letters*, **2017**, 119, 103201 | 7.4 | 123 |
| 294 | Cold molecules: Progress in quantum engineering of chemistry and quantum matter. *Science*, **2017**, 357, 1002-1010 | 33.3 | 192 |
| 293 | Symplectic structure of statistical variational data assimilation. *Quarterly Journal of the Royal Meteorological Society*, **2017**, 143, 756-771 | 6.4 | 3 |
| 292 | Ultrastable Silicon Cavity in a Continuously Operating Closed-Cycle Cryostat at 4´K. *Physical Review Letters*, **2017**, 119, 243601 | 7.4 | 43 |
| 291 | First Dark Matter Search Results from the XENON1T Experiment. *Physical Review Letters*, **2017**, 119, 181301 | 7.4 | 485 |
| 290 | Online (^{222})Rn removal by cryogenic distillation in the XENON100 experiment. *European Physical Journal C*, **2017**, 77, 1 | 4.2 | 21 |
| 289 | 1.5 Th Lasers with Sub-10´mHz Linewidth. *Physical Review Letters*, **2017**, 118, 263202 | 7.4 | 192 |
| 288 | Controlling spin flips of molecules in an electromagnetic trap. *Physical Review A*, **2017**, 96, | 2.6 | 20 |

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| 287 | The XENON1T dark matter experiment. *European Physical Journal C*, **2017**, 77, 1 | 4.2 | 99 |
| 286 | Gas-phase broadband spectroscopy using active sources: progress, status, and applications. *Journal of the Optical Society of America B: Optical Physics*, **2017**, 34, 104-129 | 1.7 | 77 |
| 285 | 1.5 Ħh Lasers with sub 10 mHz Linewidth **2017**, | | 2 |
| 284 | Three-photon absorption in optical parametric oscillators based on OP-GaAs. *Optics Letters*, **2016**, 41, 5405-5408 | 3 | 19 |
| 283 | Doublon dynamics and polar molecule production in an optical lattice. *Nature Communications*, **2016**, 7, 11279 | 17.4 | 31 |
| 282 | Synthetic Spin-Orbit Coupling in an Optical Lattice Clock. *Physical Review Letters*, **2016**, 116, 035301 | 7.4 | 80 |
| 281 | Entanglement and spin squeezing in a network of distant optical lattice clocks. *Physical Review A*, **2016**, 93, | 2.6 | 11 |
| 280 | Collective atomic scattering and motional effects in a dense coherent medium. *Nature Communications*, **2016**, 7, 11039 | 17.4 | 113 |
| 279 | Direct frequency comb measurement of OD + CO -iDOCO kinetics. *Science*, **2016**, 354, 444-448 | 33.3 | 65 |
| 278 | 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 | 1.3 | 18 |
| 277 | High-performance near- and mid-infrared crystalline coatings. *Optica*, **2016**, 3, 647 | 8.6 | 81 |
| 276 | A second generation of low thermal noise cryogenic silicon resonators. *Journal of Physics: Conference Series*, **2016**, 723, 012031 | 0.3 | 15 |
| 275 | Sensitivity and resolution in frequency comb spectroscopy of buffer gas cooled polyatomic molecules. *Applied Physics B: Lasers and Optics*, **2016**, 122, 1 | 1.9 | 12 |
| 274 | Gravitational wave detection with optical lattice atomic clocks. *Physical Review D*, **2016**, 94, | 4.9 | 143 |
| 273 | Optical atomic clock **2016**, | | 1 |
| 272 | 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 | 1.3 | 59 |
| 271 | Precision measurement and frequency metrology with ultracold atoms. *National Science Review*, **2016**, 3, 189-200 | 10.8 | 13 |
| 270 | Continuous probing of cold complex molecules with infrared frequency comb spectroscopy. *Nature*, **2016**, 533, 517-20 | 50.4 | 74 |

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| 269 | Quantum Network of Atom Clocks: A Possible Implementation with Neutral Atoms. *Physical Review Letters*, **2016**, 117, 060506 | 7.4 | 19 |
| 268 | Light scattering from dense cold atomic media. *Physical Review A*, **2016**, 94, | 2.6 | 44 |
| 267 | Observation of motion-dependent nonlinear dispersion with narrow-linewidth atoms in an optical cavity. *Physical Review Letters*, **2015**, 114, 093002 | 7.4 | 20 |
| 266 | Optical atomic clocks. *Reviews of Modern Physics*, **2015**, 87, 637-701 | 40.5 | 867 |
| 265 | Cavity-enhanced field-free molecular alignment at a high repetition rate. *Physical Review Letters*, **2015**, 114, 153001 | 7.4 | 8 |
| 264 | Prospects for a narrow line MOT in YO. *New Journal of Physics*, **2015**, 17, 055008 | 2.9 | 30 |
| 263 | Systematic evaluation of an atomic clock at 2 □10(-18) total uncertainty. *Nature Communications*, **2015**, 6, 6896 | 17.4 | 421 |
| 262 | Creation of a low-entropy quantum gas of polar molecules in an optical lattice. *Science*, **2015**, 350, 659-62 | 33.3 | 125 |
| 261 | Optical Feshbach resonances: Field-dressed theory and comparison with experiments. *Physical Review A*, **2015**, 92, | 2.6 | 24 |
| 260 | Nonlinear spectroscopy of Sr atoms in an optical cavity for laser stabilization. *Physical Review A*, **2015**, 92, | 2.6 | 16 |
| 259 | Rotational State Microwave Mixing for Laser Cooling of Complex Diatomic Molecules. *Physical Review Letters*, **2015**, 114, 223003 | 7.4 | 63 |
| 258 | Progress on the optical lattice clock. *Comptes Rendus Physique*, **2015**, 16, 499-505 | 1.4 | 9 |
| 257 | Accurate removal of RAM from FM laser beams **2015**, | | 2 |
| 256 | Cavity-Enhanced Mid-IR Optical Frequency Comb Spectroscopy: Enhanced Time and Spectral Resolution **2015**, | | 1 |
| 255 | State-specific detection of trapped HfF+ by photodissociation. *Journal of Molecular Spectroscopy*, **2014**, 300, 12-15 | 1.3 | 18 |
| 254 | An optical lattice clock with accuracy and stability at the 10(-18) level. *Nature*, **2014**, 506, 71-5 | 50.4 | 637 |
| 253 | Mid-Infrared Time-Resolved Frequency Comb Spectroscopy of Transient Free Radicals. *Journal of Physical Chemistry Letters*, **2014**, 5, 2241-6 | 6.4 | 87 |
| 252 | Suppressing the loss of ultracold molecules via the continuous quantum Zeno effect. *Physical Review Letters*, **2014**, 112, 070404 | 7.4 | 78 |

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| 251 | Extreme ultraviolet radiation with coherence time greater than 1´s. *Nature Photonics*, **2014**, 8, 530-536 | 33.9 | 61 |
| 250 | Quantum simulation. Spectroscopic observation of SU(N)-symmetric interactions in Sr orbital magnetism. *Science*, **2014**, 345, 1467-73 | 33.3 | 229 |
| 249 | Cold state-selected molecular collisions and reactions. *Annual Review of Physical Chemistry*, **2014**, 65, 501-18 | 15.7 | 72 |
| 248 | Heisenberg-limited atom clocks based on entangled qubits. *Physical Review Letters*, **2014**, 112, 190403 | 7.4 | 66 |
| 247 | A quantum network of clocks. *Nature Physics*, **2014**, 10, 582-587 | 16.2 | 260 |
| 246 | Ultrastable laser with average fractional frequency drift rate below 5 □10?□/s. *Optics Letters*, **2014**, 39, 5102-5 | 3 | 47 |
| 245 | Reduction of residual amplitude modulation to 1 □10?□for frequency modulation and laser stabilization. *Optics Letters*, **2014**, 39, 1980-3 | 3 | 90 |
| 244 | Many-body dynamics of dipolar molecules in an optical lattice. *Physical Review Letters*, **2014**, 113, 195302 | 7.4 | 119 |
| 243 | Probing many-body interactions in an optical lattice clock. *Annals of Physics*, **2014**, 340, 311-351 | 2.5 | 43 |
| 242 | Cavity-Enhanced Direct Frequency Comb Spectroscopy. *Springer Series in Optical Sciences*, **2014**, 271-321 | 0.5 | 12 |
| 241 | Mol□cules polaires ultrafroides dans le r□gime quantique **2014**, 14-18 | 0.1 | |
| 240 | Tenfold reduction of Brownian noise in high-reflectivity optical coatings. *Nature Photonics*, **2013**, 7, 644-650 | 33.9 | 202 |
| 239 | Trace Water Vapor Analysis in Specialty Gases: Sensor and Spectroscopic Approaches **2013**, 195-249 | | 2 |
| 238 | Precision spectroscopy of polarized molecules in an ion trap. *Science*, **2013**, 342, 1220-2 | 33.3 | 83 |
| 237 | A quantum many-body spin system in an optical lattice clock. *Science*, **2013**, 341, 632-6 | 33.3 | 119 |
| 236 | Observation of dipolar spin-exchange interactions with lattice-confined polar molecules. *Nature*, **2013**, 501, 521-5 | 50.4 | 508 |
| 235 | 2D Magneto-optical trapping of diatomic molecules. *Physical Review Letters*, **2013**, 110, 143001 | 7.4 | 276 |
| 234 | Realizing fractional Chern insulators in dipolar spin systems. *Physical Review Letters*, **2013**, 110, 185302 | 7.4 | 138 |

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| 233 | 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 | 1.9 | 101 |
| 232 | Electric-field-induced inelastic collisions between magnetically trapped hydroxyl radicals. *Molecular Physics*, **2013**, 111, 1798-1804 | 1.7 | 11 |
| 231 | Optical spectrum analyzer with quantum-limited noise floor. *Physical Review Letters*, **2013**, 111, 093604 | 7.4 | 50 |
| 230 | High Brightness XUV Frequency Combs via Intracavity High Harmonic Generation. *EPJ Web of Conferences*, **2013**, 41, 11006 | 0.3 | 0 |
| 229 | Evaporative cooling of the dipolar hydroxyl radical. *Nature*, **2012**, 492, 396-400 | 50.4 | 142 |
| 228 | . *IEEE Transactions on Plasma Science*, **2012**, 40, 1984-1991 | 1.3 | 35 |
| 227 | Broadband velocity modulation spectroscopy of HfF+: Towards a measurement of the electron electric dipole moment. *Chemical Physics Letters*, **2012**, 546, 1-11 | 2.5 | 41 |
| 226 | Operating a (87)Sr optical lattice clock with high precision and at high density. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2012**, 59, 416-25 | 3.2 | 33 |
| 225 | A sub-40-mHz-linewidth laser based on a silicon single-crystal optical cavity. *Nature Photonics*, **2012**, 6, 687-692 | 33.9 | 402 |
| 224 | Comparison of two independent Sr optical clocks with 1□10(-17) stability at 10(3) s. *Physical Review Letters*, **2012**, 109, 230801 | 7.4 | 130 |
| 223 | Long-lived dipolar molecules and Feshbach molecules in a 3D optical lattice. *Physical Review Letters*, **2012**, 108, 080405 | 7.4 | 180 |
| 222 | Direct frequency comb spectroscopy in the extreme ultraviolet. *Nature*, **2012**, 482, 68-71 | 50.4 | 280 |
| 221 | Mid-infrared virtually imaged phased array spectrometer for rapid and broadband trace gas detection. *Optics Letters*, **2012**, 37, 3285-7 | 3 | 71 |
| 220 | Full phase stabilization of a Yb:fiber femtosecond frequency comb via high-bandwidth transducers. *Optics Letters*, **2012**, 37, 2196-8 | 3 | 45 |
| 219 | Anisotropic polarizability of ultracold polar 40K87Rb molecules. *Physical Review Letters*, **2012**, 109, 230403 | 7.4 | 69 |
| 218 | Microwave state transfer and adiabatic dynamics of magnetically trapped polar molecules. *Physical Review A*, **2012**, 85, | 2.6 | 17 |
| 217 | Power optimization of XUV frequency combs for spectroscopy applications [Invited]. *Optics Express*, **2011**, 19, 23483-93 | 3.3 | 32 |
| 216 | Broadband phase noise suppression in a Yb-fiber frequency comb. *Optics Letters*, **2011**, 36, 743-5 | 3 | 21 |

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|---|---|---|---|
| 215 | Polar molecules in the quantum regime. *Physics Today*, **2011**, 64, 27-31 | 0.9 | 35 |
| 214 | Controlling the quantum stereodynamics of ultracold bimolecular reactions. *Nature Physics*, **2011**, 7, 502-507 | 16.2 | 349 |
| 213 | State-dependent lattices for quantum computing with alkaline-earth-metal atoms. *European Physical Journal D*, **2011**, 65, 207-217 | 1.3 | 19 |
| 212 | Extreme nonlinear optics in a femtosecond enhancement cavity. *Physical Review Letters*, **2011**, 107, 183903 | 7.4 | 52 |
| 211 | Cold heteromolecular dipolar collisions. *Physical Chemistry Chemical Physics*, **2011**, 13, 19059-66 | 3.6 | 77 |
| 210 | Optical frequency comb spectroscopy. *Faraday Discussions*, **2011**, 150, 23 | 3.6 | 59 |
| 209 | Measurement of optical Feshbach resonances in an ideal gas. *Physical Review Letters*, **2011**, 107, 073202 | 7.4 | 96 |
| 208 | Extreme nonlinear response of ultranarrow optical transitions in cavity QED for laser stabilization. *Physical Review A*, **2011**, 84, | 2.6 | 20 |
| 207 | Inelastic collisions and density-dependent excitation suppression in a 87Sr optical lattice clock. *Physical Review A*, **2011**, 84, | 2.6 | 30 |
| 206 | Ultrabroadband coherent supercontinuum frequency comb. *Physical Review A*, **2011**, 84, | 2.6 | 48 |
| 205 | Tunable superfluidity and quantum magnetism with ultracold polar molecules. *Physical Review Letters*, **2011**, 107, 115301 | 7.4 | 194 |
| 204 | Frequency comb velocity-modulation spectroscopy. *Physical Review Letters*, **2011**, 107, 093002 | 7.4 | 20 |
| 203 | Quantum-noise-limited optical frequency comb spectroscopy. *Physical Review Letters*, **2011**, 107, 233002 | 7.4 | 107 |
| 202 | Resolved atomic interaction sidebands in an optical clock transition. *Physical Review Letters*, **2011**, 106, 250801 | 7.4 | 16 |
| 201 | Suppression of collisional shifts in a strongly interacting lattice clock. *Science*, **2011**, 331, 1043-6 | 33.3 | 115 |
| 200 | Optical frequency comb spectroscopy. *Faraday Discussions*, **2011**, 150, 23-31; discussion 113-60 | 3.6 | 5 |
| 199 | Dipolar collisions of polar molecules in the quantum regime. *Nature*, **2010**, 464, 1324-8 | 50.4 | 426 |
| 198 | Two-orbital S U(N) magnetism with ultracold alkaline-earth atoms. *Nature Physics*, **2010**, 6, 289-295 | 16.2 | 457 |

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| 197 | Direct absorption imaging of ultracold polar molecules. *Physical Review A*, **2010**, 81, | 2.6 | 50 |
| 196 | Controlling the hyperfine state of rovibronic ground-state polar molecules. *Physical Review Letters*, **2010**, 104, 030402 | 7.4 | 197 |
| 195 | Precision measurement of fermionic collisions using an 87Sr optical lattice clock with 1 x 10(-16) inaccuracy. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2010**, 57, 574-82 | 3.2 | 7 |
| 194 | Quantum-state controlled chemical reactions of ultracold potassium-rubidium molecules. *Science*, **2010**, 327, 853-7 | 33.3 | 673 |
| 193 | Simple piezoelectric-actuated mirror with 180 kHz servo bandwidth. *Optics Express*, **2010**, 18, 9739-46 | 3.3 | 71 |
| 192 | Mid-infrared Fourier transform spectroscopy with a broadband frequency comb. *Optics Express*, **2010**, 18, 21861-72 | 3.3 | 173 |
| 191 | Cavity opto-mechanics using an optically levitated nanosphere. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 1005-10 | 11.5 | 381 |
| 190 | Single-atom cavity QED and optomicromechanics. *Physical Review A*, **2010**, 81, | 2.6 | 87 |
| 189 | Cavity-enhanced direct frequency comb spectroscopy: technology and applications. *Annual Review of Analytical Chemistry*, **2010**, 3, 175-205 | 12.5 | 159 |
| 188 | Analysis of trace impurities in semiconductor gas via cavity-enhanced direct frequency comb spectroscopy. *Applied Physics B: Lasers and Optics*, **2010**, 100, 917-924 | 1.9 | 30 |
| 187 | Microwatt-level XUV Frequency Comb via Intracavity High Harmonic Generation **2009**, | | 1 |
| 186 | Strong coupling of a mechanical oscillator and a single atom. *Physical Review Letters*, **2009**, 103, 063005 | 7.4 | 164 |
| 185 | Alkaline-earth-metal atoms as few-qubit quantum registers. *Physical Review Letters*, **2009**, 102, 110503 | 7.4 | 116 |
| 184 | Rabi spectroscopy and excitation inhomogeneity in a one-dimensional optical lattice clock. *Physical Review A*, **2009**, 80, | 2.6 | 94 |
| 183 | Prospects for application of ultracold Sr2 molecules in precision measurements. *Physical Review A*, **2009**, 79, | 2.6 | 34 |
| 182 | Probing interactions between ultracold fermions. *Science*, **2009**, 324, 360-3 | 33.3 | 81 |
| 181 | Vacuum-ultraviolet frequency combs from below-threshold harmonics. *Nature Physics*, **2009**, 5, 815-820 | 16.2 | 137 |
| 180 | Tomography of a supersonically cooled molecular jet using cavity-enhanced direct frequency comb spectroscopy. *Chemical Physics Letters*, **2009**, 468, 1-8 | 2.5 | 34 |

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|---|---|---|---|
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