

Lars Bojer Madsen

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262
papers

7,192
citations

46
h-index

72
g-index

277
ext. papers

8,018
ext. citations

3.3
avg, IF

6.41
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 262 | Measurement and laser control of attosecond charge migration in ionized iodoacetylene. <i>Science</i> , 2015 , 350, 790-5 | 33.3 | 352 |
| 261 | Photoelectron angular distributions from strong-field ionization of oriented molecules. <i>Nature Physics</i> , 2010 , 6, 428-432 | 16.2 | 314 |
| 260 | Attoclock reveals natural coordinates of the laser-induced tunnelling current flow in atoms. <i>Nature Physics</i> , 2012 , 8, 76-80 | 16.2 | 267 |
| 259 | Quantum gates and multiparticle entanglement by Rydberg excitation blockade and adiabatic passage. <i>Physical Review Letters</i> , 2008 , 100, 170504 | 7.4 | 192 |
| 258 | Strong-field ionization of N ₂ : length and velocity gauge strong-field approximation and tunnelling theory. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004 , 37, 2033-2044 | 1.3 | 123 |
| 257 | Theory of tunneling ionization of molecules: Weak-field asymptotics including dipole effects. <i>Physical Review A</i> , 2011 , 84, | 2.6 | 122 |
| 256 | Electron vortices in photoionization by circularly polarized attosecond pulses. <i>Physical Review Letters</i> , 2015 , 115, 113004 | 7.4 | 98 |
| 255 | Ionization in elliptically polarized pulses: Multielectron polarization effects and asymmetry of photoelectron momentum distributions. <i>Physical Review A</i> , 2012 , 85, | 2.6 | 95 |
| 254 | Time-dependent restricted-active-space self-consistent-field theory for laser-driven many-electron dynamics. <i>Physical Review A</i> , 2013 , 87, | 2.6 | 94 |
| 253 | Manipulating the torsion of molecules by strong laser pulses. <i>Physical Review Letters</i> , 2009 , 102, 073007 | 7.4 | 94 |
| 252 | Probing the longitudinal momentum spread of the electron wave packet at the tunnel exit. <i>Physical Review Letters</i> , 2012 , 109, 083002 | 7.4 | 90 |
| 251 | Strong-field ionization of diatomic molecules and companion atoms: Strong-field approximation and tunneling theory including nuclear motion. <i>Physical Review A</i> , 2005 , 71, | 2.6 | 90 |
| 250 | Strong-field ionization of polar molecules: Stark-shift-corrected strong-field approximation. <i>Physical Review A</i> , 2010 , 82, | 2.6 | 88 |
| 249 | Multiphoton electron angular distributions from laser-aligned CS ₂ molecules. <i>Physical Review Letters</i> , 2008 , 100, 093006 | 7.4 | 84 |
| 248 | Gauge invariance in the interaction between atoms and few-cycle laser pulses. <i>Physical Review A</i> , 2002 , 65, | 2.6 | 83 |
| 247 | Extending the strong-field approximation of high-order harmonic generation to polar molecules: gating mechanisms and extension of the harmonic cutoff. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010 , 43, 155602 | 1.3 | 82 |
| 246 | Semiclassical two-step model for strong-field ionization. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 81 |

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|-----|---|-----|----|
| 245 | High-order harmonic generation from arbitrarily oriented diatomic molecules including nuclear motion and field-free alignment. <i>Physical Review A</i> , 2006 , 74, | 2.6 | 78 |
| 244 | Influence of molecular symmetry on strong-field ionization: Studies on ethylene, benzene, fluorobenzene, and chlorofluorobenzene. <i>Physical Review A</i> , 2005 , 71, | 2.6 | 78 |
| 243 | Extracting continuum information from $\mathbf{\hat{t}}$ in time-dependent wave-packet calculations. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 77 |
| 242 | Time-resolved photoelectron angular distributions from strong-field ionization of rotating naphthalene molecules. <i>Physical Review Letters</i> , 2011 , 106, 073001 | 7.4 | 75 |
| 241 | Spin squeezing and precision probing with light and samples of atoms in the Gaussian description. <i>Physical Review A</i> , 2004 , 70, | 2.6 | 74 |
| 240 | Control and femtosecond time-resolved imaging of torsion in a chiral molecule. <i>Journal of Chemical Physics</i> , 2012 , 136, 204310 | 3.9 | 73 |
| 239 | Application of the weak-field asymptotic theory to the analysis of tunneling ionization of linear molecules. <i>Physical Review A</i> , 2012 , 85, | 2.6 | 72 |
| 238 | Time-dependent restricted-active-space self-consistent-field theory for laser-driven many-electron dynamics. II. Extended formulation and numerical analysis. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 67 |
| 237 | Ionization of oriented carbonyl sulfide molecules by intense circularly polarized laser pulses. <i>Physical Review A</i> , 2011 , 83, | 2.6 | 66 |
| 236 | Structure factors for tunneling ionization rates of molecules. <i>Physical Review A</i> , 2013 , 87, | 2.6 | 64 |
| 235 | Theory of strong-field ionization of aligned CO ₂ . <i>Physical Review A</i> , 2009 , 80, | 2.6 | 64 |
| 234 | Ionization of one- and three-dimensionally-oriented asymmetric-top molecules by intense circularly polarized femtosecond laser pulses. <i>Physical Review A</i> , 2011 , 83, | 2.6 | 62 |
| 233 | Orientation-dependent ionization yields from strong-field ionization of fixed-in-space linear and asymmetric top molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012 , 45, 015101 | 1.3 | 62 |
| 232 | Solving the m-mixing problem for the three-dimensional time-dependent Schrödinger equation by rotations: Application to strong-field ionization of H ₂ ⁺ . <i>Physical Review A</i> , 2007 , 75, | 2.6 | 62 |
| 231 | Symmetry of carrier-envelope phase difference effects in strong-field, few-cycle ionization of atoms and molecules. <i>Physical Review Letters</i> , 2006 , 97, 093001 | 7.4 | 60 |
| 230 | Comparison between length and velocity gauges in quantum simulations of high-order harmonic generation. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 59 |
| 229 | Time-dependent generalized-active-space configuration-interaction approach to photoionization dynamics of atoms and molecules. <i>Physical Review A</i> , 2014 , 90, | 2.6 | 58 |
| 228 | Geometric phase gates based on stimulated Raman adiabatic passage in tripod systems. <i>Physical Review A</i> , 2007 , 75, | 2.6 | 58 |

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|-----|--|------|----|
| 227 | Role of symmetry in strong-field ionization of molecules. <i>Physical Review A</i> , 2003 , 68, | 2.6 | 58 |
| 226 | Observation of laser-induced electronic structure in oriented polyatomic molecules. <i>Nature Communications</i> , 2015 , 6, 7039 | 17.4 | 55 |
| 225 | On the dipole, velocity and acceleration forms in high-order harmonic generation from a single atom or molecule. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011 , 44, 115601 | 1.3 | 55 |
| 224 | Exact nondipole Kramers-Henneberger form of the light-atom hamiltonian: an application to atomic stabilization and photoelectron energy spectra. <i>Physical Review Letters</i> , 2005 , 95, 043601 | 7.4 | 54 |
| 223 | Multistart spiral electron vortices in ionization by circularly polarized UV pulses. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 53 |
| 222 | Dynamic stark control of torsional motion by a pair of laser pulses. <i>Physical Review Letters</i> , 2014 , 113, 073005 | 7.4 | 52 |
| 221 | Single-active-electron potentials for molecules in intense laser fields. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 52 |
| 220 | A combined experimental and theoretical study on realizing and using laser controlled torsion of molecules. <i>Journal of Chemical Physics</i> , 2009 , 130, 234310 | 3.9 | 52 |
| 219 | Illuminating Molecular Symmetries with Bicircular High-Order-Harmonic Generation. <i>Physical Review Letters</i> , 2016 , 117, 133902 | 7.4 | 50 |
| 218 | Molecular-frame 3D photoelectron momentum distributions by tomographic reconstruction. <i>Physical Review Letters</i> , 2012 , 109, 123001 | 7.4 | 49 |
| 217 | Weak-field asymptotic theory of tunneling ionization in many-electron atomic and molecular systems. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 46 |
| 216 | Electron-nuclear energy sharing in above-threshold multiphoton dissociative ionization of H ₂ . <i>Physical Review Letters</i> , 2013 , 111, 023002 | 7.4 | 45 |
| 215 | Multiphoton above threshold effects in strong-field fragmentation. <i>Physical Review Letters</i> , 2012 , 109, 163003 | 7.4 | 45 |
| 214 | Ab initio studies of strong-field ionization of arbitrarily oriented H ₂ ⁺ molecules. <i>Physical Review A</i> , 2006 , 74, | 2.6 | 44 |
| 213 | Nondipole ionization dynamics of atoms in superintense high-frequency attosecond pulses. <i>Physical Review Letters</i> , 2006 , 97, 043601 | 7.4 | 43 |
| 212 | Vibrational excitation of diatomic molecular ions in strong field ionization of diatomic molecules. <i>Physical Review Letters</i> , 2005 , 95, 073004 | 7.4 | 43 |
| 211 | Theory for time-resolved measurements of laser-induced electron emission from metal surfaces. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 42 |
| 210 | Scaling of hydrogenic atoms and ions interacting with laser fields: Positronium in a laser field. <i>Physical Review A</i> , 1999 , 59, 4574-4579 | 2.6 | 42 |

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|-----|---|------|----|
| 209 | Photoelectron angular distributions from polar molecules probed by intense femtosecond lasers. <i>Physical Review A</i> , 2010 , 82, | 2.6 | 41 |
| 208 | Blackbody-radiation-assisted laser cooling of molecular ions. <i>Physical Review Letters</i> , 2002 , 89, 173003 | 7.4 | 41 |
| 207 | Counterintuitive angular shifts in the photoelectron momentum distribution for atoms in strong few-cycle circularly polarized laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009 , 42, 161001 | 1.3 | 40 |
| 206 | Tunneling ionization of atoms. <i>American Journal of Physics</i> , 2004 , 72, 249-254 | 0.7 | 39 |
| 205 | Ionization and excitation dynamics of H(1s) in short intense laser pulses. <i>Physical Review A</i> , 2001 , 64, | 2.6 | 38 |
| 204 | First-order correction terms in the weak-field asymptotic theory of tunneling ionization. <i>Physical Review A</i> , 2013 , 87, | 2.6 | 37 |
| 203 | Polarization effects in attosecond photoelectron spectroscopy. <i>Physical Review Letters</i> , 2010 , 104, 043602 | 0.7 | 37 |
| 202 | Rotational cooling of heteronuclear molecular ions with $\tilde{0}$, $\tilde{1}$, $\tilde{2}$, and $\tilde{3}$ electronic ground states. <i>Physical Review A</i> , 2004 , 70, | 2.6 | 37 |
| 201 | Role of Multi-Electron Effects in the Asymmetry of Strong-Field Ionization and Fragmentation of Polar Molecules: The Methyl Halide Series. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 11772-82 | 2.8 | 36 |
| 200 | Finite-system effects on high-order harmonic generation: From atoms to solids. <i>Physical Review A</i> , 2018 , 97, | 2.6 | 36 |
| 199 | Low-energy photoelectrons in strong-field ionization by laser pulses with large ellipticity. <i>Physical Review Letters</i> , 2014 , 113, 103005 | 7.4 | 36 |
| 198 | Time-dependent restricted-active-space self-consistent-field singles method for many-electron dynamics. <i>Journal of Chemical Physics</i> , 2014 , 140, 164309 | 3.9 | 36 |
| 197 | Strong-field approximation in laser-assisted dynamics. <i>American Journal of Physics</i> , 2005 , 73, 57-62 | 0.7 | 36 |
| 196 | Theory of laser-assisted electron-atom scattering: beyond the Kroll-Watson approximation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1995 , 28, 5327-5342 | 1.3 | 36 |
| 195 | High-order harmonic generation from gapped graphene: Perturbative response and transition to nonperturbative regime. <i>Physical Review B</i> , 2017 , 95, | 3.3 | 35 |
| 194 | Interrogation of orbital structure by elliptically polarized intense femtosecond laser pulses. <i>Physical Review A</i> , 2011 , 84, | 2.6 | 35 |
| 193 | Colloquium: Multiconfigurational time-dependent Hartree approaches for indistinguishable particles. <i>Reviews of Modern Physics</i> , 2020 , 92, | 40.5 | 34 |
| 192 | Estimation of a classical parameter with Gaussian probes: Magnetometry with collective atomic spins. <i>Physical Review A</i> , 2004 , 70, | 2.6 | 34 |

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|-----|---|-----|----|
| 191 | Geometric phases in open tripod systems. <i>Physical Review A</i> , 2008 , 77, | 2.6 | 33 |
| 190 | Strong orientation effects in ionization of H ₂ by short, intense, high-frequency light pulses. <i>Physical Review Letters</i> , 2005 , 95, 093002 | 7.4 | 33 |
| 189 | in intense laser fields: mechanisms for enhanced ionization in the multiphoton regime. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1998 , 31, 87-104 | 1.3 | 33 |
| 188 | Enhanced high-order harmonic generation in donor-doped band-gap materials. <i>Physical Review A</i> , 2019 , 99, | 2.6 | 32 |
| 187 | Internuclear-distance dependence of the role of excited states in high-order-harmonic generation of H ₂ ⁺ . <i>Physical Review A</i> , 2013 , 87, | 2.6 | 32 |
| 186 | Two-center minima in harmonic spectra from aligned polar molecules. <i>Physical Review A</i> , 2011 , 84, | 2.6 | 32 |
| 185 | Inducing elliptically polarized high-order harmonics from aligned molecules with linearly polarized femtosecond pulses. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 31 |
| 184 | Rotating-frame perspective on high-order-harmonic generation of circularly polarized light. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 30 |
| 183 | Electron emission during combined attosecond pulses. <i>Physical Review A</i> , 2003 , 68, | 2.6 | 30 |
| 182 | Alignment- and orientation-dependent strong-field ionization of molecules: Field-induced orbital distortion effects. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 29 |
| 181 | Nuclear-motion effects in attosecond transient-absorption spectroscopy of molecules. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 29 |
| 180 | Extraction of electron differential scattering cross sections for C ₂ H ₄ by laser-induced rescattering photoelectron spectroscopy. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012 , 45, 131001 | 1.3 | 28 |
| 179 | Ionization of oriented targets by intense circularly polarized laser pulses: Imprints of orbital angular nodes in the two-dimensional momentum distribution. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 28 |
| 178 | Excitation in ion-atom collisions inside subfemtosecond laser pulses. <i>Physical Review Letters</i> , 2002 , 89, 093202 | 7.4 | 28 |
| 177 | Dissociation and dissociative ionization of H ₂ ⁺ using the time-dependent surface flux method. <i>Physical Review A</i> , 2013 , 88, | 2.6 | 27 |
| 176 | Time-dependent restricted-active-space self-consistent-field theory for bosonic many-body systems. <i>New Journal of Physics</i> , 2017 , 19, 043007 | 2.9 | 26 |
| 175 | Laser-induced transitions between triply excited hollow states. <i>Physical Review Letters</i> , 2000 , 85, 42-5 | 7.4 | 26 |
| 174 | Monte carlo wave packet theory of dissociative double ionization. <i>Physical Review Letters</i> , 2009 , 103, 183601 | 7.4 | 25 |

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|-----|--|-----|----|
| 173 | Theoretical studies of high-order harmonic generation: Effects of symmetry, degeneracy, and orientation. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 25 |
| 172 | Kinematical vortices in double photoionization of helium by attosecond pulses. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 24 |
| 171 | Spectral and partial-wave decomposition of time-dependent wave functions on a grid: Photoelectron spectra of H and H ₂ ⁺ in electromagnetic fields. <i>Physical Review A</i> , 2007 , 75, | 2.6 | 24 |
| 170 | Application of the weak-field asymptotic theory to tunneling ionization of H ₂ O. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 23 |
| 169 | Minimum in the high-order harmonic generation spectrum from molecules: role of excited states. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010 , 43, 225601 | 1.3 | 23 |
| 168 | The N-dimensional Coulomb problem: Stark effect in hyperparabolic and hyperspherical coordinates. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007 , 40, 1097-1104 | 2 | 23 |
| 167 | Three-dimensional time-dependent Hartree-Fock approach for arbitrarily oriented molecular hydrogen in strong electromagnetic fields. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 23 |
| 166 | Strong-field-ionization suppression by light-field control. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 22 |
| 165 | Theory of attosecond absorption spectroscopy in krypton. <i>Physical Review A</i> , 2012 , 85, | 2.6 | 22 |
| 164 | Effects of orientation and alignment in high-order harmonic generation and above-threshold ionization. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 22 |
| 163 | Attosecond transient absorption spectroscopy of molecular nitrogen: Vibrational coherences in the b ² 1 π _u state. <i>Chemical Physics Letters</i> , 2017 , 683, 408-415 | 2.5 | 21 |
| 162 | Nonlinear Dichroism in Back-to-Back Double Ionization of He by an Intense Elliptically Polarized Few-Cycle Extreme Ultraviolet Pulse. <i>Physical Review Letters</i> , 2014 , 113, 223002 | 7.4 | 21 |
| 161 | Geometrical dependence in photoionization of H ₂ ⁺ in high-intensity, high-frequency, ultrashort laser pulses. <i>Physical Review A</i> , 2006 , 73, | 2.6 | 21 |
| 160 | Strong-field ionization of atoms and molecules: The two-term saddle-point method. <i>Physical Review A</i> , 2006 , 74, | 2.6 | 21 |
| 159 | Molecules in intense xuv pulses: Beyond the dipole approximation in linearly and circularly polarized fields. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 21 |
| 158 | Probabilistic state preparation of a single molecular ion by projection measurement. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006 , 39, S1259-S1265 | 1.3 | 21 |
| 157 | Laser-induced transitions between triply excited hollow states. <i>Physical Review A</i> , 2000 , 62, | 2.6 | 21 |
| 156 | Structure factors for tunneling ionization rates of diatomic molecules. <i>Atomic Data and Nuclear Data Tables</i> , 2015 , 103-104, 4-49 | 2 | 20 |

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| 155 | Magnetometry with entangled atomic samples. <i>Physical Review A</i> , 2005 , 71, | 2.6 | 20 |
| 154 | High-order harmonic generation in imperfect crystals. <i>Physical Review A</i> , 2019 , 99, | 2.6 | 19 |
| 153 | Theory of low-energy photoelectrons in strong-field ionization by laser pulses with large ellipticity. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 19 |
| 152 | Dissociative ionization of H ₂ ⁺ using intense femtosecond XUV laser pulses. <i>Physical Review A</i> , 2014 , 90, | 2.6 | 19 |
| 151 | High-order harmonic generation from polyatomic molecules including nuclear motion and a nuclear modes analysis. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 19 |
| 150 | Comment on Strong-field ionization of laser-irradiated light homonuclear diatomic molecules: A generalized strong-field approximation combination of atomic orbitals model <i>Physical Review A</i> , 2006 , 73, | 2.6 | 19 |
| 149 | Field-induced orbital distortion in high-order-harmonic generation from aligned and oriented molecules within adiabatic strong-field approximation. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 18 |
| 148 | Retardation effects and the Born-Oppenheimer approximation: theory of tunneling ionization of molecules revisited. <i>Physical Review Letters</i> , 2013 , 111, 153003 | 7.4 | 17 |
| 147 | Finite-bandwidth effects in strong-field ionization of atoms by few-cycle circularly polarized laser pulses. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 17 |
| 146 | Time delays in cold elastic scattering. <i>Journal of Chemical Physics</i> , 2003 , 118, 1679-1683 | 3.9 | 17 |
| 145 | Multispecies time-dependent restricted-active-space self-consistent-field theory for ultracold atomic and molecular gases. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018 , 51, 155302 ¹⁻³ | | 16 |
| 144 | High-order-harmonic generation from field-distorted orbitals. <i>Physical Review A</i> , 2013 , 87, | 2.6 | 16 |
| 143 | Rotational cooling of molecular ions through laser-induced coupling to the collective modes of a two-ion Coulomb crystal. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006 , 39, S1267-S1280 | 1.3 | 16 |
| 142 | Triply excited states: electron-electron correlations in lithium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003 , 36, R223-R278 | 1.3 | 16 |
| 141 | Electron correlation in beryllium: Effects in the ground state, short-pulse photoionization, and time-delay studies. <i>Physical Review A</i> , 2017 , 95, | 2.6 | 15 |
| 140 | Electron-correlation effects in enhanced ionization of molecules: A time-dependent generalized-active-space configuration-interaction study. <i>Physical Review A</i> , 2015 , 92, | 2.6 | 15 |
| 139 | From multiphoton to tunnelling ionization of neon and argon. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 151001 | 1.3 | 15 |
| 138 | Multiphoton intrashell resonances in Rydberg atoms: Bloch-Siegert shifts and widths. <i>Physical Review A</i> , 2004 , 69, | 2.6 | 15 |

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|-----|---|-----|----|
| 137 | Ionization and excitation dynamics of H(1s) in short intense laser pulses. II. <i>Physical Review A</i> , 2002 , 66, | 2.6 | 15 |
| 136 | Multiphoton ionization of H ₂ ⁺ by intense light: A comparison of Floquet and wave-packet results. <i>Physical Review A</i> , 1998 , 58, 456-465 | 2.6 | 15 |
| 135 | Dynamical electron vortices in attosecond double photoionization of H ₂ . <i>Physical Review A</i> , 2018 , 98, | 2.6 | 15 |
| 134 | Rotational cooling of molecules using lamps. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004 , 37, 4571-4574 | 1.3 | 14 |
| 133 | On selection rules for atoms in laser fields and high harmonic generation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2002 , 35, L403-L408 | 1.3 | 14 |
| 132 | Alignment-dependent strong-field ionization yields of carbonyl sulfide molecules induced by mid-infrared laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016 , 49, 205601 | 1.3 | 14 |
| 131 | Time-dependent restricted-active-space self-consistent-field theory with space partition. <i>Physical Review A</i> , 2017 , 95, | 2.6 | 13 |
| 130 | Attosecond transient-absorption spectroscopy on aligned molecules. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 13 |
| 129 | Floquet-Bloch shifts in two-band semiconductors interacting with light. <i>Physical Review A</i> , 2017 , 95, | 2.6 | 13 |
| 128 | Light-induced structures in attosecond transient-absorption spectroscopy of molecules. <i>Physical Review A</i> , 2015 , 92, | 2.6 | 13 |
| 127 | Strong-field short-pulse nondipole dynamics. <i>Physical Review A</i> , 2009 , 80, | 2.6 | 13 |
| 126 | Time-resolved subcycle dynamics: Importance of physical fields and gauge invariance. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 13 |
| 125 | The role of the atomic potential in the regime of strong-field tunnelling ionization: imprints on longitudinal and 2D momentum distributions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 245601 | 1.3 | 13 |
| 124 | Inter- and intracycle interference effects in strong-field dissociative ionization. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 12 |
| 123 | Alignment dependence in above-threshold ionization of H ₂ ⁺ : role of intermediate resonances. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009 , 42, 085602 | 1.3 | 12 |
| 122 | Effective range theory. <i>American Journal of Physics</i> , 2002 , 70, 811-814 | 0.7 | 12 |
| 121 | Effect of multielectron polarization in the strong-field ionization of the oriented CO molecule. <i>Physical Review A</i> , 2020 , 101, | 2.6 | 11 |
| 120 | Ehrenfest's theorem and the validity of the two-step model for strong-field ionization. <i>Physical Review A</i> , 2013 , 87, | 2.6 | 11 |

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|-----|--|-----|----|
| 119 | Structure factors for tunneling ionization rates of molecules: General Hartree-Fock-based integral representation. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 11 |
| 118 | Asymmetric photoelectron momentum distributions due to quantum interference in strong-field ionization by a few-cycle pulse. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 11 |
| 117 | Dissociative double ionization of H ₂ and D ₂ : Comparison between experiment and Monte Carlo wave packet calculations. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 11 |
| 116 | Monte Carlo wave packet approach to dissociative multiple ionization in diatomic molecules. <i>Physical Review A</i> , 2010 , 81, | 2.6 | 11 |
| 115 | Laser-induced bound-state phases in high-order-harmonic generation. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 11 |
| 114 | Reaction and scattering in cold electron collisions. <i>Physical Review Letters</i> , 2003 , 90, 083201 | 7.4 | 11 |
| 113 | A simple test of theories of laser-assisted electron-atom scattering. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1998 , 31, 4701-4716 | 1.3 | 11 |
| 112 | Sequential and nonsequential double ionization of helium by intense XUV laser pulses: Revealing ac Stark shifts from joint energy spectra. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 11 |
| 111 | Electron correlation in tunneling ionization of diatomic molecules: An application of the many-electron weak-field asymptotic theory with a generalized-active-space partition scheme. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 10 |
| 110 | Alignment dependence of photoelectron momentum distributions of atomic and molecular targets probed by few-cycle circularly polarized laser pulses. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 10 |
| 109 | Signatures of a Conical Intersection in Attosecond Transient Absorption Spectroscopy. <i>Physical Review Letters</i> , 2018 , 121, 023203 | 7.4 | 10 |
| 108 | Above-threshold ionization of helium in the long-wavelength regime: Examining the single-active-electron approximation and the two-electron strong-field approximation. <i>Physical Review A</i> , 2017 , 95, | 2.6 | 10 |
| 107 | Strong-field ionization of three-dimensionally aligned naphthalene molecules: orbital modification and imprints of orbital nodal planes. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015 , 48, 245601 | 1.3 | 10 |
| 106 | Efficient excitation of Ps by 50-100 fs laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999 , 32, L425-L431 | 1.3 | 10 |
| 105 | Procedures for the evaluation of atomic transition matrix elements in the interaction with laser light. <i>Computer Physics Communications</i> , 1999 , 120, 231-237 | 4.2 | 10 |
| 104 | Nondipole strong-field-approximation Hamiltonian. <i>Physical Review A</i> , 2020 , 101, | 2.6 | 10 |
| 103 | Attosecond photoionization dynamics in neon. <i>Physical Review A</i> , 2018 , 97, | 2.6 | 9 |
| 102 | Multielectron polarization effects in strong-field ionization: Narrowing of momentum distributions and imprints in interference structures. <i>Physical Review A</i> , 2018 , 98, | 2.6 | 9 |

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|-----|--|-----|---|
| 101 | Secondary-electron cascade in attosecond photoelectron spectroscopy from metals. <i>Physical Review A</i> , 2009 , 80, | 2.6 | 9 |
| 100 | Above-threshold ionization, energy-resolved photoelectron angular distributions, and momentum distributions of H ₂ ⁺ in intense femtosecond laser pulses. <i>Physical Review A</i> , 2009 , 79, | 2.6 | 9 |
| 99 | The calculation of multiphoton ionization rates of the hydrogen molecular ion. <i>Computer Physics Communications</i> , 1998 , 114, 94-119 | 4.2 | 9 |
| 98 | Correlated electrons in lithiumlike hollow atoms. <i>Physical Review Letters</i> , 2001 , 87, 133002 | 7.4 | 9 |
| 97 | Symmetric rotor of lithiumlike hollow atoms. <i>Physical Review A</i> , 2002 , 65, | 2.6 | 9 |
| 96 | Laser excitation of angular Rydberg wavepackets. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999 , 32, 4995-5007 | 1.3 | 9 |
| 95 | Torsional and rotational couplings in nonrigid molecules. <i>Physical Review A</i> , 2017 , 95, | 2.6 | 8 |
| 94 | Exterior time scaling with the stiffness-free Lanczos time propagator: Formulation and application to atoms interacting with strong midinfrared lasers. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 8 |
| 93 | Characterization of Molecular Breakup by Very Intense Femtosecond XUV Laser Pulses. <i>Physical Review Letters</i> , 2015 , 115, 033001 | 7.4 | 8 |
| 92 | Atomic and molecular phases through attosecond streaking. <i>Physical Review A</i> , 2011 , 83, | 2.6 | 8 |
| 91 | Time dependence of ionization and excitation by few-cycle laser pulses. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 8 |
| 90 | Line shapes in photoexcitation of triply excited hollow states. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001 , 34, 1855-1868 | 1.3 | 8 |
| 89 | Comment on "Suppression of angular-momentum mixing in photoexcitation of rydberg states by multistate off-resonant quantum coherence". <i>Physical Review Letters</i> , 2000 , 85, 898 | 7.4 | 8 |
| 88 | Crystal-momentum-resolved contributions to multiple plateaus of high-order harmonic generation from band-gap materials. <i>Physical Review A</i> , 2020 , 102, | 2.6 | 8 |
| 87 | Structure factors for tunneling ionization rates of molecules: General grid-based methodology and convergence studies. <i>Journal of Chemical Physics</i> , 2018 , 149, 164107 | 3.9 | 8 |
| 86 | Probing atomic and molecular targets by intense bicircular counter-rotating laser fields. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018 , 51, 135401 | 1.3 | 8 |
| 85 | Theory of dissociative tunneling ionization. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 7 |
| 84 | Coulomb and dipole effects in tunneling ionization of molecules including nuclear motion. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 7 |

| | | | |
|----|--|-----|---|
| 83 | Nondipole effects in attosecond photoelectron streaking. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 7 |
| 82 | Energy-resolved photoelectron angular distributions of H ₂ in intense femtosecond laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009 , 42, 021001 | 1.3 | 7 |
| 81 | Laser-assisted ion-atom collisions: Plateau, cutoff, and multiphoton peaks. <i>Physical Review A</i> , 2008 , 77, | 2.6 | 7 |
| 80 | Ellipticity dependence of the validity of the saddle-point method in strong-field ionization by few-cycle laser pulses. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 7 |
| 79 | Strong-field ionization of N ₂ : length and velocity gauge strong-field approximation and tunnelling theory. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006 , 39, 3707-3707 | 1.3 | 7 |
| 78 | Entangled Quantum Dynamics of Many-Body Systems using Bohmian Trajectories. <i>Scientific Reports</i> , 2018 , 8, 12704 | 4.9 | 6 |
| 77 | Analytic modeling of structures in attosecond transient-absorption spectra. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 6 |
| 76 | Laser-assisted electron - atom resonance scattering and laser-induced resonance interference. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1997 , 30, 1599-1610 | 1.3 | 6 |
| 75 | Electron emission in energetic ion-atom collisions in the presence of coherent electromagnetic radiation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006 , 39, 5037-5050 | 1.3 | 6 |
| 74 | Comment on "Generalization of Keldysh theory" <i>Physical Review A</i> , 2007 , 75, | 2.6 | 6 |
| 73 | Strong-field approximation for Coulomb explosion of H ₂ ⁺ and D ₂ ⁺ by short intense laser pulses. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 6 |
| 72 | Gaussian-state description of squeezed light. <i>Physical Review A</i> , 2005 , 72, | 2.6 | 6 |
| 71 | Classification of atomic states by geometrical and quantum-mechanical symmetries. <i>Physical Review A</i> , 2005 , 72, | 2.6 | 6 |
| 70 | Pyramidal atoms: Berylliumlike hollow states. <i>Physical Review A</i> , 2005 , 71, | 2.6 | 6 |
| 69 | Comment on "Laser-enhanced antihydrogen formation" <i>Physical Review A</i> , 2000 , 61, | 2.6 | 6 |
| 68 | Selection rule in the theory of laser-assisted charged-particle scattering. <i>Physical Review A</i> , 1999 , 60, 5126-5128 | 2.6 | 6 |
| 67 | Electron correlation effects in enhanced ionization of diatomic molecules in near-infrared fields. <i>Physical Review A</i> , 2019 , 99, | 2.6 | 6 |
| 66 | Effects of core space and excitation levels on ground-state correlation and photoionization dynamics of Be and Ne. <i>Journal of Chemical Physics</i> , 2019 , 150, 084305 | 3.9 | 5 |

| | | | |
|----|--|-----|---|
| 65 | Suppression of strong-field ionization by optimal pulse shaping: Application to hydrogen and the hydrogen molecular ion. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 5 |
| 64 | Alignment-dependent above-threshold ionization of molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007 , 40, 237-245 | 1.3 | 5 |
| 63 | Triply excited Rydberg series and their doubly excited limits in hollow lithium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001 , 34, 2137-2144 | 1.3 | 5 |
| 62 | Rotational structure in multiply excited atoms. <i>Physical Review A</i> , 2001 , 64, | 2.6 | 5 |
| 61 | Polarization effect in electron-excitation of hydrogen. <i>Physical Review A</i> , 1995 , 52, 2429-2432 | 2.6 | 5 |
| 60 | Effects of vacancies on high-order harmonic generation in a linear chain with band gap. <i>Physical Review Research</i> , 2020 , 2, | 3.9 | 5 |
| 59 | Laser-induced Coulomb-explosion imaging of the CS ₂ dimer: The effect of non-Coulombic interactions. <i>Physical Review A</i> , 2020 , 102, | 2.6 | 5 |
| 58 | Attosecond transient-absorption spectroscopy of polar molecules. <i>Physical Review A</i> , 2018 , 98, | 2.6 | 5 |
| 57 | Nonsequential double-recombination high-order-harmonic generation in molecularlike systems. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 4 |
| 56 | Interplay between pulse parameters and alignment of H_2^+ in strong laser fields. <i>Journal of Physics: Conference Series</i> , 2017 , 869, 012009 | 0.3 | 4 |
| 55 | Observation of low-energy electrons in the photoelectron energy distribution from strong-field ionization of naphthalene by circularly polarized pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015 , 48, 121001 | 1.3 | 4 |
| 54 | Dissociative multiple ionization of diatomic molecules by extreme-ultraviolet free-electron-laser pulses. <i>Physical Review A</i> , 2011 , 83, | 2.6 | 4 |
| 53 | Fidelities for transformations of unknown quantum states. <i>Physical Review A</i> , 2006 , 73, | 2.6 | 4 |
| 52 | Triply excited symmetric rotor states: distributions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003 , 36, 769-779 | 1.3 | 4 |
| 51 | Positronium in laser fields. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 221, 174-181 | 1.2 | 4 |
| 50 | Off-shell effects in laser-assisted scattering. <i>European Physical Journal D</i> , 2004 , 29, 209-216 | 1.3 | 4 |
| 49 | A spectral method for integration of the time-dependent Schrödinger equation in hyperspherical coordinates. <i>Journal of Physics A</i> , 2005 , 38, 6977-6985 | | 4 |
| 48 | CHAPTER 11: Time-dependent Restricted-active-space Self-consistent-field Theory for Electron Dynamics on the Attosecond Timescale. <i>RSC Theoretical and Computational Chemistry Series</i> , 386-423 | 1.2 | 4 |

| | | | |
|----|--|-----|---|
| 47 | Laser-induced dissociative ionization of H ₂ from the near-infrared to the mid-infrared regime. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 4 |
| 46 | Time-resolved spectroscopy of interparticle Coulombic decay processes. <i>Physical Review A</i> , 2020 , 101, | 2.6 | 3 |
| 45 | Ionization of helium by intense XUV laser pulses: Numerical simulations on channel-resolved probabilities. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 3 |
| 44 | Same-period emission and recombination in nonsequential double-recombination high-order-harmonic generation. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 3 |
| 43 | Excitation spectra of systems of indistinguishable particles by the autocorrelation function technique: Circumventing the exponential scaling for bosons. <i>Journal of Chemical Physics</i> , 2019 , 150, 194105 | 3.9 | 3 |
| 42 | Pulse-length effects in strong-field ionization of atoms by co-rotating and counter-rotating bicircular laser pulses. <i>Physical Review A</i> , 2019 , 100, | 2.6 | 3 |
| 41 | Momentum distributions of selected rare-gas atoms probed by intense femtosecond laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011 , 44, 235601 | 1.3 | 3 |
| 40 | Control of autoionization widths: Doubly excited coherent elliptic states. <i>Physical Review A</i> , 2006 , 73, | 2.6 | 3 |
| 39 | Off-shell effects in laser-assisted scattering. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000 , 33, 2869-2874 | 1.3 | 3 |
| 38 | Core-resonant ionization of helium by intense XUV pulses: Analytical and numerical studies on channel-resolved spectral features. <i>Physical Review A</i> , 2018 , 98, | 2.6 | 3 |
| 37 | Enhancement of Above Threshold Ionization in Resonantly Excited Helium Nanodroplets. <i>Physical Review Letters</i> , 2021 , 127, 093201 | 7.4 | 3 |
| 36 | Blow-up time discretization: a versatile time propagator for the time-dependent Schrödinger equation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014 , 47, 075007 | 1.3 | 2 |
| 35 | Isotopic scaling in strong-field dissociation by few-cycle pulses. <i>Physical Review A</i> , 2009 , 79, | 2.6 | 2 |
| 34 | Publisher's Note: Comment on Strong-field ionization of laser-irradiated light homonuclear diatomic molecules: A generalized strong-field approximation near combination of atomic orbitals model [Phys. Rev. A 73, 047401 (2006)]. <i>Physical Review A</i> , 2006 , 73, | 2.6 | 2 |
| 33 | Minimizing the loss of entanglement under dimensional reduction. <i>European Physical Journal D</i> , 2004 , 29, 293-299 | 1.3 | 2 |
| 32 | The determination of absolute anion formation cross sections from electron beam scattering data. <i>Journal of Chemical Physics</i> , 2005 , 122, 024309 | 3.9 | 2 |
| 31 | Excitation and ionization of positronium by 5000 fs laser pulses 2000 , 127, 185-188 | | 2 |
| 30 | Torsional effects in strong-field ionization of molecules. <i>Physical Review Research</i> , 2019 , 1, | 3.9 | 2 |

| | | | |
|----|--|------|---|
| 29 | Nondipole effects in laser-assisted electron scattering. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020 , 53, 195602 | 1.3 | 2 |
| 28 | Multielectron effects in strong-field ionization of the oriented OCS molecule. <i>Physical Review A</i> , 2020 , 102, | 2.6 | 2 |
| 27 | Dynamics of interatomic Coulombic decay in neon dimers by XUV-pumpXUV-probe spectroscopy. <i>Physical Review A</i> , 2019 , 99, | 2.6 | 2 |
| 26 | Nondipole photoelectron momentum shifts in strong-field ionization with mid-infrared laser pulses of long duration. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021 , 54, 165602 | 1.3 | 2 |
| 25 | Asymmetric Dissociative Tunneling Ionization of Tetrafluoromethane in - 2 Intense Laser Fields.. <i>Frontiers in Chemistry</i> , 2022 , 10, 857863 | 5 | 2 |
| 24 | Molecular Symmetry-Mixed Dichroism in Double Photoionization of H ₂ . <i>Physical Review Letters</i> , 2019 , 123, 143202 | 7.4 | 1 |
| 23 | Monte Carlo wave-packet approach to trace nuclear dynamics in molecular excited states by XUV-pumpIR-probe spectroscopy. <i>Physical Review A</i> , 2018 , 97, | 2.6 | 1 |
| 22 | Bound and continuum energy distributions of nuclear fragments resulting from tunneling ionization of molecules. <i>Physical Review A</i> , 2018 , 97, | 2.6 | 1 |
| 21 | Attosecond charge migration and its laser control. <i>Journal of Physics: Conference Series</i> , 2015 , 635, 1121363 | 13.6 | 1 |
| 20 | Reply to Comment on On the dipole, velocity and acceleration forms in high-order harmonic generation from a single atom or molecule. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012 , 45, 028002 | 1.3 | 1 |
| 19 | Photodetachment of He ⁻ in the vicinity of the two-electron escape threshold. <i>Physical Review Letters</i> , 2003 , 90, 013002 | 7.4 | 1 |
| 18 | Binding bare nuclei with strong laser fields: Nondipole effects. <i>Physical Review A</i> , 2005 , 71, | 2.6 | 1 |
| 17 | Laser excitation of angular Rydberg wavepackets in a static magnetic field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001 , 34, L39-L45 | 1.3 | 1 |
| 16 | Two- and- Three Electron Atoms in Strong Laser Fields 2001 , 153-168 | | 1 |
| 15 | Coherent scattering of an optically modulated electron beam by atoms. <i>Physical Review A</i> , 2021 , 103, | 2.6 | 1 |
| 14 | Helicity-dependent dissociative tunneling ionization of CF in multicycle circularly polarized intense laser fields.. <i>Physical Chemistry Chemical Physics</i> , 2022 , | 3.6 | 1 |
| 13 | MCTDH-X: The Multiconfigurational Time-Dependent Hartree Method for Indistinguishable Particles High-Performance Computation Project 2021 , 21-45 | | 0 |
| 12 | Different forms of laser-matter interaction operators and expansion in adiabatic states. <i>European Physical Journal: Special Topics</i> ,1 | 2.3 | 0 |

- 11 Two attosecond pulse transient absorption spectroscopy and extraction of the instantaneous AC Stark shift in helium. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2016**, 49, 14LT02 1.3
- 10 Non-perturbative semiclassical model for strong-field ionization. *Journal of Physics: Conference Series*, **2017**, 875, 022019 0.3
- 9 Electron Matter-Wave Vortices in Double Photoionization of Helium by Attosecond Pulses. *Journal of Physics: Conference Series*, **2017**, 875, 022014 0.3
- 8 Intense near-IR laser induced electron-ion scattering experiment on hydrocarbon molecules. *Journal of Physics: Conference Series*, **2015**, 635, 112029 0.3
- 7 Two-step semiclassical model for strong-field ionization with interference and multielectron polarization effects. *Journal of Physics: Conference Series*, **2015**, 635, 092047 0.3
- 6 Probing the longitudinal momentum spread of the electron wave packet at the tunnel exit. *EPJ Web of Conferences*, **2013**, 41, 02017 0.3
- 5 Probe dispersion and quantum coherence. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **1997**, 30, L419-L425 1.3
- 4 Atoms and molecules in intense attosecond fields: beyond the dipole approximation. *Journal of Physics: Conference Series*, **2007**, 88, 012049 0.3
- 3 Complex-scaled Hartree-Fock wave functions for the frozen core: A B spline approach. *Computer Physics Communications*, **2003**, 151, 47-59 4.2
- 2 Gaussian Description of Continuous Measurements on Continuous Variable Quantum Systems **2007**, 435-462
- 1 Photoionization of aligned excited states in neon by attosecond laser pulses. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2021**, 54, 054001 1.3