# Robert Lucchese

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5841506/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 347 papers | 8,820 citations | 47004 47 h-index | 76898 74 g-index |
| 360 all docs | 360 docs citations | 360 times ranked | 3053 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Studies of differential and total photoionization cross sections of molecular nitrogen. Physical Review A, 1982, 25, 2572-2587. | 2.5 | 421 |
| 2 | Quantitative rescattering theory for high-order harmonic generation from molecules. Physical Review A, 2009, 80, . | 2.5 | 315 |
| 3 | Applications of the Schwinger variational principle to electron-molecule collisions and molecular photoionization. Physics Reports, 1986, 131, 147-221. | 25.6 | 236 |
| 4 | Strong-field rescattering physicsâ€"self-imaging of a molecule by its own electrons. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 122001. | 1.5 | 234 |
| 5 | Calculation of lowâ€energy elastic cross sections for electronâ€CF4 scattering. Journal of Chemical Physics, 1994, 100, 6464-6471. | 3.0 | 183 |
| 6 | Cross section and asymmetry parameter calculation for sulfur 1s photoionization of SF6. Journal of Chemical Physics, 1999, 111, 5344-5348. | 3.0 | 170 |
| 7 | Infrared linewidths and vibrational lifetimes at surfaces: H on Si(100). Physical Review B, 1985, 31, 1184-1186. | 3.2 | 149 |
| 8 | Monte Carlo simulations of gasâ€phase collisions in rapid desorption of molecules from surfaces. Journal of Chemical Physics, 1987, 86, 5816-5824. | 3.0 | 125 |
| 9 | Multipletâ€specific multichannel electronâ€correlation effects in the photoionization of NO. Journal of Chemical Physics, 1996, 104, 8989-9000. | 3.0 | 106 |
| 10 | One-electron resonances in electron scattering from polyatomic molecules. International Reviews in Physical Chemistry, 1996, 15, 429-466. | 2.3 | 99 |
| 11 | Iterative approach to the Schwinger variational principle for electron-molecule collisions. Physical Review A, 1980, 22, 421-426. | 2.5 | 98 |
| 12 | A graphical unitary group approach to study multiplet specific multichannel electron correlation effects in the photoionization of O2. Journal of Chemical Physics, 1995, 102, 8493-8505. | 3.0 | 96 |
| 13 | Trajectory studies of vibrational energy transfer in gasâ€"surface collisions. Journal of Chemical Physics, 1984, 80, 3451-3462. | 3.0 | 85 |
| 14 | Studies of differential and total photoionization cross sections of carbon dioxide. Physical Review A, 1982, 26, 1406-1418. | 2.5 | 81 |
| 15 | Application of the Schwinger variational principle to electron-ion scattering in the static-exchange approximation. Physical Review A, 1980, 21, 112-123. | 2.5 | 79 |
| 16 | Polar and azimuthal dependence of the molecular frame photoelectron angular distributions of spatially oriented linear molecules. Physical Review A, 2002, 65, . | 2.5 | 78 |
| 17 | PadÃ©-approximant corrections to general variational expressions of scattering theory: Application to5Ïƒphotoionization of carbon monoxide. Physical Review A, 1983, 28, 1382-1394. | 2.5 | 77 |
| 18 | Complete description of linear molecule photoionization achieved by vector correlations using the light of a single circular polarization. Journal of Chemical Physics, 2003, 118, 9653-9663. | 3.0 | 76 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Selective Bond Breaking in Î²-d-Ribose by Gas-Phase Electron Attachment around 8 eV. Journal of the American Chemical Society, 2007, 129, 6269-6277. | 13.7 | 72 |
| 20 | Radiation damage of biosystems mediated by secondary electrons: Resonant precursors for uracil molecules. Journal of Chemical Physics, 2004, 120, 7446-7455. | 3.0 | 70 |
| 21 | 4Ïƒâˆ’1Inner Valence Photoionization Dynamics of NO Derived from Photoelectron-Photoion Angular Correlations. Physical Review Letters, 2002, 88, 193002. | 7.8 | 69 |
| 22 | Photoelectron dynamics of molecules. The Journal of Physical Chemistry, 1984, 88, 3188-3196. | 2.9 | 67 |
| 23 | Triple differential cross sections for molecular hydrogen, both under Bethe ridge conditions and in the dipolar regime. Experiments and theory. Journal of Physics B: Atomic, Molecular and Optical Physics, 1989, 22, 3483-3499. | 1.5 | 66 |
| 24 | Probing Molecular Frame Photoionization via Laser Generated High-Order Harmonics from Aligned Molecules. Physical Review Letters, 2009, 102, 203001. | 7.8 | 66 |
| 25 | One-electron resonances and computed cross sections in electron scattering from the benzene molecule. Journal of Chemical Physics, 1998, 108, 6144-6159. | 3.0 | 64 |
| 26 | Attosecond control of dissociative ionization of O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>molecules. Physical Review A, 2011, 84, . | 2.5 | 64 |
| 27 | Accurate Hartree-Fock vibrational branching ratios in 3Ïƒgphotoionisation of N2. Journal of Physics B: Atomic and Molecular Physics, 1981, 14, L629-L634. | 1.6 | 62 |
| 28 | Effects of gasâ€phase collisions in rapid desorption of molecules from surfaces in the presence of coadsorbates. Journal of Chemical Physics, 1988, 89, 5251-5263. | 3.0 | 62 |
| 29 | Intensity dependence of multiple orbital contributions and shape resonance in high-order harmonic generation of aligned N<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>molecules. Physical Review A, 2012, 85, . | 2.5 | 62 |
| 30 | Laser induced thermal desorption from surfaces. Journal of Chemical Physics, 1984, 81, 6313-6319. | 3.0 | 61 |
| 31 | Vibrationally resolved cross sections and asymmetry parameters for the photoionization ofN2with coupling between the (3Ïƒg)âˆ’1and the (2Ïƒu)âˆ’1channels. Physical Review A, 1988, 37, 89-97. | 2.5 | 61 |
| 32 | High Harmonic Spectroscopy of the Cooper Minimum in Molecules. Physical Review Letters, 2013, 110, 033006. | 7.8 | 61 |
| 33 | Schwinger variational principle for electron-molecule scattering: Application to electron-hydrogen scattering. Physical Review A, 1980, 21, 738-744. | 2.5 | 60 |
| 34 | On the scattering of lowâ€energy electrons by sulphur hexafluoride. Journal of Chemical Physics, 1995, 102, 5743-5751. | 3.0 | 58 |
| 35 | Ring-breaking electron attachment to uracil: Following bond dissociations via evolving resonances. Journal of Chemical Physics, 2008, 128, 174302. | 3.0 | 57 |
| 36 | High-Harmonic Probing of Electronic Coherence in Dynamically Aligned Molecules. Physical Review Letters, 2013, 111, 243005. | 7.8 | 56 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Vector correlations in dissociative photoionization of O2 in the 20â€“28 eV range. II. Polar and azimuthal dependence of the molecular frame photoelectron angular distribution. Journal of Chemical Physics, 2002, 117, 8368-8384. | 3.0 | 55 |
| 38 | Iterative approach to the Schwinger variational principle applied to electronâ€”molecular-ion collisions. Physical Review A, 1981, 24, 770-776. | 2.5 | 54 |
| 39 | Thermal spike model for heavy ion induced desorption from surfaces. Journal of Chemical Physics, 1987, 86, 443-453. | 3.0 | 54 |
| 40 | Effects of gas-phase collisions on particles rapidly desorbed from surfaces. Physical Review B, 1987, 36, 4978-4981. | 3.2 | 54 |
| 41 | One-particle resonances in low-energy electron scattering from C60. Journal of Chemical Physics, 1999, 111, 6769-6786. | 3.0 | 54 |
| 42 | Uncovering multiple orbitals influence in high harmonic generation from aligned N<sub>2</sub>. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 211001. | 1.5 | 54 |
| 43 | Extracting Electron-Ion Differential Scattering Cross Sections for Partially Aligned Molecules by Laser-Induced Rescattering Photoelectron Spectroscopy. Physical Review Letters, 2011, 106, 063001. | 7.8 | 53 |
| 44 | Trajectory studies of rainbow scattering from the reconstructed Si(100) surface. Surface Science, 1984, 137, 570-594. | 1.9 | 52 |
| 45 | Roadmap on photonic, electronic and atomic collision physics: I. Lightâ€“matter interaction. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 171001. | 1.5 | 52 |
| 46 | Photolysis of methane revisited at 121.6 nm and at 118.2 nm: quantum yields of the primary products, measured by mass spectrometry. Physical Chemistry Chemical Physics, 2011, 13, 8140. | 2.8 | 50 |
| 47 | Electron-impact excitation and dissociation processes inH2. Physical Review A, 1982, 26, 3240-3248. | 2.5 | 49 |
| 48 | Energy separation between the open (C2v) and closed (D3h) forms of ozone. Journal of Chemical Physics, 1977, 67, 848-849. | 3.0 | 47 |
| 49 | Studies of the photoionization cross sections of acetylene. Journal of Chemical Physics, 1984, 80, 1907-1916. | 3.0 | 47 |
| 50 | Effects of interchannel coupling on the photoionization cross sections of carbon dioxide. Journal of Chemical Physics, 1990, 92, 4203-4211. | 3.0 | 46 |
| 51 | Multiconfiguration multichannel Schwinger study of the C(1s) photoionization of CO including shake-up satellites. Physical Review A, 1993, 47, 1989-2003. | 2.5 | 46 |
| 52 | Metal-carbene complexes and the possible role of hydroxycarbene in formaldehyde laser photochemistry. Journal of the American Chemical Society, 1978, 100, 298-299. | 13.7 | 45 |
| 53 | Comparison of the random-phase approximation with the multichannel frozen-core Hartree-Fock approximation for the photoionization ofN2. Physical Review A, 1991, 44, 291-303. | 2.5 | 45 |
| 54 | Polarization and ellipticity of high-order harmonics from aligned molecules generated by linearly polarized intense laser pulses. Physical Review A, 2010, 82, . | 2.5 | 45 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Computed elastic cross sections and angular distributions of low-energy electron scattering from gas phase C60fullerene. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 2181-2193. | 1.5 | 43 |
| 56 | Differentiation of the ground vibrational and global minimum structures in the Ar:HBr intermolecular complex. Journal of Chemical Physics, 2001, 115, 899-911. | 3.0 | 43 |
| 57 | Formulation of the direct configuration interaction method for triplet spin states. Applications to glyoxal. Journal of Chemical Physics, 1978, 68, 769-774. | 3.0 | 41 |
| 58 | Electron-correlation effects in the photoionization ofN2. Physical Review A, 1995, 51, 3756-3765. | 2.5 | 41 |
| 59 | Charge-transfer complexes. NH3O3, NH3SO2, and N(CH3)3SO2. Journal of the American Chemical Society, 1976, 98, 7617-7620. | 13.7 | 40 |
| 60 | Anisotropic translational energy distribution due to gas-phase collisions in rapid desorption of molecules from surfaces. Surface Science, 1988, 200, 113-134. | 1.9 | 40 |
| 61 | The structure and ground state dynamics of Arâ€“IH. Journal of Chemical Physics, 1999, 111, 5764-5770. | 3.0 | 39 |
| 62 | Relationship between the Schwinger and Kohn-type variational principles in scattering theory. Physical Review A, 1981, 24, 1812-1816. | 2.5 | 38 |
| 63 | Low-energy resonant structures in electron scattering from C20 fullerene. Journal of Chemical Physics, 2002, 116, 2811-2824. | 3.0 | 38 |
| 64 | Low-energy electron scattering from C60 molecules. Chemical Physics Letters, 1999, 305, 413-418. | 2.6 | 37 |
| 65 | Extensive configuration interaction studies of the methylene singlet-triplet separation. Journal of the American Chemical Society, 1977, 99, 6765-6766. | 13.7 | 36 |
| 66 | Comparative studies of a shape-resonant feature in the photoionization of carbon dioxide. The Journal of Physical Chemistry, 1981, 85, 2166-2169. | 2.9 | 36 |
| 67 | Low-energy electron scattering from the water molecule: Angular distributions and rotational excitation. Journal of Chemical Physics, 1998, 108, 4002-4012. | 3.0 | 36 |
| 68 | Charge-transfer complexes. Ammonia-molecular fluorine, ammonia-molecular chlorine, ammonia-chlorine fluoride, trimethylamine-molecular fluorine, trimethylamine-molecular chlorine, and trimethylamine-chlorine fluoride. Journal of the American Chemical Society, 1975, 97, 7205-7210. | 13.7 | 35 |
| 69 | Molecular frame and recoil frame photoelectron angular distributions from dissociative photoionization of NO2. Journal of Chemical Physics, 2007, 126, 054307. | 3.0 | 35 |
| 70 | Electron scattering by methanol and ethanol: A joint theoretical-experimental investigation. Journal of Chemical Physics, 2012, 136, 114311. | 3.0 | 34 |
| 71 | Theoretical studies of cross sections and photoelectron angular distributions in the valence photoionization of molecular oxygen. Journal of Chemical Physics, 2002, 116, 8863-8875. | 3.0 | 33 |
| 72 | XUV ionization of aligned molecules. Physical Review A, 2011, 84, . | 2.5 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Separation of target structure and medium propagation effects in high-harmonic generation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 095601. | 1.5 | 33 |
| 74 | Quantitative rescattering theory of high-order harmonic generation for polyatomic molecules. Physical Review A, 2013, 87, . | 2.5 | 33 |
| 75 | Superexcited State Dynamics Probed with an Extreme-Ultraviolet Free Electron Laser. Physical Review Letters, 2004, 92, 083002. | 7.8 | 32 |
| 76 | Molecular Frame Photoelectron Emission in the Presence of Autoionizing Resonances. Physical Review Letters, 2006, 96, 073001. | 7.8 | 32 |
| 77 | Extraction of electronâ€“ion differential scattering cross sections for C<sub>2</sub>H<sub>4</sub>by laser-induced rescattering photoelectron spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 131001. | 1.5 | 32 |
| 78 | Modelling electron-induced processes in â€œcondensedâ€•formic acid. European Physical Journal D, 2005, 35, 417-428. | 1.3 | 31 |
| 79 | Vibrational effects in the photoionization shape resonance leading to theCÎ£g+2state of CO2+. Physical Review A, 1982, 26, 1992-1996. | 2.5 | 30 |
| 80 | Fluorine peroxide (FOOF): A problem molecule for theoretical structural predictions. Journal of Chemical Physics, 1978, 68, 2507-2508. | 3.0 | 29 |
| 81 | Study of electron scattering by CO2at the static-exchange level. Physical Review A, 1982, 25, 1963-1968. | 2.5 | 29 |
| 82 | Studies of the photoionization cross section of the 2Ï€ level of nitric oxide. Journal of Chemical Physics, 1983, 79, 1360-1363. | 3.0 | 29 |
| 83 | Anomalous singularities in the complex Kohn variational principle of quantum scattering theory. Physical Review A, 1989, 40, 6879-6885. | 2.5 | 29 |
| 84 | Very low-energy electron scattering from benzene: experiment and theory. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 4371-4381. | 1.5 | 29 |
| 85 | Dissociative photoionization of N2O in the region of the N2O+(Bâ€‰2Î) state studied by ionâ€“electron velocity vector correlation. Journal of Chemical Physics, 2004, 120, 8226-8240. | 3.0 | 29 |
| 86 | Spectroscopic characterization of the hydrogen bonded OCâ€“HI in supersonic jets. Journal of Chemical Physics, 1993, 98, 1761-1767. | 3.0 | 28 |
| 87 | Resonant Capture of Low-Energy Electrons by Gas-Phase Glycine:Â A Quantum Dynamics Calculation. Journal of Physical Chemistry A, 2004, 108, 7056-7062. | 2.5 | 28 |
| 88 | Vibrationally resolved partial cross sections and asymmetry parameters for nitrogen<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>K</mml:mi></mml:math>-shell photoionization of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:math>molecule. Physical Review A, 2007, 76, . | 2.5 | 28 |
| 89 | Theory of High Harmonic Generation for Probing Time-Resolved Large-Amplitude Molecular Vibrations with Ultrashort Intense Lasers. Physical Review Letters, 2012, 109, 203004. | 7.8 | 28 |
| 90 | Probing autoionizing states of molecular oxygen with XUV transient absorption: Electronic-symmetry-dependent line shapes and laser-induced modifications. Physical Review A, 2017, 95, . | 2.5 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Attosecond spectroscopy of size-resolved water clusters. Nature, 2022, 609, 507-511. | 27.8 | 28 |
| 92 | Lowâ€energy electron scattering by halomethanes: Elastic and differential cross sections for CF4. Journal of Chemical Physics, 1996, 104, 6482-6490. | 3.0 | 27 |
| 93 | Influence of shape resonances on the angular dependence of molecular photoionization delays. Nature Communications, 2021, 12, 7343. | 12.8 | 27 |
| 94 | Topological analysis of eigenvectors of the adjacency matrices in graph theory: The concept of internal connectivity. Chemical Physics Letters, 1987, 137, 279-284. | 2.6 | 26 |
| 95 | The inner valence photoionization of acetylene. Journal of Chemical Physics, 1999, 110, 6365-6380. | 3.0 | 26 |
| 96 | Photoemission in the molecular frame using the vector correlation approach: from valence to inner-valence shell ionization. Journal of Electron Spectroscopy and Related Phenomena, 2004, 141, 211-227. | 1.7 | 26 |
| 97 | Nanoscopic models for radiobiological damage: metastable precursors of dissociative electron attachment to formic acid. New Journal of Physics, 2004, 6, 66-66. | 2.9 | 26 |
| 98 | Theoretical study of photoelectron angular distributions in single-photon ionization of aligned<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">CO</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. | 2.5 | 26 |
| 99 | The Badgerâ€“Bauer Rule Revisited: Correlation of Proper Blue Frequency Shifts in the OC Hydrogen Acceptor with Morphed Hydrogen Bond Dissociation Energies in OCâ€“HX (X = F, Cl, Br, I, CN, CCH). Journal of Physical Chemistry A, 2013, 117, 8477-8483. | 2.5 | 26 |
| 100 | Dicyanocarbene. Triplet and singlet structures and energetics. Journal of the American Chemical Society, 1977, 99, 13-14. | 13.7 | 25 |
| 101 | Application of the Schwinger variational principle to electron scattering. Journal of Physics B: Atomic and Molecular Physics, 1979, 12, L421-L424. | 1.6 | 25 |
| 102 | Multipletâ€specific shape resonant features in photoionization of NO. Journal of Chemical Physics, 1985, 82, 4147-4154. | 3.0 | 25 |
| 103 | The elastic scattering of electrons from molecules: II. Molecular features and spatial symmetries of some resonant states. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, 3955-3970. | 1.5 | 25 |
| 104 | Low-energy electron scattering and resonant states of NO2( X2A1). Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 59-79. | 1.5 | 25 |
| 105 | Excitation of the symmetry forbidden bending mode in molecular photoionization. Journal of Chemical Physics, 2001, 114, 4496. | 3.0 | 25 |
| 106 | Evolution of photoelectronâ€“vibrational coupling with molecular complexity. Physica Scripta, 2006, 74, C71-C79. | 2.5 | 25 |
| 107 | Molecular-frame photoelectron and electron-frame photoion angular distributions and their interrelation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 485-496. | 1.5 | 25 |
| 108 | Cross sections for electron scattering by propane in the low- and intermediate-energy ranges. Physical Review A, 2010, 82, . | 2.5 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Photoelectron kinetic and angular distributions for the ionization of aligned molecules using a HHG source. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 074016. | 1.5 | 25 |
| 110 | Dissociation dynamics of the water dication following one-photon double ionization. I. Theory. Physical Review A, 2018, 98, . | 2.5 | 25 |
| 111 | A Krâ^'BrH Global Minimum Structure Determined on the Basis of Potential Morphingâ€. Journal of Physical Chemistry A, 2004, 108, 2884-2892. | 2.5 | 24 |
| 112 | Cross sections for electron scattering by ethane in the low- and intermediate-energy ranges. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 225202. | 1.5 | 24 |
| 113 | Asymmetric Attosecond Photoionization in Molecular Shape Resonance. Physical Review X, 2022, 12, . | 8.9 | 24 |
| 114 | Computational investigation of positron scattering fromC60. Physical Review A, 1999, 60, 4567-4576. | 2.5 | 23 |
| 115 | Dissociative photoionization of N2O in the region of the N2O+(Câ€Š2Î£+) state, studied by ionâ€“electron velocity vector correlation. Journal of Chemical Physics, 2002, 117, 9248-9257. | 3.0 | 23 |
| 116 | Cross section and asymmetry parameter calculations for the C1sphotoionization ofCH4,CF4,andCCl4. Physical Review A, 2003, 68, . | 2.5 | 23 |
| 117 | Correlationâ€“polarization effects in electron/positron scattering from acetylene: A comparison of computational models. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 425-434. | 1.4 | 23 |
| 118 | Near-threshold shape resonance in the photoionization of 2-butyne. Journal of Chemical Physics, 2012, 136, 154303. | 3.0 | 23 |
| 119 | Cross sections for electron scattering by formaldehyde and pyrimidine in the low- and intermediate-energy ranges. Physical Review A, 2013, 87, . | 2.5 | 23 |
| 120 | Collision of hyperthermal atoms with a solid surface. I. Energy dissipation in the solid. Journal of Chemical Physics, 1991, 94, 4055-4061. | 3.0 | 22 |
| 121 | Classical trajectory simulations of photodissociation of CH3Br at surfaces. Journal of Chemical Physics, 1992, 96, 7771-7787. | 3.0 | 22 |
| 122 | Investigation of the ground vibrational state structure of H35Cl trimer based on the resolvedK,Jsubstructure of the Î½5vibrational band. Journal of Chemical Physics, 1994, 100, 7101-7108. | 3.0 | 22 |
| 123 | Auger decay of theC1sâ†'2Ï€*excitation of CO. Physical Review A, 1997, 56, 3666-3674. | 2.5 | 22 |
| 124 | The validity of the hard-sphere model in hydrogen bonded intermolecular interactions of HCNâ€“HF. Journal of Chemical Physics, 1997, 107, 8327-8337. | 3.0 | 22 |
| 125 | Monte Carlo studies of effects of substrate size on waterâ€“substrate interaction energy and water structure. Journal of Chemical Physics, 1997, 107, 5212-5216. | 3.0 | 22 |
| 126 | Cross sections for electron collisions with dimethyl ether. Physical Review A, 2013, 88, . | 2.5 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Electron collisions with ammonia and formamide in the low- and intermediate-energy ranges. Physical Review A, 2014, 90, . | 2.5 | 22 |
| 128 | Electron correlation effects on the excitation energies of the lowest triplet states of glyoxal. Journal of Chemical Physics, 1977, 67, 2422. | 3.0 | 21 |
| 129 | Correlated wavefunctions for the water molecule. Journal of Chemical Physics, 1978, 68, 5292-5294. | 3.0 | 21 |
| 130 | Inversion of experimental data and ab initio studies of a pseudoâ€atomâ€“diatom model for the vibrational dynamics of HCNâ€“HF. Journal of Chemical Physics, 1992, 97, 2209-2223. | 3.0 | 21 |
| 131 | Resonances and the effects of interchannel coupling in the photoionization of CS2. Journal of Chemical Physics, 1992, 97, 6384-6395. | 3.0 | 21 |
| 132 | Multichannel Schwinger study of Câ€Š1s photoionization of acetylene. Journal of Chemical Physics, 2000, 113, 1843-1851. | 3.0 | 21 |
| 133 | Interchannel coupling effects in the valence photoionization of SF6. Journal of Chemical Physics, 2014, 140, 204305. | 3.0 | 21 |
| 134 | Probing molecular bond-length using molecular-frame photoelectron angular distributions. Journal of Chemical Physics, 2019, 150, 174306. | 3.0 | 21 |
| 135 | Symmetry restricted multiconfiguration annihilation of single excitations. II. Applications: Electronic states of methylnitrene. Journal of Chemical Physics, 1978, 68, 2696. | 3.0 | 20 |
| 136 | Angular distributions ofN2(2Ïƒu)â^'1photoelectrons including the effects of coupling to theN2(3Ïƒg)â^'1channel. Physical Review A, 1986, 34, 5158-5161. | 2.5 | 20 |
| 137 | Rovibrationally resolved, Fourierâ€transform near infrared spectroscopy of the Î½1 and Î½2 vibrations of the HCl dimer in a supersonic jet. Journal of Chemical Physics, 1994, 101, 4593-4598. | 3.0 | 20 |
| 138 | Photoemission in the NO molecular frame induced by soft-x-ray elliptically polarized light above theN(1s)â^'1andO(1s)â^'1ionization thresholds. Physical Review A, 2007, 75, . | 2.5 | 20 |
| 139 | Differential cross sections for the electron-impact ionization of molecular hydrogen in the distorted-wave Born approximation. Physical Review A, 1988, 37, 1176-1184. | 2.5 | 19 |
| 140 | Testing the morphed potential of Ar:HBr using frequency and phase stabilized FASSST with a supersonic jet. Chemical Physics Letters, 2003, 370, 528-534. | 2.6 | 19 |
| 141 | A simple model for molecular frame photoelectron angular distributions. Journal of Electron Spectroscopy and Related Phenomena, 2004, 141, 201-210. | 1.7 | 19 |
| 142 | Rovibrationally resolved, continuous supersonic-jet, Fourier-transform, infrared absorption spectroscopy of weakly bound heterodimers: analysis of Î½1 and Î½2 of OCî—¸HCl. Chemical Physics Letters, 1993, 206, 488-492. | 2.6 | 18 |
| 143 | Fitting of an ab initio potential of two linear-rigid-rotor dimer and the calculation of rovibrational energy levels by the pseudo-spectral approach. Computer Physics Communications, 2002, 145, 48-63. | 7.5 | 18 |
| 144 | Studies of Ar:HBr using fast scan submillimeter-wave and microwave coaxial pulsed jet spectrometers with sub-kHz precision. Journal of Chemical Physics, 2003, 119, 10687-10695. | 3.0 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Molecular frame photoemission by a comb of elliptical high-order harmonics: a sensitive probe of both photodynamics and harmonic complete polarization state. Faraday Discussions, 2016, 194, 161-183. | 3.2 | 18 |
| 146 | Schwinger variational principle applied to long-range potentials. Physical Review A, 1984, 29, 1857-1864. | 2.5 | 17 |
| 147 | The outer valence photoionization of acetylene. Journal of Chemical Physics, 1999, 111, 6290-6299. | 3.0 | 17 |
| 148 | Studies of angular distributions and cross sections for photodetachment from the oxygen molecular anion. Journal of Chemical Physics, 2001, 114, 9350-9360. | 3.0 | 17 |
| 149 | Cross sections and asymmetry parameters in gas-phase photoionization ofC60. Physical Review A, 2001, 64, . | 2.5 | 17 |
| 150 | A morphed ground state potential for Ne:HI based on microwave spectroscopy. Chemical Physics Letters, 2002, 356, 101-108. | 2.6 | 17 |
| 151 | Multiplet-specific N 1s photoelectron angular distributions from the fixed-in-space NO molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, L49-L55. | 1.5 | 17 |
| 152 | Near-infrared spectra and rovibrational dynamics on a four-dimensional ab initio potential energy surface of (HBr)2. Journal of Chemical Physics, 2004, 120, 10426-10441. | 3.0 | 17 |
| 153 | Analysis of the submillimetre Ar:HI ? bending transition as a test of a morphed potential. Physical Chemistry Chemical Physics, 2004, 6, 5318. | 2.8 | 17 |
| 154 | Electron scattering by formic acid in the gas phase: comparing measured and computed angular distributions. European Physical Journal D, 2006, 39, 399-405. | 1.3 | 17 |
| 155 | High-order-harmonic generation using gas-phase<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>O molecules. Physical Review A, 2011, 83, . | 2.5 | 17 |
| 156 | Valence and inner-valence shell dissociative photoionization of CO in the 26â€“33 eV range. II. Molecular-frame and recoil-frame photoelectron angular distributions. Journal of Chemical Physics, 2012, 136, 094303. | 3.0 | 17 |
| 157 | CMM-RS Potential for Characterization of the Properties of the Halogen-Bonded OCâ€“Cl<sub>2</sub> Complex, and a Comparison with Hydrogen-Bonded OCâ€“HCl. Journal of Physical Chemistry A, 2012, 116, 1213-1223. | 2.5 | 17 |
| 158 | A Generalized Single Centre Approach for Treating Electron Scattering from Polyatomic Molecules. , 1994, , 71-86. | | 17 |
| 159 | Multichannel variational expressions of scattering theory. Physical Review A, 1986, 33, 1626-1630. | 2.5 | 16 |
| 160 | Mode-specific photoelectron scattering effects on CO2+(Câ€Š2Î£g+) vibrations. Journal of Chemical Physics, 2004, 120, 612-622. | 3.0 | 16 |
| 161 | Morphing a vibrationally-complete ground state potential for the hydrogen bond OCâ€“HF. Chemical Physics, 2011, 390, 42-50. | 1.9 | 16 |
| 162 | Complete determination of the state of elliptically polarized light by electron-ion vector correlations. Physical Review A, 2013, 88, . | 2.5 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | A Unified Perspective on the Nature of Bonding in Pairwise Interatomic Interactions. Journal of Physical Chemistry A, 2014, 118, 6287-6298. | 2.5 | 16 |
| 164 | Strong-field ionization of water. II. Electronic and nuclear dynamics en route to double ionization. Physical Review A, 2021, 104, . | 2.5 | 16 |
| 165 | Thermal collision rate constants for small nickel clusters of size 2â€“14 atoms. Journal of Chemical Physics, 1995, 102, 7683-7699. | 3.0 | 15 |
| 166 | Theoretical studies of core excitation and ionization in molecular systems. Journal of Synchrotron Radiation, 2001, 8, 150-153. | 2.4 | 15 |
| 167 | Intrachannel vibronic coupling in molecular photoionization. Canadian Journal of Chemistry, 2004, 82, 1043-1051. | 1.1 | 15 |
| 168 | Circular dichroism in molecular frame photoemission. Molecular Physics, 2007, 105, 1757-1768. | 1.7 | 15 |
| 169 | Density functional theory for the photoionization dynamics of uracil. Journal of Chemical Physics, 2007, 127, 234317. | 3.0 | 15 |
| 170 | Is there any fundamental difference between ionic, covalent, and others types of bond? A canonical perspective on the question. Physical Chemistry Chemical Physics, 2017, 19, 15864-15869. | 2.8 | 15 |
| 171 | BERKELEY: An â€œopen endedâ€•Configuration Interaction (CI) program designed for minicomputers. Journal of Computational Physics, 1978, 26, 243-251. | 3.8 | 14 |
| 172 | The microwave spectrum and ground state dynamics of Krâ€“IH. Chemical Physics Letters, 2000, 331, 95-100. | 2.6 | 14 |
| 173 | Resonantly amplified vibronic symmetry breaking. Journal of Chemical Physics, 2001, 114, 8240-8243. | 3.0 | 14 |
| 174 | Electron-Driven Molecular Processes Induced in Biological Systems by Electromagnetic and Other Ionizing Sources. Advances in Quantum Chemistry, 2007, 52, 189-230. | 0.8 | 14 |
| 175 | Precise Access to the Molecular-Frame Complex Recombination Dipole through High-Harmonic Spectroscopy. Physical Review Letters, 2017, 118, 033201. | 7.8 | 14 |
| 176 | Unambiguous observation of F-atom core-hole localization in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CF</mml:mi><mml:mn>4</mml:mn></mml:msub></mml: through body-frame photoelectron angular distributions. Physical Review A, 2017, 95, . | 2.9 | 14 |
| 177 | The Schwinger Variational Principle: An Approach to Electron-Molecule Collisions. , 1983, , 29-49. | | 14 |
| 178 | The effects of collision mass and potential on the energy transfer in thermal collisions of gas phase clusters. Journal of Chemical Physics, 1993, 99, 1178-1184. | 3.0 | 13 |
| 179 | A nearâ€infrared Fourierâ€transform planar supersonic jet spectrometer for rovibrational studies of weakly bound dimers and trimers. Review of Scientific Instruments, 1995, 66, 4375-4384. | 1.3 | 13 |
| 180 | Electron scattering from gaseous SF6: Comparing calculations with experiments. Journal of Chemical Physics, 2001, 114, 3429-3439. | 3.0 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Total cross sections and molecular frame photoelectron angular distributions in the Nâ€Š1s photoionization of N2: An investigation of electron correlation effects. Journal of Chemical Physics, 2002, 117, 4348-4360. | 3.0 | 13 |
| 182 | Observation of the Symmetry-Forbidden5Ïƒuâ†'kÏƒuCS2Transition: A Vibrationally Driven Photoionization Resonance. Physical Review Letters, 2004, 92, 143002. | 7.8 | 13 |
| 183 | Electron-Attachment Resonances of Glycine Zwitterions from Quantum Scattering Calculations:Â Modeling Macrosolvation Effects. Journal of Physical Chemistry B, 2006, 110, 26240-26247. | 2.6 | 13 |
| 184 | Molecular-frame photoelectron angular distributions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 190201. | 1.5 | 13 |
| 185 | Mechanisms of Franckâ€"Condon breakdown over a broad energy range in the valence photoionization of N2 and CO. Journal of Electron Spectroscopy and Related Phenomena, 2012, 185, 211-218. | 1.7 | 13 |
| 186 | Canonical Potentials and Spectra within the Bornâ€"Oppenheimer Approximation. Journal of Physical Chemistry A, 2015, 119, 6753-6758. | 2.5 | 13 |
| 187 | Collision of hyperthermal atoms with an adsorbate covered solid surface. Surface Science, 1992, 264, 197-206. | 1.9 | 12 |
| 188 | Angular distributions of scattered electrons from gaseous benzene molecules. Journal of Chemical Physics, 2000, 113, 10044-10050. | 3.0 | 12 |
| 189 | Near threshold photoionization of the ground and first excited states of C2. Journal of Chemical Physics, 2004, 120, 6010-6018. | 3.0 | 12 |
| 190 | Microwave spectrum of Ne:HBr: structural perspectives on Rg:HX, Rg=Ne, Ar, Kr; X=F, Cl, Br, I. Chemical Physics Letters, 2004, 398, 544-552. | 2.6 | 12 |
| 191 | Photoelectron trapping in N2O 7Ïƒâ†'kÏƒ resonant ionization. Journal of Chemical Physics, 2005, 123, 014307. | 3.0 | 12 |
| 192 | Electronically forbidden (5Ïƒuâ†'kÏƒu) photoionization of CS2: Mode-specific electronic-vibrational coupling. Journal of Chemical Physics, 2005, 122, 064308. | 3.0 | 12 |
| 193 | Improved Morphed Potentials for Arâ^'HBr Including Scaling to the Experimentally Determined Dissociation Energy. Journal of Physical Chemistry A, 2005, 109, 8168-8179. | 2.5 | 12 |
| 194 | Vibrationally resolved nitrogen K-shell photoelectron spectra of the dinitrogen oxide molecule: Experiment and theory. Chemical Physics Letters, 2007, 438, 14-19. | 2.6 | 12 |
| 195 | Nitrogen K-shell photoelectron angular distribution from NO molecules in the molecular frame. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 045102. | 1.5 | 12 |
| 196 | Mode-specific photoionization dynamics of a simple asymmetric target: OCS. Journal of Chemical Physics, 2009, 130, 044302. | 3.0 | 12 |
| 197 | Theoretical and experimental investigation of electron collisions with dimethyl sulfide. Physical Review A, 2015, 91, . | 2.5 | 12 |
| 198 | A general transformation to canonical form for potentials in pairwise interatomic interactions. Physical Chemistry Chemical Physics, 2015, 17, 14805-14810. | 2.8 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Morse, Lennard-Jones, and Kratzer Potentials: A Canonical Perspective with Applications. Journal of Physical Chemistry A, 2016, 120, 8347-8359. | 2.5 | 12 |
| 200 | Extraction of geometrical structure of ethylene molecules by laser-induced electron diffraction combined with ab initio scattering calculations. Physical Review A, 2017, 96, . | 2.5 | 12 |
| 201 | Monte Carlo simulation of laser induced chemical vapor deposition. Journal of Applied Physics, 1991, 69, 4110-4115. | 2.5 | 11 |
| 202 | Recent Advances in Rovibrationally Resolved FTIR Supersonic Jet Spectroscopy of Transients, Weakly Bound Dimers and Trimers. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 447-456. | 0.9 | 11 |
| 203 | First principles determination of the photoelectron spectrum of LiHâ^. Journal of Chemical Physics, 2002, 117, 5757-5763. | 3.0 | 11 |
| 204 | Modeling dynamical correlation forces in low-energy positron scattering from polyatomic gases: a comparison for CH4. Radiation Physics and Chemistry, 2003, 68, 673-680. | 2.8 | 11 |
| 205 | Symmetry- and multiplet-resolved N1sphotoionization cross sections of theNO2molecule. Physical Review A, 2004, 70, . | 2.5 | 11 |
| 206 | A parameterized compound-model chemistry for morphing the intermolecular potential of OCâ€“HCl. Chemical Physics Letters, 2008, 460, 352-358. | 2.6 | 11 |
| 207 | Measurements of molecular-frame Auger electron angular distributions at the CO C 1s<sup>â^'1</sup>2Ï€* resonance with high energy resolution. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 215101. | 1.5 | 11 |
| 208 | Vibrationally resolved partial cross sections and asymmetry parameters for nitrogen K-shell photoionization of the NO molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 085105. | 1.5 | 11 |
| 209 | A ground state morphed intermolecular potential for the hydrogen bonded and van der Waals isomers in OC:HI and a prediction of an anomalous deuterium isotope effect. Journal of Chemical Physics, 2010, 133, 184305. | 3.0 | 11 |
| 210 | A four-dimensional compound-model morphed potential for the OC:HBr complex. Physical Chemistry Chemical Physics, 2010, 12, 7258. | 2.8 | 11 |
| 211 | Study of resonances in the photoionization of Ar@C60and C60. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 215103. | 1.5 | 11 |
| 212 | High-resolution photoabsorption spectrum of jet-cooled propyne. Journal of Chemical Physics, 2014, 141, 114303. | 3.0 | 11 |
| 213 | Theoretical and experimental investigation of electron collisions with acetone. Physical Review A, 2015, 92, . | 2.5 | 11 |
| 214 | Resonancelike enhancement in high-order above-threshold ionization of polyatomic molecules. Physical Review A, 2016, 93, . | 2.5 | 11 |
| 215 | Ultrafast Rydberg-state dissociation in oxygen: Identifying the role of multielectron excitations. Physical Review A, 2019, 99, . | 2.5 | 11 |
| 216 | Coupled nuclearâ€“electronic decay dynamics of O<sub>2</sub> inner valence excited states revealed by attosecond XUV wave-mixing spectroscopy. Faraday Discussions, 2021, 228, 537-554. | 3.2 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Excitation energies of the n â†' Ï€* 3Aâ€³ and Ïƒ â†' Ï€* 3Aâ€² states of acrolein. Chemical Physics Letters, 1977, 51, 600-602. | 2.6 | 10 |
| 218 | Vibrationally resolved cross sections for the photoionization of CS2. Journal of Chemical Physics, 1994, 101, 9548-9557. | 3.0 | 10 |
| 219 | High frequency wavelength modulation cw slit jet diode laser spectrometer for characterizing ground state intermolecular hydrogen bonded vibrations. Infrared Physics and Technology, 2004, 45, 301-314. | 2.9 | 10 |
| 220 | High-order-harmonic generation from molecular isomers with midinfrared intense laser pulses. Physical Review A, 2013, 88, . | 2.5 | 10 |
| 221 | 6.2â€Î¼m spectrum and 6-dimensional morphed potentials of OC-H2O. Chemical Physics, 2018, 501, 35-45. | 1.9 | 10 |
| 222 | Resonance signatures in the body-frame valence photoionization of CF<sub>4</sub>. Physical Chemistry Chemical Physics, 2018, 20, 21075-21084. | 2.8 | 10 |
| 223 | Stochastic sensitivity analysis applied to gasâ€“surface scattering. Journal of Chemical Physics, 1985, 83, 3118-3128. | 3.0 | 9 |
| 224 | Differential cross section for molecular ionization by electron impact in the adiabatic approximation. Physical Review A, 1987, 35, 2852-2862. | 2.5 | 9 |
| 225 | High-order Newton-Cotes integration methods in scattering theory. Journal of Computational Physics, 1988, 77, 524-536. | 3.8 | 9 |
| 226 | Continuousâ€wave supersonic jet diode laser spectroscopy and dynamics of Arâ€“DCl: Rovibrational analysis of Î½1 and Î½1+Î½12 and the effect of Coriolis coupling in the spectrum of Î½1+2Î½02. Journal of Chemical Physics, 1991, 95, 3175-3181. | 3.0 | 9 |
| 227 | Dissociative photoionization dynamics in ethane studied by velocity map imaging. Chemical Physics Letters, 2003, 374, 334-340. | 2.6 | 9 |
| 228 | Morphing the ground state potential of the hydrogen-bonded complex HBrâ€“HBr. Chemical Physics Letters, 2005, 407, 40-47. | 2.6 | 9 |
| 229 | Metastable trapping of low-energy positrons by cubane: A computational experiment. Physical Review A, 2005, 72, . | 2.5 | 9 |
| 230 | Ion Pair Formation in Multiphoton Excitation of NO<sub>2</sub> Using Linearly and Circularly Polarized Femtosecond Light Pulses: Kinetic Energy Distribution and Fragment Recoil Anisotropy. Journal of Physical Chemistry A, 2010, 114, 9902-9918. | 2.5 | 9 |
| 231 | Asymmetry in the molecular-frame photoelectron angular distribution for oxygen 1s photoemission from CO2. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 194014. | 1.5 | 9 |
| 232 | Compound model-morphed potentials contrasting OCâ€“79Br35Cl with the halogen bonded OCâ€“35Cl2 and hydrogen-bonded OCâ€“HX (X=19F, 35Cl, 79Br). Chemical Physics, 2013, 425, 162-169. | 1.9 | 9 |
| 233 | The role of Rydberg states in photoionization of NO<sub>2</sub>and (NO<sup>+</sup>,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 044311. | 3.0 | 9 |
| 234 | Recoil frame photoemission in multiphoton ionization of small polyatomic molecules: photodynamics of NO<sub>2</sub>probed by 400 nm fs pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 124024. | 1.5 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Rescattering photoelectron spectroscopy of small molecules. Journal of Electron Spectroscopy and Related Phenomena, 2014, 195, 313-319. | 1.7 | 9 |
| 236 | Vibrational effects in the shape resonant photoionization leading to the A2T1 state of SF6+. Chemical Physics, 2015, 447, 64-70. | 1.9 | 9 |
| 237 | Retrieving transient conformational molecular structure information from inner-shell photoionization of laser-aligned molecules. Scientific Reports, 2016, 6, 23655. | 3.3 | 9 |
| 238 | Rescattering photoelectron spectroscopy of the CO2 molecule: Progress towards experimental discrimination between theoretical target-structure models. Physical Review A, 2019, 100, . | 2.5 | 9 |
| 239 | Dissociative photoionization of NO across a shape resonance in the XUV range using circularly polarized synchrotron radiation. Journal of Chemical Physics, 2019, 151, 174305. | 3.0 | 9 |
| 240 | Simulations of aerosol aggregation including long-range interactions. Physical Review E, 1999, 60, 2051-2064. | 2.1 | 8 |
| 241 | Trapped metastable anions in low-energy electron scattering from C20 clusters. Journal of Chemical Physics, 2003, 118, 4013-4024. | 3.0 | 8 |
| 242 | Exchange interaction effects in NO core-level photoionization cross-sections. New Journal of Physics, 2005, 7, 189-189. | 2.9 | 8 |
| 243 | A morphed intermolecular bending potential of OCâ€“HCl. Chemical Physics Letters, 2006, 429, 68-76. | 2.6 | 8 |
| 244 | Launching a particle on a ring: b2uâ†'ke2g ionization of C6F6. Journal of Chemical Physics, 2006, 125, 164316. | 3.0 | 8 |
| 245 | Photoemission in the molecular frame induced by soft X-ray elliptically polarized light. Journal of Electron Spectroscopy and Related Phenomena, 2007, 156-158, 30-37. | 1.7 | 8 |
| 246 | Probing the accuracy of the isomerization energy of the 3-D morphed potential of Arâ€“HBr. Chemical Physics Letters, 2008, 460, 525-530. | 2.6 | 8 |
| 247 | Positron scattering from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mtext>C</mml:mtext><mml:mrow><mml:mn>20</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review A, 2008, 78, . | 2.8 | 8 |
| 248 | Studies of low-frequency intermolecular hydrogen-bonded vibrations using a continuous supersonic slit jet mid-infrared quantum cascade laser spectrometer. Chemical Physics, 2012, 409, 1-10. | 1.9 | 8 |
| 249 | Electron interaction with dimethyl disulfide in the low- and intermediate-energy range. Physical Review A, 2016, 94, . | 2.5 | 8 |
| 250 | Probing and extracting the structure of vibrating<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SF</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math> with inner-shell photoelectrons. Physical Review A, 2016, 93, . | 2.5 | 8 |
| 251 | Canonical Approaches to Applications of the Virial Theorem. Journal of Physical Chemistry A, 2016, 120, 817-823. | 2.5 | 8 |
| 252 | Low to intermediate energy elastic electron scattering from dichloromethane (CH<sub>2</sub>Cl<sub>2</sub>). Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 025204. | 1.5 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Variational treatment of electronâ€“polyatomic-molecule scattering calculations using adaptive overset grids. Physical Review A, 2017, 96, . | 2.5 | 8 |
| 254 | Multidimensional Configuration-Space Models of the Electronic Factor in Electron Transfer by Superexchange:â€‰ Implications for Models of Biological Electron Transfer. Journal of Physical Chemistry A, 1999, 103, 7345-7356. | 2.5 | 7 |
| 255 | Low-energy electron scattering by cubane: Resonant states and Ramsauerâ€“Townsend features from quantum calculations in the gas phase. Journal of Chemical Physics, 2004, 120, 4172-4181. | 3.0 | 7 |
| 256 | Quasibound continuum states in SiF4â€ˆ(DÌƒA12) photoionization: Photoelectron-vibrational coupling. Journal of Chemical Physics, 2007, 126, 244309. | 3.0 | 7 |
| 257 | Vibrational branching ratios in the (b2u)â€ˆ1 photoionization of C6F6. Journal of Chemical Physics, 2009, 131, 044311. | 3.0 | 7 |
| 258 | Theoretical investigation on electron scattering by benzene in the intermediate-energy range. Chemical Physics, 2012, 393, 19-24. | 1.9 | 7 |
| 259 | Morphed intermolecular potential of OC:HCCH complex based on infrared quantum cascade laser spectroscopy. Chemical Physics Letters, 2012, 522, 17-22. | 2.6 | 7 |
| 260 | High-resolution vacuum-ultraviolet photoabsorption spectra of 1-butyne and 2-butyne. Journal of Chemical Physics, 2015, 143, 034304. | 3.0 | 7 |
| 261 | A Near-Threshold Shape Resonance in the Valence-Shell Photoabsorption of Linear Alkynes. Journal of Physical Chemistry A, 2015, 119, 12339-12348. | 2.5 | 7 |
| 262 | A canonical approach to forces in molecules. Chemical Physics, 2016, 474, 52-58. | 1.9 | 7 |
| 263 | Electron collisions with small esters: A joint experimental-theoretical investigation. Physical Review A, 2016, 93, . | 2.5 | 7 |
| 264 | Distinguishing resonance symmetries with energy-resolved photoion angular distributions from ion-pair formation in O2 following two-photon absorption of a 9.3 eV femtosecond pulse. Journal of Chemical Physics, 2020, 153, 021103. | 3.0 | 7 |
| 265 | Correlated variational treatment of ionization coupled to nuclear motion: Ultrafast pump and ionizing probe of electronic and nuclear dynamics in LiH. Physical Review Research, 2021, 3, . | 3.6 | 7 |
| 266 | Theoretical Chemistry via Minicomputer. ACS Symposium Series, 1977, , 171-190. | 0.5 | 6 |
| 267 | The effect of the nature of the interaction potential on cluster reaction rates. Journal of Chemical Physics, 1996, 104, 9016-9026. | 3.0 | 6 |
| 268 | A Fermi resonance study in H12C14Nî—¸H19F based on gas phase far infrared spectroscopy. Journal of Molecular Structure, 1997, 413-414, 167-173. | 3.6 | 6 |
| 269 | High resolution Fourier transform infrared spectroscopy using a high temperature argon arc source. Infrared Physics and Technology, 2001, 42, 509-514. | 2.9 | 6 |
| 270 | Computing the exchange interaction in electron scattering from polyatomic molecules. Physical Review A, 2002, 65, . | 2.5 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 271 | Shape resonances in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>K</mml:mi></mml:math>-shell photodetachment of small size-selected clusters: Experiment and theory. Physical Review A, 2007, 76, . | 2.5 | 6 |
| 272 | A symmetry analysis of circular dichroism in photoabsorption of fixed-in-space molecules: Chiral and nondipole effects. Journal of Electron Spectroscopy and Related Phenomena, 2007, 155, 104-108. | 1.7 | 6 |
| 273 | Microwave-Based Structure and Four-Dimensional Morphed Intermolecular Potential for HIâ‹¯CO<sub>2</sub>. Journal of Physical Chemistry A, 2007, 111, 11976-11985. | 2.5 | 6 |
| 274 | Predicted properties of the COâ€“HF isomer using a six-dimensional morphed potential. Journal of Molecular Structure, 2012, 1023, 43-48. | 3.6 | 6 |
| 275 | A study of the dynamical energy flow in uracil. Journal of Physics: Conference Series, 2015, 635, 112062. | 0.4 | 6 |
| 276 | Rovibrational analysis of the water bending vibration in the mid-infrared spectrum of atmospherically significant N2â€“H2O complex. Chemical Physics Letters, 2015, 633, 229-233. | 2.6 | 6 |
| 277 | From H2+ to the multidimensional potential of the intermolecular interaction ArÂ·HBr: A canonical approach. Chemical Physics Letters, 2015, 639, 63-66. | 2.6 | 6 |
| 278 | A canonical approach to multi-dimensional van der Waals, hydrogen-bonded, and halogen-bonded potentials. Chemical Physics, 2016, 469-470, 60-64. | 1.9 | 6 |
| 279 | Application of the Schwinger Variational Principle to Electron-Molecular Ion Scattering. Physica Scripta, 1980, 21, 366-367. | 2.5 | 5 |
| 280 | Short-range effects in resonant electronâ€“molecule scattering from van der Waals clusters. Journal of Chemical Physics, 1997, 107, 8483-8490. | 3.0 | 5 |
| 281 | Structure and dynamics of N2â€“IH. Journal of Chemical Physics, 2000, 113, 249-257. | 3.0 | 5 |
| 282 | Cross sections and asymmetry parameters for photoionization of in the VUV region. Chemical Physics, 2009, 358, 96-102. | 1.9 | 5 |
| 283 | A New Java Program for Graphical Illustration of the Franckâ‹¯Condon Principle: Application to the I<sub>2</sub> Spectroscopy Experiment in the Undergraduate Physical Chemistry Laboratory. Journal of Chemical Education, 2010, 87, 345-345. | 2.3 | 5 |
| 284 | Paired hydrogen bonds in the hydrogen halide homodimer (HI)2. Journal of Chemical Physics, 2011, 134, 064317. | 3.0 | 5 |
| 285 | Interatomic Electronic Decay Processes in Clusters. , 2012, , 57-95. | | 5 |
| 286 | Trajectory studies and sensitivity analysis of rotational energy transfer in gasâ€“surface collisions. Journal of Chemical Physics, 1987, 87, 4170-4179. | 3.0 | 4 |
| 287 | On the influence of collision mass and interaction potential to the energy transfer in small thermal gas phase clusters. Journal of Applied Physics, 1994, 75, 7195-7199. | 2.5 | 4 |
| 288 | Inner-valence photoionization of HCN: An example of the complete breakdown of the quasiparticle picture of photoionization. Physical Review A, 1999, 60, 4519-4531. | 2.5 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 289 | Cross-section and asymmetry-parameter calculations for the outer- and inner-valence photoionization of ethane. Physical Review A, 2004, 69, . | 2.5 | 4 |
| 290 | Shape and Feshbach resonances in inner-shell photodetachment of negative ions. Journal of Electron Spectroscopy and Related Phenomena, 2011, 183, 64-69. | 1.7 | 4 |
| 291 | High order harmonic generation from SF6: Deconvolution of macroscopic effects. Journal of Chemical Physics, 2016, 145, 224305. | 3.0 | 4 |
| 292 | Canonical Force Distributions in Pairwise Interatomic Interactions from the Perspective of the Hellmannâ€“Feynman Theorem. Journal of Physical Chemistry A, 2016, 120, 3718-3725. | 2.5 | 4 |
| 293 | Spectral dependence of photoemission in multiphoton ionization of NO<sub>2</sub> by femtosecond pulses in the 375â€“430 nm range. Physical Chemistry Chemical Physics, 2017, 19, 21996-22007. | 2.8 | 4 |
| 294 | Validity of the static-exchange approximation for inner-shell photoionization of polyatomic molecules. Physical Review A, 2020, 102, . | 2.5 | 4 |
| 295 | Two-dimensional phase cartography for high-harmonic spectroscopy. Optica, 2021, 8, 308. | 9.3 | 4 |
| 296 | Role of dipole-forbidden autoionizing resonances in nonresonant one-color two-photon single ionization of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review A, 2020, 102, . | 2.5 | 4 |
| 297 | Photoelectron and fragmentation dynamics of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mo>+</mml:mo></mml:msup><mml:mo>+</mml:mo><mml:msup><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math> dissociative channel in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NH</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> | 3.6 | 4 |
| 298 | A theoretical study of laser-induced chemical vapor deposition. Surface Science, 1991, 257, 402-416. | 1.9 | 3 |
| 299 | Near infrared diode laser cw slit jet investigations of O13C:HCl, 14N2:HBr and OC:HBr. Journal of Molecular Structure, 2004, 695-696, 171-180. | 3.6 | 3 |
| 300 | Vibrationally resolved photoionization dynamics of CF4 in the DA12 state. Journal of Chemical Physics, 2007, 127, 044312. | 3.0 | 3 |
| 301 | Recoil frame photoemission in inner-shell photoionization of small polyatomic molecules. European Physical Journal: Special Topics, 2009, 169, 85-93. | 2.6 | 3 |
| 302 | Bending-induced diminution of shape resonances in the core-level absorption region of hot CO<sub>2</sub>and N<sub>2</sub>O. New Journal of Physics, 2010, 12, 123017. | 2.9 | 3 |
| 303 | Vibrationally specific photoionization cross sections of acrolein leading to the XÌƒÂ€²2 ionic state. Journal of Chemical Physics, 2014, 141, 094301. | 3.0 | 3 |
| 304 | Role of initial-state electron correlation in one-photon double ionization of atoms and molecules. Physical Review A, 2019, 99, . | 2.5 | 3 |
| 305 | Nonequilibrium dissociative dynamics of D2 in two-color, few-photon excitation and ionization. Physical Review Research, 2021, 3, . | 3.6 | 3 |
| 306 | Mechanisms and dynamics of the NH<sup>+</sup> <sub>2</sub> + H<sup>+</sup> and NH<sup>+</sup> + H<sup>+</sup> + H fragmentation channels upon single-photon double ionization of NH<sub>3</sub>. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 244003. | 1.5 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 307 | Dynamics of Molecular Photoionization Processes. ACS Symposium Series, 1984, , 89-112. | 0.5 | 3 |
| 308 | Theoretical studies of the effects of electron-electron correlation in the photoionization of small molecular systems. , 1999, , . | | 2 |
| 309 | A three-dimensional morphed potential of Neâ€“HCl including the ground state deuterated Î£ bending vibration. Chemical Physics Letters, 2007, 444, 9-16. | 2.6 | 2 |
| 310 | The effect of vibrational motion on the dynamics of shape resonant photoionization of BF3leading to the state of. Molecular Physics, 2010, 108, 1055-1067. | 1.7 | 2 |
| 311 | Electron scattering from gas phase cis-diamminedichloroplatinum(II): Quantum analysis of resonance dynamics. Journal of Chemical Physics, 2013, 138, 204308. | 3.0 | 2 |
| 312 | Canonical Approach To Generate Multidimensional Potential Energy Surfaces. Journal of Physical Chemistry A, 2019, 123, 537-543. | 2.5 | 2 |
| 313 | Simulation of heavy ion induced desorption of biomolecules from surfaces using the popcorn model. Surface Science, 1988, 193, 486-500. | 1.9 | 1 |
| 314 | Calculation of collisional energy transfer of thermal clusters. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1993, 26, 341-343. | 1.0 | 1 |
| 315 | One- and Two-Electron Resonances in Molecular Photoionization. , 1997, , 109-124. | | 1 |
| 316 | Computing the superexchange electronic factor of electron transfer theory using a grid-based numerical method. Journal of Computational Chemistry, 2000, 21, 1262-1273. | 3.3 | 1 |
| 317 | Electron-Molecule Collisions in the Static-Exchange Correlation-Polarization Approximation. AIP Conference Proceedings, 2002, , . | 0.4 | 1 |
| 318 | Molecular frame and recoil frame angular distributions in dissociative photoionization of small molecules. Journal of Physics: Conference Series, 2008, 141, 012009. | 0.4 | 1 |
| 319 | Infrared quantum cascade laser spectroscopy of low frequency vibrations of intermolecular complexes. , 2011, , . | | 1 |
| 320 | Probing molecular frame photoelectron angular distributions via high-order harmonic generation from aligned molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 194010. | 1.5 | 1 |
| 321 | Changes in site-specific shape resonances in nitrogen K-shell photoionization of N2O induced by vibrational excitation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 065402. | 1.5 | 1 |
| 322 | Two-photon double photoionization of atomic Mg by ultrashort pulses: Variation of angular distributions with pulse length. Physical Review A, 2020, 102, . | 2.5 | 1 |
| 323 | Thermal spike model for heavy ion induced desorption. , 1987, , 81-93. | | 1 |
| 324 | Laser Induced Rescattering Photoelectron Spectroscopy on Hydrocarbon Molecules. , 2014, , . | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 325 | Interchannel coupling effects in the resonant scattering of low-energy electrons from molecular targets. Journal of Electron Spectroscopy and Related Phenomena, 1995, 76, 151-155. | 1.7 | 0 |
| 326 | Low-energy electron and positron scattering from C[sub 60]: A progress report on calculations. AIP Conference Proceedings, 2000, , . | 0.4 | 0 |
| 327 | Computational Studies of Molecular Frame Photoelectron Angular Distributions. AIP Conference Proceedings, 2003, , . | 0.4 | 0 |
| 328 | Dynamics of molecular photoionization processes. International Journal of Quantum Chemistry, 1983, 24, 89-100. | 2.0 | 0 |
| 329 | Molecular frame photoemission in multiphoton ionization of small molecules induced by linearly and circularly polarized light. Journal of Physics: Conference Series, 2009, 194, 032043. | 0.4 | 0 |
| 330 | Cross sections and asymmetry parameters for photoionization from ground and triplet excited states of nitromethane. Journal of Physics: Conference Series, 2009, 194, 022075. | 0.4 | 0 |
| 331 | Using vibrational branching ratios to probe initial and final state effects in molecular photoionization. Journal of Physics: Conference Series, 2009, 194, 022056. | 0.4 | 0 |
| 332 | Extracting Electron-Ion Differential Scattering Cross Sections for Partially Aligned Molecules by Laser-induced Rescattering Photoelectron Spectroscopy. Journal of Physics: Conference Series, 2012, 388, 032027. | 0.4 | 0 |
| 333 | Recoil-frame photoelectron angular distributions probing inner-valence dissociative ionization of carbon monoxide. Journal of Physics: Conference Series, 2012, 388, 022016. | 0.4 | 0 |
| 334 | Absorption effects in intermediate energy electron scattering byn-butane (C<sub>4</sub>H<sub>10</sub>). Journal of Physics: Conference Series, 2012, 388, 052026. | 0.4 | 0 |
| 335 | Non-Resonant Breakdown of the Franck-Condon Approximation as Seen in Vibrational Branching Ratios. Journal of Physics: Conference Series, 2012, 388, 022061. | 0.4 | 0 |
| 336 | Cross sections for electron scattering by methylfluoride (CH3F) in the low- and intermediate-energy ranges. Journal of Electron Spectroscopy and Related Phenomena, 2014, 193, 16-20. | 1.7 | 0 |
| 337 | Interferece of Two Shape Resonances Probed by Rescattering Photoelectron Spectroscopy of CO2. Journal of Physics: Conference Series, 2014, 488, 032024. | 0.4 | 0 |
| 338 | Intense near-IR laser induced electron-ion scattering experiment on hydrocarbon molecules. Journal of Physics: Conference Series, 2015, 635, 112029. | 0.4 | 0 |
| 339 | Molecular frame photoemission: a sensitive probe of the complete polarization state of high harmonic generation. Journal of Physics: Conference Series, 2015, 635, 112140. | 0.4 | 0 |
| 340 | Experimental confirmation of ground state isotopic isomerization from OCâ‹¯HI to OCâ‹¯ID. Chemical Physics Letters, 2015, 619, 174-179. | 2.6 | 0 |
| 341 | Effects of molecular rotation after ionization and prior to fragmentation on observed recoil-frame photoelectron angular distributions in the dissociative photoionization of nonlinear molecules. Physical Review A, 2016, 93, . | 2.5 | 0 |
| 342 | The Connection between Resonances and Bound States in the Presence of a Coulomb Potential. Journal of Physical Chemistry A, 2019, 123, 82-95. | 2.5 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 343 | Rescattering photoelectron spectroscopy of CO<sub>2</sub> molecule with an analytical returning electron wavepacket. Journal of Physics: Conference Series, 2020, 1412, 092014. | 0.4 | 0 |
| 344 | Laser induced rescattering photoelectron spectroscopy of CO2 molecule. , 2014, , . | | 0 |
| 345 | Retrieval of Geometrical Structure of Molecules by Intense NIR Laser Induced Electron Rescattering. , 2016, , . | | 0 |
| 346 | A Test Calculation on SF6 of Model Potentials for Correlation and Polarization Effects in Positron Scattering from Molecules. , 2001, , 475-492. | | 0 |
| 347 | MODELS FOR HIGH ENERGY ION INDUCED DESORPTION OF MOLECULES FROM SURFACES. Journal De Physique Colloque, 1989, 50, C2-231-C2-236. | 0.2 | 0 |