Robert Lucchese

List of Publications by Year
in descending order

347 papers	8,820 citations	46918 47 h-index	76769 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.	1.0	421
2	Quantitative rescattering theory for high-order harmonic generation from molecules. Physical Review A, 2009, 80, .	1.0	315
3	Applications of the Schwinger variational principle to electron-molecule collisions and molecular photoionization. Physics Reports, 1986, 131, 147-221.	10.3	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.	0.6	234
5	Calculation of lowâ€energy elastic cross sections for electronâ€CF4 scattering. Journal of Chemical Physics, 1994, 100, 6464-6471.	1.2	183
6	Cross section and asymmetry parameter calculation for sulfur 1s photoionization of SF6. Journal of Chemical Physics, 1999, 111, 5344-5348.	1.2	170
7	Infrared linewidths and vibrational lifetimes at surfaces: H on Si(100). Physical Review B, 1985, 31, 1184-1186.	1.1	149
8	Monte Carlo simulations of gasâ€phase collisions in rapid desorption of molecules from surfaces. Journal of Chemical Physics, 1987, 86, 5816-5824.	1.2	125
9	Multipletâ€specific multichannel electronâ€correlation effects in the photoionization of NO. Journal of Chemical Physics, 1996, 104, 8989-9000.	1.2	106
10	One-electron resonances in electron scattering from polyatomic molecules. International Reviews in Physical Chemistry, 1996, 15, 429-466.	0.9	99
11	Iterative approach to the Schwinger variational principle for electron-molecule collisions. Physical Review A, 1980, 22, 421-426.	1.0	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.	1.2	96
13	Trajectory studies of vibrational energy transfer in gasâ€"surface collisions. Journal of Chemical Physics, 1984, 80, 3451-3462.	1.2	85
14	Studies of differential and total photoionization cross sections of carbon dioxide. Physical Review A, 1982, 26, 1406-1418.	1.0	81
15	Application of the Schwinger variational principle to electron-ion scattering in the static-exchange approximation. Physical Review A, 1980, 21, 112-123.	1.0	79
16	Polar and azimuthal dependence of the molecular frame photoelectron angular distributions of spatially oriented linear molecules. Physical Review A, 2002, 65, .	1.0	78
17	PadÃ©-approximant corrections to general variational expressions of scattering theory: Application to5Ïƒ photoionization of carbon monoxide. Physical Review A, 1983, 28, 1382-1394.	1.0	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.	1.2	76

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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.	6.6	72
20	Radiation damage of biosystems mediated by secondary electrons: Resonant precursors for uracil molecules. Journal of Chemical Physics, 2004, 120, 7446-7455.	1.2	70
21	4Ïƒâˆ1Inner Valence Photoionization Dynamics of NO Derived from Photoelectron-Photoion Angular Correlations. Physical Review Letters, 2002, 88, 193002.	2.9	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.	0.6	66
24	Probing Molecular Frame Photoionization via Laser Generated High-Order Harmonics from Aligned Molecules. Physical Review Letters, 2009, 102, 203001.	2.9	66
25	One-electron resonances and computed cross sections in electron scattering from the benzene molecule. Journal of Chemical Physics, 1998, 108, 6144-6159.	1.2	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, .	1.0	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.	1.2	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, .	1.0	62
30	Laser induced thermal desorption from surfaces. Journal of Chemical Physics, 1984, 81, 6313-6319.	1.2	61
31	Vibrationally resolved cross sections and asymmetry parameters for the photoionization ofN2with coupling between the (3Ïƒg)âˆ1and the (2Ïƒu)âˆ1channels. Physical Review A, 1988, 37, 89-97.	1.0	61
32	High Harmonic Spectroscopy of the Cooper Minimum in Molecules. Physical Review Letters, 2013, 110, 033006.	2.9	61
33	Schwinger variational principle for electron-molecule scattering: Application to electron-hydrogen scattering. Physical Review A, 1980, 21, 738-744.	1.0	60
34	On the scattering of lowâ€energy electrons by sulphur hexafluoride. Journal of Chemical Physics, 1995, 102, 5743-5751.	1.2	58
35	Ring-breaking electron attachment to uracil: Following bond dissociations via evolving resonances. Journal of Chemical Physics, 2008, 128, 174302.	1.2	57
36	High-Harmonic Probing of Electronic Coherence in Dynamically Aligned Molecules. Physical Review Letters, 2013, 111, 243005.	2.9	56

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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.	1.2	55
38	Iterative approach to the Schwinger variational principle applied to electronâ€”molecular-ion collisions. Physical Review A, 1981, 24, 770-776.	1.0	54
39	Thermal spike model for heavy ion induced desorption from surfaces. Journal of Chemical Physics, 1987, 86, 443-453.	1.2	54
40	Effects of gas-phase collisions on particles rapidly desorbed from surfaces. Physical Review B, 1987, 36, 4978-4981.	1.1	54
41	One-particle resonances in low-energy electron scattering from C60. Journal of Chemical Physics, 1999, 111, 6769-6786.	1.2	54
42	Uncovering multiple orbitals influence in high harmonic generation from aligned N₂. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 211001.	0.6	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.	2.9	53
44	Trajectory studies of rainbow scattering from the reconstructed Si(100) surface. Surface Science, 1984, 137, 570-594.	0.8	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.	0.6	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.	1.3	50
47	Electron-impact excitation and dissociation processes inH2. Physical Review A, 1982, 26, 3240-3248.	1.0	49
48	Energy separation between the open (C2v) and closed (D3h) forms of ozone. Journal of Chemical Physics, 1977, 67, 848-849.	1.2	47
49	Studies of the photoionization cross sections of acetylene. Journal of Chemical Physics, 1984, 80, 1907-1916.	1.2	47
50	Effects of interchannel coupling on the photoionization cross sections of carbon dioxide. Journal of Chemical Physics, 1990, 92, 4203-4211.	1.2	46
51	Multiconfiguration multichannel Schwinger study of the C(1s) photoionization of CO including shake-up satellites. Physical Review A, 1993, 47, 1989-2003.	1.0	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.	6.6	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.	1.0	45
54	Polarization and ellipticity of high-order harmonics from aligned molecules generated by linearly polarized intense laser pulses. Physical Review A, 2010, 82, .	1.0	45

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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.	0.6	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.	1.2	43
57	Formulation of the direct configuration interaction method for triplet spin states. Applications to glyoxal. Journal of Chemical Physics, 1978, 68, 769-774.	1.2	41
58	Electron-correlation effects in the photoionization ofN2. Physical Review A, 1995, 51, 3756-3765.	1.0	41
59	Charge-transfer complexes. NH3O3, NH3SO2, and N(CH3)3SO2. Journal of the American Chemical Society, 1976, 98, 7617-7620.	6.6	40
60	Anisotropic translational energy distribution due to gas-phase collisions in rapid desorption of molecules from surfaces. Surface Science, 1988, 200, 113-134.	0.8	40
61	The structure and ground state dynamics of Arâ€“IH. Journal of Chemical Physics, 1999, 111, 5764-5770.	1.2	39
62	Relationship between the Schwinger and Kohn-type variational principles in scattering theory. Physical Review A, 1981, 24, 1812-1816.	1.0	38
63	Low-energy resonant structures in electron scattering from C20 fullerene. Journal of Chemical Physics, 2002, 116, 2811-2824.	1.2	38
64	Low-energy electron scattering from C60 molecules. Chemical Physics Letters, 1999, 305, 413-418.	1.2	37
65	Extensive configuration interaction studies of the methylene singlet-triplet separation. Journal of the American Chemical Society, 1977, 99, 6765-6766.	6.6	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.	1.2	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.	6.6	35
69	Molecular frame and recoil frame photoelectron angular distributions from dissociative photoionization of NO2. Journal of Chemical Physics, 2007, 126, 054307.	1.2	35
70	Electron scattering by methanol and ethanol: A joint theoretical-experimental investigation. Journal of Chemical Physics, 2012, 136, 114311.	1.2	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.	1.2	33
72	XUV ionization of aligned molecules. Physical Review A, 2011, 84, .	1.0	33

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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.	0.6	33
74	Quantitative rescattering theory of high-order harmonic generation for polyatomic molecules. Physical Review A, 2013, 87, .	1.0	33
75	Superexcited State Dynamics Probed with an Extreme-Ultraviolet Free Electron Laser. Physical Review Letters, 2004, 92, 083002.	2.9	32
76	Molecular Frame Photoelectron Emission in the Presence of Autoionizing Resonances. Physical Review Letters, 2006, 96, 073001.	2.9	32
77	Extraction of electronâ€“ion differential scattering cross sections for C₂H₄by laser-induced rescattering photoelectron spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 131001.	0.6	32
78	Modelling electron-induced processes in â€œcondensedâ€•formic acid. European Physical Journal D, 2005, 35, 417-428.	0.6	31
79	Vibrational effects in the photoionization shape resonance leading to theCÎ£g+2state of CO2+. Physical Review A, 1982, 26, 1992-1996.	1.0	30
80	Fluorine peroxide (FOOF): A problem molecule for theoretical structural predictions. Journal of Chemical Physics, 1978, 68, 2507-2508.	1.2	29
81	Study of electron scattering by CO2at the static-exchange level. Physical Review A, 1982, 25, 1963-1968.	1.0	29
82	Studies of the photoionization cross section of the 2Ï€ level of nitric oxide. Journal of Chemical Physics, 1983, 79, 1360-1363.	1.2	29
83	Anomalous singularities in the complex Kohn variational principle of quantum scattering theory. Physical Review A, 1989, 40, 6879-6885.	1.0	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.	0.6	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.	1.2	29
86	Spectroscopic characterization of the hydrogen bonded OCâ€“HI in supersonic jets. Journal of Chemical Physics, 1993, 98, 1761-1767.	1.2	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.	1.1	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, .	1.0	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.	2.9	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, .	1.0	28

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91	Attosecond spectroscopy of size-resolved water clusters. Nature, 2022, 609, 507-511.	13.7	28
92	Lowâ€energy electron scattering by halomethanes: Elastic and differential cross sections for CF4. Journal of Chemical Physics, 1996, 104, 6482-6490.	1.2	27
93	Influence of shape resonances on the angular dependence of molecular photoionization delays. Nature Communications, 2021, 12, 7343.	5.8	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.	1.2	26
95	The inner valence photoionization of acetylene. Journal of Chemical Physics, 1999, 110, 6365-6380.	1.2	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.	0.8	26
97	Nanoscopic models for radiobiological damage: metastable precursors of dissociative electron attachment to formic acid. New Journal of Physics, 2004, 6, 66-66.	1.2	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>.	1.0	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.	1.1	26
100	Dicyanocarbene. Triplet and singlet structures and energetics. Journal of the American Chemical Society, 1977, 99, 13-14.	6.6	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.	1.2	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.	0.6	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.	0.6	25
105	Excitation of the symmetry forbidden bending mode in molecular photoionization. Journal of Chemical Physics, 2001, 114, 4496.	1.2	25
106	Evolution of photoelectronâ€“vibrational coupling with molecular complexity. Physica Scripta, 2006, 74, C71-C79.	1.2	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.	0.6	25
108	Cross sections for electron scattering by propane in the low- and intermediate-energy ranges. Physical Review A, 2010, 82, .	1.0	25

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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.	0.6	25
110	Dissociation dynamics of the water dication following one-photon double ionization. I. Theory. Physical Review A, 2018, 98, .	1.0	25
111	A Krâ^'BrH Global Minimum Structure Determined on the Basis of Potential Morphingâ€. Journal of Physical Chemistry A, 2004, 108, 2884-2892.	1.1	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.	0.6	24
113	Asymmetric Attosecond Photoionization in Molecular Shape Resonance. Physical Review X, 2022, 12, .	2.8	24
114	Computational investigation of positron scattering fromC60. Physical Review A, 1999, 60, 4567-4576.	1.0	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.	1.2	23
116	Cross section and asymmetry parameter calculations for the C1sphotoionization ofCH4,CF4,andCCl4. Physical Review A, 2003, 68, .	1.0	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.	0.6	23
118	Near-threshold shape resonance in the photoionization of 2-butyne. Journal of Chemical Physics, 2012, 136, 154303.	1.2	23
119	Cross sections for electron scattering by formaldehyde and pyrimidine in the low- and intermediate-energy ranges. Physical Review A, 2013, 87, .	1.0	23
120	Collision of hyperthermal atoms with a solid surface. I. Energy dissipation in the solid. Journal of Chemical Physics, 1991, 94, 4055-4061.	1.2	22
121	Classical trajectory simulations of photodissociation of CH3Br at surfaces. Journal of Chemical Physics, 1992, 96, 7771-7787.	1.2	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.	1.2	22
123	Auger decay of theC1sâ†'2Ï€*excitation of CO. Physical Review A, 1997, 56, 3666-3674.	1.0	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.	1.2	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.	1.2	22
126	Cross sections for electron collisions with dimethyl ether. Physical Review A, 2013, 88, .	1.0	22

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127	Electron collisions with ammonia and formamide in the low- and intermediate-energy ranges. Physical Review A, 2014, 90, .	1.0	22
128	Electron correlation effects on the excitation energies of the lowest triplet states of glyoxal. Journal of Chemical Physics, 1977, 67, 2422.	1.2	21
129	Correlated wavefunctions for the water molecule. Journal of Chemical Physics, 1978, 68, 5292-5294.	1.2	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.	1.2	21
131	Resonances and the effects of interchannel coupling in the photoionization of CS2. Journal of Chemical Physics, 1992, 97, 6384-6395.	1.2	21
132	Multichannel Schwinger study of Câ€Š1s photoionization of acetylene. Journal of Chemical Physics, 2000, 113, 1843-1851.	1.2	21
133	Interchannel coupling effects in the valence photoionization of SF6. Journal of Chemical Physics, 2014, 140, 204305.	1.2	21
134	Probing molecular bond-length using molecular-frame photoelectron angular distributions. Journal of Chemical Physics, 2019, 150, 174306.	1.2	21
135	Symmetry restricted multiconfiguration annihilation of single excitations. II. Applications: Electronic states of methylnitrene. Journal of Chemical Physics, 1978, 68, 2696.	1.2	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.	1.0	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.	1.2	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, .	1.0	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.	1.0	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.	1.2	19
141	A simple model for molecular frame photoelectron angular distributions. Journal of Electron Spectroscopy and Related Phenomena, 2004, 141, 201-210.	0.8	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.	1.2	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.	3.0	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.	1.2	18

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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.	1.6	18
146	Schwinger variational principle applied to long-range potentials. Physical Review A, 1984, 29, 1857-1864.	1.0	17
147	The outer valence photoionization of acetylene. Journal of Chemical Physics, 1999, 111, 6290-6299.	1.2	17
148	Studies of angular distributions and cross sections for photodetachment from the oxygen molecular anion. Journal of Chemical Physics, 2001, 114, 9350-9360.	1.2	17
149	Cross sections and asymmetry parameters in gas-phase photoionization ofC60. Physical Review A, 2001, 64, .	1.0	17
150	A morphed ground state potential for Ne:HI based on microwave spectroscopy. Chemical Physics Letters, 2002, 356, 101-108.	1.2	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.	0.6	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.	1.2	17
153	Analysis of the submillimetre Ar:HI ? bending transition as a test of a morphed potential. Physical Chemistry Chemical Physics, 2004, 6, 5318.	1.3	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.	0.6	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, .	1.0	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.	1.2	17
157	CMM-RS Potential for Characterization of the Properties of the Halogen-Bonded OCâ€“Cl₂ Complex, and a Comparison with Hydrogen-Bonded OCâ€“HCl. Journal of Physical Chemistry A, 2012, 116, 1213-1223.	1.1	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.	1.0	16
160	Mode-specific photoelectron scattering effects on CO2+(Câ€Š2Î£g+) vibrations. Journal of Chemical Physics, 2004, 120, 612-622.	1.2	16
161	Morphing a vibrationally-complete ground state potential for the hydrogen bond OCâ€“HF. Chemical Physics, 2011, 390, 42-50.	0.9	16
162	Complete determination of the state of elliptically polarized light by electron-ion vector correlations. Physical Review A, 2013, 88, .	1.0	16

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163	A Unified Perspective on the Nature of Bonding in Pairwise Interatomic Interactions. Journal of Physical Chemistry A, 2014, 118, 6287-6298.	1.1	16
164	Strong-field ionization of water. II. Electronic and nuclear dynamics en route to double ionization. Physical Review A, 2021, 104, .	1.0	16
165	Thermal collision rate constants for small nickel clusters of size 2â€“14 atoms. Journal of Chemical Physics, 1995, 102, 7683-7699.	1.2	15
166	Theoretical studies of core excitation and ionization in molecular systems. Journal of Synchrotron Radiation, 2001, 8, 150-153.	1.0	15
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