Stephen R Leone

List of Publications by Year
in descending order

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224 papers	10,778 citations	34105 52 h-index	39675 94 g-index
241 all docs	241 docs citations	241 times ranked	9878 citing authors

#	Article	IF	Citations
1	Real-time observation of valence electron motion. Nature, 2010, 466, 739-743.	27.8	1,040
2	Lasing in robust cesium lead halide perovskite nanowires. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1993-1998.	7.1	668
3	Attosecond band-gap dynamics in silicon. Science, 2014, 346, 1348-1352.	12.6	415
4	Operando Spectroscopic Analysis of an Amorphous Cobalt Sulfide Hydrogen Evolution Electrocatalyst. Journal of the American Chemical Society, 2015, 137, 7448-7455.	13.7	330
5	Femtosecond x-ray spectroscopy of an electrocyclic ring-opening reaction. Science, 2017, 356, 54-59.	12.6	253
6	Roadmap of ultrafast x-ray atomic and molecular physics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 032003.	1.5	240
7	What will it take to observe processes in 'real time'?. Nature Photonics, 2014, 8, 162-166.	31.4	220
8	The ultrafast X-ray spectroscopic revolution in chemical dynamics. Nature Reviews Chemistry, 2018, 2, 82-94.	30.2	215
9	Shapes and vorticities of superfluid helium nanodroplets. Science, 2014, 345, 906-909.	12.6	197
10	Excitation-wavelength-dependent small polaron trapping of photoexcited carriers in Î±-Fe2O3. Nature Materials, 2017, 16, 819-825.	27.5	178
11	Real-Time Probing of Electron Dynamics Using Attosecond Time-Resolved Spectroscopy. Annual Review of Physical Chemistry, 2016, 67, 41-63.	10.8	168
12	Vacuum Ultraviolet (VUV) Photoionization of Small Water Clusters. Journal of Physical Chemistry A, 2007, 111, 10075-10083.	2.5	143
13	Detection and Identification of the Keto-Hydroperoxide (HOOCH₂OCHO) and Other Intermediates during Low-Temperature Oxidation of Dimethyl Ether. Journal of Physical Chemistry A, 2015, 119, 7361-7374.	2.5	143
14	Transient absorption spectroscopy using high harmonic generation: a review of ultrafast X-ray dynamics in molecules and solids. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170463.	3.4	125
15	Direct and simultaneous observation of ultrafast electron and hole dynamics in germanium. Nature Communications, 2017, 8, 15734.	12.8	117
16	Unraveling the structure and chemical mechanisms of highly oxygenated intermediates in oxidation of organic compounds. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13102-13107.	7.1	117
17	Light-induced states in attosecond transient absorption spectra of laser-dressed helium. Physical Review A, 2012, 86, .	2.5	112
18	Tracking the insulator-to-metal phase transition in VO ₂ with few-femtosecond extreme UV transient absorption spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9558-9563.	7.1	112

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19	Femtosecond M_{2,3}-Edge Spectroscopy of Transition-Metal Oxides: Photoinduced Oxidation State Change in Î±-Fe₂O₃. Journal of Physical Chemistry Letters, 2013, 4, 3667-3671.	4.6	110
20	Photoelectron Spectrum of Isolated Ion-Pairs in Ionic Liquid Vapor. Journal of Physical Chemistry A, 2007, 111, 3191-3195.	2.5	106
21	Attosecond optics and technology: progress to date and future prospects [Invited]. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1081.	2.1	101
22	Thermal Vaporization of Biological Nanoparticles:Â Fragment-Free Vacuum Ultraviolet Photoionization Mass Spectra of Tryptophan, Phenylalanineâ^'Glycineâ^'Glycine, and Î²-Carotene. Journal of Physical Chemistry A, 2006, 110, 2106-2113.	2.5	98
23	Direct mapping of curve-crossing dynamics in IBr by attosecond transient absorption spectroscopy. Science, 2019, 365, 79-83.	12.6	98
24	Application of an InGaAsP diode laser to probe photodissociation dynamics: I* quantum yields from nâ€• and iâ€C3F7I and CH3I by laser gain vs absorption spectroscopy. Journal of Chemical Physics, 1986, 84, 2143-2149.	3.0	93
25	Probing ultrafast dynamics with attosecond transient absorption. Chemical Physics Letters, 2015, 624, 119-130.	2.6	84
26	Atomic-Scale Perspective of Ultrafast Charge Transfer at a Dyeâ€“Semiconductor Interface. Journal of Physical Chemistry Letters, 2014, 5, 2753-2759.	4.6	79
27	Characterization of Photo-Induced Charge Transfer and Hot Carrier Relaxation Pathways in Spinel Cobalt Oxide (Co₃O₄). Journal of Physical Chemistry C, 2014, 118, 22774-22784.	3.1	78
28	Two-dimensional periodic alignment of self-assembled Ge islands on patterned Si(001) surfaces. Applied Physics Letters, 2002, 80, 497-499.	3.3	77
29	Experimental implementation of the Deutsch-Jozsa algorithm for three-qubit functions using pure coherent molecular superpositions. Physical Review A, 2002, 66, .	2.5	76
30	Laserâ€excited electronicâ€toâ€vibrational energy transfer from Br(42P1/2) to HCl and HBr. Journal of Chemical Physics, 1974, 60, 314-315.	3.0	74
31	Absolute I* quantum yields for the ICN Ã1Æ state by diode laser gainâ€vsâ€absorption spectroscopy. Journal of Chemical Physics, 1987, 86, 3773-3780.	3.0	74
32	Chemical dynamics, molecular energetics, and kinetics at the synchrotron. Physical Chemistry Chemical Physics, 2010, 12, 6564.	2.8	73
33	Photodissociation dynamics of C2H2 at 193 nm: Vibrational distributions of the CCH radical and the rotational state distribution of the Ã1Æ(010) state by timeâ€resolved Fourier transform infrared emission. Journal of Chemical Physics, 1989, 90, 871-879.	3.0	71
34	Photodissociation of ammonia at 193.3 nm: Rovibrational state distribution of the NH2(Ã1Æâ€‰2A1) fragment. Journal of Chemical Physics, 1991, 94, 4195-4204.	3.0	71
35	Investigating the chemical composition of mixed organicâ€“inorganic particles by â€œsoftâ€•vacuum ultraviolet photoionization: The reaction of ozone with anthracene on sodium chloride particles. International Journal of Mass Spectrometry, 2006, 258, 74-85.	1.5	71
36	Growth and Photoelectrochemical Energy Conversion of Wurtzite Indium Phosphide Nanowire Arrays. ACS Nano, 2016, 10, 5525-5535.	14.6	70

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37	Ultrafast Intersystem Crossing in Acetylacetone via Femtosecond X-ray Transient Absorption at the Carbon K-Edge. Journal of the American Chemical Society, 2017, 139, 16576-16583.	13.7	68
38	Disentangling conical intersection and coherent molecular dynamics in methyl bromide with attosecond transient absorption spectroscopy. Nature Communications, 2019, 10, 3133.	12.8	68
39	Photofragmentation dynamics of acetone of 193 nm: State distributions of the CH3and CO fragments by timeâ€•and wavelengthâ€•resolved infrared emission. Journal of Chemical Physics, 1986, 85, 817-824.	3.0	66
40	A laser-based instrument for the study of ultrafast chemical dynamics by soft x-ray-probe photoelectron spectroscopy. Review of Scientific Instruments, 2002, 73, 1875-1886.	1.3	66
41	Direct Observation of the Transition-State Region in the Photodissociation of CH₃I by Femtosecond Extreme Ultraviolet Transient Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 5072-5077.	4.6	60
42	Rotationally resolved product states of polyatomic photofragmentation by timeâ€•resolved FTIR emission: HF elimination from 1,1â€CH2CClF at 193 mm. Journal of Chemical Physics, 1988, 88, 4720-4731.	3.0	59
43	State-resolved attosecond reversible and irreversible dynamics in strong optical fields. Nature Physics, 2017, 13, 472-478.	16.7	59
44	Excitation Intensity Dependence of Photoluminescence Blinking in CsPbBr₃ Perovskite Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 12106-12113.	3.1	58
45	Ultrafast strong-field dissociative ionization dynamics of CH2Br2 probed by femtosecond soft x-ray transient absorption spectroscopy. Journal of Chemical Physics, 2008, 128, 204302.	3.0	57
46	Thermal Decomposition Mechanism of 1-Ethyl-3-methylimidazolium Bromide Ionic Liquid. Journal of Physical Chemistry A, 2012, 116, 5867-5876.	2.5	57
47	Capturing Ultrafast Quantum Dynamics with Femtosecond and Attosecond X-ray Core-Level Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2013, 4, 292-302.	4.6	57
48	Probing the Dynamics of Rydberg and Valence States of Molecular Nitrogen with Attosecond Transient Absorption Spectroscopy. Journal of Physical Chemistry A, 2016, 120, 3165-3174.	2.5	56
49	Generating high-contrast, near single-cycle waveforms with third-order dispersion compensation. Optics Letters, 2017, 42, 811.	3.3	56
50	Diode laser probing of I*(2P1/2) Doppler profiles: Time evolution of a fast, anisotropic velocity distribution in a thermal bath. Journal of Chemical Physics, 1990, 93, 6543-6553.	3.0	54
51	Attosecond transient absorption probing of electronic superpositions of bound states in neon: detection of quantum beats. New Journal of Physics, 2014, 16, 113016.	2.9	54
52	High-spectral-resolution attosecond absorption spectroscopy of autoionization in xenon. Physical Review A, 2014, 89, .	2.5	54
53	Waveâ€packet dynamics in the Li2 E(1Î£+g) shelf state: Simultaneous observation of vibrational and rotational recurrences with single rovibronic control of an intermediate state. Journal of Chemical Physics, 1995, 103, 7269-7276.	3.0	53
54	Ultrafast X-ray Transient Absorption Spectroscopy of Gas-Phase Photochemical Reactions: A New Universal Probe of Photoinduced Molecular Dynamics. Accounts of Chemical Research, 2018, 51, 3203-3211.	15.6	53

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55	Charge transfer and collisionâ€induced dissociation reactions of CO++ with the rare gases at Elab=49 eV. Journal of Chemical Physics, 1993, 98, 280-289.	3.0	52
56	Characterization of vibrational wave packets by core-level high-harmonic transient absorption spectroscopy. Physical Review A, 2013, 88, .	2.5	52
57	Kinetics of C2H Reactions with Hydrocarbons and Nitriles in the 104â^'296 K Temperature Range. Journal of Physical Chemistry A, 2004, 108, 1746-1752.	2.5	51
58	Noncollinear wave mixing of attosecond XUV and few-cycle optical laser pulses in gas-phase atoms: Toward multidimensional spectroscopy involving XUV excitations. Physical Review A, 2016, 94, .	2.5	50
59	Laser probing of ion velocity distributions in drift fields: Parallel and perpendicular temperatures and mobility for Ba+ in He. Journal of Chemical Physics, 1988, 89, 4707-4715.	3.0	49
60	Translational and internal state distributions of NO produced in the 193 nm explosive vaporization of cryogenic NO films: Rotationally cold, translationally fast NO molecules. Journal of Chemical Physics, 1989, 91, 5731-5742.	3.0	49
61	Heats of Vaporization of Room Temperature Ionic Liquids by Tunable Vacuum Ultraviolet Photoionization. Journal of Physical Chemistry B, 2010, 114, 1361-1367.	2.6	49
62	Thermal Decomposition Mechanisms of Alkylimidazolium Ionic Liquids with Cyano-Functionalized Anions. Journal of Physical Chemistry A, 2014, 118, 11119-11132.	2.5	49
63	Evidence for Multiple Trapping Mechanisms in Single CdSe/ZnS Quantum Dots from Fluorescence Intermittency Measurements over a Wide Range of Excitation Intensities. Journal of Physical Chemistry C, 2011, 115, 6341-6349.	3.1	45
64	Vibrational relaxation and photochemistry of HCl(v=1,2) and Br atoms. Journal of Chemical Physics, 1975, 63, 4735-4741.	3.0	44
65	A general method for Doppler determination of cylindrically symmetric velocity distributions: An application of Fourier transform Doppler spectroscopy. Journal of Chemical Physics, 1990, 93, 6554-6559.	3.0	44
66	Photofragmentation of ammonia at 193.3 nm: Bimodal rotational distributions and vibrational excitation of NH2(Ãƒ). Journal of Chemical Physics, 2000, 112, 658-669.	3.0	42
67	Ultrafast carrier thermalization and trapping in silicon-germanium alloy probed by extreme ultraviolet transient absorption spectroscopy. Structural Dynamics, 2017, 4, 044029.	2.3	42
68	Ultrafast photodissociation of Br2: Laser-generated high-harmonic soft x-ray probing of the transient photoelectron spectra and ionization cross sections. Journal of Chemical Physics, 2002, 117, 6108-6116.	3.0	40
69	Femtosecond tracking of carrier relaxation in germanium with extreme ultraviolet transient reflectivity. Physical Review B, 2018, 97, .	3.2	40
70	Revealing electronic state-switching at conical intersections in alkyl iodides by ultrafast XUV transient absorption spectroscopy. Nature Communications, 2020, 11, 4042.	12.8	40
71	Charge transfer and collisionâ€induced dissociation reactions of OCS2+ and CO22+ with the rare gases at a laboratory collision energy of 49 eV. Journal of Chemical Physics, 1993, 98, 9455-9465.	3.0	39
72	Phase and amplitude control in the formation and detection of rotational wave packets in the Eâ€‰1Î£g+ state of Li2. Journal of Chemical Physics, 1998, 108, 9259-9274.	3.0	39

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73	Hot phonon and carrier relaxation in Si(100) determined by transient extreme ultraviolet spectroscopy. Structural Dynamics, 2018, 5, 054302.	2.3	39
74	Simultaneous Observation of Carrier-Specific Redistribution and Coherent Lattice Dynamics in 2H-MoTe₂ with Femtosecond Core-Level Spectroscopy. ACS Nano, 2020, 14, 15829-15840.	14.6	38
75	A laser photolysis/time-resolved Fourier transform infrared emission study of OH(Xâ€‰2Î,v) produced in the reaction of alkyl radicals with O(3P). Journal of Chemical Physics, 1998, 108, 1944-1952.	3.0	37
76	Branching ratios for electronically excited oxygen atoms formed in the reaction of N+ with O2 at 300 K. Journal of Chemical Physics, 1986, 84, 2158-2166.	3.0	36
77	A laserâ€induced fluorescence study of product rotational state distributions in the charge transfer reaction: Ar+(2P3/2)+N2â†'Ar+N+2 (X) at 0.28 and 0.40 eV. Journal of Chemical Physics, 1989, 90, 1677-1685.	3.0	36
78	Near-resonant four-wave mixing of attosecond extreme-ultraviolet pulses with near-infrared pulses in neon: Detection of electronic coherences. Physical Review A, 2016, 94, .	2.5	36
79	Multidimensional spectroscopy with attosecond extreme ultraviolet and shaped near-infrared pulses. Science Advances, 2018, 4, eaau3783.	10.3	36
80	Photoinduced Heterocyclic Ring Opening of Furfural: Distinct Open-Chain Product Identification by Ultrafast X-ray Transient Absorption Spectroscopy. Journal of the American Chemical Society, 2018, 140, 12538-12544.	13.7	34
81	Attosecond Time-Domain Measurement of Core-Level-Exciton Decay in Magnesium Oxide. Physical Review Letters, 2020, 124, 207401.	7.8	34
82	Laser doubleâ€resonance mesurements of rotational relaxation rates of HF(â€‰J=13) with rare gases, H2, and D2. Journal of Chemical Physics, 1988, 89, 302-308.	3.0	33
83	Laser preparation and probing of initial and final orbital alignment in collisionâ€induced energy transfer Ca(4s5p,â€‰1P1) +Heâ†'Ca(4s5p,â€‰3P2)+He. Journal of Chemical Physics, 1992, 96, 8212-8224.	3.0	33
84	A selected ion flow tubeâ€laser induced fluorescence instrument for vibrationally stateâ€specific ionâ€molecule reactions. Review of Scientific Instruments, 1993, 64, 2808-2820.	1.3	33
85	Catalytic Decomposition of Hydroxylammonium Nitrate Ionic Liquid: Enhancement of NO Formation. Journal of Physical Chemistry Letters, 2017, 8, 2126-2130.	4.6	33
86	Individual cross sections for1D2sublevels (ML=0, Â±1, Â±2) in the alignmentâ€dependent process: Ca(4p21D2)+Rgâ†'Ca(3d4p1F3)+Rg as a function of rare gas. Journal of Chemical Physics, 1990, 92, 5260-5269.	3.0	32
87	Fourier transform infrared emission study of the mechanism and dynamics of HOI formed in the reaction of alkyl iodides with O(3P). Journal of Chemical Physics, 1997, 106, 3934-3947.	3.0	31
88	Laser probing of velocity-subgroup dependent rotational alignment of N2+ drifted in He. Journal of Chemical Physics, 1997, 106, 5413-5422.	3.0	31
89	A tabletop femtosecond time-resolved soft x-ray transient absorption spectrometer. Review of Scientific Instruments, 2008, 79, 073101.	1.3	31
90	Core-to-valence spectroscopic detection of the CH2Br radical and element-specific femtosecond photodissociation dynamics of CH2IBr. Journal of Chemical Physics, 2014, 141, 164308.	3.0	31

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91	Accurate prediction of core-level spectra of radicals at density functional theory cost via square gradient minimization and recoupling of mixed configurations. Journal of Chemical Physics, 2020, 153, 134108.	3.0	31
92	Interplay of Open-Shell Spin-Coupling and Jahnâ€“Teller Distortion in Benzene Radical Cation Probed by X-ray Spectroscopy. Journal of Physical Chemistry A, 2020, 124, 9532-9541.	2.5	31
93	Characterization of dynamical product-state distributions by spectral extended cross-correlation: Vibrational dynamics in the photofragmentation of NH2D and ND2H. Journal of Chemical Physics, 2000, 112, 3181-3191.	3.0	30
94	Optimization of wave packet coefficients in Li2 using an evolutionary algorithm: The role of resonant and nonresonant wavelengths. Journal of Chemical Physics, 2002, 116, 1350-1360.	3.0	30
95	Attosecond transient absorption of argon atoms in the vacuum ultraviolet region: line energy shifts versus coherent population transfer. New Journal of Physics, 2016, 18, 013041.	2.9	30
96	Direct observation of Ba+ velocity distributions in a drift tube using singleâ€frequency laserâ€induced fluorescence. Journal of Chemical Physics, 1987, 87, 5578-5579.	3.0	29
97	Tunable Wavelength Soft Photoionization of Ionic Liquid Vapors. Journal of Physical Chemistry A, 2010, 114, 879-883.	2.5	29
98	Strong-field induced XUV transmission and multiplet splitting in 4dâ^'16p core-excited Xe studied by femtosecond XUV transient absorption spectroscopy. Journal of Chemical Physics, 2012, 137, 244305.	3.0	29
99	Alternating absorption features during attosecond-pulse propagation in a laser-controlled gaseous medium. Physical Review A, 2013, 88, .	2.5	29
100	Layer-resolved ultrafast extreme ultraviolet measurement of hole transport in a Ni-TiO ₂ -Si photoanode. Science Advances, 2020, 6, eaay6650.	10.3	29
101	X-ray transient absorption reveals the 1Au (nÏ€*) state of pyrazine in electronic relaxation. Nature Communications, 2021, 12, 5003.	12.8	29
102	Flow-Tube Investigations of Hypergolic Reactions of a Dicyanamide Ionic Liquid Via Tunable Vacuum Ultraviolet Aerosol Mass Spectrometry. Journal of Physical Chemistry A, 2016, 120, 8011-8023.	2.5	28
103	Attosecond transient absorption spectroscopy of molecular nitrogen: Vibrational coherences in the bâ€² 1Î£+u state. Chemical Physics Letters, 2017, 683, 408-415.	2.6	28
104	Excited-state vibronic wave-packet dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> probed by XUV transient four-wave mixing. Physical Review A, 2018, 97, .	2.5	28
105	Selectivity of Electronic Coherence and Attosecond Ionization Delays in Strong-Field Double Ionization. Physical Review Letters, 2018, 120, 233201.	7.8	28
106	Efficient table-top dual-wavelength beamline for ultrafast transient absorption spectroscopy in the soft X-ray region. Scientific Reports, 2020, 10, 5773.	3.3	27
107	Ionization and dissociation dynamics of vinyl bromide probed by femtosecond extreme ultraviolet transient absorption spectroscopy. Journal of Chemical Physics, 2014, 140, 064311.	3.0	26
108	Polarization-assisted amplitude gating as a route to tunable, high-contrast attosecond pulses. Optica, 2016, 3, 707.	9.3	26

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109	Photoexcited Small Polaron Formation in Goethite (Î±-FeOOH) Nanorods Probed by Transient Extreme Ultraviolet Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 4120-4124.	4.6	26
110	Laserâ€induced fluorescence measurements of rotationally resolved velocity distributions for CO+ drifted in He. Journal of Chemical Physics, 1991, 94, 7810-7818.	3.0	25
111	Compositional control of rovibrational wave packets in the E(1Î£g+) â€œshelfâ€•state of Li2 via quantum-state-resolved intermediate state selection. Journal of Chemical Physics, 1997, 106, 8310-8323.	3.0	25
112	Ultrafast spectroscopy of wavelength-dependent coherent photoionization cross sections of Li2wave packets in the E1Î£g+ state: The role of Rydberg states. Journal of Chemical Physics, 2001, 114, 10311-10320.	3.0	25
113	Electrical properties of InGaNâ€Si heterojunctions. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S413.	0.8	25
114	Attosecond science in atomic, molecular, and condensed matter physics. Faraday Discussions, 2016, 194, 15-39.	3.2	25
115	Quenching and energy transfer processes of single rotational levels of Br2Bâ€‰3Î(0+u)vâ€™=24 with Ar under single collision conditions. Journal of Chemical Physics, 1989, 90, 964-976.	3.0	24
116	Attosecond transient-absorption dynamics of xenon core-excited states in a strong driving field. Physical Review A, 2017, 95, .	2.5	24
117	Nonlinear XUV signal generation probed by transient grating spectroscopy with attosecond pulses. Nature Communications, 2019, 10, 1384.	12.8	24
118	Tracing the 267 nm-Induced Radical Formation in Dimethyl Disulfide Using Time-Resolved X-ray Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 1382-1387.	4.6	24
119	Table-Top X-ray Spectroscopy of Benzene Radical Cation. Journal of Physical Chemistry A, 2020, 124, 9524-9531.	2.5	24
120	Production of 0.1â€“3 eV reactive molecules by laser vaporization of condensed molecular films: A potential source for beam-surface interactions. Journal of Materials Research, 1988, 3, 1158-1168.	2.6	23
121	Advances in submicron infrared vibrational band chemical imaging. International Reviews in Physical Chemistry, 2001, 20, 59-92.	2.3	23
122	Simultaneous phase control of Li2 wave packets in two electronic states. Journal of Chemical Physics, 2002, 116, 946-954.	3.0	23
123	Observing hydrogen silsesquioxane crossâ€linking with broadband CARS. Journal of Raman Spectroscopy, 2009, 40, 770-774.	2.5	23
124	Soft Ionization of Thermally Evaporated Hypergolic Ionic Liquid Aerosols. Journal of Physical Chemistry A, 2011, 115, 4630-4635.	2.5	23
125	Multiple pulse coherent dynamics and wave packet control of the N₂aâ€²â€²¹Î£+g dark state by attosecond four-wave mixing. Faraday Discussions, 2018, 212, 157-174.	3.2	23
126	Differentiating Photoexcited Carrier and Phonon Dynamics in the Î”, L, and Î“ Valleys of Si(100) with Transient Extreme Ultraviolet Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 3343-3352.	3.1	23

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127	Nascent vibrational and rotational distributions from the charge transfer reaction Ar++COâ€‰â†’â€‰CO++Ar at near thermal energy. Journal of Chemical Physics, 1985, 82, 5527-5535.	3.0	22
128	Manipulation of rovibrational wave packet composition in the Li2â€‰E(1Î£g+) shelf state using intermediate state selection and shaped femtosecond laser pulses. Journal of Chemical Physics, 1997, 107, 4172-4178.	3.0	22
129	Intensity dependence of light-induced states in transient absorption of laser-dressed helium measured with isolated attosecond pulses. Journal of Modern Optics, 2013, 60, 1506-1516.	1.3	22
130	Single frequency laser probing of velocity component correlations and transport properties of Ba+ drifting in Ar. Journal of Chemical Physics, 1993, 98, 9496-9512.	3.0	21
131	Mobility and formation kinetics of NH4+(NH3)n cluster ions (n=0â€“3) in helium and helium/ammonia mixtures. Journal of Chemical Physics, 1997, 106, 530-538.	3.0	21
132	The direct production of CO(v=1â€“9) in the reaction of O(3P) with the ethyl radical. Journal of Chemical Physics, 2000, 113, 4572-4580.	3.0	21
133	Tracking dissociation dynamics of strong-field ionized 1,2-dibromoethane with femtosecond XUV transient absorption spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 14644-14653.	2.8	21
134	Electron thermalization and relaxation in laser-heated nickel by few-femtosecond core-level transient absorption spectroscopy. Physical Review B, 2021, 103, .	3.2	21
135	Initial stages of heteroepitaxial growth of InAs on Siâ€‰(100). Applied Physics Letters, 1989, 55, 1333-1335.	3.3	20
136	The mobilities of ions and cluster ions drifting in polar gases. Journal of Chemical Physics, 1997, 106, 5937-5942.	3.0	20
137	Coherent electronic-vibrational dynamics in deuterium bromide probed via attosecond transient-absorption spectroscopy. Physical Review A, 2020, 101, .	2.5	20
138	Laserâ€induced fluorescence measurements of driftâ€velocity distributions for Ba+ in Ar: Moment analysis and a direct measure of skewness. Journal of Chemical Physics, 1990, 93, 5118-5127.	3.0	19
139	Laser single-photon ionization mass spectrometry measurements of SiCl and SiCl2 during thermal etching of Si(100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 2134-2142.	2.1	19
140	Pulseâ€toâ€pulse normalization of timeâ€resolved Fourier transform emission experiments in the near infrared. Review of Scientific Instruments, 1995, 66, 2812-2817.	1.3	18
141	Ultrafast predissociation of superexcited nitrogen molecules. Molecular Physics, 2008, 106, 275-280.	1.7	18
142	Mapping wave packet bifurcation at a conical intersection in CH3I by attosecond XUV transient absorption spectroscopy. Journal of Chemical Physics, 2021, 154, 234301.	3.0	18
143	Tâ€“V energy transfer and the exchange reaction of H(D)+HF at 2.2(2.1) eV: Vibrational state distributions by time and wavelength resolved infrared fluorescence. Journal of Chemical Physics, 1987, 86, 6731-6737.	3.0	17
144	The mobilities of NO+(CH3CN)n cluster ions (n=0â€“3) drifting in helium and in heliumâ€“acetonitrile mixtures. Journal of Chemical Physics, 1996, 105, 10398-10409.	3.0	17

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145	Nanometer-scale dielectric constant of Ge quantum dots using apertureless near-field scanning optical microscopy. Applied Physics Letters, 2010, 96, .	3.3	17
146	Ultraviolet Photoionization Efficiency of the Vaporized Ionic Liquid 1-Butyl-3-methylimidazolium Tricyanomethanide: Direct Detection of the Intact Ion Pair. Journal of Physical Chemistry Letters, 2012, 3, 2910-2914.	4.6	17
147	Simultaneous generation of sub-5-femtosecond 400â€‰â€‰nm and 800â€‰â€‰nm pulses for attosecond extreme ultraviolet pumpâ€“probe spectroscopy. Optics Letters, 2016, 41, 5365.	3.3	17
148	Solid state core-exciton dynamics in NaCl observed by tabletop attosecond four-wave mixing spectroscopy. Physical Review B, 2021, 103, .	3.2	17
149	Simulation of attosecondâ€resolved imaging of the plasmon electric field in metallic nanoparticles. Annalen Der Physik, 2013, 525, 151-161.	2.4	16
150	Dissociation Dynamics and Electronic Structures of Highly Excited Ferrocenium Ions Studied by Femtosecond XUV Absorption Spectroscopy. Journal of Physical Chemistry A, 2016, 120, 9509-9518.	2.5	16
151	Femtosecond Extreme Ultraviolet Photoemission Spectroscopy: Observation of Ultrafast Charge Transfer at the n-TiO₂/p-Si(100) Interface with Controlled TiO₂ Oxygen Vacancies. Journal of Physical Chemistry C, 2016, 120, 2769-2776.	3.1	16
152	Probing ultrafast Câ€“Br bond fission in the UV photochemistry of bromoform with core-to-valence transient absorption spectroscopy. Structural Dynamics, 2019, 6, 054304.	2.3	16
153	Nascent rotational and vibrational product state distribution in the charge transfer reaction of N++COâ†’CO++N at near thermal energy. Journal of Chemical Physics, 1986, 84, 2180-2186.	3.0	15
154	Threeâ€vector correlation study of orientation and coherence effects in Na(3p,2P1/2â†2P3/2)+He: Semiclassical and quantum calculations. Journal of Chemical Physics, 1993, 98, 2038-2053.	3.0	15
155	Vibrational enhancement of the charge transfer rate constant of N+2(v=0â€“4) with Kr at thermal energies. Journal of Chemical Physics, 1996, 105, 5455-5466.	3.0	15
156	Autoionization dynamics of (2P1/2)ns/d states in krypton probed by noncollinear wave mixing with attosecond extreme ultraviolet and few-cycle near infrared pulses. Journal of Chemical Physics, 2019, 151, 114305.	3.0	15
157	Chemistry of arsenic incorporation during GaAs/GaAs(100) molecular beam epitaxy probed by simultaneous laser flux monitoring and reflection high-energy electron diffraction. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2742.	1.6	14
158	Laser probing of rotational-state-dependent velocity distributions of N2+â€Š(Î½â€²=0,J) drifted in He. Journal of Chemical Physics, 2000, 112, 10269-10281.	3.0	14
159	Water Vapor Uptake in Photolithographic Polymers Observed by Infrared Near-Field Scanning Optical Microscopy in a Controlled Environment. Journal of Physical Chemistry B, 2003, 107, 4951-4954.	2.6	14
160	Time-resolved photoelectron angular distributions and cross-section ratios of two-colour two-photon above threshold ionization of helium. Molecular Physics, 2010, 108, 1241-1251.	1.7	14
161	Investigation of coupling mechanisms in attosecond transient absorption of autoionizing states: comparison of theory and experiment in xenon. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 125601.	1.5	14
162	Transition state region in the A-Band photodissociation of allyl iodideâ€”A femtosecond extreme ultraviolet transient absorption study. Journal of Chemical Physics, 2016, 144, 124311.	3.0	14

#	Article	IF	Citations
163	Electron-Withdrawing Effects in the Photodissociation of CH₂ICl To Form CH₂Cl Radical, Simultaneously Viewed Through the Carbon K and Chlorine L_{2,3} X-ray Edges. Journal of the American Chemical Society, 2018, 140, 13360-13366.	13.7	14
164	Carrier-specific dynamics in 2H-MoTe2 observed by femtosecond soft x-ray absorption spectroscopy using an x-ray free-electron laser. Structural Dynamics, 2021, 8, 014501.	2.3	14
165	Collisionâ€induced dissociation of laserâ€excited Br2[Bâ€‰3Î(0+u);vâ€™, Jâ€™]: Formation of Br*(2P1/2)+Br(2P3/2) at energies 1â€“5 kT below dissociation. Journal of Chemical Physics, 1987, 86, 6801-6812.	3.0	13
166	Translational to vibrational and rotational (Tâ†’V,R) energy transfer and reactive exchange collisions of H(D)+HF(DF) in the energy range from 1 to 2 eV by time-resolved Fourier transform spectroscopy. Journal of Chemical Physics, 1997, 106, 2265-2276.	3.0	13
167	Direct observation of ring-opening dynamics in strong-field ionized selenophene using femtosecond inner-shell absorption spectroscopy. Journal of Chemical Physics, 2016, 145, 234313.	3.0	13
168	Attosecond transient absorption instrumentation for thin film materials: Phase transitions, heat dissipation, signal stabilization, timing correction, and rapid sample rotation. Review of Scientific Instruments, 2018, 89, 013109.	1.3	13
169	All-XUV Pump-Probe Transient Absorption Spectroscopy of the Structural Molecular Dynamics of Di-iodomethane. Physical Review X, 2021, 11, .	8.9	13
170	Coupled valence carrier and core-exciton dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">WS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> probed by few-femtosecond extreme ultraviolet transient absorption spectroscopy. Physical Review B, 2021, 104, .	3.2	13
171	Ion-enhanced etching of Si(100) with molecular chlorine: Reaction mechanisms and product yields. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 3340-3350.	2.1	12
172	Product State Distributions of Vibrationally Excited CO(v) for the CH(X2Î) and CH(A2Î”) Channels of the C2H + O(3P) Reaction. Journal of Physical Chemistry A, 2004, 108, 10770-10782.	2.5	12
173	Scanning x-ray microscopy investigations into the electron-beam exposure mechanism of hydrogen silsesquioxane resists. Journal of Vacuum Science & Technology B, 2006, 24, 3048.	1.3	12
174	Effect of enhanced collision energy on product vibrational excitation for the proton transfer reaction: Oâ¯+HFâ†’Fâ¯+OH(v=0,1). Journal of Chemical Physics, 1992, 96, 298-306.	3.0	11
175	Coupled nuclearâ€“electronic decay dynamics of O₂ inner valence excited states revealed by attosecond XUV wave-mixing spectroscopy. Faraday Discussions, 2021, 228, 537-554.	3.2	11
176	A rotationally resolved LIF study of the N+2products of the thermal energy Penning ionization reaction: Ne*(3P2)+N2. Journal of Chemical Physics, 1987, 87, 5041-5043.	3.0	10
177	Calculation of valence electron motion induced by sequential strong-field ionisation. Molecular Physics, 2013, 111, 2283-2291.	1.7	10
178	Simulation of X-ray transient absorption for following vibrations in coherently ionized F2 molecules. Chemical Physics, 2017, 482, 249-264.	1.9	10
179	Attosecond XUV probing of vibronic quantum superpositions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msubsup><mml:mi>Br</mml:mi><mml:mn>2</mml:mn><mml:mo>+</mml:mo>+</mml:msubsup></mml:math> Physical Review A, 2020, 102, .	2.5	10
180	Conical intersection and coherent vibrational dynamics in alkyl iodides captured by attosecond transient absorption spectroscopy. Journal of Chemical Physics, 2022, 156, 114304.	3.0	10

#	Article	IF	Citations
181	Laser determinations of â€˜â€˜hot bandâ€™â€™ quantum yields: Br*(2P1/2) formation in the continuum absorption of Br2 at 510â€“550 nm. Journal of Chemical Physics, 1987, 87, 2700-2708.	3.0	9
182	Preparation and probing of alignment in molecular ensembles by saturated coherent pulsed laser excitation. Journal of Chemical Physics, 1996, 105, 5858-5871.	3.0	9
183	Comparison of electron cyclotron resonance and radio-frequency inductively coupled plasmas of Ar and N2: Neutral kinetic energies and source gas cracking. Journal of Applied Physics, 1998, 83, 1917-1923.	2.5	9
184	Probing the cyclic transition state in the reaction O(3P)+alkyl iodides to form HOI: electronic, steric and thermodynamic factors influencing the reaction pathway. Physical Chemistry Chemical Physics, 2000, 2, 853-860.	2.8	9
185	Rotational-state and velocity-subgroup dependence of the rotational alignment of N2+ drifted in He. Journal of Chemical Physics, 2001, 114, 6654-6661.	3.0	9
186	Inducing a sign inversion in one state of a two-state superposition using ultrafast pulse shaping. Physical Review A, 2003, 68, .	2.5	9
187	Ultrafast decay of superexcited cÎ£uâ€²4nÏƒgv=0,1 states of O2 probed with femtosecond photoelectron spectroscopy. Journal of Chemical Physics, 2012, 136, 214303.	3.0	9
188	Measuring the Surface Photovoltage of a Schottky Barrier under Intense Light Conditions: Zn/p-Si(100) by Laser Time-Resolved Extreme Ultraviolet Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 21904-21912.	3.1	9
189	Nonmetal to Metal Transition and Ultrafast Charge Carrier Dynamics of Zn Clusters on p-Si(100) by fs-XUV Photoemission Spectroscopy. Nano Letters, 2018, 18, 4107-4114.	9.1	9
190	Ab initio investigation of Br-3d core-excited states in HBr and HBr+ toward XUV probing of photochemical dynamics. Structural Dynamics, 2019, 6, 014101.	2.3	9
191	Atomic force microscopy study of the growth and annealing of Ge islands on Si(100). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 678.	1.6	8
192	Attosecond spectroscopy reveals alignment dependent core-hole dynamics in the ICl molecule. Nature Communications, 2020, 11, 5810.	12.8	8
193	Ultrafast strong-field dissociation of vinyl bromide: An attosecond transient absorption spectroscopy and non-adiabatic molecular dynamics study. Structural Dynamics, 2021, 8, 034104.	2.3	8
194	Coherent energy exchange between carriers and phonons in Peierls-distorted bismuth unveiled by broadband XUV pulses. Physical Review Research, 2021, 3, .	3.6	8
195	Vibrational distributions of As2 in the cracking of As4 on Si(100) and Si(111). Journal of Chemical Physics, 1992, 97, 6864-6870.	3.0	7
196	Addition-insertion-elimination reactions of O(3P) with halogenated iodoalkanes producing HF(v) and HCl(v). Journal of Chemical Physics, 2001, 114, 2251-2258.	3.0	7
197	Product Studies of Inelastic and Reactive Collisions of NH2 + NO:â€‰ Effects of Vibrationally and Electronically Excited NH2â€. Journal of Physical Chemistry A, 2002, 106, 8249-8255.	2.5	6
198	NaI revisited: Theoretical investigation of predissociation via ultrafast XUV transient absorption spectroscopy. Journal of Chemical Physics, 2019, 151, 204103.	3.0	6

#	Article	IF	Citations
199	Characterization of Carrier Cooling Bottleneck in Silicon Nanoparticles by Extreme Ultraviolet (XUV) Transient Absorption Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 9319-9329.	3.1	6
200	Self-heterodyned detection of dressed state coherences in helium by noncollinear extreme ultraviolet wave mixing with attosecond pulses. JPhys Photonics, 2020, 2, 034003.	4.6	6
201	Effect of nonresonant frequencies on the enhancement of quantum beat amplitudes in rovibrational states of Li2: The role of state spacing. Journal of Chemical Physics, 2002, 117, 11228-11238.	3.0	5
202	Excited-state electronic coherence in vinyl bromide ions. Physical Review A, 2019, 100, .	2.5	5
203	Visualizing coherent vibrational motion in the molecular iodine <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>B</mml:mi><mml:mspace width="0.28em" /><mml:msup><mml:mrow /><mml:mn>3</mml:mn></mml:msup><mml:msub><mml:mi mathvariant="normal">Î</mml:mi><mml:msub><mml:mrow><mml:msup><mml:mn>0</mml:mn><mml:mo>+</mml:mo></mml:msup> state using ultrafast XUV transient absorption spectroscopy. Physical Review A, 2021, 104, .	2.5	5
204	Thermal and Catalytic Decomposition of 2-Hydroxyethylhydrazine and 2-Hydroxyethylhydrazinium Nitrate Ionic Liquid. Journal of Physical Chemistry A, 2022, 126, 373-394.	2.5	4
205	Theoretical analysis of the role of complex transition dipole phase in XUV transient-absorption probing of charge migration. Optics Express, 2022, 30, 5673.	3.4	4
206	Interaction of in Atom Spin-Orbit States with Si(100) Surfaces. Materials Research Society Symposia Proceedings, 1988, 131, 239.	0.1	3
207	Generation of a velocity selected, pulsed source of hyperthermal (1â€“10 eV) neutral metal atoms for thin film growth studies. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 2709-2716.	2.1	3
208	Sizes of pure and doped helium droplets from single shot x-ray imaging. Journal of Chemical Physics, 2022, 156, 041102.	3.0	3
209	Application of semiconductor diode lasers to probe photodissociation dynamics. AIP Conference Proceedings, 1987, , .	0.4	1
210	Laser Probing of the Dynamics of Ga Interactions on Si(lO0). Materials Research Society Symposia Proceedings, 1988, 116, 45.	0.1	1
211	Laser-Induced Desorption of in and Ga from Si(100) and Adsorbate Enhanced Surface Damage. Materials Research Society Symposia Proceedings, 1991, 236, 27.	0.1	1
212	Nonmetal-to-Metal Transition of Magnesia Supported Au Clusters Affects the Ultrafast Dissociation Dynamics of Adsorbed CH₃Br Molecules. Journal of Physical Chemistry Letters, 2022, 13, 4747-4753.	4.6	1
213	T-V Energy Transfer and Chemical Reactions of Laser-Produced Hot H and D Atoms. Radiochimica Acta, 1988, 43, 107-109.	1.2	0
214	Time-resolved FTIR emission studies of molecular photofragmentation initiated by a high repetition rate excimer laser. AIP Conference Proceedings, 1988, , .	0.4	0
215	Orbital alignment and vector correlations in inelastic atomic collisions. AIP Conference Proceedings, 1993, , .	0.4	0
216	Single-Photon Ionization, In Situ Optical Diagnostic Of Molecular Beam Epitaxial Growth Of GaAs. Materials Research Society Symposia Proceedings, 1995, 406, 101.	0.1	0

#	Article	IF	Citations
217	Quantum dynamics of isolated molecules: general discussion. Faraday Discussions, 2018, 212, 281-306.	3.2	0
218	Attosecond and Soft X-ray Time-Resolved Dynamics. , 2021, , .		0
219	Attosecond Noncollinear Four Wave Mixing. , 2021, , .		0
220	TIME-SHIFTING THE DYNAMICS OF Li₂ MULTISTATE ROVIBRATIONAL WAVE PACKETS BY STATE SELECTIVE COHERENT PHASE CONTROL. , 2000, , .		0
221	Ultrafast atomic and molecular dynamics with high-order harmonic probes. , 2008, , .		0
222	Microjoule-level 20 fs UV pulses for the investigation of molecular dynamics via attosecond transient absorption spectroscopy. , 2020, , .		0
223	Probing Delayed Câ€“I Bond Fission in the UV Photochemistry of 2-Iodothiophene with Core-to-Valence Transient Absorption Spectroscopy. , 2020, , .		0
224	Elucidation of Molecular Dynamics by Extreme Ultraviolet and Soft X-ray Transient-Absorption Spectroscopy. ACS Symposium Series, 0, , 1-14.	0.5	0