

Jesse Beauchamp

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

217 papers	11,619 citations	59 h-index	94 g-index
328 ext. papers	12,275 ext. citations	11.5 avg, IF	5.96 L-index

#	Paper	IF	Citations
217	Host-Guest Complexation of Amphiphilic Molecules at the Air-Water Interface Prevents Oxidation by Hydroxyl Radicals and Singlet Oxygen. <i>Angewandte Chemie</i> , 2020 , 132, 12784-12788	3.6	3
216	Host-Guest Complexation of Amphiphilic Molecules at the Air-Water Interface Prevents Oxidation by Hydroxyl Radicals and Singlet Oxygen. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 12684-12688	16.4	14
215	Mass Spectrometric Study of Acoustically Levitated Droplets Illuminates Molecular-Level Mechanism of Photodynamic Therapy for Cancer Involving Lipid Oxidation. <i>Angewandte Chemie</i> , 2019 , 131, 8166-8170	3.6	6
214	Mass Spectrometric Study of Acoustically Levitated Droplets Illuminates Molecular-Level Mechanism of Photodynamic Therapy for Cancer Involving Lipid Oxidation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 8082-8086	16.4	32
213	Robert C. Dunbar (1943-2017). <i>European Journal of Mass Spectrometry</i> , 2019 , 25, 4-7	1.1	
212	Resin and Magnetic Nanoparticle-Based Free Radical Probes for Glycan Capture, Isolation, and Structural Characterization. <i>Analytical Chemistry</i> , 2019 , 91, 15387-15396	7.8	6
211	Cholesterol provides nonsacrificial protection of membrane lipids from chemical damage at air-water interface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3255-3260	11.5	50
210	Probing the OH Oxidation of Pinonic Acid at the Air-Water Interface Using Field-Induced Droplet Ionization Mass Spectrometry (FIDI-MS). <i>Journal of Physical Chemistry A</i> , 2018 , 122, 6445-6456	2.8	13
209	Subtle Changes in Lipid Environment Have Profound Effects on Membrane Oxidation Chemistry. <i>Journal of the American Chemical Society</i> , 2018 , 140, 17492-17498	16.4	22
208	Easily fabricated ion source for characterizing mixtures of organic compounds by direct analysis in real time mass spectrometry. <i>Analytical Methods</i> , 2017 , 9, 5065-5074	3.2	7
207	Time resolved study of hydroxyl radical oxidation of oleic acid at the air-water interface. <i>Chemical Physics Letters</i> , 2017 , 683, 76-82	2.5	21
206	Real-Time Studies of Iron Oxalate-Mediated Oxidation of Glycolaldehyde as a Model for Photochemical Aging of Aqueous Tropospheric Aerosols. <i>Environmental Science & Technology</i> , 2016 , 50, 12241-12249	10.3	29
205	Eradicating mass spectrometric glycan rearrangement by utilizing free radicals. <i>Chemical Science</i> , 2016 , 7, 5390-5397	9.4	19
204	Mass spectrometric sampling of a liquid surface by nanoliter droplet generation from bursting bubbles and focused acoustic pulses: application to studies of interfacial chemistry. <i>Analytical Chemistry</i> , 2015 , 87, 3336-44	7.8	20
203	Investigation of the Mechanism of Electron Capture and Electron Transfer Dissociation of Peptides with a Covalently Attached Free Radical Hydrogen Atom Scavenger. <i>International Journal of Mass Spectrometry</i> , 2015 , 390, 49-55	1.9	11
202	Mechanisms and energetics of free radical initiated disulfide bond cleavage in model peptides and insulin by mass spectrometry. <i>Chemical Science</i> , 2015 , 6, 4550-4560	9.4	22
201	Hydrogen bonding constrains free radical reaction dynamics at serine and threonine residues in peptides. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 8380-92	2.8	25

200	Biomimetic reagents for the selective free radical and acid-base chemistry of glycans: application to glycan structure determination by mass spectrometry. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10684-92	16.4	45
199	Studying interfacial reactions of cholesterol sulfate in an unsaturated phosphatidylglycerol layer with ozone using field induced droplet ionization mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2012 , 23, 141-52	3.5	14
198	A microfluidic-based bubble generation platform enables analysis of physical property change in phospholipid surfactant layers by interfacial ozone reaction. <i>Lab on A Chip</i> , 2012 , 12, 5243-8	7.2	4
197	Click chemistry facilitates formation of reporter ions and simplified synthesis of amine-reactive multiplexed isobaric tags for protein quantification. <i>Journal of the American Chemical Society</i> , 2012 , 134, 2672-80	16.4	28
196	Designer reagents for mass spectrometry-based proteomics: clickable cross-linkers for elucidation of protein structures and interactions. <i>Analytical Chemistry</i> , 2012 , 84, 2662-9	7.8	39
195	Switched ferroelectric plasma ionizer (SwiFerr) for ambient mass spectrometry. <i>Analytical Chemistry</i> , 2011 , 83, 38-43	7.8	9
194	Interfacial reactions of ozone with surfactant protein B in a model lung surfactant system. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2254-63	16.4	44
193	Time resolved studies of interfacial reactions of ozone with pulmonary phospholipid surfactants using field induced droplet ionization mass spectrometry. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 9496-503	3.4	30
192	Evaporation and discharge dynamics of highly charged multicomponent droplets generated by electrospray ionization. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 1411-9	2.8	57
191	Ionization mechanism of the ambient pressure pyroelectric ion source (APPIS) and its applications to chemical nerve agent detection. <i>Journal of the American Society for Mass Spectrometry</i> , 2009 , 20, 2093-9	3.5	6
190	Mapping disulfide bonds in insulin with the Route 66 Method: selective cleavage of S-C bonds using alkali and alkaline earth metal enolate complexes. <i>Journal of the American Society for Mass Spectrometry</i> , 2009 , 20, 157-66	3.5	40
189	Probing the mechanism of electron capture and electron transfer dissociation using tags with variable electron affinity. <i>Journal of the American Chemical Society</i> , 2009 , 131, 5444-59	16.4	66
188	Experimental and theoretical investigation into the correlation between mass and ion mobility for choline and other ammonium cations in N ₂ . <i>Analytical Chemistry</i> , 2008 , 80, 1928-36	7.8	62
187	Identifying the presence of a disulfide linkage in peptides by the selective elimination of hydrogen disulfide from collisionally activated alkali and alkaline earth metal complexes. <i>Journal of the American Chemical Society</i> , 2008 , 130, 1245-57	16.4	31
186	Compact ambient pressure pyroelectric ion source for mass spectrometry. <i>Analytical Chemistry</i> , 2007 , 79, 3945-8	7.8	30
185	Cluster phase chemistry: collisions of vibrationally excited cationic dicarboxylic acid clusters with water molecules initiate dissociation of cluster components. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 5954-67	2.8	6
184	Cluster phase chemistry: gas-phase reactions of anionic sodium salts of dicarboxylic acid clusters with water molecules. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 7777-86	2.8	16
183	Probing interfacial chemistry of single droplets with field-induced droplet ionization mass spectrometry: physical adsorption of polycyclic aromatic hydrocarbons and ozonolysis of oleic acid and related compounds. <i>Analytical Chemistry</i> , 2006 , 78, 3800-6	7.8	52

182	Bioconjugates for tunable peptide fragmentation: free radical initiated peptide sequencing (FRIPS). <i>Journal of the American Chemical Society</i> , 2005 , 127, 12436-7	16.4	117
181	Cluster-phase reactions: gas-phase phosphorylation of peptides and model compounds with triphosphate anions. <i>Journal of the American Chemical Society</i> , 2005 , 127, 4084-90	16.4	16
180	Dynamics of field-induced droplet ionization: time-resolved studies of distortion, jetting, and progeny formation from charged and neutral methanol droplets exposed to strong electric fields. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 8244-50	3.4	133
179	Selective molecular recognition of arginine by anionic salt bridge formation with bis-phosphate crown ethers: implications for gas phase peptide acidity from adduct dissociation. <i>Journal of the American Society for Mass Spectrometry</i> , 2004 , 15, 616-24	3.5	23
178	Particle phase acidity and oligomer formation in secondary organic aerosol. <i>Environmental Science & Technology</i> , 2004 , 38, 6582-9	10.3	323
177	Cluster Phase Reactions: Alkylation of Triphosphate and DNA Anions with Alkylammonium Cations. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 10030-10034	2.8	7
176	A compact time-of-flight mass spectrometer for high-flux cosmic dust analysis. <i>Journal of Geophysical Research</i> , 2004 , 109,		2
175	Molecular Mousetraps: Gas-Phase Studies of the Covalent Coupling of Noncovalent Complexes Initiated by Reactive Carbenes Formed by Controlled Activation of Diazo Precursors. <i>Angewandte Chemie</i> , 2003 , 115, 1042-1045	3.6	3
174	Molecular mousetraps: gas-phase studies of the covalent coupling of noncovalent complexes initiated by reactive carbenes formed by controlled activation of diazo precursors. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 1012-5	16.4	23
173	Abiotic synthesis of ATP from AMP in the gas phase: implications for the origin of biologically important molecules from small molecular clusters. <i>International Journal of Mass Spectrometry</i> , 2003 , 227, 147-159	1.9	19
172	Mass spectrometer calibration of Cosmic Dust Analyzer. <i>Journal of Geophysical Research</i> , 2003 , 108, n/a-n/a		2
171	Hypervelocity microparticle impact studies using a novel cosmic dust mass spectrometer. <i>Journal of Geophysical Research</i> , 2003 , 108,		9
170	Field-Induced Droplet Ionization Mass Spectrometry. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 14161-14163	16.3	67
169	Gas-phase synthesis of charged copper and silver Fischer carbenes from diazomalonates: mechanistic and conformational considerations in metal-mediated wolff rearrangements. <i>Journal of the American Chemical Society</i> , 2003 , 125, 4478-86	16.4	68
168	Dustbuster: a compact impact-ionization time-of-flight mass spectrometer for in situ analysis of cosmic dust. <i>Review of Scientific Instruments</i> , 2002 , 73, 185-189	1.7	16
167	Evaporation and discharge dynamics of highly charged droplets of heptane, octane, and p-xylene generated by electrospray ionization. <i>Analytical Chemistry</i> , 2002 , 74, 6291-7	7.8	51
166	Nanocrystalline Aggregation of Serine Detected by Electrospray Ionization Mass Spectrometry: Origin of the Stable Homochiral Gas-Phase Serine Octamer. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 1219-1228	3.4	118
165	Cooperative Salt Bridge Stabilization of Gas-Phase Zwitterions in Neutral Arginine Clusters. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 32-34	2.8	73

164	Droplet Evaporation and Discharge Dynamics in Electrospray Ionization. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 9957-9967	2.8	167
163	Spontaneous chiral separation in noncovalent molecular clusters. <i>Chirality</i> , 2001 , 13, 703-6	2.1	56
162	Salt bridge stabilization of charged zwitterionic arginine aggregates in the gas phase. <i>Journal of the American Chemical Society</i> , 2001 , 123, 3577-83	16.4	107
161	Chemistry in Nanodroplets: Studies of Protonation Sites of Substituted Anilines in Water Clusters Using FT-ICR. <i>Journal of the American Chemical Society</i> , 2000 , 122, 9201-9205	16.4	33
160	Fourier transform ion cyclotron resonance study of multiply charged aggregates of small singly charged peptides formed by electrospray ionization. <i>Journal of the American Society for Mass Spectrometry</i> , 1999 , 10, 347-351	3.5	31
159	Slow Evaporation of Water from Hydrated Salen Transition Metal Complexes in the Gas Phase Reveals Details of Metal Ligand Interactions. <i>Journal of the American Chemical Society</i> , 1999 , 121, 10152-10156	16.4	18
158	Salt Bridge Chemistry Applied to Gas-Phase Peptide Sequencing: Selective Fragmentation of Sodiated Gas-Phase Peptide Ions Adjacent to Aspartic Acid Residues. <i>Journal of the American Chemical Society</i> , 1998 , 120, 3188-3195	16.4	150
157	Selective Binding of Crown Ethers to Protonated Peptides Can Be Used To Probe Mechanisms of H/D Exchange and Collision-Induced Dissociation Reactions in the Gas Phase. <i>Journal of the American Chemical Society</i> , 1998 , 120, 5800-5805	16.4	67
156	Freeze-Dried Biomolecules: FT-ICR Studies of the Specific Solvation of Functional Groups and Clathrate Formation Observed by the Slow Evaporation of Water from Hydrated Peptides and Model Compounds in the Gas Phase. <i>Journal of the American Chemical Society</i> , 1998 , 120, 11758-11765	16.4	155
155	Chemical Ionization of TNT and RDX with Trimethylsilyl Cation. <i>Analytical Chemistry</i> , 1997 , 69, 1092-1101	7.8	25
154	σ -Bond Metathesis Reactions of $\text{Sc}(\text{CH}_3)_2^+$ with Secondary C-H Bonds: Reactivity with Cyclohexane and Cyclopentane. <i>Organometallics</i> , 1996 , 15, 5368-5373	3.8	6
153	Deuterium Exchange Reactions as a Probe of Biomolecule Structure. Fundamental Studies of Gas Phase H/D Exchange Reactions of Protonated Glycine Oligomers with D_2O , CD_3OD , $\text{CD}_3\text{CO}_2\text{D}$, and ND_3 . <i>Journal of the American Chemical Society</i> , 1995 , 117, 12840-12854	16.4	303
152	Group and Site Selective σ -Bond Metathesis Reactions of $\text{CH}_3\text{ScCH}_2\text{CH}_3^+$ with [2,2- D_2]Propane, [1,1,1,4,4,4- D_6]-n-Butane, [2- D]-Isobutane, and n-Pentane. <i>Organometallics</i> , 1995 , 14, 4366-4373	3.8	7
151	Low-Energy Dissociation Pathways of Small Deprotonated Peptides in the Gas Phase. <i>Journal of the American Chemical Society</i> , 1994 , 116, 7787-7796	16.4	73
150	Structural and Energetic Constraints on Gas Phase Hydrogen/Deuterium Exchange Reactions of Protonated Peptides with D_2O , CD_3OD , $\text{CD}_3\text{CO}_2\text{D}$, and ND_3 . <i>Journal of the American Chemical Society</i> , 1994 , 116, 9765-9766	16.4	87
149	Site Selective σ -Bond Metathesis Reactions of $\text{Sc}(\text{CD}_3)_2^+$ with [2,2- D_2]Propane, [1,1,1,4,4,4- D_6]-n-Butane, and [2- D]Isobutane. <i>Organometallics</i> , 1994 , 13, 3733-3736	3.8	14
148	Proton Affinities and Photoelectron Spectra of Phenylalanine and N-Methyl- and N,N-Dimethylphenylalanine. Correlation of Lone Pair Ionization Energies with Proton Affinities and Implications for N-Methylation as a Method to Effect Site Specific Protonation of Peptides. <i>Journal of the American Chemical Society</i> , 1994 , 116, 5257-5264	16.4	45
147	Thermochemical properties and gas-phase ion chemistry of phenylsilane investigated by FT-ICR spectrometry. Identification of parent- and fragment-ion structural isomers by their specific reactivities. <i>Journal of the American Chemical Society</i> , 1993 , 115, 10805-10811	16.4	29

146	Electron impact ionization of phenylsilane. Evidence for the formation of phenylsilyl and silacycloheptatrienyl cations. <i>Journal of the American Chemical Society</i> , 1992 , 114, 3573-3574	16.4	21
145	Fundamental Gas Phase Studies of the Mechanism and Thermochemistry of Organometallic Reactions 1992 , 287-320		3
144	Transition-metal ion mediated carbon-hydrogen and carbon-carbon bond activation of alkanes: dynamical coupling between entrance and exit channel transition states. <i>Journal of the American Chemical Society</i> , 1991 , 113, 2359-2369	16.4	88
143	Singlet-triplet energy gaps in fluorine-substituted methylenes and silylenes. <i>Journal of Chemical Physics</i> , 1990 , 93, 4986-4993	3.9	38
142	Transition metal-hydrogen and metal-carbon bond strengths: the keys to catalysis. <i>Chemical Reviews</i> , 1990 , 90, 629-688	68.1	640
141	Infrared multiphoton dissociation spectrum of CF ₃ Mn(CO) ₃ (NO) ⁻ . <i>Journal of the American Chemical Society</i> , 1990 , 112, 2066-2069	16.4	29
140	Carbon-hydrogen bond activation as the initial step in the Co ⁺ -mediated demethanation of propane: the critical role of angular momentum at the rate-limiting transition state. <i>Journal of the American Chemical Society</i> , 1990 , 112, 5663-5665	16.4	57
139	Kinetic energy release distributions as a probe of ligation effects on potential energy surfaces in organometallic reactions. Reversible dehydrogenation of cycloalkenes by iron cation. <i>Journal of the American Chemical Society</i> , 1990 , 112, 9372-9378	16.4	13
138	Organometallic Reaction Energetics from Product Kinetic Energy Release Distributions. <i>ACS Symposium Series</i> , 1990 , 34-54	0.4	18
137	Precise determination of stabilities of primary, secondary, and tertiary silicenium ions from kinetics and equilibria of hydride-transfer reactions in the gas phase. A quantitative comparison of the stabilities of silicenium and carbonium ions in the gas phase. <i>Journal of the American Chemical Society</i> , 1989 , 111, 900-906	16.4	37
136	The chemistry of atomic transition-metal ions: insight into fundamental aspects of organometallic chemistry. <i>Accounts of Chemical Research</i> , 1989 , 22, 315-321	24.3	286
135	Product kinetic energy release distributions as a probe of the energetics and mechanisms of organometallic reactions involving the formation of metallacyclobutanes in the gas phase. <i>Journal of the American Chemical Society</i> , 1989 , 111, 1991-2001	16.4	41
134	Fundamental studies of the energetics and dynamics of ligand dissociation and exchange processes at transition-metal centers in the gas phase: Mn(CO) _x ⁺ , x = 1-6. <i>Journal of the American Chemical Society</i> , 1989 , 111, 2401-2409	16.4	32
133	Hydrocarbon activation by gas-phase lanthanide cations: interaction of praseodymium (Pr ⁺), europium (Eu ⁺), and gadolinium (Gd ⁺) with small alkanes, cycloalkanes, and alkenes. <i>Journal of the American Chemical Society</i> , 1988 , 110, 15-24	16.4	85
132	Thermochemistry of silaethylene and methylsilylene from experiment and theory. <i>Journal of the American Chemical Society</i> , 1988 , 110, 24-30	16.4	41
131	What is wrong with gas-phase chromium? A comparison of the unreactive chromium(1 ⁺) cation with the alkane-activating molybdenum cation. <i>Organometallics</i> , 1988 , 7, 194-199	3.8	45
130	Kinetic energy release distributions as a probe of transition-metal-mediated hydrogen-hydrogen, carbon-hydrogen, and carbon-carbon bond formation processes: reactions of cobalt and nickel ions with alkanes. <i>Journal of the American Chemical Society</i> , 1988 , 110, 1-14	16.4	119
129	Theoretical studies of transition-metal hydrides. 3. SrH ⁺ through CdH ⁺ . <i>Journal of the American Chemical Society</i> , 1987 , 109, 5565-5573	16.4	53

- 128 Theoretical studies of transition-metal methyl ions, MCH_3^+ ($M = Sc, Cr, Mn, Zn, Y, Mo, Tc, Pd, Cd$). *Journal of the American Chemical Society*, **1987**, 109, 5573-5580 16.4 42
- 127 Photoelectron spectroscopy of the o-, m-, and p-methylbenzyl radicals. Implications for the thermochemistry of the radicals and ions. *Journal of the American Chemical Society*, **1986**, 108, 5441-5443 16.4 33
- 126 Reactions of transition-metal ions with methylsilanes in the gas phase. The formation and characteristics of strong transition metal-silylene bonds. *Journal of the American Chemical Society*, **1986**, 108, 5668-75 16.4 25
- 125 Mechanistic and kinetic study of alkane activation by titanium(II) and vanadium(II) in the gas phase. Lifetimes of reaction intermediates. *Journal of the American Chemical Society*, **1986**, 108, 7509-17 16.4 32
- 124 Gas-phase studies of alkane oxidation by transition-metal oxides. Selective oxidation by CrO^+ . *Journal of the American Chemical Society*, **1986**, 108, 7502-9 16.4 51
- 123 Gas-phase studies of alkene oxidation by transition-metal oxides. Ion-beam studies of CrO^+ . *Journal of the American Chemical Society*, **1986**, 108, 5663-8 16.4 82
- 122 Energetics and structure of the 1- and 2-adamantyl radicals and their corresponding carbonium ions by photoelectron spectroscopy. *Journal of the American Chemical Society*, **1986**, 108, 2162-9 16.4 69
- 121 Activation of alkanes by ruthenium, rhodium, and palladium ions in the gas phase: striking differences in reactivity of first- and second-row metal ions. *Journal of the American Chemical Society*, **1986**, 108, 5675-83 16.4 59
- 120 Theoretical studies of transition-metal hydrides. 1. Bond energies for MH^+ with $M = Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu$, and Zn . *Journal of the American Chemical Society*, **1986**, 108, 582-584 16.4 81
- 119 Multiphoton infrared laser activation of organometallic species: a novel probe of the potential energy surfaces for reactions of cobalt ions with C_5H_{10} isomers. *Journal of the American Chemical Society*, **1985**, 107, 5074-5080 16.4 26
- 118 Activation of carbon-hydrogen and carbon-carbon bonds by transition-metal ions in the gas phase. Exhibition of unique reactivity by scandium ions. *Journal of the American Chemical Society*, **1984**, 106, 8117-8122 16.4 71
- 117 Determination of the metal-hydrogen and metal-methyl bond dissociation energies of the second-row, Group 8 transition metal cations. *Journal of the American Chemical Society*, **1984**, 106, 4403-4411 16.4 86
- 116 Photoelectron spectroscopy of 1-propyl, 1-butyl, isobutyl, neopentyl, and 2-butyl radicals: free radical precursors to high-energy carbonium ion isomers. *Journal of the American Chemical Society*, **1984**, 106, 3917-3927 16.4 71
- 115 Photoelectron spectroscopy of isomeric C_4H_7 radicals. Implications for the thermochemistry and structures of the radicals and their corresponding carbonium ions. *Journal of the American Chemical Society*, **1984**, 106, 7336-7347 16.4 41
- 114 Properties and reactions of organometallic fragments in the gas phase. Ion beam studies of hydridoiron(1+) ion. *Journal of the American Chemical Society*, **1984**, 106, 2543-2549 16.4 48
- 113 Activation of carbon-hydrogen and carbon-carbon bonds in alkanes by first-row Group VIII atomic transition-metal ions in the gas-phase. Mechanistic details from a study of deuterium and ^{13}C -labeled hydrocarbons. *Organometallics*, **1983**, 2, 1818-1829 3.8 61
- 112 Dissociative electron attachment reactions of transition metal carbonyls and their apparent influence on the thermalization of electrons by CO_2 . *Journal of Chemical Physics*, **1982**, 76, 2959-2964 3.9 39
- 111 Nickel ions effect a highly specific 1,4-dehydrogenation of hydrocarbons in the gas phase: metallacycles are not involved. *Journal of the American Chemical Society*, **1982**, 104, 6293-6297 16.4 46

110	Reaction of Cr ⁺ , Mn ⁺ , Fe ⁺ , Co ⁺ , and Ni ⁺ with O ₂ and N ₂ O. Examination of the translational energy dependence of the cross sections of endothermic reactions. <i>Journal of Chemical Physics</i> , 1982 , 76, 2449-2457	3.9	134
109	Infrared Photochemistry of Gas Phase Ions. <i>Lecture Notes in Quantum Chemistry II</i> , 1982 , 43-97	0.6	5
108	Slow multiphoton excitation as a probe of bimolecular and unimolecular reaction energetics. Multiphoton dissociation of proton-bound alcohol dimers. <i>Journal of the American Chemical Society</i> , 1981 , 103, 3292-3296	16.4	39
107	Energetics of the rearrangement of neutral and ionized perfluorocyclopropane to perfluoropropylene. Use of infrared multiphoton dissociation spectra to identify structural isomers of molecular ions. <i>Journal of the American Chemical Society</i> , 1981 , 103, 3967-3971	16.4	30
106	Infrared spectra of gas-phase ions and their use in elucidating reaction mechanisms. Identification of C ₇ H ₇ ⁺ structural isomers by multiphoton electron detachment using a low-power infrared laser. <i>Journal of the American Chemical Society</i> , 1981 , 103, 6499-6501	16.4	30
105	Ion-beam studies of the reactions of atomic cobalt ions with cycloalkanes in the gas phase. Formation and decomposition of chemically activated metallacycles. <i>Journal of the American Chemical Society</i> , 1981 , 103, 6628-6632	16.4	30
104	Ion-beam studies of the reactions of atomic cobalt ions with alkenes. <i>Journal of the American Chemical Society</i> , 1981 , 103, 6624-6628	16.4	38
103	Cobalt carbene ion: Reactions of Co ⁺ with C ₂ H ₄ , cyclo-C ₃ H ₆ , and cyclo-C ₂ H ₄ O. <i>Journal of Chemical Physics</i> , 1981 , 74, 2819-2826	3.9	56
102	Formation of chromium carbene ions by reaction of electronically excited chromium ions with methane in the gas phase. <i>Journal of the American Chemical Society</i> , 1981 , 103, 962-963	16.4	54
101	Periodic trends in transition metal-hydrogen, metal-carbon, and metal-oxygen bond dissociation energies. Correlation with reactivity and electronic structure. <i>Journal of the American Chemical Society</i> , 1981 , 103, 6501-6502	16.4	112
100	Ion beam studies of the reactions of atomic cobalt ions with alkanes: determination of metal-hydrogen and metal-carbon bond energies and an examination of the mechanism by which transition metals cleave carbon-carbon bonds. <i>Journal of the American Chemical Society</i> , 1981 , 103, 784-791	16.4	97
99	Efficient multiphoton dissociation of CF ₃ I ⁺ in the metastable X 2E1/2 excited state using cw infrared laser radiation. <i>Journal of Chemical Physics</i> , 1981 , 74, 5100-5105	3.9	21
98	Properties and reactions of trimethyl phosphite, trimethyl phosphate, triethyl phosphate, and trimethyl phosphorothionate by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1980 , 102, 1327-1332	16.4	33
97	Infrared photochemistry of ethylene clusters. <i>Journal of Chemical Physics</i> , 1980 , 72, 6805-6806	3.9	38
96	Ion cyclotron resonance studies of radiative and dissociative electron attachment processes at low pressures. <i>Journal of Chemical Physics</i> , 1980 , 72, 4223-4227	3.9	46
95	Nucleophilic reactions of anions with trimethyl phosphate in the gas phase by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1980 , 102, 935-938	16.4	27
94	Effects of molecular structure on basicity. Gas-phase proton affinities of cyclic phosphites. <i>Journal of the American Chemical Society</i> , 1980 , 102, 932-935	16.4	25
93	Selective enhancement of bimolecular reaction rates by over three orders of magnitude using low intensity CW infrared laser radiation. <i>Journal of the American Chemical Society</i> , 1980 , 102, 3967-3969	16.4	18

92	Ion beam studies of organometallic chemistry. High energy "sampling" of reaction intermediates involved in carbon-carbon bond cleavage by transition metals. <i>Journal of the American Chemical Society</i> , 1980 , 102, 1736-1738	16.4	45
91	Properties and reactions of manganese methylene complexes in the gas phase. The importance of strong metal-carbene bonds for effective olefin metathesis catalysts. <i>Journal of the American Chemical Society</i> , 1979 , 101, 6449-6450	16.4	46
90	Properties and reactions of uranium(IV) tetrahydroborate by ion cyclotron mass spectrometry. <i>Inorganic Chemistry</i> , 1979 , 18, 1349-1353	5.1	8
89	Stabilities of isomeric halonium ions C ₂ H ₄ X ⁺ (X = chlorine, bromine) by photoionization mass spectrometry and ion cyclotron resonance spectroscopy. General considerations of the relative stabilities of cyclic and acyclic isomeric onium ions. <i>Journal of the American Chemical Society</i> , 1979 , 101, 1239-1248	16.4	69
88	Molecular activation with low-intensity CW infrared laser radiation. Multiphoton dissociation of ions derived from diethyl ether. <i>Journal of the American Chemical Society</i> , 1979 , 101, 5503-5512	16.4	79
87	Photoelectron spectroscopy of methyl, ethyl, isopropyl, and tert-butyl radicals. Implications for the thermochemistry and structures of the radicals and their corresponding carbonium ions. <i>Journal of the American Chemical Society</i> , 1979 , 101, 4067-4074	16.4	172
86	Gas-phase organometallic chemistry. Mechanism and energetics of methane formation resulting from protonation of pentacarbonylmethylmanganese. <i>Journal of the American Chemical Society</i> , 1979 , 101, 245-246	16.4	10
85	Simple pressure gauge for uranium hexafluoride. <i>Review of Scientific Instruments</i> , 1979 , 50, 1640	1.7	2
84	Chemistry without solvents: properties and reactions of organometallic complexes in the gas phase. <i>Pure and Applied Chemistry</i> , 1979 , 51, 967-978	2.1	32
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