

Jesse Beauchamp

List of Publications by Year in descending order

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218
papers

13,075
citations

18436

62
h-index

31759

101
g-index

328
all docs

328
docs citations

328
times ranked

5990
citing authors

#	ARTICLE	IF	CITATIONS
1	Transition metal-hydrogen and metal-carbon bond strengths: the keys to catalysis. <i>Chemical Reviews</i> , 1990, 90, 629-688.	23.0	729
2	Ion Cyclotron Resonance Spectroscopy. <i>Annual Review of Physical Chemistry</i> , 1971, 22, 527-561.	4.8	361
3	Particle Phase Acidity and Oligomer Formation in Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2004, 38, 6582-6589.	4.6	359
4	Deuterium Exchange Reactions as a Probe of Biomolecule Structure. Fundamental Studies of Gas Phase H/D Exchange Reactions of Protonated Glycine Oligomers with D ₂ O, CD ₃ OD, CD ₃ CO ₂ D, and ND ₃ . <i>Journal of the American Chemical Society</i> , 1995, 117, 12840-12854.	6.6	319
5	The chemistry of atomic transition-metal ions: insight into fundamental aspects of organometallic chemistry. <i>Accounts of Chemical Research</i> , 1989, 22, 315-321.	7.6	314
6	Gas phase basicities and relative proton affinities of compounds between water and ammonia from pulsed ion cyclotron resonance thermal equilibriums measurements. <i>Journal of the American Chemical Society</i> , 1977, 99, 5417-5429.	6.6	218
7	Binding of lithium(1+) ion to Lewis bases in the gas phase. Reversals in methyl substituent effects for different reference acids. <i>Journal of the American Chemical Society</i> , 1978, 100, 501-508.	6.6	211
8	Droplet Evaporation and Discharge Dynamics in Electrospray Ionization. <i>Journal of Physical Chemistry A</i> , 2002, 106, 9957-9967.	1.1	196
9	Intrinsic acid-base properties of molecules. Binding energies of lithium(1+) ion to .pi.- and n-donor bases. <i>Journal of the American Chemical Society</i> , 1975, 97, 5920-5921.	6.6	194
10	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.	6.6	193
11	Multiphoton dissociation of molecules with low power continuous wave infrared laser radiation. <i>Journal of the American Chemical Society</i> , 1978, 100, 3248-3250.	6.6	186
12	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.	6.6	162
13	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.	6.6	157
14	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, 8244-8250.	1.2	153
15	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.	1.2	149
16	Ion Cyclotron Double Resonance. <i>Journal of Chemical Physics</i> , 1966, 45, 1062-1063.	1.2	126
17	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.	6.6	124
18	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.	1.2	124

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19	A Versatile Trapped Ion Cell for Ion Cyclotron Resonance Spectroscopy. Review of Scientific Instruments, 1972, 43, 509-512.	0.6	122
20	Periodic trends in transition metal-hydrogen, metal-carbon, and metal-oxygen bond dissociation energies. Correlation with reactivity and electronic structure. Journal of the American Chemical Society, 1981, 103, 6501-6502.	6.6	122
21	Bioconjugates for Tunable Peptide Fragmentation: Free Radical Initiated Peptide Sequencing (FRIPS). Journal of the American Chemical Society, 2005, 127, 12436-12437.	6.6	122
22	Thermochemical properties and ion-molecule reactions of the alkyl halides in the gas phase by ion cyclotron resonance spectroscopy. Journal of the American Chemical Society, 1972, 94, 2798-2807.	6.6	121
23	Detection and investigation of allyl and benzyl radicals by photoelectron spectroscopy. Journal of the American Chemical Society, 1978, 100, 3290-3294.	6.6	120
24	An Ion Ejection Technique for the Study of Ion-Molecule Reactions with Ion Cyclotron Resonance Spectroscopy. Review of Scientific Instruments, 1969, 40, 123-128.	0.6	113
25	Theory of Collision-Broadened Ion Cyclotron Resonance Spectra. Journal of Chemical Physics, 1967, 46, 1231-1243.	1.2	111
26	Salt Bridge Stabilization of Charged Zwitterionic Arginine Aggregates in the Gas Phase. Journal of the American Chemical Society, 2001, 123, 3577-3583.	6.6	111
27	Complete thermodynamic analysis of the "anomalous order" of amine basicities in solution. Journal of the American Chemical Society, 1972, 94, 4724-4726.	6.6	107
28	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. Journal of the American Chemical Society, 1981, 103, 784-791.	6.6	107
29	Proton Affinities of H ₂ S and H ₂ O. Journal of Chemical Physics, 1968, 48, 1783-1789.	1.2	101
30	Gas-phase ion chemistry of fluoromethanes by ion cyclotron resonance spectroscopy. New techniques for the determination of carbonium ion stabilities. Journal of the American Chemical Society, 1974, 96, 1269-1278.	6.6	98
31	Transition-metal ion mediated carbon-hydrogen and carbon-carbon bond activation of alkanes: dynamical coupling between entrance and exit channel transition states. Journal of the American Chemical Society, 1991, 113, 2359-2369.	6.6	98
32	Structural and Energetic Constraints on Gas Phase Hydrogen/Deuterium Exchange Reactions of Protonated Peptides with D ₂ O, CD ₃ OD, CD ₃ CO ₂ D, and ND ₃ . Journal of the American Chemical Society, 1994, 116, 9765-9766.	6.6	95
33	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.	6.6	94
34	Hydrocarbon activation by gas-phase lanthanide cations: interaction of praseodymium (Pr ⁺), europium (Eu ⁺), and gadolinium (Gd ⁺) with small alkanes, cycloalkanes, and alkenes. Journal of the American Chemical Society, 1988, 110, 15-24.	6.6	94
35	Sequential deuterium exchange reactions of protonated benzenes with water-d ₂ in the gas phase by ion cyclotron resonance spectroscopy. Journal of the American Chemical Society, 1975, 97, 6893-6894.	6.6	93
36	Gas-phase studies of alkene oxidation by transition-metal oxides. Ion-beam studies of CrO ⁺ . Journal of the American Chemical Society, 1986, 108, 5663-5668.	6.6	93

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37	Cholesterol provides nonsacrificial protection of membrane lipids from chemical damage at air-water interface. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3255-3260.	3.3	93
38	Carbenium ion stabilities in the gas phase and solution. An ion cyclotron resonance study of bromide transfer reactions involving alkali ions, alkyl carbenium ions, acyl cations, and cyclic halonium ions. Journal of the American Chemical Society, 1977, 99, 5964-5972.	6.6	90
39	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.	6.6	90
40	Acid-base properties of molecules in excited electronic states utilizing ion cyclotron resonance spectroscopy. Journal of the American Chemical Society, 1977, 99, 3214-3225.	6.6	85
41	Gas-phase basicities and pyridine substituent effects. Journal of the American Chemical Society, 1972, 94, 1369-1370.	6.6	84
42	Molecular activation with low-intensity CW infrared laser radiation. Multiphoton dissociation of ions derived from diethyl ether. Journal of the American Chemical Society, 1979, 101, 5503-5512.	6.6	84
43	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, 2162-2169.	6.6	82
44	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.	6.6	81
45	Ion cyclotron resonance of olefins. I. Study of the ion-molecule reactions in electron-impacted ethylene. The Journal of Physical Chemistry, 1968, 72, 3599-3612.	2.9	79
46	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.	6.6	79
47	Low-Energy Dissociation Pathways of Small Deprotonated Peptides in the Gas Phase. Journal of the American Chemical Society, 1994, 116, 7787-7796.	6.6	78
48	Cooperative Salt Bridge Stabilization of Gas-Phase Zwitterions in Neutral Arginine Clusters. Journal of Physical Chemistry A, 2002, 106, 32-34.	1.1	76
49	Experimental and Theoretical Investigation into the Correlation between Mass and Ion Mobility for Choline and Other Ammonium Cations in N ₂ . Analytical Chemistry, 2008, 80, 1928-1936.	3.2	76
50	Gas-phase ion chemistry of iron pentacarbonyl by ion cyclotron resonance spectroscopy. New insights into the properties and reactions of transition metal complexes in the absence of complicating solvation phenomena. Journal of the American Chemical Society, 1975, 97, 4808-4814.	6.6	75
51	Application of alkali ions in chemical ionization mass spectrometry. Analytical Chemistry, 1976, 48, 825-829.	3.2	75
52	Field-Induced Droplet Ionization Mass Spectrometry. Journal of Physical Chemistry B, 2003, 107, 14161-14163.	1.2	75
53	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. Journal of the American Chemical Society, 1979, 101, 1239-1248.	6.6	74
54	Gas-Phase Synthesis of Charged Copper and Silver Fischer Carbenes from Diazomalonates: Mechanistic and Conformational Considerations in Metal-Mediated Wolff Rearrangements. Journal of the American Chemical Society, 2003, 125, 4478-4486.	6.6	73

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55	Endothermic reactions of uranium ions with N ₂ , D ₂ , and CD ₄ . Journal of Chemical Physics, 1977, 66, 4683-4688.	1.2	71
56	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. Journal of the American Chemical Society, 1998, 120, 5800-5805.	6.6	71
57	Evaporation and Discharge Dynamics of Highly Charged Multicomponent Droplets Generated by Electrospray Ionization. Journal of Physical Chemistry A, 2010, 114, 1411-1419.	1.1	71
58	Probing the Mechanism of Electron Capture and Electron Transfer Dissociation Using Tags with Variable Electron Affinity. Journal of the American Chemical Society, 2009, 131, 5444-5459.	6.6	69
59	Solvent effects of water and fluorosulfuric acid on proton transfer equilibria and the energies of solvation of gaseous onium ions. Journal of the American Chemical Society, 1978, 100, 1240-1249.	6.6	66
60	Formation of chromium carbene ions by reaction of electronically excited chromium ions with methane in the gas phase. Journal of the American Chemical Society, 1981, 103, 962-963.	6.6	66
61	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, 5675-5683.	6.6	65
62	Methyl substituent effects in protonated aliphatic amines and their radical cations. Journal of the American Chemical Society, 1972, 94, 4728-4729.	6.6	64
63	Reactions of alkali ions with organic molecules in the gas phase. Low energy pathways for carbonium ion formation and novel methods for generating alkali ion complexes with π- and n-donor bases. Journal of the American Chemical Society, 1975, 97, 924-926.	6.6	63
64	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.	1.1	63
65	Gas-phase studies of alkane oxidation by transition-metal oxides. Selective oxidation by CrO ⁺ . Journal of the American Chemical Society, 1986, 108, 7502-7509.	6.6	63
66	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. Journal of the American Chemical Society, 1990, 112, 5663-5665.	6.6	62
67	Cobalt carbene ion: Reactions of Co ⁺ with C ₂ H ₄ , cyclopropane, and cyclohexane. Journal of Chemical Physics, 1981, 74, 2819-2826.	1.2	61
68	Spontaneous chiral separation in noncovalent molecular clusters. Chirality, 2001, 13, 703-706.	1.3	60
69	Quantitative metal-ligand bond dissociation energies in the gas phase by ion cyclotron resonance spectroscopy. Journal of the American Chemical Society, 1976, 98, 3998-4000.	6.6	58
70	Ion cyclotron resonance studies of endothermic reactions of UF ₆ ⁺ generated by surface ionization. Journal of Chemical Physics, 1976, 64, 929-935.	1.2	58
71	Theoretical studies of transition-metal hydrides. 3. SrH ⁺ through CdH ⁺ . Journal of the American Chemical Society, 1987, 109, 5565-5573.	6.6	58
72	Properties and reactions of organometallic fragments in the gas phase. Ion beam studies of hydroiron(1+) ion. Journal of the American Chemical Society, 1984, 106, 2543-2549.	6.6	57

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73	Evaporation and Discharge Dynamics of Highly Charged Droplets of Heptane, Octane, and p-Xylene Generated by Electrospray Ionization. <i>Analytical Chemistry</i> , 2002, 74, 6291-6297.	3.2	57
74	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, 10684-10692.	6.6	56
75	Competition between proton transfer and elimination in the reactions of strong bases with fluoroethanes in the gas phase. Influence of base strength on reactivity. <i>Journal of the American Chemical Society</i> , 1976, 98, 1160-1165.	6.6	55
76	Probing Interfacial Chemistry of Single Droplets with Field-Induced Droplet Ionization Mass Spectrometry: A Physical Adsorption of Polycyclic Aromatic Hydrocarbons and Ozonolysis of Oleic Acid and Related Compounds. <i>Analytical Chemistry</i> , 2006, 78, 3800-3806.	3.2	55
77	Determination of Ion Transit Times in an Ion Cyclotron Resonance Spectrometer. <i>Review of Scientific Instruments</i> , 1971, 42, 1632-1638.	0.6	54
78	Potential of ion cyclotron resonance spectroscopy for the study of the intrinsic properties and reactivity of transition metal complexes in the gas phase. Ion-molecule reactions of iron pentacarbonyl. <i>Journal of the American Chemical Society</i> , 1971, 93, 4924-4926.	6.6	53
79	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.	6.6	53
80	Chemical consequences of strong hydrogen bonding in the reactions of organic ions in the gas phase. Interaction of remote functional groups. <i>Journal of the American Chemical Society</i> , 1972, 94, 3671-3672.	6.6	52
81	Ion cyclotron resonance studies of radiative and dissociative electron attachment processes at low pressures. <i>Journal of Chemical Physics</i> , 1980, 72, 4223-4227.	1.2	52
82	Nucleophilic attack protonated oxiranes in the gas phase. Identification of the C ₂ H ₅ O ⁺ isomeric ion corresponding to protonated ethylene oxide. <i>Journal of the American Chemical Society</i> , 1974, 96, 1260-1261.	6.6	51
83	The interaction of ions with nonpolar neutrals: The collision broadening of ion cyclotron resonance lines of ions in hydrogen and methane. <i>Journal of Chemical Physics</i> , 1976, 64, 2735-2746.	1.2	51
84	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.	6.6	51
85	Ion-molecule reactions of 2-butanol by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1972, 94, 2638-2646.	6.6	50
86	Photochemistry of organic ions in the gas phase. Comparison of the gas phase photodissociation and solution absorption spectra of benzoyl cation, protonated benzene, and protonated mesitylene. <i>Journal of the American Chemical Society</i> , 1976, 98, 3136-3139.	6.6	50
87	Nickel ions effect a highly specific 1,4-dehydrogenation of hydrocarbons in the gas phase: metallacycles are not involved. <i>Journal of the American Chemical Society</i> , 1982, 104, 6293-6297.	6.6	50
88	Thermochemistry of silaethylene and methylsilylene from experiment and theory. <i>Journal of the American Chemical Society</i> , 1988, 110, 24-30.	6.6	50
89	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.	1.1	50
90	Ion-molecule reactions and gas-phase basicity of ferrocene. <i>Journal of the American Chemical Society</i> , 1975, 97, 4814-4817.	6.6	49

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91	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.	6.6	49
92	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. Journal of the American Chemical Society, 1994, 116, 5257-5264.	6.6	49
93	Interfacial Reactions of Ozone with Surfactant Protein B in a Model Lung Surfactant System. Journal of the American Chemical Society, 2010, 132, 2254-2263.	6.6	49
94	Photoionization and ion cyclotron resonance studies of the reaction $C_2H_4^+ + C_2H_4 \hat{\rightarrow} C_3H_5^+ + CH_3$. Journal of Chemical Physics, 1975, 62, 1623-1631.	1.2	48
95	Properties and reactions of ketene in the gas phase by ion cyclotron resonance spectroscopy and photoionization mass spectrometry. Proton affinity, site specificity of protonation, and heat of formation of ketene. Journal of the American Chemical Society, 1978, 100, 3478-3483.	6.6	48
96	Gas phase ion chemistry and photochemistry of ions generated from perfluoropropylene. Photodissociation of the perfluoroallyl cation. Journal of the American Chemical Society, 1974, 96, 6260-6266.	6.6	47
97	Photoionization and ion cyclotron resonance studies of the ion chemistry of ethylene oxide. Journal of Chemical Physics, 1976, 65, 4929-4939.	1.2	47
98	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.	6.6	47
99	Reactions of strong bases with alkyl halides in the gas phase. New look at E2 base-induced elimination reactions without solvent participation. Journal of the American Chemical Society, 1974, 96, 3595-3602.	6.6	46
100	Slow multiphoton excitation as a probe of bimolecular and unimolecular reaction energetics. Multiphoton dissociation of proton-bound alcohol dimers. Journal of the American Chemical Society, 1981, 103, 3292-3296.	6.6	46
101	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. Journal of the American Chemical Society, 1989, 111, 1991-2001.	6.6	46
102	Ion-beam studies of the reactions of atomic cobalt ions with alkenes. Journal of the American Chemical Society, 1981, 103, 6624-6628.	6.6	45
103	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.	1.2	45
104	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. Journal of the American Chemical Society, 1989, 111, 900-906.	6.6	44
105	Singlet-triplet energy gaps in fluorine-substituted methylenes and silylenes. Journal of Chemical Physics, 1990, 93, 4986-4993.	1.2	44
106	Relationship between orbital ionization energies and molecular properties. Proton affinities and photoelectron spectra of nitriles. Journal of the American Chemical Society, 1976, 98, 2081-2085.	6.6	43
107	Ion-molecule reactions of tert-butyl alcohol by ion cyclotron resonance spectroscopy. Journal of the American Chemical Society, 1974, 96, 6243-6251.	6.6	42
108	Relation of nitrogen lone pair interactions to thermodynamic parameters associated with amine basicities. Journal of the American Chemical Society, 1974, 96, 1604-1606.	6.6	42

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109	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.	4.6	42
110	Chain-length effects upon the interaction of remote functional groups. Low energy electron impact mass spectra of .alpha.,.omega.-dialkoxyalkanes examined by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1975, 97, 2355-2362.	6.6	41
111	Photoionization mass spectrometry of the fluoromethylsilanes (CH ₃) _n F _{4-n} Si (n = 1-4). <i>Journal of the American Chemical Society</i> , 1977, 99, 2085-2089.	6.6	41
112	Infrared photochemistry of ethylene clusters. <i>Journal of Chemical Physics</i> , 1980, 72, 6805-6806.	1.2	41
113	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, 157-166.	1.2	41
114	Designer Reagents for Mass Spectrometry-Based Proteomics: Clickable Cross-Linkers for Elucidation of Protein Structures and Interactions. <i>Analytical Chemistry</i> , 2012, 84, 2662-2669.	3.2	41
115	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.	7.2	41
116	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.	6.6	40
117	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.	1.2	39
118	Relative stabilities of carbonium ions in the gas phase and solution. Comparison of cyclic and acyclic alkylcarbonium ions, acyl cations and cyclic halonium ions. <i>Journal of the American Chemical Society</i> , 1974, 96, 7552-7554.	6.6	38
119	Proton affinity and gas-phase ion chemistry of hydrogen fluoride. <i>Inorganic Chemistry</i> , 1975, 14, 1229-1232.	1.9	38
120	Metal atoms as superbases: the gas phase proton affinity of uranium. <i>Journal of the American Chemical Society</i> , 1977, 99, 3162-3163.	6.6	38
121	Methyl and fluorine substituent effects on the gas-phase Lewis acidities of silanes by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1977, 99, 4992-4999.	6.6	38
122	Photoelectron spectroscopy of the o-, m-, and p-methylbenzyl radicals. Implications for the thermochemistry of the radicals and ions. <i>Journal of the American Chemical Society</i> , 1986, 108, 5441-5443.	6.6	38
123	Infrared multiphoton dissociation spectrum of CF ₃ Mn(CO) ₃ (NO) ⁻ . <i>Journal of the American Chemical Society</i> , 1990, 112, 2066-2069.	6.6	38
124	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.	6.6	38
125	Reactions of fluoroethylenes with strong bases in the gas phase. <i>Journal of the American Chemical Society</i> , 1977, 99, 5017-5022.	6.6	37
126	Mechanistic and kinetic study of alkane activation by titanium(II) and vanadium(II) in the gas phase. Lifetimes of reaction intermediates. <i>Journal of the American Chemical Society</i> , 1986, 108, 7509-7517.	6.6	37

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127	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, 9496-9503.	1.2	37
128	Metal carbene chemistry. Formation and reactions of $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_n(\text{CH}_2)^+$ ($n = 1,2$) in the gas phase by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1978, 100, 2584-2585.	6.6	36
129	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.	6.6	36
130	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.	6.6	36
131	Xenon as a Nucleophile in Gas-Phase Displacement Reactions: Formation of the Methyl Xenonium Ion. <i>Science</i> , 1971, 173, 1237-1238.	6.0	35
132	Photoionization mass spectrometry of 2-fluoropropane and 2,2-difluoropropane. A novel determination of the proton affinity of vinyl fluoride and 1,1-difluoroethylene. <i>Journal of the American Chemical Society</i> , 1976, 98, 2705-2709.	6.6	35
133	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.	6.6	35
134	Basicities and ion-molecule reactions of the methylphosphines in the gas phase by ion cyclotron resonance spectroscopy. <i>Journal of the American Chemical Society</i> , 1974, 96, 6252-6259.	6.6	34
135	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.	6.6	34
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