Michael T Bowers

List of Publications by Year
in descending order

244	19,575	9775 73	14197 128
papers	citations	h-index	g-index

250	250	250	10944
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Amyloid-Î² protein oligomerization and the importance of tetramers and dodecamers in the aetiology of Alzheimer's disease. Nature Chemistry, 2009, 1, 326-331.	6.6	835
2	An investigation of the mobility separation of some peptide and protein ions using a new hybrid quadrupole/travelling wave IMS/oa-ToF instrument. International Journal of Mass Spectrometry, 2007, 261, 1-12.	0.7	749
3	Carbon cluster cations with up to 84 atoms: structures, formation mechanism, and reactivity. The Journal of Physical Chemistry, 1993, 97, 8182-8192.	2.9	556
4	Structures of carbon cluster ions from 3 to 60 atoms: Linears to rings to fullerenes. Journal of Chemical Physics, 1991, 95, 3835-3837.	1.2	477
5	Experimental evidence for the formation of fullerenes by collisional heating of carbon rings in the gas phase. Nature, 1993, 363, 60-63.	13.7	395
6	Gas-Phase Conformation of Biological Molecules:â€‰ Bradykinin. Journal of the American Chemical Society, 1996, 118, 8355-8364.	6.6	364
7	Amyloid Î²-Protein:Â Monomer Structure and Early Aggregation States of AÎ²42 and Its Pro19Alloform. Journal of the American Chemical Society, 2005, 127, 2075-2084.	6.6	321
8	Ion mobilityâ€“mass spectrometry reveals a conformational conversion from random assembly to Î²-sheet in amyloid fibril formation. Nature Chemistry, 2011, 3, 172-177.	6.6	315
9	Recommendations for reporting ion mobility Mass Spectrometry measurements. Mass Spectrometry Reviews, 2019, 38, 291-320.	2.8	315
10	Effect of the long-range potential on ion mobility measurements. Journal of the American Society for Mass Spectrometry, 1997, 8, 275-282.	1.2	305
11	Structural Stability from Solution to the Gas Phase: Native Solution Structure of Ubiquitin Survives Analysis in a Solvent-Free Ion Mobilityâ€“Mass Spectrometry Environment. Journal of Physical Chemistry B, 2011, 115, 12266-12275.	1.2	298
12	Collisions in a noncentral field: A variational and trajectory investigation of ionâ€“dipole capture. Journal of Chemical Physics, 1980, 72, 2641-2655.	1.2	266
13	Design of a new electrospray ion mobility mass spectrometer. International Journal of Mass Spectrometry, 2001, 212, 13-23.	0.7	260
14	G-Quadruplex DNA Assemblies: Loop Length, Cation Identity, and Multimer Formation. Journal of the American Chemical Society, 2008, 130, 10208-10216.	6.6	246
15	Amyloid beta-protein monomer structure: A computational and experimental study. Protein Science, 2006, 15, 420-428.	3.1	236
16	Characterization of Phosphorylated Peptides Using Traveling Wave-Based and Drift Cell Ion Mobility Mass Spectrometry. Analytical Chemistry, 2009, 81, 248-254.	3.2	223
17	Statistical phase space theory of polyatomic systems: Rigorous energy and angular momentum conservation in reactions involving symmetric polyatomic species. Journal of Chemical Physics, 1977, 66, 2306-2315.	1.2	207
18	Human Islet Amyloid Polypeptide Monomers Form Ordered Î²-hairpins: A Possible Direct Amyloidogenic Precursor. Journal of the American Chemical Society, 2009, 131, 18283-18292.	6.6	204

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19	Elucidating Amyloid Î²-Protein Folding and Assembly:â€‰ A Multidisciplinary Approach. Accounts of Chemical Research, 2006, 39, 635-645.	7.6	203
20	Gas-Phase Conformations: The Ion Mobility/Ion Chromatography Method. Topics in Current Chemistry, 2003, , 207-232.	4.0	199
21	A novel projection approximation algorithm for the fast and accurate computation of molecular collision cross sections (I). Method. International Journal of Mass Spectrometry, 2011, 308, 1-10.	0.7	199
22	Near thermal energy charge transfer reactions of rare gas ions with diatomic and simple polyatomic molecules: The importance of Franckâ€Condon factors and energy resonance on the magnitude of the rate constants. Journal of Chemical Physics, 1974, 61, 4600-4617.	1.2	198
23	Inclusion of a MALDI ion source in the ion chromatography technique: conformational information on polymer and biomolecular ions. International Journal of Mass Spectrometry and Ion Processes, 1995, 146-147, 349-364.	1.9	198
24	The Amyloid Formation Mechanism in Human IAPP: Dimers Have Î²-Strand Monomerâ^'Monomer Interfaces. Journal of the American Chemical Society, 2011, 133, 7240-7243.	6.6	195
25	A new, higher resolution, ion mobility mass spectrometer. International Journal of Mass Spectrometry, 2009, 287, 46-57.	0.7	185
26	Multiple transition states in unimolecular reactions: A transition state switching model. Application to the C4H8â€‰+â‹… system. Journal of Chemical Physics, 1981, 74, 2228-2246.	1.2	181
27	Electronic-state chromatography: application to first-row transition-metal ions. The Journal of Physical Chemistry, 1991, 95, 5134-5146.	2.9	173
28	Protomers of Benzocaine: Solvent and Permittivity Dependence. Journal of the American Chemical Society, 2015, 137, 4236-4242.	6.6	172
29	Salt Bridge Structures in the Absence of Solvent? The Case for the Oligoglycines. Journal of the American Chemical Society, 1998, 120, 5098-5103.	6.6	168
30	Rational Design of a Structural Framework with Potential Use to Develop Chemical Reagents That Target and Modulate Multiple Facets of Alzheimerâ€™s Disease. Journal of the American Chemical Society, 2014, 136, 299-310.	6.6	166
31	Ion Mobility Analysis of Molecular Dynamics. Annual Review of Physical Chemistry, 2014, 65, 175-196.	4.8	163
32	An infrared spectroscopy approach to follow Î²-sheet formation in peptide amyloid assemblies. Nature Chemistry, 2017, 9, 39-44.	6.6	163
33	A new method for studying carbon clusters in the gas phase: Observation of size specific neutral fragment loss from metastable reactions of mass selected C+n, nâ‰60. Journal of Chemical Physics, 1988, 88, 2809-2814.	1.2	155
34	Gas phase conformations of biological molecules: the hydrogen/deuterium exchange mechanism. Journal of the American Society for Mass Spectrometry, 1999, 10, 9-14.	1.2	155
35	Intermolecular Interactions in Biomolecular Systems Examined by Mass Spectrometry. Annual Review of Physical Chemistry, 2007, 58, 511-533.	4.8	147
36	A hybrid double-focusing mass spectrometerâ€”High-pressure drift reaction cell to study thermal energy reactions of mass-selected ions. Journal of the American Society for Mass Spectrometry, 1990, 1, 197-207.	1.2	143

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37	Gas-Phase Conformations of Synthetic Polymers:Â Poly(ethylene glycol), Poly(propylene glycol), and Poly(tetramethylene glycol). Journal of the American Chemical Society, 2000, 122, 4692-4699.	6.6	143
38	Stabilization and Structure of Telomeric and c-myc Region Intramolecular G-Quadruplexes:Â The Role of Central Cations and Small Planar Ligands. Journal of the American Chemical Society, 2007, 129, 895-904.	6.6	143
39	Structures and Energetics of Vn(C6H6)m+Clusters:Â Evidence for a Quintuple-Decker Sandwich. Journal of Physical Chemistry A, 1997, 101, 8207-8213.	1.1	136
40	Intact Size-Selected AunClusters on a TiO2(110)-(1 Ã— 1) Surface at Room Temperature. Journal of the American Chemical Society, 2005, 127, 13516-13518.	6.6	136
41	Tau Assembly: The Dominant Role of PHF6 (VQIVYK) in Microtubule Binding Region Repeat R3. Journal of Physical Chemistry B, 2015, 119, 4582-4593.	1.2	134
42	On the structure, reactivity and relative stability of the large carbon cluster ions C+62, C+60 and C+58. Chemical Physics Letters, 1990, 174, 223-229.	1.2	128
43	Conformations of alkali ion cationized polyethers in the gas phase: polyethylene glycol and bis[(benzo-15-crown-5)-15-ylmethyl] pimelate. International Journal of Mass Spectrometry and Ion Processes, 1997, 165-166, 377-390.	1.9	128
44	Carbon cluster anions: structure and growth from C5â¯ to C62â¯. International Journal of Mass Spectrometry and Ion Processes, 1995, 149-150, 217-229.	1.9	124
45	Amyloid Î²-Protein Assembly and Alzheimerâ€™s Disease: Dodecamers of AÎ²42, but Not of AÎ²40, Seed Fibril Formation. Journal of the American Chemical Society, 2016, 138, 1772-1775.	6.6	123
46	Duplex Formation and the Onset of Helicity in Poly d(CG)nOligonucleotides in a Solvent-Free Environment. Journal of the American Chemical Society, 2004, 126, 15132-15140.	6.6	119
47	Ionâ€“polar molecule collisions. Conservation of angular momentum in the average dipole orientation theory. The AADO theory. Journal of Chemical Physics, 1978, 69, 2243-2250.	1.2	115
48	Characterization of simple isomeric oligosaccharides and the rapid separation of glycan mixtures by ion mobility mass spectrometry. International Journal of Mass Spectrometry, 2010, 298, 119-127.	0.7	114
49	Amyloid Î² Protein: AÎ²40 Inhibits AÎ²42 Oligomerization. Journal of the American Chemical Society, 2009, 131, 6316-6317.	6.6	106
50	Retention of Native Protein Structures in the Absence of Solvent: A Coupled Ion Mobility and Spectroscopic Study. Angewandte Chemie - International Edition, 2016, 55, 14173-14176.	7.2	106
51	Atomic structure of a toxic, oligomeric segment of SOD1 linked to amyotrophic lateral sclerosis (ALS). Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8770-8775.	3.3	104
52	Structural motifs of DNA complexes in the gas phase. International Journal of Mass Spectrometry, 2005, 240, 183-193.	0.7	101
53	Annealing of carbon cluster cations: rings to rings and rings to fullerenes. Journal of the American Chemical Society, 1993, 115, 4363-4364.	6.6	96
54	Effects of Familial Alzheimerâ€™s Disease Mutations on the Folding Nucleation of the Amyloid Î²-Protein. Journal of Molecular Biology, 2008, 381, 221-228.	2.0	96

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55	Gas Phase Conformations of Li+, Na+, K+, and Cs+ Complexed with 18-Crown-6. Journal of the American Chemical Society, 1995, 117, 10159-10160.	6.6	91
56	Amyloid Î²-Protein C-Terminal Fragments: Formation of Cylindrins and Î²-Barrels. Journal of the American Chemical Society, 2016, 138, 549-557.	6.6	91
57	The Effect of the Initial Water of Hydration on the Energetics, Structures, and H/D Exchange Mechanism of a Family of Pentapeptides:Â An Experimental and Theoretical Study. Journal of the American Chemical Society, 2003, 125, 13768-13775.	6.6	88
58	Photodissociation of Conformer-Selected Ubiquitin Ions Reveals Site-Specific Cis/Trans Isomerization of Proline Peptide Bonds. Journal of the American Chemical Society, 2014, 136, 10308-10314.	6.6	88
59	Phenylalanine Oligomers and Fibrils: The Mechanism of Assembly and the Importance of Tetramers and Counterions. Journal of the American Chemical Society, 2015, 137, 10080-10083.	6.6	87
60	Cyclo[n]pyrroles:Â Size and Site-Specific Binding to G-Quadruplexes. Journal of the American Chemical Society, 2006, 128, 2641-2648.	6.6	86
61	The Structure of AÎ²42 C-Terminal Fragments Probed by a Combined Experimental and Theoretical Study. Journal of Molecular Biology, 2009, 387, 492-501.	2.0	84
62	Ion Mobility Spectrometry Reveals the Mechanism of Amyloid Formation of AÎ²(25â€“35) and Its Modulation by Inhibitors at the Molecular Level: Epigallocatechin Gallate and Scyllo-inositol. Journal of the American Chemical Society, 2013, 135, 16926-16937.	6.6	83
63	Insertion of Sc+ into H2: The First Example of Cluster-Mediated .sigma.-Bond Activation by a Transition Metal Center. Journal of the American Chemical Society, 1994, 116, 9710-9718.	6.6	82
64	Structural Investigation of Encapsulated Fluoride in Polyhedral Oligomeric Silsesquioxane Cages Using Ion Mobility Mass Spectrometry and Molecular Mechanics. Chemistry of Materials, 2008, 20, 4299-4309.	3.2	82
65	Gas phase structures of sodiated oligosaccharides by ion mobility/ion chromatography methods. International Journal of Mass Spectrometry and Ion Processes, 1997, 167-168, 605-614.	1.9	81
66	Origin of Bonding Interactions in Cu+(H2)n Clusters:â€‰ An Experimental and Theoretical Investigation. Journal of the American Chemical Society, 1998, 120, 13494-13502.	6.6	81
67	Hydration of biomolecules. Chemical Physics Letters, 2009, 480, 1-16.	1.2	81
68	On the question of salt bridges of cationized amino acids in the gas phase: glycine and arginine. International Journal of Mass Spectrometry, 1999, 182-183, 243-252.	0.7	80
69	G-quadruplexes in telomeric repeats are conserved in a solvent-free environment. International Journal of Mass Spectrometry, 2006, 253, 225-237.	0.7	80
70	Familial Alzheimerâ€™s Disease Mutations Differentially Alter Amyloid Î²-Protein Oligomerization. ACS Chemical Neuroscience, 2012, 3, 909-918.	1.7	80
71	Molecular Structures and Ion Mobility Cross Sections: Analysis of the Effects of He and N₂ Buffer Gas. Analytical Chemistry, 2015, 87, 7196-7203.	3.2	78
72	Mass Spectrometry:Â Recent Advances and Future Directions. The Journal of Physical Chemistry, 1996, 100, 12897-12910.	2.9	77

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73	Gas-Phase Conformations and Folding Energetics of Oligonucleotides:Â dTG-and dGT-. Journal of the American Chemical Society, 2001, 123, 5610-5611.	6.6	76
74	Sequential Hydration of Small Protonated Peptides. Journal of the American Chemical Society, 2003, 125, 8458-8464.	6.6	76
75	Factors Contributing to the Collision Cross Section of Polyatomic Ions in the Kilodalton to Gigadalton Range: Application to Ion Mobility Measurements. Analytical Chemistry, 2013, 85, 2191-2199.	3.2	74
76	Cluster ions: carbon, met-cars, and .sigma.-bond activation. Accounts of Chemical Research, 1994, 27, 324-332.	7.6	73
77	Poly (ethylene terephthalate) oligomers cationized by alkali ions: Structures, energetics, and their effect on mass spectra and the matrix-assisted laser desorption/ionization process. Journal of the American Society for Mass Spectrometry, 1999, 10, 883-895.	1.2	73
78	Binding energies of cobalt(1+)-hydrogen-methane-ethane (Co+.cntdot.(H2/CH4/C2H6)1,2,3) clusters. The Journal of Physical Chemistry, 1993, 97, 1810-1817.	2.9	72
79	Gas-phase conformations of cationized poly(styrene) oligomers. Journal of the American Society for Mass Spectrometry, 2002, 13, 499-505.	1.2	72
80	AÎ²(39â€“42) Modulates AÎ² Oligomerization but Not Fibril Formation. Biochemistry, 2012, 51, 108-117.	1.2	72
81	Microstructural and conformational studies of polyether copolymers. International Journal of Mass Spectrometry, 2004, 238, 287-297.	0.7	71
82	Gas phase conformations of synthetic polymers: poly (methyl methacrylate) oligomers cationized by sodium ions. International Journal of Mass Spectrometry, 1999, 188, 121-130.	0.7	70
83	Energy disposal in photodissociation from magic angle measurements with a crossed highâ€energy ion beam and laser beam: Photodissociation dynamics of the (N2)+2 cluster in the 458â€“514 nm range. Journal of Chemical Physics, 1984, 81, 214-221.	1.2	69
84	Charge transfer halfâ€collisions: Photodissociation of the Krâ‹…O+2cluster ion with resolution of the O2product vibrational states. Journal of Chemical Physics, 1984, 81, 4369-4379.	1.2	69
85	Amyloid Î²-Protein Assembly: The Effect of Molecular Tweezers CLR01 and CLR03. Journal of Physical Chemistry B, 2015, 119, 4831-4841.	1.2	69
86	Na+/K+.cntdot.(H2)1,2 clusters: binding energies from theory and experiment. The Journal of Physical Chemistry, 1994, 98, 2044-2049.	2.9	67
87	Gas-Phase Conformations of Deprotonated and Protonated Mononucleotides Determined by Ion Mobility and Theoretical Modeling. Journal of Physical Chemistry B, 2003, 107, 12829-12837.	1.2	67
88	Is it biologically relevant to measure the structures of small peptides in the gas-phase?. International Journal of Mass Spectrometry, 2005, 240, 273-284.	0.7	67
89	Oligomers of the Prion Protein Fragment 106âˆ’126 Are Likely Assembled from Î²-Hairpins in Solution, and Methionine Oxidation Inhibits Assembly without Altering the Peptideâ€™s Monomeric Conformation. Journal of the American Chemical Society, 2010, 132, 532-539.	6.6	67
90	Defining the Molecular Basis of Amyloid Inhibitors: Human Islet Amyloid Polypeptideâ€“Insulin Interactions. Journal of the American Chemical Society, 2014, 136, 12912-12919.	6.6	67

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91	The Structure of the Protonated Serine Octamer. Journal of the American Chemical Society, 2018, 140, 7554-7560.	6.6	67
92	Activation of Methane by MH+(M = Fe, Co, and Ni):Â A Combined Mass Spectrometric and DFT Studyâ€. Journal of Physical Chemistry A, 2004, 108, 9755-9761.	1.1	66
93	A novel projection approximation algorithm for the fast and accurate computation of molecular collision cross sections (II). Model parameterization and definition of empirical shape factors for proteins. International Journal of Mass Spectrometry, 2013, 345-347, 89-96.	0.7	66
94	The impact of environment and resonance effects on the site of protonation of aminobenzoic acid derivatives. Physical Chemistry Chemical Physics, 2016, 18, 25474-25482.	1.3	66
95	Interactions between Amyloid-Î² and Tau Fragments Promote Aberrant Aggregates: Implications for Amyloid Toxicity. Journal of Physical Chemistry B, 2014, 118, 11220-11230.	1.2	65
96	Transition-metal ion-rare gas clusters: bond strengths and molecular parameters for Co+(He/Ne)n, Ni+(He/Ne)n, and Cr+(He/Ne/Ar). The Journal of Physical Chemistry, 1991, 95, 10600-10609.	2.9	63
97	Mn+(H2)n and Zn+(H2)n Clusters:â€‰ Influence of 3d and 4s Orbitals on Metalâ^'Ligand Bonding. Journal of Physical Chemistry A, 1997, 101, 2809-2816.	1.1	63
98	Structural characterization of G-quadruplexes in deoxyguanosine clusters using ion mobility mass spectrometry. Journal of the American Society for Mass Spectrometry, 2005, 16, 989-997.	1.2	63
99	Binding between Ground-State Aluminum Ions and Small Molecules: Al+Â·(H2/CH4/C2H2/C2H4/C2H6)n. Can Al+Insert into H2?. Journal of Physical Chemistry A, 1998, 102, 8590-8597.	1.1	62
100	Hydration of Protonated Aromatic Amino Acids: Phenylalanine, Tryptophan, and Tyrosine. Journal of the American Chemical Society, 2009, 131, 4695-4701.	6.6	62
101	Oxytocin-Receptor Binding:Â Why Divalent Metals Are Essential. Journal of the American Chemical Society, 2005, 127, 2024-2025.	6.6	61
102	Reactions of Ground-State Ti+ and V+ with Propane:â€‰ Factors That Govern Câ^'H and Câ^'C Bond Cleavage Product Branching Ratios. Journal of the American Chemical Society, 1998, 120, 5704-5712.	6.6	60
103	Cobalt-hydrogen (Co+.cntdot.(H2)n) clusters: binding energies and molecular parameters. The Journal of Physical Chemistry, 1993, 97, 52-58.	2.9	59
104	Landing of size-selected Agn+ clusters on single crystal TiO2 (110)-(1Ã—1) surfaces at room temperature. Journal of Chemical Physics, 2005, 122, 081102.	1.2	59
105	A novel projection approximation algorithm for the fast and accurate computation of molecular collision cross sections (III): Application to supramolecular coordination-driven assemblies with complex shapes. International Journal of Mass Spectrometry, 2012, 330-332, 78-84.	0.7	58
106	A novel projection approximation algorithm for the fast and accurate computation of molecular collision cross sections (IV). Application to polypeptides. International Journal of Mass Spectrometry, 2013, 354-355, 275-280.	0.7	57
107	The Effect of Calcium Ions and Peptide Ligands on the Relative Stabilities of the Calmodulin Dumbbell and Compact Structures. Journal of Physical Chemistry B, 2010, 114, 437-447.	1.2	56
108	Infrared spectrum and structure of the homochiral serine octamerâ€“dichloride complex. Nature Chemistry, 2017, 9, 1263-1268.	6.6	56

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109	Electronic state-selected reactivity of transition metal ions: cobalt(+) and iron(+) with propane. Journal of the American Chemical Society, 1992, 114, 10941-10950.	6.6	55
110	Amyloid Î²-Protein Assembly: Differential Effects of the Protective A2T Mutation and Recessive A2V Familial Alzheimerâ€™s Disease Mutation. ACS Chemical Neuroscience, 2015, 6, 1732-1740.	1.7	55
111	Conformational evolution of ubiquitin ions in electrospray mass spectrometry: molecular dynamics simulations at gradually increasing temperatures. Physical Chemistry Chemical Physics, 2008, 10, 3077.	1.3	54
112	Initiation of assembly of tau(273-284) and its Î”K280 mutant: an experimental and computational study. Physical Chemistry Chemical Physics, 2013, 15, 8916.	1.3	54
113	The formation and reactivity of HOC+: Interstellar implications. Journal of Chemical Physics, 1985, 83, 1121-1131.	1.2	53
114	Hydration of small peptides. International Journal of Mass Spectrometry, 2005, 240, 221-232.	0.7	53
115	Hydration of Mononucleotides. Journal of the American Chemical Society, 2006, 128, 15155-15163.	6.6	53
116	B-DNA Helix Stability in a Solvent-Free Environment. Journal of the American Society for Mass Spectrometry, 2007, 18, 1188-1195.	1.2	53
117	Investigation of the dynamics and energy disposal in the photodissociation of small ion clusters using a highâ€energy ion beam crossed with a laser beam: Photodissociation of (NO)2+. in the 488â€“660 nm range. Journal of Chemical Physics, 1983, 79, 6086-6096.	1.2	52
118	Methane Dehydrogenation by Ti+: A Cluster-Assisted Mechanism for .sigma.-Bond Activation. Journal of the American Chemical Society, 1995, 117, 2098-2099.	6.6	52
119	Spermine Binding to Parkinsonâ€™s Protein Î±-Synuclein and Its Disease-Related A30P and A53T Mutants. Journal of Physical Chemistry B, 2008, 112, 11147-11154.	1.2	52
120	Details of Potential Energy Surfaces Involving C-C Bond Activation: Reactions of Fe+, Co+, and Ni+ with Acetone. Journal of the American Chemical Society, 1995, 117, 10976-10985.	6.6	51
121	Structural Characterization of POSS Siloxane Dimer and Trimer. Chemistry of Materials, 2006, 18, 1490-1497.	3.2	51
122	Amyloid Î²-Protein: Experiment and Theory on the 21â”30 Fragment. Journal of Physical Chemistry B, 2009, 113, 6041-6046.	1.2	50
123	Binding energies of Ti+(H2)1â€“6 clusters: Theory and experiment. Journal of Chemical Physics, 1997, 106, 10153-10167.	1.2	48
124	Cr+(H2)n clusters: Asymmetric bonding from a symmetric ion. International Journal of Mass Spectrometry and Ion Processes, 1997, 160, 17-37.	1.9	47
125	Gas-phase conformations of deprotonated trinucleotides (dGTTâ”, dTGTâ”, and dTTGâ”): the question of zwitterion formation. Journal of the American Society for Mass Spectrometry, 2003, 14, 161-170.	1.2	47
126	Application of ion mobility to the gas-phase conformational analysis of polyhedral oligomeric silsesquioxanes (POSS). International Journal of Mass Spectrometry, 2003, 222, 63-73.	0.7	47

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127	Hydration of protonated primary amines: effects of intermolecular and intramolecular hydrogen bonds. International Journal of Mass Spectrometry, 2004, 236, 81-90.	0.7	47
128	Structural analysis of prion proteins by means of drift cell and traveling wave ion mobility mass spectrometry. Journal of the American Society for Mass Spectrometry, 2010, 21, 845-854.	1.2	47
129	Mechanism of C-Terminal Fragments of Amyloid Î²-Protein as AÎ² Inhibitors: Do C-Terminal Interactions Play a Key Role in Their Inhibitory Activity?. Journal of Physical Chemistry B, 2016, 120, 1615-1623.	1.2	47
130	NFGAIL Amyloid Oligomers: The Onset of Beta-Sheet Formation and the Mechanism for Fibril Formation. Journal of the American Chemical Society, 2018, 140, 244-249.	6.6	47
131	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
132	Spin change induced in vanadium(I) by low-field ligands: binding energies of vanadium ion-hydrogen (V+(H2)n) clusters (n = 1-7). The Journal of Physical Chemistry, 1993, 97, 11628-11634.	2.9	45
133	Isomeric Structural Characterization of Polyhedral Oligomeric Silsesquioxanes (POSS) with Styryl and Epoxy Phenyl Capping Agents. Nano Letters, 2004, 4, 779-785.	4.5	45
134	Investigation of Noncovalent Interactions in Deprotonated Peptides:â€‰ Structural and Energetic Competition between Aggregation and Hydration. Journal of the American Chemical Society, 2004, 126, 3261-3270.	6.6	44
135	Ion mobility spectrometry: A personal view of its development at UCSB. International Journal of Mass Spectrometry, 2014, 370, 75-95.	0.7	44
136	Reactions of state-selected cobalt(+) with propane. Journal of the American Chemical Society, 1992, 114, 1083-1084.	6.6	43
137	Protonated Arginine and Protonated Lysine: Hydration and Its Effect on the Stability of Salt-Bridge Structures. Journal of Physical Chemistry B, 2009, 113, 9995-10000.	1.2	43
138	The Solution Assembly of Biological Molecules Using Ion Mobility Methods: From Amino Acids to Amyloid Î²-Protein. Annual Review of Analytical Chemistry, 2017, 10, 365-386.	2.8	43
139	Factors Affecting .sigma. Bond Activation in Simple Systems: Measurement of Experimental Binding Energies of Fe+(H2)1-6 Clusters. The Journal of Physical Chemistry, 1995, 99, 15602-15607.	2.9	41
140	Supramolecular Modification of Ion Chemistry: Modulation of Peptide Charge State and Dissociation Behavior through Complexation with Cucurbit[n]uril (n = 5, 6) or Î±-Cyclodextrin. Journal of Physical Chemistry A, 2009, 113, 1508-1517.	1.1	41
141	An experimental study of the formation and reactivity of ionic hydrogen clusters: The first observation and characterization of the even clusters H+4, H+6, H+8, and H+10. Journal of Chemical Physics, 1987, 86, 1301-1310.	1.2	40
142	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. Journal of the American Chemical Society, 1989, 111, 2401-2409.	6.6	40
143	Direct Visualization of Water-Induced Relocation of Au Atoms from Oxygen Vacancies on a TiO₂(110) Surface. Journal of Physical Chemistry C, 2010, 114, 3987-3990.	1.5	40
144	Amino Acid Metaclusters: Implications of Growth Trends on Peptide Self-Assembly and Structure. Analytical Chemistry, 2016, 88, 868-876.	3.2	40

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145	On the formation of HCO+ and HOC+ from the reaction between H+3 and CO. Journal of Chemical Physics, 1982, 77, 5847-5848.	1.2	39
146	Determination of potential energy curves for ground and metastable excited state transition metal ions interacting with helium and neon using electronic state chromatography. Journal of Chemical Physics, 1992, 96, 6591-6605.	1.2	38
147	Folding Energetics and Dynamics of Macromolecules in the Gas Phase:Â Alkali Ion-Cationized Poly(ethylene terephthalate) Oligomers. Journal of the American Chemical Society, 1999, 121, 1421-1422.	6.6	38
148	On the use of collision induced dissociation spectra in the determination of the structural composition of ions. Organic Mass Spectrometry, 1982, 17, 229-236.	1.3	37
149	3-Dimensional structural characterization of cationized polyhedral oligomeric silsesquioxanes (POSS) with styryl and phenylethyl capping agents. International Journal of Mass Spectrometry, 2003, 227, 205-216.	0.7	37
150	DNA Hairpin, Pseudoknot, and Cruciform Stability in a Solvent-Free Environment. Journal of Physical Chemistry B, 2009, 113, 1722-1727.	1.2	37
151	An improved high-pressure, temperature-variable ion source with coaxial electron beam/ion exit slit. International Journal of Mass Spectrometry and Ion Processes, 1983, 54, 263-282.	1.9	36
152	Photodissociation dynamics of negative ion clusters: (SO2)â˜2. Journal of Chemical Physics, 1986, 85, 2718-2725.	1.2	36
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