

Martin F Jarrold

List of Publications by Year in descending order

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232
papers

15,828
citations

18465

62
h-index

23514

111
g-index

235
all docs

235
docs citations

235
times ranked

6959
citing authors

#	ARTICLE	IF	CITATIONS
1	An exact hard-spheres scattering model for the mobilities of polyatomic ions. <i>Chemical Physics Letters</i> , 1996, 261, 86-91.	1.2	775
2	Ion Mobility Measurements and their Applications to Clusters and Biomolecules. , 1997, 32, 577-592.		671
3	Structures of medium-sized silicon clusters. <i>Nature</i> , 1998, 392, 582-585.	13.7	622
4	Naked Protein Conformations: Cytochrome c in the Gas Phase. <i>Journal of the American Chemical Society</i> , 1995, 117, 10141-10142.	6.6	466
5	Integrative structure and functional anatomy of a nuclear pore complex. <i>Nature</i> , 2018, 555, 475-482.	13.7	435
6	Protein Structure in Vacuo: Gas-Phase Conformations of BPTI and Cytochrome c. <i>Journal of the American Chemical Society</i> , 1997, 119, 2240-2248.	6.6	409
7	Silicon cluster ions: Evidence for a structural transition. <i>Physical Review Letters</i> , 1991, 67, 2994-2997.	2.9	360
8	PEPTIDES AND PROTEINS IN THE VAPOR PHASE. <i>Annual Review of Physical Chemistry</i> , 2000, 51, 179-207.	4.8	344
9	Solid Clusters above the Bulk Melting Point. <i>Physical Review Letters</i> , 2000, 85, 2530-2532.	2.9	270
10	An IMS-IMS Analogue of MS-MS. <i>Analytical Chemistry</i> , 2006, 78, 4161-4174.	3.2	251
11	Collision induced dissociation of metal cluster ions: Bare aluminum clusters, Al _n (n=3-26). <i>Journal of Chemical Physics</i> , 1987, 86, 3876-3885.	1.2	232
12	Hot and Solid Gallium Clusters: Too Small to Melt. <i>Physical Review Letters</i> , 2003, 91, 215508.	2.9	209
13	Conformations, Unfolding, and Refolding of Apomyoglobin in Vacuum: An Activation Barrier for Gas-Phase Protein Folding. <i>Journal of the American Chemical Society</i> , 1997, 119, 2987-2994.	6.6	196
14	Mobilities of silicon cluster ions: The reactivity of silicon sausages and spheres. <i>Journal of Chemical Physics</i> , 1992, 96, 9180-9190.	1.2	192
15	Dissociation of large silicon clusters: the approach to bulk behavior. <i>The Journal of Physical Chemistry</i> , 1991, 95, 9181-9185.	2.9	188
16	Drift Tube Studies of Atomic Clusters. <i>The Journal of Physical Chemistry</i> , 1995, 99, 11-21.	2.9	183
17	Unfolding, Refolding, and Hydration of Proteins in the Gas Phase. <i>Accounts of Chemical Research</i> , 1999, 32, 360-367.	7.6	173
18	Ionization of medium-sized silicon clusters and the geometries of the cations. <i>Journal of Chemical Physics</i> , 1998, 109, 9401-9409.	1.2	169

#	ARTICLE	IF	CITATIONS
19	Design of Helices That Are Stable in Vacuo. <i>Journal of the American Chemical Society</i> , 1998, 120, 12974-12975.	6.6	160
20	Melting, Premelting, and Structural Transitions in Size-Selected Aluminum Clusters with around 55 Atoms. <i>Physical Review Letters</i> , 2005, 94, 173401.	2.9	160
21	Helix Formation in Unsolvated Alanine-Based Peptides: Helical Monomers and Helical Dimers. <i>Journal of the American Chemical Society</i> , 1999, 121, 3494-3501.	6.6	152
22	Structures of Silicon-Doped Carbon Clusters. <i>Journal of Physical Chemistry A</i> , 1997, 101, 1836-1840.	1.1	149
23	High-resolution ion mobility measurements for silicon cluster anions and cations. <i>Journal of Chemical Physics</i> , 1999, 111, 7865-7870.	1.2	139
24	Mobilities of carbon cluster ions: Critical importance of the molecular attractive potential. <i>Journal of Chemical Physics</i> , 1998, 108, 2416-2423.	1.2	135
25	Modeling ionic mobilities by scattering on electronic density isosurfaces: Application to silicon cluster anions. <i>Journal of Chemical Physics</i> , 2000, 112, 4517-4526.	1.2	131
26	Helices and Sheets in vacuo. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1659.	1.3	125
27	A detailed study of the reactions between size selected aluminum cluster ions, Al_n ($n=3-26$), and oxygen. <i>Journal of Chemical Physics</i> , 1987, 87, 5728-5738.	1.2	124
28	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
29	Structures of Germanium Clusters: Where the Growth Patterns of Silicon and Germanium Clusters Diverge. <i>Physical Review Letters</i> , 1999, 83, 2167-2170.	2.9	123
30	Physical and chemical evidence for metallofullerenes with metal atoms as part of the cage. <i>Nature</i> , 1994, 372, 248-250.	13.7	122
31	Structural information from ion mobility measurements: applications to semiconductor clusters. <i>Chemical Society Reviews</i> , 2001, 30, 26-35.	18.7	119
32	Detection of Late Intermediates in Virus Capsid Assembly by Charge Detection Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2014, 136, 3536-3541.	6.6	118
33	Charge Separation in the Aerodynamic Breakup of Micrometer-Sized Water Droplets. <i>Journal of Physical Chemistry A</i> , 2008, 112, 13352-13363.	1.1	117
34	Resolving Adeno-Associated Viral Particle Diversity With Charge Detection Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 6718-6725.	3.2	116
35	Photodissociation kinetics of aluminum cluster ions: Determination of cluster dissociation energies. <i>Journal of Chemical Physics</i> , 1989, 91, 2912-2921.	1.2	108
36	High resolution ion mobility measurements for gas phase proteins: correlation between solution phase and gas phase conformations. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 165-166, 497-507.	1.9	107

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37	Melting and Freezing of Metal Clusters. Annual Review of Physical Chemistry, 2011, 62, 151-172.	4.8	105
38	Tin clusters adopt prolate geometries. Physical Review A, 1999, 60, 1235-1239.	1.0	101
39	Conformations of GlynH ⁺ and AlanH ⁺ Peptides in the Gas Phase. Biophysical Journal, 1999, 76, 1591-1597.	0.2	98
40	Thermal Unfolding of Unsolvated Cytochrome c: Experiment and Molecular Dynamics Simulations. Journal of the American Chemical Society, 1999, 121, 2712-2721.	6.6	97
41	Annealing and dissociation of carbon rings. Journal of Chemical Physics, 1993, 99, 1785-1795.	1.2	95
42	Charge detection mass spectrometry for single ions with a limit of detection of 30 charges. International Journal of Mass Spectrometry, 2013, 345-347, 153-159.	0.7	95
43	Chemistry of semiconductor clusters: Large silicon clusters are much less reactive towards oxygen than the bulk. Journal of Chemical Physics, 1990, 93, 224-229.	1.2	93
44	Gallium Cluster "Magic Melters". Journal of the American Chemical Society, 2004, 126, 8628-8629.	6.6	90
45	Charge detection mass spectrometry: weighing heavier things. Analyst, The, 2017, 142, 1654-1671.	1.7	89
46	Charge Detection Mass Spectrometry with Resolved Charge States. Journal of the American Society for Mass Spectrometry, 2013, 24, 101-108.	1.2	85
47	"Denaturation" and Refolding of Cytochrome c in Vacuo. Journal of the American Chemical Society, 1996, 118, 10313-10314.	6.6	84
48	Charge Detection Mass Spectrometry with Almost Perfect Charge Accuracy. Analytical Chemistry, 2015, 87, 10330-10337.	3.2	84
49	Raman spectra and calculated vibrational frequencies of size-selected C ₁₆ , C ₁₈ , and C ₂₀ clusters. Journal of Chemical Physics, 1998, 109, 9652-9655.	1.2	83
50	Permanent Electric Dipole and Conformation of Unsolvated Tryptophan. Journal of the American Chemical Society, 2001, 123, 8440-8441.	6.6	83
51	Transition from covalent to metallic behavior in group-14 clusters. Chemical Physics Letters, 2000, 317, 615-618.	1.2	76
52	Annealing of silicon clusters. Journal of the American Chemical Society, 1992, 114, 459-464.	6.6	75
53	Ion-molecule association reactions: reaction sequences initiated by protonated methanol (MeOH ₂ ⁺) in methanol; experiment and theory. Journal of the American Chemical Society, 1983, 105, 7024-7033.	6.6	74
54	Structural Transitions in Sodium Chloride Nanocrystals. Physical Review Letters, 1997, 78, 4213-4216.	2.9	74

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55	Reactions of silicon cluster ions, Si _n (n=10-65), with water. <i>Journal of Chemical Physics</i> , 1991, 94, 2631-2639.	1.2	71
56	Small carbon rings: dissociation, isomerization, and a simple model based on strain. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1994, 138, 17-31.	1.9	71
57	Dissociation Energies of Silicon Clusters: A Depth Gauge for the Global Minimum on the Potential Energy Surface. <i>Physical Review Letters</i> , 1998, 81, 4616-4619.	2.9	71
58	Extreme Stability of an Unsolvated α -Helix. <i>Journal of the American Chemical Society</i> , 2004, 126, 7420-7421.	6.6	71
59	Hepatitis B Virus Capsid Completion Occurs through Error Correction. <i>Journal of the American Chemical Society</i> , 2017, 139, 16932-16938.	6.6	71
60	Energy disposal in photodissociation from magic angle measurements with a crossed high-energy ion beam and laser beam: Photodissociation dynamics of the (N ₂) ₂ cluster in the 458-514 nm range. <i>Journal of Chemical Physics</i> , 1984, 81, 214-221.	1.2	69
61	Charge transfer half-collisions: Photodissociation of the Kr...O ₂ cluster ion with resolution of the O ₂ product vibrational states. <i>Journal of Chemical Physics</i> , 1984, 81, 4369-4379.	1.2	69
62	Single-molecule mass spectrometry. <i>Mass Spectrometry Reviews</i> , 2017, 36, 715-733.	2.8	69
63	Interaction of silicon cluster ions with ammonia: Annealing, equilibria, high temperature kinetics, and saturation studies. <i>Journal of Chemical Physics</i> , 1991, 94, 3607-3618.	1.2	67
64	Helix Unfolding in Unsolvated Peptides. <i>Journal of the American Chemical Society</i> , 2001, 123, 5660-5667.	6.6	63
65	Hydration of Gas Phase Proteins: Δ Folded +5 and Unfolded +7 Charge States of Cytochrome c. <i>Journal of Physical Chemistry B</i> , 1997, 101, 847-851.	1.2	61
66	High-resolution ion mobility studies of sodium chloride nanocrystals. <i>Chemical Physics Letters</i> , 1997, 267, 186-192.	1.2	61
67	Metal-Ion Enhanced Helicity in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2000, 122, 12377-12378.	6.6	60
68	Photodissociation of the dimanganese ion: Mn ₂ ⁺ : a route to the energetics of metal clusters. <i>Journal of the American Chemical Society</i> , 1985, 107, 7339-7344.	6.6	59
69	Structural Elucidation of Fullerene Dimers by High-Resolution Ion Mobility Measurements and Trajectory Calculation Simulations. <i>Journal of Physical Chemistry A</i> , 1997, 101, 1684-1688.	1.1	59
70	Conformations of Unsolvated Valine-Based Peptides. <i>Journal of the American Chemical Society</i> , 2000, 122, 9243-9256.	6.6	58
71	Optical spectroscopy of metal clusters: Cu ₄ ⁺ . <i>Chemical Physics Letters</i> , 1990, 166, 116-122.	1.2	57
72	Mobilities of metal cluster ions: Aluminum and the electronic shell model. <i>Journal of Chemical Physics</i> , 1993, 98, 2399-2407.	1.2	57

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73	Molecular Dynamics Simulations of the Charge-Induced Unfolding and Refolding of Unsolvated Cytochrome c. <i>Journal of Physical Chemistry B</i> , 1999, 103, 10017-10021.	1.2	57
74	Ion funnels for the masses: Experiments and simulations with a simplified ion funnel. <i>Journal of the American Society for Mass Spectrometry</i> , 2005, 16, 1708-1712.	1.2	57
75	Chemistry of semiconductor clusters: reactions of Si_n^+ ($n = 11-50$) with ethylene show evidence for numerous structural isomers. <i>Journal of the American Chemical Society</i> , 1990, 112, 3768-3773.	6.6	56
76	Hydration of Gas-Phase Proteins: A Special Hydration Site on Gas-Phase BPTI. <i>Journal of the American Chemical Society</i> , 1997, 119, 9586-9587.	6.6	56
77	Hydration of Folded and Unfolded Gas-Phase Proteins: Saturation of Cytochrome c and Apomyoglobin. <i>Journal of the American Chemical Society</i> , 1998, 120, 1327-1328.	6.6	55
78	Melting transitions in aluminum clusters: The role of partially melted intermediates. <i>Physical Review B</i> , 2007, 76, .	1.1	55
79	The reactions of mass selected aluminum cluster ions, Al_n ($n=4-25$), with oxygen. <i>Journal of Chemical Physics</i> , 1986, 85, 5373-5375.	1.2	54
80	Ion-molecule association reactions: A study of the temperature dependence of the reaction $\text{N}_2^+ + \text{M} \rightarrow \text{N}_2 + \text{M}^+$ for $\text{M} = \text{N}_2, \text{Ne}, \text{and He}$: Experiment and theory. <i>Journal of Chemical Physics</i> , 1984, 81, 288-297.	1.2	53
81	The formation and reactivity of HOC^+ : Interstellar implications. <i>Journal of Chemical Physics</i> , 1985, 83, 1121-1131.	1.2	53
82	The Initial Steps in the Hydration of Unsolvated Peptides: Water Molecule Adsorption on Alanine-Based Helices and Globules. <i>Journal of the American Chemical Society</i> , 2002, 124, 11148-11158.	6.6	53
83	Correlation between the latent heats and cohesive energies of metal clusters. <i>Journal of Chemical Physics</i> , 2008, 129, 144702.	1.2	53
84	Investigation of the dynamics and energy disposal in the photodissociation of small ion clusters using a high-energy ion beam crossed with a laser beam: Photodissociation of $(\text{NO})_2^+$ in the 488-660 nm range. <i>Journal of Chemical Physics</i> , 1983, 79, 6086-6096.	1.2	52
85	Observation of C_n^+ and C_nH^+ Intermediates along the Fullerene Road. <i>Physical Review Letters</i> , 2000, 84, 2421-2424.	2.9	52
86	Melting Dramatically Enhances the Reactivity of Aluminum Nanoclusters. <i>Journal of the American Chemical Society</i> , 2009, 131, 2446-2447.	6.6	52
87	Chemisorption on size-selected metal clusters: activation barriers and chemical reactions for deuterium on aluminum cluster ions. <i>Journal of the American Chemical Society</i> , 1988, 110, 70-78.	6.6	51
88	Comparison of analytical techniques to quantitate the capsid content of adeno-associated viral vectors. <i>Molecular Therapy - Methods and Clinical Development</i> , 2021, 23, 254-262.	1.8	51
89	Properties of deposited size-selected clusters: Reactivity of deposited silicon clusters. <i>Journal of Chemical Physics</i> , 1992, 97, 8312-8321.	1.2	50
90	One Ring to Bind Them All: Shape-Selective Complexation of Phenylenediamine Isomers with Cucurbit[6]uril in the Gas Phase. <i>Journal of Physical Chemistry A</i> , 2009, 113, 989-997.	1.1	50

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91	Metal-Containing Carbon Clusters: Structures, Isomerization, and Formation of NbC _n ⁺ Clusters. <i>Journal of the American Chemical Society</i> , 1995, 117, 8841-8850.	6.6	49
92	One Water Molecule Stiffens a Protein. <i>Journal of the American Chemical Society</i> , 2000, 122, 2950-2951.	6.6	49
93	Multiple Pathways in Capsid Assembly. <i>Journal of the American Chemical Society</i> , 2018, 140, 5784-5790.	6.6	49
94	Electric Susceptibility of Unsolvated Glycine-Based Peptides. <i>Journal of the American Chemical Society</i> , 2002, 124, 6737-6741.	6.6	48
95	Electronic effects on melting: Comparison of aluminum cluster anions and cations. <i>Journal of Chemical Physics</i> , 2009, 131, 044307.	1.2	47
96	Higher Resolution Charge Detection Mass Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 11357-11364.	3.2	47
97	Gas-phase self-assembly of endohedral metallofullerenes. <i>Nature</i> , 1994, 367, 718-720.	13.7	46
98	Gas-Phase Zwitterions in the Absence of a Net Charge. <i>Journal of Physical Chemistry A</i> , 2004, 108, 10861-10864.	1.1	46
99	Charge Detection Mass Spectrometry for Single Ions with an Uncertainty in the Charge Measurement of 0.65 Åe. <i>Journal of the American Society for Mass Spectrometry</i> , 2015, 26, 1213-1220.	1.2	46
100	Measurement of the accurate mass of a 50 ÅMDa infectious virus. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 1957-1962.	0.7	46
101	Collision induced dissociation of aluminum cluster ions with chemisorbed oxygen, Al _n O _m (n=3-26). <i>Journal of Physical Chemistry A</i> , 2005, 109, 10784-10794.	1.2	45
102	Interaction of silicon cluster ions with ammonia: The kinetics. <i>Journal of Chemical Physics</i> , 1990, 93, 5709-5718.	1.2	45
103	Heterogeneity of Glycan Processing on Trimeric SARS-CoV-2 Spike Protein Revealed by Charge Detection Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2021, 143, 3959-3966.	6.6	45
104	Applications of Charge Detection Mass Spectrometry in Molecular Biology and Biotechnology. <i>Chemical Reviews</i> , 2022, 122, 7415-7441.	23.0	45
105	The smallest fullerene. <i>Nature</i> , 2000, 407, 26-27.	13.7	44
106	Synthesis and Temperature-Dependence of Hydrogen-Terminated Silicon Clusters. <i>Journal of Physical Chemistry B</i> , 2001, 105, 4188-4194.	1.2	44
107	Second-Order Phase Transitions in Amorphous Gallium Clusters. <i>Journal of Physical Chemistry B</i> , 2005, 109, 16575-16578.	1.2	44
108	Charge detection mass spectrometry of bacteriophage P22 procapsid distributions above 20 MDa. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 483-488.	0.7	44

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109	Ion calorimetry: Using mass spectrometry to measure melting points. Journal of the American Society for Mass Spectrometry, 2007, 18, 74-81.	1.2	43
110	Pulsed Acceleration Charge Detection Mass Spectrometry: Application to Weighing Electrosprayed Droplets. Analytical Chemistry, 2007, 79, 8431-8439.	3.2	43
111	Activation of Dinitrogen by Solid and Liquid Aluminum Nanoclusters: A Combined Experimental and Theoretical Study. Journal of the American Chemical Society, 2010, 132, 12906-12918.	6.6	43
112	Charge Detection Mass Spectrometry Identifies Preferred Non-Icosahedral Polymorphs in the Self-Assembly of Woodchuck Hepatitis Virus Capsids. Journal of Molecular Biology, 2016, 428, 292-300.	2.0	43
113	Kinetics of ion-molecule collision complexes in the gas phase. Experiment and theory. Faraday Discussions of the Chemical Society, 1983, 75, 57-76.	2.2	42
114	Water Molecule Adsorption on Short Alanine Peptides: How Short Is the Shortest Gas-Phase Alanine-Based Helix?. Journal of the American Chemical Society, 2004, 126, 8454-8458.	6.6	42
115	Tin clusters that do not melt: Calorimetry measurements up to 650K. Physical Review B, 2005, 71, .	1.1	42
116	Acquiring Structural Information on Virus Particles with Charge Detection Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 1028-1036.	1.2	42
117	Probing higher order multimers of pyruvate kinase with charge detection mass spectrometry. International Journal of Mass Spectrometry, 2013, 337, 50-56.	0.7	41
118	Optimized Electrostatic Linear Ion Trap for Charge Detection Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 2086-2095.	1.2	41
119	Conformations of Unsolvated Glycine-Based Peptides. Journal of Physical Chemistry B, 2000, 104, 2154-2158.	1.2	40
120	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
121	Entropic Stabilization of Isolated β -Sheets. Journal of the American Chemical Society, 2005, 127, 4675-4679.	6.6	39
122	Importin β Can Bind Hepatitis B Virus Core Protein and Empty Core-Like Particles and Induce Structural Changes. PLoS Pathogens, 2016, 12, e1005802.	2.1	39
123	Metal Ion Interactions with Polyalanine Peptides. Journal of Physical Chemistry B, 2004, 108, 6093-6097.	1.2	38
124	The FUNPET—a New Hybrid Ion Funnel-Ion Carpet Atmospheric Pressure Interface for the Simultaneous Transmission of a Broad Mass Range. Journal of the American Society for Mass Spectrometry, 2018, 29, 2160-2172.	1.2	38
125	Ball-and-Chain Dimers from a Hot Fullerene Plasma. Journal of Physical Chemistry A, 1999, 103, 5275-5284.	1.1	37
126	Image Charge Detection Mass Spectrometry: Pushing the Envelope with Sensitivity and Accuracy. Analytical Chemistry, 2011, 83, 950-956.	3.2	37

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127	Negative Droplets from Positive Electrospray. <i>Journal of Physical Chemistry A</i> , 2006, 110, 12607-12612.	1.1	36
128	Melting of size-selected aluminum nanoclusters with 84-128 atoms. <i>Journal of Chemical Physics</i> , 2010, 132, 034302.	1.2	36
129	A viral scaffolding protein triggers portal ring oligomerization and incorporation during procapsid assembly. <i>Science Advances</i> , 2017, 3, e1700423.	4.7	36
130	Real-Time Analysis and Signal Optimization for Charge Detection Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 898-904.	1.2	36
131	All-atom generalized-ensemble simulations of small proteins. <i>Journal of Molecular Graphics and Modelling</i> , 2004, 22, 397-403.	1.3	35
132	Quantitative analysis of genome packaging in recombinant AAV vectors by charge detection mass spectrometry. <i>Molecular Therapy - Methods and Clinical Development</i> , 2021, 23, 87-97.	1.8	35
133	Photodissociation of copper clusters, Cu _n (n = 3-8), in the 370-710 nm wavelength region. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1990, 102, 161-181.	1.9	34
134	The dynamics of photodissociation of cluster ions. II. Photodissociation of the (NO) ₃ cluster in the visible wavelength range. <i>Journal of Chemical Physics</i> , 1984, 81, 222-230.	1.2	33
135	Bonding of Metals to Carbon Rings: LaC _n ⁺ Isomers with La ⁺ Inserted and Attached to the Ring. <i>Journal of the American Chemical Society</i> , 1994, 116, 5971-5972.	6.6	33
136	Carbon Clusters Containing Two Metal Atoms: Structures, Growth Mechanism, and Fullerene Formation. <i>Journal of the American Chemical Society</i> , 1996, 118, 1139-1147.	6.6	33
137	Unimolecular and bimolecular reactions in the C ₄ H ₆ ⁺ system: Experiment and theory. <i>Journal of Chemical Physics</i> , 1983, 78, 3756-3766.	1.2	32
138	Photodissociation of metal cluster ions. Dissociation energies and optical spectroscopy. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1990, 86, 2537.	1.7	32
139	Water Molecule Adsorption on Protonated Dipeptides. <i>Journal of the American Chemical Society</i> , 2004, 126, 1206-1213.	6.6	32
140	Charge Detection Mass Spectrometry Measurements of Exosomes and other Extracellular Particles Enriched from Bovine Milk. <i>Analytical Chemistry</i> , 2020, 92, 3285-3292.	3.2	32
141	Kinetic isotope effect in gas-phase base-induced elimination reactions. <i>Journal of the American Chemical Society</i> , 1985, 107, 2818-2820.	6.6	31
142	Drift Tube Studies of Large Carbon Clusters: New Isomers and the Mechanism of Giant Fullerene Formation. <i>Journal of the American Chemical Society</i> , 1995, 117, 10317-10324.	6.6	31
143	Melting, freezing, sublimation, and phase coexistence in sodium chloride nanocrystals. <i>Journal of Chemical Physics</i> , 2004, 121, 6502-6507.	1.2	31
144	Evidence for High T _c Superconducting Transitions in Isolated Al ₄₅ ⁺ and Al ₄₇ ⁺ Nanoclusters. <i>Journal of Superconductivity and Novel Magnetism</i> , 2008, 21, 163-166.	0.8	31

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145	High-resolution ion mobility measurements of indium clusters: electron spill-out in metal cluster anions and cations. <i>Chemical Physics Letters</i> , 1999, 304, 19-22.	1.2	30
146	Noncovalent Interactions between Unsolvated Peptides. <i>Journal of Physical Chemistry A</i> , 2002, 106, 9655-9664.	1.1	30
147	Melting of Aluminum Cluster Cations with 31 ⁺ 48 Atoms. <i>Experiment and Theory. Journal of Physical Chemistry C</i> , 2007, 111, 17788-17794.	1.5	30
148	Charge Separation from the Bursting of Bubbles on Water. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5723-5728.	1.1	30
149	Photodissociation of the SO ₂ ...SO ₂ dimer in the visible region of the spectrum: Product relative kinetic energy distributions and product angular distributions. <i>Journal of Chemical Physics</i> , 1985, 82, 1832-1840.	1.2	29
150	Probing Helix Formation in Unsolvated Peptides. <i>Journal of the American Chemical Society</i> , 2003, 125, 10740-10747.	6.6	29
151	Folding and unfolding of helix-turn-helix motifs in the gas phase. <i>Journal of the American Society for Mass Spectrometry</i> , 2007, 18, 1239-1248.	1.2	29
152	Melting of Size-Selected Gallium Clusters with 60 ⁺ 183 Atoms. <i>Journal of Physical Chemistry A</i> , 2014, 118, 4900-4906.	1.1	29
153	Proton Transfer-Induced Conformational Changes and Melting In Designed Peptides in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2006, 128, 7193-7197.	6.6	28
154	Catching a virus in a molecular net. <i>Nanoscale</i> , 2016, 8, 16221-16228.	2.8	28
155	Virus-like particle size and molecular weight/mass determination applying gas-phase electrophoresis (native nES GEMMA). <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 5951-5962.	1.9	28
156	Mechanism of the metastable reaction H ₂ S ⁺ + S ⁺ + H ₂ ; product energy distributions and their dependence on temperature. <i>Chemical Physics</i> , 1982, 65, 19-28.	0.9	27
157	Structures of the Clusters Produced by Laser Desorption of Fullerenes. [2+2] Cycloadducts of Preshrunk Cages. <i>Journal of Physical Chemistry A</i> , 1998, 102, 7919-7923.	1.1	27
158	Helix Formation in Unsolvated Peptides: Side Chain Entropy Is Not the Determining Factor. <i>Journal of the American Chemical Society</i> , 2001, 123, 7907-7908.	6.6	27
159	Structural Studies of Sc Metallofullerenes by High-resolution Ion Mobility Measurements. <i>Journal of the American Chemical Society</i> , 2001, 123, 6427-6428.	6.6	27
160	The Energy Landscape of Unsolvated Peptides: Helix Formation and Cold Denaturation in Ac-A4G7A4+H ⁺ . <i>Journal of the American Chemical Society</i> , 2002, 124, 4422-4431.	6.6	27
161	Helix~Turn~Helix Motifs in Unsolvated Peptides. <i>Journal of the American Chemical Society</i> , 2003, 125, 7186-7187.	6.6	27
162	Structurally Similar Woodchuck and Human Hepadnavirus Core Proteins Have Distinctly Different Temperature Dependences of Assembly. <i>Journal of Virology</i> , 2014, 88, 14105-14115.	1.5	27

#	ARTICLE	IF	CITATIONS
163	Implementation of a Charge-Sensitive Amplifier without a Feedback Resistor for Charge Detection Mass Spectrometry Reduces Noise and Enables Detection of Individual Ions Carrying a Single Charge. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 146-154.	1.2	27
164	Chemisorption on the microsurface of metal clusters: activation barriers and chemical reactions for carbon monoxide, nitrogen, oxygen, and methane on aluminum cluster. <i>Journal of the American Chemical Society</i> , 1988, 110, 6706-6716.	6.6	26
165	Disrupting Helix Formation in Unsolvated Peptides. <i>Journal of Physical Chemistry B</i> , 2001, 105, 4436-4440.	1.2	26
166	Raman and Fluorescence Spectra of Size-Selected, Matrix-Isolated C ₁₄ and C ₁₈ Neutral Carbon Clusters. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3029-3033.	1.1	26
167	Molecular Dynamics Simulations of the Rehydration of Folded and Unfolded Cytochrome c Ions in the Vapor Phase. <i>Journal of the American Chemical Society</i> , 2001, 123, 6503-6507.	6.6	25
168	Dynamic Calibration Enables High-Accuracy Charge Measurements on Individual Ions for Charge Detection Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 1241-1248.	1.2	25
169	Networked and Endohedral La ₂ Cn ⁺ (n = 28-100) Metallofullerenes. <i>Journal of the American Chemical Society</i> , 1995, 117, 6404-6405.	6.6	24
170	The Mobile Proton in Polyalanine Peptides. <i>Journal of the American Chemical Society</i> , 2004, 126, 16981-16987.	6.6	24
171	Stable Copper ⁺ Tin Cluster Compositions from High-Temperature Annealing. <i>Journal of Physical Chemistry A</i> , 2005, 109, 8755-8759.	1.1	24
172	Probing Antibody Binding to Canine Parvovirus with Charge Detection Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2018, 140, 15701-15711.	6.6	24
173	Resolution of Lipoprotein Subclasses by Charge Detection Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 6353-6356.	3.2	24
174	Application of evolutionary algorithm methods to polypeptide folding: Comparison with experimental results for unsolvated Ac-(Ala-Gly-Gly) ₅ -LysH ⁺ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 7215-7222.	3.3	22
175	Improved signal stability from a laser vaporization source with a liquid metal target. <i>Review of Scientific Instruments</i> , 2007, 78, 075108.	0.6	22
176	A molecular breadboard: Removal and replacement of subunits in a hepatitis B virus capsid. <i>Protein Science</i> , 2017, 26, 2170-2180.	3.1	22
177	A laser ion beam study of the photodissociation dynamics of the (CO ₂) ₃ cluster. <i>Journal of Chemical Physics</i> , 1986, 84, 4882-4887.	1.2	21
178	Substituting a copper atom modifies the melting of aluminum clusters. <i>Journal of Chemical Physics</i> , 2008, 129, 124709.	1.2	21
179	Dissecting the Components of Sindbis Virus from Arthropod and Vertebrate Hosts: Implications for Infectivity Differences. <i>ACS Infectious Diseases</i> , 2019, 5, 892-902.	1.8	21
180	Chemistry of semiconductor clusters. A survey of the reactions of Si ₂₅ ⁺ using low-energy ion beam techniques. <i>Journal of the American Chemical Society</i> , 1989, 111, 1979-1986.	6.6	20

#	ARTICLE	IF	CITATIONS
181	Ï€-Helix Preference in Unsolvated Peptides. <i>Journal of the American Chemical Society</i> , 2004, 126, 2777-2784.	6.6	20
182	Phase coexistence in melting aluminum clusters. <i>Journal of Chemical Physics</i> , 2009, 130, 204303.	1.2	20
183	The Energy Landscape of Unsolvated Peptides: The Role of Context in the Stability of Alanine/Glycine Helices. <i>Journal of the American Chemical Society</i> , 2003, 125, 3941-3947.	6.6	19
184	Freezing, fragmentation, and charge separation in sonic sprayed water droplets. <i>International Journal of Mass Spectrometry</i> , 2009, 283, 191-199.	0.7	19
185	Spontaneous Mass and Charge Losses from Single Multi-Megadalton Ions Studied by Charge Detection Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 498-506.	1.2	19
186	Application of Molecular Beam Deflection Time-of-Flight Mass Spectrometry to Peptide Analysis. <i>Analytical Chemistry</i> , 2003, 75, 5512-5516.	3.2	18
187	Lot-to-Lot Variation in Adeno-Associated Virus Serotype 9 (AAV9) Preparations. <i>Human Gene Therapy Methods</i> , 2019, 30, 214-225.	2.1	18
188	Virus Assembly Pathways: Straying Away but Not Too Far. <i>Small</i> , 2020, 16, 2004475.	5.2	18
189	Disassembly Intermediates of the Brome Mosaic Virus Identified by Charge Detection Mass Spectrometry. <i>Journal of Physical Chemistry B</i> , 2020, 124, 2124-2131.	1.2	18
190	Peptide Pinwheels. <i>Journal of the American Chemical Society</i> , 2002, 124, 1154-1155.	6.6	17
191	Metal clusters that freeze into high energy geometries. <i>Journal of Chemical Physics</i> , 2008, 129, 014503.	1.2	17
192	A simple electrospray interface based on a DC ion carpet. <i>International Journal of Mass Spectrometry</i> , 2014, 371, 1-7.	0.7	17
193	Activation barriers for chemisorption of deuterium on aluminum cluster ions: Influence of oxygen preadsorption. <i>Chemical Physics Letters</i> , 1988, 144, 311-316.	1.2	16
194	Direct Probing of Zwitterion Formation in Unsolvated Peptides. <i>Journal of the American Chemical Society</i> , 2003, 125, 8996-8997.	6.6	16
195	Melting of Alloy Clusters: Effects of Aluminum Doping on Gallium Cluster Melting. <i>Journal of Physical Chemistry A</i> , 2007, 111, 8056-8061.	1.1	16
196	Metal clusters with hidden ground states: Melting and structural transitions in Al ₁₁₅ ⁺ , Al ₁₁₆ ⁺ , and Al ₁₁₇ ⁺ . <i>Journal of Chemical Physics</i> , 2009, 131, 124305.	1.2	16
197	Noncovalent Interactions between Unsolvated Peptides: Dissociation of Helical and Globular Peptide Complexes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 14529-14536.	1.2	15
198	Left-Handed and Ambidextrous Helices in the Gas Phase. <i>Journal of Physical Chemistry B</i> , 2005, 109, 11777-11780.	1.2	15

#	ARTICLE	IF	CITATIONS
199	N-terminal VP1 Truncations Favor T = 1 Norovirus-Like Particles. <i>Vaccines</i> , 2021, 9, 8.	2.1	15
200	Dramatic Improvement in Sensitivity with Pulsed Mode Charge Detection Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 14002-14008.	3.2	14
201	Surface reactions driven by cluster impact: Oxidation of Si(111) by (O ₂) _n + (n ^{1/4} 1600). <i>Journal of Chemical Physics</i> , 1997, 106, 8855-8861.	1.2	13
202	Non-Covalent Interactions between Unsolvated Peptides: Helical Complexes Based on Acid-Base Interactions. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6442-6447.	1.2	13
203	Characterization of Classical Vaccines by Charge Detection Mass Spectrometry. <i>Analytical Chemistry</i> , 2021, 93, 11965-11972.	3.2	13
204	Asymmetrizing an icosahedral virus capsid by hierarchical assembly of subunits with designed asymmetry. <i>Nature Communications</i> , 2021, 12, 589.	5.8	12
205	Core Protein-Directed Antivirals and Importin β Can Synergistically Disrupt Hepatitis B Virus Capsids. <i>Journal of Virology</i> , 2022, 96, JM0139521.	1.5	12
206	On the structure and photodissociation of cluster ions in the gas phase. (N ₂) ⁺ (O ₂) ⁺ and (NO) ₂ ⁺ . <i>Chemical Physics Letters</i> , 1983, 102, 335-339.	1.2	9
207	Surface chemistry on metal clusters: Observation of multiple structures for C ₂ H ₄ chemisorbed on aluminum clusters. <i>Chemical Physics Letters</i> , 1988, 149, 433-438.	1.2	9
208	A frequency and amplitude scanned quadrupole mass filter for the analysis of high <i>m/z</i> ions. <i>Review of Scientific Instruments</i> , 2014, 85, 113109.	0.6	9
209	Ion-Ion Interactions in Charge Detection Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2741-2749.	1.2	9
210	Analysis of Recombinant Adenovirus Vectors by Ion Trap Charge Detection Mass Spectrometry: Accurate Molecular Weight Measurements beyond 150 MDa. <i>Analytical Chemistry</i> , 2022, 94, 1543-1551.	3.2	9
211	Reactions of liquid and solid aluminum clusters with N ₂ : The role of structure and phase in Al ₁₁₄ ⁺ , Al ₁₁₅ ⁺ , and Al ₁₁₇ ⁺ . <i>Journal of Chemical Physics</i> , 2014, 141, 204304.	1.2	8
212	Virus Matryoshka: A Bacteriophage Particle-Guided Molecular Assembly Approach to a Monodisperse Model of the Immature Human Immunodeficiency Virus. <i>Small</i> , 2016, 12, 5862-5872.	5.2	8
213	Thermal Analysis of a Mixture of Ribosomal Proteins by vT-ESI-MS: Toward a Parallel Approach for Characterizing the Stabilitome. <i>Analytical Chemistry</i> , 2021, 93, 8484-8492.	3.2	8
214	Studies of the chemistry of large semiconductor cluster ions. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1990, 100, 625-646.	1.9	7
215	Techniques used to study the chemistry of gas phase elemental clusters. <i>Journal of Cluster Science</i> , 1991, 2, 137-181.	1.7	7
216	Discovering Free Energy Basins for Macromolecular Systems via Guided Multiscale Simulation. <i>Journal of Physical Chemistry B</i> , 2012, 116, 8534-8544.	1.2	7

#	ARTICLE	IF	CITATIONS
217	Reactions of CO ₂ on Solid and Liquid Al ₁₀₀ ⁺ . Journal of Physical Chemistry A, 2013, 117, 1053-1058.	1.1	7
218	Melting of Size-Selected Aluminum Clusters with 150–342 Atoms: The Transition to Thermodynamic Scaling. Journal of Physical Chemistry C, 2017, 121, 10242-10248.	1.5	7
219	A crossed beam study of the reaction of CO with O ₂ . Molecular Physics, 1980, 39, 787-798.	0.8	6
220	Determination of Antibody Population Distributions for Virus-Antibody Conjugates by Charge Detection Mass Spectrometry. Analytical Chemistry, 2020, 92, 1285-1291.	3.2	6
221	The fragmentation of metastable NH ₃ ⁺ ions and isotopic analogs: an example of tunneling through a rotational barrier. Chemical Physics Letters, 1982, 92, 653-658.	1.2	5
222	Fragmentation dynamics and energy disposal in photodissociation of (N ₂ O) ₂ ⁺ in the 458–660 nm wavelength range. Chemical Physics, 1985, 95, 469-472.	0.9	5
223	A first-order transition in the charge-induced conformational changes of polymers. Journal of Chemical Physics, 2002, 116, 9964-9974.	1.2	5
224	Characterization of Recombinant Chimpanzee Adenovirus C68 Low and High-Density Particles: Impact on Determination of Viral Particle Titer. Frontiers in Bioengineering and Biotechnology, 2021, 9, 753480.	2.0	5
225	Hysteresis in Hepatitis B Virus (HBV) Requires Assembly of Near-Perfect Capsids. Biochemistry, 2022, 61, 505-513.	1.2	4
226	Analysis of Keratinocytic Exosomes from Diabetic and Nondiabetic Mice by Charge Detection Mass Spectrometry. Analytical Chemistry, 2022, 94, 8909-8918.	3.2	4
227	Dehydrogenation of Benzene on Liquid Al ₁₀₀ ⁺ . Journal of Physical Chemistry A, 2013, 117, 2075-2081.	1.1	3
228	HBV Core-Directed Antivirals and Importin β Can Synergistically Disrupt Capsids. Microscopy and Microanalysis, 2021, 27, 1130-1131.	0.2	2
229	Tryptophan Residues Are Critical for Portal Protein Assembly and Incorporation in Bacteriophage P22. Viruses, 2022, 14, 1400.	1.5	2
230	A crossed beam study of the reaction CO + NO $\hat{\rightarrow}$ CO ₂ + N. Molecular Physics, 1980, 40, 1197-1207.	0.8	1
231	A crossed beam study of the reaction CO + NO $\hat{\rightarrow}$ (NCO) + O. Molecular Physics, 1981, 42, 97-107.	0.8	0
232	Calcium Contributes to Polarized Targeting of HIV Assembly Machinery by Regulating Complex Stability. JACS, 2022, 144, 522-530.	3.6	0