

Hugh I Kim

List of Publications by Year in descending order

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Characterization of Drug-like Compounds by Ion Mobility Mass Spectrometry: Comparison of Theoretical and Experimentally Derived Nitrogen Collision Cross Sections. <i>Analytical Chemistry</i> , 2012, 84, 1026-1033.	6.5	340
2	Recommendations for reporting ion mobility Mass Spectrometry measurements. <i>Mass Spectrometry Reviews</i> , 2019, 38, 291-320.	5.4	315
3	Supramolecular Inhibition of Amyloid Fibrillation by Cucurbit[7]uril. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7461-7465.	13.8	128
4	Deciphering the Specific High-Affinity Binding of Cucurbit[7]uril to Amino Acids in Water. <i>Journal of Physical Chemistry B</i> , 2015, 119, 4628-4636.	2.6	103
5	Structural Characterization of Unsaturated Phosphatidylcholines Using Traveling Wave Ion Mobility Spectrometry. <i>Analytical Chemistry</i> , 2009, 81, 8289-8297.	6.5	98
6	Fluorescence switch for silver ion detection utilizing dimerization of DNA-Ag nanoclusters. <i>Biosensors and Bioelectronics</i> , 2015, 68, 642-647.	10.1	81
7	Experimental and Theoretical Investigation into the Correlation between Mass and Ion Mobility for Choline and Other Ammonium Cations in N ₂ . <i>Analytical Chemistry</i> , 2008, 80, 1928-1936.	6.5	76
8	Molecular Insights into Human Serum Albumin as a Receptor of Amyloid- β^2 in the Extracellular Region. <i>Journal of the American Chemical Society</i> , 2017, 139, 15437-15445.	13.7	61
9	Native Top-Down Mass Spectrometry and Ion Mobility MS for Characterizing the Cobalt and Manganese Metal Binding of β -Synuclein Protein. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 1870-1880.	2.8	57
10	Elucidating Molecular Structures of Nonalkylated and Short-Chain Alkyl (<i>n</i> <i>≤ 5</i>,) Tj ETQqO O O rgBT /Overlock 10 Tf 50 392 Td ((Mobility and Ultrahigh-Resolution Mass Spectrometries and Theoretical Collisional Cross-Section Calculations. <i>Analytical Chemistry</i> , 2014, 86, 3300-3307.	6.5	53
11	Miniature mass spectrometer equipped with electrospray and desorption electrospray ionization for direct analysis of organics from solids and solutions. <i>International Journal of Mass Spectrometry</i> , 2011, 306, 187-195.	1.5	50
12	Host-Guest Chemistry from Solution to the Gas Phase: An Essential Role of Direct Interaction with Water for High-Affinity Binding of Cucurbit[7]urils. <i>Journal of Physical Chemistry B</i> , 2013, 117, 8855-8864.	2.6	50
13	Interfacial Reactions of Ozone with Surfactant Protein B in a Model Lung Surfactant System. <i>Journal of the American Chemical Society</i> , 2010, 132, 2254-2263.	13.7	49
14	Host-Guest Chemistry in the Gas Phase: Selected Fragmentations of CB[6]-Peptide Complexes at Lysine Residues and Its Utility to Probe the Structures of Small Proteins. <i>Analytical Chemistry</i> , 2011, 83, 7916-7923.	6.5	47
15	Supramolecular Enhancement of Protein Analysis via the Recognition of Phenylalanine with Cucurbit[7]uril. <i>Journal of the American Chemical Society</i> , 2015, 137, 15322-15329.	13.7	44
16	Ion mobility spectrometry in space exploration. <i>International Journal of Mass Spectrometry</i> , 2007, 262, 1-15.	1.5	42
17	Molecular Role of Ca ²⁺ and Hard Divalent Metal Cations on Accelerated Fibrillation and Interfibrillar Aggregation of β -Synuclein. <i>Scientific Reports</i> , 2018, 8, 1895.	3.3	42
18	Electrospray Ionization Ion Mobility Spectrometry of Amino Acids: Ion Mobilities and a Mass-Mobility Correlation. <i>Journal of Physical Chemistry A</i> , 2004, 108, 5785-5792.	2.5	41

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19	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.	2.8	41
20	Highly active ruthenium metathesis catalysts enabling ring-opening metathesis polymerization of cyclopentadiene at low temperatures. <i>Nature Communications</i> , 2019, 10, 3860.	12.8	41
21	Collision cross sections and ion structures: development of a general calculation method via high-quality ion mobility measurements and theoretical modeling. <i>Analyst, The</i> , 2017, 142, 4289-4298.	3.5	39
22	Structure and assembly mechanisms of toxic human islet amyloid polypeptide oligomers associated with copper. <i>Chemical Science</i> , 2016, 7, 5398-5406.	7.4	38
23	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.	2.6	37
24	Structural characterization of small molecular ions by ion mobility mass spectrometry in nitrogen drift gas: improving the accuracy of trajectory method calculations. <i>Analyst, The</i> , 2018, 143, 1786-1796.	3.5	35
25	Identifying the Presence of a Disulfide Linkage in Peptides by the Selective Elimination of Hydrogen Disulfide from Collisionally Activated Alkali and Alkaline Earth Metal Complexes. <i>Journal of the American Chemical Society</i> , 2008, 130, 1245-1257.	13.7	31
26	Probing Conformational Change of Intrinsically Disordered Î±-Synuclein to Helical Structures by Distinctive Regional Interactions with Lipid Membranes. <i>Analytical Chemistry</i> , 2014, 86, 1909-1916.	6.5	31
27	One-Step Peptide Backbone Dissociations in Negative-Ion Free Radical Initiated Peptide Sequencing Mass Spectrometry. <i>Analytical Chemistry</i> , 2013, 85, 7044-7051.	6.5	30
28	Electrospray Ionization Ion Mobility Spectrometry of Carboxylate Anions: Ion Mobilities and a Mass-Mobility Correlation. <i>Journal of Physical Chemistry A</i> , 2005, 109, 7888-7895.	2.5	27
29	Probing Conformational Changes of Ubiquitin by Host-Guest Chemistry Using Electrospray Ionization Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 21-29.	2.8	27
30	Characterization of Polylactides with Different Stereoregularity Using Electrospray Ionization Ion Mobility Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 1771-1779.	2.8	27
31	Amyloid Fibrillation of Insulin under Water-Limited Conditions. <i>Biophysical Journal</i> , 2014, 107, 1939-1949.	0.5	27
32	Supramolecular Modulation of Structural Polymorphism in Pathogenic Î±-Synuclein Fibrils Using Copper(II) Coordination. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3099-3103.	13.8	25
33	The transition from the native to the acid-state characterized by multi-spectroscopy approach: Study for the holo-form of bovine Î²-lactalbumin. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 593-606.	2.3	24
34	Chiral differentiation of D- and L-isoleucine using permethylated Î²-cyclodextrin: infrared multiple photon dissociation spectroscopy, ion-mobility mass spectrometry, and DFT calculations. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 30428-30436.	2.8	24
35	Nanoscale Control of Amyloid Self-Assembly Using Protein Phase Transfer by Host-Guest Chemistry. <i>Scientific Reports</i> , 2017, 7, 5710.	3.3	20
36	Investigating acid-induced structural transitions of lysozyme in an electrospray ionization source. <i>Analyst, The</i> , 2015, 140, 661-669.	3.5	19

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37	Selective LC-MRM/SIM-MS based profiling of adrenal steroids reveals metabolic signatures of 17 α -hydroxylase deficiency. <i>Journal of Steroid Biochemistry and Molecular Biology</i> , 2020, 198, 105615.	2.5	19
38	Unusual Complex Formation and Chemical Reaction of Haloacetate Anion on the Exterior Surface of Cucurbit[6]uril in the Gas Phase. <i>Journal of the American Society for Mass Spectrometry</i> , 2012, 23, 1786-1793.	2.8	18
39	Manifesting Subtle Differences of Neutral Hydrophilic Guest Isomers in a Molecular Container by Phase Transfer. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8249-8253.	13.8	18
40	Cluster Phase Chemistry: Gas-Phase Reactions of Anionic Sodium Salts of Dicarboxylic Acid Clusters with Water Molecules. <i>Journal of Physical Chemistry A</i> , 2006, 110, 7777-7786.	2.5	17
41	Studying Interfacial Reactions of Cholesterol Sulfate in an Unsaturated Phosphatidylglycerol Layer with Ozone Using Field Induced Droplet Ionization Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2012, 23, 141-152.	2.8	17
42	Host-Guest Chemistry in the Gas Phase: Complex Formation of Cucurbit[6]uril with Proton-bound Water Dimer. <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 410-421.	2.8	17
43	ATP Kinetically Modulates Pathogenic Tau Fibrillations. <i>ACS Chemical Neuroscience</i> , 2020, 11, 3144-3152.	3.5	17
44	Direct observation of protein structural transitions through entire amyloid aggregation processes in water using 2D-IR spectroscopy. <i>Chemical Science</i> , 2022, 13, 4482-4489.	7.4	17
45	DNA-templated silver nanoclusters as label-free, sensitive detection probes for potassium ions and nitric oxide. <i>Journal of Materials Chemistry B</i> , 2014, 2, 2616.	5.8	15
46	Accurate Quantification of N-Glycolylneuraminic Acid in Therapeutic Proteins Using Supramolecular Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2018, 140, 16528-16534.	13.7	12
47	Host-Guest Chemistry in the Gas Phase: Complex Formation with 18-Crown-6 Enhances Helicity of Alanine-Based Peptides. <i>Journal of Physical Chemistry A</i> , 2011, 115, 14215-14220.	2.5	11
48	Electrostatic and hydrophobic interactions of lipid-associated β -synuclein: The role of a water-limited interfaces in amyloid fibrillation. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 1854-1862.	2.6	11
49	TEMPO-Assisted Free Radical-Initiated Peptide Sequencing Mass Spectrometry (FRIPS MS) in Q-TOF and Orbitrap Mass Spectrometers: Single-Step Peptide Backbone Dissociations in Positive Ion Mode. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 154-163.	2.8	10
50	Competitive homo- and hetero- self-assembly of amyloid- β 1-42 and 1-40 in the early stage of fibrillation. <i>International Journal of Mass Spectrometry</i> , 2018, 428, 15-21.	1.5	10
51	Kinetic Modulation of Amyloid- β (1-42) Aggregation and Toxicity by Structure-Based Rational Design. <i>Journal of the American Chemical Society</i> , 2022, 144, 1603-1611.	13.7	10
52	Supramolecular Analysis of Monosaccharide Derivatives Using Cucurbit[7]uril and Electrospray Ionization Tandem Mass Spectrometry. <i>Israel Journal of Chemistry</i> , 2018, 58, 472-478.	2.3	8
53	Gas-phase conformations of intrinsically disordered proteins and their complexes with ligands: Kinetically trapped states during transfer from solution to the gas phase. <i>Mass Spectrometry Reviews</i> , 2019, 38, 483-500.	5.4	7
54	Effect of packing density of lipid vesicles on the A β 242 fibril polymorphism. <i>Chemistry and Physics of Lipids</i> , 2021, 236, 105073.	3.2	7

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55	Cluster Phase Chemistry: Collisions of Vibrationally Excited Cationic Dicarboxylic Acid Clusters with Water Molecules Initiate Dissociation of Cluster Components. <i>Journal of Physical Chemistry A</i> , 2007, 111, 5954-5967.	2.5	6
56	Probing Distinct Fullerene Formation Processes from Carbon Precursors of Different Sizes and Structures. <i>Analytical Chemistry</i> , 2016, 88, 8232-8238.	6.5	6
57	Structural Characterization of Anticancer Drug Paclitaxel and Its Metabolites Using Ion Mobility Mass Spectrometry and Tandem Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 329-338.	2.8	6
58	Mass spectrometry-based proteomics of single cells and organoids: The new generation of cancer research. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 130, 116005.	11.4	6
59	Cisplatin fastens chromatin irreversibly even at a high chloride concentration. <i>Nucleic Acids Research</i> , 2021, 49, 12035-12047.	14.5	5
60	A microfluidic-based bubble generation platform enables analysis of physical property change in phospholipid surfactant layers by interfacial ozone reaction. <i>Lab on A Chip</i> , 2012, 12, 5243.	6.0	4
61	Solvent-induced structural transitions of lysozyme in an electrospray ionization source. <i>Analyst</i> , 2015, 140, 3573-3580.	3.5	4
62	Distinct Fragmentation Pathways of Anticancer Drugs Induced by Charge-Carrying Cations in the Gas Phase. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 628-637.	2.8	4
63	TEMPO-Assisted Free-Radical-Initiated Peptide Sequencing Mass Spectrometry for Ubiquitin Ions: An Insight on the Gas-Phase Conformations. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 471-481.	2.8	4
64	DNA repair and cholesterol-mediated drug efflux induce dose-dependent chemoresistance in nutrient-deprived neuroblastoma cells. <i>IScience</i> , 2021, 24, 102325.	4.1	3
65	Supramolecular Modulation of Structural Polymorphism in Pathogenic α -Synuclein Fibrils Using Copper(II) Coordination. <i>Angewandte Chemie</i> , 2018, 130, 3153-3157.	2.0	2
66	IM-MS for Supramolecular Systems: Structures and Dynamics of Noncovalent Complexes From Solution to Gas Phase. <i>Comprehensive Analytical Chemistry</i> , 2019, 83, 197-236.	1.3	2
67	Ion Mobility Mass Spectrometry Analysis of Oxygen Affinity-Associated Structural Changes in Hemoglobin. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 2528-2535.	2.8	2
68	Maternal Signatures of Cortisol in First Trimester Small-for-Gestational Age. <i>Reproductive Sciences</i> , 2022, 29, 1498-1505.	2.5	2
69	Solvent mediated thermodynamically favorable helical supramolecular self-assembly: recognition behavior towards achiral and chiral analytes. <i>Journal of Materials Chemistry C</i> , 0, , .	5.5	2
70	Disassembly of Chromophore-Guided DNA Duplexes through Site-Selective Binding of Coralyne to Pyrene-Modified Adenine Bases. <i>ChemPlusChem</i> , 2016, 81, 590-593.	2.8	1
71	Manifesting Subtle Differences of Neutral Hydrophilic Guest Isomers in a Molecular Container by Phase Transfer. <i>Angewandte Chemie</i> , 2016, 128, 8389-8393.	2.0	1
72	Midwavelength Infrared Colloidal Nanowire Laser. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 1431-1437.	4.6	1

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73	Probing drug delivery and mechanisms of action in 3D spheroid cells by quantitative analysis. Analyst, The, 2020, 145, 7687-7694.	3.5	0