Giel Berden

List of Publications by Year in descending order

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182 papers 4,032 citations

34 h-index 50 g-index

187 all docs

187 docs citations

times ranked

187

2752 citing authors

#	Article	IF	CITATIONS
1	Taming microwave plasma to beat thermodynamics in CO ₂ dissociation. Faraday Discussions, 2015, 183, 233-248.	3.2	150
2	Infrared ion spectroscopy in a modified quadrupole ion trap mass spectrometer at the FELIX free electron laser laboratory. Review of Scientific Instruments, 2016, 87, 103108.	1.3	150
3	Isomer-Selective Detection of Hydrogen-Bond Vibrations in the Protonated Water Hexamer. Journal of the American Chemical Society, 2013, 135, 8266-8273.	13.7	107
4	Infrared spectra of protonated neurotransmitters: dopamine. Physical Chemistry Chemical Physics, 2011, 13, 2815-2823.	2.8	85
5	Characterization of glycosyl dioxolenium ions and their role in glycosylation reactions. Nature Communications, 2020, 11, 2664.	12.8	83
6	Structural identification of electron transfer dissociation products in mass spectrometry using infrared ion spectroscopy. Nature Communications, 2016, 7, 11754.	12.8	74
7	Direct Experimental Characterization of Glycosyl Cations by Infrared Ion Spectroscopy. Journal of the American Chemical Society, 2018, 140, 6034-6038.	13.7	68
8	An automatic variable laser attenuator for IRMPD spectroscopy and analysis of power-dependence in fragmentation spectra. International Journal of Mass Spectrometry, 2019, 443, 1-8.	1.5	67
9	Non-Equilibrium Isomer Distribution of the Gas-Phase Photoactive Yellow Protein Chromophore. Journal of Physical Chemistry Letters, 2012, 3, 2259-2263.	4.6	63
10	Coordination of Trivalent Metal Cations to Peptides: Results from IRMPD Spectroscopy and Theory. Journal of Physical Chemistry A, 2010, 114, 854-860.	2.5	62
11	Infrared Multiple Photon Dissociation Action Spectroscopy of Proton-Bound Dimers of Cytosine and Modified Cytosines: Effects of Modifications on Gas-Phase Conformations. Journal of Physical Chemistry B, 2013, 117, 14191-14201.	2.6	58
12	Infrared ion spectroscopy: New opportunities for small-molecule identification in mass spectrometry - A tutorial perspective. Analytica Chimica Acta, 2020, 1093, 1-15.	5.4	57
13	Gas-Phase Conformations and Energetics of Protonated 2′-Deoxyadenosine and Adenosine: IRMPD Action Spectroscopy and Theoretical Studies. Journal of Physical Chemistry B, 2015, 119, 2795-2805.	2.6	56
14	The importance of thermal dissociation in CO ₂ microwave discharges investigated by power pulsing and rotational Raman scattering. Plasma Sources Science and Technology, 2019, 28, 055015.	3.1	55
15	Isomer Population Analysis of Gaseous Ions From Infrared Multiple Photon Dissociation Kinetics. Journal of Physical Chemistry A, 2011, 115, 2745-2751.	2.5	54
16	Molecular identification in metabolomics using infrared ion spectroscopy. Scientific Reports, 2017, 7, 3363.	3.3	54
17	Combined Liquid Chromatography-Infrared Ion Spectroscopy for Identification of Regioisomeric Drug Metabolites. Analytical Chemistry, 2017, 89, 4359-4362.	6.5	52
18	Spectroscopy on triphenylamine and its van der Waals complexes. Chemical Physics, 1992, 163, 209-222.	1.9	51

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19	Metal ion binding to peptides: Oxygen or nitrogen sites?. International Journal of Mass Spectrometry, 2012, 330-332, 71-77.	1.5	51
20	N3 and O2 Protonated Tautomeric Conformations of $2\hat{a}\in^2$ -Deoxycytidine and Cytidine Coexist in the Gas Phase. Journal of Physical Chemistry B, 2015, 119, 5773-5784.	2.6	51
21	Infrared Spectra of Protonated Neurotransmitters: Serotonin. Journal of Physical Chemistry A, 2010, 114, 13268-13276.	2.5	50
22	Effects of anions on the zwitterion stability of Glu, His and Arg investigated by IRMPD spectroscopy and theory. International Journal of Mass Spectrometry, 2010, 297, 116-123.	1.5	48
23	IRMPD Action Spectroscopy of Alkali Metal Cation–Cytosine Complexes: Effects of Alkali Metal Cation Size on Gas Phase Conformation. Journal of the American Society for Mass Spectrometry, 2013, 24, 1523-1533.	2.8	47
24	Interaction of Cu ⁺ with cytosine and formation of i-motif-like C–M ⁺ –C complexes: alkali versus coinage metals. Physical Chemistry Chemical Physics, 2016, 18, 7269-7277.	2.8	46
25	Structural Elucidation of Biological and Toxicological Complexes: Investigation of Monomeric and Dimeric Complexes of Histidine with Multiply Charged Transition Metal (Zn and Cd) Cations using IR Action Spectroscopy. Journal of Physical Chemistry B, 2011, 115, 12648-12661.	2.6	45
26	Vibrational study of isolated 18-crown-6 ether complexes with alkaline-earth metal cations. International Journal of Mass Spectrometry, 2011, 308, 217-224.	1.5	45
27	Gas-Phase Conformations and Energetics of Protonated 2′-Deoxyguanosine and Guanosine: IRMPD Action Spectroscopy and Theoretical Studies. Journal of Physical Chemistry B, 2014, 118, 14774-14784.	2.6	45
28	Unraveling the unknown areas of the human metabolome: the role of infrared ion spectroscopy. Journal of Inherited Metabolic Disease, 2018, 41, 367-377.	3.6	44
29	Gas-phase conformations of small polyprolines and their fragment ions by IRMPD spectroscopy. International Journal of Mass Spectrometry, 2015, 377, 179-187.	1.5	42
30	Diverse mixtures of 2,4-dihydroxy tautomers and O4 protonated conformers of uridine and 2′-deoxyuridine coexist in the gas phase. Physical Chemistry Chemical Physics, 2015, 17, 25978-25988.	2.8	40
31	The FELion cryogenic ion trap beam line at the FELIX free-electron laser laboratory: infrared signatures of primary alcohol cations. Faraday Discussions, 2019, 217, 172-202.	3.2	40
32	Structure and Reactivity of the <i>N</i> -Acetyl-Cysteine Radical Cation and Anion: Does Radical Migration Occur?. Journal of the American Society for Mass Spectrometry, 2011, 22, 1794-803.	2.8	38
33	How does a small peptide choose how to bind a metal ion? IRMPD and computational survey of CS versus Iminol binding preferences. International Journal of Mass Spectrometry, 2013, 354-355, 356-364.	1.5	36
34	Evaluation of Hybrid Theoretical Approaches for Structural Determination of a Glycine-Linked Cisplatin Derivative via Infrared Multiple Photon Dissociation (IRMPD) Action Spectroscopy. Journal of Physical Chemistry A, 2015, 119, 10980-10987.	2.5	35
35	Gas-phase vibrational spectroscopy of triphenylamine: the effect of charge on structure and spectra. Physical Chemistry Chemical Physics, 2017, 19, 19881-19889.	2.8	35
36	Infrared Multiple Photon Dissociation Action Spectroscopy of Deprotonated RNA Mononucleotides: Gas-Phase Conformations and Energetics. Journal of Physical Chemistry A, 2013, 117, 10634-10649.	2.5	34

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37	N3 Protonation Induces Base Rotation of 2′-Deoxyadenosine-5′-monophosphate and Adenosine-5′-monophosphate. Journal of Physical Chemistry B, 2016, 120, 4616-4624.	2.6	34
38	Unravelling the Keto–Enol Tautomer Dependent Photochemistry and Degradation Pathways of the Protonated UVA Filter Avobenzone. Journal of Physical Chemistry A, 2020, 124, 2919-2930.	2.5	34
39	Mass-Spectrometry-Based Identification of Synthetic Drug Isomers Using Infrared Ion Spectroscopy. Analytical Chemistry, 2020, 92, 7282-7288.	6.5	34
40	Structural characterization of gas-phase cysteine and cysteine methyl ester complexes with zinc and cadmium dications by infrared multiple photon dissociation spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 25799-25808.	2.8	33
41	Untargeted metabolomics and infrared ion spectroscopy identify biomarkers for pyridoxine-dependent epilepsy. Journal of Clinical Investigation, 2021, 131, .	8.2	33
42	lonic Pd/NHC Catalytic System Enables Recoverable Homogeneous Catalysis: Mechanistic Study and Application in the Mizoroki–Heck Reaction. Chemistry - A European Journal, 2019, 25, 16564-16572.	3.3	32
43	Reference-standard free metabolite identification using infrared ion spectroscopy. International Journal of Mass Spectrometry, 2019, 443, 77-85.	1.5	32
44	Metal Ion Complexes with HisGly: Comparison with PhePhe and PheGly. Journal of Physical Chemistry A, 2013, 117, 5335-5343.	2.5	31
45	2,4-Dihydroxy and O2 Protonated Tautomers of dThd and Thd Coexist in the Gas Phase: Methylation Alters Protonation Preferences versus dUrd and Urd. Journal of the American Society for Mass Spectrometry, 2016, 27, 410-421.	2.8	31
46	Protonation Preferentially Stabilizes Minor Tautomers of the Halouracils: IRMPD Action Spectroscopy and Theoretical Studies. Journal of the American Society for Mass Spectrometry, 2012, 23, 1469-1478.	2.8	30
47	Synthesis and Hydrolysis of Uranyl, Neptunyl, and Plutonyl Gas-Phase Complexes Exhibiting Discrete Actinide–Carbon Bonds. Organometallics, 2016, 35, 1228-1240.	2.3	30
48	Hydrogen Tunneling above Room Temperature Evidenced by Infrared Ion Spectroscopy. Journal of the American Chemical Society, 2017, 139, 5779-5786.	13.7	28
49	S-to-αC Radical Migration in the Radical Cations of Gly-Cys and Cys-Gly. Journal of the American Society for Mass Spectrometry, 2012, 23, 1019-1023.	2.8	27
50	Experimental and Theoretical Investigations of Infrared Multiple Photon Dissociation Spectra of Glutamine Complexes with Zn ²⁺ and Cd ²⁺ . Journal of Physical Chemistry B, 2015, 119, 11607-11617.	2.6	27
51	Investigation of proton affinities and gas phase vibrational spectra of protonated nucleosides, deoxynucleosides, and their analogs. International Journal of Mass Spectrometry, 2015, 378, 294-302.	1.5	26
52	The infrared spectrum of protonated buckminsterfullerene C60H+. Nature Astronomy, 2020, 4, 240-245.	10.1	26
53	Resonant Infrared Multiple Photon Dissociation Spectroscopy of Anionic Nucleotide Monophosphate Clusters. Journal of Physical Chemistry B, 2015, 119, 7894-7901.	2.6	25
54	Isolated complexes of the amino acid arginine with polyether and polyamine macrocycles, the role of proton transfer. Physical Chemistry Chemical Physics, 2017, 19, 31345-31351.	2.8	25

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55	Deamidation Reactions of Asparagine- and Glutamine-Containing Dipeptides Investigated by Ion Spectroscopy. Journal of the American Society for Mass Spectrometry, 2016, 27, 1855-1869.	2.8	24
56	Influence of Sodium Cationization versus Protonation on the Gas-Phase Conformations and Glycosidic Bond Stabilities of 2′-Deoxyadenosine and Adenosine. Journal of Physical Chemistry B, 2016, 120, 8892-8904.	2.6	24
57	Experimental and theoretical investigations of infrared multiple photon dissociation spectra of glutamic acid complexes with Zn ²⁺ and Cd ²⁺ . Physical Chemistry Chemical Physics, 2017, 19, 12394-12406.	2.8	24
58	Gas-Phase Conformations and N-Glycosidic Bond Stabilities of Sodium Cationized 2′-Deoxyguanosine and Guanosine: Sodium Cations Preferentially Bind to the Guanine Residue. Journal of Physical Chemistry B, 2017, 121, 4048-4060.	2.6	24
59	Structure and Reactivity of the Glutathione Radical Cation: Radical Rearrangement from the Cysteine Sulfur to the Glutamic Acid αâ€Carbon Atom. ChemPlusChem, 2013, 78, 970-978.	2.8	23
60	Protonation induces base rotation of purine nucleotides pdGuo and pGuo. Physical Chemistry Chemical Physics, 2016, 18, 15081-15090.	2.8	23
61	Cleaving Off Uranyl Oxygens through Chelation: A Mechanistic Study in the Gas Phase. Inorganic Chemistry, 2017, 56, 12930-12937.	4.0	23
62	Structures of Fluoranthene Reagent Anions Used in Electron Transfer Dissociation and Proton Transfer Reaction Tandem Mass Spectrometry. Analytical Chemistry, 2016, 88, 6126-6129.	6.5	22
63	IRMPD Spectroscopy of Metalated Flavins: Structure and Bonding of Lumiflavin Complexes with Alkali and Coinage Metal Ions. Journal of Physical Chemistry A, 2016, 120, 8297-8308.	2.5	22
64	Gas-phase complexes of Ni2+ and Ca2+ with deprotonated histidylhistidine (HisHis): A model case for polyhistidyl-metal binding motifs. Journal of Molecular Spectroscopy, 2017, 332, 38-44.	1.2	22
65	IRMPD Action Spectroscopy, ER-CID Experiments, and Theoretical Studies of Sodium Cationized Thymidine and 5-Methyluridine: Kinetic Trapping During the ESI Desolvation Process Preserves the Solution Structure of [Thd+Na] ⁺ . Journal of the American Society for Mass Spectrometry, 2017, 28, 2423-2437.	2.8	22
66	Isomer-Specific Two-Color Double-Resonance IR ² MS ³ Ion Spectroscopy Using a Single Laser: Application in the Identification of Novel Psychoactive Substances. Analytical Chemistry, 2021, 93, 2687-2693.	6.5	22
67	Infrared Multiphoton Dissociation Spectroscopy of a Gas-Phase Complex of Uranyl and 3-Oxa-Glutaramide: An Extreme Red-Shift of the [Oâ•Uâ•O]2+ Asymmetric Stretch. Journal of Physical Chemistry A, 2015, 119, 3366-3374.	2.5	21
68	Electronic structure and characterization of a uranyl di-15-crown-5 complex with an unprecedented sandwich structure. Chemical Communications, 2016, 52, 12761-12764.	4.1	21
69	Zn ²⁺ and Cd ²⁺ cationized serine complexes: infrared multiple photon dissociation spectroscopy and density functional theory investigations. Physical Chemistry Chemical Physics, 2016, 18, 22434-22445.	2.8	21
70	BREAKDOWN PRODUCTS OF GASEOUS POLYCYCLIC AROMATIC HYDROCARBONS INVESTIGATED WITH INFRARED ION SPECTROSCOPY. Astrophysical Journal, 2016, 826, 33.	4.5	21
71	Infrared multiple photon dissociation (IRMPD) spectroscopy of oxazine dyes. Physical Chemistry Chemical Physics, 2013, 15, 5049.	2.8	20
72	IRMPD spectroscopy of metalated flavins: structure and bonding of M ^{q+} –lumichrome complexes (M ^{q+} = Li ⁺ –Cs ⁺ , Ag ⁺ , Mg ²⁺). Physical Chemistry Chemical Physics, 2014, 16, 14161-14171.	2.8	20

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73	Complexes of Ni(<scp>ii</scp>) and Cu(<scp>ii</scp>) with small peptides: deciding whether to deprotonate. Physical Chemistry Chemical Physics, 2016, 18, 26923-26932.	2.8	20
74	Effects of sodium cationization versus protonation on the conformations and N-glycosidic bond stabilities of sodium cationized Urd and dUrd: solution conformation of [Urd+Na] ⁺ is preserved upon ESI. Physical Chemistry Chemical Physics, 2017, 19, 17637-17652.	2.8	20
75	Conformations and N-glycosidic bond stabilities of sodium cationized 2′-deoxycytidine and cytidine: Solution conformation of [Cyd + Na]+ is preserved upon ESI. International Journal of Mass Spectrometry, 2018, 429, 18-27.	1.5	20
76	Structural characterization of nucleotide $5\hat{a}\in^2$ -triphosphates by infrared ion spectroscopy and theoretical studies. Physical Chemistry Chemical Physics, 2018, 20, 28319-28330.	2.8	20
77	Modified Quadrupole Ion Trap Mass Spectrometer for Infrared Ion Spectroscopy: Application to Protonated Thiated Uridines. Journal of the American Society for Mass Spectrometry, 2018, 29, 2125-2137.	2.8	20
78	Breslow Intermediates (Amino Enols) and Their Keto Tautomers: First Gasâ€Phase Characterization by IR Ion Spectroscopy. Chemistry - A European Journal, 2021, 27, 2662-2669.	3.3	20
79	Metabolite Identification Using Infrared Ion Spectroscopy─Novel Biomarkers for Pyridoxine-Dependent Epilepsy. Analytical Chemistry, 2021, 93, 15340-15348.	6.5	20
80	Proton-Bridge Motions in Amine Conjugate Acid Ions Having Intramolecular Hydrogen Bonds to Hydroxyl and Amine Groups. Journal of Physical Chemistry A, 2013, 117, 1360-1369.	2.5	19
81	Infrared Ion Spectroscopy of Environmental Organic Mixtures: Probing the Composition of α-Pinene Secondary Organic Aerosol. Environmental Science & Environmental Science & 2019, 53, 7604-7612.	10.0	19
82	Infrared multiple photon dissociation action spectroscopy of sodium cationized halouracils: Effects of sodium cationization and halogenation on gas-phase conformation. International Journal of Mass Spectrometry, 2015, 378, 76-85.	1.5	18
83	Identification of novel fragmentation pathways and fragment ion structures in the tandem mass spectra of protonated synthetic cathinones. Forensic Chemistry, 2020, 19, 100245.	2.8	18
84	Insights into the fragmentation pathways of gas-phase protonated sulfoserine. International Journal of Mass Spectrometry, 2015, 379, 26-32.	1.5	17
85	Divalent Metal-Ion Complexes with Dipeptide Ligands Having Phe and His Side-Chain Anchors: Effects of Sequence, Metal Ion, and Anchor. Journal of Physical Chemistry A, 2015, 119, 9901-9909.	2.5	17
86	Preparation of Labile Ni ⁺ (cyclam) Cations in the Gas Phase Using Electron-Transfer Reduction through Ion–Ion Recombination in an Ion Trap and Structural Characterization with Vibrational Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 5047-5052.	4.6	17
87	N3 and O2 Protonated Conformers of the Cytosine Mononucleotides Coexist in the Gas Phase. Journal of the American Society for Mass Spectrometry, 2017, 28, 1638-1646.	2.8	17
88	Experimental and Theoretical Investigations of Infrared Multiple Photon Dissociation Spectra of Asparagine Complexes with Zn ²⁺ and Cd ²⁺ and Their Deamidation Processes. Journal of Physical Chemistry B, 2016, 120, 12486-12500.	2.6	16
89	Guanidinium/ammonium competition and proton transfer in the interaction of the amino acid arginine with the tetracarboxylic 18-crown-6 ionophore. Physical Chemistry Chemical Physics, 2018, 20, 4067-4073.	2.8	16
90	Protoisomerization of Indigo and Isoindigo Dyes Confirmed by Gas-Phase Infrared Ion Spectroscopy. Journal of Physical Chemistry A, 2019, 123, 8226-8233.	2.5	16

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91	Amadori rearrangement products as potential biomarkers for inborn errors of amino-acid metabolism. Communications Biology, 2021, 4, 367.	4.4	16
92	Cations in a Molecular Funnel: Vibrational Spectroscopy of Isolated Cyclodextrin Complexes with Alkali Metals. ChemPhysChem, 2013, 14, 400-407.	2.1	15
93	Deamidation reactions of protonated asparagine and glutamine investigated by ion spectroscopy. Rapid Communications in Mass Spectrometry, 2016, 30, 483-490.	1.5	15
94	Hydrogen bond mediated stabilization of the salt bridge structure for the glycine dimer anion. Physical Chemistry Chemical Physics, 2015, 17, 30642-30647.	2.8	14
95	The intrinsic basicity of the phosphate backbone exceeds that of uracil and thymine residues: protonation of the phosphate moiety is preferred over the nucleobase for pdThd and pUrd. Physical Chemistry Chemical Physics, 2017, 19, 30351-30361.	2.8	14
96	Zinc and Cadmium Complexation of <scp>l</scp> -Threonine: An Infrared Multiple Photon Dissociation Spectroscopy and Theoretical Study. Journal of Physical Chemistry B, 2019, 123, 9343-9354.	2.6	14
97	Ergothioneine and related histidine derivatives in the gas phase: tautomer structures determined by IRMPD spectroscopy and theory. Physical Chemistry Chemical Physics, 2017, 19, 23362-23372.	2.8	13
98	Deamidation of Protonated Asparagine–Valine Investigated by a Combined Spectroscopic, Guided Ion Beam, and Theoretical Study. Journal of Physical Chemistry A, 2018, 122, 2424-2436.	2.5	13
99	Experimental and Theoretical Investigations of Infrared Multiple Photon Dissociation Spectra of Aspartic Acid Complexes with Zn ²⁺ and Cd ²⁺ . Journal of Physical Chemistry B, 2018, 122, 3836-3853.	2.6	13
100	Influence of $2\hat{a}\in^2$ -fluoro modification on glycosidic bond stabilities and gas-phase ion structures of protonated pyrimidine nucleosides. Journal of Fluorine Chemistry, 2019, 219, 10-22.	1.7	13
101	Mass spectrometry-based identification of <i>ortho</i> -, <i>meta</i> - and <i>para</i> -isomers using infrared ion spectroscopy. Analyst, The, 2020, 145, 6162-6170.	3.5	13
102	Examination of the Coordination Sphere of Al ^{III} in Trifluoromethylâ€Heteroarylalkenolato Complex Ions by Gasâ€Phase IRMPD Spectroscopy and Computational Modelling. ChemPhysChem, 2012, 13, 2037-2045.	2.1	12
103	Water Microsolvation Can Switch the Binding Mode of Ni(II) with Small Peptides. Journal of Physical Chemistry Letters, 2017, 8, 2634-2638.	4.6	12
104	Binding of Divalent Metal lons with Deprotonated Peptides: Do Gas-Phase Anions Parallel the Condensed Phase?. Journal of Physical Chemistry A, 2018, 122, 5589-5596.	2.5	12
105	Investigation of the position of the radical in z ₃ -ions resulting from electron transfer dissociation using infrared ion spectroscopy. Faraday Discussions, 2019, 217, 434-452.	3.2	12
106	Mechanistic Study of Pd/NHCâ€Catalyzed Sonogashira Reaction: Discovery of NHCâ€Ethynyl Coupling Process. Chemistry - A European Journal, 2020, 26, 15672-15681.	3.3	12
107	Tweezerâ€ike Complexes of Crown Ethers with Divalent Metals: Probing Cationâ€Sizeâ€Dependent Conformations by Vibrational Spectroscopy in the Gas Phase. ChemPlusChem, 2012, 77, 118-123.	2.8	11
108	Transition metal(II) complexes of histidine-containing tripeptides: Structures, and infrared spectroscopy by IRMPD. International Journal of Mass Spectrometry, 2018, 429, 198-205.	1.5	11

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109	Gas-Phase Infrared Ion Spectroscopy Characterization of Cu(II/I)Cyclam and Cu(II/I)2,2′-Bipyridine Redox Pairs. Journal of Physical Chemistry A, 2019, 123, 4149-4157.	2.5	11
110	Vibrational Spectra of the Ruthenium–Tris-Bipyridine Dication and Its Reduced Form in Vacuo. Journal of Physical Chemistry A, 2020, 124, 2449-2459.	2.5	11
111	Preferred protonation site of a series of sulfa drugs in the gas phase revealed by IR spectroscopy. European Physical Journal D, 2021, 75, 1.	1.3	11
112	Radicalâ€Pairing Interactions in a Molecular Switch Evidenced by Ion Mobility Spectrometry and Infrared Ion Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 10049-10055.	13.8	11
113	Stabilization of Glucosyl Dioxolenium Ions by "Dual Participation―of the 2,2-Dimethyl-2-(<i>ortho</i> -nitrophenyl)acetyl (DMNPA) Protection Group for 1,2- <i>cis</i> -Glucosylation. Journal of Organic Chemistry, 2022, 87, 9139-9147.	3.2	11
114	Infrared Multiphoton Dissociation Spectroscopic Analysis of Noncovalent Interactions in Organocatalysis. European Journal of Organic Chemistry, 2014, 2014, 5675-5680.	2.4	10
115	Halide anion binding to Gly3, Ala3 and Leu3. International Journal of Mass Spectrometry, 2015, 377, 440-447.	1.5	10
116	Probing the geometry reorganization from solution to gas-phase in putrescine derivatives by IRMPD, ¹ H-NMR and theoretical calculations. Physical Chemistry Chemical Physics, 2017, 19, 24330-24340.	2.8	10
117	Competition between salt bridge and non-zwitterionic structures in deprotonated amino acid dimers. Physical Chemistry Chemical Physics, 2018, 20, 15641-15652.	2.8	10
118	Experimental and theoretical investigations of infrared multiple photon dissociation spectra of arginine complexes with Zn ²⁺ and Cd ²⁺ . Physical Chemistry Chemical Physics, 2018, 20, 20712-20725.	2.8	10
119	Experimental and theoretical investigations of infrared multiple photon dissociation spectra of lysine complexes with Zn ²⁺ and Cd ²⁺ . European Journal of Mass Spectrometry, 2019, 25, 97-111.	1.0	10
120	Evaluation of table-top lasers for routine infrared ion spectroscopy in the analytical laboratory. Analyst, The, 2021, 146, 7218-7229.	3.5	10
121	Infrared multipleâ€photon dissociation spectroscopy of deprotonated 6â€hydroxynicotinic acid. Rapid Communications in Mass Spectrometry, 2014, 28, 691-698.	1.5	9
122	Gas-phase metal ion chelation investigated with IRMPD spectroscopy: A brief review of Robert Dunbar's contributions. European Journal of Mass Spectrometry, 2019, 25, 86-96.	1.0	9
123	Sodium cationization can disrupt the intramolecular hydrogen bond that mediates the sunscreen activity of oxybenzone. Physical Chemistry Chemical Physics, 2020, 22, 19522-19531.	2.8	9
124	The Infrared Spectrum of Protonated C ₇₀ . Astrophysical Journal Letters, 2021, 909, L17.	8.3	9
125	IRMPD Spectroscopy of [PC (4:0/4:0) + M] < sup>+ (M = H, Na, K) and Corresponding CID Fragment lons. Journal of the American Society for Mass Spectrometry, 2021, 32, 2874-2884.	2.8	9
126	IRMPD spectroscopy reveals a novel rearrangement reaction for modified peptides that involves elimination of the N-terminal amino acid. International Journal of Mass Spectrometry, 2015, 379, 165-178.	1.5	8

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127	Benchmark Ditopic Binding of Cl ^{â^'} and Cs ⁺ by the Macrocycle Hexacyclen. ChemPhysChem, 2017, 18, 1324-1332.	2.1	8
128	Dehydration reactions of protonated dipeptides containing asparagine or glutamine investigated by infrared ion spectroscopy. International Journal of Mass Spectrometry, 2018, 429, 90-100.	1.5	8
129	Hydrogen tunneling avoided: enol-formation from a charge-tagged phenyl pyruvic acid derivative evidenced by tandem-MS, IR ion spectroscopy and theory. Physical Chemistry Chemical Physics, 2019, 21, 16591-16600.	2.8	8
130	Formation of n → π ⁺ interaction facilitating dissociative electron transfer in isolated tyrosine-containing molecular peptide radical cations. Physical Chemistry Chemical Physics, 2020, 22, 21393-21402.	2.8	8
131	UV/Vis and IRMPD Spectroscopic Analysis of the Absorption Properties of Methylglyoxal Brown Carbon. ACS Earth and Space Chemistry, 2021, 5, 910-919.	2.7	8
132	Conformations of Protonated AlaDap and DapAla Characterized by IRMPD Spectroscopy and Molecular Modeling. Journal of Physical Chemistry B, 2018, 122, 2191-2202.	2.6	7
133	Intra-cavity proton bonding and anharmonicity in the anionophore cyclen. Physical Chemistry Chemical Physics, 2018, 20, 8968-8975.	2.8	7
134	Preferential host-guest coordination of nonactin with ammonium and hydroxylammonium. Journal of Chemical Physics, 2018, 149, 225101.	3.0	7
135	Impact of the 2′- and 3′-Sugar Hydroxyl Moieties on Gas-Phase Nucleoside Structure. Journal of the American Society for Mass Spectrometry, 2019, 30, 832-845.	2.8	7
136	Gas-phase structures of protonated arabino nucleosides. International Journal of Mass Spectrometry, 2019, 438, 124-134.	1.5	7
137	Uranyl/12-crown-4 Ether Complexes and Derivatives: Structural Characterization and Isomeric Differentiation. Inorganic Chemistry, 2018, 57, 4125-4134.	4.0	6
138	Equatorial coordination of uranyl: Correlating ligand charge donation with the Oyl-U-Oyl asymmetric stretch frequency. Journal of Organometallic Chemistry, 2018, 857, 94-100.	1.8	6
139	lon spectroscopy and guided ion beam studies of protonated asparaginyl-threonine decomposition: Influence of a hydroxyl containing C-Terminal residue on deamidation processes. International Journal of Mass Spectrometry, 2019, 442, 64-82.	1.5	6
140	Hydrogen atom transfer in the radical cations of tryptophan-containing peptides AW and WA studied by mass spectrometry, infrared multiple-photon dissociation spectroscopy, and theoretical calculations. European Journal of Mass Spectrometry, 2019, 25, 112-121.	1.0	6
141	Water Loss from Protonated XxxSer and XxxThr Dipeptides Gives Oxazoline—Not Oxazolone—Product lons. Journal of the American Society for Mass Spectrometry, 2020, 31, 2111-2123.	2.8	6
142	Structural determination of arginine-linked cisplatin complexes <i>via</i> IRMPD action spectroscopy: arginine binds to platinum <i>via</i> NO ^{â°'} binding mode. Physical Chemistry Chemical Physics, 2021, 23, 21959-21971.	2.8	6
143	Infrared Multiple-Photon Dissociation Spectra of Sodiated Complexes of the Aliphatic Amino Acids. Journal of Physical Chemistry A, 2021, 125, 6348-6355.	2.5	6
144	IRMPD Spectroscopic and Theoretical Structural Investigations of Zinc and Cadmium Dications Bound to Histidine Dimers. Journal of Physical Chemistry A, 2020, 124, 10266-10276.	2.5	6

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145	Spectroscopic Characterization of an Extensive Set of <i>c</i> -Type Peptide Fragment Ions Formed by Electron Transfer Dissociation Suggests Exclusive Formation of Amide Isomers. Journal of Physical Chemistry Letters, 2018, 9, 6404-6411.	4.6	5
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