Travis D Fridgen

List of Publications by Year
in descending order

80 papers	1,981 citations	279798 23 h-index	265206 42 g-index
82 all docs	82 docs citations	82 times ranked	1350 citing authors

#	Article	IF	Citations
1	Topâ€“down lignomics analysis of the French oak lignin by atmospheric pressure photoionization and electrospray ionization quadrupole timeâ€ofâ€flight tandem mass spectrometry: Identification of a novel series of lignans. Journal of Mass Spectrometry, 2021, 56, e4676.	1.6	4
2	A vibrational spectroscopic and computational study of the structures of protonated imidacloprid and its fragmentation products in the gas phase. Physical Chemistry Chemical Physics, 2021, 23, 3377-3388.	2.8	3
3	Demystifying and unravelling the molecular structure of the biopolymer sporopollenin. Rapid Communications in Mass Spectrometry, 2020, 34, e8740.	1.5	24
4	Topâ€down lignomics analysis of the French pine lignin by atmospheric pressure photoionization quadrupole timeâ€ofâ€flight tandem mass spectrometry: Identification of a novel series of ligninâ€“carbohydrate complexes. Rapid Communications in Mass Spectrometry, 2020, 34, e8910.	1.5	4
5	A vibrational spectroscopic and computational study of gaseous protonated and alkali metal cationized Gâ€“C base pairs. Physical Chemistry Chemical Physics, 2020, 22, 11546-11557.	2.8	11
6	An IRMPD spectroscopic and computational study of protonated guanine-containing mismatched base pairs in the gas phase. Physical Chemistry Chemical Physics, 2020, 22, 2999-3007.	2.8	5
7	Matrixâ€assisted laser desorption/ionization timeâ€ofâ€flight/timeâ€ofâ€flight tandem mass spectrometry (negative ion mode) of French Oak lignin: A novel series of lignin and tricin derivatives attached to carbohydrate and shikimic acid moieties. Rapid Communications in Mass Spectrometry, 2020, 34, e8841.	1.5	6
8	The K₂(9-ethylguanine)₁₂²⁺ quadruplex is more stable to unimolecular dissociation than the K(9-ethylguanine)₈⁺ quadruplex in the gas phase: a BIRD, energy resolved SORI-CID, IRMPD spectroscopic, and computational study. Physical Chemistry Chemical Physics, 2019, 21, 15319-15326.	2.8	4
9	Hydrogen bonding in alkali metal cation-bound i-motif-like dimers of 1-methyl cytosine: an IRMPD spectroscopic and computational study. Physical Chemistry Chemical Physics, 2019, 21, 11103-11110.	2.8	9
10	Strong intramolecular hydrogen bonding in protonated Î²-methylaminoalanine: A vibrational spectroscopic and computational study. European Journal of Mass Spectrometry, 2019, 25, 133-141.	1.0	3
11	Topâ€down lignomic matrixâ€assisted laser desorption/ionization timeâ€ofâ€flight tandem mass spectrometry analysis of lignin oligomers extracted from date palm wood. Rapid Communications in Mass Spectrometry, 2019, 33, 539-560.	1.5	10
12	Self-assembled uracil complexes containing tautomeric uracils: an IRMPD spectroscopic and computation study of the structures of gaseous uracilnCa2+ (n = 4, 5, or 6) complexes. Physical Chemistry Chemical Physics, 2018, 20, 572-580.	2.8	6
13	Structures of [M(Ura-H)(Ura)]+ and [M(Ura-H)(H2O)n]+ (M = Cu, Zn, Pb; n = 1â€“3) complexes in the gas phase by IRMPD spectroscopy in the fingerprint region and theoretical studies. International Journal of Mass Spectrometry, 2018, 429, 56-65.	1.5	12
14	Structural investigation by tandem mass spectrometry analysis of a heterogeneous mixture of Lipid A_n isolated from the lipopolysaccharide of Aeromonas hydrophila SJâ€55Ra. Rapid Communications in Mass Spectrometry, 2018, 32, 167-183.	1.5	2
15	Distinguishing complexes of isomeric peptides: Structures, energetic, and reactions of sodium cation-coordinated ProLeu or LeuPro trimers in the gas phase. International Journal of Mass Spectrometry, 2018, 429, 136-141.	1.5	3
16	Endo or Exo? Structures of Gasâ€Phase Alkali Metal Cation/Aromatic Halfâ€Belt Complexes. ChemPhysChem, 2018, 19, 2194-2199.	2.1	4
17	Ammoniated Complexes of Uracil and Transition Metal Ions: Structures of [M(Ura-H)(Ura)(NH₃)]⁺ by IRMPD Spectroscopy and Computational Methods (M) Tj ETQq1 1 0.784314 rgBT	2.6	13
18	The intrinsic stabilities and structures of alkali metal cationized guanine quadruplexes. Physical Chemistry Chemical Physics, 2017, 19, 1281-1287.	2.8	15

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19	Tandem mass spectrometry determination of the putative structure of a heterogeneous mixture of Lipid A_s isolated from the lipopolysaccharide of the Gramâ€negative bacteria Aeromonas liquefaciens SJâ€19a. Rapid Communications in Mass Spectrometry, 2016, 30, 1043-1058.	1.5	2
20	Structures of [M(Uraâ€H)(H₂O)_n]⁺ (Mâ€‰=â€‰Mg, Ca, Sr, Ba; nâ€‰=â€‰1â€“3) complexes in the gas phase by IRMPD spectroscopy and theoretical studies. Journal of Mass Spectrometry, 2016, 51, 236-244.	1.6	22
21	Structures, Unimolecular Fragmentations, and Reactivities of the Selfâ€Assembled Multimetallic/Peptide Complexes [Mn_n(GlyGlyâ€H)_{2nâ^'1}]⁺ and [Mn_{n+1}(GlyGlyâ€H)_{2n}]²⁺. ChemPhysChem, 2016, 17, 2181-2189.	2.1	4
22	Distinguishing Isomeric Peptides: The Unimolecular Reactivity and Structures of (LeuPro)M⁺ and (ProLeu)M⁺ (M = Alkali Metal). Journal of Physical Chemistry B, 2016, 120, 13039-13046.	2.6	4
23	Structures and unimolecular chemistry of M(Pro₂-H)⁺(M = Mg, Ca, Sr, Ba, Mn,) Tj ETQq1 1 0.784314 rgBT / Chemical Physics, 2016, 18, 2023-2033.	2.8	6
24	Selfâ€Assembled Multimetallic/Peptide Complexes: Structures and Unimolecular Reactions of [M_n(GlyGlyâ^'H)_{2nâ^'1}]⁺ and		

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37	Structures and Physical Properties of Gaseous Metal Cationized Biological Ions. European Journal of Mass Spectrometry, 2012, 18, 235-250.	1.0	20
38	IRMPD spectroscopic and computational study of gas phase [M(Ura-H)(Ura)]+ and [M(Ura-H)(H2O)n]+ (M=Sr, Ba; n=1, 2) complexes. International Journal of Mass Spectrometry, 2012, 330-332, 233-240.	1.5	13
39	Water binding energies of [Pb(amino acid-H)H2O]+ complexes determined by blackbody infrared radiative dissociation. Physical Chemistry Chemical Physics, 2012, 14, 15118.	2.8	11
40	Structures and energetics of electrosprayed uracilnCa2+clusters (n = 14â€“4) in the gas phase. Physical Chemistry Chemical Physics, 2012, 14, 3304-3315.	2.8	31
41	Primary Fragmentation Pathways of Gas Phase [M(Uracilâ^'H)(Uracil)]⁺ Complexes (M=Zn,) Tj ETQq1 1 0.784314 rgBT /O 1507-1513.	2.1	20
42	Kinetic and mechanistic studies of low-pressure ionâ€“molecule association reactions of unsaturated Ru(II) complexes with CO. International Journal of Mass Spectrometry, 2012, 316-318, 192-198.	1.5	2
43	Structures and Fragmentation of [Cu(Uracilâ€H)(Uracil)]⁺ in the Gas Phase. ChemPhysChem, 2012, 13, 588-596.	2.1	20
44	Structures of Bare and Hydrated [Pb(AminoAcid-H)]⁺ Complexes Using Infrared Multiple Photon Dissociation Spectroscopy. Journal of Physical Chemistry B, 2011, 115, 11506-11518.	2.6	34
45	Structures of electrosprayed Pb(Uracil-H)+ complexes by infrared multiple photon dissociation spectroscopy. International Journal of Mass Spectrometry, 2011, 308, 167-174.	1.5	29
46	The hydrated Li+â€“adenineâ€“thymine complex by IRMPD spectroscopy in the Nâ€“H/Oâ€“H stretching region. International Journal of Mass Spectrometry, 2010, 297, 2-8.	1.5	31
47	Structures of Alkali Metal Ionâ^'Adenine Complexes and Hydrated Complexes by IRMPD Spectroscopy and Electronic Structure Calculations. Journal of Physical Chemistry A, 2010, 114, 3449-3456.	2.5	58
48	Infrared consequence spectroscopy of gaseous protonated and metal ion cationized complexes. Mass Spectrometry Reviews, 2009, 28, 586-607.	5.4	196
49	Solvation of electrosprayed ions in the accumulation/collision hexapole of a hybrid Q-FTMS. Journal of the American Society for Mass Spectrometry, 2009, 20, 411-418.	2.8	30
50	Structure of [Pb(Gly-H)]⁺ and the Monosolvated Water and Methanol Solvated Species by Infrared Multiple-Photon Dissociation Spectroscopy, Energy-Resolved Collision-Induced Dissociation, and Electronic Structure Calculations. Journal of Physical Chemistry B, 2009, 113, 14457-14464.	2.6	18
51	Investigations of Strong Hydrogen Bonding in (ROH)_nÂ·Â·Â·FHF^{â^'} (n =) Tj ETQq1 1 0.784314 Spectrometry and Quantum Calculations. Journal of Physical Chemistry A, 2009, 113, 644-652.	2.5	4
52	Structures of Hydrated Li⁺â^'Thymine and Li⁺â^'Uracil Complexes by IRMPD Spectroscopy in the Nâ^'H/Oâ^'H Stretching Region. Journal of Physical Chemistry A, 2009, 113, 824-832.	2.5	54
53	The Structure of the Protonated Adenine Dimer by Infrared Multiple Photon Dissociation Spectroscopy and Electronic Structure Calculations. Journal of Physical Chemistry A, 2009, 113, 8099-8107.	2.5	34
54	Structures of Aliphatic Amino Acid Proton-Bound Dimers by Infrared Multiple Photon Dissociation Spectroscopy in the 700â^'2000 cm⁻¹ Region. Journal of Physical Chemistry A, 2008, 112, 23-30.	2.5	60

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55	The Correlation of Binary Acid Strengths with Molecular Properties in First-Year Chemistry. Journal of Chemical Education, 2008, 85, 1220.	2.3	4
56	Infrared Multiple Photon Dissociation Spectra of Proton- and Sodium Ion-Bound Glycine Dimers in the Nâ^'H and Oâ^'H Stretching Region. Journal of Physical Chemistry A, 2008, 112, 10220-10225.	2.5	52
57	Infrared Multiphoton Dissociation Spectra as a Probe of Ion Molecule Reaction Mechanism:Â The Formation of the Protonated Water Dimer via Sequential Bimolecular Reactions with 1,1,3,3â^'Tetrafluorodimethyl Ether. Journal of Physical Chemistry A, 2007, 111, 8792-8802.	2.5	8
58	Heterogeneous Proton-Bound Dimers with a High Dipole Moment Monomer:â€‰ How Could We Experimentally Observe These Anomalous Ionic Hydrogen Bonds?. Journal of Physical Chemistry A, 2007, 111, 10738-10744.	2.5	22
59	Structures of Heterogeneous Proton-Bond Dimers with a High Dipole Moment Monomer:Â Covalent vs Electrostatic Interactions. Journal of Physical Chemistry A, 2006, 110, 6122-6128.	2.5	28
60	Gas phase infrared multiple-photon dissociation spectra of methanol, ethanol and propanol proton-bound dimers, protonated propanol and the propanol/water proton-bound dimer. Physical Chemistry Chemical Physics, 2006, 8, 955.	2.8	80
61	Experimental infrared spectra of Clâ^'(ROH) (R = H, CH3, CH3CH2) complexes in the gas-phase. Physical Chemistry Chemical Physics, 2006, 8, 2483-2490.	2.8	15
62	Potential Energy Surfaces for Gas-Phase SN2 Reactions Involving Nitriles and Substituted Nitriles. Journal of Physical Chemistry A, 2005, 109, 7519-7526.	2.5	7
63	Infrared spectra of homogeneous and heterogeneous proton-bound dimers in the gas phase. Physical Chemistry Chemical Physics, 2005, 7, 2747.	2.8	77
64	Experimental and Theoretical Studies of the Benzylium+/Tropylium+ Ratios after Charge Transfer to Ethylbenzene. Journal of Physical Chemistry A, 2004, 108, 5600-5609.	2.5	56
65	Infrared Spectrum of the Protonated Water Dimer in the Gas Phase. Journal of Physical Chemistry A, 2004, 108, 9008-9010.	2.5	169
66	The Gasâ€Phase Formation of Methyl Formate in Hot Molecular Cores. Astrophysical Journal, 2004, 611, 605-614.	4.5	141
67	A Study of the Methane Catalyzed Isomerization of HCO+ to HOC+ and the Elimination of Methane from Metastable Methoxymethyl Cation. European Journal of Mass Spectrometry, 2004, 10, 747-754.	1.0	8
68	Gas-phase acidities and sites of deprotonation of 2-ketones and structures of the corresponding enolates. International Journal of Mass Spectrometry, 2003, 227, 497-508.	1.5	10
69	Enthalpy Barriers for Asymmetric SN2 Alkyl Cation Transfer Reactions between Neutral and Protonated Alcohols. Journal of Physical Chemistry A, 2003, 107, 668-675.	2.5	21
70	Binding Energies of Proton-Bound Ether/Alcohol Mixed Dimers Determined by FTICR Radiative Association Kinetics Measurements. Journal of Physical Chemistry A, 2002, 106, 1576-1583.	2.5	13
71	Experimental Determination of Activation Energies for Gas-Phase Ethyl andn-Propyl Cation Transfer Reactionsâ€. Journal of Physical Chemistry A, 2002, 106, 9648-9654.	2.5	11
72	The Reaction of Protonated Dimethyl Ether with Dimethyl Ether:Â Temperature and Isotope Effects on the Methyl Cation Transfer Reaction Forming Trimethyloxonium Cation and Methanol. Journal of the American Chemical Society, 2001, 123, 3980-3985.	13.7	14

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73	Direct Experimental Determination of the Energy Barriers for Methyl Cation Transfer in the Reactions of Methanol with Protonated Methanol, Protonated Acetonitrile, and Protonated Acetaldehyde:Â A Low Pressure FTICR Study. Journal of Physical Chemistry A, 2001, 105, 3816-3824.	2.5	37
74	A Fourier Transform Ion Cyclotron Resonance Study of theTemperature and Isotope Effects on the Kinetics of Low-Pressure Association Reactions of Protonated Dimethyl Ether with Dimethyl Ether. Journal of Physical Chemistry A, 2001, 105, 1011-1019.	2.5	10
75	Isomerization and Fragmentation Products of CH2Cl2and Other Dihalomethanes in Rare-Gas Matrices:Â An Electron Bombardment Matrix-Isolation FTIR Spectroscopic Studyâ€. Journal of Physical Chemistry A, 2000, 104, 3487-3497.	2.5	40
76	A density functional theory study of the catalytic role of Ar, Kr, Xe, and N2 in the CH3OHÂ·+ to CH2OH2Â·+ isomerization reaction. International Journal of Mass Spectrometry, 1999, 190-191, 181-194.	1.5	17
77	Density functional theory study of the proton-bound rare-gas dimers Rg2H+ and (RgHRgâ€²)+ (Rg=Ar, Kr,) Tj ETQq1 1 0.784314 rgBT /C 109, 2162-2168.	3.0	54
78	Electron bombardment matrix isolation of Rg/Rgâ€²/methanol mixtures (Rg= Ar, Kr, Xe): Fourier-transform infrared characterization of the proton-bound dimers Kr2H+, Xe2H+, (ArHKr)+ and (ArHXe)+ in Ar matrices and (KrHXe)+ and Xe2H+ in Kr matrices. Journal of Chemical Physics, 1998, 109, 2155-2161.	3.0	60
79	Gas-Phase Ion Chemistry of Oxalyl Chloride:â€‰ An Electron Bombardment Matrix Isolation FTIR Spectroscopic Study. Journal of Physical Chemistry A, 1997, 101, 5117-5123.	2.5	12
80	Stabilization of the primary products of atomic oxygen (1D) reactions with carbon monoxide, carbon dioxide, methane and other hydrocarbons in cryogenic matrixes. The Journal of Physical Chemistry, 1993, 97, 10708-10711.	2.9	18