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	Infrared consequence spectroscopy of gaseous protonated and metal ion cationized complexes. Mass Spectrometry Reviews, 2009, 28, 586-607.	5.4	196
2	Infrared Spectrum of the Protonated Water Dimer in the Gas Phase. Journal of Physical Chemistry A, 2004, 108, 9008-9010.	2.5	169
3	The Gasâ€Phase Formation of Methyl Formate in Hot Molecular Cores. Astrophysical Journal, 2004, 611, 605-614.	4.5	141
4	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
5	Infrared spectra of homogeneous and heterogeneous proton-bound dimers in the gas phase. Physical Chemistry Chemical Physics, 2005, 7, 2747.	2.8	77
6	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
7	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
8	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
9	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
10	Density functional theory study of the proton-bound rare-gas dimers Rg2H+ and (RgHRgâ€²)+ (Rg=Ar, Kr,) Tj ETQq0 0 0 rgBT /Overlock 109, 2162-2168.	3.0	54
11	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
12	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
13	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
14	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
15	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
16	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
17	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
18	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

#	Article	IF	Citations
19	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
20	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
21	Guanine tetrads: an IRMPD spectroscopy, energy resolved SORI-CID, and computational study of M(9-ethylguanine)₄⁺(M = Li, Na, K, Rb, Cs) in the gas phase. Physical Chemistry Chemical Physics, 2015, 17, 25778-25785.	2.8	29
22	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
23	Structure and energetics of gas phase halogen-bonding in mono-, bi-, and tri-dentate anion receptors as studied by BIRD. Physical Chemistry Chemical Physics, 2013, 15, 7638.	2.8	26
24	Demystifying and unravelling the molecular structure of the biopolymer sporopollenin. Rapid Communications in Mass Spectrometry, 2020, 34, e8740.	1.5	24
25	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
26	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
27	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
28	Structures and Physical Properties of Gaseous Metal Cationized Biological Ions. European Journal of Mass Spectrometry, 2012, 18, 235-250.	1.0	20
29	Primary Fragmentation Pathways of Gas Phase [M(Uracilâ¯H)(Uracil)]⁺ Complexes (M=Zn,) Tj ETQq1 1 0.784314 rgBT /Ov 1507-1513.	2.1	20
30	Structures and Fragmentation of [Cu(Uracilâ€H)(Uracil)]⁺ in the Gas Phase. ChemPhysChem, 2012, 13, 588-596.	2.1	20
31	The protonated and sodiated dimers of proline studied by IRMPD spectroscopy in the Nâ€“H and Oâ€“H stretching region and computational methods. Physical Chemistry Chemical Physics, 2014, 16, 26855-26863.	2.8	19
32	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
33	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
34	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
35	Structures of bare and singly hydrated [M(Ura-H)(Ura)]+ (M = Mg, Ca, Sr, Ba) complexes in the gas phase by IRMPD spectroscopy in the fingerprint region. International Journal of Mass Spectrometry, 2015, 378, 328-335.	1.5	17
36	IRMPD Spectroscopic Study of Microsolvated [Na(GlyAla)]⁺ and [Ca(GlyAlaâ€“H)]⁺ and the Blue Shifting of the Hydrogen-Bonded Amide Stretch with Each Water Addition. Journal of Physical Chemistry B, 2013, 117, 6157-6164.	2.6	16

#	Article	IF	Citations
37	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
38	Gas-Phase Structures of Pb²⁺-Cationized Phenylalanine and Glutamic Acid Determined by Infrared Multiple Photon Dissociation Spectroscopy and Computational Chemistry. Journal of Physical Chemistry A, 2013, 117, 1283-1290.	2.5	15
39	Structures and Unimolecular Reactivity of Gas-Phase [Zn(Proline-H)]⁺ and [Zn(Proline-H)(H₂O)]⁺. Journal of Physical Chemistry B, 2013, 117, 8447-8456.	2.6	15
40	Ammoniated Complexes of Uracil and Transition Metal Ions: Structures of [M(Ura-H)(Ura)(NH₃)]⁺ by IRMPD Spectroscopy and Computational Methods (M) Tj ETQq0 0 0 rgBT /Overloc	2.6	15
41	The intrinsic stabilities and structures of alkali metal cationized guanine quadruplexes. Physical Chemistry Chemical Physics, 2017, 19, 1281-1287.	2.8	15
42	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
43	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
44	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
45	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
46	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
47	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
48	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
49	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
50	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
51	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
52	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
53	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
54	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

#	Article	IF	Citations
55	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
56	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
57	The unimolecular chemistry of [Zn(amino acid)2-H]+ in the gas phase: H2 elimination when the amino acid is a secondary amine. Physical Chemistry Chemical Physics, 2014, 16, 3134.	2.8	6
58	Structures and unimolecular chemistry of M(Pro₂-H)⁺(M = Mg, Ca, Sr, Ba, Mn,) Tj ETQq0 0 0 rgBT /Overlock 1 Chemical Physics, 2016, 18, 2023-2033.	2.8	6
59	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
60	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
61	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
62	The Correlation of Binary Acid Strengths with Molecular Properties in First-Year Chemistry. Journal of Chemical Education, 2008, 85, 1220.	2.3	4
63	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
64	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
65	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
66	Endo or Exo? Structures of Gasâ€Phase Alkali Metal Cation/Aromatic Halfâ€Belt Complexes. ChemPhysChem, 2018, 19, 2194-2199.	2.1	4
67	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
68	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
69	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
70	High-energy collision-induced dissociation tandem mass spectrometry of regioisomeric lactose palmitic acid monoesters using matrix-assisted laser desorption/ionization. Rapid Communications in Mass Spectrometry, 2014, 28, 169-177.	1.5	3
71	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
72	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

#	Article	IF	Citations
73	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
74	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
75	Infrared spectroscopic characterization of hydrogen-bonded propylene oxide â^' ethanol and propylene oxide â^' 2-fluoroethanol complexes isolated in solid neon matrices. Canadian Journal of Chemistry, 2013, 91, 1292-1302.	1.1	2
76	Dehydrogenation and demethanation of 2-methylpropane and propane in the gas-phase by the 16-electron complex [Ru(bipy)2(CO)]2+* chemically activated by the association of [Ru(bipy)2]2+ and CO. Dalton Transactions, 2013, 42, 3979.	3.3	2
77	The in situ gasâ€phase formation of a Câ€glycoside ion obtained during electrospray ionization tandem mass spectrometry. A unique intramolecular mechanism involving an ionâ€molecule reaction. Rapid Communications in Mass Spectrometry, 2015, 29, 1717-1732.	1.5	2
78	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
79	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
80	Selfâ€Assembled Multimetallic/Peptide Complexes: Structures and Unimolecular Reactions of [M_n(GlyGlyâ^'H)_{2nâ^'1}]⁺ and		