Mark A Johnson

List of Publications by Year
in descending order

179 papers	10,423 citations	28242 55 h-index	38368 95 g-index
180 all docs	180 docs citations	180 times ranked	4792 citing authors

#	Article	IF	Citations
1	Spectral Signatures of Hydrated Proton Vibrations in Water Clusters. Science, 2005, 308, 1765-1769.	6.0	712
2	MOLECULARASPECTS OFHALIDEIONHYDRATION: The Cluster Approach. Annual Review of Physical Chemistry, 2003, 54, 173-213.	4.8	449
3	Spectroscopic Determination of the OH- Solvation Shell in the OH-middle dot(H2O)n Clusters. Science, 2003, 299, 1367-1372.	6.0	355
4	How Do Small Water Clusters Bind an Excess Electron?. Science, 2004, 306, 675-679.	6.0	276
5	Cryogenic Ion Chemistry and Spectroscopy. Accounts of Chemical Research, 2014, 47, 202-210.	7.6	256
6	The vibrational predissociation spectra of the H5O2+â^™RGn(RG=Ar,Ne) clusters: Correlation of the solvent perturbations in the free OH and shared proton transitions of the Zundel ion. Journal of Chemical Physics, 2005, 122, 244301.	1.2	228
7	Vibrational Spectroscopy of the Ionic Hydrogen Bond:â€‰ Fermi Resonances and Ionâ^'Molecule Stretching Frequencies in the Binary X-Â·H2O (X = Cl, Br, I) Complexes via Argon Predissociation Spectroscopy. Journal of the American Chemical Society, 1998, 120, 12361-12362.	6.6	226
8	Spectroscopic snapshots of the proton-transfer mechanism in water. Science, 2016, 354, 1131-1135.	6.0	213
9	Electronic absorption spectra of size-selected hydrated electron clusters: (H2O)nâ^',â€,n=6â€“50. Journal of Chemical Physics, 1997, 106, 811-814.	1.2	188
10	Fundamental Excitations of the Shared Proton in the H3O2- and H5O2+ Complexes. Journal of Physical Chemistry A, 2005, 109, 1487-1490.	1.1	168
11	Precursor of the Iaqâ^' chargeâ€transferâ€toâ€solvent (CTTS) band in Iâ^'â‹…(H2O)n clusters. Journal of Chemical Physics, 1996, 105, 7231-7234.	1.2	162
12	Vibrational Spectroscopy of Small Br-Â·(H2O)nand I-Â·(H2O)nClusters:Â Infrared Characterization of the Ionic Hydrogen Bond. Journal of Physical Chemistry A, 1998, 102, 3067-3071.	1.1	158
13	Isolating the Spectroscopic Signature of a Hydration Shell With the Use of Clusters: Superoxide Tetrahydrate. Science, 2000, 287, 2461-2463.	6.0	157
14	Prying Apart a Water Molecule with Anionic H-Bonding:Â A Comparative Spectroscopic Study of the X-Â·H2O (X = OH, O, F, Cl, and Br) Binary Complexes in the 600â^'3800 cm-1Region. Journal of Physical Chemistry A, 2006, 110, 4943-4952.	1.1	157
15	Demonstration of a pulsed photoelectron spectrometer on mass-selected negative ions: Oâ^', O2â^', and O4â^'. Chemical Physics Letters, 1986, 131, 170-174.	1.2	152
16	Photoelectron spectroscopy of the `missing' hydrated electron clusters (H2O)â^'n, n=3, 5, 8 and 9: Isomers and continuity with the dominant clusters n=6, 7 and â©¾11. Chemical Physics Letters, 1998, 297, 90-96.	1.2	142
17	Vibrational Characterization of Simple Peptides Using Cryogenic Infrared Photodissociation of H₂-Tagged, Mass-Selected Ions. Journal of the American Chemical Society, 2011, 133, 6440-6448.	6.6	139
18	Vibrational predissociation spectroscopy of the H2-tagged mono- and dicarboxylate anions of dodecanedioic acid. International Journal of Mass Spectrometry, 2011, 300, 91-98.	0.7	136

#	Article	IF	Citations
19	Mass-selected â€œmatrix isolationâ€•infrared spectroscopy of the Iâ¯Â·(H2O)2 complex: making and breaking the inter-water hydrogen-bond. Chemical Physics, 1998, 239, 485-491.	0.9	131
20	Spectroscopic Observation of Ion-Induced Water Dimer Dissociation in the X·Â·(H2O)2(X = F, Cl, Br, I) Clusters. Journal of Physical Chemistry A, 1999, 103, 10665-10669.	1.1	128
21	Determination of Noncovalent Docking by Infrared Spectroscopy of Cold Gas-Phase Complexes. Science, 2012, 335, 694-698.	6.0	127
22	Predissociation spectroscopy of the argon-solvated H5O2+ â€œzundelâ€•cation in the 1000â€“1900 cmâ¯1 region. Journal of Chemical Physics, 2004, 121, 11523-11526.	1.2	126
23	Photoelectron spectroscopy of (CO2)â¯n clusters with 2â‰¤nâ‰¤13: Cluster size dependence of the core molecular ion. Journal of Chemical Physics, 1988, 88, 5857-5863.	1.2	124
24	An infrared study of the competition between hydrogen-bond networking and ionic solvation: Halide-dependent distortions of the water trimer in the Xâ¯â‹…(H2O)3, (X=Cl, Br, I) systems. Journal of Chemical Physics, 1999, 110, 7129-7132.	1.2	116
25	Vibrational spectral signature of the proton defect in the three-dimensional H ⁺ (H) Tj ETQq1 1 0.784314 rgBT /Overlock	6.0	111
26	Snapshots of Proton Accommodation at a Microscopic Water Surface: Understanding the Vibrational Spectral Signatures of the Charge Defect in Cryogenically Cooled H⁺(H₂O)_{n=2â€“28} Clusters. Journal of Physical Chemistry A, 2015, 119, 9425-9440.	1.1	111
27	How the Shape of an H-Bonded Network Controls Proton-Coupled Water Activation in HONO Formation. Science, 2010, 327, 308-312.	6.0	99
28	Photochemistry of hydrated electron clusters (H2O)â¯n (15â‰¤nâ‰¤40) at 1064 nm: Size dependent competition between photofragmentation and photodetachment. Journal of Chemical Physics, 1988, 89, 4807-4814.	1.2	97
29	Photoelectron spectroscopy of (CO2)nâ¯ revisited: core switching in the 2 â©½ n â©½ 16 range. Chemical Physics Letters, 1997, 268, 429-433.	1.2	96
30	Hydration of a structured excess charge distribution: Infrared spectroscopy of the O2â¯â‹…(H2O)n,â€,(1â©½nâ©½5) clusters. Journal of Chemical Physics, 2001, 114, 2698-2706.	1.2	93
31	An H/D Isotopic Substitution Study of the H₅O₂⁺Â·Ar Vibrational Predissociation Spectra:â€‰ Exploring the Putative Role of Fermi Resonances in the Bridging Proton Fundamentals. Journal of Physical Chemistry B, 2008, 112, 321-327.	1.2	92
32	Spectroscopic Study of the Ionâ¯Radical H-Bond in H₄O₂⁺. Journal of Physical Chemistry A, 2009, 113, 4772-4779.	1.1	91
33	Vibrational predissociation spectroscopy of the (H2O)6â¯â‹…Arn, nâ©¾6, clusters. Journal of Chemical Physics, 1998, 108, 444-449.	1.2	88
34	Isomer-Specific IRâ€“IR Double Resonance Spectroscopy of D₂-Tagged Protonated Dipeptides Prepared in a Cryogenic Ion Trap. Journal of Physical Chemistry Letters, 2012, 3, 1099-1105.	2.1	88
35	Vibrational manifestations of strong non-Condon effects in the H3O+Â·X3 (X = Ar, N2, CH4, H2O) complexes: A possible explanation for the intensity in the â€œassociation bandâ€•in the vibrational spectrum of water. Physical Chemistry Chemical Physics, 2012, 14, 7205.	1.3	82
36	Vibrational predissociation spectra of Iâ¯Â·(H2O): isotopic labels and weakly bound complexes with Ar and N2. Chemical Physics Letters, 1997, 269, 122-127.	1.2	81

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37	Gasâ€Phase Infrared Spectroscopy and Multidimensional Quantum Calculations of the Protonated Ammonia Dimer N₂H₇⁺. Angewandte Chemie - International Edition, 2007, 46, 8691-8694.	7.2	77
38	Unraveling Anharmonic Effects in the Vibrational Predissociation Spectra of H₅O₂⁺ and Its Deuterated Analogues. Journal of Physical Chemistry A, 2011, 115, 5847-5858.	1.1	75
39	Photochemistry of Halide Ionâ^'Molecule Clusters:â€‰ Dipole-Bound Excited States and the Case for Asymmetric Solvation. Accounts of Chemical Research, 1998, 31, 527-534.	7.6	74
40	Infrared Signatures of a Water Molecule Attached to Triatomic Domains of Molecular Anions:â€‰ Evolution of the H-bonding Configuration with Domain Length. Journal of Physical Chemistry A, 2003, 107, 6527-6532.	1.1	74
41	Dipoleâ€bound excited states of the Iâ^'â‹…CH3CN and Iâ^'â‹…(CH3CN)2 ionâ€“molecule complexes: Evidence for asymmetric solvation. Journal of Chemical Physics, 1995, 103, 2006-2015.	1.2	71
42	The Vibrational Spectrum of the Neutral (H2O)6 Precursor to the â€œMagicâ€•(H2O)6- Cluster Anion by Argon-Mediated, Population-Modulated Electron Attachment Spectroscopy. Journal of Physical Chemistry A, 2004, 108, 64-68.	1.1	71
43	Capture of CO₂ by a Cationic Nickel(I) Complex in the Gas Phase and Characterization of the Bound, Activated CO₂ Molecule by Cryogenic Ion Vibrational Predissociation Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 1282-1285.	7.2	68
44	Thermal Energy Reactions of Size-Selected Hydrated Electron Clusters (H2O)n-. The Journal of Physical Chemistry, 1996, 100, 2900-2906.	2.9	67
45	Communication: He-tagged vibrational spectra of the SarGlyH+ and H+(H2O)2,3 ions: Quantifying tag effects in cryogenic ion vibrational predissociation (CIVP) spectroscopy. Journal of Chemical Physics, 2014, 140, 221101.	1.2	67
46	Isolating the spectra of cluster ion isomers using Ar-â€œtagâ€•-mediated IR-IR double resonance within the vibrational manifolds: Application to NO2â^'â‹…H2O. Journal of Chemical Physics, 2008, 129, 094303.	1.2	65
47	Pulsed photoelectron spectroscopy of negative cluster ions: Isolation of three distinguishable forms of N2Oâ^'2. Journal of Chemical Physics, 1988, 88, 5383-5395.	1.2	64
48	Reactions of hydrated electron clusters (H2O)n-: scavenging the excess electron. The Journal of Physical Chemistry, 1989, 93, 1178-1181.	2.9	63
49	Vibrational Predissociation Spectrum of the Carbamate Radical Anion, C5H5N-CO2â^', Generated by Reaction of Pyridine with (CO2)mâ^'. Journal of the American Chemical Society, 2010, 132, 15508-15511.	6.6	62
50	A Cluster Study of Anionic Hydration:â€‰ Spectroscopic Characterization of the I-Â·Wn, 1 â‰‰ n â‰‰ 3, Supramolecular Complexes at the Primary Steps of Solvation. Journal of Physical Chemistry A, 1999, 103, 443-447.	1.1	61
51	Anharmonicities and Isotopic Effects in the Vibrational Spectra of X^{â^'}Â·H₂O, Â·HDO, and Â·D₂O [X = Cl, Br, and I] Binary Complexes. Journal of Physical Chemistry A, 2010, 114, 1556-1568.	1.1	61
52	Site-specific vibrational spectral signatures of water molecules in the magic H ₃ O ⁺ (H ₂ O) ₂₀ and Cs ⁺ (H ₂ O) ₂₀ clusters. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18132-18137.	3.3	59
53	Large anharmonic effects in the infrared spectra of the symmetrical CH3NO2â^'â‹…(H2O) and CH3CO2â^'â‹…(H2O) complexes. Journal of Chemical Physics, 2003, 119, 10138-10145.	1.2	57
54	Modes of Activation of Organometallic Iridium Complexes for Catalytic Water and Câ€“H Oxidation. Inorganic Chemistry, 2014, 53, 423-433.	1.9	57

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55	Photoactivation of the Cl- + CH3Br SN2 Reaction via Rotationally Resolved Câ^'H Stretch Excitation of the Cl-Â·CH3Br Entrance Channel Complex. Journal of the American Chemical Society, 1999, 121, 6950-6951.	6.6	56
56	Argon Predissociation Spectroscopy of the OH-Â·H2O and Cl-Â·H2O Complexes in the 1000â^'1900 cm-1Region:Â Intramolecular Bending Transitions and the Search for the Shared-Proton Fundamental in the Hydroxide Monohydrate. Journal of Physical Chemistry A, 2005, 109, 571-575.	1.1	56
57	Gas phase vibrational spectroscopy of the protonated water pentamer: the role of isomers and nuclear quantum effects. Physical Chemistry Chemical Physics, 2016, 18, 26743-26754.	1.3	53
58	Deconstructing waterâ€™s diffuse OH stretching vibrational spectrum with cold clusters. Science, 2019, 364, 275-278.	6.0	53
59	Photoabsorption of negative cluster ions near the electron detachment threshold: A study of the (O2)â^'n system. Journal of Chemical Physics, 1990, 93, 268-275.	1.2	52
60	Microhydration of Contact Ion Pairs in M²⁺OH^{â€“}(H₂O)_{n=1â€“5} (M = Mg, Ca) Clusters: Spectral Manifestations of a Mobile Proton Defect in the First Hydration Shell. Journal of Physical Chemistry A, 2014, 118, 7590-7597.	1.1	52
61	Collisional activation of captured intermediates in the gas-phase SN2 reaction chloride + bromomethane .fwdarw. bromide + chloromethane. Journal of the American Chemical Society, 1991, 113, 9697-9699.	6.6	51
62	Spectroscopic Evidence for an Attractive Cationâ€“Cation Interaction in Hydroxyâ€Functionalized Ionic Liquids: A Hydrogenâ€Bonded Chainâ€like Trimer. Angewandte Chemie - International Edition, 2018, 57, 15364-15368.	7.2	51
63	Unraveling the Anomalous Solvatochromic Response of the Formate Ion Vibrational Spectrum: An Infrared, Ar-Tagging Study of the HCO₂^{Â¯}, DCO₂^{Â¯}, and HCO₂^{Â¯}Â·H₂O Ions. Journal of Physical Chemistry Letters, 2011, 2, 2437-2441.	2.1	49
64	Understanding the ionic liquid [NC₄₁₁₁][NTf₂] from individual building blocks: an IR-spectroscopic study. Physical Chemistry Chemical Physics, 2015, 17, 8518-8529.	1.3	48
65	Solvation of the Cl-Â·H2O Complex in CCl4 Clusters:â€‰ The Effect of Solvent-Mediated Charge Redistribution on the Ionic H-Bond. Journal of Physical Chemistry A, 2002, 106, 1205-1209.	1.1	47
66	Hidden role of intermolecular proton transfer in the anomalously diffuse vibrational spectrum of a trapped hydronium ion. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4706-E4713.	3.3	47
67	Structural Motifs in Cold Ternary Ion Complexes of Hydroxyl-Functionalized Ionic Liquids: Isolating the Role of Cationâ€“Cation Interactions. Journal of Physical Chemistry Letters, 2018, 9, 2979-2984.	2.1	47
68	Controlling the internal energy content of sizeâ€selected cluster ions: An experimental comparison of the metastable decay rate and photofragmentation methods of quantifying the internal excitation of (H2O)â^'n. Journal of Chemical Physics, 1991, 95, 7998-8004.	1.2	45
69	A Cluster Study of Cl2-Microhydration:Â Size-Dependent Competition between Symmetrical H-Bonding to the Anion and the Formation of Cyclic Water Networks in the Cl2-Â·1â^'5(H2O) Series. Journal of Physical Chemistry A, 2004, 108, 3910-3915.	1.1	45
70	Size-dependent collisional incorporation of D2O into (H2O)â^'n around n = 15: implications on the origin of magic numbers in the hydrated electron cluster distribution. Chemical Physics Letters, 1991, 181, 206-212.	1.2	44
71	Disentangling the Complex Vibrational Spectrum of the Protonated Water Trimer, H⁺(H₂O)₃, with Two-Color IR-IR Photodissociation of the Bare Ion and Anharmonic VSCF/VCI Theory. Journal of Physical Chemistry Letters, 2017, 8, 3782-3789.	2.1	44
72	Spectroscopic observation of vibrational Feshbach resonances in near-threshold photoexcitation of X-Â·CH3NO2 (X-=I- and Br-). Faraday Discussions, 2000, 115, 395-406.	1.6	43

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73	Hiding in Plain Sight: Unmasking the Diffuse Spectral Signatures of the Protonated N-Terminus in Isolated Dipeptides Cooled in a Cryogenic Ion Trap. Journal of Physical Chemistry Letters, 2013, 4, 3450-3457.	2.1	43
74	Photodestruction spectra of the anionic water clusters, (H2O)â^'n, n=18 and 30: Absorption to the red of eâ^'aq. Journal of Chemical Physics, 1991, 94, 5240-5242.	1.2	42
75	Observation of the dipoleâ€bound excited state of the Iâ^'â‹…acetone ionâ€molecule complex. Journal of Chemical Physics, 1995, 102, 6335-6338.	1.2	42
76	Vibrationally Induced Proton Transfer in F^{â^'}(H₂O) and F^{â^'}(D₂O). Journal of Physical Chemistry A, 2008, 112, 12337-12344.	1.1	42
77	Alkali-Controlled Câ€"H Cleavage or Nâ€"C Bond Formation by N₂-Derived Iron Nitrides and Imides. Journal of the American Chemical Society, 2016, 138, 11185-11191.	6.6	42
78	Optical-optical double resonance on cooled molecular ions: rotational assignments in the perturbed CO+2- system. Chemical Physics Letters, 1982, 92, 225-231.	1.2	41
79	Infrared predissociation spectroscopy of I[sup â^']â‹…(CH[sub 3]OH)[sub n], n=1,2: Cooperativity in asymmetric solvation. Journal of Chemical Physics, 2002, 116, 4853.	1.2	41
80	Dominant structural motifs of NOâ^'â‹…(H2O)n complexes: Infrared spectroscopic and ab initio studies. Journal of Chemical Physics, 2003, 118, 4945-4953.	1.2	41
81	Preparation and photoelectron spectra of the dc missingâ€™ <mml:math altimg="si8.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/co	1.2	41
82	Caught in the Act of Dissolution. Science, 2002, 298, 69-69.	6.0	40
83	Generating Spectra from Ground-State Wave Functions: Unraveling Anharmonic Effects in the OH^{â^'}Â·H₂O Vibrational Predissociation Spectrum. Journal of Physical Chemistry A, 2009, 113, 7346-7352.	1.1	39
84	Ionic liquids from the bottom up: Local assembly motifs in [EMIM][BF4] through cryogenic ion spectroscopy. Journal of Chemical Physics, 2013, 139, 224305.	1.2	39
85	Persistence of Dual Free Internal Rotation in NH₄⁺(H₂O)Â·He_{n=0â€"3} Ionâ€"Molecule Complexes: Expanding the Case for Quantum Delocalization in He Tagging. Journal of Physical Chemistry A, 2015, 119, 4170-4176.	1.1	38
86	Isolation of site-specific anharmonicities of individual water molecules in the Iâ^'Â·(H2O)2 complex using tag-free, isotopomer selective IR-IR double resonance. Chemical Physics Letters, 2017, 690, 159-171.	1.2	38
87	Infrared spectroscopic observation of the argon isomer distribution in evaporative ensembles of Iâ^'â‹…ROHâ‹…Arm (R=methyl, ethyl, isopropyl) clusters. Journal of Chemical Physics, 1999, 111, 9593-9599.	1.2	37
88	Characterizing the Intramolecular H-bond and Secondary Structure in Methylated GlyGlyH⁺ with H₂ Predissociation Spectroscopy. Journal of the American Society for Mass Spectrometry, 2011, 22, 1941-52.	1.2	37
89	Thermodynamics of Water Dimer Dissociation in the Primary Hydration Shell of the Iodide Ion with Temperature-Dependent Vibrational Predissociation Spectroscopy. Journal of Physical Chemistry A, 2015, 119, 1859-1866.	1.1	37
90	Molecular-level origin of the carboxylate head group response to divalent metal ion complexation at the airâ€"water interface. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14874-14880.	3.3	37

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91	Autodetachment from vibrational levels of the Oâ¯2 Aâ€‰2Îu resonance across its dissociation limit by photoexcitation from Oâ¯2 Xâ€‰2Îg. Journal of Chemical Physics, 1996, 105, 1807-1814.	1.2	36
92	Comparison of the local binding motifs in the imidazolium-based ionic liquids [EMIM][BF4] and [EMMIM][BF4] through cryogenic ion vibrational predissociation spectroscopy: Unraveling the roles of anharmonicity and intermolecular interactions. Journal of Chemical Physics, 2015, 142, 064306.	1.2	35
93	The angular distribution of photoelectrons ejected from the hydrated electron cluster (H2O)â¯18. Journal of Chemical Physics, 1990, 92, 3243-3245.	1.2	33
94	Why Does Argon Bind to Deuterium? Isotope Effects and Structures of ArÂ·H ₅O ₂ ⁺ Complexes. Journal of Physical Chemistry A, 2008, 112, 6074-6078.	1.1	33
95	On the vibrational fine structure in the nearâ€threshold photofragmentation spectrum of the Iâ¯â‹…CH3I complex: Spectroscopic observation of nonadiabatic effects in electronâ€molecule scattering. Journal of Chemical Physics, 1996, 105, 10416-10423.	1.2	32
96	Capturing intrinsic site-dependent spectral signatures and lifetimes of isolated OH oscillators in extended water networks. Nature Chemistry, 2020, 12, 159-164.	6.6	32
97	Isolating the Spectral Signatures of Individual Sites in Water Networks Using Vibrational Double-Resonance Spectroscopy of Cluster Isotopomers. Journal of Physical Chemistry Letters, 2010, 1, 2396-2401.	2.1	31
98	NH+â€“F Hydrogen Bonding in a Fluorinated â€œProton Spongeâ€•Derivative: Integration of Solution, Solid-State, Gas-Phase, and Computational Studies. Journal of Organic Chemistry, 2011, 76, 7975-7984.	1.7	31
99	Photoelectron spectroscopy of the gasâ€phase SN2 reaction intermediates Iâ¯â‹…CH3I and Iâ¯â‹…CD3I: Distortion of the CH3I at the â€˜â€˜ionâ€“dipoleâ€™â€™ complex. Journal of Chemical Physics, 1993, 99, 4869-4872.	1.2	30
100	Vibrational Spectra and Fragmentation Pathways of Size-Selected, D₂-Tagged Ammonium/Methylammonium Bisulfate Clusters. Journal of Physical Chemistry A, 2013, 117, 13265-13274.	1.1	30
101	The charge transfer excited state of the Iâ¯â‹…CH3ISN2 reaction intermediate: Photoinduced intracluster dissociative attachment. Journal of Chemical Physics, 1994, 101, 10507-10520.	1.2	29
102	Diffuse Vibrational Signature of a Single Proton Embedded in the Oxalate Scaffold, HO₂CCO₂^{â€“}. Journal of Physical Chemistry A, 2015, 119, 13018-13024.	1.1	29
103	Cooperatively enhanced hydrogen bonds in ionic liquids: closing the loop with molecular mimics of hydroxy-functionalized cations. Physical Chemistry Chemical Physics, 2019, 21, 18092-18098.	1.3	29
104	Integration of High-Resolution Mass Spectrometry with Cryogenic Ion Vibrational Spectroscopy. Journal of the American Society for Mass Spectrometry, 2019, 30, 1551-1557.	1.2	28
105	Vibronic structure of the CO₂⁺ion: reinvestigation of the antisymmetric stretch vibration in the [Xtilde], Ãƒ, and [Btilde] states. Molecular Physics, 1995, 85, 839-868.	0.8	27
106	Origin of the diffuse vibrational signature of a cyclic intramolecular proton bond: Anharmonic analysis of protonated 1,8-disubstituted naphthalene ions. Journal of Chemical Physics, 2013, 139, 024301.	1.2	27
107	Tag-Free and Isotopomer-Selective Vibrational Spectroscopy of the Cryogenically Cooled H₉O₄⁺ Cation with Two-Color, IRâ€“IR Double-Resonance Photoexcitation: Isolating the Spectral Signature of a Single OH Group in the Hydronium Ion Core. Journal of Physical Chemistry A, 2018, 122, 9275-9284.	1.1	27
108	Linking the photoelectron and infrared spectroscopies of the (H2O)6â¯ isomers. Journal of Chemical Physics, 2002, 116, 1201-1203.	1.2	26

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109	Characterization of Highly Unusual NH⁺â€“O Hydrogen Bonding to Ester Ether Oxygen Atoms through Spectroscopic and Computational Studies. Journal of Physical Chemistry A, 2012, 116, 3556-3560.	1.1	26
110	Characterization of the primary hydration shell of the hydroxide ion with H2 tagging vibrational spectroscopy of the OHâ˜ â‹…(H2O)n=2,3 and ODâ˜ â‹…(D2O)n=2,3 clusters. Journal of Chemical Physics, 2016, 145, 134304.	1.2	26
111	Groundâ€State Structure of the Protonâ€Bound Formate Dimer by Coldâ€Ion Infrared Action Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 10615-10619.	7.2	26
112	Double-contact ion-molecule binding: Infrared characterization of the ionic H bonds to formic acid in the Iâ˜â‹…HCOOH complex. Journal of Chemical Physics, 2000, 113, 7879-7884.	1.2	25
113	Synthesis, Characterization, and Nitrogenase-Relevant Reactions of an Iron Sulfide Complex with a Bridging Hydride. Journal of the American Chemical Society, 2015, 137, 13220-13223.	6.6	25
114	Coordination-Dependent Spectroscopic Signatures of Divalent Metal Ion Binding to Carboxylate Head Groups: H₂- and He-Tagged Vibrational Spectra of M²⁺Â·RCO₂Â¯ (M =) Tj ETQq0 0 0 rgBT /Overlo Chemistry Letters, 2017, 8, 484-488.	2.1	25
115	Isolating the Charge-Transfer Component of the Anionic H Bond Via Spin Suppression of the Intracluster Proton Transfer Reaction in the NO-Â·H2O Entrance Channel Complexâ€. Journal of Physical Chemistry A, 2002, 106, 10010-10014.	1.1	24
116	Argon cluster-mediated isolation and vibrational spectra of peroxy and nominally D3h isomers of CO3â˜ and NO3â˜. Journal of Chemical Physics, 2008, 129, 064305.	1.2	23
117	Isotopomer-selective spectra of a single intact H2O molecule in the Cs+(D2O)5H2O isotopologue: Going beyond pattern recognition to harvest the structural information encoded in vibrational spectra. Journal of Chemical Physics, 2016, 144, 074305.	1.2	23
118	Survey of Ar-Tagged Predissociation and Vibrationally Mediated Photodetachment Spectroscopies of the Vinylidene Anion, C₂H₂^{â˜}. Journal of Physical Chemistry A, 2010, 114, 1592-1601.	1.1	22
119	Vibrational spectroscopy of the cryogenically cooled O- and N-protomers of 4-aminobenzoic acid: Tag effects, isotopic labels, and identification of the E,Z isomer of the O-protomer. International Journal of Mass Spectrometry, 2020, 457, 116427.	0.7	22
120	Photoelectron imaging study of vibrationally mediated electron autodetachment in the type I isomer of the water hexamer anion. Chemical Physics Letters, 2008, 467, 32-36.	1.2	21
121	Characterization of an activated iridium water splitting catalyst using infrared photodissociation of H2 tagged ions. Physical Chemistry Chemical Physics, 2012, 14, 10109.	1.3	21
122	Identification and Partial Structural Characterization of Mass Isolated Valsartan and Its Metabolite with Messenger Tagging Vibrational Spectroscopy. Journal of the American Society for Mass Spectrometry, 2017, 28, 2414-2422.	1.2	21
123	Vibrational Signatures of Solvent-Mediated Deformation of the Ternary Core Ion in Size-Selected [MgSO₄Mg(H₂O)_{n=4â€“11}]²⁺ Clusters. Journal of Physical Chemistry A, 2015, 119, 8294-8302.	1.1	20
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