Richard James Saykally

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Nanowire dye-sensitized solar cells. Nature Materials, 2005, 4, 455-459.	13.3	5,232
2	Low-Temperature Wafer-Scale Production of ZnO Nanowire Arrays. Angewandte Chemie - International Edition, 2003, 42, 3031-3034.	7.2	1,562
3	Single gallium nitride nanowire lasers. Nature Materials, 2002, 1, 106-110.	13.3	1,144
4	Nanoribbon Waveguides for Subwavelength Photonics Integration. Science, 2004, 305, 1269-1273.	6.0	879
5	Optical Cavity Effects in ZnO Nanowire Lasers and Waveguides. Journal of Physical Chemistry B, 2003, 107, 8816-8828.	1.2	602
6	Dendritic Nanowire Ultraviolet Laser Array. Journal of the American Chemical Society, 2003, 125, 4728-4729.	6.6	577
7	Small Carbon Clusters:  Spectroscopy, Structure, and Energetics. Chemical Reviews, 1998, 98, 2313-2358.	23.0	567
8	Tunable nanowire nonlinear optical probe. Nature, 2007, 447, 1098-1101.	13.7	544
9	Energetics of Hydrogen Bond Network Rearrangements in Liquid Water. Science, 2004, 306, 851-853.	6.0	476
10	Single Nanowire Lasers. Journal of Physical Chemistry B, 2001, 105, 11387-11390.	1.2	425
11	ON THE NATURE OF IONS AT THE LIQUID WATER SURFACE. Annual Review of Physical Chemistry, 2006, 57, 333-364.	4.8	416
12	The Effects of Dissolved Halide Anions on Hydrogen Bonding in Liquid Water. Journal of the American Chemical Society, 2007, 129, 13847-13856.	6.6	416
13	Unified description of temperature-dependent hydrogen-bond rearrangements in liquid water. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14171-14174.	3.3	369
14	Many-Body Effects in Intermolecular Forces. Chemical Reviews, 1994, 94, 1975-1997.	23.0	334
15	The Water Trimer. Chemical Reviews, 2003, 103, 2533-2578.	23.0	325
16	Ultrafast Carrier Dynamics in Single ZnO Nanowire and Nanoribbon Lasers. Nano Letters, 2004, 4, 197-204.	4.5	319
17	Velocity-Modulated Infrared Laser Spectroscopy of Molecular Ions: Theν1Band of HCO+. Physical Review Letters, 1983, 50, 727-731.	2.9	312
18	Near-Field Imaging of Nonlinear Optical Mixing in Single Zinc Oxide Nanowires. Nano Letters, 2002, 2, 279-283.	4.5	305

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19	Self-Organized GaN Quantum Wire UV Lasers. Journal of Physical Chemistry B, 2003, 107, 8721-8725.	1.2	281
20	Far infrared laser magnetic resonance of singlet methylene: Singlet–triplet perturbations, 5251-5264.	1.2	280
21	Laboratory Microwave Spectrum of HCO+. Physical Review Letters, 1975, 35, 1269-1272.	2.9	228
22	Evidence for an Enhanced Hydronium Concentration at the Liquid Water Surface. Journal of Physical Chemistry B, 2005, 109, 7976-7980.	1.2	226
23	Optical routing and sensing with nanowire assemblies. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7800-7805.	3.3	224
24	The structure of ambient water. Molecular Physics, 2010, 108, 1415-1433.	0.8	209
25	Elucidating the mechanism of selective ion adsorption to the liquid water surface. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 701-705.	3.3	202
26	Is the liquid water surface basic or acidic? Macroscopic vs. molecular-scale investigations. Chemical Physics Letters, 2008, 458, 255-261.	1.2	192
27	Infrared Spectroscopy of Cationized Arginine in the Gas Phase:Â Direct Evidence for the Transition from Nonzwitterionic to Zwitterionic Structure. Journal of the American Chemical Society, 2007, 129, 1612-1622.	6.6	189
28	Organic chemistry of C60 (buckminsterfullerene): chromatography and osmylation. Journal of Organic Chemistry, 1990, 55, 6250-6252.	1.7	183
29	Confirmation of enhanced anion concentration at the liquid water surface. Chemical Physics Letters, 2004, 397, 51-55.	1.2	178
30	Enhanced Concentration of Polarizable Anions at the Liquid Water Surface:Â SHG Spectroscopy and MD Simulations of Sodium Thiocyanide. Journal of Physical Chemistry B, 2005, 109, 10915-10921.	1.2	175
31	Direct experimental validation of the Jones–Ray effect. Chemical Physics Letters, 2004, 397, 46-50.	1.2	168
32	Effects of Alkaline Earth Metal Ion Complexation on Amino Acid Zwitterion Stability: Results from Infrared Action Spectroscopy. Journal of the American Chemical Society, 2008, 130, 6463-6471.	6.6	166
33	Fully coupled six-dimensional calculations of the water dimer vibration-rotation-tunneling states with a split Wigner pseudo spectral approach. Journal of Chemical Physics, 1997, 106, 8527-8544.	1.2	161
34	Effects of Alkali Metal Halide Salts on the Hydrogen Bond Network of Liquid Water. Journal of Physical Chemistry B, 2005, 109, 7046-7052.	1.2	159
35	Raman Thermometry Measurements of Free Evaporation from Liquid Water Droplets. Journal of the American Chemical Society, 2006, 128, 12892-12898.	6.6	150
36	Femtosecond Spectroscopy of Carrier Relaxation Dynamics in Type II CdSe/CdTe Tetrapod Heteronanostructures. Nano Letters, 2005, 5, 1809-1813.	4.5	148

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37	Velocity modulation laser spectroscopy of negative ions: The infrared spectrum of hydroxide (OHâ^'). Journal of Chemical Physics, 1986, 84, 5308-5313.	1.2	141
38	Cavity ring down dye laser spectroscopy of jet-cooled metal clusters: Cu2 and Cu3. Chemical Physics Letters, 1990, 172, 214-218.	1.2	137
39	Probing the Interfacial Structure of Aqueous Electrolytes with Femtosecond Second Harmonic Generation Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 14060-14073.	1.2	137
40	The vibrationâ€rotation spectrum of the hydroxide anion (OHâ^'). Journal of Chemical Physics, 1985, 83, 5338-5339.	1.2	136
41	Determination of a flexible (12D) water dimer potential via direct inversion of spectroscopic data. Journal of Chemical Physics, 2002, 117, 8710-8722.	1.2	129
42	Adsorption of Ions to the Surface of Dilute Electrolyte Solutions:  The Jonesâ^'Ray Effect Revisited. Journal of the American Chemical Society, 2005, 127, 15446-15452.	6.6	125
43	The water dimer I: Experimental characterization. Chemical Physics Letters, 2015, 633, 13-26.	1.2	124
44	Characterization of selective binding of alkali cations with carboxylate by x-ray absorption spectroscopy of liquid microjets. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6809-6812.	3.3	121
45	Effects of Cations on the Hydrogen Bond Network of Liquid Water:Â New Results from X-ray Absorption Spectroscopy of Liquid Microjets. Journal of Physical Chemistry B, 2006, 110, 5301-5309.	1.2	119
46	On the hydration and hydrolysis of carbon dioxide. Chemical Physics Letters, 2011, 514, 187-195.	1.2	119
47	Terahertz Laser Vibrationâ^'Rotation Tunneling Spectroscopy of the Water Tetramer. Journal of Physical Chemistry A, 1997, 101, 9022-9031.	1.1	110
48	One Water Molecule Stabilizes the Cationized Arginine Zwitterion. Journal of the American Chemical Society, 2007, 129, 13544-13553.	6.6	109
49	Infrared Spectroscopy of Cationized Lysine and ε- <i>N</i> -methyllysine in the Gas Phase:  Effects of Alkali-Metal Ion Size and Proton Affinity on Zwitterion Stability. Journal of Physical Chemistry A, 2007, 111, 7753-7760.	1.1	108
50	Infrared cavity ringdown laser absorption spectroscopy (IR-CRLAS). Chemical Physics Letters, 1995, 245, 273-280.	1.2	106
51	Hydrogen Bonding in Alcohol Clusters:  A Comparative Study by Infrared Cavity Ringdown Laser Absorption Spectroscopy. Journal of Physical Chemistry A, 2000, 104, 1423-1429.	1.1	105
52	Soft X-ray Absorption Spectroscopy of Liquids and Solutions. Chemical Reviews, 2017, 117, 13909-13934.	23.0	103
53	Pseudorotation in Water Trimer Isotopomers Using Terahertz Laser Spectroscopy. Journal of Physical Chemistry A, 1997, 101, 9032-9041.	1.1	100
54	High spectral resolution multiplex CARS spectroscopy using chirped pulses. Chemical Physics Letters, 2004, 387, 436-441.	1.2	96

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55	Probing the Local Structure of Liquid Water by X-ray Absorption Spectroscopyâ€. Journal of Physical Chemistry B, 2006, 110, 20038-20045.	1.2	91
56	Laboratory Microwave Spectrum and Rest Frequencies of the N2H(+) Ion. Astrophysical Journal, 1976, 205, L101.	1.6	91
57	Evidence for Water Rings in the Hexahydrated Sulfate Dianion from IR Spectroscopy. Journal of the American Chemical Society, 2007, 129, 2220-2221.	6.6	89
58	Vibrational spectroscopy of van der Waals bonds: Measurement of the perpendicular bend of ArHCl by intracavity far infrared laser spectroscopy of a supersonic jet. Journal of Chemical Physics, 1986, 84, 1171-1180.	1.2	87
59	A study of the structure and dynamics of the hydronium ion by highâ€resolution infrared laser spectroscopy. I. The ν3 band of H3 16O+. Journal of Chemical Physics, 1985, 82, 3570-3579.	1.2	86
60	Water Dimers in the Atmosphere:  Equilibrium Constant for Water Dimerization from the VRT(ASP-W) Potential Surface. Journal of Physical Chemistry A, 2001, 105, 515-519.	1.1	85
61	Hydration of the Calcium Dication: Direct Evidence for Second Shell Formation from Infrared Spectroscopy. ChemPhysChem, 2007, 8, 2245-2253.	1.0	85
62	Velocityâ€nodulated infrared laser spectroscopy of molecular ions: The ν1 band of HNN+. Journal of Chemical Physics, 1983, 78, 5837-5838.	1.2	84
63	Mechanism of ion adsorption to aqueous interfaces: Graphene/water vs. air/water. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13369-13373.	3.3	84
64	A long path length pulsed slit valve appropriate for high temperature operation: Infrared spectroscopy of jetâ€cooled large water clusters and nucleotide bases. Review of Scientific Instruments, 1996, 67, 410-416.	0.6	83
65	Near-Field Scanning Optical Microscopy (NSOM) Studies of the Relationship between Interchain Interactions, Morphology, Photodamage, and Energy Transport in Conjugated Polymer Films. Journal of Physical Chemistry B, 2001, 105, 5153-5160.	1.2	82
66	Structure and torsional dynamics of the water octamer from THz laser spectroscopy near 215 μm. Science, 2016, 352, 1194-1197.	6.0	82
67	The water dimer II: Theoretical investigations. Chemical Physics Letters, 2018, 700, 163-175.	1.2	82
68	Infrared Action Spectra of Ca2+(H2O)11â~'69 Exhibit Spectral Signatures for Condensed-Phase Structures with Increasing Cluster Size. Journal of the American Chemical Society, 2008, 130, 15482-15489.	6.6	79
69	Nonlinear Chemical Imaging Nanomicroscopy:Â From Second and Third Harmonic Generation to Multiplex (Broad-Bandwidth) Sum Frequency Generation Near-Field Scanning Optical Microscopy. Journal of Physical Chemistry B, 2002, 106, 5143-5154.	1.2	78
70	Water dimer hydrogen bond stretch, donor torsion overtone, and "in-plane bend―vibrations. Journal of Chemical Physics, 2003, 119, 8927-8937.	1.2	76
71	Two sides of the acid–base story. Nature Chemistry, 2013, 5, 82-84.	6.6	74
72	Velocity modulation laser spectroscopy of negative ions. The .nu.3 band of azide anion. Journal of the American Chemical Society, 1987, 109, 2884-2887.	6.6	73

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73	Hydration of Alkaline Earth Metal Dications: Effects of Metal Ion Size Determined Using Infrared Action Spectroscopy. Journal of the American Chemical Society, 2009, 131, 13270-13277.	6.6	72
74	An extended study of the lowest Πbending vibration–rotation spectrum of Ar–HCl by intracavity far infrared laser/microwave double resonance spectroscopy. Journal of Chemical Physics, 1987, 87, 5149-5155.	1.2	66
75	Nature of the Aqueous Hydroxide Ion Probed by X-ray Absorption Spectroscopy. Journal of Physical Chemistry A, 2007, 111, 4776-4785.	1.1	63
76	Pinning Down the Water Hexamer. Science, 2012, 336, 814-815.	6.0	63
77	Cation-cation contact pairing in water: Guanidinium. Journal of Chemical Physics, 2013, 139, 035104.	1.2	62
78	Communication: Hydrogen bonding interactions in water-alcohol mixtures from X-ray absorption spectroscopy. Journal of Chemical Physics, 2016, 144, 191103.	1.2	62
79	The highâ€resolution far infrared spectrum of a van der Waals stretching vibration: The ν3 band of Ar–HCl. Journal of Chemical Physics, 1987, 87, 5156-5160.	1.2	61
80	Reactivity and Infrared Spectroscopy of Gaseous Hydrated Trivalent Metal Ions. Journal of the American Chemical Society, 2008, 130, 9122-9128.	6.6	61
81	Adsorption of thiocyanate ions to the dodecanol/water interface characterized by UV second harmonic generation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15176-15180.	3.3	61
82	Infrared laser spectroscopy of jet-cooled carbon clusters. Molecular Physics, 1993, 79, 769-776.	0.8	60
83	Alkali Metal Ion Binding to Glutamine and Glutamine Derivatives Investigated by Infrared Action Spectroscopy and Theory. Journal of Physical Chemistry A, 2008, 112, 8578-8584.	1.1	60
84	A study of the structure and dynamics of the hydronium ion by high resolution infrared laser spectroscopy. II. The ν4 perpendicular bending mode of H3 16O+. Journal of Chemical Physics, 1987, 87, 3347-3351.	1.2	59
85	Complete characterization of the water dimer vibrational ground state and testing the VRT(ASP-W)III, SAPT-5st, and VRT(MCY-5f) surfaces. Molecular Physics, 2003, 101, 3477-3492.	0.8	59
86	The molecular structure of HCO+by the microwave substitution method. Journal of Chemical Physics, 1981, 75, 4256-4260.	1.2	58
87	Observation of nitrate ions at the air/water interface by UV-second harmonic generation. Chemical Physics Letters, 2007, 449, 261-265.	1.2	58
88	Electrokinetic Power Generation from Liquid Water Microjets. Journal of Physical Chemistry C, 2008, 112, 17018-17022.	1.5	58
89	The Nature of Interchain Excitations in Conjugated Polymers:  Spatially-Varying Interfacial Solvatochromism of Annealed MEH-PPV Films Studied by Near-Field Scanning Optical Microscopy (NSOM). Journal of Physical Chemistry B, 2002, 106, 9496-9506.	1.2	57
90	Infrared cavity ringdown spectroscopy of acid–water clusters: HCl–H2O, DCl–D2O, and DCl–(D2O)2. Journal of Chemical Physics, 2003, 118, 1221-1229.	1.2	57

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91	The μ23 vibrational spectrum of the free ammonium ion (NH4+). Journal of Chemical Physics, 1983, 79, 3159-3160.	1.2	56
92	Formation of hydrated triply charged metal ions from aqueous solutions using nanodrop mass spectrometry. International Journal of Mass Spectrometry, 2006, 253, 256-262.	0.7	55
93	Laser magnetic resonance rotational spectroscopy of 2Σ radicals: Ethynyl (CCH). Journal of Chemical Physics, 1984, 80, 2247-2255.	1.2	54
94	Quantitative characterization of the (D2O)3 torsional manifold by terahertz laser spectroscopy and theoretical analysis. Journal of Chemical Physics, 1999, 110, 4369-4381.	1.2	53
95	Velocity Modulation Spectroscopy of Ions. Chemical Reviews, 2005, 105, 3220-3234.	23.0	53
96	Investigation of Terahertz Vibration–Rotation Tunneling Spectra for the Water Octamer. Journal of Physical Chemistry A, 2013, 117, 6960-6966.	1.1	52
97	Far-infrared laser spectroscopy of van der Waals bonds: a powerful new probe of intermolecular forces. Accounts of Chemical Research, 1989, 22, 295-300.	7.6	51
98	Chemically Selective Imaging of Subcellular Structure in Human Hepatocytes with Coherent Anti-Stokes Raman Scattering (CARS) Near-Field Scanning Optical Microscopy (NSOM). Journal of Physical Chemistry B, 2002, 106, 8489-8492.	1.2	51
99	Observation of Pure Rotational Transitions in the HBr+Molecular Ion by Laser Magnetic Resonance. Physical Review Letters, 1979, 43, 515-518.	2.9	50
100	Exciton Dynamics in CdSâ^'Ag ₂ S Nanorods with Tunable Composition Probed by Ultrafast Transient Absorption Spectroscopy. Journal of Physical Chemistry C, 2010, 114, 5879-5885.	1.5	50
101	Infrared laser spectroscopy of uracil in a pulsed slit jet. Journal of Chemical Physics, 1995, 103, 9502-9505.	1.2	49
102	Quantitative characterization of the water trimer torsional manifold by terahertz laser spectroscopy and theoretical analysis. II. (H2O)3. Journal of Chemical Physics, 1999, 111, 7789-7800.	1.2	49
103	Isotope Fractionation of Water during Evaporation without Condensation. Journal of Physical Chemistry B, 2005, 109, 24391-24400.	1.2	49
104	Effects of vibrational motion on core-level spectra of prototype organic molecules. Chemical Physics Letters, 2008, 467, 195-199.	1.2	49
105	A study of the ν1 fundamental and bendâ€excited hot band of DNN+ by velocity modulation absorption spectroscopy with an infrared difference frequency laser. Journal of Chemical Physics, 1984, 81, 5281-5287.	1.2	47
106	Evidence for a secondary minimum in the ArHCl potential surface from far infrared laser spectroscopy of the lowest Σ bending vibration. Journal of Chemical Physics, 1987, 86, 5211-5212.	1.2	47
107	Singleâ€Photon Infrared Emission Spectroscopy of Gaseous Polycyclic Aromatic Hydrocarbon Cations: A Direct Test for Proposed Carriers of the Unidentified Infrared Emission Bands. Astrophysical Journal, Supplement Series, 2002, 143, 455-467.	3.0	47
108	Chirped Coherent Anti-Stokes Raman Scattering for High Spectral Resolution Spectroscopy and Chemically Selective Imaging. Journal of Physical Chemistry B, 2006, 110, 5854-5864.	1.2	47

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109	The high resolution infrared spectrum and molecular structure of the superacid H2F+ by velocity modulation laser absorption spectroscopy. Journal of Chemical Physics, 1984, 81, 4189-4199.	1.2	46
110	Velocity modulation laser spectroscopy of vibrationally excited CF+ determination of the molecular potential function. Chemical Physics Letters, 1986, 125, 165-169.	1.2	46
111	X-Ray absorption spectroscopy of LiBF ₄ in propylene carbonate: a model lithium ion battery electrolyte. Physical Chemistry Chemical Physics, 2014, 16, 23568-23575.	1.3	46
112	Determination of the Born–Oppenheimer potential function of CCl+ by velocity modulation diode laser spectroscopy. Journal of Chemical Physics, 1986, 85, 6276-6281.	1.2	45
113	A high resolution study of the ν3 band of the ammonium ion (NH+4) by velocity modulation laser absorption spectroscopy. Journal of Chemical Physics, 1984, 80, 3969-3977.	1.2	44
114	Velocity modulation infrared laser spectroscopy of negative ions: The ν3, ν3+ν1â^î¼21, ν3+ν2â^î¼22, ar bands of cyanate (NCOâ^'). Journal of Chemical Physics, 1987, 86, 6631-6636.	nd Î ¹ ⁄23+2Î [:] 1:2	1/22â^'2Î1/22 44
115	Tunable far-infrared laser spectroscopy in a planar supersonic jet: The Σ bending vibration of Arî—,H35Cl. Chemical Physics Letters, 1987, 141, 289-291.	1.2	44
116	Non-additive intermolecular forces from the spectroscopy of van der Waals trimers: far-infrared spectra and calculations on Ar2-DCI. Molecular Physics, 1994, 81, 579-598.	0.8	44
117	CHEMISTRY: Building SolutionsOne Molecule at a Time. Science, 2003, 299, 1329-1330.	6.0	44
118	Infrared Cavity Ringdown Spectroscopy of Jet-Cooled Nucleotide Base Clusters and Water Complexes. Journal of Physical Chemistry A, 2004, 108, 10989-10996.	1.1	44
119	The Electronic Structure of the Hydrated Proton:  A Comparative X-ray Absorption Study of Aqueous HCl and NaCl Solutions. Journal of Physical Chemistry B, 2006, 110, 1166-1171.	1.2	44
120	Nanoscopic interchain aggregate domain formation in conjugated polymer films studied by third harmonic generation near-field scanning optical microscopy. Journal of Chemical Physics, 2002, 117, 6688-6698.	1.2	43
121	FAR INFRARED LASER MAGNETIC RESONANCE. , 1980, , 95-138.		43
122	Hydrogen Bond Breaking Dynamics of the Water Trimer in the Translational and Librational Band Region of Liquid Water. Journal of the American Chemical Society, 2001, 123, 5938-5941.	6.6	42
123	Electrokinetic Hydrogen Generation from Liquid Water Microjets. Journal of Physical Chemistry C, 2007, 111, 12031-12037.	1.5	42
124	Electronic absorption spectroscopy of molecular ions in plasmas by dye laser velocity modulation: The Aâ†X system of N+2. Journal of Chemical Physics, 1987, 87, 898-901.	1.2	41
125	Terahertz vibration–rotation–tunneling spectroscopy of water clusters in the translational band region of liquid water. Journal of Chemical Physics, 2001, 114, 3994-4004.	1.2	40
126	Laser magnetic resonance measurement of the 2 3P2–2 3P1 splitting in atomic oxygen. Journal of Chemical Physics, 1979, 71, 1564-1566.	1.2	39

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127	On the importance of nuclear quantum motions in near edge x-ray absorption fine structure spectroscopy of molecules. Journal of Chemical Physics, 2009, 130, 184109.	1.2	39
128	pH-dependent x-ray absorption spectra of aqueous boron oxides. Journal of Chemical Physics, 2011, 134, 154503.	1.2	39
129	Experimental potential functions for open and closed shell molecular ions: Adiabatic and nonadiabatic corrections in X3ΣⰒ OH+ and X1Σ+ ArH+. Journal of Molecular Spectroscopy, 1988, 131, 343-366.	0.4	38
130	Nonlinear Chemical Imaging Microscopy:Â Near-Field Third Harmonic Generation Imaging of Human Red Blood Cells. Analytical Chemistry, 2000, 72, 5361-5364.	3.2	38
131	An investigation of the laser optogalvanic effect for atoms and molecules in recombination-limited plasmas. Molecular Physics, 1984, 52, 541-566.	0.8	37
132	Velocity modulation infrared laser spectroscopy of negative ions: Measurement of the ν1 vibration of amide (NHâ^2). Journal of Chemical Physics, 1986, 84, 7056-7057.	1.2	37
133	The ν5 band of C7. Chemical Physics Letters, 1991, 182, 17-20.	1.2	37
134	Water Pentamer:  Characterization of the Torsional-Puckering Manifold by Terahertz VRT Spectroscopy. Journal of Physical Chemistry A, 2005, 109, 6483-6497.	1.1	37
135	Measurement of Bromide Ion Affinities for the Air/Water and Dodecanol/Water Interfaces at Molar Concentrations by UV Second Harmonic Generation Spectroscopy. Journal of Physical Chemistry C, 2010, 114, 13746-13751.	1.5	37
136	Radiative lifetimes of trapped molecular ions: HCl+ and HBr+. Journal of Chemical Physics, 1983, 78, 7073-7076.	1.2	36
137	Characterization of silicon-carbon clusters by infrared laser spectroscopy. The v1 band of SiC4. Chemical Physics Letters, 1995, 237, 77-80.	1.2	35
138	Bifurcation tunneling dynamics in the water trimer. Journal of Chemical Physics, 2002, 117, 8823-8835.	1.2	35
139	Investigation of protein conformation and interactions with salts via X-ray absorption spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14008-14013.	3.3	35
140	Color center laser optogalvanic spectroscopy of lithium, barium, neon and argon Rydberg states in hollow cathode discharges. Optics Communications, 1982, 40, 277-282.	1.0	34
141	Tunable far-infrared laser spectroscopy of van der Waals bonds: thejkc= 10↕00Σ bending vibration of Ar-14NH3. Molecular Physics, 1990, 71, 453-460.	0.8	34
142	Far-infrared laser vibration–rotation–tunneling spectroscopy of water clusters in the librational band region of liquid water. Journal of Chemical Physics, 2001, 114, 4005-4015.	1.2	34
143	Velocity modulation laser spectroscopy of negative ions: The infrared spectrum of hydrosulfide (SHâ~'). Journal of Chemical Physics, 1987, 86, 1698-1702.	1.2	33
144	Revisiting the total ion yield x-ray absorption spectra of liquid water microjets. Journal of Physics Condensed Matter, 2008, 20, 205105.	0.7	33

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145	Velocity modulation infrared laser spectroscopy of molecular ions: The ν1 and ν3 bands of fluoronium (H2F+). Journal of Chemical Physics, 1984, 80, 2973-2974.	1.2	32
146	Measurement of the rotational spectrum of HF+by laser magnetic resonance. Molecular Physics, 1984, 52, 245-249.	0.8	32
147	Velocity modulation diode laser spectroscopy of negative ions: The ν1, ν1+ν2â~ν2, ν1+ν3â~ν3 bands thiocyanate (NCSâ~). Journal of Chemical Physics, 1987, 87, 3352-3356.	of 1.2	32
148	A crystallographic analysis of C60(Buckminsterfullerene). Journal of the Chemical Society Chemical Communications, 1991, , 775.	2.0	32
149	Near-Field Infrared Sum-Frequency Generation Imaging of Chemical Vapor Deposited Zinc Selenide. Langmuir, 2001, 17, 2055-2058.	1.6	32
150	The laser magnetic resonance spectrum of HCl+. Molecular Physics, 1982, 46, 217-221.	0.8	31
151	Laser magnetic resonance in supersonic plasmas: The rotational spectrum of SH+. Journal of Chemical Physics, 1987, 87, 4332-4338.	1.2	31
152	Velocity modulation infrared laser spectroscopy of molecular ions. Molecular Physics, 1989, 66, 1193-1202.	0.8	31
153	Intermolecular Coupling in Nanometric Domains of Light-Harvesting Dendrimer Films Studied by Photoluminescence Near-Field Scanning Optical Microscopy (PL NSOM). Journal of the American Chemical Society, 2003, 125, 536-540.	6.6	31
154	Infrared Cavity Ringdown Spectroscopy of Jet-Cooled Polycyclic Aromatic Hydrocarbons. ChemPhysChem, 2004, 5, 321-326.	1.0	31
155	Single-molecule dynamics of phytochrome-bound fluorophores probed by fluorescence correlation spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11136-11141.	3.3	31
156	Interpreting the H/D Isotope Fractionation of Liquid Water during Evaporation without Condensation. Journal of Physical Chemistry C, 2007, 111, 7011-7020.	1.5	30
157	Communication: Near edge x-ray absorption fine structure spectroscopy of aqueous adenosine triphosphate at the carbon and nitrogen K-edges. Journal of Chemical Physics, 2010, 133, 101103.	1.2	30
158	Properties of aqueous nitrate and nitrite from x-ray absorption spectroscopy. Journal of Chemical Physics, 2015, 143, 084503.	1.2	30
159	Nitrogen quadrupole coupling constants for HCN and H2CN+: Explanation of the absence of fine structure in the microwave spectrum of interstellar H2CN+. Journal of Chemical Physics, 1986, 84, 5711-5714.	1.2	28
160	Far-infrared VRT spectroscopy of the water dimer: Characterization of the 20 μm out-of-plane librational vibration. Journal of Chemical Physics, 2015, 143, 154306.	1.2	28
161	Charge-Transfer-to-Solvent Spectrum of Thiocyanate at the Air/Water Interface Measured by Broadband Deep Ultraviolet Electronic Sum Frequency Generation Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 4753-4757.	2.1	28
162	Far-infrared VRT spectroscopy of two water trimer isotopomers: vibrationally averaged structures and rearrangement dynamics. Molecular Physics, 1996, 89, 1373-1396.	0.8	28

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163	A microwave substitution structure for protonated nitrogen N2H+. Journal of Chemical Physics, 1981, 75, 4261-4263.	1.2	27
164	On the evaporation of ammonium sulfate solution. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18897-18901.	3.3	26
165	Velocity modulation infrared laser spectroscopy of negative ions: The (011)–(001) band of azide (Nâ^'3). Journal of Chemical Physics, 1988, 89, 110-114.	1.2	25
166	Laser magnetic resonance rotational spectroscopy of the hydrogen halide molecular ions: H35Cl+ and H37Cl+. Journal of Molecular Spectroscopy, 1989, 134, 1-20.	0.4	25
167	Surprising Effects of Hydrochloric Acid on the Water Evaporation Coefficient Observed by Raman Thermometry. Journal of Physical Chemistry C, 2017, 121, 4420-4425.	1.5	25
168	Laser magnetic resonance measurement of rotational transitions in the metastable a1l̂"g state of oxygen. Journal of Molecular Spectroscopy, 1981, 89, 344-351.	0.4	24
169	The pure rotational spectrum and hyperfine structure of CF studied by laser magnetic resonance. Journal of Chemical Physics, 1982, 77, 58-67.	1.2	24
170	Far infrared laser Stark spectroscopy of the Σ bending vibration of ArHCl. Molecular Physics, 1988, 63, 1021-1029.	0.8	24
171	Effect of Surface Active Ions on the Rate of Water Evaporation. Journal of Physical Chemistry C, 2010, 114, 11880-11885.	1.5	24
172	Evaporation kinetics of aqueous acetic acid droplets: effects of soluble organic aerosol components on the mechanism of water evaporation. Physical Chemistry Chemical Physics, 2013, 15, 11634.	1.3	24
173	Diode laser velocity modulation spectroscopy of carbanions: The CC stretching vibration of C2Hâ^'. Journal of Chemical Physics, 1987, 87, 1448-1449.	1.2	22
174	Laser magnetic resonance rotational spectroscopy of the hydrogen halide molecular ions: H79Br+ and H81Br+. Journal of Molecular Spectroscopy, 1989, 134, 21-31.	0.4	22
175	Strong surface adsorption of aqueous sodium nitrite as an ion pair. Chemical Physics Letters, 2012, 519-520, 45-48.	1.2	22
176	The hydration structure of aqueous carbonic acid from X-ray absorption spectroscopy. Chemical Physics Letters, 2014, 614, 282-286.	1.2	22
177	Hydrogen bond network rearrangement dynamics in water clusters: Effects of intermolecular vibrational excitation on tunneling rates. Journal of Chemical Physics, 2017, 147, 064301.	1.2	22
178	Laboratory Rest Frequencies for N2D(+). Astrophysical Journal, 1977, 216, L85.	1.6	22
179	Near-field Second Harmonic Imaging of Granular Membrane Structures in Natural Killer Cells. Journal of Physical Chemistry B, 2000, 104, 5217-5220.	1.2	21
180	A re-examination of the 4051 Ã band of C3 using cavity ringdown spectroscopy of a supersonic plasma. Chemical Physics Letters, 2003, 374, 583-586.	1.2	21

#	Article	IF	CITATIONS
181	Importance of Electronic Relaxation for Inter-Coulombic Decay in Aqueous Systems. Physical Review Letters, 2010, 105, 198102.	2.9	21
182	Reversed interfacial fractionation of carbonate and bicarbonate evidenced by X-ray photoemission spectroscopy. Journal of Chemical Physics, 2017, 146, .	1.2	21
183	The microwave spectrum of CO in the a 3Πstate. I. The J=0–1 transitions in CO, 13CO, and C18O. Journal o Chemical Physics, 1987, 87, 6423-6433.	f 1.2	20
184	Auto-oligomerization and hydration of pyrrole revealed by x-ray absorption spectroscopy. Journal of Chemical Physics, 2009, 131, 114509.	1.2	20
185	Electronic spectroscopy of molecular ions by velocity modulation with cw dye lasers: a non-intrusive, in situ state-selective probe of plasma dynamics. Chemical Physics Letters, 1985, 122, 108-112.	1.2	19
186	Cavity ringdown laser absorption spectra of tungsten oxide. Chemical Physics Letters, 1998, 295, 285-288.	1.2	19
187	High symmetry effects on hydrogen bond rearrangement: The 4.1 THz vibrational band of (D2O)4. Journal of Chemical Physics, 1999, 111, 7801-7806.	1.2	19
188	The 583.2 GHz torsional hot-band of (D2O)3. Journal of Chemical Physics, 2001, 114, 3988-3993.	1.2	19
189	An analysis of the NEXAFS spectra of a molecular crystal: α-glycine. Journal of Chemical Physics, 2010, 133, 044507.	1.2	19
190	Broadband Deep UV Spectra of Interfacial Aqueous Iodide. Journal of Physical Chemistry Letters, 2016, 7, 3882-3885.	2.1	19
191	Terahertz laser vibration–rotation–tunneling spectrum of the water pentamer–d10 Chemical Physics Letters, 1998, 292, 667-676.	1.2	18
192	New Insights into the Charge-Transfer-to-Solvent Spectrum of Aqueous Iodide: Surface versus Bulk. Journal of Physical Chemistry Letters, 2020, 11, 1656-1661.	2.1	18
193	Positive and Negative Contrast Lithography on Silver Quantum Dot Monolayers. Journal of Physical Chemistry B, 1999, 103, 3524-3528.	1.2	17
194	High Spatial Resolution Imaging with Near-Field Scanning Optical Microscopy in Liquids. Analytical Chemistry, 2001, 73, 5015-5019.	3.2	17
195	High resolution pulsed infrared cavity ringdown spectroscopy: Application to laser ablated carbon clusters. Journal of Chemical Physics, 2002, 116, 6640-6647.	1.2	17
196	Chirped coherent anti-Stokes Raman scattering as a high-spectral- and spatial-resolution microscopy. Optics Letters, 2007, 32, 2858.	1.7	17
197	Molecular Properties and Chemical Transformations Near Interfaces. Journal of Physical Chemistry B, 2021, 125, 9037-9051.	1.2	17
198	Measurement of the rotational spectrum of carbon monoxide in its metastablea3Đ¿ state by laser magnetic resonance. Molecular Physics, 1986, 58, 735-743.	0.8	16

#	Article	IF	CITATIONS
199	Velocity modulation infrared laser spectroscopy of HCS+: Analysis of hot bands and perturbations. Journal of Molecular Spectroscopy, 1989, 133, 365-382.	0.4	16
200	Farâ€infrared laser vibration–rotation–tunneling spectroscopy of the propane–water complex: Torsional dynamics of the hydrogen bond Journal of Chemical Physics, 1993, 99, 7431-7439.	1.2	16
201	The hydration structure of dissolved carbon dioxide from X-ray absorption spectroscopy. Chemical Physics Letters, 2015, 633, 214-217.	1.2	16
202	Non-intrusive measurement of axial electric fields in low-pressure glow discharges by velocity modulation laser spectroscopy. Chemical Physics Letters, 1988, 152, 419-423.	1.2	15
203	Tunable far infrared laser spectroscopy of ultracold free radicals. Chemical Physics Letters, 1989, 164, 321-324.	1.2	15
204	On the role of molecular clustering on infrared absorption line shapes of acetylene in a supersonic expansion. Chemical Physics Letters, 2008, 463, 345-348.	1.2	15
205	Hydrogen bond breaking dynamics in the water pentamer: Terahertz VRT spectroscopy of a 20 <i>μ</i> m libration. Journal of Chemical Physics, 2017, 146, 014306.	1.2	15
206	Velocity modulation laser spectroscopy of molecular ions. Molecular Physics, 1989, 68, 599-607.	0.8	14
207	Detection of the Linear Carbon Cluster C10: Rotationally Resolved Diode-Laser Spectroscopy. ChemPhysChem, 2001, 2, 242-247.	1.0	14
208	Terahertz vibration-rotation-tunneling spectroscopy of the water tetramer-d8: Combined analysis of vibrational bands at 4.1 and 2.0THz. Journal of Chemical Physics, 2008, 128, 094302.	1.2	14
209	Electronic structure of aqueous borohydride: a potential hydrogen storage medium. Physical Chemistry Chemical Physics, 2011, 13, 17077.	1.3	14
210	Angstrom-Resolved Interfacial Structure in Buried Organic-Inorganic Junctions. Physical Review Letters, 2021, 127, 096801.	2.9	14
211	Measurement of the ν1 vibrationâ€rotation spectrum of the thioformyl ion (HCS+) by velocity modulation laser spectroscopy. Journal of Chemical Physics, 1985, 83, 4845-4848.	1.2	13
212	Cavity ringdown laser absorption spectroscopy of the jet-cooled aluminum dimer. Chemical Physics Letters, 1995, 242, 395-400.	1.2	13
213	Infrared water recombination lasers. Chemical Physics Letters, 2001, 338, 277-284.	1.2	13
214	Terahertz laser velocity modulation spectroscopy of ions. Journal of Molecular Spectroscopy, 2005, 231, 145-153.	0.4	13
215	Terahertz vibration–rotation-tunneling (VRT) spectroscopy of the d6-water trimer: Complete characterization of the 2.94THz torsional band (kn=±21â†00). Chemical Physics Letters, 2006, 423, 344-351. 	1.2	13
216	Nuclear quantum effects in the structure and lineshapes of the N2 near-edge x-ray absorption fine structure spectrum. Journal of Chemical Physics, 2010, 132, 094302.	1.2	13

#	Article	IF	CITATIONS
217	Monopeptide versus Monopeptoid: Insights on Structure and Hydration of Aqueous Alanine and Sarcosine via X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2010, 114, 4702-4709.	1.2	13
218	Exploring Solid/Aqueous Interfaces with Ultradilute Electrokinetic Analysis of Liquid Microjets. Journal of Physical Chemistry C, 2013, 117, 12702-12706.	1.5	13
219	Hydrogen and Electric Power Generation from Liquid Microjets: Design Principles for Optimizing Conversion Efficiency. Journal of Physical Chemistry C, 2016, 120, 14513-14521.	1.5	13
220	The far-infrared laser magnetic resonance spectrum of the CF radical and determination of ground state parameters. Journal of Molecular Spectroscopy, 1986, 120, 421-434.	0.4	12
221	Behavior of β-Amyloid 1â^'16 at the Airâ^'Water Interface at Varying pH by Nonlinear Spectroscopy and Molecular Dynamics Simulations. Journal of Physical Chemistry A, 2011, 115, 5873-5880.	1.1	12
222	A reanalysis of the molecular beam electric resonance Stark effect data for the a 3Πstate of carbon monoxide. Journal of Chemical Physics, 1988, 89, 2781-2788.	1.2	11
223	Far-infrared vibration-rotation-tunnelling spectroscopy of ArDCl. Molecular Physics, 1993, 79, 245-251.	0.8	11
224	Rotational Transitions in Excited Vibrational States of D2O. Journal of Molecular Spectroscopy, 2001, 208, 219-223.	0.4	11
225	Time-Resolved Second Harmonic Generation Near-Field Scanning Optical Microscopy. ChemPhysChem, 2003, 4, 1243-1247.	1.0	11
226	Dynamics of Micropollutant Adsorption to Polystyrene Surfaces Probed by Angle-Resolved Second Harmonic Scattering. Journal of Physical Chemistry C, 2019, 123, 14362-14369.	1.5	11
227	Close coupling results for inelastic collisions of NH3 and Ar. A stringent test of a spectroscopic potential. Chemical Physics Letters, 1994, 226, 22-26.	1.2	10
228	Cavity-Ringdown Spectroscopy Studies of the B2Σ+↥2Σ+ System of AlO. ChemPhysChem, 2002, 3, 364-366.	1.0	10
229	An ion beam reflectron/single-photon infrared emission spectrometer for the study of gas-phase polycyclic aromatic hydrocarbon ions: Testing proposed carriers of the unidentified infrared emission bands. Review of Scientific Instruments, 2003, 74, 2488-2494.	0.6	10
230	Broadband transient infrared laser spectroscopy of trifluorovinyl radical C2F3.cntdot.: experimental and ab initio results. The Journal of Physical Chemistry, 1991, 95, 2932-2937.	2.9	9
231	Complete characterization of the (D2O)2 ground state: High Ka rotation–tunneling levels. Faraday Discussions, 2001, 118, 79-93.	1.6	9
232	Terahertz VRT spectroscopy of the water hexamer-d12 prism: Dramatic enhancement of bifurcation tunneling upon librational excitation. Journal of Chemical Physics, 2018, 148, .	1.2	9
233	Two-photon absorption of soft X-ray free electron laser radiation by graphite near the carbon K-absorption edge. Chemical Physics Letters, 2018, 703, 112-116.	1.2	9
234	The liquid state of carbon. Chemical Physics Letters, 2020, 749, 137341.	1.2	9

#	Article	IF	CITATIONS
235	The Structures and Vibrational Dynamics of Small Carbon Clusters. , 1993, , 7-21.		9
236	On the interfacial and dynamical properties of the hydroxide ion. Chemical Physics Letters, 2009, 481, 1.	1.2	8
237	CRLAS: A new analytical technique for cluster science. Advances in Metal and Semiconductor Clusters, 1996, , 149-180.	1.5	8
238	Cavity ringdown spectroscopy search for transition metal dimers. Chemical Physics, 1999, 247, 431-434.	0.9	7
239	Special issue devoted to molecular complexes in our atmosphere and beyond. Molecular Physics, 2010, 108, 2153-2153.	0.8	7
240	Soft X-ray absorption spectra of aqueous salt solutions with highly charged cations in liquid microjets. Chemical Physics Letters, 2010, 493, 94-96.	1.2	7
241	Electrokinetic detection for X-ray spectra of weakly interacting liquids: n-decane and n-nonane. Journal of Chemical Physics, 2014, 140, 234202.	1.2	7
242	A Terahertz VRT spectrometer employing quantum cascade lasers. Chemical Physics Letters, 2015, 638, 144-148.	1.2	7
243	<title>Single nanowire lasers and waveguides</title> ., 2003, 5223, 187.		6
244	Femtosecond Spectroscopy of Carrier Relaxation Dynamics in Type II CdSe/CdTe Tetrapod Heteronanostructures. Nano Letters, 2005, 5, 2651-2651.	4.5	6
245	Comment on "Interfacial pH at an Isolated Silicaâ^'Water Surfaceâ€: Journal of Physical Chemistry B, 2006, 110, 15037-15038.	1.2	6
246	Terahertz Vibrationâ^'Rotation-Tunneling Spectroscopy of the Ammonia Dimer:  Characterization of an out of Plane Vibration. Journal of Physical Chemistry A, 2006, 110, 8011-8016.	1.1	6
247	Terahertz VRT Spectroscopy of the Water Hexamer-h12 Cage: Dramatic Libration-Induced Enhancement of Hydrogen Bond Tunneling Dynamics. Journal of Physical Chemistry A, 2018, 122, 7421-7426.	1.1	6
248	Toward the detection of pure carbon clusters in the ISM. Advances in Space Research, 1995, 15, 25-33.	1.2	5
249	Terahertz vibration-rotation-tunneling spectroscopy of the propane–water dimer: The ortho-state of a 20 cmâ^'1 torsion. Chemical Physics Letters, 2014, 612, 167-171.	1.2	5
250	Characterizing Anion Adsorption to Aqueous Interfaces: Toluene–Water versus Air–Water. Journal of Physical Chemistry Letters, 2022, 13, 222-228.	2.1	5
251	Terahertz Vibrationâ^'Rotationâ^'Tunneling Spectroscopy of the Ammonia Dimer. II.Aâ^'EStates of an Out-of-Plane Vibration and an In-Plane Vibration. Journal of Physical Chemistry A, 2007, 111, 9680-9687.	1.1	4

Nanowire dye-sensitized solar cells. , 2010, , 75-79.

0

#	Article	IF	CITATIONS
253	Thermally driven electrokinetic energy conversion with liquid water microjets. Chemical Physics Letters, 2015, 640, 172-174.	1.2	3
254	Early time dynamics of laser-ablated silicon using ultrafast grazing incidence X-ray scattering. Chemical Physics Letters, 2019, 736, 136811.	1.2	3
255	Revisiting the Ï€Â→ÂÏ€* transition of the nitrite ion at the air/water interface: A combined experimental and theoretical study. Chemical Physics Letters, 2020, 751, 137516.	1.2	3
256	Catalytic Mechanism of Interfacial Water in the Cycloaddition of Quadricyclane and Diethyl Azodicarboxylate. Journal of Physical Chemistry Letters, 2021, 12, 3026-3030.	2.1	3
257	Low-Temperature Wafer-Scale Production of ZnO Nanowire Arrays ChemInform, 2003, 34, no.	0.1	2
258	Characterization of Domain Ordering in Polymer and Dendrimer Thin Films Using Photoluminescence and Third Harmonic Generation (THG) Near-field Scanning Optical Microscopy (NSOM). Japanese Journal of Applied Physics, 2003, 42, 4799-4803.	0.8	2
259	Characterization of gas-phase HCl-H 2 O clusters using pulsed infrared cavity ringdown spectroscopy. , 2002, , .		1
260	Poled polymer thin film gratings studied by near-field second harmonic optical microscopy and far-field optical diffraction. , 2003, , .		1
261	High-spectral-resolution multiplex CARS spectroscopy using chirped pulses. , 2004, , .		1
262	Mid-IR laser action in the H3 Rydberg molecule and some possible astrophysical implications. , 2015, , .		1
263	Rydberg States of H3 and HeH as Potential Coolants for Primordial Star Formation. Journal of Physical Chemistry A, 2021, 125, 4267-4275.	1.1	1
264	Studies of Astrophysically Important Molecular Ions with Ultrasensitive Infrared Laser Techniques. , 1985, , 403-419.		1
265	Structures of Molecular lons from Laser Magnetic Resonance Spectroscopy. , 1983, , 33-52.		1
266	Characterization of biological structures with nonlinear chemical imaging nanomicroscopy. , 2002, 4633, 62.		0
267	The Water Trimer. ChemInform, 2003, 34, no.	0.1	0
268	Velocity Modulation Spectroscopy of Ions. ChemInform, 2005, 36, no.	0.1	0
269	Terahertz spectroscopy of water clusters. , 2014, , .		0

THz QCLs for heterodyne receivers and wavelength modulation spectroscopy. , 2016, , .

16

#	Article	IF	CITATIONS
271	Free Electron Laser Measurement of Liquid Carbon Reflectivity in the Extreme Ultraviolet. Photonics, 2020, 7, 35.	0.9	0
272	Evidence for an Enhanced Proton Concentration at the Liquid Water Surface from SHG Spectroscopy. , 2007, , .		0
273	Resonant UV SHG Studies of Ion Adsorption at Aqueous Interfaces. , 2009, , .		0
274	Vibration-Rotation Spectroscopy of ArHCI by Far-Infrared Laser and Microwave/Far-Infrared Laser Double Resonance Spectroscopy. , 1987, , 85-92.		0