

R Benny Gerber

List of Publications by Year in descending order

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338
papers

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18436

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times ranked

6470
citing authors

#	ARTICLE	IF	CITATIONS
1	Absorption Spectra and the Electronic Structure of Gallic Acid in Water at Different pH: Experimental Data and Theoretical Cluster Models. <i>Journal of Physical Chemistry A</i> , 2022, 126, 190-197.	1.1	4
2	Preparation and Characterization of the Halogen-Bonding Motif in the Isolated $\text{Cl}^+\cdot\text{IOH}$ Complex with Cryogenic Ion Vibrational Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2750-2756.	2.1	9
3	Electronic and mechanical anharmonicities in the vibrational spectra of the H-bonded, cryogenically cooled $\text{X}^+\cdot\text{HOCl}$ ($\text{X}=\text{Cl}, \text{Br}, \text{I}$) complexes: Characterization of the strong anionic H-bond to an acidic OH. <i>Journal of Chemical Physics</i> , 2022, 156, 174303.		11
4	Energy transfer, pre-reactive complex formation and recombination reactions during the collision of peroxy radicals. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10033-10043.	1.3	6
5	My Trajectory in Molecular Reaction Dynamics and Spectroscopy. <i>Annual Review of Physical Chemistry</i> , 2021, 72, 1-34.	4.8	7
6	Size-Dependent Onset of Nitric Acid Dissociation in $\text{Cs}^+(\text{HNO}_3)(\text{H}_2\text{O})_n$ Clusters at 20 K. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3335-3342.	2.1	7
7	Toward a microscopic model of light absorbing dissolved organic compounds in aqueous environments: theoretical and experimental study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 10487-10497.	1.3	7
8	S_2N_2 Reactions of N_2O_5 with Ions in Water: Microscopic Mechanisms, Intermediates, and Products. <i>Journal of Physical Chemistry A</i> , 2020, 124, 711-720.	1.1	8
9	Microscopic Mechanisms of N_2O_5 Hydrolysis on the Surface of Water Droplets. <i>Journal of Physical Chemistry A</i> , 2020, 124, 224-228.	1.1	9
10	Dual Basis Approach for Ab Initio Anharmonic Calculations of Vibrational Spectroscopy: Application to Microsolvated Biomolecules. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 7005-7016.	2.3	8
11	Absorption spectra of pyruvic acid in water: insights from calculations for small hydrates and comparison to experiment. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12658-12670.	1.3	19
12	Gas phase dynamics, conformational transitions and spectroscopy of charged saccharides: the oxocarbenium ion, protonated anhydrogalactose and protonated methyl galactopyranoside. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 4144-4157.	1.3	8
13	Absorption spectra of benzoic acid in water at different pH and in the presence of salts: insights from the integration of experimental data and theoretical cluster models. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5046-5056.	1.3	28
14	Isomer-specific cryogenic ion vibrational spectroscopy of the D_2 tagged $\text{Cs}^+(\text{HNO}_3)(\text{H}_2\text{O})_n$ complexes: ion-driven enhancement of the acidic H-bond to water. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 4501-4507.	1.3	9
15	Integrated experimental and theoretical approach to probe the synergistic effect of ammonia in methanesulfonic acid reactions with small alkylamines. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 305-328.	1.7	18
16	Impact of pH and NaCl and CaCl_2 Salts on the Speciation and Photochemistry of Pyruvic Acid in the Aqueous Phase. <i>Journal of Physical Chemistry A</i> , 2020, 124, 5071-5080.	1.1	18
17	Structures, Stability, and Decomposition Dynamics of the Polynitrogen Molecule $\text{N}_5^+\text{B}(\text{N}_3)_4^+$ and Its Dimer $[\text{N}_5^+]\text{B}(\text{N}_3)_4^+$. <i>Journal of Physical Chemistry A</i> , 2019, 123, 7384-7393.	1.1	6
18	Conformers of Ubiquitin 6+ for Different Charge Distributions: Atomistic Structures and Ion Mobility Cross Sections. <i>Journal of Physical Chemistry B</i> , 2019, 123, 6401-6409.	1.2	2

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19	Experimental and Theoretical Studies of the Environmental Sensitivity of the Absorption Spectra and Photochemistry of Nitenpyram and Analogs. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2063-2075.	1.2	8
20	Hydrogenic Stretch Spectroscopy of Glycineâ€“Water Complexes: Anharmonic Ab Initio Classical Separable Potential Calculations. <i>Journal of Physical Chemistry A</i> , 2019, 123, 8377-8384.	1.1	0
21	Sulfate and Carboxylate Suppress the Formation of ClNO ₂ at Atmospheric Interfaces. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1987-1997.	1.2	18
22	Ion reactions in atmospherically-relevant clusters: mechanisms, dynamics and spectroscopic signatures. <i>Faraday Discussions</i> , 2019, 217, 342-360.	1.6	3
23	Mechanisms and competition of halide substitution and hydrolysis in reactions of N ₂ O ₅ with seawater. <i>Science Advances</i> , 2019, 5, eaav6503.	4.7	16
24	Anharmonic vibrational spectroscopy calculations using the ab initio CSP method: Applications to H ₂ CO ₃ , (H ₂ CO ₃) ₂ , H ₂ CO ₃ -H ₂ O and isotopologues. <i>Chemical Physics</i> , 2018, 514, 44-54.	0.9	4
25	Molecular Dynamics of Photoinduced Reactions of Acrylic Acid: Products, Mechanisms, and Comparison with Experiment. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 527-533.	2.1	15
26	Autocorrelation of electronic wave-functions: a new approach for describing the evolution of electronic structure in the course of dynamics. <i>Molecular Physics</i> , 2018, 116, 2512-2523.	0.8	2
27	Understanding interactions of organic nitrates with the surface and bulk of organic films: implications for particle growth in the atmosphere. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1593-1610.	1.7	12
28	Double Photodetachment of F [−] ·H ₂ O: Experimental and Theoretical Studies of [F·H ₂ O] [−] . <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6808-6813.	2.1	5
29	Adjacent keto and enol groups in photochemistry of a cyclic molecule: Products, mechanisms and dynamics. <i>Chemical Physics</i> , 2018, 515, 177-186.	0.9	3
30	Intrinsic structure of pentapeptide Leu-enkephalin: geometry optimization and validation by comparison of VSCF-PT2 calculations with cold ion spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 24894-24901.	1.3	18
31	<i>Ab initio</i> molecular dynamics studies of formic acid dimer colliding with liquid water. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 23717-23725.	1.3	15
32	Uptake of water by an acidâ€“base nanoparticle: theoretical and experimental studies of the methanesulfonic acidâ€“methylamine system. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 22249-22259.	1.3	15
33	N ₂ O ₅ at water surfaces: binding forces, charge separation, energy accommodation and atmospheric implications. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17961-17976.	1.3	18
34	The Role of Oxalic Acid in New Particle Formation from Methanesulfonic Acid, Methylamine, and Water. <i>Environmental Science & Technology</i> , 2017, 51, 2124-2130.	4.6	53
35	Approximate Quantum Dynamics using Ab Initio Classical Separable Potentials: Spectroscopic Applications. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 982-991.	2.3	8
36	Proton Transfer in Mixed Clusters of Methanesulfonic Acid, Methylamine, and Oxalic Acid: Implications for Atmospheric Particle Formation. <i>Journal of Physical Chemistry A</i> , 2017, 121, 2377-2385.	1.1	42

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37	Photochemistry of Thin Solid Films of the Neonicotinoid Imidacloprid on Surfaces. Environmental Science & Technology, 2017, 51, 2660-2668.	4.6	37
38	Particle formation and growth from oxalic acid, methanesulfonic acid, trimethylamine and water: a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2017, 19, 28286-28301.	1.3	42
39	Trapping and Structural Characterization of the XNO ₂ -NO ₃ ⁺ (X =) Tj ETQq1 1 0.784314 rg Reactions with Cryogenic Vibrational Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 4710-4715.	2.1	11
40	Concerted transfer of multiple protons in acid-water clusters: [(HCl)(H ₂ O)] ₂ and [(HF)(H ₂ O)] ₄ . Physical Chemistry Chemical Physics, 2017, 19, 20641-20646.	1.3	3
41	Nanoparticles grown from methanesulfonic acid and methylamine: microscopic structures and formation mechanism. Physical Chemistry Chemical Physics, 2017, 19, 31949-31957.	1.3	11
42	A Decapeptide Hydrated by Two Waters: Conformers Determined by Theory and Validated by Cold Ion Spectroscopy. Journal of Physical Chemistry A, 2017, 121, 9401-9408.	1.1	16
43	DMAP-assisted sulfonylation as an efficient step for the methylation of primary amine motifs on solid support. Beilstein Journal of Organic Chemistry, 2017, 13, 806-816.	1.3	9
44	Mean-Field Methods for Time-Dependent Quantum Dynamics of Many-Atom Systems. Advances in Quantum Chemistry, 2017, , 1-26.	0.4	2
45	Deprotonation of formic acid in collisions with a liquid water surface studied by molecular dynamics and metadynamics simulations. Physical Chemistry Chemical Physics, 2016, 18, 29756-29770.	1.3	22
46	Dynamics of Photochemical Reactions of Organic Carbonyls and their Clusters. Advances in Chemical Physics, 2016, , 1-22.	0.3	0
47	Infrared Spectrum of Toluene: Comparison of Anharmonic Isolated-Molecule Calculations and Experiments in Liquid Phase and in a Ne Matrix. Journal of Physical Chemistry A, 2016, 120, 3380-3389.	1.1	16
48	Photochemical Reactions of Cyclohexanone: Mechanisms and Dynamics. Journal of Physical Chemistry A, 2016, 120, 7112-7120.	1.1	17
49	Dynamics and spectroscopy of CH ₂ OO excited electronic states. Physical Chemistry Chemical Physics, 2016, 18, 10941-10946.	1.3	19
50	Formation of Carbonic Acid in Impact of CO ₂ on Ice and Water. Journal of Physical Chemistry Letters, 2016, 7, 2905-2909.	2.1	16
51	Temperature and collision energy effects on dissociation of hydrochloric acid on water surfaces. Physical Chemistry Chemical Physics, 2016, 18, 13432-13442.	1.3	13
52	Reactions of Methanesulfonic Acid with Amines and Ammonia as a Source of New Particles in Air. Journal of Physical Chemistry B, 2016, 120, 1526-1536.	1.2	115
53	A Noble-Gas Hydride in a Nitrogen Medium: Structure, Spectroscopy, and Intermolecular Vibrations of HXeBr@(N ₂) ₂₂ . Journal of Physical Chemistry A, 2016, 120, 3372-3379.	1.1	4
54	First-principles anharmonic quantum calculations for peptide spectroscopy: VSCF calculations and comparison with experiments. Physical Chemistry Chemical Physics, 2016, 18, 1607-1614.	1.3	32

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55	Mechanistic studies of malonic acid-mediated in situ acylation. <i>Biopolymers</i> , 2015, 104, 495-505.	1.2	3
56	Conformational Structures of a Decapeptide Validated by First Principles Calculations and Cold Ion Spectroscopy. <i>ChemPhysChem</i> , 2015, 16, 1374-1378.	1.0	28
57	Absorption spectra and aqueous photochemistry of β^2 -hydroxyalkyl nitrates of atmospheric interest. <i>Molecular Physics</i> , 2015, 113, 2179-2190.	0.8	22
58	The future of airborne sulfur-containing particles in the absence of fossil fuel sulfur dioxide emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13514-13519.	3.3	76
59	High resolution absolute absorption cross sections of the $B^1\Sigma^+ \rightarrow X^1\Sigma^+$ transition of the CH_2OO biradical. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 32539-32546.	1.3	42
60	Computational Studies of Atmospherically-Relevant Chemical Reactions in Water Clusters and on Liquid Water and Ice Surfaces. <i>Accounts of Chemical Research</i> , 2015, 48, 399-406.	7.6	89
61	Stability of Criegee Intermediates Formed by Ozonolysis of Different Double Bonds. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2318-2325.	1.1	18
62	Infrared Identification of Proton-Bound Rare-Gas Dimers ($XeHXe$), ($KrHXe$), and ($KrHXe$) and Their Deuterated Species in Solid Hydrogen. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2651-2660.	1.1	23
63	Mechanism for formation of atmospheric Cl atom precursors in the reaction of dinitrogen oxides with HCl/Cl on aqueous films. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19360-19370.	1.3	20
64	Tribute to Markku O. Räsänen. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2187-2190.	1.1	1
65	New particle formation and growth from methanesulfonic acid, trimethylamine and water. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 13699-13709.	1.3	88
66	Amine Amine Exchange in Aminium Methanesulfonate Aerosols. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29431-29440.	1.5	31
67	Frontispiz: A Tandem In Situ Peptide Cyclization through Trifluoroacetic Acid Cleavage. <i>Angewandte Chemie</i> , 2014, 126, n/a-n/a.	1.6	0
68	Raman spectroscopy of solutions and interfaces containing nitrogen dioxide, water, and 1,4 dioxane: Evidence for repulsion of surface water by NO_2 gas. <i>Journal of Chemical Physics</i> , 2014, 140, 184702.	1.2	3
69	Matrix effect on vibrational frequencies: Experiments and simulations for HCl and $HNgCl$ ($Ng = Kr$ and Tj). <i>ETQq1 1 0.784314 rgBT / Over</i>	1.2	11
70	Frontispiece: A Tandem In Situ Peptide Cyclization through Trifluoroacetic Acid Cleavage. <i>Angewandte Chemie - International Edition</i> , 2014, 53, n/a-n/a.	7.2	0
71	An atomistic structure of ubiquitin +13 relevant in mass spectrometry: Theoretical prediction and comparison with experimental cross sections. <i>International Journal of Mass Spectrometry</i> , 2014, 367, 10-15.	0.7	12
72	Calculations predict a stable molecular crystal of N_8 . <i>Nature Chemistry</i> , 2014, 6, 52-56.	6.6	152

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73	Hybrid MP2/MP4 potential surfaces in VSCF calculations of IR spectra: Applications for organic molecules. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 119, 2-11.	2.0	8
74	Reaction of a charge-separated ONONO ₂ species with water in the formation of HONO: an MP2 Molecular Dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4483.	1.3	31
75	Photochemistry of aldehyde clusters: cross-molecular versus unimolecular reaction dynamics. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 23861-23868.	1.3	21
76	First and second deprotonation of H ₂ SO ₄ on wet hydroxylated (0001) $\hat{\pm}$ -quartz. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 22287-22298.	1.3	12
77	Ionization of Acids on the Quasi-Liquid Layer of Ice. <i>Journal of Physical Chemistry A</i> , 2014, 118, 5029-5037.	1.1	17
78	Approximate First-Principles Anharmonic Calculations of Polyatomic Spectra Using MP2 and B3LYP Potentials: Comparisons with Experiment. <i>Journal of Physical Chemistry A</i> , 2014, 118, 6730-6739.	1.1	32
79	Chemically-bound xenon in fibrous silica. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11658-11661.	1.3	13
80	Isomerization and Decomposition of a Criegee Intermediate in the Ozonolysis of Alkenes: Dynamics Using a Multireference Potential. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 265-268.	7.2	33
81	Ab initio and semi-empirical Molecular Dynamics simulations of chemical reactions in isolated molecules and in clusters. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 9760-9775.	1.3	35
82	Modeling of HXeBr in CO ₂ and Xe environments: Structure, energetics and vibrational spectra. <i>Chemical Physics Letters</i> , 2014, 594, 18-22.	1.2	20
83	A highly efficient in situ N-acetylation approach for solid phase synthesis. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 1879-1884.	1.5	14
84	Dissociation of HCl into Ions on Wet Hydroxylated (0001) $\hat{\pm}$ -Quartz. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3500-3507.	2.1	19
85	When a proton attacks cellobiose in the gas phase: ab initio molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15382.	1.3	4
86	Nitrogen dioxide at the air-water interface: trapping, absorption, and solvation in the bulk and at the surface. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 204-212.	1.3	33
87	Destabilization of noble-gas hydrides by a water environment: calculations for HXeOH@(H ₂ O) _n , HXeOXeH@(H ₂ O) _n , HXeBr@(H ₂ O) _n , HXeCCH@(H ₂ O) _n . <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12610.	1.3	8
88	Spectroscopy of the C-H Stretching Vibrational Band in Selected Organic Molecules. <i>Journal of Physical Chemistry A</i> , 2013, 117, 7442-7452.	1.1	22
89	On the crystallographic accuracy of structure prediction by implicit water models: Tests for cyclic peptides. <i>Chemical Physics</i> , 2013, 415, 168-172.	0.9	13
90	Vibrational self-consistent field calculations for spectroscopy of biological molecules: new algorithmic developments and applications. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9468.	1.3	163

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91	Dynamics of Triplet-State Photochemistry of Pentanal: Mechanisms of Norrish I, Norrish II, and H Abstraction Reactions. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11711-11724.	1.1	26
92	Ionization of Nitric Acid on Crystalline Ice: The Role of Defects and Collective Proton Movement. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1850-1855.	2.1	25
93	Photooxidation of Ammonia on TiO ₂ as a Source of NO and NO ₂ under Atmospheric Conditions. <i>Journal of the American Chemical Society</i> , 2013, 135, 8606-8615.	6.6	72
94	Femtosecond timescale deactivation of electronically excited peroxides at ice surfaces. <i>Molecular Physics</i> , 2012, 110, 605-617.	0.8	21
95	Simplified mechanism for new particle formation from methanesulfonic acid, amines, and water via experiments and ab initio calculations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18719-18724.	3.3	173
96	Protonated sugars: vibrational spectroscopy and conformational structure of protonated O-methyl β -D-galactopyranoside. <i>Molecular Physics</i> , 2012, 110, 1609-1615.	0.8	17
97	Isomerization and ionization of N ₂ O ₄ on model ice and silica surfaces. <i>Chemical Physics</i> , 2012, 405, 52-59.	0.9	13
98	Migration and chemical reaction of H ⁺ in protonated β -D-galactose. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 13522.	1.3	4
99	Interaction and reaction of the hydroxyl ion with β -D-galactose and its hydrated complex: an ab initio molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 12086.	1.3	5
100	Monosaccharide-Water Complexes: Vibrational Spectroscopy and Anharmonic Potentials. <i>Journal of Physical Chemistry A</i> , 2012, 116, 11088-11094.	1.1	13
101	Intrinsic lifetimes and kinetic stability in media of noble-gas hydrides. <i>Chemical Physics Letters</i> , 2012, 545, 1-8.	1.2	23
102	NO _x Reactions on Aqueous Surfaces with Gaseous HCl: Formation of a Potential Precursor to Atmospheric Cl Atoms. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3405-3410.	2.1	34
103	Absorption Spectra and Photolysis of Methyl Peroxide in Liquid and Frozen Water. <i>Journal of Physical Chemistry A</i> , 2012, 116, 6068-6077.	1.1	49
104	Computational Studies of Protonated β -D-Galactose and Its Hydrated Complex: Structures, Interactions, Proton Transfer Dynamics, and Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2012, 116, 4851-4859.	1.2	17
105	Decomposition mechanisms and dynamics of N ₆ : Bond orders and partial charges along classical trajectories. <i>Chemical Physics Letters</i> , 2012, 531, 46-51.	1.2	25
106	Hydration of cellobiose: Structure and dynamics of cellobiose \cdot (H ₂ O) _n , n=5-25. <i>Chemical Physics Letters</i> , 2012, 531, 52-58.	1.2	15
107	Mechanism and electronic transition in the reaction: On the fly dynamics simulations with multi-reference potentials. <i>Chemical Physics Letters</i> , 2012, 535, 44-48.	1.2	10
108	Stability of noble-gas hydrocarbons in an organic liquid-like environment: HXeCCH in acetylene. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 19601.	1.3	26

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109	Raman spectra of long chain hydrocarbons: anharmonic calculations, experiment and implications for imaging of biomembranes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 12724.	1.3	41
110	Isotopic Hydration of Cellobiose: Vibrational Spectroscopy and Dynamical Simulations. <i>Journal of Physical Chemistry A</i> , 2011, 115, 9498-9509.	1.1	27
111	Tributes to Victoria Buch. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5709-5714.	1.1	0
112	Vibrational Spectra of α -Glucose, β -Glucose, and Sucrose: Anharmonic Calculations and Experiment. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5859-5872.	1.1	63
113	Conformational transitions of glycine induced by vibrational excitation of the O-H stretch. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 8715-8722.	1.3	19
114	Proton Transfer and Dissociation of GlyLysH ⁺ following O-H and N-H Stretching Mode Excitations: Dynamics Simulations. <i>Journal of the American Chemical Society</i> , 2011, 133, 16510-16517.	6.6	11
115	Raman and infrared spectra of cellobiose in the solid state: What can be learned from single-molecule calculations?. <i>Chemical Physics Letters</i> , 2011, 514, 284-290.	1.2	14
116	Raman and IR spectra of butane: Anharmonic calculations and interpretation of room temperature spectra. <i>Chemical Physics Letters</i> , 2011, 515, 7-12.	1.2	29
117	Structures of the xylose-water complex: Energetics, transitions between conformers and spectroscopy. <i>Chemical Physics Letters</i> , 2011, 518, 49-54.	1.2	10
118	A new hybrid algorithm for finding the lowest minima of potential surfaces: Approach and application to peptides. <i>Journal of Computational Chemistry</i> , 2011, 32, 1785-1800.	1.5	19
119	Ultrafast photochemistry of methyl hydroperoxide on ice particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 6600-6604.	3.3	19
120	On the Mean Accuracy of the Separable VSCF Approximation for Large Molecules. <i>Journal of Physical Chemistry C</i> , 2010, 114, 20603-20608.	1.5	9
121	Catalytic Role for Water in the Atmospheric Production of ClNO. <i>Journal of Physical Chemistry A</i> , 2010, 114, 4609-4618.	1.1	40
122	Hygroscopic Growth and Deliquescence of NaCl Nanoparticles Mixed with Surfactant SDS. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2435-2449.	1.2	42
123	Sugar-salt and sugar-salt-water complexes: structure and dynamics of glucose-KNO ₃ (H ₂ O) _n . <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3550.	1.3	16
124	Predicted compounds of radon with acetylene and water. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11791.	1.3	22
125	Chlorine activation indoors and outdoors via surface-mediated reactions of nitrogen oxides with hydrogen chloride. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 13647-13654.	3.3	107
126	Direct visualization of the H-Xe bond in xenon hydrides: Xenon isotopic shift in the IR spectra. <i>Journal of Chemical Physics</i> , 2009, 131, 151101.	1.2	30

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127	Matrix-isolation and ab initio study of HXeCCH complexed with acetylene. <i>Chemical Physics Letters</i> , 2009, 481, 83-87.	1.2	32
128	Lifetimes of compounds made of noble-gas atoms with water. <i>Chemical Physics Letters</i> , 2009, 482, 30-33.	1.2	42
129	Ultrafast nonadiabatic photodissociation dynamics of F2 in solid Ar. <i>Laser Physics</i> , 2009, 19, 1651-1659.	0.6	4
130	Autobiography of Robert Benny Gerber. <i>Journal of Physical Chemistry A</i> , 2009, 113, 7163-7170.	1.1	0
131	Anharmonic Vibrational Spectroscopy Calculations for Proton-Bound Amino Acid Dimers. <i>Journal of Physical Chemistry A</i> , 2009, 113, 1905-1912.	1.1	24
132	Structure of Large Nitrate ⁻ Water Clusters at Ambient Temperatures: Simulations with Effective Fragment Potentials and Force Fields with Implications for Atmospheric Chemistry. <i>Journal of Physical Chemistry A</i> , 2009, 113, 12805-12814.	1.1	47
133	Dynamics simulations of atmospherically relevant molecular reactions. <i>International Reviews in Physical Chemistry</i> , 2009, 28, 207-222.	0.9	36
134	Ionization of N ₂ O ₄ in Contact with Water: Mechanism, Time Scales and Atmospheric Implications. <i>Journal of the American Chemical Society</i> , 2009, 131, 12180-12185.	6.6	72
135	Noble-Gas Hydrides: New Chemistry at Low Temperatures. <i>Accounts of Chemical Research</i> , 2009, 42, 183-191.	7.6	241
136	Ultrafast phase transitions in metastable water near liquid interfaces. <i>Faraday Discussions</i> , 2009, 141, 67-79.	1.6	24
137	Anharmonic vibrational spectroscopy calculations with electronic structure potentials: comparison of MP2 and DFT for organic molecules. <i>Theoretical Chemistry Accounts</i> , 2008, 120, 273-279.	0.5	51
138	Early Structural Evolution of Native Cytochrome c after Solvent Removal. <i>ChemBioChem</i> , 2008, 9, 2417-2423.	1.3	66
139	Critical Size for Intracuster Proton Transfer from Water to an Anion. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6272-6274.	7.2	14
140	Vibrational spectroscopy of triacetone triperoxide (TATP): Anharmonic fundamentals, overtones and combination bands. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 71, 1438-1445.	2.0	30
141	Predicted stability of the organo-xenon compound HXeCCH above the cryogenic range. <i>Chemical Physics Letters</i> , 2008, 460, 23-26.	1.2	34
142	Vibrational spectroscopy for glycine adsorbed on silicon clusters: Harmonic and anharmonic calculations for models of the Si(100)-2 \times 1 surface. <i>Chemical Physics</i> , 2008, 347, 218-228.	0.9	26
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