## Martin A Suhm

List of Publications by Year in descending order

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207 papers

7,934 citations

41344 49 h-index 76900 74 g-index

222 all docs 222 docs citations

times ranked

222

3676 citing authors

#	Article	IF	CITATIONS
1	Potential energy surfaces, quasiadiabatic channels, rovibrational spectra, and intramolecular dynamics of (HF)2 and its isotopomers from quantum Monte Carlo calculations. Journal of Chemical Physics, 1991, 95, 28-59.	3.0	278
2	Quantum Monte Carlo studies of vibrational states in molecules and clusters. Physics Reports, 1991, 204, 293-329.	25.6	247
3	Chirality Recognition between Neutral Molecules in the Gas Phase. Angewandte Chemie - International Edition, 2008, 47, 6970-6992.	13.8	221
4	A new six-dimensional analytical potential up to chemically significant energies for the electronic ground state of hydrogen peroxide. Journal of Chemical Physics, 1999, 111, 2565-2587.	3.0	175
5	FTIR-spectroscopy of molecular clusters in pulsed supersonic slit-jet expansions. Physical Chemistry Chemical Physics, 1999, 1, 5573-5582.	2.8	168
6	HF dimer: Empirically refined analytical potential energy and dipole hypersurfaces from ab initio calculations. Journal of Chemical Physics, 1998, 108, 10096-10115.	3.0	157
7	Hydrogen-bonded OH stretching modes of methanol clusters: A combined IR and Raman isotopomer study. Journal of Chemical Physics, 2007, 126, 194307.	3.0	153
8	A monomers-in-dimers model for carboxylic acid dimers. Journal of Chemical Physics, 2003, 118, 2242-2255.	3.0	121
9	Benchmarking Quantum Chemical Methods: Are We Heading in the Right Direction?. Angewandte Chemie - International Edition, 2017, 56, 11011-11018.	13.8	119
10	Dipole moment function and equilibrium structure of methane in an analytical, anharmonic nineâ€dimensional potential surface related to experimental rotational constants and transition moments by quantum Monte Carlo calculations. Journal of Chemical Physics, 1994, 101, 3588-3602.	3.0	105
11	The Last Globally Stable Extended Alkane. Angewandte Chemie - International Edition, 2013, 52, 463-466.	13.8	105
12	Ragout-jet FTIR spectroscopy of cluster isomerism and cluster dynamics: from carboxylic acid dimers to N2O nanoparticles. Faraday Discussions, 2001, 118, 331-359.	3.2	99
13	A new ab initio based six-dimensional semi-empirical pair interaction potential for HF. Chemical Physics Letters, 1996, 261, 35-44.	2.6	86
14	A critical analysis of electronic density functionals for structural, energetic, dynamic, and magnetic properties of hydrogen fluoride clusters. Journal of Computational Chemistry, 1997, 18, 1695-1719.	3.3	85
15	Hydrogen Bonding in 2-Propanol. The Effect of Fluorinationâ€. Journal of Physical Chemistry A, 2000, 104, 265-274.	2.5	84
16	High resolution 1.3 $\hat{1}$ /4m overtone spectroscopy of HF dimer in a slit jet: Ka=0â†0 and Ka=1â†0 subbands of vacc=2â†0. Journal of Chemical Physics, 1992, 97, 5341-5354.	3.0	81
17	Acidic protons before take-off: A comparative jet Fourier transform infrared study of small HCl– and HBr–solvent complexes. Journal of Chemical Physics, 2003, 118, 10120-10136.	3.0	80
18	Raman jet spectroscopy of formic acid dimers: low frequency vibrational dynamics and beyond. Physical Chemistry Chemical Physics, 2007, 9, 4528.	2.8	80

#	Article	IF	CITATIONS
19	Elementary Peptide Motifs in the Gas Phase: FTIR Aggregation Study of Formamide, Acetamide, <i>N</i> -Methylformamide, and <i>N</i> -Methylacetamide. Journal of Physical Chemistry A, 2008, 112, 7530-7542.	2.5	79
20	A combined Raman- and infrared jet study of mixed methanol–water and ethanol–water clusters. Physical Chemistry Chemical Physics, 2011, 13, 14050.	2.8	77
21	The Raman spectrum of isolated water clusters. Physical Chemistry Chemical Physics, 2014, 16, 9849.	2.8	77
22	Glycidol dimer: anatomy of a molecular handshakePresented at the LANMAT 2001 Conference on the Interaction of Laser Radiation with Matter at Nanoscopic Scales: From Single Molecule Spectroscopy to Materials Processing, Venice, 3–6 October, 2001 Physical Chemistry Chemical Physics, 2002, 4, 2721-2732.	2.8	76
23	Communication: The highest frequency hydrogen bond vibration and an experimental value for the dissociation energy of formic acid dimer. Journal of Chemical Physics, 2012, 136, 151101.	3.0	76
24	Observation and assignment of the hydrogen bond exchange disrotatory in-plane bending vibration v5 in (HF)2. Chemical Physics Letters, 1990, 171, 517-524.	2.6	75
25	Femtisecond single-mole infrared spectroscopy of molecular clusters. Physical Chemistry Chemical Physics, 2013, 15, 10702.	2.8	75
26	Intra- vs. intermolecular hydrogen bonding: dimers of alpha-hydroxyesters with methanol. Physical Chemistry Chemical Physics, 2006, 8, 4449.	2.8	71
27	Chirality-Induced Switch in Hydrogen-Bond Topology: Tetrameric Methyl Lactate Clusters in the Gas Phase. Angewandte Chemie - International Edition, 2006, 45, 3440-3445.	13.8	71
28	N–Hâ< <sup>¬ï</sup> € interactions in pyrroles: systematic trends from the vibrational spectroscopy of clusters. Physical Chemistry Chemical Physics, 2008, 10, 2827.	2.8	70
29	Accurate quantum Monte Carlo calculations of the tunneling splitting in (HF)2 on a six-dimensional potential hypersurface. Chemical Physics Letters, 1995, 234, 71-76.	2.6	68
30	A first glimpse at the acidic proton vibrations in HCl–water clusters via supersonic jet FTIR spectroscopy. Physical Chemistry Chemical Physics, 2002, 4, 3933-3937.	2.8	68
31	Highâ€resolution infrared spectroscopy of DF trimer: A cyclic ground state structure and DF stretch induced intramolecular vibrational coupling. Journal of Chemical Physics, 1993, 98, 5985-5989.	3.0	67
32	Probing the stiffness of the simplest double hydrogen bond: The symmetric hydrogen bond modes of jet-cooled formic acid dimer. Journal of Chemical Physics, 2009, 131, 054301.	3.0	65
33	Observation and assignment of tunnelling-rotational transitions in the far infrared spectrum of (HF)2. Molecular Physics, 1988, 65, 1025-1045.	1.7	64
34	Self-organization of lactates in the gas phase. Organic and Biomolecular Chemistry, 2003, 1, 4351.	2.8	64
35	Combined jet relaxation and quantum chemical study of the pairing preferences of ethanol. Physical Chemistry Chemical Physics, 2005, 7, 991-997.	2.8	64
36	Potential energy surface and energy levels of (HF)2 and its D isotopomers. Molecular Physics, 1990, 69, 791-801.	1.7	63

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37	Hydrogen bonded rings, chains and lassos: the case of t-butyl alcohol clusters. Molecular Physics, 2001, 99, 413-425.	1.7	62
38	Concerted proton motion in hydrogen-bonded trimers: A spontaneous Raman scattering perspective. Physical Chemistry Chemical Physics, 2006, 8, 2826.	2.8	61
39	A peptide co-solvent under scrutiny: self-aggregation of 2,2,2-trifluoroethanol. Physical Chemistry Chemical Physics, 2007, 9, 4472.	2.8	61
40	Evidence for the (HF) 5 complex in the HF stretching FTIR absorption spectra of pulsed and continuous supersonic jet expansions of hydrogen fluoride. Chemical Physics Letters, 1993, 208, 446-452.	2.6	60
41	Vibrational dynamics of (HF)n aggregates from an ab initio based analytical (1+2+3)-body potential. Journal of Molecular Structure, 1993, 294, 33-36.	3.6	59
42	The complexes of halothane with benzene: the temperature dependent direction of the complexation shift of the aliphatic C–H stretching. Physical Chemistry Chemical Physics, 2010, 12, 14034.	2.8	59
43	Potential surfaces and dynamic of weakly bound trimers: perspectives from high resolution IR spectroscopy. Chemical Society Reviews, 1995, 24, 45.	38.1	58
44	OH-Stretching Red Shifts in Bulky Hydrogen-Bonded Alcohols:Â Jet Spectroscopy and Modeling. Journal of Physical Chemistry A, 2006, 110, 9839-9848.	2.5	58
45	Proton tunneling estimates for malonaldehyde vibrations from supersonic jet and matrix quenching experiments. Physical Chemistry Chemical Physics, 2006, 8, 2344.	2.8	56
46	Structural Preferences, Argon Nanocoating, and Dimerization ofn-Alkanols As Revealed by OH Stretching Spectroscopy in Supersonic Jetsâ€. Journal of Physical Chemistry A, 2007, 111, 7437-7448.	2.5	55
47	Ethanol Monomers and Dimers Revisited: A Raman Study of Conformational Preferences and Argon Nanocoating Effects. Journal of Physical Chemistry A, 2010, 114, 8223-8233.	2.5	55
48	On FTIR Spectroscopy in Asynchronously Pulsed Supersonic Free Jet Expansions and on the Interpretation of Stretching Spectra of HF Clusters. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 457-468.	0.9	53
49	A chemical approach towards the spectroscopy of carboxylic acid dimer isomerism. Physical Chemistry Chemical Physics, 2003, 5, 3094.	2.8	51
50	Analytical three-body interaction potentials and hydrogen bond dynamics of hydrogen fluoride aggregates, (HF) n, n a‰¥3. Journal of Molecular Structure, 2001, 599, 381-425.	3.6	50
51	FTIR spectroscopy of hydrogen fluoride clusters in synchronously pulsed supersonic jets. Isotopic isolation, substitution and 3-d condensation. Chemical Physics Letters, 1997, 269, 29-38.	2.6	48
52	Dimerization of Pyrazole in Slit Jet Expansions. Zeitschrift Fur Physikalische Chemie, 2005, 219, 379-388.	2.8	48
53	From hydrogen bond donor to acceptor: the effect of ethanol fluorination on the first solvating water molecule. Physical Chemistry Chemical Physics, 2013, 15, 16065.	2.8	48
54	Observation and quantification of the hydrogen bond effect on O–H overtone intensities in an alcohol dimer. Chemical Physics, 2008, 346, 167-175.	1.9	46

#	Article	IF	CITATIONS
55	Dimer formation in nicotinamide and picolinamide in the gas and condensed phases probed by infrared spectroscopy. Physical Chemistry Chemical Physics, 2008, 10, 7010.	2.8	46
56	The Chiral Trimer and a Metastable Chiral Dimer of Achiral Hexafluoroisopropanol: A Multiâ€Messenger Study. Angewandte Chemie - International Edition, 2019, 58, 5080-5084.	13.8	46
57	Quasiadiabatic channels and effective transition-state barriers for the disrotatory in-plane hydrogen-bond exchange motion in (HF)2. Chemical Physics Letters, 1991, 183, 187-194.	2.6	45
58	Chiral self-recognition in the gas phase: the case of glycidol dimers. Physical Chemistry Chemical Physics, 2001, 3, 1945-1948.	2.8	45
59	Chirality-dependent sublimation of -(trifluoromethyl)-lactic acid: Relative vapor pressures of racemic, eutectic, and enantiomerically pure forms, and vibrational spectroscopy of isolated (S,S) and (S,R) dimers. Journal of Fluorine Chemistry, 2010, 131, 495-504.	1.7	44
60	Quantum-chemical study and FTIR jet spectroscopy of CHCl3–NH3 association in the gas phase. Physical Chemistry Chemical Physics, 2010, 12, 13555.	2.8	44
61	The furan microsolvation blind challenge for quantum chemical methods: First steps. Journal of Chemical Physics, 2018, 148, 014301.	3.0	44
62	Explicitly correlated coupled cluster calculations of the dissociation energies and barriers to concerted hydrogen exchange of (HF)n oligomers ( $n = 2,3,4,5$ ). Molecular Physics, 1998, 94, 105-119.	1.7	44
63	Alcohol dimers – how much diagonal OH anharmonicity?. Physical Chemistry Chemical Physics, 2014, 16, 15948-15956.	2.8	43
64	HF Vapor. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 1159-1167.	0.9	42
65	Chiral recognition between lactic acid derivatives and an aromatic alcohol in a supersonic expansion: electronic and vibrational spectroscopy. Physical Chemistry Chemical Physics, 2006, 8, 1007-1016.	2.8	42
66	Cooperative organic hydrogen bonds: The librational modes of cyclic methanol clusters. Journal of Chemical Physics, 2006, 125, 154314.	3.0	41
67	Control over the Hydrogenâ€Bond Docking Site in Anisole by Ring Methylation. Angewandte Chemie - International Edition, 2016, 55, 1921-1924.	13.8	41
68	Infrared spectrum and dynamics of the hydrogen bonded dimer (HF)2. Infrared Physics, 1989, 29, 535-539.	0.5	40
69	The permanentectric dipole moment of CH2D2: FIR el spectroscopy. Molecular Physics, 1996, 89, 297-313.	1.7	40
70	Tipping the Scales: Spectroscopic Tools for Intermolecular Energy Balances. Journal of Physical Chemistry Letters, 2017, 8, 5656-5665.	4.6	40
71	Breaking symmetry with hydrogen bonds: Vibrational predissociation and isomerization dynamics in HF–DF and DF–HF isotopomers. Journal of Chemical Physics, 1996, 104, 9313-9331.	3.0	39
72	Tailor-made aggregates of α-hydroxy esters in supersonic jets. Physical Chemistry Chemical Physics, 2004, 6, 2885-2890.	2.8	39

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73	Correcting the record: the dimers and trimers of trans-N-methylacetamide. Physical Chemistry Chemical Physics, 2017, 19, 10727-10737.	2.8	39
74	Raman spectroscopic evidence for the most stable water/ethanol dimer and for the negative mixing energy in cold water/ethanol trimers. Physical Chemistry Chemical Physics, 2008, 10, 5953.	2.8	38
75	Communication: Where does the first water molecule go in imidazole?. Journal of Chemical Physics, 2011, 135, 061102.	3.0	38
76	Chirality-dependent balance between hydrogen bonding and London dispersion in isolated (±)-1-indanol clusters. Physical Chemistry Chemical Physics, 2013, 15, 10167.	2.8	38
77	On hydrogen-bonded complexes: the case of (HF). Theoretica Chimica Acta, 1996, 93, 61.	0.8	37
78	Cooperative and anticooperative mixed trimers of HCl and methanol. Journal of Molecular Structure, 2006, 790, 18-26.	3.6	35
79	Hydrogen bonding lights up overtones in pyrazoles. Journal of Chemical Physics, 2007, 127, 234309.	3.0	35
80	Periodic bond breaking and making in the electronic ground state on a sub-picosecond timescale: OH bending spectroscopy of malonaldehyde in the frequency domain at low temperature. Physical Chemistry Chemical Physics, 2010, 12, 8201.	2.8	35
81	Chirality influence on the aggregation of methyl mandelate. New Journal of Chemistry, 2010, 34, 1266.	2.8	35
82	Vibrational tuning of the Hydrogen transfer in malonaldehyde – a combined FTIR and Raman jet study <sup>â€</sup> . Molecular Physics, 2013, 111, 2211-2227.	1.7	35
83	Low Temperature Infrared Spectroscopy Study of Pyrazinamide: From the Isolated Monomer to the Stable Low Temperature Crystalline Phase. Journal of Physical Chemistry A, 2010, 114, 151-161.	2.5	34
84	Weak hydrogen bonds – strong effects?. Physical Chemistry Chemical Physics, 2011, 13, 13858.	2.8	34
85	Quantitative chirality synchronization in trifluoroethanol dimers. Physical Chemistry Chemical Physics, 2006, 8, 4664-4667.	2.8	33
86	Tuning the Hydrogen Bond Donor/Acceptor Isomerism in Jet-Cooled Mixed Dimers of Aliphatic Alcohols. Journal of Physical Chemistry A, 2006, 110, 2906-2915.	2.5	33
87	Isomerization around C–C and C–O bonds in 1-propanol: Collisional relaxation in supersonic jets and selective IR photo-isomerization in cryogenic matrices. Journal of Molecular Structure, 2012, 1025, 20-32.	3.6	33
88	The effect of hydrogen bonding on torsional dynamics: A combined far-infrared jet and matrix isolation study of methanol dimer. Journal of Chemical Physics, 2014, 141, 174314.	3.0	33
89	To π or not to π – how does methanol dock onto anisole?. Physical Chemistry Chemical Physics, 2015, 17, 13045-13052.	2.8	33
90	Anisotropic molecular reorientation of liquid benzene revisited. A study using 13C magnetic relaxation through chemical shift anisotropy and spin rotation. Journal of Chemical Physics, 1991, 94, 3361-3365.	3.0	32

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91	Extension of panoramic cluster jet spectroscopy into the far infrared: Low frequency modes of methanol and water clusters. Physical Chemistry Chemical Physics, 2004, 6, 3315.	2.8	32
92	Explicitly correlated coupled cluster calculations of the dissociation energies and barriers to concerted hydrogen exchange of (HF)n oligomers (n=2,3,4,5). Molecular Physics, 1998, 94, 105-119.	1.7	31
93	Experimental and theoretical study of the microsolvation of sodium atoms in methanol clusters: differences and similarities to sodium–water and sodium–ammonia. Physical Chemistry Chemical Physics, 2008, 10, 83-95.	2.8	31
94	Size-selected methyl lactate clusters: fragmentation and spectroscopic fingerprints of chiral recognition. Physical Chemistry Chemical Physics, 2006, 8, 1148.	2.8	29
95	On the weakly C–Hâ<ï€ hydrogen bonded complexes of sevoflurane and benzene. Physical Chemistry Chemical Physics, 2011, 13, 14142.	2.8	29
96	Vibrational exciton coupling in homo and hetero dimers of carboxylic acids studied by linear infrared and Raman jet spectroscopy. Journal of Chemical Physics, 2018, 149, 104307.	3.0	29
97	Hybrid diatomics-in-molecules-based quantum mechanical/molecular mechanical approach applied to the modeling of structures and spectra of mixed molecular clusters Arn(HCl)m and Arn(HF)m. Journal of Chemical Physics, 2004, 120, 3732-3743.	3.0	28
98	Communication: Towards the binding energy and vibrational red shift of the simplest organic hydrogen bond: Harmonic constraints for methanol dimer. Journal of Chemical Physics, 2014, 141, 101105.	3.0	28
99	Stretching and folding of 2-nanometer hydrocarbon rods. Soft Matter, 2014, 10, 4885-4901.	2.7	28
100	The first microsolvation step for furans: New experiments and benchmarking strategies. Journal of Chemical Physics, 2020, 152, 164303.	3.0	28
101	Competing hydrogen bond topologies in 2-fluoroethanol dimer. Journal of Molecular Structure, 2006, 786, 86-95.	3.6	27
102	Aromatic embedding wins over classical hydrogen bonding – a multi-spectroscopic approach for the diphenyl ether–methanol complex. Physical Chemistry Chemical Physics, 2016, 18, 25975-25983.	2.8	27
103	Comparative FTIR Spectroscopy of HX Adsorbed on Solid Water:  Ragout-Jet Water Clusters vs Ice Nanocrystal Arrays. Journal of Physical Chemistry A, 2005, 109, 955-958.	2.5	26
104	On the low volatility of cyclic esters: an infrared spectroscopy comparison between dimers of $\hat{I}^3$ -butyrolactone and methyl propionate. Physical Chemistry Chemical Physics, 2009, 11, 11157.	2.8	26
105	Chirality Recognition in Menthol and Neomenthol: Preference for Homoconfigurational Aggregation. Angewandte Chemie - International Edition, 2010, 49, 6203-6206.	13.8	26
106	Soft hydrogen bonds to alkenes: the methanol–ethene prototype under experimental and theoretical scrutiny. Chemical Science, 2015, 6, 3738-3745.	7.4	26
107	FTIR investigation of non-volatile molecular nanoparticles. Chemical Physics Letters, 2000, 329, 52-60.	2.6	25
108	Identifying the first folded alkylbenzene via ultraviolet, infrared, and Raman spectroscopy of pentylbenzene through decylbenzene. Chemical Science, 2017, 8, 5305-5318.	7.4	25

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109	Spectroscopy and quantum dynamics of hydrogen fluoride clusters. Advances in Molecular Vibrations and Collision Dynamics, 1998, , 205-248.	0.8	25
110	Spectroscopic characterization of N2O aggregates: from clusters to the particulate state. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 2855-2865.	3.9	24
111	Adding more weight to a molecular recognition unit: the low-frequency modes of carboxylic acid dimers. Molecular Physics, 2010, 108, 2279-2288.	1.7	24
112	Temperature-dependent intensity anomalies in amino acid esters: weak hydrogen bonds in protected glycine, alanine and valine. Physical Chemistry Chemical Physics, 2011, 13, 14119.	2.8	24
113	Supersonic jet FTIR and quantum chemical investigations of ammonia/acetylene clusters. Physical Chemistry Chemical Physics, 2004, 6, 4642-4651.	2.8	23
114	Infrared spectroscopy of pyrrole-2-carboxaldehyde and its dimer: A planar $\hat{l}^2$ -sheet peptide model?. Journal of Chemical Physics, 2007, 126, 134313.	3.0	23
115	Weak Hydrogen Bonds Make a Difference: Dimers of Jet-Cooled Halogenated Ethanols. Zeitschrift Fur Physikalische Chemie, 2008, 222, 1407-1452.	2.8	23
116	The stiffness of a fully stretched polyethylene chain: A Raman jet spectroscopy extrapolation. Journal of Chemical Physics, 2009, 131, 161108.	3.0	23
117	Origin of the Argon Nanocoating Shift in the OH Stretching Fundamental of n-Propanol: A Combined Experimental and Quantum Chemical Study. Journal of Physical Chemistry C, 2009, 113, 10929-10938.	3.1	23
118	Phenyl- vs Cyclohexyl-Substitution in Methanol: Implications for the OH Conformation and for Dispersion-Affected Aggregation from Vibrational Spectra in Supersonic Jets. Journal of Physical Chemistry A, 2014, 118, 3266-3279.	2.5	22
119	Molecular Docking via Olefinic OH···π Interactions: A Bulky Alkene Model System and Its Cooperativity. Journal of Physical Chemistry A, 2015, 119, 1723-1730.	2.5	22
120	Multidimensional vibrational quantum Monte Carlo technique using robust interpolation from static or growing sets of discrete potential energy points. Chemical Physics Letters, 1993, 214, 373-380.	2.6	21
121	How Broad Are Water Dimer Bands?. Science, 2004, 304, 823-824.	12.6	21
122	Size-selective vibrational spectroscopy of methyl glycolate clusters: comparison with ragout-jet FTIR spectroscopy. Physical Chemistry Chemical Physics, 2004, 6, 4614-4620.	2.8	21
123	Conformation-Changing Aggregation in Hydroxyacetone: A Combined Low-Temperature FTIR, Jet, and Crystallographic Study. Journal of the American Chemical Society, 2011, 133, 20194-20207.	13.7	21
124	Dispersion-controlled docking preference: multi-spectroscopic study on complexes of dibenzofuran with alcohols and water. Physical Chemistry Chemical Physics, 2019, 21, 16032-16046.	2.8	21
125	The benefits of alternation and alkylation: large amplitude hydrogen bond librational modes of alcohol trimers and tetramers. Physical Chemistry Chemical Physics, 2010, 12, 8152.	2.8	20
126	Subtle solvation behaviour of a biofuel additive: the methanol complex with 2,5-dimethylfuran. Physical Chemistry Chemical Physics, 2016, 18, 27265-27271.	2.8	20

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127	Soft experimental constraints for soft interactions: a spectroscopic benchmark data set for weak and strong hydrogen bonds. Physical Chemistry Chemical Physics, 2019, 21, 18799-18810.	2.8	20
128	Stretching of <i>cis</i> -formic acid: warm-up and cool-down as molecular work-out. Chemical Science, 2019, 10, 6285-6294.	7.4	20
129	The Chiral Trimer and a Metastable Chiral Dimer of Achiral Hexafluoroisopropanol: A Multiâ€Messenger Study. Angewandte Chemie, 2019, 131, 5134-5138.	2.0	20
130	Dipole Moment Function of Methane and Analytical Anharmonic, 9â€dimensional Potential Surface: Theory and Experiment for the Permanent Electric Dipole Moment of CH <sub>2</sub> D <sub>2</sub> Using Quantum Monte Carlo Calculations and FIR Spectroscopy. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 275-281.	0.9	19
131	A Symmetric Recognition Motif between Vicinal Diols: The Fourfold Grip in Ethylene Glycol Dimer. Angewandte Chemie - International Edition, 2016, 55, 4591-4595.	13.8	19
132	Molecular Recognition in Glycolaldehyde, the Simplest Sugar: Two Isolated Hydrogen Bonds Win Over One Cooperative Pair. ChemistryOpen, 2012, 1, 269-275.	1.9	18
133	Microscopic Roots of Alcohol–Ketone Demixing: Infrared Spectroscopy of Methanol–Acetone Clusters. Journal of Physical Chemistry A, 2015, 119, 2225-2232.	2.5	18
134	On hydrogen-bonded complexes: the case of (HF)2. Theoretica Chimica Acta, 1996, 93, 61-65.	0.8	17
135	Variations of bite angle and coupling patterns in double hydrogen bonds: The case of oxime dimers. Journal of Molecular Structure, 2008, 880, 2-13.	3.6	17
136	Potential Energy Hypersurfaces for Hydrogen Bonded Clusters (HF) n., 1997,, 415-463.		17
137	Increasing the weights in the molecular work-out of <i>cis</i> - and <i>trans</i> -formic acid: extension of the vibrational database <i>via</i> deuteration. Physical Chemistry Chemical Physics, 2020, 22, 25492-25501.	2.8	17
138	Exploring a hydrogen-bond terminus: spectroscopy of eucalyptol–alcohol clusters. Physical Chemistry Chemical Physics, 2000, 2, 3555-3563.	2.8	16
139	Infrared spectra of phenanthrene particles generated by pulsed rapid expansion of CO2solutions. Physical Chemistry Chemical Physics, 2004, 6, 4652-4657.	2.8	16
140	Dimers of cyclic carbonates: chirality recognition in battery solvents and energy storage. Physical Chemistry Chemical Physics, 2011, 13, 14176.	2.8	16
141	Solute–solvent interactions in cryosolutions: a study of halothane–ammonia complexes. Physical Chemistry Chemical Physics, 2012, 14, 6469.	2.8	16
142	Adaptive Aggregation of Peptide Model Systems. Journal of Physical Chemistry A, 2013, 117, 7050-7063.	2.5	16
143	Multi-spectroscopic and theoretical analyses on the diphenyl ether– <i>tert</i> -butyl alcohol complex in the electronic ground and electronically excited state. Physical Chemistry Chemical Physics, 2017, 19, 18076-18088.	2.8	16
144	Dinitrogen as a Sensor for Metastable Carboxylic Acid Dimers and a Weak Hydrogen Bond Benchmarking Tool. Journal of Physical Chemistry A, 2018, 122, 2933-2946.	2.5	16

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145	The reduced cohesion of homoconfigurational 1,2-diols. Physical Chemistry Chemical Physics, 2020, 22, 1122-1136.	2.8	16
146	Torsional isomers in methylated aminoethanols - A jet-FT-IR study. Canadian Journal of Chemistry, 2004, 82, 1006-1012.	1.1	15
147	Infrared absorption imaging of 2D supersonic jet expansions: Free expansion, cluster formation, and shock wave patterns. Journal of Chemical Physics, 2013, 139, 024201.	3.0	15
148	The OH stretching spectrum of warm water clusters. Journal of Chemical Physics, 2014, 140, 064312.	3.0	15
149	Concerted Pair Motion Due to Double Hydrogen Bonding: The Formic Acid Dimer Case. Journal of the Indian Institute of Science, 2020, 100, 5-19.	1.9	15
150	A Rather Universal Vibrational Resonance in 1:1 Hydrates of Carbonyl Compounds. Journal of Physical Chemistry Letters, 2021, 12, 138-144.	4.6	15
151	The Hydrates of TEMPO: Water Vibrations Reveal Radical Microsolvation. Angewandte Chemie - International Edition, 2021, 60, 19013-19017.	13.8	15
152	Understanding benzyl alcohol aggregation by chiral modification: the pairing step. Physical Chemistry Chemical Physics, 2020, 22, 25538-25551.	2.8	15
153	Reliable determination of multidimensional analytical fitting bias. Chemical Physics Letters, 1994, 223, 474-480.	2.6	14
154	Brightening and Locking a Weak and Floppy Nâ^'H Chromophore: The Case of Pyrrolidine. Journal of Physical Chemistry A, 2010, 114, 10492-10499.	2.5	14
155	Quantenchemische Methoden im Leistungsvergleich: Stimmt die Richtung noch?. Angewandte Chemie, 2017, 129, 11155-11163.	2.0	14
156	Experimental Reference Data for Hexafluorinated Propanol by Exploring an Unusual Intermolecular Torsional Balance. Angewandte Chemie - International Edition, 2017, 56, 12672-12676.	13.8	13
157	Incremental NH stretching downshift through stepwise nitrogen complexation of pyrrole: a combined jet expansion and matrix isolation study. Physical Chemistry Chemical Physics, 2019, 21, 1277-1284.	2.8	13
158	Phenylacetylene as a gas phase sliding balance for solvating alcohols. Physical Chemistry Chemical Physics, 2019, 21, 7831-7840.	2.8	13
159	Glycolic Acid as a Vibrational Anharmonicity Benchmark. Journal of Physical Chemistry Letters, 2020, 11, 5228-5233.	4.6	13
160	Three-dimensional docking of alcohols to ketones: an experimental benchmark based on acetophenone solvation energy balances. Physical Chemistry Chemical Physics, 2020, 22, 2870-2877.	2.8	13
161	A Sustainable Slit Jet FTIR Spectrometer for Hydrate Complexes and Beyond. Instruments, 2021, 5, 12.	1.8	13
162	Rovibronic signatures of molecular aggregation in the gas phase: subtle homochirality trends in the dimer, trimer and tetramer of benzyl alcohol. Physical Chemistry Chemical Physics, 2021, 23, 23610-23624.	2.8	13

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163	Cooperativity in Alcohol–Nitrogen Complexes: Understanding Cryomatrices through Slit Jet Expansions. Journal of Physical Chemistry A, 2017, 121, 3411-3422.	2.5	12
164	Formic acid aggregation in 2D supersonic expansions probed by FTIR imaging. Journal of Chemical Physics, 2017, 147, 144305.	3.0	12
165	The phenyl vinyl ether–methanol complex: a model system for quantum chemistry benchmarking. Beilstein Journal of Organic Chemistry, 2018, 14, 1642-1654.	2.2	12
166	A Nuclear Magnetic Relaxation Study of the Structure of Binary Liquid Mixtures of Hexafluorobenzene with Benzene and Cyclohexane. Zeitschrift Fur Physikalische Chemie, 1987, 155, 101-119.	2.8	11
167	The performance of the semi-empirical AM1 method on small and nanometre-sized N2O clusters. Physical Chemistry Chemical Physics, 2004, 6, 4939-4949.	2.8	11
168	High Resolution FTIR and Diode Laser Supersonic Jet Spectroscopy of the $\langle i \rangle N \langle  i \rangle = 2$ HF Stretching Polyad in (HF) $\langle sub \rangle 2 \langle  sub \rangle$ and (HFDF): Hydrogen Bond Switching and Predissociation Dynamics. Zeitschrift Fur Physikalische Chemie, 2007, 221, 1581-1645.	2.8	11
169	Predicting OH stretching fundamental wavenumbers of alcohols for conformational assignment: different correction patterns for density functional and wave-function-based methods. Physical Chemistry Chemical Physics, 2021, 23, 5629-5643.	2.8	11
170	Parameterized dipole moment function for the water molecule. Molecular Physics, 1991, 73, 463-469.	1.7	10
171	Chemical dynamics of large amplitude motion. Physical Chemistry Chemical Physics, 2010, 12, 8151.	2.8	10
172	Vibrational Signatures of Chirality Recognition Between αâ€Pinene and Alcohols for Theory Benchmarking. Angewandte Chemie - International Edition, 2019, 58, 8177-8181.	13.8	10
173	Anisotropic molecular reorientation of hexafluorobenzene in binary liquid mixtures with benzene and cyclohexane. A nuclear magnetic relaxation study. Chemical Physics Letters, 1989, 159, 193-198.	2.6	9
174	Conformation and Aggregation of Proline Esters and Their Aromatic Homologs: Pyramidal vs. Planar RR´N-H in Hydrogen Bonds. Zeitschrift Fur Physikalische Chemie, 2009, 223, 579-604.	2.8	9
175	Conformational instability upon dimerization: Prolinol. Journal of Molecular Structure, 2010, 976, 397-404.	3.6	9
176	Constraining the Conformational Landscape of a Polyether Building Block by Raman Jet Spectroscopy. Zeitschrift Fur Physikalische Chemie, 2015, 229, 1625-1648.	2.8	9
177	The donor OH stretching–libration dynamics of hydrogen-bonded methanol dimers in cryogenic matrices. Physical Chemistry Chemical Physics, 2016, 18, 3739-3745.	2.8	9
178	Strained hydrogen bonding in imidazole trimer: a combined infrared, Raman, and theory study. Physical Chemistry Chemical Physics, 2019, 21, 5989-5998.	2.8	9
179	2-Methoxyethanol: harmonic tricks, anharmonic challenges and chirality-sensitive chain aggregation. Physical Chemistry Chemical Physics, 2020, 22, 15303-15311.	2.8	9
180	Halogens in Acetophenones Direct the Hydrogen Bond Docking Preference of Phenol via Stacking Interactions. Molecules, 2021, 26, 4883.	3.8	9

#	Article	IF	Citations
181	Setting up the HyDRA blind challenge for the microhydration of organic molecules. Physical Chemistry Chemical Physics, 2022, 24, 11442-11454.	2.8	9
182	The Guinness Molecules for the Carbohydrate Formula. Chemical Record, 2014, 14, 1116-1133.	5.8	8
183	Bracketing subtle conformational energy differences between self-solvated and stretched trifluoropropanol. Physical Chemistry Chemical Physics, 2015, 17, 9899-9909.	2.8	8
184	Slow monomer vibrations in formic acid dimer: Stepping up the ladder with FTIR and Raman jet spectroscopy. Journal of Chemical Physics, 2021, 155, 224301.	3.0	8
185	Suppressed Particle Formation by Kinetically Controlled Ozone Removal: Revealing the Role of Transientâ€5pecies Chemistry during Alkene Ozonolysis. Angewandte Chemie - International Edition, 2009, 48, 2231-2235.	13.8	7
186	Helium Nanodroplet Study of the Hydrogen-Bonded OH Vibrations in HCl–H <sub>2</sub> O Clusters. Journal of Physical Chemistry A, 2015, 119, 2636-2643.	2.5	7
187	Ringmethylierung kontrolliert die WasserstoffbrÃ⅓ckenâ€Andockstelle bei Anisol. Angewandte Chemie, 2016, 128, 1955-1959.	2.0	7
188	Pinacolone-Alcohol Gas-Phase Solvation Balances as Experimental Dispersion Benchmarks. Molecules, 2020, 25, 5095.	3.8	7
189	Subtle hydrogen bonds: benchmarking with OH stretching fundamentals of vicinal diols in the gas phase. Physical Chemistry Chemical Physics, 2021, 23, 21623-21640.	2.8	7
190	Chiral Recognition in Jet-Cooled Complexes. Australian Journal of Chemistry, 2004, 57, 1149.	0.9	5
191	Guinness Molecules: Identifying Lowestâ€Energy Structures. Angewandte Chemie - International Edition, 2014, 53, 1714-1715.	13.8	5
192	Quantifying Conformational Isomerism in Chain Molecules by Linear Raman Spectroscopy: The Case of Methyl Esters. Molecules, 2021, 26, 4523.	3.8	5
193	A Symmetric Recognition Motif between Vicinal Diols: The Fourfold Grip in Ethylene Glycol Dimer. Angewandte Chemie, 2016, 128, 4667-4671.	2.0	4
194	Spectroscopic probes of molecular recognition. Physical Chemistry Chemical Physics, 2007, 9, 4443.	2.8	3
195	Comment on "Theoretical investigations into the enantiomeric and racemic forms of α-(trifluoromethyl)lactic acid―by R. Tonner, V. A. Soloshonok and P. Schwerdtfeger, Phys. Chem. Chem. Phys., 2011, 13, 811-817. Physical Chemistry Chemical Physics, 2011, 13, 4159.	2.8	3
196	Detailed Assignment of the CH Chromophores in Methyl Mandelate and Mandelic Acid: A Multi-Experimental Approach Using Polarized FTIR Microspectroscopy of Sublimated Crystals. Crystal Growth and Design, 2012, 12, 1933-1942.	3.0	3
197	Experimental Reference Data for Hexafluorinated Propanol by Exploring an Unusual Intermolecular Torsional Balance. Angewandte Chemie, 2017, 129, 12846-12850.	2.0	2
198	Vibrational Signatures of Chirality Recognition Between αâ€Pinene and Alcohols for Theory Benchmarking. Angewandte Chemie, 2019, 131, 8261-8265.	2.0	2

#	Article	IF	CITATIONS
199	The Hydrates of TEMPO: Water Vibrations Reveal Radical Microsolvation. Angewandte Chemie, 2021, 133, 19161-19165.	2.0	2
200	Comment on: "Quantum Confinement in Hydrogen Bond―by Carlos da Silva dos Santos, Elso Drigo Filho, and Regina Maria Ricotta, Int. J. Quantum Chem. 2015, 115, 765-770 International Journal of Quantum Chemistry, 2015, 115, 1510-1511.	2.0	1
201	Polymer Segments at the Folding Limit: Raman Scattering for the Diglyme Benchmark. ChemPhysChem, 2017, 18, 3570-3575.	2.1	1
202	Understanding dispersion interactions in molecular chemistry. Physical Chemistry Chemical Physics, 2021, 23, 8960-8961.	2.8	1
203	Attaching Onto or Inserting Into an Intramolecular Hydrogen Bond: Exploring and Controlling a Chirality-Dependent Dilemma for Alcohols. Symmetry, 2022, 14, 357.	2.2	1
204	Hydrogen Delocalization in an Asymmetric Biomolecule: The Curious Case of Alpha-Fenchol. Molecules, 2022, 27, 101.	3.8	1
205	Physikalische Chemie 1999. Nachrichten Aus Der Chemie, 2000, 48, 313-327.	0.0	0
206	The Performance of the Semi-empirical AM1 Method on Small and Nanometer-Sized N2O Clusters ChemInform, 2005, 36, no.	0.0	0
207	The elastic modulus of isolated polytetrafluoroethylene filaments. ScienceOpen Research, 2014, .	0.6	0