Konstantin S Rutkowski

List of Publications by Year
in descending order

55	756	623734	552781
papers	citations	14 h-index	26 g-index

55	55	55	443
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unusual spectroscopic properties of CF3H dissolved in liquified Ar, N2, CO, and CO2. Chemical Physics Letters, 2002, 352, 301-310.	2.6	69
2	A Cryosolution Infrared Study of the Complexes of Fluoroform with Ammonia and Pyridine:Â Evidence for a Câ¯HÂ·Â·Â·N Pseudo Blue-Shifting Hydrogen Bond. Journal of Physical Chemistry A, 2005, 109, 3038-3044.	2.5	63
3	Blue shifted F3CHâ‹¯FCD3 and Cl3CHâ‹¯FCD3 weakly H-bound complexes. Cryospectroscopic and ab initio study. Chemical Physics, 2005, 313, 225-243.	1.9	59
4	Ab Initio Studies of Electron Acceptor-Donor Interactions with Blue- and Red-Shifted Hydrogen Bonds. ChemPhysChem, 2005, 6, 1282-1292.	2.1	59
5	Gas phase IR spectra of systems with intramolecular hydrogen bonds. Journal of Molecular Structure, 1994, 322, 195-203.	3.6	34
6	Strong and weak effects caused by non covalent interactions between chloroform and selected electron donor molecules. Physical Chemistry Chemical Physics, 2011, 13, 14223.	2.8	32
7	Cryospectroscopic and ab initio studies of haloformâ€“trimethylamine H-bonded complexes. Physical Chemistry Chemical Physics, 2009, 11, 1551.	2.8	30
8	Comparative studies of blue shifting and red shifting effects in fluoroform and acetylene cryogenic solutions. Journal of Molecular Structure, 2004, 705, 49-61.	3.6	29
9	FTIR study of the hydrogen bond symmetry in protonated homodimers of pyridine and collidine in solution. Journal of Molecular Structure, 2012, 1018, 39-44.	3.6	27
10	The Sâ€“Hâ‹¯N versus Oâ€“Hâ‹¯N hydrogen bonding in the ammonia complexes with CH3OH and CH3SH. Journal of Molecular Structure, 2012, 1009, 96-102.	3.6	26
11	Infrared spectra and relative stability of the F3CH/NH3 H-bonded complex in liquefied Xe. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 1595-1602.	3.9	24
12	Solvent effect on the blue shifted weakly H-bound F3 CHâ€¦FCD3 complex. Journal of Molecular Structure, 2008, 880, 64-68.	3.6	24
13	Infrared studies of acetylene dissolved in liquefied Ar, Kr, N2, CO, and CO2. Journal of Molecular Structure, 2002, 614, 305-313.	3.6	18
14	A cryosolution FTIR and ab initio study of the blue shifting Câ€“HÂ·Â·Â·F hydrogen bonded complexes F2ClCHÂ·FCD3 and Cl2FCHÂ·FCD3. Chemical Physics, 2008, 354, 71-79.	1.9	18
15	Infrared studies of weak Bâ€¦HCl (B = HCl, CO, Xe, N2) complex formation in solid Kr solutions. Journal of Molecular Structure, 1998, 448, 231-237.	3.6	14
16	Car-Parrinello Molecular Dynamics Study of a Blue-Shifted Intermolecular Weak-Hydrogen-Bond System. ChemPhysChem, 2005, 6, 1719-1724.	2.1	14
17	Towards understanding the spectroscopic features of enflurane. The fundamental and overtone bands of CH stretching vibrations. Chemical Physics Letters, 2014, 604, 68-71.	2.6	13
18	Temperature dependence studies and model calculations of Î½(OH) and Î½(OD) band shapes of salicylaldehyde. Journal of Molecular Structure, 1996, 381, 141-148.	3.6	12

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19	Higher-order transitions in the IR spectrum of the weak OCâ‹¯HCl complex dissolved in liquid CO. Chemical Physics Letters, 2000, 325, 425-432.	2.6	12
20	Carâ€“Parrinello Molecular Dynamics Study of the Blue-Shifted F3CHâ‹…â‹…â‹…FCD3 System in Liquid N2. ChemPhysChem, 2006, 7, 1221-1228.	2.1	12
21	First-principles study of fluoroform adsorption on a hexagonal ice (0001) surface: weak hydrogen bondsâ€”strong structural effects. Physical Chemistry Chemical Physics, 2011, 13, 14101.	2.8	12
22	The gas phase FTIR studies of chloroform+B and halothane+B (B=TMA, FCD3) mixtures. Journal of Molecular Structure, 2014, 1072, 32-37.	3.6	12
23	FTIR and Raman spectra of CH(D)FClCF2OCHF derivatives of enflurane. Experimental and ab initio study. Chemical Physics, 2015, 453-454, 26-34.	1.9	11
24	Temperature dependence of the Î½s(OH) band shape of ortho-Mannich bases in gas phase and liquid xenon solution. Vibrational Spectroscopy, 1994, 7, 265-274.	2.2	10
25	Theoretical study of Hal3CH/F2CD2 (Hal=F,Cl) and F3CH/FH heterodimers with blue shifted hydrogen bonds. Chemical Physics, 2006, 327, 193-201.	1.9	10
26	Cooperative effects in blue-shifted hydrogen bonded cluster of from first principles simulations. Chemical Physics, 2009, 361, 129-136.	1.9	10
27	Cryospectroscopic and ab initio anharmonic studies of acetyleneâ€“trimethylamine H-bonded complex. Chemical Physics, 2010, 375, 92-100.	1.9	8
28	Infrared spectroscopy and ab initio study of hydrogen bonded Cl3CDÂ·N(CH3)3 complex in the gas phase. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 95-99.	3.9	8
29	Vibrational spectra of OCâ‹¯HCl complex in Kr solutions at liquid to solid phase transition. Journal of Molecular Structure, 1999, 511-512, 233-240.	3.6	7
30	Degeneracy Lifting Effect in the FTIR Spectrum of Fluoroform Trapped in a Nitrogen Matrix. An Experimental and Carâ€“Parrinello Molecular Dynamics Study. Journal of Physical Chemistry A, 2016, 120, 3497-3503.	2.5	7
31	FTIR cryospectroscopic and ab initio studies of desfluraneâ€“dimethyl ether Hâ€“bonded complexes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 184, 163-168.	3.9	7
32	CHâ‹¯B interactions in acetylene containing solutions: experimental and theoretical DFT studies. Journal of Molecular Structure, 2003, 645, 295-302.	3.6	6
33	The infrared study of fluoroformâ€¯+â€¯methyl fluoride mixtures in argon and nitrogen matrices. Evidence of nonlinear blue-shifting complex formation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 203, 185-194.	3.9	6
34	Effect of liquid to solid phase transition on rotational and vibrational broadening of vibrational bands of CF3CL in Xe solutions. Vibrational Spectroscopy, 2000, 24, 277-286.	2.2	5
35	Vibrational spectra and conformational analysis of desflurane. A cryosolution and ab initio study. Chemical Physics Letters, 2015, 637, 77-82.	2.6	5
36	Investigation of the IR spectra of weakly hydrogen-bonded complex Cl3CHâ€¦O(CD3)2 in a cryosolution in liquid krypton. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2016, 120, 242-249.	0.6	5

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37	Conformational origin of temperature changes in the IR spectrum of isoflurane. A cryosolution and ab initio study. Journal of Molecular Structure, 2017, 1134, 374-380.	3.6	5
38	IR spectra of halothaneâ€“acetone complex in liquefied noble gases (Kr and Xe). Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2017, 123, 30-37.	0.6	5
39	Spectroscopic manifestation of molecular rotation dynamics in dense media: CO fundamental band in liquid and solid CO-Kr and CO-Xe solutions. Journal of Molecular Liquids, 2001, 92, 251-261.	4.9	4
40	Spectroscopic evidence of weak complex formation between N,N-dimethylformamide and fluoroform in the gas phase. Journal of Molecular Structure, 2018, 1160, 328-332.	3.6	4
41	Evolution of IR spectra of a weakly-bound OCOâ‹¯HCl complex with increasing CO2 density from the gas to liquid phase. Journal of Molecular Structure, 2001, 598, 205-211.	3.6	3
42	Cryosolution infrared study of hydrogen bonded halothane acetylene complex. Journal of Molecular Structure, 2018, 1160, 434-439.	3.6	3
43	Noncovalent interactions between isoflurane and dimethyl ether. Spectroscopic evidence of trimer formation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 223, 117363.	3.9	3
44	Infrared studies of CO2 doped Xe solutions in gas, liquid and solid phases. The fundamental Î½3 band and the Coriolis perturbed Fermi doublet (Î½21+Î½22, Î½21+Î½211). Journal of Molecular Structure, 2001, 596, 179-183.	3.6	2
45	Identification of H-Bonds in a Calcified Aortic Valve. Technical Physics Letters, 2019, 45, 927-929.	0.7	2
46	IRâ€“IR double-resonance studies of vibrational relaxation of CD3F in solid and liquid Xe, Kr, Ar solutions near the melting point. Chemical Physics, 1998, 237, 403-411.	1.9	1
47	IR spectra of CH3F in liquid and solid noble gas solutions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2000, 56, 1813-1818.	3.9	1
48	FTIR studies of HCl dissolved in liquid CO: Anharmonic effects in the weak OCâ€¦HCl complex. Journal of Molecular Structure, 2007, 844-845, 64-69.	3.6	1
49	Spectroscopic evidence of reversible micro-crystallization of carbon dioxide dissolved in solid xenon. Chemical Physics Letters, 2013, 583, 54-59.	2.6	1
50	Evidence of noncovalent interactions between sevoflurane and dimethyl ether. FTIR cryospectroscopic and ab initio studies. Journal of Molecular Structure, 2020, 1221, 128852.	3.6	1
51	Spectral Diagnostics of the Dynamics of the Formation of a Homoconjugated Complex [HCN.H.NCH]+. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2020, 128, 467-469.	0.6	1
52	IR cryospectroscopic manifestation of complex formation between methoxyflurane and dimethyl ether in liquid Xe. Chemical Physics Letters, 2020, 742, 137134.	2.6	1
53	Vibrational relaxation studies of systems with strong intermolecular interactions at low temperatures in the gas phase and in cryogenic solutions. Advances in Molecular Relaxation and Interaction Processes, 1982, 22, 223-231.	0.5	0
54	Shape of the IR bands of CH4: The CH4-Kr system in different phase states. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2000, 88, 169-175.	0.6	0

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55	Cryospectroscopic evidence of trimer formation between halothane and trimethylamine, stabilized by hydrogen and halogen bonds. Journal of Molecular Structure, 2021, 1243, 130766.	3.6	0