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	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
2	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
3	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
4	IR cryospectroscopic manifestation of complex formation between methoxyflurane and dimethyl ether in liquid Xe. Chemical Physics Letters, 2020, 742, 137134.	2.6	1
5	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
6	Identification of H-Bonds in a Calcified Aortic Valve. Technical Physics Letters, 2019, 45, 927-929.	0.7	2
7	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
8	Cryosolution infrared study of hydrogen bonded halothane acetylene complex. Journal of Molecular Structure, 2018, 1160, 434-439.	3.6	3
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	Vibrational spectra and conformational analysis of desflurane. A cryosolution and ab initio study. Chemical Physics Letters, 2015, 637, 77-82.	2.6	5
17	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
18	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

#	Article	IF	Citations
19	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
20	Spectroscopic evidence of reversible micro-crystallization of carbon dioxide dissolved in solid xenon. Chemical Physics Letters, 2013, 583, 54-59.	2.6	1
21	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
22	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
23	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
24	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
25	Cryospectroscopic and ab initio anharmonic studies of acetyleneâ€“trimethylamine H-bonded complex. Chemical Physics, 2010, 375, 92-100.	1.9	8
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 studies of haloformâ€“trimethylamine H-bonded complexes. Physical Chemistry Chemical Physics, 2009, 11, 1551.	2.8	30
28	Solvent effect on the blue shifted weakly H-bound F3 CHâ€¦FCD3 complex. Journal of Molecular Structure, 2008, 880, 64-68.	3.6	24
29	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
30	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
31	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
32	Carâ€“Parrinello Molecular Dynamics Study of the Blue-Shifted F3CHâ‹…â‹…â‹…â‹…â‹…FCD3 System in Liquid N2. ChemPhysChem, 2006, 7, 1221-1228.	2.1	12
33	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
34	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
35	Car-Parrinello Molecular Dynamics Study of a Blue-Shifted Intermolecular Weak-Hydrogen-Bond System. ChemPhysChem, 2005, 6, 1719-1724.	2.1	14
36	Ab Initio Studies of Electron Acceptor-Donor Interactions with Blue- and Red-Shifted Hydrogen Bonds. ChemPhysChem, 2005, 6, 1282-1292.	2.1	59

#	Article	IF	Citations
37	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
38	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
39	CHâ‹¯B interactions in acetylene containing solutions: experimental and theoretical DFT studies. Journal of Molecular Structure, 2003, 645, 295-302.	3.6	6
40	Infrared studies of acetylene dissolved in liquefied Ar, Kr, N2, CO, and CO2. Journal of Molecular Structure, 2002, 614, 305-313.	3.6	18
41	Unusual spectroscopic properties of CF3H dissolved in liquified Ar, N2, CO, and CO2. Chemical Physics Letters, 2002, 352, 301-310.	2.6	69
42	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
43	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
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+Î½221, Î½21+Î½211). Journal of Molecular Structure, 2001, 596, 179-183.	3.6	2
45	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
46	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
47	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
48	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
49	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
50	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
51	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
52	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
53	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
54	Gas phase IR spectra of systems with intramolecular hydrogen bonds. Journal of Molecular Structure, 1994, 322, 195-203.	3.6	34

#	Article	IF	Citations
55	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