# Sm Melikova

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1950361/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 65 papers | 994 citations | 430874 18 h-index | 477307 29 g-index |
| 65 all docs | 65 docs citations | 65 times ranked | 629 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 | Interplay of Ï€-stacking and inter-stacking interactions in two-component crystals of neutral closed-shell aromatic compounds: periodic DFT study. RSC Advances, 2020, 10, 27899-27910. | 3.6 | 20 |
| 4 | 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 |
| 5 | IR cryospectroscopic manifestation of complex formation between methoxyflurane and dimethyl ether in liquid Xe. Chemical Physics Letters, 2020, 742, 137134. | 2.6 | 1 |
| 6 | 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 |
| 7 | New look at the Badger-Bauer rule: Correlations of spectroscopic IR and NMR parameters with hydrogen bond energy and geometry. FHF complexes. Journal of Molecular Structure, 2018, 1164, 129-136. | 3.6 | 22 |
| 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 | 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 |
| 23 | Cryospectroscopic and ab initio anharmonic studies of acetyleneâ€“trimethylamine H-bonded complex. Chemical Physics, 2010, 375, 92-100. | 1.9 | 8 |
| 24 | Cooperative effects in blue-shifted hydrogen bonded cluster of from first principles simulations. Chemical Physics, 2009, 361, 129-136. | 1.9 | 10 |
| 25 | Cryospectroscopic and ab initio studies of haloformâ€“trimethylamine H-bonded complexes. Physical Chemistry Chemical Physics, 2009, 11, 1551. | 2.8 | 30 |
| 26 | Solvent effect on the blue shifted weakly H-bound F3 CHâ€¦FCD3 complex. Journal of Molecular Structure, 2008, 880, 64-68. | 3.6 | 24 |
| 27 | 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 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | 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 |
| 32 | 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 |
| 33 | Car-Parrinello Molecular Dynamics Study of a Blue-Shifted Intermolecular Weak-Hydrogen-Bond System. ChemPhysChem, 2005, 6, 1719-1724. | 2.1 | 14 |
| 34 | Ab Initio Studies of Electron Acceptor-Donor Interactions with Blue- and Red-Shifted Hydrogen Bonds. ChemPhysChem, 2005, 6, 1282-1292. | 2.1 | 59 |
| 35 | 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 |
| 36 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Proton Transfer Equilibria in Schiff Bases with Steric Repulsion. Journal of Physical Chemistry A, 2004, 108, 2131-2138. | 2.5 | 66 |
| 38 | CHâ‹¯B interactions in acetylene containing solutions: experimental and theoretical DFT studies. Journal of Molecular Structure, 2003, 645, 295-302. | 3.6 | 6 |
| 39 | Interpretation of Hydrogen/Deuterium Isotope Effects on NMR Chemical Shifts of [FHF]â¯ Ion Based on Calculations of Nuclear Magnetic Shielding Tensor Surface. Zeitschrift Fur Physikalische Chemie, 2003, 217, 1549-1564. | 2.8 | 41 |
| 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 and structural consequences of intramolecular hydrogen bond formation in ortho -dimethylaminomethylphenol. Journal of Molecular Structure, 2001, 559, 127-145. | 3.6 | 40 |
| 43 | Infrared studies of CO2 doped Xe solutions in gas, liquid and solid phases. The fundamental Î½3 band and the Coriolis perturbed Fermi doublet (Î½1+Î½21, Î½1+Î½211). Journal of Molecular Structure, 2001, 596, 179-183. | 3.6 | 2 |
| 44 | Dimerization and solvent-assisted proton dislocation in the low-barrier hydrogen bond of a Mannich base: a low-temperature NMR study. Magnetic Resonance in Chemistry, 2001, 39, S81-S90. | 1.9 | 23 |
| 45 | The model analysis of the effects of electrical and mechanical anharmonicity on vibrational spectra of H-bonded complexes. Journal of Molecular Structure, 2000, 552, 273-282. | 3.6 | 13 |
| 46 | Influence of hydrogen bonding on the conformation of ortho -aminomethylphenol. Journal of Molecular Structure, 2000, 523, 223-239. | 3.6 | 15 |
| 47 | 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 |
| 48 | 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 |
| 49 | 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 |
| 50 | 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 |
| 51 | Stretching mode interaction of equal and unequal pairs of SeH<sup>â¯</sup>and SeD<sup>â¯</sup>defects in alkali halides. Radiation Effects and Defects in Solids, 1999, 151, 311-315. | 1.2 | 6 |
| 52 | 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 |
| 53 | Gas phase FT-IR spectra and structure of aminoalcohols with intramolecular hydrogen bonds. Vibrational Spectroscopy, 1999, 20, 69-83. | 2.2 | 28 |
| 54 | 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 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 55 | Effect of electrical and mechanical anharmonicity on vibrational spectra of H-bonded complexes: phenoltctdot;B (B = acetonitrile, pyridine) systems. Journal of Molecular Structure, 1998, 448, 239-246. | 3.6 | 17 |
| 56 | 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 |
| 57 | 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 |
| 58 | The analysis of the band structure in Î½<sub>1</sub> of HCN...HF complex. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1994, 91, 163-171. | 0.2 | 3 |
| 59 | Application of the method of cryospectroscopy to the study of the molecular composition of gases. Journal of Applied Spectroscopy, 1992, 56, 224-230. | 0.7 | 0 |
| 60 | Quantitative analysis of sulfur hexafluoride for molecular impurities using IR absorption spectra of solutions in liquid argon. Journal of Applied Spectroscopy, 1992, 56, 360-364. | 0.7 | 0 |
| 61 | Theoretical vibrational study of hydrogen-bonded complexes : a simple anharmonical model. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1992, 89, 607-613. | 0.2 | 12 |
| 62 | An optical cryostat with a variable layer for examining the spectra of solutions in liquefied gases. Journal of Applied Spectroscopy, 1986, 45, 1000-1001. | 0.7 | 2 |
| 63 | Vibrational spectra of Freons dissolved in liquid argon. Journal of Applied Spectroscopy, 1985, 43, 999-1005. | 0.7 | 2 |
| 64 | Study on the solubility light alkanes in liquid nitrogen. Cryogenics, 1980, 20, 48-51. | 1.7 | 7 |
| 65 | The solubility of light olefins in liquid nitrogen: Part 2. Cryogenics, 1979, 19, 649-651. | 1.7 | 7 |