

Qian Gou

List of Publications by Year in descending order

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552781

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99
all docs

99
docs citations

99
times ranked

587
citing authors

#	ARTICLE	IF	CITATIONS
1	Rotational spectrum of Isochroman. Journal of Molecular Structure, 2022, 1254, 132322.	3.6	0
2	Rotational Spectra of 2-Ethynylpyridine and Its Monohydrate: Influence of the Ortho-Substitution on Ring Geometry and Intermolecular Hydrogen Bonds. Journal of Physical Chemistry A, 2022, 126, 623-629.	2.5	1
3	Sp ² - and sp ³ -C=O tetrel bonds in the 3-oxetanone homodimer. Physical Chemistry Chemical Physics, 2022, , .	2.8	5
4	Interaction Types in C ₆ H ₅ (CH ₂) _n OHâ€“CO ₂ (n = 1-10) / Overlaid 149-155.	4.6	10
5	Modulation of π character upon complexation captured by molecular rotation spectra. Physical Chemistry Chemical Physics, 2022, , .	2.8	0
6	Laboratory Measurements and Astronomical Search for Methoxyacetone and Methyl Methoxyacetate. Journal of Physical Chemistry A, 2022, 126, 3549-3554.	2.5	4
7	Competitive and cooperative n π * and π π * interactions in benzaldehydeâ€“formaldehyde: rotational characterization. Physical Chemistry Chemical Physics, 2021, 23, 8778-8783.	2.8	9
8	Hydrogen versus tetrel bonds in complexes of 3-oxetanone with water and formaldehyde. Physical Chemistry Chemical Physics, 2021, 23, 7295-7301.	2.8	8
9	The 2,2,4,4-tetrafluoro-1,3-dithietaneâ€“NH ₃ complex: A rotational study reveals a Nâ€“f-hole interaction. Journal of Molecular Spectroscopy, 2021, 376, 111409.	1.2	2
10	Chlorine â€œEquatorial Beltâ€•Activation of CF ₃ Cl by CO ₂ : The C-Cl Tetrel Bond Dominance in CF ₃ Clâ€“CO ₂ . Journal of Physical Chemistry Letters, 2021, 12, 3907-3913.	4.6	17
11	Switching Aromatic Character by Complexation: π to π * Change Seen in Molecular Rotation Spectra. Journal of Physical Chemistry Letters, 2021, 12, 5150-5155.	4.6	9
12	Monitoring of peroxy radicals by chemical amplification enhanced photoacoustic spectroscopy. , 2021, , .		1
13	Conformational Equilibria of 2-Methoxypyridineâ€“CO ₂ : Cooperative and Competitive Tetrel and Weak Hydrogen Bonds. ChemPhysChem, 2021, 22, 154-159.	2.1	6
14	Competitive tetrel bond and hydrogen bond in benzaldehyde-CO ₂ : Characterization by rotational spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 25784-25788.	2.8	10
15	Possibilities and challenges in astrochemistry: Computational and spectroscopic strategies. Physics of Life Reviews, 2020, 32, 104-106.	2.8	1
16	The microwave spectrum and structure of 2-ethynylthiophene. Journal of Molecular Structure, 2020, 1205, 127632.	3.6	2
17	Unveiling the structural and energetic properties of thiazole-water complex by microwave spectroscopy and theoretical calculations. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 242, 118720.	3.9	8
18	Microwave spectrum and structure of 2-(trifluoromethyl)pyridine. Chinese Journal of Chemical Physics, 2020, 33, 53-57.	1.3	0

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19	Rotational spectra and molecular structures of ethylanilines. Chinese Journal of Chemical Physics, 2020, 33, 119-124.	1.3	2
20	Rotational spectra of 2,3,6-trifluoropyridine: Effect of fluorination on ring geometry. Chinese Journal of Chemical Physics, 2020, 33, 48-52.	1.3	2
21	Rotational Spectroscopy Meets Quantum Chemistry for Analyzing Substituent Effects on Non-Covalent Interactions: The Case of the Trifluoroacetophenone-Water Complex. Molecules, 2020, 25, 4899.	3.8	8
22	Conformation and bonding of 2-methoxypyridine and its monohydrate from rotational spectra. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 239, 118434.	3.9	5
23	Halogen bond and internal dynamics in the π - π complex of pyridine-chlorotrifluoromethane: A rotational study. Journal of Molecular Spectroscopy, 2020, 371, 111323.	1.2	8
24	Structure and C-N tetrel-bonding of the isopropylamine-CO ₂ complex studied by microwave spectroscopy and theoretical calculations. Physical Chemistry Chemical Physics, 2020, 22, 8467-8475.	2.8	22
25	Weak hydrogen bonds between alkyl halides and amides: The microwave spectroscopic and theoretical study of the difluoromethane-formamide complex. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 241, 118681.	3.9	5
26	Theory meets experiment for elucidating the structure and stability of non-covalent complexes: water-amine interaction as a proof of concept. Physical Chemistry Chemical Physics, 2020, 22, 5024-5032.	2.8	14
27	Rich Collection of n-Propylamine and Isopropylamine Conformers: Rotational Fingerprints and State-of-the-Art Quantum Chemical Investigation. Journal of Physical Chemistry A, 2020, 124, 1372-1381.	2.5	14
28	The rotational spectrum of acetophenone-CO ₂ : Preferred non-covalent interactions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 238, 118424.	3.9	15
29	Shape and non-bonding interactions in the formic acid-difluoromethane complex by rotational spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 206, 185-189.	3.9	8
30	Rotational spectrum, internal dynamics, and molecular structure of methylphenylsilane. Journal of Chemical Physics, 2019, 150, 234302.	3.0	0
31	The Unexplored World of Cycloalkene-Water Complexes: Primary and Assisting Interactions Unraveled by Experimental and Computational Spectroscopy. Angewandte Chemie, 2019, 131, 14073-14079.	2.0	6
32	The Unexplored World of Cycloalkene-Water Complexes: Primary and Assisting Interactions Unraveled by Experimental and Computational Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 13935-13941.	13.8	22
33	Molecular structure and non-covalent interaction of 2-thiophenecarboxaldehyde and its monohydrated complex. Journal of Chemical Physics, 2019, 151, 164307.	3.0	10
34	Chalcogen bond and internal dynamics of the 2,2,4,4-tetrafluoro-1,3-dithietane-water complex. Physical Chemistry Chemical Physics, 2019, 21, 15656-15661.	2.8	12
35	Rotational spectrum and structure of 2-chlorothiophene and its complex with argon. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 218, 136-141.	3.9	6
36	Tetrel bonds and conformational equilibria in the formamide-CO ₂ complex: a rotational study. Physical Chemistry Chemical Physics, 2019, 21, 7016-7020.	2.8	24

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37	Conformational landscape of the weakly bound difluoromethane \cdots 1,1-difluoroethane dimer explored by rotational spectroscopy and quantum chemical calculations. <i>Journal of Molecular Spectroscopy</i> , 2019, 357, 32-37.	1.2	3
38	Structure and non-covalent interactions of 1,3-difluoropropane and its complex with water explored by rotational spectroscopy and quantum chemical calculations. <i>Journal of Chemical Physics</i> , 2019, 150, 064305.	3.0	5
39	Rotational characterization of S \cdots F chalcogen bonds in the complex of 2,2,4,4-tetrafluoro-1,3-dithietane and difluoromethane. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 24659-24665.	2.8	7
40	Conformational preference determined by inequivalent n-pairs: rotational studies on acetophenone and its monohydrate. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22888-22894.	2.8	18
41	Conformational Equilibria and Molecular Structures of Model Sulfur \cdots Sulfur Bridge Systems: Diisopropyl Disulfide. <i>Journal of Physical Chemistry A</i> , 2019, 123, 10714-10720.	2.5	5
42	The Barrier to Proton Transfer in the Dimer of Formic Acid: A Pure Rotational Study. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 859-865.	13.8	48
43	6,8-di-C-glycosyl flavones with β -furanarabinose from <i>Scutellaria baicalensis</i> and their anti-inflammatory activities. <i>Natural Product Research</i> , 2019, 33, 1243-1250.	1.8	4
44	Fluorination effect on conformational preferences of trifluorothioanisole. <i>Journal of Molecular Structure</i> , 2018, 1156, 230-234.	3.6	5
45	Rotational study on the van der Waals complex 1-chloro-1,1-difluoroethane-argon. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 193, 447-450.	3.9	0
46	Microwave spectroscopy of 2-(trifluoromethyl)pyridine \cdots water complex: Molecular structure and hydrogen bond. <i>Journal of Chemical Physics</i> , 2018, 148, 044306.	3.0	9
47	Rotational spectrum of the pentafluoroethane-argon van der Waals complex. <i>Chemical Physics Letters</i> , 2018, 691, 206-210.	2.6	0
48	Barrier to Proton Transfer in the Dimer of Formic Acid: A Pure Rotational Study. <i>Angewandte Chemie</i> , 2018, 131, 869.	2.0	10
49	Microwave spectrum and non-covalent interactions of the 1, 2, 3, 4-tetrafluorobenzene-water complex. <i>Journal of Chemical Physics</i> , 2018, 149, 164306.	3.0	5
50	Halogen bond in the water adduct of chloropentafluoroethane revealed by rotational spectroscopy. <i>Journal of Chemical Physics</i> , 2018, 149, 154307.	3.0	5
51	Van der Waals interaction between perhalogenated ethylene and rare gas: A rotational study of chlorotrifluoroethylene-argon. <i>Journal of Chemical Physics</i> , 2018, 148, 154302.	3.0	1
52	Rotational spectrum of 2,2,2-trifluoroacetophenone. <i>Journal of Molecular Spectroscopy</i> , 2018, 351, 4-7.	1.2	2
53	Structure, Conformational Equilibria, and Weak Hydrogen Bonding in the CH ₂ F ₂ \cdots CF ₃ CH ₂ F Dimer. <i>ChemPhysChem</i> , 2018, 19, 2655-2661.	2.1	4
54	Disulfide Bond in Diethyl Disulfide: A Rotational Spectroscopic Study. <i>Journal of Physical Chemistry A</i> , 2018, 122, 5597-5601.	2.5	9

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55	Rotational study of the bimolecule acetic acid-fluoroacetic acid. <i>Chemical Physics Letters</i> , 2017, 667, 154-157.	2.6	2
56	Interactions between Ketones and Alcohols: Rotational Spectrum and Internal Dynamics of the Acetone-Ethanol Complex. <i>Chemistry - A European Journal</i> , 2017, 23, 11119-11125.	3.3	8
57	Rotational spectrum of the tetrafluoromethane-ethylene oxide. <i>Journal of Molecular Spectroscopy</i> , 2017, 335, 84-87.	1.2	6
58	Conformational equilibrium and internal dynamics in the iso-propanol-water dimer. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 568-573.	2.8	19
59	Weak hydrogen bond topology in 1,1-difluoroethane dimer: A rotational study. <i>Journal of Chemical Physics</i> , 2017, 147, 094301.	3.0	27
60	Weak Hydrogen Bond Network: A Rotational Study of 1,1,1,2-Tetrafluoroethane Dimer. <i>Journal of Physical Chemistry A</i> , 2017, 121, 7876-7881.	2.5	10
61	A HIGHLY-INTEGRATED SUPERSONIC-JET FOURIER TRANSFORM MICROWAVE SPECTROMETER. , 2017, , .		8
62	Probing the Lone Pair-Hole Interaction in Perfluorinated Heteroaromatic Rings: The Rotational Spectrum of Pentafluoropyridine-Water. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1513-1517.	4.6	36
63	Hydrated forms of fluoroacetic acid: a rotational study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 23651-23656.	2.8	13
64	Intermolecular Hydrogen Bonding in 2-Fluoropyridine-Water. <i>ChemistrySelect</i> , 2016, 1, 1273-1277.	1.5	10
65	Conformational Equilibrium and Internal Dynamics of E-Anethole: A Rotational Study. <i>Journal of Physical Chemistry B</i> , 2016, 120, 6587-6591.	2.6	10
66	The rotational spectrum of CF ₃ Cl. <i>Chemical Physics Letters</i> , 2016, 653, 1-4.	2.6	7
67	On the Cl-C halogen bond: a rotational study of CF ₃ Cl-CO. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 17851-17855.	2.8	38
68	Effects of Fluorine Substitution on the Microsolvation of Aromatic Azines: The Microwave Spectrum of 3-Fluoropyridine-Water. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5163-5168.	2.5	12
69	Rotational Study of Dimethyl Ether-Chlorotrifluoroethylene: Lone Pair-Hole Interaction Links the Two Subunits. <i>Journal of Physical Chemistry A</i> , 2016, 120, 4939-4943.	2.5	22
70	Interactions between Carboxylic Acids and Heteroaromatics: A Rotational Study of Formic Acid-Pyridine. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5094-5098.	2.5	16
71	Chloromethane-Water Adduct: Rotational Spectrum, Weak Hydrogen Bonds, and Internal Dynamics. <i>Chemistry - an Asian Journal</i> , 2015, 10, 1198-1203.	3.3	4
72	Internal Dynamics in Halogen-Bonded Adducts: A Rotational Study of Chlorotrifluoromethane-Formaldehyde. <i>Chemistry - A European Journal</i> , 2015, 21, 4148-4152.	3.3	14

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73	How CO ₂ Interacts with Carboxylic Acids: A Rotational Study of Formic Acidâ€“CO ₂ . ChemPhysChem, 2015, 16, 2961-2967.	2.1	26
74	N lone-pairâ€“ interaction: a rotational study of chlorotrifluoroethyleneâ€“ammonia. Physical Chemistry Chemical Physics, 2015, 17, 7694-7698.	2.8	24
75	Weak hydrogen bonds in adducts between freons: the rotational study of CH ₂ F ₂ â€“CH ₂ ClF. New Journal of Chemistry, 2015, 39, 2296-2299.	2.8	8
76	Conformational Equilibria and Largeâ€“Amplitude Motions in Dimers of Carboxylic Acids: Rotational Spectrum of Acetic Acidâ€“Difluoroacetic Acid. ChemPhysChem, 2014, 15, 2977-2984.	2.1	12
77	Interactions between Freons: A Rotational Study of CH ₂ F ₂ â€“CH ₂ Cl ₂ . Chemistry - an Asian Journal, 2014, 9, 1032-1038.	3.3	16
78	Adducts of alcohols with ketones: A rotational study of the molecular complex Ethylalcoholâ€“Cyclobutanone. Journal of Molecular Spectroscopy, 2014, 299, 38-42.	1.2	3
79	Conformers of dimers of carboxylic acids in the gas phase: A rotational study of difluoroacetic acidâ€“formic acid. Chemical Physics Letters, 2014, 591, 301-305.	2.6	24
80	Interactions between freons and aromatic molecules: The rotational spectrum of pyridineâ€“difluoromethane. Chemical Physics Letters, 2014, 591, 216-219.	2.6	16
81	Halogen Bond and Free Internal Rotation: The Microwave Spectrum of CF ₃ Clâ€“Dimethyl Ether. Journal of Physical Chemistry A, 2014, 118, 579-582.	2.5	34
82	The shape of trifluoromethoxybenzene. Journal of Molecular Spectroscopy, 2014, 297, 32-34.	1.2	11
83	Interactions between Carboxylic Acids and Aldehydes: A Rotational Study of HCOOHâ€“CH ₂ O. Journal of Physical Chemistry A, 2014, 118, 10738-10741.	2.5	22
84	Competition between weak hydrogen bonds: Câ€“Hâ€“Cl is preferred to Câ€“Hâ€“F in CH ₂ ClFâ€“H ₂ CO, as revealed by rotational spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 12261-12265.	2.8	21
85	Interactions between alkanes and aromatic molecules: a rotational study of pyridineâ€“methane. Physical Chemistry Chemical Physics, 2014, 16, 13041-13046.	2.8	16
86	Weak Câ€“Hâ€“N and Câ€“Hâ€“F hydrogen bonds and internal rotation in pyridineâ€“CH ₃ F. Physical Chemistry Chemical Physics, 2014, 16, 2149-2153.	2.8	25
87	Fluorination Effects on the Shapes of Complexes of Water with Ethers: A Rotational Study of Trifluoroanisoleâ€“Water. Journal of Physical Chemistry A, 2014, 118, 1047-1051.	2.5	7
88	Halogenâ€“Halogen Links and Internal Dynamics in Adducts of Freons. Journal of Physical Chemistry Letters, 2014, 5, 1591-1595.	4.6	25
89	Interaction between Freons and Amines: The Câ€“Hâ€“N Weak Hydrogen Bond in Quinuclidineâ€“Trifluoromethane. Journal of Physical Chemistry A, 2014, 118, 737-740.	2.5	11
90	How Water Interacts with Halogenated Anesthetics: The Rotational Spectrum of Isofluraneâ€“Water. Chemistry - A European Journal, 2014, 20, 1980-1984.	3.3	7

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91	Ubbelohde Effect within Weak C-H...H Hydrogen Bonds: The Rotational Spectrum of Benzene-d ₆ . Journal of Physical Chemistry A, 2013, 117, 13531-13534.	2.5	23
92	Lone Pair... Interaction: A Rotational Study of the Chlorotrifluoroethylene-Water Adduct. Angewandte Chemie - International Edition, 2013, 52, 11888-11891.	13.8	49
93	Conformational equilibria in carboxylic acid dimers: a rotational study of acrylic acid-formic acid. Physical Chemistry Chemical Physics, 2013, 15, 2917.	2.8	40
94	Non-bonding interactions and internal dynamics in CH ₂ F ₂ -H ₂ CO: a rotational and model calculations study. Physical Chemistry Chemical Physics, 2013, 15, 6714.	2.8	18
95	Orientation of the water moiety in CF ₄ -H ₂ O. Journal of Molecular Spectroscopy, 2012, 282, 39-41.	1.2	11
96	Rotational Spectrum and Internal Dynamics of Tetrahydrofuran-Krypton. ChemPhysChem, 2012, 13, 221-225.	2.1	3