Qian Gou

List of Publications by Year
in descending order

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96	1,153	394421 19	552781 26
papers	citations	h-index	g-index

99	99	99	587
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Loneâ€Pairâ‹…â‹…â‹…Ï€ Interaction: A Rotational Study of the Chlorotrifluoroethyleneâ€“Water Adduct. Angewandte Chemie - International Edition, 2013, 52, 11888-11891.	13.8	49
2	The Barrier to Proton Transfer in the Dimer of Formic Acid: A Pure Rotational Study. Angewandte Chemie - International Edition, 2019, 58, 859-865.	13.8	48
3	Conformational equilibria in carboxylic acid bimolecules: a rotational study of acrylic acidâ€“formic acid. Physical Chemistry Chemical Physics, 2013, 15, 2917.	2.8	40
4	On the Clâ‹¯C halogen bond: a rotational study of CF₃Clâ€“CO. Physical Chemistry Chemical Physics, 2016, 18, 17851-17855.	2.8	38
5	Probing the Lone PairÂ·Â·Â·Ï€-Hole Interaction in Perfluorinated Heteroaromatic Rings: The Rotational Spectrum of PentafluoropyridineÂ·Water. Journal of Physical Chemistry Letters, 2016, 7, 1513-1517.	4.6	36
6	Halogen Bond and Free Internal Rotation: The Microwave Spectrum of CF₃Clâ€“Dimethyl Ether. Journal of Physical Chemistry A, 2014, 118, 579-582.	2.5	34
7	Weak hydrogen bond topology in 1,1-difluoroethane dimer: A rotational study. Journal of Chemical Physics, 2017, 147, 094301.	3.0	27
8	How CO₂ Interacts with Carboxylic Acids: A Rotational Study of Formic Acidâ€“CO₂. ChemPhysChem, 2015, 16, 2961-2967.	2.1	26
9	Weak Câ€“Hâ‹¯N and Câ€“Hâ‹¯F hydrogen bonds and internal rotation in pyridineâ€“CH₃F. Physical Chemistry Chemical Physics, 2014, 16, 2149-2153.	2.8	25
10	Halogenâ€“Halogen Links and Internal Dynamics in Adducts of Freons. Journal of Physical Chemistry Letters, 2014, 5, 1591-1595.	4.6	25
11	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
12	N lone-pairâ‹¯Ï€ interaction: a rotational study of chlorotrifluoroethyleneâ‹¯ammonia. Physical Chemistry Chemical Physics, 2015, 17, 7694-7698.	2.8	24
13	Tetrel bonds and conformational equilibria in the formamideâ€“CO2 complex: a rotational study. Physical Chemistry Chemical Physics, 2019, 21, 7016-7020.	2.8	24
14	Ubbelohde Effect within Weak Câ€“HÂ·Â·Â·Ï€ Hydrogen Bonds: The Rotational Spectrum of Benzeneâ€“DCF3. Journal of Physical Chemistry A, 2013, 117, 13531-13534.	2.5	23
15	Interactions between Carboxylic Acids and Aldehydes: A Rotational Study of HCOOHâ€“CH₂O. Journal of Physical Chemistry A, 2014, 118, 10738-10741.	2.5	22
16	Rotational Study of Dimethyl Etherâ€“Chlorotrifluoroethylene: Lone PairÂ·Â·Â·Ï€ Interaction Links the Two Subunits. Journal of Physical Chemistry A, 2016, 120, 4939-4943.	2.5	22
17	The Unexplored World of Cycloalkeneâ€“Water Complexes: Primary and Assisting Interactions Unraveled by Experimental and Computational Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 13935-13941.	13.8	22
18	Structure and Câ‹¯N tetrel-bonding of the isopropylamineâ€“CO2 complex studied by microwave spectroscopy and theoretical calculations. Physical Chemistry Chemical Physics, 2020, 22, 8467-8475.	2.8	22

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19	Competition between weak hydrogen bonds: Câ€“Hâ‹¯Cl is preferred to Câ€“Hâ‹¯F in CH₂ClFâ€“H₂CO, as revealed by rotational spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 12261-12265.	2.8	21
20	Conformational equilibrium and internal dynamics in the iso-propanolâ€“water dimer. Physical Chemistry Chemical Physics, 2017, 19, 568-573.	2.8	19
21	Non-bonding interactions and internal dynamics in CH2F2â‹¯H2CO: a rotational and model calculations study. Physical Chemistry Chemical Physics, 2013, 15, 6714.	2.8	18
22	Conformational preference determined by inequivalent n-pairs: rotational studies on acetophenone and its monohydrate. Physical Chemistry Chemical Physics, 2019, 21, 22888-22894.	2.8	18
23	Chlorine â€œEquatorial Beltâ€•Activation of CF₃Cl by CO₂: The CÂ·Â·Cl Tetrel Bond Dominance in CF₃Clâ€“CO₂. Journal of Physical Chemistry Letters, 2021, 12, 3907-3913.	4.6	17
24	Interactions between Freons: A Rotational Study of CH₂F₂â€“CH₂Cl₂. Chemistry - an Asian Journal, 2014, 9, 1032-1038.	3.3	16
25	Interactions between freons and aromatic molecules: The rotational spectrum of pyridineâ€“difluoromethane. Chemical Physics Letters, 2014, 591, 216-219.	2.6	16
26	Interactions between alkanes and aromatic molecules: a rotational study of pyridineâ€“methane. Physical Chemistry Chemical Physics, 2014, 16, 13041-13046.	2.8	16
27	Interactions between Carboxylic Acids and Heteroaromatics: A Rotational Study of Formic Acidâ€“Pyridine. Journal of Physical Chemistry A, 2016, 120, 5094-5098.	2.5	16
28	The rotational spectrum of acetophenone-CO2: Preferred non-covalent interactions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 238, 118424.	3.9	15
29	Internal Dynamics in Halogenâ€Bonded Adducts: A Rotational Study of Chlorotrifluoromethaneâ€“Formaldehyde. Chemistry - A European Journal, 2015, 21, 4148-4152.	3.3	14
30	Theory meets experiment for elucidating the structure and stability of non-covalent complexes: waterâ€“amine interaction as a proof of concept. Physical Chemistry Chemical Physics, 2020, 22, 5024-5032.	2.8	14
31	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
32	Hydrated forms of fluoroacetic acid: a rotational study. Physical Chemistry Chemical Physics, 2016, 18, 23651-23656.	2.8	13
33	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
34	Effects of Fluorine Substitution on the Microsolvation of Aromatic Azines: The Microwave Spectrum of 3-Fluoropyridine-Water. Journal of Physical Chemistry A, 2016, 120, 5163-5168.	2.5	12
35	Chalcogen bond and internal dynamics of the 2,2,4,4-tetrafluoro-1,3-dithietaneâ‹¯water complex. Physical Chemistry Chemical Physics, 2019, 21, 15656-15661.	2.8	12
36	Orientation of the water moiety in CF4â€“H2O. Journal of Molecular Spectroscopy, 2012, 282, 39-41.	1.2	11

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37	The shape of trifluoromethoxybenzene. Journal of Molecular Spectroscopy, 2014, 297, 32-34.	1.2	11
38	Interaction between Freons and Amines: The Câ€“HÂ·Â·Â·N Weak Hydrogen Bond in Quinuclidineâ€“Trifluoromethane. Journal of Physical Chemistry A, 2014, 118, 737-740.	2.5	11
39	Intermolecular Hydrogen Bonding in 2-Fluoropyridine-Water. ChemistrySelect, 2016, 1, 1273-1277.	1.5	10
40	Conformational Equilibrium and Internal Dynamics of E-Anethole: A Rotational Study. Journal of Physical Chemistry B, 2016, 120, 6587-6591.	2.6	10
41	Weak Hydrogen Bond Network: A Rotational Study of 1,1,1,2-Tetrafluoroethane Dimer. Journal of Physical Chemistry A, 2017, 121, 7876-7881.	2.5	10
42	Barrier to Proton Transfer in the Dimer of Formic Acid: A Pure Rotational Study. Angewandte Chemie, 2018, 131, 869.	2.0	10
43	Molecular structure and non-covalent interaction of 2-thiophenecarboxaldehyde and its monohydrated complex. Journal of Chemical Physics, 2019, 151, 164307.	3.0	10
44	Competitive tetrel bond and hydrogen bond in benzaldehyde-CO2: Characterization by rotational spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 25784-25788.	2.8	10
45	Interaction Types in C₆H₅(CH₂)_nOHâ€“CO₂ (n =) Tj ETQq1 1 0.784314 rgB 149-155.	4.6	10
46	Microwave spectroscopy of 2-(trifluoromethyl)pyridineâ‹¯water complex: Molecular structure and hydrogen bond. Journal of Chemical Physics, 2018, 148, 044306.	3.0	9
47	Disulfide Bond in Diethyl Disulfide: A Rotational Spectroscopic Study. Journal of Physical Chemistry A, 2018, 122, 5597-5601.	2.5	9
48	Competitive and cooperative n â†' Ï€* and n â†' Ïƒ* interactions in benzaldehydeâ€“formaldehyde: rotational characterization. Physical Chemistry Chemical Physics, 2021, 23, 8778-8783.	2.8	9
49	Switching Aromatic Character by Complexation: Ï€ to Ï€* Change Seen in Molecular Rotation Spectra. Journal of Physical Chemistry Letters, 2021, 12, 5150-5155.	4.6	9
50	Weak hydrogen bonds in adducts between freons: the rotational study of CH2F2â€“CH2ClF. New Journal of Chemistry, 2015, 39, 2296-2299.	2.8	8
51	Interactions between Ketones and Alcohols: Rotational Spectrum and Internal Dynamics of the Acetoneâ€“Ethanol Complex. Chemistry - A European Journal, 2017, 23, 11119-11125.	3.3	8
52	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
53	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
54	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

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55	Halogen bond and internal dynamics in the Ïƒâ€“complex of pyridine-chlorotrifluoromethane: A rotational study. Journal of Molecular Spectroscopy, 2020, 371, 111323.	1.2	8
56	Hydrogen versus tetrel bonds in complexes of 3-oxetanone with water and formaldehyde. Physical Chemistry Chemical Physics, 2021, 23, 7295-7301.	2.8	8
57	A HIGHLY-INTEGRATED SUPERSONIC-JET FOURIER TRANSFORM MICROWAVE SPECTROMETER. , 2017, , .		8
58	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
59	How Water Interacts with Halogenated Anesthetics: The Rotational Spectrum of Isofluraneâ€“Water. Chemistry - A European Journal, 2014, 20, 1980-1984.	3.3	7
60	The rotational spectrum of CF 3 Cl Ar. Chemical Physics Letters, 2016, 653, 1-4.	2.6	7
61	Rotational characterization of Sâ‹¯F chalcogen bonds in the complex of 2,2,4,4-tetrafluoro-1,3-dithietane and difluoromethane. Physical Chemistry Chemical Physics, 2019, 21, 24659-24665.	2.8	7
62	Rotational spectrum of the tetrafluoromethane-ethylene oxide. Journal of Molecular Spectroscopy, 2017, 335, 84-87.	1.2	6
63	The Unexplored World of Cycloalkeneâ€“Water Complexes: Primary and Assisting Interactions Unraveled by Experimental and Computational Spectroscopy. Angewandte Chemie, 2019, 131, 14073-14079.	2.0	6
64	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
65	Conformational Equilibria of 2â€Methoxypyridineâ‹…â‹…â‹…CO 2 : Cooperative and Competitive Tetrel and Weak Hydrogen Bonds. ChemPhysChem, 2021, 22, 154-159.	2.1	6
66	Fluorination effect on conformational preferences of trifluorothioanisole. Journal of Molecular Structure, 2018, 1156, 230-234.	3.6	5
67	Microwave spectrum and non-covalent interactions of the 1, 2, 3, 4-tetrafluorobenzene-water complex. Journal of Chemical Physics, 2018, 149, 164306.	3.0	5
68	Halogen bond in the water adduct of chloropentafluoroethane revealed by rotational spectroscopy. Journal of Chemical Physics, 2018, 149, 154307.	3.0	5
69	Structure and non-covalent interactions of 1,3-difluoropropane and its complex with water explored by rotational spectroscopy and quantum chemical calculations. Journal of Chemical Physics, 2019, 150, 064305.	3.0	5
70	Conformational Equilibria and Molecular Structures of Model Sulfurâ€“Sulfur Bridge Systems: Diisopropyl Disulfide. Journal of Physical Chemistry A, 2019, 123, 10714-10720.	2.5	5
71	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
72	Weak hydrogen bonds between alkyl halides and amides: The microwave spectroscopic and theoretical study of the difluoromethaneâ‹¯formamide complex. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 241, 118681.	3.9	5

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73	Sp²- and sp³â€“Câ‹¯O tetrel bonds in the 3-oxetanone homodimer. Physical Chemistry Chemical Physics, 2022, , .	2.8	5
74	Chloromethaneâ€“Water Adduct: Rotational Spectrum, Weak Hydrogen Bonds, and Internal Dynamics. Chemistry - an Asian Journal, 2015, 10, 1198-1203.	3.3	4
75	Structure, Conformational Equilibria, and Weak Hydrogen Bonding in the CH₂F₂â‹¯CF₃CH₂F Dimer. ChemPhysChem, 2018, 19, 2655-2661.	2.1	4
76	6,8-di-C-glycosyl flavones with Î²-furanoarabinose from Scutellaria baicalensis and their anti-inflammatory activities. Natural Product Research, 2019, 33, 1243-1250.	1.8	4
77	Laboratory Measurements and Astronomical Search for Methoxyacetone and Methyl Methoxyacetate. Journal of Physical Chemistry A, 2022, 126, 3549-3554.	2.5	4
78	Rotational Spectrum and Internal Dynamics of Tetrahydrofuranâ€“Krypton. ChemPhysChem, 2012, 13, 221-225.	2.1	3
79	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
80	Conformational landscape of the weakly bound difluoromethaneâ€“1,1-difluoroethane dimer explored by rotational spectroscopy and quantum chemical calculations. Journal of Molecular Spectroscopy, 2019, 357, 32-37.	1.2	3
81	Rotational study of the bimolecule acetic acid-fluoroacetic acid. Chemical Physics Letters, 2017, 667, 154-157.	2.6	2
82	Rotational spectrum of 2,2,2-trifluoroacetophenone. Journal of Molecular Spectroscopy, 2018, 351, 4-7.	1.2	2
83	The microwave spectrum and structure of 2-ethynylthiophene. Journal of Molecular Structure, 2020, 1205, 127632.	3.6	2
84	Rotational spectra and molecular structures of ethylanilines. Chinese Journal of Chemical Physics, 2020, 33, 119-124.	1.3	2
85	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
86	The 2,2,4,4-tetrafluoro-1,3-dithietaneâ‹¯NH3 complex: A rotational study reveals a Nâ‹¯Ïƒ-hole interaction. Journal of Molecular Spectroscopy, 2021, 376, 111409.	1.2	2
87	Van der Waals interaction between perhalogenated ethylene and rare gas: A rotational study of chlorotrifluorethylene-argon. Journal of Chemical Physics, 2018, 148, 154302.	3.0	1
88	Possibilities and challenges in astrochemistry: Computational and spectroscopic strategies. Physics of Life Reviews, 2020, 32, 104-106.	2.8	1
89	Monitoring of peroxy radicals by chemical amplification enhanced photoacoustic spectroscopy. , 2021, , .		1
90	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

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91	Rotational study on the van der Waals complex 1-chloro-1,1-difluoroethane-argon. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 193, 447-450.	3.9	0
92	Rotational spectrum of the pentafluoroethane-argon van der Waals complex. Chemical Physics Letters, 2018, 691, 206-210.	2.6	0
93	Rotational spectrum, internal dynamics, and molecular structure of methylphenylsilane. Journal of Chemical Physics, 2019, 150, 234302.	3.0	0
94	Microwave spectrum and structure of 2-(trifluoromethyl)pyridine. Chinese Journal of Chemical Physics, 2020, 33, 53-57.	1.3	0
95	Rotational spectrum of Isochroman. Journal of Molecular Structure, 2022, 1254, 132322.	3.6	0
96	Modulation of Ï€ character upon complexation captured by molecular rotation spectra. Physical Chemistry Chemical Physics, 2022, , .	2.8	0