Anthony Charles Legon

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8841496/publications.pdf

Version: 2024-02-01

261	14,878	46984 47	23514 111
papers	citations	h-index	g-index

272	272	272	6976
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Definition of the halogen bond (IUPAC Recommendations 2013). Pure and Applied Chemistry, 2013, 85, 1711-1713.	0.9	1,554
2	Definition of the hydrogen bond (IUPAC Recommendations 2011). Pure and Applied Chemistry, 2011, 83, 1637-1641.	0.9	1,449
3	Defining the hydrogen bond: An account (IUPAC Technical Report). Pure and Applied Chemistry, 2011, 83, 1619-1636.	0.9	856
4	Prereactive Complexes of Dihalogens XY with Lewis Bases B in the Gas Phase: A Systematic Case for the Halogen Analogue Bâ‹…â‹…â‹…XY of the Hydrogen Bond Bâ‹…â‹…â‹…HX. Angewandte Chemie - International Edition, 1999, 38, 2686-2714.	7.2	385
5	The halogen bond: an interim perspective. Physical Chemistry Chemical Physics, 2010, 12, 7736.	1.3	556
6	Halogen Bonding:Â A New Interaction for Liquid Crystal Formation. Journal of the American Chemical Society, 2004, 126, 16-17.	6.6	518
7	Definition of the chalcogen bond (IUPAC Recommendations 2019). Pure and Applied Chemistry, 2019, 91, 1889-1892.	0.9	322
8	Gas-phase spectroscopy and the properties of hydrogen-bonded dimers. HCN.cntdot..cntdot..cntdot.HF as the spectroscopic prototype. Chemical Reviews, 1986, 86, 635-657.	23.0	280
9	Angular geometries and other properties of hydrogen-bonded dimers: a simple electrostatic interpretation of the success of the electron-pair model. Chemical Society Reviews, 1987, 16, 467.	18.7	262
10	Determination of properties of hydrogen-bonded dimers by rotational spectroscopy and a classfication of dimer geometries. Faraday Discussions of the Chemical Society, 1982, 73, 71.	2.2	250
11	Directional character, strength, and nature of the hydrogen bond in gas-phase dimers. Accounts of Chemical Research, 1987, 20, 39-46.	7.6	207
12	Tetrel, pnictogen and chalcogen bonds identified in the gas phase before they had names: a systematic look at non-covalent interactions. Physical Chemistry Chemical Physics, 2017, 19, 14884-14896.	1.3	201
13	Equilibrium conformations of four- and five-membered cyclic molecules in the gas phase: determination and classification. Chemical Reviews, 1980, 80, 231-262.	23.0	191
14	The rotational spectrum and molecular structure of the acetyleneâ€“HCl dimer. Journal of Chemical Physics, 1981, 75, 625-630.	1.2	176
15	Pulsed-Nozzle, Fourier-Transform Microwave Spectroscopy of Weakly Bound Dimers. Annual Review of Physical Chemistry, 1983, 34, 275-300.	4.8	176
16	Hydrogen bonding as a probe of electron densities: limiting gas-phase nucleophilicities and electrophilicities of B and HX. Journal of the American Chemical Society, 1987, 109, 356-358.	6.6	151
17	Ï€-Electron â€œDonor-Acceptorâ€•Complexes Bâ‹…â‹…â‹…ClF and the Existence of the â€œChlorine Bondâ€• Chemistry - A European Journal, 1998, 4, 1890-1897.	1.7	144
18	The nature of ammonium and methylammonium halides in the vapour phase: hydrogen bonding versus proton transfer. Chemical Society Reviews, 1993, 22, 153.	18.7	138

#	Article	IF	Citations
19	The microwave rotational spectrum, molecular geometry, 14N nuclear quadrupole coupling constants, and H, 19F nuclear spinâ€“nuclear spin coupling constant of the nitrogenâ€“hydrogen fluoride dimer. Journal of Chemical Physics, 1982, 76, 292-300.	1.2	130
20	The rotational spectrum, structure, and molecular properties of the ethyleneâ€“HCl dimer. Journal of Chemical Physics, 1981, 75, 2126-2134.	1.2	126
21	The rotational spectrum, H, 19F nuclear spinâ€“nuclear spin coupling, D nuclear quadrupole coupling, and molecular geometry of a weakly bound dimer of carbon monoxide and hydrogen fluoride. Journal of Chemical Physics, 1981, 74, 4944-4950.	1.2	121
22	Rotational spectrum of (CH3)3Pâ‹¯HCl and a comparison of properties within the series of axially symmetric dimers R3Yâ‹¯HCl, where Y = N or P and R = H or CH3. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 1915-1921.	1.7	117
23	Nature, geometry, and binding strength of the ammoniaâ€“hydrogen chloride dimer determined from the rotational spectrum of ammonium chloride vapor. Journal of Chemical Physics, 1988, 88, 4694-4701.	1.2	108
24	Microwave rotational spectrum, molecular geometry, and intermolecular interaction potential of the hydrogenâ€bonded dimer OCâ€“HCl. Journal of Chemical Physics, 1981, 74, 2138-2142.	1.2	101
25	Tilden Lecture. The properties of hydrogen-bonded dimers from rotational spectroscopy. Chemical Society Reviews, 1990, 19, 197.	18.7	100
26	Molecular structure of ArDF: An analysis of the bending mode in the rare gasâ€“hydrogen halides. Journal of Chemical Physics, 1981, 74, 2133-2137.	1.2	99
27	The Interaction of Dihalogens and Hydrogen Halides with Lewis Bases in the Gas Phase: An Experimental Comparison of the Halogen Bond and the Hydrogen Bond. , 2007, , 17-64.		90
28	Rotational Spectra of the Less Common Isotopomers, Electric Dipole Moment and the Double Minimum Inversion Potential of H2OÂ·Â·Â·HCl. Journal of Physical Chemistry A, 2000, 104, 6970-6978.	1.1	83
29	The rotational spectrum and molecular properties of a hydrogenâ€bonded complex formed between hydrogen cyanide and hydrogen chloride. Journal of Chemical Physics, 1982, 76, 2267-2274.	1.2	81
30	The rotational spectrum, chlorine nuclear quadrupole coupling constants, and molecular geometry of a hydrogen-bonded dimer of cyclopropane and hydrogen chloride. Journal of the American Chemical Society, 1982, 104, 1486-1490.	6.6	76
31	Non-linear hydrogen bonds and rotational spectroscopy: measurement and rationalisation of the deviation from linearity. Faraday Discussions, 1994, 97, 19.	1.6	75
32	What's in a name? â€˜Coinage-metalâ€™ non-covalent bonds and their definition. Physical Chemistry Chemical Physics, 2018, 20, 19332-19338.	1.3	74
33	The properties of the hydrogenâ€bonded dimer (CH3)3Nâ‹…â‹…â‹…HCN from an investigation of its rotational spectrum. Journal of Chemical Physics, 1988, 89, 696-702.	1.2	73
34	An investigation of the hydrogenâ€bonded dimer H3Nâ‹…â‹…â‹…HBr by pulsedâ€nozzle, Fourierâ€transform microwave spectroscopy of ammonium bromide vapor. Journal of Chemical Physics, 1987, 86, 6722-6730.	1.2	71
35	The rotational spectrum and molecular geometry of the cyclopropaneâ€“HF dimer. Journal of Chemical Physics, 1981, 75, 2681-2686.	1.2	67
36	The rotational spectra of weakly bound dimers of carbon monoxide and the hydrogen halides HX (X=F,) Tj ETQq0 0 0 rgBT /Overlock 10	1.2	66

#	Article	IF	Citations
37	Rotational spectra and structures of van der Waals dimers of Ar with a series of fluorocarbons: Arâ‹…â‹…â‹…CH2CHF, Arâ‹…â‹…â‹…CH2CF2, and Arâ‹…â‹…â‹…CHFCF2. Journal of Chemical Physics, 1991, 95, 2283-2291.	1.2	66
38	Non-reactive interaction of ammonia and molecular chlorine: rotational spectrum of the â€˜charge-transferâ€™ complex H3Nâ‹¯Cl2. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 3205-3212.	1.7	66
39	Microwave rotational spectrum of a weakly bound complex formed by hydrogen sulphide and hydrogen chloride. Journal of the Chemical Society, Faraday Transactions 2, 1984, 80, 51.	1.1	63
40	Rotational spectrum, structure, and chlorine nuclear quadrupole tensor of the vinyl fluorideâ€“HCl dimer. Journal of Chemical Physics, 1990, 93, 3054-3062.	1.2	63
41	Rotational spectrum of a shortâ€lived dimer of oxirane and hydrogen chloride: Evidence for a bent hydrogen bond. Journal of Chemical Physics, 1992, 97, 3050-3059.	1.2	63
42	Pre-reactive Complexes in Mixtures of Water Vapour with Halogens: Characterisation of H2Oâ‹…â‹…â‹…ClF and H2Oâ‹…â‹…â‹…F2 by a Combination of Rotational Spectroscopy and Ab initio Calculations. Chemistry - A European Journal, 2001, 7, 2295-2305.	1.7	59
43	Donorâ€“acceptor complexes of Lewis bases with bromine monochloride in the gas phase. Some generalisations from rotational spectroscopy. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 1881-1883.	1.7	57
44	Microwave spectrum and molecular structure of the carbon monoxide-hydrogen bromide molecular complex. Proceedings of the National Academy of Sciences of the United States of America, 1980, 77, 5583-5587.	3.3	54
45	An investigation of the trimethylammonium chloride molecule in the vapor phase by pulsedâ€nozzle, Fourierâ€transform microwave spectroscopy. Journal of Chemical Physics, 1989, 90, 6867-6876.	1.2	54
46	The rotational spectrum and nature of the heterodimer in trimethylammonium bromide vapor. Journal of Chemical Physics, 1990, 92, 6397-6407.	1.2	54
47	Characterisation of the Intermediate C₂H₄â€¦Cl₂ in a Gaseous Mixture of Ethene and Chlorine by Rotational Spectroscopy: A Weak Ïâ€Type Complex. Chemistry - A European Journal, 1995, 1, 17-25.	1.7	53
48	Existence and molecular properties of a gas-phase, hydrogen-bonded complex between hydrogen fluoride and water established from microwave spectroscopy. Journal of the Chemical Society Chemical Communications, 1975, , 341.	2.0	52
49	On the directionality and non-linearity of halogen and hydrogen bonds. Physical Chemistry Chemical Physics, 2015, 17, 858-867.	1.3	52
50	Infrared diodeâ€laser spectroscopy and Fourierâ€transform microwave spectroscopy of the (CO2,CO) dimer in a pulsed jet. Journal of Chemical Physics, 1989, 91, 4440-4447.	1.2	51
51	83Kr nuclear quadrupole coupling, microwave spectrum, and structure of KrHCN. Journal of Chemical Physics, 1983, 78, 3483-3493.	1.2	47
52	The rotational spectrum and molecular properties of the hydrogen cyanide hydrogen bromide complex. Journal of Chemical Physics, 1983, 78, 3494-3500.	1.2	47
53	The nature of the hydrogen bond to water in the gas phase. Chemical Society Reviews, 1992, 21, 71.	18.7	47
54	Nonreactive Interactions between Ethene and Halogens: Detection of aï€-Donor Complex C2H4?BrCl by Rotational Spectroscopy. Angewandte Chemie International Edition in English, 1994, 33, 1512-1513.	4.4	47

#	Article	IF	Citations
55	Interaction of water and dichlorine in the gas phase: An investigation of H2Oâ‹¯Cl2 by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2001, 114, 6190-6202.	1.2	47
56	A reduced radial potential energy function for the halogen bond and the hydrogen bond in complexes Bâ‹¯XY and Bâ‹¯HX, where X and Y are halogen atoms. Physical Chemistry Chemical Physics, 2014, 16, 12415-12421.	1.3	47
57	Isolation of stable intermediates in reactive gas mixtures: Rotational spectrum of H3P...Cl2in a pulsed jet. Journal of Chemical Physics, 1993, 98, 3827-3832.	1.2	46
58	Cyclopropane-hydrogen chloride dimer: identification and geometry from its rotational spectrum. Journal of the American Chemical Society, 1980, 102, 7584-7585.	6.6	44
59	The rotational spectrum and properties of N2â€‰â‹…â‹…â‹…â€‰HCN. Journal of Chemical Physics, 1985, 82, 4434-4441.	1.2	44
60	Microwave spectrum and structure of nitrosyl fluoride. Transactions of the Faraday Society, 1969, 65, 1975.	0.9	43
61	Stark effects in the rotational spectrum of the dimer H2Oâ‹…â‹…â‹…HF and the variation of the electric dipole moment with excitation of the lowâ€frequency, hydrogenâ€bond modes. Journal of Chemical Physics, 1983, 78, 2910-2914.	1.2	43
62	The rotational spectrum and molecular geometry of an antihydrogenâ€bonded dimer of sulfur dioxide and hydrogen cyanide. Journal of Chemical Physics, 1986, 85, 6828-6836.	1.2	43
63	Rotational spectrum of a weakly bound dimer of formaldehyde and acetylene: Identification and characterization of a bridged planar form involving two nonlinear hydrogen bonds. Journal of Chemical Physics, 1988, 88, 6793-6800.	1.2	43
64	An investigation of the rotational spectrum of H2Sâ‹…â‹…â‹…HF by pulsedâ€nozzle, Fourierâ€transform microwave spectroscopy: Determination of the hyperfine coupling constants ï‡aa(33S), ï‡Daa, andDH(D)Faa. Journal of Chemical Physics, 1984, 81, 20-26.	1.2	42
65	Geometric and electric properties of the donorâ€“acceptor complex H3Nâ€“BF3. Journal of the Chemical Society Chemical Communications, 1995, , 113-114.	2.0	42
66	Is pyridinium hydrochloride a simple hydrogen-bonded complex C5H5NÂ·Â·Â·HCl or an ion pair C5H5NH+Â·Â·Â·Cl- in the gas phase? An answer from its rotational spectrum. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 837-841.	1.7	42
67	Rotational spectrum of thiopheneÂ·Â·Â·HCl Does thiophene act as an aromatic ï€-type electron donor or an n-type electron donor in hydrogen-bond formation?. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 1565-1570.	1.7	42
68	The Interaction of Water and Dibromine in the Gas Phase: An Investigation of the Complex H2Oâ‹…â‹…â‹…Br2 by Rotational Spectroscopy and Ab Initio Calculations. Chemistry - A European Journal, 2002, 8, 940-950.	1.7	42
69	An Ab Initio Investigation of the Geometries and Binding Strengths of Tetrel-, Pnictogen-, and Chalcogen-Bonded Complexes of CO2, N2O, and CS2 with Simple Lewis Bases: Some Generalizations. Molecules, 2018, 23, 2250.	1.7	41
70	The identification of the classical donorâ€“acceptor complex H3Nâ€“BF3in the gas phase. Journal of the Chemical Society Chemical Communications, 1991, , 1397-1399.	2.0	40
71	Detection and Characterization of a Pre-Reactive Complex in a Mixture of Water and Fluorine: Rotational Spectrum of H2Oâ€¦F2. Angewandte Chemie International Edition in English, 1997, 36, 129-130.	4.4	40
72	The structure and ground state dynamics of Arâ€“IH. Journal of Chemical Physics, 1999, 111, 5764-5770.	1.2	39

#	Article	IF	Citations
73	Rotational spectrum, H,19F spinâ€“spin and Dâ€“nuclear quadrupole coupling constants, and molecular geometry of the sulphur dioxideâ€“hydrogen fluoride dimer. Journal of Chemical Physics, 1986, 85, 3180-3187.	1.2	38
74	Rotational spectrum of the gas-phase dimer OCâ‹¯BrCl. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 1365-1371.	1.7	38
75	The complex H3Nâ‹…â‹…â‹…Br2 characterized in the gas phase by rotational spectroscopy. Journal of Chemical Physics, 1995, 103, 876-882.	1.2	38
76	N2ï£¿Cuï£¿F: A Complex of Dinitrogen and Cuprous Fluoride Characterized by Rotational Spectroscopy. Angewandte Chemie - International Edition, 2006, 45, 6341-6343.	7.2	38
77	Evidence for a pre-reactive intermediate in a gaseous mixture of ethyne and chlorine monofluoride. Rotational spectrum of the Mulliken bÏ€Â· aÏƒ complex C2H2â‹¯ClF. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 1291-1296.	1.7	37
78	Microwave spectrum, structure, dipole moment, and deuterium nuclear quadrupole coupling constants of the acetyleneâ€“sulfur dioxide van der Waals complex. Journal of Chemical Physics, 1991, 94, 6947-6955.	1.2	36
79	Identification and characterisation of the gas-phase complex HCNâ‹¯Cl2by rotational spectroscopy. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 4157-4162.	1.7	36
80	The pre-reactive complex H2Oâ‹¯ClF identified in mixtures of water vapour and chlorine monofluoride by rotational spectroscopy. Chemical Communications, 1996, , 2327-2328.	2.2	36
81	Inter- and intramolecular electron transfer in the complex OCÂ·Â·Â·ICl determined from iodine and chlorine nuclear quadrupole hyperfine structure in its rotational spectrum. Physical Chemistry Chemical Physics, 1999, 1, 3097-3101.	1.3	35
82	Monohydrates of cuprous chloride and argentous chloride: H2Oâ‹…â‹…â‹…â‹…â‹…CuCl and H2Oâ‹…â‹…â‹…â‹…â‹…AgCl characterized by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2011, 134, 134305.	1.2	35
83	The microwave spectrum, structure, and dipole moment of nitryl fluoride. The Journal of the Chemical Society A, Inorganic, Physicaloretical, 1968, , 1736.	0.7	33
84	Rotational spectrum and structure of a hydrogen-bonded dimer of phosphine with hydrogen bromide. The Journal of Physical Chemistry, 1983, 87, 2085-2090.	2.9	33
85	Rotational spectrum of the trimethylamineâ€hydrogen iodide dimer: An ion pair (CH3)3NH+â‹…â‹…â‹…Iâ¯ in the gas phase. Journal of Chemical Physics, 1993, 99, 1463-1468.	1.2	33
86	H2Sâ‹¯Cl2characterised in a pre-reactive gas mixture of hydrogen sulfide and chlorine through rotational spectroscopy: the nature of the interaction. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 2059-2066.	1.7	33
87	Rotational spectroscopy of a weak complex of thiirane and ethyne: The identification and properties of a highly nonlinear Sâ‹¯Hâ€“C hydrogen bond. Journal of Chemical Physics, 2003, 119, 7903-7912.	1.2	33
88	Internal rotation and halogen bonds in CF3Iâ‹¯NH3 and CF3Iâ‹¯N(CH3)3 probed by broadband rotational spectroscopy. Physical Chemistry Chemical Physics, 2011, 13, 20736.	1.3	33
89	Characterisation of H2Sâ‹¯CuCl and H2Sâ‹¯AgCl isolated in the gas phase: A rigidly pyramidal geometry at sulphur revealed by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2011, 135, 014307.	1.2	33
90	Investigation of the rotational spectrum of the hydrogen-bonded dimer CF2CH2â‹¯HCl. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 3385-3391.	1.7	31

#	Article	IF	Citations
91	The bÏ€.aï‚f complex C2H2â‹¯Cl2characterised by rotational spectroscopy as an intermediate in a reactive mixture of ethyne and chlorine. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 1891-1900.	1.7	31
92	Pre-reactive intermediates in gas-phase chemical reactions: a contribution from rotational spectroscopy. Chemical Communications, 1996, , 109.	2.2	31
93	Rotational spectroscopy of the gas phase complex of water and bromine monochloride in the microwave region: Geometry, binding strength and charge transfer. Physical Chemistry Chemical Physics, 2001, 3, 3006-3011.	1.3	31
94	A Ï€-electron donorâ€“acceptor complex C2H4Â·Â·Â·Br2 characterised by its rotational spectrum. Physical Chemistry Chemical Physics, 2001, 3, 1397-1402.	1.3	31
95	Structure and potential energy function of cyclopent-3-enone. Part 1.â€”Microwave spectrum, ring planarity, rs-structure, and dipole moment. Journal of the Chemical Society, Faraday Transactions 2, 1973, 69, 902-915.	1.1	30
96	Investigation of the rotational spectrum of the hydrogenâ€bonded dimer formed between methylenecyclopropane and HCl. Journal of Chemical Physics, 1994, 101, 4635-4643.	1.2	30
97	â€˜Charge-transferâ€™ complexes of ammonia with halogens. Nature of the binding in H3Nâ‹¯BrCl from its rotational spectrum. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 781-787.	1.7	30
98	The Preâ€Reactive Complex of H₂S and BrCl; Observation and Characterisation by Rotational Spectroscopy. Chemistry - A European Journal, 1996, 2, 265-270.	1.7	30
99	Molecular geometry of OCâ‹…â‹…â‹…â‹…AgI determined by broadband rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2012, 136, 064306.	1.2	30
100	Changes in the Geometries of C₂H₂ and C₂H₄ on Coordination to CuCl Revealed by Broadband Rotational Spectroscopy and ab-Initio Calculations. Inorganic Chemistry, 2014, 53, 10722-10730.	1.9	30
101	Halogen Bonding with Phosphine: Evidence for Mulliken Inner Complexes and the Importance of Relaxation Energy. Journal of Physical Chemistry A, 2016, 120, 8461-8468.	1.1	30
102	Nucleophilicities of Lewis Bases B and Electrophilicities of Lewis Acids A Determined from the Dissociation Energies of Complexes Bâ‹¯A Involving Hydrogen Bonds, Tetrel Bonds, Pnictogen Bonds, Chalcogen Bonds and Halogen Bonds. Molecules, 2017, 22, 1786.	1.7	30
103	Evidence concerning the relative nucleophilicities of non-bonding and Ï€-bonding electrons in furan from the rotational spectrum of furanÂ·Â·Â·ClF. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2675-2680.	1.7	29
104	The pairwise interaction of methane with hydrogen cyanide: a surprising result from rotational spectroscopy. Journal of the Chemical Society Chemical Communications, 1989, , 588.	2.0	28
105	Spectroscopic characterization of the hydrogen bonded OCâ€“HI in supersonic jets. Journal of Chemical Physics, 1993, 98, 1761-1767.	1.2	28
106	An investigation of the gas-phase complex of water and iodine monochloride by microwave spectroscopy: geometry, binding strength and electron redistribution. Physical Chemistry Chemical Physics, 2000, 2, 1659-1665.	1.3	28
107	A non-linear hydrogen bond Fâ‹¯Hâ€“Br in vinyl fluoride â‹¯HBr characterised by rotational spectroscopy. Physical Chemistry Chemical Physics, 2002, 4, 4103-4108.	1.3	28
108	Identification and geometry of dimers of phosphine and the hydrogen halides HCl and HBr from their rotational spectra detected by pulsed-nozzle, fourier-transform microwave spectroscopy. Journal of the Chemical Society Chemical Communications, 1982, , 997.	2.0	27

#	Article	IF	Citations
109	Pulsedâ€nozzle, Fourierâ€transform microwave spectroscopy of the methyl cyanideâ€“acetylene dimer. Journal of Chemical Physics, 1986, 85, 6898-6904.	1.2	27
110	Dissociation energies of the hydrogenâ€bonded dimers RCNâ‹…â‹…â‹…HF (R=CH3, HCC) determined by rotational spectroscopy. Journal of Chemical Physics, 1987, 86, 2530-2535.	1.2	27
111	Non-reactive interaction of oxirane and hydrogen bromide: isolation of an oxiraneâ€“hydrogen bromide dimer in a supersonic jet and its characterisation by microwave spectroscopy. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 3975-3982.	1.7	27
112	Methane as a proton acceptor: rotational spectrum and internal dynamics of a weakly bound dimer of methane and hydrogen cyanide. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1.	1.7	27
113	Properties of the halogen-bonded complex H2SÂ·Â·Â·Br2 established by rotational spectroscopy and ab initio calculations. Physical Chemistry Chemical Physics, 2001, 3, 2758-2764.	1.3	27
114	H3Nâ‹¯Agâ€“Cl: Synthesis in a supersonic jet and characterisation by rotational spectroscopy. Chemical Physics Letters, 2010, 499, 16-20.	1.2	27
115	Distortion of ethyne on formation of a Ï€ complex with silver chloride: C2H2â‹¯Agâ€“Cl characterised by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2012, 137, 174302.	1.2	27
116	Rotational spectrum of the hydrogen-bonded dimer acetonitrile.cntdot..cntdot..cntdot.hydrogen chloride. The Journal of Physical Chemistry, 1987, 91, 5210-5213.	2.9	26
117	The rotational spectrum, 14Nâ€nuclear quadrupole coupling constants, and H,19F nuclear spinâ€“nuclear spin coupling constant of the cyanogenâ€“hydrogen fluoride dimer. Journal of Chemical Physics, 1981, 74, 4936-4943.	1.2	25
118	Effect of weakening the hydrogen bond on the angular geometry of H2COâ‹…â‹…â‹…HX: Evidence from the rotational spectrum of H2COâ‹…â‹…â‹…HCN. Journal of Chemical Physics, 1987, 87, 2426-2432.	1.2	25
119	Angular geometries of complexes containing the Oâ‹¯Clâ€“F linkage: Rotational spectrum of formaldehydeâ‹¯chlorine monofluoride. Journal of Chemical Physics, 1998, 108, 39-45.	1.2	25
120	Are members of the family of hydrogen-bonded complexes formed by furan with the hydrogen halides isostructural? An answer from the rotational spectrum of furanâ‹¯HBr. Journal of Chemical Physics, 2002, 117, 2790-2799.	1.2	25
121	Experimental Detection and Properties of H₂Oâ‹…â‹…â‹…Agï£¿Cl and H₂Sâ‹…â‹…â‹…Agï£¿Cl by Rotational Spectroscopy. Angewandte Chemie - International Edition, 2010, 49, 181-183.	7.2	25
122	Molecular geometries of H2Sâ‹¯ICF3 and H2Oâ‹¯ICF3 characterised by broadband rotational spectroscopy. Physical Chemistry Chemical Physics, 2011, 13, 21093.	1.3	25
123	Rotational spectra and properties of complexes Bâ‹¯ICF3 (B = Kr or CO) and a comparison of the efficacy of ICl and ICF3 as iodine donors in halogen bond formation. Journal of Chemical Physics, 2011, 135, 224309.	1.2	25
124	Internal dynamics and HF bond lengthening in the hydrogen-bonded heterodimer CH3CNâ‹¯HF determined from nuclear hyperfine structure in its rotational spectrum. Journal of the Chemical Society, Faraday Transactions 2, 1986, 82, 1197-1206.	1.1	24
125	The rotational spectrum of the weakly bound dimer N2â‹…â‹…â‹…HBr and the dynamics of the N2 and HBr subunits. Journal of Chemical Physics, 1989, 90, 672-678.	1.2	24
126	Rotational spectroscopy of a mixture of thiirane and hydrogen bromide: detection and characterization of a short-lived complex (CH2)2SÄ‹HBr in a pulsed jet. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 3327-3334.	1.7	24

#	Article	IF	Citations
127	Interaction of benzene and halogens in the gas-phase: rotational spectrum of C6H6Â·Â·Â·ClF. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2295-2302.	1.7	24
128	Hydrogen bonding in the gas phase. Infrared spectroscopic investigation of hydrogen fluoride alcoholâ€“heterodimers. Journal of the Chemical Society, Faraday Transactions 2, 1979, 75, 592-601.	1.1	23
129	Internal dynamics of subunits and bending force constants in weakly bound dimers. Journal of the Chemical Society, Faraday Transactions 2, 1986, 82, 1189.	1.1	23
130	Rotational Spectroscopy of Mixtures of Trimethylamine and Fluorine: Identification of the Ion Pair[(CH3)3NF]+â€¦ Fâ¯ in the Gas Phase. Angewandte Chemie International Edition in English, 1997, 36, 1340-1342.	4.4	23
131	Halogen nuclear quadrupole coupling in the rotational spectrum of H3NÂ·Â·Â·ICl as a probe of inter- and intramolecular charge transfer. Physical Chemistry Chemical Physics, 1999, 1, 4695-4700.	1.3	23
132	Geometry, strength of binding and Br2 charge redistribution in the complex OC Â·Â·Â· Br2 determined by rotational spectroscopy. Molecular Physics, 1999, 97, 159-166.	0.8	23
133	Rotational spectroscopy of H[sub 3]Pâ‹¯BrCl and the systematics of intermolecular electron transfer in the series Bâ‹¯BrCl, where B=CO, HCN, H[sub 2]O, C[sub 2]H[sub 2], C[sub 2]H[sub 4], H[sub 2]S, NH[sub 3], and PH[sub 3]. Journal of Chemical Physics, 2000, 113, 5278.	1.2	23
134	Microwave spectrum and structure of the polar N2O dimer. Journal of Molecular Spectroscopy, 2008, 251, 153-158.	0.4	23
135	A prototype transition-metal olefin complex C2H4â‹¯AgCl synthesised by laser ablation and characterised by rotational spectroscopy and ab initio methods. Journal of Chemical Physics, 2011, 135, 024315.	1.2	23
136	Microwave spectra and structures of 1-cyano- and 1-iodo-adamantane. Journal of the Chemical Society, Faraday Transactions 2, 1972, 68, 2064.	1.1	22
137	Rotational spectroscopy and the properties of hydrogen-bonded dimers Bâ€¢â€¢â€¢HA. The Journal of Physical Chemistry, 1983, 87, 2064-2072.	2.9	22
138	Geometry of a weakly bound complex (H2S, HCN) determined from an investigation of its rotational spectrum. Journal of the Chemical Society, Faraday Transactions 2, 1984, 80, 1669.	1.1	22
139	An investigation of hydrogen bonding between HCl and vinylacetylene: A molecule with two different Ï€â€acceptor sites. Journal of Chemical Physics, 1990, 93, 6249-6255.	1.2	22
140	Is ammonium iodide an ion pair H3N+Hâ‹¯Iâ€“or a hydrogen-bonded species H3Nâ‹¯HI in the gas phase?. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 761-762.	1.7	22
141	Nonreactive interaction of methyl isocyanide and hydrogen chloride: isolation and characterization of CH3NC.cntdot..cntdot..cntdot.HCl in a pulsed jet. Journal of the American Chemical Society, 1992, 114, 8177-8180.	6.6	22
142	The rotational constant A0and planarity of the hydrogen-bonded complex H2COâ‹¯HCl. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2677-2679.	1.7	22
143	A pseudo-Ï€ analogue of a Mulliken bÏ€.aÏƒ type complex: The rotational spectrum of cyclopropaneâ€“chlorine monofluoride. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 373-378.	1.7	22
144	Weak Complexes of Dinitrogen: An Approach to the ¹⁴N-Nuclear Quadrupole Coupling Constant of Free N₂. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1992, 47, 367-370.	0.7	21

#	Article	IF	Citations
145	Intermediates in the gas-phase reactions of acetylene and halogens: the identification of the acetyleneâ€“BrCl complex by rotational spectroscopy. Journal of the Chemical Society Chemical Communications, 1994, , 1229-1230.	2.0	21
146	Rotational spectrum and molecular properties of the dinitrogenâ€“chlorine monofluoride complex. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2671-2676.	1.7	21
147	Rotational spectroscopy of mixtures of ethyne and iodine monochloride: isolation and characterisation of the Iâ€-type complex C2H2Â·Â·Â·ICl. Physical Chemistry Chemical Physics, 1999, 1, 3721-3726.	1.3	21
148	Microwave spectrum, ring conformation and electric dipole moment of cyclopent-2-enone. Journal of the Chemical Society, Faraday Transactions 2, 1979, 75, 302.	1.1	20
149	The halogen bond between ethene and a simple perfluoroiodoalkane: C2H4â‹¯ICF3 identified by broadband rotational spectroscopy. Journal of Molecular Spectroscopy, 2012, 280, 47-53.	0.4	20
150	The rotational spectrum and geometry of the heterodimer oxiraneâ€‰â‹…â€‰â‹…â€‰â‹…hydrogen cyanide in the vibrational ground state and thevÎ²(0)=1 state. Journal of Chemical Physics, 1986, 85, 676-682.	1.2	19
151	Rotational spectrum of phosphonium iodide vapour. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 507.	1.7	19
152	Microwave spectra, hyperfine splittings and average structures of 3,3,3-trifluoropropyne, CF3Cî€,CH and trifluoroacetonitrile, CF3CN. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 2937-2944.	1.7	19
153	Quantitative gas-phase electrophilicities of the dihalogen molecules XY = F2, Cl2, Br2, BrCl and ClF. Chemical Communications, 1998, , 2585-2586.	2.2	19
154	Monohydrate of argentous fluoride: H2Oâ‹¯AgF characterised by rotational spectroscopy and ab initio calculations. Journal of Molecular Spectroscopy, 2011, 267, 163-168.	0.4	19
155	H2Sâ‹¯Agâ€“I synthesized by a laser-ablation method and identified by its rotational spectrum. Chemical Physics Letters, 2012, 531, 1-5.	1.2	19
156	Distortions of ethyne when complexed with a cuprous or argentous halide: the rotational spectrum of C₂H₂â‹¯CuF. Physical Chemistry Chemical Physics, 2015, 17, 19230-19237.	1.3	19
157	Non-Covalent Interactions Involving Alkaline-Earth Atoms and Lewis Bases B: An ab Initio Investigation of Beryllium and Magnesium Bonds, BÂ·Â·Â·MR2 (M = Be or Mg, and R = H, F or CH3). Inorganics, 2019, 7, 35.	1.2	19
158	Nitrogen-14 nuclear quadrupole coupling and hydrogen fluoride (fluorine-19) nuclear spin-nuclear spin coupling in the microwave rotational spectrum of the acetonitrile-hydrogen fluoride dimer. The Journal of Physical Chemistry, 1981, 85, 3440-3443.	2.9	18
159	The rotational spectrum, geometry, and intermolecular force constant of the heterodimer of hydrogen cyanide and fluoroform. Journal of Chemical Physics, 1986, 84, 1988-1995.	1.2	18
160	Can the pre-equilibrium molecular complex in a reactive mixture of ethene and chlorine be characterised? : an answer from rotational spectroscopy. Journal of the Chemical Society Chemical Communications, 1994, , 1321.	2.0	18
161	Studies of Ar:HBr using fast scan submillimeter-wave and microwave coaxial pulsed jet spectrometers with sub-kHz precision. Journal of Chemical Physics, 2003, 119, 10687-10695.	1.2	18
162	Geometry of an Isolated Dimer of Imidazole Characterised by Rotational Spectroscopy and Ab Initio Calculations. ChemPhysChem, 2016, 17, 1154-1158.	1.0	18

#	Article	IF	Citations
163	Rotational spectrum and properties of the hydrogen-bonded dimer CH3CNâ‹¯HCN. Journal of the Chemical Society, Faraday Transactions 2, 1987, 83, 991-999.	1.1	17
164	Is there significant intermolecular charge transfer in the ground state of the HCNÂ·Â·Â·ICl complex? An answer from rotational spectroscopy. Physical Chemistry Chemical Physics, 1999, 1, 4961-4966.	1.3	17
165	Pathways for inversion in the oxiraneâ€“argon complex. Journal of Molecular Structure, 2001, 599, 81-87.	1.8	17
166	CMM-RS Potential for Characterization of the Properties of the Halogen-Bonded OCâ€“Cl₂ Complex, and a Comparison with Hydrogen-Bonded OCâ€“HCl. Journal of Physical Chemistry A, 2012, 116, 1213-1223.	1.1	17
167	Computational approaches and sigma-hole interactions: general discussion. Faraday Discussions, 2017, 203, 131-163.	1.6	17
168	Strengths of non-covalent interactions in hydrogen-bonded complexes Bâ‹¯HX and halogen-bonded complexes Bâ‹¯XY (X, Y = F, Cl): an ab initio investigation. New Journal of Chemistry, 2018, 42, 10548-10554.	1.4	17
169	Microwave spectrum, molecular geometry, ring bending potential function, and electric dipole moment of bicyclo[3.1.0]hexan-3-one. Journal of the American Chemical Society, 1978, 100, 8161-8165.	6.6	16
170	Pre-reactive intermediates in mixtures of hydrocarbons with chlorine monofluoride: characterisation of ethyne ? ClF and ethene ? ClF by rotational spectroscopy. Journal of the Chemical Society Chemical Communications, 1995, , 1833.	2.0	16
171	Structural and Electronic Properties of the Charge-Transfer Complex H3Pâ‹…â‹…â‹…â‹…Br2 Determined by Fourier Transform Microwave Spectroscopy. Chemistry - A European Journal, 2000, 6, 3968-3975.	1.7	16
172	The microwave spectrum and ring planarity of cyclopent-2-en-1-one. Challenge, 1969, , 1130.	0.4	15
173	Isolation and characterisation of the transient complex H3N ? Cl2 in the gas phase. Journal of the Chemical Society Chemical Communications, 1994, , 757.	2.0	15
174	A monomeric complex of ammonia and cuprous chloride: H3Nâ‹¯CuCl isolated and characterised by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2015, 142, 144302.	1.2	15
175	A chalcogen-bonded complex H3Nâ‹¯S=C=S formed by ammonia and carbon disulfide characterised by chirped-pulse, broadband microwave spectroscopy. Journal of Chemical Physics, 2019, 150, 084307.	1.2	15
176	The microwave spectra and ring configuration of Î³-butyrolactone and Î³-crotonolactone. Challenge, 1970, .	0.4	14
177	Microwave spectrum of a gas-phase charge-transfer complex. Journal of the Chemical Society Chemical Communications, 1975, , 580.	2.0	14
178	Rotational spectrum of a weakly bound dimer of carbonyl sulphide and hydrogen chloride. Journal of the Chemical Society, Faraday Transactions 2, 1985, 81, 1709.	1.1	14
179	An Isolated Complex of Ethyne and Gold Iodide Characterized by Broadband Rotational Spectroscopy and Ab initio Calculations. Journal of Physical Chemistry A, 2015, 119, 9636-9643.	1.1	14
180	Gas phase complexes of H₃Nâ‹¯CuF and H₃Nâ‹¯CuI studied by rotational spectroscopy and ab initio calculations: the effect of X (X = F, Cl, Br, I) in OCâ‹¯CuX and H₃Nâ‹¯CuX. Physical Chemistry Chemical Physics, 2016, 18, 13638-13645.	1.3	14

#	Article	IF	Citations
181	Microwave spectrum of tungsten pentafluoride chloride. Transactions of the Faraday Society, 1969, 65, 2595.	0.9	13
182	Structure and potential energy function of cyclopent-3-enone. Part 2.â€”Out-of-plane ring modes from far infra-red, Raman and microwave spectra: ring bending potential function. Journal of the Chemical Society, Faraday Transactions 2, 1973, 69, 916-925.	1.1	13
183	Conformations of some bicyclic monoterpenes based on bicyclo[3.1.0]hexane from their low-resolution microwave spectra. Journal of the American Chemical Society, 1978, 100, 8166-8169.	6.6	13
184	Microwave rotational spectrum, ring-puckering vibrations, ring conformation and electric dipole moment of Î³-crotonolactone. Journal of the Chemical Society, Faraday Transactions 2, 1981, 77, 2191-2201.	1.1	13
185	Characterization by Microwave Spectroscopy of a Transient Hydrogen-Bonded Complex of Oxirane and Hydrogen Chloride Isolated in a Pulsed Jet. Angewandte Chemie International Edition in English, 1990, 29, 72-73.	4.4	13
186	Identification and characterization of a gas-phase complex of methylenecyclopropane and chlorine monofluoride by rotational spectroscopy. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 4253-4258.	1.7	13
187	Inter- and intramolecular electronic transfer on formation of H3PÂ·Â·Â·ICl as determined by rotational spectroscopy. Physical Chemistry Chemical Physics, 2000, 2, 2265-2269.	1.3	13
188	Rotational spectrum, inversion, and geometry of 2,5-dihydrofuranâ‹¯ethyne and a generalization about Zâ‹¯Hâ€“C hydrogen bonds. Journal of Chemical Physics, 2005, 122, 134311.	1.2	13
189	Microwave spectrum and structure of carbonyl gold iodide, OCAuI. Molecular Physics, 2007, 105, 861-869.	0.8	13
190	H₃Pâ‹¯AgI: generation by laser-ablation and characterization by rotational spectroscopy and ab initio calculations. Physical Chemistry Chemical Physics, 2016, 18, 18971-18977.	1.3	13
191	A complex Arâ‹¯Ag<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mtext /></mml:mrow></mml:math>I produced by laser ablation and characterised by rotational spectroscopy and ab initio calculations: Variation of properties along the series Arâ‹¯Ag<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mtext /></mml:mrow></mml:math>X (X = F, Cl, Br and I). Journal of Molecular Spectroscopy, 2011, 268, 61-66.	0.4	13
192	Determination of oscillation amplitudes and force constants in hydrogen-bonded dimers from nuclear quadrupole hyperfine coupling constants. Journal of the Chemical Society, Faraday Transactions 2, 1987, 83, 2163.	1.1	12
193	Thermodynamic properties of hydrogen-bonded dimers Bâ‹¯HF from spectroscopy: B = HCN, CH3CN, HC2CN, (CH3)3CCN and H2O. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 443-447.	1.7	12
194	Microwave spectrum, structure and internal rotation of the methylamineâ€“hydrogen chloride dimer. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 1173-1178.	1.7	12
195	Fourier transform rotational spectrum and molecular structure of vinylcyclopropane. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 907.	1.7	12
196	The rotational spectrum of thiopheneâ‹¯HBr and a comparison of the geometries of the complexes Bâ‹¯HX, where B is benzene, furan or thiophene and X is F, Cl or Br. Physical Chemistry Chemical Physics, 2004, 6, 488-494.	1.3	12
197	Characterisation of the weak halogen bond in N2â‹¯ICF3 by pure rotational spectroscopy. Chemical Physics Letters, 2015, 625, 179-185.	1.2	12
198	Geometries of H2Sâ‹¯MI (M = Cu, Ag, Au) complexes studied by rotational spectroscopy: The effect of the metal atom. Journal of Chemical Physics, 2016, 145, 194306.	1.2	12

#	Article	IF	Citations
199	Molecular geometries and other properties of H2Oâ‹¯AgI and H3Nâ‹¯AgI as characterised by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2017, 147, 234308.	1.2	12
200	Microwave spectra and structures of some 1-halogenoadamantanes. The Journal of the Chemical Society A, Inorganic, Physicaloretical, 1968, , 1116.	0.7	11
201	Hydrogen bonding in gaseous mixtures. Microwave spectroscopic detection of simple complexes. Journal of the Chemical Society Chemical Communications, 1975, , 130b.	2.0	11
202	A quantitative approach to the pseudo-? nature of cyclopropane. Journal of the Chemical Society Chemical Communications, 1987, , 986.	2.0	11
203	Rotational spectrum of vinyl fluorideÂ·Â·Â·ClF: Are the Ï€-bonding or nonbonding electrons the most nucleophilic region of vinyl fluoride?. Physical Chemistry Chemical Physics, 1999, 1, 2415-2420.	1.3	11
204	A hydrogen bonded complex C2H2â€¦HBr isolated and characterized in the gas phase using pulsed-jet, Fourier transform microwave spectroscopy. Molecular Physics, 2003, 101, 603-612.	0.8	11
205	Distortion of ethyne on coordination to silver acetylide, C2H2â‹…â‹…â‹…AgCCH, characterised by broadband rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2014, 140, 124310.	1.2	11
206	Observation and Properties of a Hydrogen Bond to Carbon in a Short-Lived, Gas-Phase Complex of Methyl Isocyanide and Hydrogen Fluoride. Angewandte Chemie International Edition in English, 1992, 31, 202-203.	4.4	10
207	Nonlinear hydrogen bonds of the type (CH2)2ZÂ·Â·Â·HY: The rotational spectrum of a complex of methylenecyclopropane and hydrogen bromide. Physical Chemistry Chemical Physics, 1999, 1, 4175-4180.	1.3	10
208	Nuclear hyperfine coupling constants of aluminium monoiodide determined by Fourier-transform microwave spectroscopy. Chemical Physics Letters, 2006, 423, 327-330.	1.2	10
209	The Ïƒâ€Hole Interaction Between Sulfur Hexafluoride and Ammonia Characterised by Broadband Rotational Spectroscopy. ChemPhysChem, 2015, 16, 2630-2634.	1.0	10
210	Microwave spectrum of tellurium pentafluoride chloride. Journal of the Chemical Society, Faraday Transactions 2, 1973, 69, 29.	1.1	9
211	Rotational spectroscopy and the nature of the trimethylammonium chloride molecule in the vapour phase: hydrogen-bonded dimer or ion pair?. Journal of the Chemical Society Chemical Communications, 1988, , 1496.	2.0	9
212	Identification and geometry of the pre-reactive complex buta-1,3-dieneÂ·Â·Â·ClF by rotational spectroscopy. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2361-2365.	1.7	9
213	The nature of the interaction of molecular fluorine and Lewis bases B from a comparison of the properties of BÂ·Â·Â·F2 and BÂ·Â·Â·HF. Chemical Communications, 1998, , 2737-2738.	2.2	9
214	The hydrogen-bonded complex H3PÂ·Â·Â·HCl investigated by a combination of rotational spectroscopy and ab initio SCF calculations. Physical Chemistry Chemical Physics, 2000, 2, 4918-4924.	1.3	9
215	Inter- and intramolecular electron transfer on formation of 15N2â‹¯BrCl determined from halogen nuclear quadrupole coupling in the rotational spectrumElectronic Supplementary Information available. See http://www.rsc.org/suppdata/cp/b1/b108824f/. Physical Chemistry Chemical Physics, 2002, 4, 441-444.	1.3	9
216	The nature of the complex formed between pyridine and hydrogen bromide in the gas phase: An experimental approach using rotational spectroscopy. Journal of Chemical Physics, 2004, 121, 10467-10473.	1.2	9

#	Article	IF	Citations
217	Intramolecular competition between n-pair and Ï€-pair hydrogen bonding: Microwave spectrum and internal dynamics of the pyridineâ€“acetylene hydrogen-bonded complex. Journal of Chemical Physics, 2015, 143, 104309.	1.2	9
218	A two force-constant model for complexes Bâ‹¯Mâ€“X (B is a Lewis base and MX is any diatomic molecule): Intermolecular stretching force constants from centrifugal distortion constants DJ or Ï”J. Journal of Chemical Physics, 2016, 144, 074308.	1.2	9
219	Highly Unsaturated Platinum and Palladium Carbenes PtC₃ and PdC₃ Isolated and Characterized in the Gas Phase. Angewandte Chemie - International Edition, 2016, 55, 3768-3771.	7.2	9
220	An ab initio investigation of alkaliâ€“metal non-covalent bonds Bâ‹¯LiR and Bâ‹¯NaR (R = F, H or) Tj ETQq0 0 0 rgBT /Overlock 10 T CH₃. Physical Chemistry Chemical Physics, 2020, 22, 16421-16430.	1.3	9
221	The microwave spectrum and planarity of cyclopent-3-enone. Challenge, 1971, , 1136.	0.4	8
222	Tilts, bends, and twists of methylene groups in four-membered rings. Evidence from the microwave spectrum of trimethylene sulphoxide. Journal of the Chemical Society Chemical Communications, 1974, , 659.	2.0	8
223	A point-charge representation of nonbonding electron pairs: model derived from the ability of the hydrogen bond to act as a probe of electron density. Canadian Journal of Chemistry, 1989, 67, 1683-1686.	0.6	8
224	Faraday communications. Microwave spectroscopy of pyrolytically produced, rapidly isolated transient molecules. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 3325.	1.7	8
225	Pure rotational spectrum of Kr...HCl in the excited state (1000) observed with a glowâ€discharge source in a pulsedâ€nozzle Fourierâ€transform microwave spectrometer. Journal of Chemical Physics, 1993, 98, 2783-2789.	1.2	8
226	Rotational spectra of tert-butyl bromide and iodide measured in the millimetre-wave region and by Fourier-transform techniques. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 397.	1.7	8
227	The rotational spectrum of the complex 2,5-dihydrofuranÂ·Â·Â·HBr and the non-linearity of the OÂ·Â·Â·HÎ½Br hydrogen bond. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2973-2976.	1.7	8
228	Identification of the OCâ€“IH isomer based on near-infrared diode laser spectroscopy. Chemical Physics Letters, 1999, 305, 57-62.	1.2	8
229	Microwave spectrum and structure of carbonyl gold iodide, OCAuI â€“ ARTICLE WITHDRAWN. Molecular Physics, 2006, 104, 3329-3337.	0.8	8
230	Interaction of a pseudo-Ï€ Câ€”C bond with cuprous and argentous chlorides: Cyclopropaneâ‹¯CuCl and cyclopropaneâ‹¯AgCl investigated by rotational spectroscopy and ab initio calculations. Journal of Chemical Physics, 2015, 143, 164314.	1.2	8
231	Non-Covalent Interactions of the Lewis Acids Cuâ€“X, Agâ€“X, and Auâ€“X (X = F and Cl) with Nine Simple Lewis Bases B: A Systematic Investigation of Coinageâ€“Metal Bonds by Ab Initio Calculations. Inorganics, 2021, 9, 13.	1.2	8
232	Microwave spectrum, equilibrium ring conformation and electric dipole moment of cyclobutane-1,2-dione. Journal of the Chemical Society, Faraday Transactions 2, 1979, 75, 651.	1.1	7
233	Does the vapour of trimethylphosphonium bromide contain ion pairs (CH3)3PH+? Br? ? An answer from the rotational spectrum. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3319.	1.7	7
234	An investigation of the molecular geometry and electronic structure of nitryl chloride by a 2008, 128, 204305.	1.2	7

#	Article	IF	Citations
235	Halogen Bonding in the Gas Phase: A Comparison of the Iodine Bond in Bâ‹¯ICl and Bâ‹¯ICF3 for Simple Lewis Bases B. Topics in Current Chemistry, 2014, 358, 43-77.	4.0	7
236	Nuclear hyperfine coupling constants of indium monoiodide determined by Fourier-transform, microwave spectroscopy. Journal of Molecular Spectroscopy, 2006, 239, 126-129.	0.4	6
237	Cooperative hydrogen bonds form a pseudocycle stabilizing an isolated complex of isocyanic acid with urea. Physical Chemistry Chemical Physics, 2017, 19, 25080-25085.	1.3	6
238	An Assessment of Radial Potential Functions for the Halogen Bond: Pseudoâ€Diatomic Models for Axially Symmetric Complexes Bâ‹…â‹…â‹…ClF (B=N 2 , CO, PH 3 , HCN, and NH 3). ChemPlusChem, 2021, 86, 731-740.	1.3	6
239	The Electrophilicities of XCF 3 and XCl (X=H, Cl, Br, I) and the Propensity of These Molecules To Form Hydrogen and Halogen Bonds with Lewis Bases: An Ab Initio Study. ChemPlusChem, 2021, 86, 778-784.	1.3	6
240	How do the nucleophilicity and size of an isocyano carbon atom differ from those of a cyano nitrogen atom?. Journal of the Chemical Society Perkin Transactions II, 1992, , 329.	0.9	5
241	Microwave spectrum and geometry of the methyl isocyanideâ€“argon complex. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1287-1290.	1.7	5
242	Second Law of Thermodynamics. Nature, 1973, 244, 431-432.	13.7	4
243	Chemistry in Laser-Induced Plasmas: Formation of Mâ€“Câ‰¡Câ€“Cl (M = Ag or Cu) and their Characterization by Rotational Spectroscopy. Journal of Physical Chemistry A, 2015, 119, 2919-2925.	1.1	4
244	A reduced electrophilicity for simple Lewis acids A involved in non-covalent interactions with Lewis bases B. Physical Chemistry Chemical Physics, 2022, 24, 6856-6865.	1.3	4
245	Nuclear quadrupole coupling constants in complexes B Â·Â·Â· X₂: Sternheimer-type properties of free X₂from experimental intramolecular charge shifts. Molecular Physics, 1996, 88, 987-996.	0.8	3
246	Systematic behaviour of electron redistribution on formation of halogen-bonded complexes Bâ‹¯XY, as determinedviaXY halogen nuclear quadrupole coupling constants. Physical Chemistry Chemical Physics, 2019, 21, 16914-16922.	1.3	3
247	The Hydrogen Bond, the Halogen Bond and Rotational Spectroscopy: A Personal Retrospective. Journal of the Indian Institute of Science, 2020, 100, 191-202.	0.9	3
248	Nucleophilicity of the boron atom in compounds R-B, (R = F, Cl, Br, I, CN, NC, CH3, SiH3, CF3, H): a new look at the inductive effects of the groups R. Physical Chemistry Chemical Physics, 2022, , .	1.3	3
249	Microwave spectrum, planarity, and dipole moment of cyclobutane-1,2-dione. Journal of the Chemical Society Chemical Communications, 1973, , 612.	2.0	2
250	33S nuclear quadrupole coupling in the rotational spectra of (1000) and (0001) carbonyl sulfide: vibrational excitation in a D.C. glow discharge. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 3119.	1.7	2
251	Highly Unsaturated Platinum and Palladium Carbenes PtC₃ and PdC₃ Isolated and Characterized in the Gas Phase. Angewandte Chemie, 2016, 128, 3832-3835.	1.6	2
252	Solid-state chemistry and applications: general discussion. Faraday Discussions, 2017, 203, 459-483.	1.6	2

#	Article	IF	Citations
253	Nonbonding pairs in cyclic thioethers: Electrostatic modeling and ab initio calculations for complexes of 2,5â€dihydrothiophene, thietane, and thiirane with hydrogen fluoride. International Journal of Quantum Chemistry, 2019, 119, e25885.	1.0	2
254	A chalcogen-bonded complex (CH3)3Nâ‹¯S C O characterised by rotational spectroscopy. Chemical Physics Letters, 2020, 743, 137177.	1.2	2
255	A test of ab initio-generated, radial intermolecular potential energy functions for five axially-symmetric, hydrogen-bonded complexes Bâ‹¯HF, where B = N₂, CO, PH₃, HCN and NH₃. Physical Chemistry Chemical Physics, 2021, 23, 7271-7279.	1.3	2
256	Radial Potential Energy Functions of Linear Halogen-Bonded Complexes YXÂ·Â·Â·ClF (YX = FB, OC, SC,) Tj ETQq0 0 0 rgBT /Overlock 10 T Complexes. Journal of Physical Chemistry A, 2022, , .	1.1	2
257	Infrared quantum cascade laser spectroscopy of low frequency vibrations of intermolecular complexes. , 2011, , .		1
258	Electrostatic Potential and a Simple Extended Electric Dipole Model of Hydrogen Fluoride as Probes of Non-Bonding Electron Pairs in the Cyclic Ethers 2,5-Dihydrofuran, Oxetane and Oxirane. Crystals, 2017, 7, 261.	1.0	1
259	Isolation of a Halogen-Bonded Complex Formed between Methane and Chlorine Monofluoride and Characterisation by Rotational Spectroscopy and Ab Initio Calculations. Molecules, 2019, 24, 4257.	1.7	1
260	Prereactive Complexes of Dihalogens XY with Lewis Bases B in the Gas Phase: A Systematic Case for the Halogen Analogue Bâ‹…â‹…â‹…XY of the Hydrogen Bond Bâ‹…â‹…â‹…HX. , 1999, 38, 2686.		1
261	The rotational spectrum of H₂Sâ‹¯HI and an investigation by ab initio calculations of the origins of the observed doubling of rotational transitions in both H₂Sâ‹¯HI and H₂Sâ‹¯F₂. Journal of Chemical Physics, 2020, 153, 204301.	1.2	0