

Assimo Maris

List of Publications by Year in descending order

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docs citations

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1268
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of the rotational spectra of van der Waals complexes by free jet absorption millimeter wave spectroscopy: pyridine-argon. <i>Chemical Physics Letters</i> , 1996, 261, 267-271.	1.2	146
2	Weak, Improper, C-H...O...C Hydrogen Bonds in the Dimethyl Ether Dimer. <i>Journal of the American Chemical Society</i> , 2002, 124, 2739-2743.	6.6	127
3	Relative Strengths of the O-H...Cl and O-H...F Hydrogen Bonds. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2438-2442.	7.2	76
4	Intermolecular Hydrogen Bonding between Water and Pyrazine. <i>Angewandte Chemie - International Edition</i> , 1998, 37, 792-795.	7.2	66
5	Dynamical Behavior and Dipole-Dipole Interactions of Tetrafluoromethane-Water. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6711-6714.	7.2	51
6	Investigation of the Rotational Spectrum of Pyrimidine from 3 to 337 GHz: Molecular Structure, Nuclear Quadrupole Coupling, and Vibrational Satellites. <i>Journal of Molecular Spectroscopy</i> , 1999, 195, 332-339.	0.4	47
7	Proton Transfer in Homodimers of Carboxylic Acids: The Rotational Spectrum of the Dimer of Acrylic Acid. <i>Journal of the American Chemical Society</i> , 2012, 134, 19281-19286.	6.6	46
8	Pure rotational spectrum of 2-pyridone-water and quantum chemical calculations on the tautomeric equilibrium 2-pyridone-water/2-hydroxypyridine-water. <i>Chemical Physics Letters</i> , 2002, 360, 155-160.	1.2	41
9	Molecular Recognition of Chiral Conformers: A Rotational Study of the Dimers of Glycidol. <i>Journal of the American Chemical Society</i> , 2008, 130, 13860-13861.	6.6	39
10	Raman and SERS study on atrazine, prometryn and simetryn triazine herbicides. <i>Journal of Molecular Structure</i> , 2013, 1040, 139-148.	1.8	38
11	Free jet rotational spectrum and Ar inversion in the dimethyl ether-argon complex. <i>Chemical Physics Letters</i> , 2002, 361, 341-348.	1.2	36
12	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.	2.1	36
13	Free jet absorption millimetre-wave spectrum and model calculations of phenol-water. <i>Chemical Physics</i> , 2002, 283, 185-192.	0.9	35
14	Intramolecular hydrogen bonds and conformational properties of biogenic amines: A free-jet microwave study of tyramine. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 2863.	1.3	35
15	Features of the C-H...N Weak Hydrogen Bond and Internal Dynamics in Pyridine-CH ₃ . <i>Chemistry - A European Journal</i> , 2010, 16, 1761-1764.	1.7	34
16	Cellular remains in a ~3.42-billion-year-old seafloor hydrothermal environment. <i>Science Advances</i> , 2021, 7, .	4.7	34
17	Methylsalicylate: A Rotational Spectroscopy Study. <i>Journal of Physical Chemistry A</i> , 2007, 111, 9076-9079.	1.1	30
18	Free jet rotational spectrum and ab initio calculations of acetanilide. <i>New Journal of Chemistry</i> , 2000, 24, 821-824.	1.4	29

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19	Rotational spectrum, dynamics, and bond energy of the floppy dimethylether-neon van der Waals complex. <i>Journal of Chemical Physics</i> , 2003, 118, 1649-1652.	1.2	28
20	CH ₂ O and CH ₂ F Links Form the Cage Structure of Dioxane-Trifluoromethane. <i>Journal of Physical Chemistry A</i> , 2005, 109, 7402-7404.	1.1	28
21	Rotational and Core Level Spectroscopies As Complementary Techniques in Tautomeric/Conformational Studies: The Case of 2-Mercaptopyridine. <i>Journal of the American Chemical Society</i> , 2010, 132, 10269-10271.	6.6	27
22	Keto-Enol Tautomerism and Conformational Landscape of 1,3-Cyclohexanedione from Its Free Jet Millimeter-Wave Absorption Spectrum. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13712-13718.	1.1	27
23	Water-ketones hydrogen bonding: The rotational spectrum of cyclobutanone-water. <i>Journal of Chemical Physics</i> , 2005, 123, 164304.	1.2	26
24	How CO ₂ Interacts with Carboxylic Acids: A Rotational Study of Formic Acid-CO ₂ . <i>ChemPhysChem</i> , 2015, 16, 2961-2967.	1.0	26
25	Microwave spectrum of the axial conformer and potential energy function of the ring puckering motion in fluorocyclobutane. <i>Journal of Molecular Structure</i> , 1996, 376, 25-32.	1.8	25
26	The free jet microwave spectrum of 2-phenylethylamine-water. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 10210.	1.3	25
27	Bond energy of complexes of neon with aromatic molecules: rotational spectrum and dynamics of pyridine-neon. <i>Chemical Communications</i> , 1998, , 2625-2626.	2.2	24
28	Rotational spectrum of trifluoroacetone. <i>Journal of Molecular Spectroscopy</i> , 2010, 259, 65-69.	0.4	24
29	Free jet rotational spectrum of propylene oxide-krypton and modelling and ab initio calculations for propylene oxide-rare gas dimers Electronic supplementary information (ESI) available: Tables S1 and S2: Experimental transition frequencies of PRO ⁺ 84Kr and PRO ⁺ 86Kr complexes. See http://www.rsc.org/suppdata/cp/b3/b300386h/ . <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1359-1364.	1.3	23
30	Millimeter Wave Spectrum of the Weakly Bound Complex CH ₂ •CHCN•H ₂ O: Structure, Dynamics, and Implications for Astronomical Search. <i>Journal of Physical Chemistry A</i> , 2015, 119, 11674-11682.	1.1	23
31	Adducts of NH ₃ with the Conformers of Glycidol: A Rotational Spectroscopy Study. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1102-1105.	7.2	22
32	Almost free methyl top internal rotation: Rotational spectrum of 2-butyric acid. <i>Journal of Molecular Spectroscopy</i> , 2011, 267, 186-190.	0.4	21
33	Free-Jet Rotational Spectrum and ab Initio Calculations of Formanilide. <i>Journal of Molecular Spectroscopy</i> , 2001, 205, 173-176.	0.4	20
34	A rotational study of the molecular complex tert-butanol-NH ₃ . <i>Chemical Physics Letters</i> , 2008, 463, 330-333.	1.2	20
35	Pyridine-CF ₄ : A Molecule with a Rotating Cap. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11289-11292.	1.1	20
36	Structure of saligenin: microwave, UV and IR spectroscopy studies in a supersonic jet combined with quantum chemistry calculations. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 17163.	1.3	20

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37	Rotational spectrum of propylene oxide-neon. <i>Molecular Physics</i> , 2002, 100, 3245-3249.	0.8	19
38	Free jet absorption millimeter wave spectrum of benzophenone. <i>Chemical Physics Letters</i> , 1996, 256, 509-512.	1.2	18
39	Intramolecular Hydrogen Bonds and Conformational Properties of Benzylamine. <i>ChemPhysChem</i> , 2001, 2, 172-177.	1.0	18
40	Pure Rotational Spectrum and Model Calculations of Anisole- ¹⁵ N ammonia. <i>Journal of Physical Chemistry A</i> , 2009, 113, 14277-14280.	1.1	17
41	Shapes, Dynamics, and Stability of ¹² C-Ionone and Its Two Mutants Evidenced by High-Resolution Spectroscopy in the Gas Phase. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1497-1502.	2.1	17
42	Free jet absorption millimeter wave spectrum and van der Waals potential energy surface of the 2,3-dihydrofuran-argon adduct. <i>Journal of Chemical Physics</i> , 1997, 107, 5714-5719.	1.2	16
43	Conformation and Stability of Adducts of Sulfurated Cyclic Compounds with Water: Rotational Spectrum of Tetrahydrothiophene-Water. <i>Journal of Physical Chemistry A</i> , 1999, 103, 5285-5290.	1.1	16
44	Atmospherically relevant acrolein-water complexes: spectroscopic evidence of aldehyde hydration and oxygen atom exchange. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23559-23566.	1.3	16
45	Millimeter wave free-jet spectrum of vinyl acetate. <i>Journal of Molecular Spectroscopy</i> , 2009, 256, 228-231.	0.4	15
46	Shape of Biomolecules by Free Jet Microwave Spectroscopy: 2-Amino-1-phenylethanol and 2-Methylamino-1-phenylethanol. <i>Journal of Physical Chemistry A</i> , 2009, 113, 7769-7773.	1.1	15
47	The rotational spectrum of tertiary-butyl alcohol. <i>Journal of Molecular Spectroscopy</i> , 2010, 260, 77-83.	0.4	15
48	The most stable conformer of the propylene oxide-argon complex. <i>Journal of Molecular Structure</i> , 2002, 612, 309-313.	1.8	14
49	Free and pulsed jet rotational spectra and van der Waals motions of ethanol-argon. <i>Chemical Physics Letters</i> , 2004, 399, 39-46.	1.2	14
50	Structure, dipole moment and large amplitude motions of 1-benzofuran. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 3317.	1.3	14
51	Effects of Chlorination on the Tautomeric Equilibrium of 2-Hydroxypyridine: Experiment and Theory. <i>Chemistry - A European Journal</i> , 2017, 23, 3595-3604.	1.7	14
52	Millimeter-Wave Absorption Free Jet Spectrum, Barriers to Internal Rotation, and Torsional Relaxation in p-Anisaldehyde. <i>Journal of Molecular Spectroscopy</i> , 1997, 185, 374-383.	0.4	13
53	On the conformational equilibrium of glycolamide: A free jet millimetre-wave spectroscopy and computational study. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 2611-2616.	1.3	13
54	Free-jet rotational spectrum and tunneling motion in difluoromethane-krypton. <i>Chemical Physics Letters</i> , 2005, 407, 192-198.	1.2	13

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55	Raman and SERS study on ibuprofen metal complexes with biomedical interest. <i>Vibrational Spectroscopy</i> , 2014, 73, 45-55.	1.2	13
56	Quantum Effects for a Proton in a Low-Barrier, Double-Well Potential: Core Level Photoemission Spectroscopy of Acetylacetone. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 521-526.	2.1	13
57	Millimeter-wave spectroscopy and modeling of 1,2-butanediol. <i>Astronomy and Astrophysics</i> , 2018, 619, A140.	2.1	13
58	Can hyperspectral imaging be used to map corrosion products on outdoor bronze sculptures?. <i>Journal of Spectral Imaging</i> , 0, , .	0.0	13
59	Tunnelling splittings in the rotational spectrum of 3-fluoro-benzylalcohol. <i>Chemical Physics Letters</i> , 2010, 498, 52-55.	1.2	12
60	The double donor/acceptor role of the NH ₃ group: microwave spectroscopy of the aminoethanolâ€“ammonia molecular complex. <i>Molecular Physics</i> , 2010, 108, 2219-2223.	0.8	12
61	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.	1.1	12
62	Rotational Spectrum of the Mixed van der Waals Triad Pyridineâ€“Arâ€“Ne. <i>ChemPhysChem</i> , 2009, 10, 2503-2507.	1.0	11
63	Conformational Equilibria in Diols: The Rotational Spectrum of Chiral 1,3-Butandiol. <i>Journal of Physical Chemistry A</i> , 2011, 115, 9585-9589.	1.1	11
64	How Trifluoroacetone Interacts with Water. <i>Journal of Physical Chemistry A</i> , 2011, 115, 9493-9497.	1.1	11
65	Regarding the torsional flexibility of the dihydrolipoic acid's pharmacophore: 1,3-propanedithiol. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 496-502.	1.3	11
66	Exploring Caffeineâ€“Phenol Interactions by the Inseparable Duet of Experimental and Theoretical Data. <i>Chemistry - A European Journal</i> , 2019, 25, 14230-14236.	1.7	11
67	Laboratory Measurements and Astronomical Search for Thioacetamide. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1537-1549.	1.2	11
68	Characterizing the lone pairâ€“hole interaction in complexes of ammonia with perfluorinated arenes. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 9121-9129.	1.3	11
69	Vibrational relaxation in pyridine upon supersonic expansion. <i>Journal of Chemical Physics</i> , 2000, 113, 8567-8573.	1.2	10
70	Interactions of Aromatic Heterocycles with Water: The Driving Force from Freeâ€“Jet Rotational Spectroscopy and Model Electrostatic Calculations. <i>ChemPhysChem</i> , 2008, 9, 1303-1308.	1.0	10
71	Shapes and Internal Dynamics of the 1:1 Adducts of Ammonia with <i>trans</i> and <i>gauche</i> â€“Ethanol: A Rotational Study. <i>Chemistry - A European Journal</i> , 2012, 18, 12759-12763.	1.7	10
72	Laboratory rotational spectrum of acrylic acid and its isotopologues in the 6â€“18.5GHz and 52â€“74.4GHz frequency ranges. <i>Journal of Molecular Spectroscopy</i> , 2014, 295, 37-43.	0.4	10

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73	Conformational Equilibrium and Internal Dynamics of E-Anethole: A Rotational Study. Journal of Physical Chemistry B, 2016, 120, 6587-6591.	1.2	10
74	Characterizing hydrogen and tetrel bonds in clusters of CO ₂ with carboxylic acids. Physical Chemistry Chemical Physics, 2021, 23, 16915-16922.	1.3	10
75	Effects of Fluorine Substitution on the Shape of Neurotransmitters: the Rotational Spectrum of 2-(2-Fluorophenyl)Ethanamine. ChemPhysChem, 2012, 13, 3504-3509.	1.0	9
76	Fluorine Substitution Effects on Flexibility and Tunneling Pathways: The Rotational Spectrum of 2-Fluorobenzylamine. ChemPhysChem, 2013, 14, 1943-1950.	1.0	9
77	The microwave spectroscopy study of 1,2-dimethoxyethane. Journal of Molecular Spectroscopy, 2017, 337, 3-8.	0.4	9
78	Free jet absorption millimeter wave spectrum of benzene sulphonyl chloride. Chemical Physics Letters, 1995, 243, 302-307.	1.2	8
79	Rotational Spectrum of 1,3-Dioxolane-Argon. Journal of Molecular Spectroscopy, 1997, 184, 145-149.	0.4	8
80	Rotational spectrum, dynamics and bond energy of 2,5-dihydrofuran-krypton van der Waals complex. Molecular Physics, 2000, 98, 1919-1924.	0.8	8
81	The internal rotation and inversion pathways of the NH ₂ group in equatorial amino cyclobutane. Journal of Molecular Structure, 2002, 612, 357-367.	1.8	8
82	Weak hydrogen bonds in <i>trans</i> -1,4-difluorobenzene-ammonia: A rotational study. Chemical Physics Letters, 2010, 485, 36-39.	1.2	8
83	Rotational Spectrum and Internal Dynamics of Methylpyruvate. Journal of Physical Chemistry A, 2013, 117, 590-593.	1.1	8
84	Structure and dynamics of cyclic amides: The rotational spectrum of 1,3-dimethyl-2-imidazolidinone. Journal of Molecular Spectroscopy, 2017, 342, 38-44.	0.4	8
85	Chlorination and tautomerism: a computational and UPS/XPS study of 2-hydroxypyridine ↔ 2-pyridone equilibrium. Physical Chemistry Chemical Physics, 2020, 22, 13440-13455.	1.3	8
86	Terpenoids: shape and non-covalent interactions. The rotational spectrum of <i>cis</i> -verbenol and its 1:1 water complex. Physical Chemistry Chemical Physics, 2020, 22, 5729-5734.	1.3	8
87	Complexes of neon with nonaromatic ring molecules: Rotational spectrum, dynamics, and bond energy of 2,5-dihydrofuran-neon. Journal of Chemical Physics, 1999, 110, 8976-8979.	1.2	7
88	Noncovalent Interactions and Internal Dynamics in Dimethoxymethane-Water. Chemistry - A European Journal, 2007, 13, 5833-5837.	1.7	7
89	Tunneling motions in the Ar-CHF ₃ complex. Journal of Molecular Spectroscopy, 2010, 261, 18-27.	0.4	7
90	Raman and SERS study on cimetidine-metal complexes with biomedical interest. Journal of Raman Spectroscopy, 2011, 42, 612-620.	1.2	7

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91	Millimeter wave free-jet spectrum of the isotopologues of 1,2-butanediol. <i>Journal of Molecular Structure</i> , 2020, 1205, 127643.	1.8	7
92	The proton donor/acceptor double role of the peptidic group: free jet rotational spectrum and computational study of lactamide. <i>Chemical Physics</i> , 2002, 283, 111-118.	0.9	6
93	Rotational Spectrum and Conformational Analysis of N-Methyl-2-Aminoethanol: Insights into the Shape of Adrenergic Neurotransmitters. <i>Frontiers in Chemistry</i> , 2018, 6, 25.	1.8	6
94	How Aromatic Fluorination Exchanges the Interaction Role of Pyridine with Carbonyl Compounds: The Formaldehyde Adduct. <i>Chemistry - A European Journal</i> , 2021, 27, 13870-13878.	1.7	6
95	Ab Initio and Empirical Atom Bond Formulation of the Interaction of the Dimethylether-Ar System. <i>Lecture Notes in Computer Science</i> , 2005, , 1046-1053.	1.0	6
96	Conformation of chiral molecules: Free jet rotational spectrum of 2-phenylpropanal. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2795.	1.3	5
97	Rotational Spectrum of Dichloromethane- ⁴ Ne: Internal Dynamics and Cl Quadrupolar Hyperfine Effects. <i>Journal of Physical Chemistry A</i> , 2015, 119, 11813-11819.	1.1	5
98	Acrylic acid (CH ₂ CHCOOH): the rotational spectrum in the millimetre range up to 397 GHz. <i>Molecular Physics</i> , 2015, 113, 2290-2295.	0.8	5
99	Non covalent interactions stabilizing the chiral dimer of CH ₂ ClF: a rotational study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3695-3700.	1.3	5
100	The Shapes of Sulfonamides: A Rotational Spectroscopy Study. <i>Molecules</i> , 2022, 27, 2820.	1.7	5
101	Skeletal Torsion Tunneling and Methyl Internal Rotation: The Coupled Large Amplitude Motions in Phenyl Acetate. <i>Molecules</i> , 2022, 27, 2730.	1.7	5
102	Spectroscopic and quantum mechanical study of a scavenger molecule: N,N-diethylhydroxylamine. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 281, 121555.	2.0	5
103	Interplay of Rotational and Pseudorotational Motions in Flexible Cyclic Molecules. <i>Journal of Physical Chemistry A</i> , 2021, 125, 4098-4113.	1.1	4
104	Immunological Analytical Techniques for Cosmetics Quality Control and Process Monitoring. <i>Processes</i> , 2021, 9, 1982.	1.3	4
105	An investigation of the quadrupole coupling of two N nuclei in the complex pyrimidine-Ar by molecular beam Fourier transform microwave spectroscopy. <i>Journal of Molecular Structure</i> , 2002, 612, 393-399.	1.8	3
106	Apparent conflicting indications on the conformation of dimethylether-Ar from the rotational spectra of the d6 and 13C species. <i>Journal of Molecular Spectroscopy</i> , 2009, 257, 29-33.	0.4	3
107	Soft X-ray photoemission spectroscopy of selected neurotransmitters in the gas phase. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2012, 185, 244-251.	0.8	3
108	Rotational Spectrum and Internal Dynamics of Tetrahydrofuran-Krypton. <i>ChemPhysChem</i> , 2012, 13, 221-225.	1.0	3

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109	Accurate spectroscopy of polycyclic aromatic compounds: From the rotational spectrum of fluoren-9-one in the millimeter wave region to its infrared spectrum. <i>Journal of Chemical Physics</i> , 2015, 142, 024317.	1.2	3
110	Testing the Scalability of the HS-AUTOFIT Tool in a High-Performance Computing Environment. <i>Electronics (Switzerland)</i> , 2021, 10, 2251.	1.8	3
111	Structure and dynamics of methacrylamide, a computational and free-jet rotational spectroscopic study. <i>Journal of Molecular Structure</i> , 2022, 1248, 131391.	1.8	3
112	“Hole activation and structural changes upon perfluorination of aryl halides: direct evidence from gas phase rotational spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 18093-18101.	1.3	3
113	Rotational spectrum, dynamics and bond energy of 2,5-dihydrofuran-krypton van der Waals complex. <i>Molecular Physics</i> , 2000, 98, 1919-1924.	0.8	3
114	LPS, XPS, NEXAFS and Computational Investigation of Acrylamide Monomer. <i>Photochem</i> , 2022, 2, 463-478.	1.3	3
115	Atropisomerism in bisphenols: free jet absorption millimeter wave study of 2,2-biphenol. <i>Journal of Molecular Structure</i> , 2004, 695-696, 353-356.	1.8	2
116	Conformational landscape of indan-5-ol: A free-jet millimetre wave study. <i>Journal of Molecular Spectroscopy</i> , 2015, 307, 6-9.	0.4	1
117	Millimeter wave free-jet spectrum of acrolein and several isotopologues. <i>Canadian Journal of Physics</i> , 2020, 98, 555-559.	0.4	1
118	Broad band free jet absorption mm-wave spectrum of 3-phenyl-1-propanol. <i>Journal of Molecular Spectroscopy</i> , 2012, 280, 145-149.	0.4	0
119	Detection and characterization of impurities in commercial products with Fourier transform microwave spectroscopy. <i>Analyst, The</i> , 2013, 138, 1959.	1.7	0
120	Structure, Dynamics, and Accurate Laboratory Rotational Frequencies of the Acrylonitrile-Methanol Complex. <i>Journal of Physical Chemistry A</i> , 2020, 124, 3601-3608.	1.1	0