

Michael C Mccarthy

List of Publications by Year in descending order

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158
papers

6,558
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61945

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times ranked

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#	ARTICLE	IF	CITATIONS
1	CH ₃ -Terminated Carbon Chains in the GOTHAM Survey of TMC-1: Evidence of Interstellar CH ₃ C ₇ N. <i>Astrophysical Journal</i> , 2022, 924, 21.	1.6	9
2	Rotational spectrum of anti- and gauche-4-cyano-1-butyne (C ₅ H ₅ N) – An open-chain isomer of pyridine. <i>Journal of Molecular Spectroscopy</i> , 2022, 385, 111604.	0.4	3
3	First Laboratory Detection of N ¹³ CO ⁺ and Semiexperimental Equilibrium Structure of the NCO ⁺ Anion. <i>Journal of Physical Chemistry A</i> , 2022, 126, 1899-1904.	1.1	0
4	Infrared action spectroscopy of fundamental nitrilium ions: Protonated vinyl- and ethyl cyanide. <i>Journal of Molecular Spectroscopy</i> , 2022, 386, 111615.	0.4	1
5	Interstellar detection of the highly polar five-membered ring cyanocyclopentadiene. <i>Nature Astronomy</i> , 2021, 5, 176-180.	4.2	96
6	SOLEIL and ALMA views on prototypical organic nitriles: C ₂ H ₅ CN. <i>Journal of Molecular Spectroscopy</i> , 2021, 375, 111392.	0.4	8
7	An investigation of spectral line stacking techniques and application to the detection of HC ₁₁ N. <i>Nature Astronomy</i> , 2021, 5, 188-196.	4.2	49
8	Ubiquitous aromatic carbon chemistry at the earliest stages of star formation. <i>Nature Astronomy</i> , 2021, 5, 181-187.	4.2	49
9	Discovery of Interstellar trans-cyanovinylacetylene (HC ≡ CCH = CHC ≡ N) and vinylcyanoacetylene (H ₂ C = CHC ₃ N) in GOTHAM Observations of TMC-1. <i>Astrophysical Journal Letters</i> , 2021, 908, L11.	3.0	13
10	Aromatics and Cyclic Molecules in Molecular Clouds: A New Dimension of Interstellar Organic Chemistry. <i>Journal of Physical Chemistry A</i> , 2021, 125, 3231-3243.	1.1	50
11	A rotational and vibrational investigation of phenylpropionitrile (C ₆ H ₅ C ₃ N). <i>Journal of Molecular Spectroscopy</i> , 2021, 377, 111425.	0.4	10
12	Detection of two interstellar polycyclic aromatic hydrocarbons via spectral matched filtering. <i>Science</i> , 2021, 371, 1265-1269.	6.0	236
13	Interstellar Detection of 2-cyanocyclopentadiene, C ₅ H ₅ CN, a Second Five-membered Ring toward TMC-1. <i>Astrophysical Journal Letters</i> , 2021, 910, L2.	3.0	33
14	A high speed fitting program for rotational spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2021, 379, 111467.	0.4	3
15	Discovery of the Pure Polycyclic Aromatic Hydrocarbon Indene (c-C ₉ H ₈) with GOTHAM Observations of TMC-1. <i>Astrophysical Journal Letters</i> , 2021, 913, L18.	3.0	96
16	Machine Learning of Interstellar Chemical Inventories. <i>Astrophysical Journal Letters</i> , 2021, 917, L6.	3.0	11
17	Descendant of the X-ogen carrier and a \tilde{m} mass of 69 \tilde{m} : infrared action spectroscopic detection of HC ₃ O ⁺ and HC ₃ S ⁺ . <i>Molecular Physics</i> , 2020, 118, e1776409.	0.8	17
18	Automated Construction of Potential Energy Surfaces Suitable to Describe van der Waals Complexes with Highly Excited Nascent Molecules: The Rotational Spectra of Ar \tilde{m} CS(v) and Ar \tilde{m} SiS(v). <i>Journal of Physical Chemistry A</i> , 2020, 124, 4445-4454.	1.1	7

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19	Exhaustive Product Analysis of Three Benzene Discharges by Microwave Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2020, 124, 5170-5181.	1.1	38
20	Molecule Identification with Rotational Spectroscopy and Probabilistic Deep Learning. <i>Journal of Physical Chemistry A</i> , 2020, 124, 3002-3017.	1.1	21
21	Detecting Laser-Volatilized Salts with a Miniature 100-GHz Spectrometer. <i>Journal of Physical Chemistry A</i> , 2020, 124, 1429-1436.	1.1	2
22	Synchrotron-Based High Resolution Far-Infrared Spectroscopy of <i>trans</i> -Butadiene. <i>Journal of Physical Chemistry A</i> , 2020, 124, 2427-2435.	1.1	4
23	Bayesian Analysis of Theoretical Rotational Constants from Low-Cost Electronic Structure Methods. <i>Journal of Physical Chemistry A</i> , 2020, 124, 898-910.	1.1	22
24	Detection of Interstellar HC ₄ NC and an Investigation of Isocyanopolyne Chemistry under TMC-1 Conditions. <i>Astrophysical Journal Letters</i> , 2020, 900, L9.	3.0	32
25	Early Science from GOTHAM: Project Overview, Methods, and the Detection of Interstellar Propargyl Cyanide (HCCCH ₂ CN) in TMC-1. <i>Astrophysical Journal Letters</i> , 2020, 900, L10.	3.0	60
26	Generation and structural characterization of Ge carbides GeC _n (<i>n</i> = 4, 5, 6) by laser ablation, broadband rotational spectroscopy, and quantum chemistry. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18911-18919.	1.3	5
27	Frontispiece: The Hunt for Elusive Molecules: Insights from Joint Theoretical and Experimental Investigations. <i>Chemistry - A European Journal</i> , 2019, 25, .	1.7	0
28	Characterization of the simplest hydroperoxide ester, hydroperoxymethyl formate, a precursor of atmospheric aerosols. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18065-18070.	1.3	13
29	Searches for Interstellar HCCSH and H ₂ CCS. <i>Astrophysical Journal</i> , 2019, 883, 201.	1.6	13
30	Gas-phase synthetic pathways to benzene and benzonitrile: a combined microwave and thermochemical investigation. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 2946-2956.	1.3	37
31	The Hunt for Elusive Molecules: Insights from Joint Theoretical and Experimental Investigations. <i>Chemistry - A European Journal</i> , 2019, 25, 7243-7258.	1.7	8
32	High sensitivity microwave spectroscopy in a cryogenic buffer gas cell. <i>Review of Scientific Instruments</i> , 2019, 90, 053104.	0.6	25
33	Study of Benzene Fragmentation, Isomerization, and Growth Using Microwave Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 2408-2413.	2.1	25
34	Rotational Characterization of the Elusive <i>gauche</i> -Isoprene. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1981-1985.	2.1	8
35	Building blocks of dust: A coordinated laboratory and astronomical study of the archetype AGB carbon star IRC+10216. <i>Journal of Molecular Spectroscopy</i> , 2019, 356, 7-20.	0.4	22
36	Gas phase detection and rotational spectroscopy of ethynethiol, HCCSH. <i>Molecular Physics</i> , 2019, 117, 1381-1391.	0.8	10

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37	BENZENE'S INFERNO, PART II: AUTOMATED ANALYSIS AND IDENTIFICATION. , 2019, , .		1
38	Building Blocks of Dust: A Coordinated Laboratory and Astronomical Study of AGB Stars. Journal of Molecular Spectroscopy, 2019, 356, 7-20.	0.4	1
39	Vibrational satellites of C ₂ S, C ₃ S, and C ₄ S: microwave spectral taxonomy as a stepping stone to the millimeter-wave band. Physical Chemistry Chemical Physics, 2018, 20, 13870-13889.	1.3	17
40	Detection of the aromatic molecule benzonitrile (<i>c</i> -C ₆ H ₅ CN) in the interstellar medium. Science, 2018, 359, 202-205.	6.0	370
41	Interconversion of Methyltropylium and Xylyl Radicals: A Pathway Unavailable to the Benzyl-Tropylium Rearrangement. Journal of Physical Chemistry A, 2018, 122, 1261-1269.	1.1	13
42	The Molecular Structure of gauche-1,3-Butadiene: Experimental Establishment of Nonplanarity. Angewandte Chemie, 2018, 130, 1839-1843.	1.6	10
43	The Molecular Structure of <i>gauche</i> -1,3-Butadiene: Experimental Establishment of Nonplanarity. Angewandte Chemie - International Edition, 2018, 57, 1821-1825.	7.2	46
44	SMA Spectral Line Survey of the Proto-Planetary Nebula CRL 618. Proceedings of the International Astronomical Union, 2018, 14, 483-484.	0.0	0
45	Synthetic and Spectroscopic Investigations Enabled by Modular Synthesis of Molecular Phosphaalkyne Precursors. Journal of the American Chemical Society, 2018, 140, 17985-17991.	6.6	25
46	The rotational spectrum and potential energy surface of the Ar-SiO complex. Journal of Chemical Physics, 2018, 149, 134308.	1.2	6
47	Sulfur monoxide thermal release from an anthracene-based precursor, spectroscopic identification, and transfer reactivity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5866-5871.	3.3	28
48	The ozonolysis of isoprene in a cryogenic buffer gas cell by high resolution microwave spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 16828-16834.	1.3	28
49	Equilibrium molecular structures of vinyl carbon chains: Vinyl acetylene, vinyl diacetylene, and vinyl cyanide. Journal of Molecular Spectroscopy, 2018, 350, 10-17.	0.4	5
50	CARBON-13 STUDIES OF SULFUR-TERMINATED CARBON CHAINS: CHEMICAL BONDING, MOLECULAR STRUCTURES AND FORMATION PATHWAYS. , 2018, , .		1
51	HSCO ⁺ and DSCO ⁺ : a multi-technique approach in the laboratory for the spectroscopy of interstellar ions. Astronomy and Astrophysics, 2018, 620, A184.	2.1	1
52	Detection and structural characterization of nitrosamide H ₂ NNO: A central intermediate in deNO _x processes. Journal of Chemical Physics, 2017, 147, 134301.	1.2	5
53	Detection of Interstellar HC ₅ O in TMC-1 with the Green Bank Telescope. Astrophysical Journal Letters, 2017, 843, L28.	3.0	36
54	Oxygen-18 Isotopic Studies of H ₂ O and D ₂ O. Journal of Physical Chemistry A, 2017, 121, 6296-6303.	1.1	4

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55	To kink or not: A search for long-chain cumulenes using microwave spectral taxonomy. <i>Journal of Chemical Physics</i> , 2017, 146, 154301.	1.2	11
56	Electron Donor–Acceptor Nature of the Ethanol–CO ₂ Dimer. <i>Journal of Physical Chemistry A</i> , 2017, 121, 6283-6287.	1.1	5
57	Germanium Dicarbide: Evidence for a T-Shaped Ground State Structure. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3776-3781.	2.1	14
58	Automated microwave double resonance spectroscopy: A tool to identify and characterize chemical compounds. <i>Journal of Chemical Physics</i> , 2016, 144, 124202.	1.2	39
59	Communication: Thermal unimolecular decomposition of syn-CH ₃ CHO: A kinetic study. <i>Journal of Chemical Physics</i> , 2016, 145, 131102.	1.2	38
60	Pyrolysis of the Simplest Carbohydrate, Glycolaldehyde (CHO–CH ₂ OH), and Glyoxal in a Heated Microreactor. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2161-2172.	1.1	13
61	Exotic SiO ₂ H ₂ Isomers: Theory and Experiment Working in Harmony. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1895-1900.	2.1	24
62	A Molecular Precursor to Phosphaethyne and Its Application in Synthesis of the Aromatic 1,2,3,4-Phosphatriazolate Anion. <i>Journal of the American Chemical Society</i> , 2016, 138, 6731-6734.	6.6	40
63	Molecular polymorphism: microwave spectra, equilibrium structures, and an astronomical investigation of the HNCS isomeric family. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 22693-22705.	1.3	17
64	Spontaneous and Selective Formation of HSNO, a Crucial Intermediate Linking H ₂ S and Nitroso Chemistries. <i>Journal of the American Chemical Society</i> , 2016, 138, 11441-11444.	6.6	60
65	Isotopic studies of <i>trans</i> - and <i>cis</i> -HOCO using rotational spectroscopy: Formation, chemical bonding, and molecular structures. <i>Journal of Chemical Physics</i> , 2016, 144, 124304.	1.2	21
66	Microwave spectral taxonomy: A semi-automated combination of chirped-pulse and cavity Fourier-transform microwave spectroscopy. <i>Journal of Chemical Physics</i> , 2016, 144, 124201.	1.2	54
67	Laboratory study of isocyanic acid ions: Rotational spectroscopy of NCO ⁺ , H ₂ NCO ⁺ , and HNCOH ⁺ , 2015, , .		0
68	Communication: The ground electronic state of Si ₂ C: Rovibrational level structure, quantum monodromy, and astrophysical implications. <i>Journal of Chemical Physics</i> , 2015, 142, 231101.	1.2	21
69	Stabilization of the Simplest Criegee Intermediate from the Reaction between Ozone and Ethylene: A High-Level Quantum Chemical and Kinetic Analysis of Ozonolysis. <i>Journal of Physical Chemistry A</i> , 2015, 119, 5524-5533.	1.1	83
70	Discovery of a Missing Link: Detection and Structure of the Elusive Disilicon Carbide Cluster. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2107-2111.	2.1	36
71	Spectroscopic and structural characterization of three silaisocyanides: exploring an elusive class of reactive molecules at high resolution. <i>Chemical Communications</i> , 2015, 51, 11305-11308.	2.2	10
72	Observation of the simplest Criegee intermediate CH ₂ OO in the gas-phase ozonolysis of ethylene. <i>Science Advances</i> , 2015, 1, e1400105.	4.7	73

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73	An Accurate Molecular Structure of Phenyl, the Simplest Aryl Radical. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 1808-1811.	7.2	16
74	Relatively Selective Production of the Simplest Criegee Intermediate in a CH_4/O_2 Electric Discharge: Kinetic Analysis of a Plausible Mechanism. <i>Journal of Physical Chemistry A</i> , 2015, 119, 7197-7204.	1.1	16
75	A LABORATORY STUDY OF C_3H^+ AND THE C_3H RADICAL IN THREE NEW VIBRATIONALLY EXCITED Σ STATES USING A PIN-HOLE NOZZLE DISCHARGE SOURCE. <i>Astrophysical Journal, Supplement Series</i> , 2015, 217, 10.	3.0	8
76	Gas-Phase Structure Determination of Dihydroxycarbene, One of the Smallest Stable Singlet Carbenes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4089-4092.	7.2	16
77	Fundamental Vibrational Frequencies and Spectroscopic Constants of <i>cis</i> - and <i>trans</i> -HOCS, HSCO, and Isotopologues via Quartic Force Fields. <i>Journal of Physical Chemistry B</i> , 2014, 118, 6498-6510.	1.2	16
78	Spectroscopic Detection and Structure of Hydroxidooxidosulfur (HOSO) Radical, An Important Intermediate in the Chemistry of Sulfur-Bearing Compounds. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4074-4079.	2.1	31
79	Detection of Two Highly Stable Silicon Nitrides: HSiSi and H_3SiSi . <i>Journal of Physical Chemistry A</i> , 2013, 117, 11282-11288.	1.1	15
80	Detection and Structure of HOON: Microwave Spectroscopy Reveals an O-O Bond Exceeding 1.9 Å... <i>Science</i> , 2013, 342, 1354-1357.	6.0	29
81	DETECTION OF E-CYANOMETHANIMINE TOWARD SAGITTARIUS B2(N) IN THE GREEN BANK TELESCOPE PRIMOS SURVEY. <i>Astrophysical Journal Letters</i> , 2013, 765, L10.	3.0	99
82	Detection of protonated vinyl cyanide, $\text{CH}_2\text{CHCNH}^+$, a prototypical branched nitrile cation. <i>Journal of Chemical Physics</i> , 2013, 138, 094316.	1.2	14
83	Microwave Detection of Sulfoxylic Acid (HOSO $\dot{\text{H}}$). <i>Journal of Physical Chemistry A</i> , 2013, 117, 3608-3613.	1.1	24
84	THE DETECTION OF INTERSTELLAR ETHANIMINE (CH_3CHNH) FROM OBSERVATIONS TAKEN DURING THE GBT PRIMOS SURVEY. <i>Astrophysical Journal Letters</i> , 2013, 765, L9.	3.0	88
85	INTERSTELLAR DETECTION OF $c\text{-C}_3\text{D}_2$. <i>Astrophysical Journal Letters</i> , 2013, 769, L19.	3.0	50
86	Detection of Nitrogen-Protonated Nitrous Oxide (HNNO^+) by Rotational Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9968-9974.	1.1	10
87	The Simplest Criegee Intermediate ($\text{H}_2\text{C}\cdot\text{O}$): Isotopic Spectroscopy, Equilibrium Structure, and Possible Formation from Atmospheric Lightning. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4133-4139.	2.1	88
88	Jet-Cooled Spectroscopy of the $\dot{\text{C}}$ -Methylbenzyl Radical: Probing the State-Dependent Effects of Methyl Rocking Against a Radical Site. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13465-13480.	1.1	17
89	Rotational Spectroscopy of Isotopologues of Silicon Monoxide, SiO, and Spectroscopic Parameters from a Combined Fit of Rotational and Rovibrational Data. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13843-13854.	1.1	32
90	On the molecular structure of HOOO. <i>Journal of Chemical Physics</i> , 2012, 136, 034303.	1.2	31

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91	Two Isomers of Protonated Isocyanic Acid: Evidence for an Ion-Neutral Molecule Pathway for HNCO \rightarrow HOCN Isomerization. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3420-3424.	2.1	20
92	LABORATORY AND TENTATIVE INTERSTELLAR DETECTION OF TRANS-METHYL FORMATE USING THE PUBLICLY AVAILABLE GREEN BANK TELESCOPE PRIMOS SURVEY. <i>Astrophysical Journal</i> , 2012, 755, 153.	1.6	75
93	Cyclic SiS ₂ : A New Perspective on the Walsh Rules. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 3695-3698.	7.2	29
94	Silicon Oxysulfide, OSiS: Rotational Spectrum, Quantum-Chemical Calculations, and Equilibrium Structure. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 1228-1231.	2.1	20
95	Spatial Distributions and Interstellar Reaction Processes. <i>Journal of Physical Chemistry A</i> , 2011, 115, 6472-6480.	1.1	39
96	AN INTERFEROMETRIC SPECTRAL-LINE SURVEY OF IRC+10216 IN THE 345 GHz BAND. <i>Astrophysical Journal, Supplement Series</i> , 2011, 193, 17.	3.0	58
97	Rotational spectra and equilibrium structures of H ₂ SiS and Si ₂ S. <i>Journal of Chemical Physics</i> , 2011, 134, 034306.	1.2	17
98	Bonding in the Heavy Analogue of Hydrogen Cyanide: The Curious Case of Bridged HPSi. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5661-5664.	7.2	37
99	Laboratory detection of protonated SO ₂ in two isomeric forms. <i>Journal of Chemical Physics</i> , 2010, 133, 194305.	1.2	19
100	Isofulminic acid, HONC: <i>Ab initio</i> theory and microwave spectroscopy. <i>Journal of Chemical Physics</i> , 2009, 131, 174308.	1.2	43
101	LABORATORY DETECTION OF HOCN AND TENTATIVE IDENTIFICATION IN Sgr B2. <i>Astrophysical Journal</i> , 2009, 697, 880-885.	1.6	65
102	A laboratory and theoretical study of protonated carbon disulfide, HSCS ⁺ . <i>Journal of Chemical Physics</i> , 2009, 130, 234304.	1.2	14
103	DETECTION OF A NEW INTERSTELLAR MOLECULE: THIOCYANIC ACID HSCN. <i>Astrophysical Journal</i> , 2009, 702, L124-L127.	1.6	68
104	SUBMILLIMETER NARROW EMISSION LINES FROM THE INNER ENVELOPE OF IRC+10216. <i>Astrophysical Journal</i> , 2009, 692, 1205-1210.	1.6	29
105	A SURVEY OF C ₄ H, C ₆ H, AND C ₆ H ⁺ WITH THE GREEN BANK TELESCOPE. <i>Astrophysical Journal</i> , 2009, 691, 1494-1500.	1.6	54
106	The far-infrared and microwave spectra of the CH radical in the v=1 level of the X ² state. <i>Journal of Molecular Spectroscopy</i> , 2008, 247, 128-139.	0.4	11
107	Rotational spectrum and equilibrium structure of silanethione, H ₂ SiS. <i>Chemical Communications</i> , 2008, , 5292.	2.2	19
108	A laboratory and theoretical study of silicon hydroxide SiOH. <i>Journal of Chemical Physics</i> , 2008, 129, 184301.	1.2	14

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109	The Rotational Spectrum of TiO ₂ . Astrophysical Journal, 2008, 676, 1367-1371.	1.6	45
110	High-resolution rotational spectroscopy of the carbon chain anions C ₃ N ⁻ , C ₄ H ⁻ , and C ₄ D ⁻ . Journal of Chemical Physics, 2008, 129, 054314.	1.2	19
111	Detection of C ₅ N ⁻ and Vibrationally Excited C ₆ H in IRC +10216. Astrophysical Journal, 2008, 688, L83-L86.	1.6	214
112	Laboratory and Astronomical Detection of the Negative Molecular Ion C ₃ N ⁻ . Astrophysical Journal, 2008, 677, 1132-1139.	1.6	216
113	Laboratory detection of the elusive HSCO ⁺ isomer. Journal of Chemical Physics, 2007, 127, 221104.	1.2	17
114	The rotational spectrum of CN ⁻ . Journal of Chemical Physics, 2007, 126, 191101.	1.2	37
115	Rotational spectra of the van der Waals complexes of molecular hydrogen and OCS. Journal of Chemical Physics, 2007, 127, 054305.	1.2	23
116	Rotational Spectra of Small PAHs: Acenaphthene, Acenaphthylene, Azulene, and Fluorene. Astrophysical Journal, 2007, 662, 1309-1314.	1.6	49
117	Rotational Spectra of the Carbon Chain Negative Ions C ₄ H ⁻ and C ₈ H ⁻ . Astrophysical Journal, 2007, 655, L57-L60.	1.6	88
118	Rotational spectroscopy of the isotopic species of silicon monosulfide, SiS. Physical Chemistry Chemical Physics, 2007, 9, 1579-1586.	1.3	50
119	Detection of the Carbon Chain Negative Ion C ₈ H ⁻ in TMC-1. Astrophysical Journal, 2007, 664, L43-L46.	1.6	250
120	Monobridged Si ₂ H ₄ . Journal of Chemical Physics, 2006, 124, 074303.	1.2	21
121	Laboratory and Astronomical Identification of the Negative Molecular Ion C ₆ H ⁻ . Astrophysical Journal, 2006, 652, L141-L144.	1.6	406
122	Laboratory Astrophysics and Radio Astronomy: Some Recent Successes. AIP Conference Proceedings, 2006, , .	0.3	2
123	Detection of low-frequency lambda-doublet transitions of the free ¹² CH and ¹³ CH radicals. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12263-12268.	3.3	31
124	The rotational spectrum of HC ₈ N, a linear molecule with a triplet ground state. Journal of Molecular Spectroscopy, 2005, 232, 351-357.	0.4	6
125	Nuclear hyperfine interaction of rotating hydrogen: A spectroscopic investigation of hydrogen-OCS van der Waals complexes. Journal of Chemical Physics, 2005, 123, 221106.	1.2	18
126	Supersonic-jet cryogenic-resonator coaxially oriented beam-resonator arrangement Fourier transform microwave spectrometer. Review of Scientific Instruments, 2005, 76, 093106.	0.6	66

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127	Vibrational excitation and relaxation of five polyatomic molecules in an electrical discharge. <i>Journal of Chemical Physics</i> , 2005, 122, 194319.	1.2	36
128	The Rotational Spectrum and Geometrical Structure of Thiozone, S ₃ . <i>ChemInform</i> , 2004, 35, no.	0.1	0
129	High resolution microwave spectroscopy of the isomeric pair vinylcyanoacetylene and cyanovinylacetylene. <i>Journal of Molecular Spectroscopy</i> , 2004, 225, 93-95.	0.4	12
130	The Rotational Spectrum and Geometrical Structure of Thiozone, S ₃ . <i>Journal of the American Chemical Society</i> , 2004, 126, 4096-4097.	6.6	53
131	Molecular Structure of o-Benzynes from Microwave Measurements. <i>Journal of Physical Chemistry A</i> , 2004, 108, 2645-2651.	1.1	25
132	Mono- and Dimeric Isomers of Si ₂ H ₃ and Si ₂ H ₄ : The True Ground State Global Minima. Theory and Experiment in Concert. <i>Journal of the American Chemical Society</i> , 2003, 125, 11409-11417.	6.6	71
133	Rotational transitions of SO, SiO, and SiS excited by a discharge in a supersonic molecular beam: Vibrational temperatures, Dunham coefficients, Born-Oppenheimer breakdown, and hyperfine structure. <i>Journal of Chemical Physics</i> , 2003, 119, 11715-11727.	1.2	52
134	Rotational spectra of C ₄ N, C ₆ N, and the isotopic species of C ₃ N. <i>Journal of Chemical Physics</i> , 2003, 118, 3549-3557.	1.2	33
135	The Radio Spectrum of the Phenyl Radical. <i>Astrophysical Journal</i> , 2003, 590, L61-L64.	1.6	49
136	Rotational Spectra of the Nitrogen-Sulfur Carbon Chains NC _n S, n = 1-7. <i>Astrophysical Journal, Supplement Series</i> , 2003, 144, 287-297.	3.0	30
137	Ab initio theory and rotational spectra of linear carbon chains SiC _n S. <i>Journal of Chemical Physics</i> , 2002, 116, 10719-10729.	1.2	25
138	Rotational Spectra of Sulfur-Carbon Chains. II. HC ₅ S, HC ₆ S, HC ₇ S, and HC ₈ S, and H ₂ C ₄ S, H ₂ C ₅ S, H ₂ C ₆ . <i>Astrophysical Journal, Supplement Series</i> , 2002, 138, 297-303.	3.0	39
139	Laboratory Detection of HS[CLC]i[CLC]CN and HS[CLC]i[CLC]NC. <i>Astrophysical Journal</i> , 2002, 577, L71-L74.	1.6	29
140	Microwave and laser spectroscopy of carbon chains and rings. <i>Chemical Society Reviews</i> , 2001, 30, 177-185.	18.7	109
141	Rotational Spectra of Sulfur-Carbon Chains. I. The Radicals C ₄ S, C ₅ S, C ₆ S, C ₇ S, C ₈ S, and C ₉ S. <i>Astrophysical Journal, Supplement Series</i> , 2001, 134, 311-317.	3.0	53
142	Rotational spectra of SiCN, SiNC, and the SiC _n H (n=2, 4-6) radicals. <i>Journal of Chemical Physics</i> , 2001, 115, 870-877.	1.2	37
143	Experimental Structures of the Carbon Chains HC ₇ N, HC ₉ N, and HC ₁₁ N by Isotopic Substitution. <i>Journal of Molecular Spectroscopy</i> , 2000, 203, 75-81.	0.4	51
144	Microwave Spectra of 11 Polyyne Carbon Chains. <i>Astrophysical Journal, Supplement Series</i> , 2000, 129, 611-623.	3.0	146

#	ARTICLE	IF	CITATIONS
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