Ryan C Fortenberry

List of Publications by Year
in descending order

172	3,188	147726	233338
papers	citations	31 h-index	45 g-index

176	176	176	1107
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The trans-HOCO radical: Quartic force fields, vibrational frequencies, and spectroscopic constants. Journal of Chemical Physics, 2011, 135, 134301.	1.2	116
2	Quartic force field predictions of the fundamental vibrational frequencies and spectroscopic constants of the cations HOCO+ and DOCO+. Journal of Chemical Physics, 2012, 136, 234309.	1.2	105
3	Structure, Anharmonic Vibrational Frequencies, and Intensities of NNHNN⁺. Journal of Physical Chemistry A, 2015, 119, 11623-11631.	1.1	81
4	Protonated nitrous oxide, NNOH+: Fundamental vibrational frequencies and spectroscopic constants from quartic force fields. Journal of Chemical Physics, 2013, 139, 084313.	1.2	80
5	Quartic Force Field Rovibrational Analysis of Protonated Acetylene, C₂H₃⁺, and Its Isotopologues. Journal of Physical Chemistry A, 2014, 118, 7034-7043.	1.1	75
6	Fundamental Vibrational Frequencies and Spectroscopic Constants of HOCS⁺, HSCO⁺, and Isotopologues via Quartic Force Fields. Journal of Physical Chemistry A, 2012, 116, 9582-9590.	1.1	70
7	On the use of quartic force fields in variational calculations. Chemical Physics Letters, 2013, 574, 1-12.	1.2	66
8	HIGH-ACCURACY QUARTIC FORCE FIELD CALCULATIONS FOR THE SPECTROSCOPIC CONSTANTS AND VIBRATIONAL FREQUENCIES OF 1¹Aâ€²l-C₃H^{â€“}: A POSSIBLE LINK TO LINES OBSERVED IN THE HORSEHEAD NEBULA PHOTODISSOCIATION REGION. Astrophysical Journal, 2013, 772, 39.	1.6	63
9	The rovibrational nature of closed-shell third-row triatomics: HOX and HXO, X = Si+, P, S+, and Cl. Chemical Physics, 2016, 472, 119-127.	0.9	63
10	Quantum astrochemical spectroscopy. International Journal of Quantum Chemistry, 2017, 117, 81-91.	1.0	63
11	Vibrational frequencies and spectroscopic constants from quartic force fields for cis-HOCO: The radical and the anion. Journal of Chemical Physics, 2011, 135, 214303.	1.2	62
12	Excited vibrational level rotational constants for SiC2: A sensitive molecular diagnostic for astrophysical conditions. Molecular Astrophysics, 2015, 1, 13-19.	1.7	60
13	Computational vibrational spectroscopy for the detection of molecules in space. Annual Reports in Computational Chemistry, 2019, 15, 173-202.	0.9	59
14	SPECTROSCOPIC CONSTANTS AND VIBRATIONAL FREQUENCIES FOR l -C ₃ H ⁺ AND ISOTOPOLOGUES FROM HIGHLY ACCURATE QUARTIC FORCE FIELDS: THE DETECTION OF l -C ₃ H ⁺ IN THE HORSEHEAD NEBULA PDR QUESTIONED. Astrophysical Journal Letters, 2013, 768, L25.	3.0	54
15	Highly-accurate quartic force fields for the prediction of anharmonic rotational constants and fundamental vibrational frequencies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 248, 119184.	2.0	50
16	Theoretical prediction of new dipole-bound singlet states for anions of interstellar interest. Journal of Chemical Physics, 2011, 134, 154304.	1.2	48
17	Interstellar Anions: The Role of Quantum Chemistry. Journal of Physical Chemistry A, 2015, 119, 9941-9953.	1.1	47
18	The performance of explicitly correlated methods for the computation of anharmonic vibrational frequencies. International Journal of Quantum Chemistry, 2019, 119, e25899.	1.0	43

#	ARTICLE	IF	CITATIONS
19	Communication: Spectroscopic consequences of proton delocalization in OCHCO+. Journal of Chemical Physics, 2015, 143, 071102.	1.2	42
20	The performance of explicitly correlated wavefunctions [CCSD(T)-F12b] in the computation of anharmonic vibrational frequencies. Chemical Physics Letters, 2019, 734, 136720.	1.2	42
21	A spectroscopic case for SPSi detection: The third-row in a single molecule. Journal of Chemical Physics, 2016, 145, 124311.	1.2	41
22	A benchmark study of the vertical electronic spectra of the linear chain radicals C2H and C4H. Journal of Chemical Physics, 2010, 132, 144303.	1.2	40
23	Potential interstellar noble gas molecules: ArOH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math> and NeOH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math> rovibrational analysis from quantum chemical quartic force fields. Molecular Astrophysics, 2016, 2, 1.	1.7	39
24	THE POSSIBLE INTERSTELLAR ANION CH₂CN^{â€“}: SPECTROSCOPIC CONSTANTS, VIBRATIONAL FREQUENCIES, AND OTHER CONSIDERATIONS. Astrophysical Journal, 2013, 762, 121.	1.6	38
25	A Small Molecule with PAH Vibrational Properties and a Detectable Rotational Spectrum: c-(C)C₃H₂, Cyclopropenylidenyl Carbene. Astrophysical Journal, 2019, 871, 236.	1.6	37
26	On the Detectability of the HSS, HSO, and HOS Radicals in the Interstellar Medium. Astrophysical Journal, 2017, 835, 243.	1.6	36
27	Theoretical Rovibronic Treatment of the XÌƒ ²Î£⁺ and Ãƒ ²Î States of C₂H and the XÌƒ ¹Î£⁺ State of C₂H^{â€“} from Quartic Force Fields. Journal of Physical Chemistry A, 2015, 119, 7013-7025.	1.1	34
28	Trihydrogen Cation with Neon and Argon: Structural, Energetic, and Spectroscopic Data from Quartic Force Fields. Journal of Physical Chemistry A, 2015, 119, 4915-4922.	1.1	34
29	Counter Anion Effect on the Photophysical Properties of Emissive Indolizine-Cyanine Dyes in Solution and Solid State. Molecules, 2018, 23, 3051.	1.7	34
30	Overcoming the Failure of Correlation for Out-of-Plane Motions in a Simple Aromatic: Rovibrational Quantum Chemical Analysis of<i>c</i>-C₃H₂. Journal of Chemical Theory and Computation, 2018, 14, 2155-2164.	2.3	33
31	F12-TZ-cCR: A Methodology for Faster and Still Highly Accurate Quartic Force Fields. Journal of Physical Chemistry A, 2021, 125, 10532-10540.	1.1	32
32	ArH2+ and NeH2+ as global minima in the Ar+/Ne+Â+ÂH2 reactions: energetic, spectroscopic, and structural data. Monthly Notices of the Royal Astronomical Society, 2015, 446, 195-204.	1.6	31
33	Quartic force fields for excited electronic states: Rovibronic reference data for the 1 <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si245.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msup><mml:msup><mml:mrow><mml:mi>A</mml:mi></mml:mrow><mm and 1 <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si246.gif" overflow="scroll"><mml:mrow><mml:msup><mml:m. Spectrochimica Acta - Part A: Molecular and ...	2.0	31
34	Rovibrational Characterization and Interstellar Implications of the Proton-Bound, Noble Gas Complexes: ArHAr⁺, NeHNe⁺, and ArHNe⁺. ACS Earth and Space Chemistry, 2017, 1, 60-69.	1.2	31
35	Dipole Surface and Infrared Intensities for the <i>cis</i>- and <i>trans</i>-HOCO and DOCO Radicals. Journal of Physical Chemistry A, 2013, 117, 6932-6939.	1.1	30
36	Accurate determination of the onset wavelength (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 77 Td (xmlns:mml="http://www.w3 ... spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 265, 107544.	1.1	30

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37	Singlet Excited States of Silicon-Containing Anions Relevant to Interstellar Chemistry. Journal of Physical Chemistry A, 2011, 115, 8119-8124.	1.1	28
38	Singlet excited states of anions with higher main group elements. Molecular Physics, 2013, 111, 3265-3275.	0.8	26
39	Additional diffuse functions in basis sets for dipole-bound excited states of anions. Theoretical Chemistry Accounts, 2015, 134, 1.	0.5	26
40	Anharmonic Frequencies of (MO)₂ and Related Hydrides for M = Mg, Al, Si, P, S, Ca, and Ti and Heuristics for Predicting Anharmonic Corrections of Inorganic Oxides. Journal of Physical Chemistry A, 2020, 124, 3191-3204.	1.1	26
41	Limited rotational and rovibrational line lists computed with highly accurate quartic force fields and ab initio dipole surfaces. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 119, 76-83.	2.0	25
42	Spectroscopic investigation of [Al,N,C,O] refractory molecules. Journal of Chemical Physics, 2019, 151, 244303.	1.2	25
43	The interstellar formation and spectra of the noble gas, proton-bound HeHHe+, HeHNe+ and HeHAr+ complexes. Monthly Notices of the Royal Astronomical Society, 2017, 469, 339-346.	1.6	24
44	Untangling the Formation of Methoxymethanol (CH₃OCH₂OH) and Dimethyl Peroxide (CH₃OOCH₃) in Star-forming Regions. Astrophysical Journal, 2019, 881, 156.	1.6	24
45	The 1 ³Aâ€² HCN and 1 ³Aâ€² HCO⁺ Vibrational Frequencies and Spectroscopic Constants from Quartic Force Fields. Journal of Physical Chemistry A, 2013, 117, 9324-9330.	1.1	23
46	Electronically excited states of PANH anions. Physical Chemistry Chemical Physics, 2015, 17, 14761-14772.	1.3	23
47	An Experimental and Theoretical Investigation into the Formation of Ketene (H₂CCO) and Ethynol (HCCOH) in Interstellar Analog Ices. Astrophysical Journal, 2020, 896, 88.	1.6	23
48	Symmetry breaking and spectral considerations of the surprisingly floppy c-C3H radical and the related dipole-bound excited state of c-C3Hâ¯. Journal of Chemical Physics, 2017, 146, 224303.	1.2	22
49	Synthesis of methanediol [CH ₂ (OH) ₂]: The simplest geminal diol. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	22
50	Quartic force field-derived vibrational frequencies and spectroscopic constants for the isomeric pair SNO and OSN and isotopologues. Journal of Chemical Physics, 2015, 143, 084308.	1.2	21
51	Communication: The failure of correlation to describe carbon=carbon bonding in out-of-plane bends. Journal of Chemical Physics, 2017, 147, 221101.	1.2	20
52	Copper-based redox shuttles supported by preorganized tetradentate ligands for dye-sensitized solar cells. Dalton Transactions, 2020, 49, 343-355.	1.6	19
53	Coincidence between Bond Strength, Atomic Abundance, and the Composition of Rocky Materials. ACS Earth and Space Chemistry, 2020, 4, 812-817.	1.2	19
54	The performance of lowâ€cost commercial cloud computing as an alternative in computational chemistry. Journal of Computational Chemistry, 2015, 36, 926-933.	1.5	18

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55	Enstatite (MgSiO3) and forsterite (Mg2SiO4) monomers and dimers: highly detectable infrared and radioastronomical molecular building blocks. Monthly Notices of the Royal Astronomical Society, 2020, 492, 276-282.	1.6	18
56	QUANTUM CHEMICAL ROVIBRATIONAL DATA FOR THE INTERSTELLAR DETECTION OFc-C₃H^{â€“}. Astrophysical Journal, 2014, 796, 139.	1.6	17
57	PSI4Education: Computational Chemistry Labs Using Free Software. ACS Symposium Series, 2015, , 85-98.	0.5	17
58	Theoretical rovibrational analysis of the covalent noble gas compound ArNH+. Journal of Molecular Spectroscopy, 2016, 322, 29-32.	0.4	17
59	The case for gas-phase astrochemistry without carbon. Molecular Astrophysics, 2020, 18, 100062.	1.7	17
60	Fundamental Vibrational Frequencies and Spectroscopic Constants of cis- and trans-HOCS, HSCO, and Isotopologues via Quartic Force Fields. Journal of Physical Chemistry B, 2014, 118, 6498-6510.	1.2	16
61	Optimal cloud use of quartic force fields: The first purely commercial cloud computing based study for rovibrational analysis of SiCH^{â^'}. International Journal of Quantum Chemistry, 2015, 115, 1650-1657.	1.0	16
62	Vibrational frequencies and spectroscopic constants of three, stable noble gas molecules: NeCCH⁺, ArCCH⁺, and ArCN⁺. Physical Chemistry Chemical Physics, 2017, 19, 5230-5238.	1.3	16
63	Towards a quantum chemical protocol for the prediction of rovibrational spectroscopic data for transition metal molecules: Exploration of CuCN, CuOH, and CuCCH. Journal of Chemical Physics, 2017, 147, 234303.	1.2	16
64	Gas-phase spectra of MgO molecules: a possible connection from gas-phase molecules to planet formation. Monthly Notices of the Royal Astronomical Society, 2018, 474, 2055-2063.	1.6	16
65	Hydrogen Sulfide as a Scavenger of Sulfur Atomic Cation. Journal of Physical Chemistry A, 2018, 122, 4983-4987.	1.1	16
66	Pathways to Detection of Strongly-Bound Inorganic Species: The Vibrational and Rotational Spectral Data of AlH2OH, HMgOH, AlH2NH2, and HMgNH2. Frontiers in Astronomy and Space Sciences, 2021, 8, .	1.1	16
67	Anharmonic vibrational frequencies of ammonia borane (BH3NH3). Journal of Chemical Physics, 2021, 154, 041104.	1.2	15
68	Experimental identification of aminomethanol (NH2CH2OH)â€”the key intermediate in the Strecker Synthesis. Nature Communications, 2022, 13, 375.	5.8	15
69	Optical spectra of the silicon-terminated carbon chain radicals SiCnH (n = 3,4,5). Journal of Chemical Physics, 2014, 141, 044310.	1.2	14
70	Formation of Potential Interstellar Noble Gas Molecules in Gas and Adsorbed Phases. ACS Omega, 2016, 1, 765-772.	1.6	14
71	TOWARD THE ASTRONOMICAL DETECTION OF THE PROTON-BOUND COMPLEX NNâ€“HCO⁺: IMPLICATIONS FOR THE SPECTRA OF PROTOPLANETARY DISKS. Astrophysical Journal, 2016, 819, 141.	1.6	14
72	Quantum Chemical Rovibrational Analysis of the HOSO Radical. Journal of Physical Chemistry A, 2017, 121, 8108-8114.	1.1	14

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73	Rovibrational Considerations for the Monomers and Dimers of Magnesium Hydride and Magnesium Fluoride. Journal of Physical Chemistry A, 2018, 122, 7079-7088.	1.1	14
74	Vibrational and Rovibrational Spectroscopy Applied to Astrochemistry. , 2022, , 235-295.		14
75	ROVIBRATIONAL SPECTROSCOPIC CONSTANTS AND FUNDAMENTAL VIBRATIONAL FREQUENCIES FOR ISOTOPOLOGUES OF CYCLIC AND BENT SINGLET HC₂N ISOMERS. Astrophysical Journal, 2013, 778, 160.	1.6	13
76	Predictable Valence Excited States of Anions. Journal of Physical Chemistry A, 2014, 118, 10763-10769.	1.1	13
77	Energetics, structure, and rovibrational spectroscopic properties of the sulfurous anions SNOâ^' and OSNâ^'. Journal of Chemical Physics, 2015, 143, 184301.	1.2	13
78	Electronic and rovibrational quantum chemical analysis of C₃P^{â^'}: the next interstellar anion?. Monthly Notices of the Royal Astronomical Society, 2015, 453, 2825-2830.	1.6	13
79	Electronically Excited States of Anisotropically Extended Singly-Deprotonated PAH Anions. Journal of Physical Chemistry A, 2015, 119, 13048-13054.	1.1	13
80	Inclusion of 13C and D in protonated acetylene. Chemical Physics Letters, 2016, 650, 126-129.	1.2	13
81	Ultrafast 25-fs relaxation in highly excited states of methyl azide mediated by strong nonadiabatic coupling. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E11072-E11081.	3.3	13
82	An efficient algorithm for the determination of force constants and displacements in numerical definitions of a large, general order Taylor series expansion. Journal of Mathematical Chemistry, 2018, 56, 103-119.	0.7	13
83	A Photoionization Reflectron Timeâ€ofâ€Flight Mass Spectrometric Study on the Detection of Ethynamine (HCCNH₂) and 2Hâ€Azirine (câ€H₂CCHN). ChemPhysChem, 2021, 22, 985-994.	1.0	13
84	Quantum Chemical Analysis of the COâ€“HNN⁺ Proton-Bound Complex. Journal of Physical Chemistry A, 2016, 120, 7745-7752.	1.1	12
85	Binding of the atomic cations hydrogen through argon to water and hydrogen sulfide. Physical Chemistry Chemical Physics, 2018, 20, 25967-25973.	1.3	12
86	Identifying Molecular Structural Aromaticity for Hydrocarbon Classification. ACS Omega, 2018, 3, 16035-16039.	1.6	12
87	Anharmonic Frequencies and Spectroscopic Constants of OAlOH and AlOH: Strong Bonding but Unhindered Motion. Journal of Physical Chemistry A, 2020, 124, 8834-8841.	1.1	12
88	Full Visible Spectrum Panchromatic Triple Donor Dye for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2020, 124, 25211-25220.	1.5	12
89	On the Formation of the Popcorn Flavorant 2,3â€Butanedione (CH₃COCOCH₃) in Acetaldehydeâ€Containing Interstellar Ices. ChemPhysChem, 2020, 21, 1531-1540.	1.0	12
90	The unsolved issue with out-of-plane bending frequencies for C C multiply bonded systems. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 248, 119148.	2.0	12

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91	Theoretical rovibrational characterization of the cis/trans-HCSH and H2SC isomers of the known interstellar molecule thioformaldehyde. Journal of Molecular Spectroscopy, 2020, 369, 111273.	0.4	11
92	Overcoming the out-of-plane bending issue in an aromatic hydrocarbon: the anharmonic vibrational frequencies of c-(CH)C₃H₂⁺. Physical Chemistry Chemical Physics, 2020, 22, 12951-12958.	1.3	11
93	The Formation of Astromolecule Ethynyl Cyclopropenylidene (c-C₃HCCH) from C₂H and c-C₃H₂. Astrophysical Journal, 2021, 921, 132.	1.6	11
94	Vibrational Frequencies and Spectroscopic Constants for 1 ³Aâ€² HNC and 1 ³Aâ€² HOC⁺ from High-Accuracy Quartic Force Fields. Journal of Physical Chemistry A, 2013, 117, 11339-11345.	1.1	10
95	Factors affecting the solubility of ionic compounds. Computational and Theoretical Chemistry, 2015, 1069, 132-137.	1.1	10
96	Rovibrational analysis of c-SiC2H2: Further evidence for out-of-plane bending issues in correlated methods. Journal of Chemical Physics, 2018, 149, 024303.	1.2	10
97	Rovibrational Spectral Analysis of CO₃ and C₂O₃: Potential Sources for O₂ Observed in Comet 67P/Churyumovâ€“Gerasimenko. Astrophysical Journal Letters, 2019, 886, L10.	3.0	10
98	Electronically Excited States in Interstellar Chemistry. Annual Reports in Computational Chemistry, 2011, 7, 195-214.	0.9	9
99	Rovibrational and energetic analysis of the hydroxyethynyl anion (CCOH^{â^’}). Molecular Physics, 2015, 113, 2012-2017.	0.8	9
100	A high-resolution photoelectron imaging and theoretical study of CPâ^’ and C2Pâ^’. Journal of Chemical Physics, 2018, 148, 044301.	1.2	9
101	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mi mathvariant="normal">ArNH</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mml:mrow> noble gas molecule: Stability, vibrational frequencies, and spectroscopic constants. Journal of Molecular Spectroscopy, 2019, 357, 4-8.	0.4	9
102	The Oldest Molecular Ancestor Finally Brought into the Light. CheM, 2019, 5, 1028-1030.	5.8	9
103	A Molecular Candle Where Few Molecules Shine: HeHHe+. Molecules, 2020, 25, 2183.	1.7	9
104	The First Mid-infrared Detection of HNC in the Interstellar Medium: Probing the Extreme Environment toward the Orion Hot Core. Astrophysical Journal, 2021, 907, 51.	1.6	9
105	An Interstellar Synthesis of Glycerol Phosphates. Astrophysical Journal Letters, 2020, 899, L3.	3.0	9
106	Excited State Trends in Bidirectionally Expanded Closed-Shell PAH and PANH Anions. Journal of Physical Chemistry A, 2016, 120, 7327-7334.	1.1	8
107	Magnesium replacement in formaldehyde: Theoretical rovibrational analysis of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mover accent="true"><mml:mrow><mml:mi>X</mml:mi></mml:mrow><mml:mrow><mml:mo stretchy="true">â^¼</mml:mo></mml:mrow></mml:mover><mml:mspace width="0.35em" /><mml:msup><mml:mrow	0.4	8
108	Spectral characterization for small clusters of silicon and oxygen: SiO2, SiO3, Si2O3, & Si2O4. Planetary and Space Science, 2020, 193, 105076.	0.9	8

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109	Iron Redox Shuttles with Wide Optical Gap Dyes for Highâ€Voltage Dyeâ€Sensitized Solar Cells. ChemSusChem, 2021, 14, 3084-3096.	3.6	8
110	Rovibrational Quantum Chemical Treatment of Inorganic and Organometallic Astrochemicals. Accounts of Chemical Research, 2021, 54, 271-279.	7.6	8
111	Fundamental Vibrational Frequencies and Spectroscopic Constants of Substituted Cyclopropenylidene (c-C₃HX, X = F, Cl, CN). Journal of Physical Chemistry A, 2021, 125, 8860-8868.	1.1	8
112	Spectroscopic Characterization of HSO₂^{â€¢} and HOSO^{â€¢} Intermediates Involved in SO₂ Geoengineering. Journal of Physical Chemistry A, 2021, 125, 10615-10621.	1.1	8
113	Probing halogen bonding interactions between heptafluoro-2-iodopropane and three azabenzenes with Raman spectroscopy and density functional theory. Physical Chemistry Chemical Physics, 2022, 24, 11713-11720.	1.3	8
114	Methylidyne-replaced boron nitride fullerenes and nanotubes: a wave function study. New Journal of Chemistry, 2016, 40, 8149-8157.	1.4	7
115	A Possible Progenitor of the Interstellar Sulfide Bond: Rovibrational Characterization of the Hydrogen Disulfide Cation HSSH⁺. Astrophysical Journal, 2018, 856, 30.	1.6	7
116	Quantum chemical spectral characterization of CH2NH2<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math> for remote sensing of Titanâ€™s atmosphere. Icarus, 2018, 299, 187-193.	1.1	7
117	Vibrational analysis of the ubiquitous interstellar molecule cyclopropenylidene (c-C₃H₂): the importance of numerical stability. Molecular Physics, 2020, 118, e1589007.	0.8	7
118	Vibrational and rotational spectral data for possible interstellar detection of AlH3OH2, SiH3OH, and SiH3NH2. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2613-2619.	1.6	7
119	Formation of Magnesium and Aluminum Oxides from Water and Metal Hydrides: Creation of the Smallest Ruby. ACS Earth and Space Chemistry, 2022, 6, 18-24.	1.2	7
120	The rovibrational nature ofcis- andtrans-HNNS: A possible nitrogen molecule progenitor. Journal of Chemical Physics, 2016, 145, 204302.	1.2	6
121	Molecular oxygen generation from the reaction of water cations with oxygen atoms. Journal of Chemical Physics, 2019, 150, 201103.	1.2	6
122	Electronically Excited States of Closed-Shell, Cyano-Functionalized Polycyclic Aromatic Hydrocarbon Anions. Chemistry, 2021, 3, 296-313.	0.9	6
123	(T)+EOM Quartic Force Fields for Theoretical Vibrational Spectroscopy of Electronically Excited States. Journal of Chemical Theory and Computation, 2021, 17, 4374-4382.	2.3	6
124	Lewis Acidâ€“Lewis Base Interactions Promote Fast Interfacial Electron Transfers with a Pyridine-Based Donor Dye in Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 1516-1527.	2.5	6
125	Toward the laboratory identification of the not-so-simple NS2 neutral and anion isomers. Journal of Chemical Physics, 2017, 147, 074303.	1.2	5
126	NeON⁺: An Atom and a Molecule. ACS Earth and Space Chemistry, 2018, 2, 491-495.	1.2	5

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127	Communication: Gas phase vibrational spectroscopy of the azide-water complex. Journal of Chemical Physics, 2018, 149, 191101.	1.2	5
128	ArCH₂⁺: A Detectable Noble Gas Molecule. ChemPhysChem, 2018, 19, 3388-3392.	1.0	5
129	The Fundamental Vibrational Frequencies and Spectroscopic Constants of the Dicyanoamine Anion, NCNCN^{â^'} (C₂N₃ ^{â^'}): Quantum Chemical Analysis for Astrophysical and Planetary Environments. Astrophysical Journal, 2019, 883, 109.	1.6	5
130	Highly-excited state properties of cumulenone chlorides in the vacuum-ultraviolet. Physical Chemistry Chemical Physics, 2020, 22, 11838-11849.	1.3	5
131	Knowledge Gaps in the Cometary Spectra of Oxygen-bearing Molecular Cations. Astrophysical Journal, Supplement Series, 2021, 256, 6.	3.0	5
132	Theoretical Rovibrational Spectroscopy of Magnesium Tricarbideâ€“Multireference Character Thwarts a Full Analysis of All Isomers. Journal of Physical Chemistry A, 2022, 126, 4132-4146.	1.1	5
133	On the spectroscopic constants, first electronic state, vibrational frequencies, and isomerization of hydroxymethylene (HCOH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.7	4
134	Towards completing the cyclopropenylidene cycle: rovibrational analysis of cyclic N₃⁺, CNN, HCNN⁺, and CNC^{â^'}. Physical Chemistry Chemical Physics, 2017, 19, 22860-22869.	1.3	4
135	Bridged HPSi and Linear HSiP as Probes of the SiP Radical in Astrophysical/Interstellar Media. Astrophysical Journal, 2017, 843, 124.	1.6	4
136	Boron-Doped C₂₄ Fullerenes for Alkyl Functionalization or Potential Polymerization. ACS Omega, 2018, 3, 1001-1006.	1.6	4
137	Patterns of cation binding to the aromatic amino acid R groups in Trp, Tyr, and Phe. Computational Biology and Chemistry, 2018, 72, 11-15.	1.1	4
138	Spectroscopic study of magnesium dinitrogen and sodium dinitrogen cation. Monthly Notices of the Royal Astronomical Society, 2020, 498, 5417-5423.	1.6	4
139	On the possibility of electronically excited states in stable amine anions: Dicyanoamine, cyanoethynylamine, and diethynylamine. Molecular Astrophysics, 2020, 19, 100070.	1.7	4
140	Computational UV spectra for amorphous solids of small molecules. Physical Chemistry Chemical Physics, 2021, 23, 24413-24420.	1.3	4
141	Valence-, Dipole- and Quadropole-Bound Electronically Excited States of Closed-Shell Anions Formed by Deprotonation of Cyano- and Ethynyl-Disubstituted Polycyclic Aromatic Hydrocarbons. Chemistry, 2022, 4, 42-56.	0.9	4
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