Paul L Raston

List of Publications by Year
in descending order

47 papers	1,005 citations	567144 15 h-index	434063 31 g-index
49 all docs	49 docs citations	49 times ranked	892 citing authors

#	Article	IF	Citations
1	A Well-Resolved Ice-like (H2O)8Cluster in an Organic Supramolecular Complex. Journal of the American Chemical Society, 2001, 123, 7192-7193.	6.6	332
2	Infrared spectroscopy of chemically doped solid parahydrogen. International Reviews in Physical Chemistry, 2006, 25, 469-496.	0.9	89
3	Infrared-induced reaction of Cl atoms trapped in solid parahydrogen. Physical Chemistry Chemical Physics, 2006, 8, 3124.	1.3	55
4	Helium Nanodroplet Isolation and Infrared Spectroscopy of the Isolated Ion-Pair 1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide. Journal of Physical Chemistry A, 2013, 117, 9047-9056.	1.1	34
5	The spin-orbit transition of atomic chlorine in solid H2, HD, and D2. Journal of Chemical Physics, 2007, 126, 021106.	1.2	32
6	The Cl + H₂ â†' HCl + H Reaction Induced by IR + UV Irradiation of Cl₂ in Solid para-H₂: Experiment. Journal of Physical Chemistry A, 2009, 113, 7621-7629.	1.1	31
7	Infrared spectroscopy of HOOO and DOOO in 4He nanodroplets. Journal of Chemical Physics, 2012, 137, 184302.	1.2	30
8	Rotational Dynamics of the Methyl Radical in Superfluid ⁴He Nanodroplets. Journal of Physical Chemistry A, 2013, 117, 11640-11647.	1.1	27
9	The ethyl radical in superfluid helium nanodroplets: Rovibrational spectroscopy and ab initio computations. Journal of Chemical Physics, 2013, 138, 194303.	1.2	26
10	Anomalous Î›-Doubling in the Infrared Spectrum of the Hydroxyl Radical in Helium Nanodroplets. Journal of Physical Chemistry A, 2013, 117, 8103-8110.	1.1	24
11	Dipole Moment of the HOOO Radical: Resolution of a Structural Enigma. Journal of Physical Chemistry Letters, 2013, 4, 3584-3589.	2.1	23
12	Mid-infrared signatures of hydroxyl containing water clusters: Infrared laser Stark spectroscopy of OHâ€"H2O and OH(D2O)n (n = 1-3). Journal of Chemical Physics, 2015, 143, 164304.	1.2	23
13	Rotational spectroscopy of single carbonyl sulfide molecules embedded in superfluid helium nanodroplets. Faraday Discussions, 2009, 142, 297.	1.6	22
14	Rotovibrational spectroscopy of hydrogen peroxide embedded in superfluid helium nanodroplets. Physical Chemistry Chemical Physics, 2011, 13, 18789.	1.3	18
15	Kinetic studies of the infrared-induced reaction between atomic chlorine and solid parahydrogen. Journal of Molecular Spectroscopy, 2015, 310, 72-83.	0.4	17
16	Liquid Hot NAGMA Cooled to 0.4 K: Benchmark Thermochemistry of a Gas-Phase Peptide. Journal of Physical Chemistry A, 2014, 118, 9692-9700.	1.1	14
17	Far-Infrared Synchrotron Spectroscopy and Torsional Analysis of the Important Interstellar Molecule, Vinyl Alcohol. ACS Earth and Space Chemistry, 2017, 1, 70-79.	1.2	14
18	Far-infrared Spectroscopic Characterization of Anti-vinyl Alcohol. Astrophysical Journal, 2017, 847, 67.	1.6	14

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19	Single and double resonance spectroscopy of methanol embedded in superfluid helium nanodroplets. Journal of Chemical Physics, 2014, 141, 044301.	1.2	13
20	Infrared spectroscopy and tunneling dynamics of the vinyl radical in 4He nanodroplets. Journal of Chemical Physics, 2013, 138, 174302.	1.2	12
21	High-resolution infrared spectroscopy of atomic bromine in solid parahydrogen and orthodeuterium. Journal of Chemical Physics, 2013, 139, 134304.	1.2	12
22	Synchrotron-based infrared spectroscopy of formic acid: Confirmation of the reassignment of Fermi-coupled 8 Î¼m states. AIP Advances, 2019, 9, .	0.6	12
23	Rovibrational spectroscopy of formaldehyde in helium nanodroplets. Journal of Molecular Spectroscopy, 2013, 292, 15-19.	0.4	11
24	Photodissociation of Molecular Bromine in Solid H₂ and D₂: Spectroscopy of the Atomic Bromine Spinâ^'Orbit Transition. Journal of Physical Chemistry A, 2008, 112, 11153-11158.	1.1	10
25	Infrared rovibrational spectroscopy of OHâ€“C2H2 in 4He nanodroplets: Parity splitting due to partially quenched electronic angular momentum. Journal of Chemical Physics, 2015, 142, 134306.	1.2	9
26	Quantum cascade laser spectroscopy of OCS isotopologues in 4He nanodroplets: A test of adiabatic following for a heavy rotor. Journal of Chemical Physics, 2018, 148, 044308.	1.2	9
27	Infrared spectroscopic studies of the rare gas atom perturbed S1(0) rovibron band of solid parahydrogen. Journal of Molecular Spectroscopy, 2007, 244, 138-145.	0.4	7
28	Infrared spectroscopy of HOCl embedded in superfluid helium nanodroplets: Probing the dynamical response of the solvent. Journal of Chemical Physics, 2012, 137, 014302.	1.2	7
29	FAR-INFRARED SPECTROSCOPY OF THE H₂-O₂VAN DER WAALS COMPLEX. Astrophysical Journal, 2015, 799, 65.	1.6	7
30	Helium Nanodroplet Isolation Spectroscopy and ab Initio Calculations of HO₃ï£¿(O₂)_n Clusters. ChemPhysChem, 2013, 14, 764-770.	1.0	6
31	Infrared Stark and Zeeman spectroscopy of OHâ€“CO: The entrance channel complex along the OH + CO â†' trans-HOCO reaction pathway. Journal of Chemical Physics, 2016, 145, 124310.	1.2	6
32	Infrared Spectroscopy of the Entrance Channel Complex Formed Between the Hydroxyl Radical and Methane in Helium Nanodroplets. Journal of Physical Chemistry A, 2017, 121, 7597-7602.	1.1	6
33	Laser Spectroscopy of Methanol Isotopologues in ⁴He Nanodroplets: Probing the Inertial Response around a Moderately Light Rotor. Journal of Physical Chemistry A, 2019, 123, 1630-1636.	1.1	6
34	Far-Infrared Synchrotron Spectroscopy and Quantum Chemical Calculations of the Potentially Important Interstellar Molecule, 2-Chloroethanol. Journal of Physical Chemistry A, 2019, 123, 1208-1216.	1.1	6
35	Concerning the asymmetric top rotational partition function in astronomical spectroscopy. Journal of Molecular Spectroscopy, 2020, 370, 111292.	0.4	6
36	Observation of the elusive â€œoxygen-inâ€•OCS dimer. Journal of Chemical Physics, 2020, 152, 221102.	1.2	6

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37	Observation of theQ(3/2) Î·-doublet transitions forX²Î_{3/2}OD in helium nanodroplets. Molecular Physics, 2014, 112, 301-303.	0.8	4
38	Far-Infrared Synchrotron Spectroscopy of a Potentially Important Interstellar Isotopologue of Vinyl Alcohol: CH₂CHOD. Journal of Physical Chemistry A, 2020, 124, 704-710.	1.1	4
39	Microwave spectroscopy of the seeded binary and ternary clusters CO-(pH2)2, CO-pH2-He, CO-HD, and CO-(oD2)N=1,2. Journal of Chemical Physics, 2015, 142, 144308.	1.2	3
40	HeNDS: A program for calculating average Helium NanoDroplet Sizes. SoftwareX, 2021, 14, 100703.	1.2	3
41	Laser spectroscopy of helium solvated molecules: probing the inertial response. Physical Chemistry Chemical Physics, 2021, 23, 25467-25479.	1.3	3
42	Rotational Spectroscopic Study of Quantum Solvation in Isotopologic (pH₂)_Nâ€“CO Clusters. Journal of Physical Chemistry A, 2017, 121, 3671-3678.	1.1	2
43	Microwave spectroscopy of carbonyl sulfide isotopologues solvated with 2â€“5 para-hydrogen molecules. Journal of Molecular Spectroscopy, 2017, 341, 23-26.	0.4	2
44	Comment on â€œRevisiting the formation of cyclic clusters in liquid ethanolâ€• [J. Chem. Phys. 144, 154302 (2016)]. Journal of Chemical Physics, 2019, 150, 057101.	1.2	2
45	FIR spectroscopy and DFT calculations involving 2-chloroethanol: Analysis of the Î½19Â+ Î½21â†Î½21 torsional hot band, and the solvated substitution reaction between ethylene glycol and hydrogen chloride. Journal of Molecular Structure, 2020, 1217, 128369.	1.8	2
46	The Synchrotron-based Far-infrared Spectrum of Glycolaldehyde. Astrophysical Journal, Supplement Series, 2021, 253, 40.	3.0	2
47	Characterization of the Coriolis Coupled Far-Infrared Bands of syn-Vinyl Alcohol. Journal of Physical Chemistry A, 2022, 126, 2569-2577.	1.1	2