

# Gary E Douberly

## List of Publications by Year in descending order

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73  
papers

1,559  
citations

257450

24  
h-index

330143

37  
g-index

74  
all docs

74  
docs citations

74  
times ranked

1238  
citing authors

#	ARTICLE	IF	CITATIONS
1	THE INFRARED SPECTRUM OF PROTONATED NAPHTHALENE AND ITS RELEVANCE FOR THE UNIDENTIFIED INFRARED BANDS. <i>Astrophysical Journal</i> , 2009, 702, 301-306.	4.5	137
2	Infrared Spectra of HCl <sup>+</sup> H <sub>2</sub> O Clusters in Helium Nanodroplets. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2233-2238.	4.6	75
3	How to VPT2: Accurate and Intuitive Simulations of CH Stretching Infrared Spectra Using VPT2+K with Large Effective Hamiltonian Resonance Treatments. <i>Journal of Physical Chemistry A</i> , 2021, 125, 1301-1324.	2.5	72
4	Infrared Spectroscopy of (HCl) <sub>m</sub> (H <sub>2</sub> O) <sub>n</sub> Clusters in Helium Nanodroplets: Definitive Assignments in the HCl Stretch Region. <i>Journal of Physical Chemistry A</i> , 2010, 114, 8090-8098.	2.5	56
5	Protein Tubule Immobilization on Self-Assembled Monolayers on Au Substrates. <i>Nano Letters</i> , 2001, 1, 461-464.	9.1	55
6	Fabrication of Protein Tubules: Immobilization of Proteins on Peptide Tubules. <i>Journal of Physical Chemistry B</i> , 2001, 105, 7612-7618.	2.6	52
7	Automation of an acousto-optic continuous-wave optical parametric oscillator. <i>Review of Scientific Instruments</i> , 2013, 84, 013102.	1.3	49
8	Infrared Spectroscopy of the tert-Butyl Cation in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2007, 129, 13782-13783.	13.7	48
9	Fabrication of Nanocrystal Tube Using Peptide Tubule as Template and Its Application as Signal-Enhancing Cuvette. <i>Journal of Physical Chemistry B</i> , 2001, 105, 1683-1686.	2.6	45
10	Infrared Spectroscopy of Perdeuterated Protonated Water Clusters in the Vicinity of the Clathrate Cage. <i>Journal of Physical Chemistry A</i> , 2009, 113, 8449-8453.	2.5	43
11	Infrared spectroscopy of gas phase C <sub>3</sub> H <sub>5</sub> <sup>+</sup> : The allyl and 2-propenyl cations. <i>Journal of Chemical Physics</i> , 2008, 128, 021102.	3.0	42
12	The structure of protonated acetone and its dimer: infrared photodissociation spectroscopy from 800 to 4000 cm <sup>-1</sup> . <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 77-79.	2.8	41
13	Organization of Peptide Nanotubes into Macroscopic Bundles. <i>Langmuir</i> , 2001, 17, 7918-7922.	3.5	39
14	Propargyl + O <sub>2</sub> Reaction in Helium Droplets: Entrance Channel Barrier or Not?. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13626-13635.	2.5	39
15	Infrared spectroscopy of protonated ethylene: The nature of proton binding in the non-classical structure. <i>Chemical Physics Letters</i> , 2009, 480, 17-20.	2.6	36
16	Helium Nanodroplet Isolation and Infrared Spectroscopy of the Isolated Ion-Pair 1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9047-9056.	2.5	34
17	IR double resonance spectroscopy in helium nanodroplets: Photo-induced isomerization. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 463-468.	2.8	33
18	Infrared spectroscopy of the protonated nitrogen dimer: The complexity of shared proton vibrations. <i>Journal of Chemical Physics</i> , 2009, 131, 104312.	3.0	32

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19	Infrared spectroscopy of HOOO and DOOO in 4He nanodroplets. <i>Journal of Chemical Physics</i> , 2012, 137, 184302.	3.0	30
20	Infrared Laser Spectroscopy of the CH <sub>3</sub> OO Radical Formed from the Reaction of CH <sub>3</sub> and O <sub>2</sub> within a Helium Nanodroplet. <i>Journal of Physical Chemistry A</i> , 2012, 116, 5299-5304.	2.5	28
21	Rotational Dynamics of the Methyl Radical in Superfluid <sup>4</sup> He Nanodroplets. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11640-11647.	2.5	27
22	Quantum Cascade Laser Spectroscopy and Photoinduced Chemistry of Al <sup>+</sup> (CO) <sub>n</sub> Clusters in Helium Nanodroplets. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7437-7447.	2.5	26
23	The ethyl radical in superfluid helium nanodroplets: Rovibrational spectroscopy and <i>ab initio</i> computations. <i>Journal of Chemical Physics</i> , 2013, 138, 194303.	3.0	26
24	Infrared Spectroscopy of OH $\cdot$ -CH <sub>3</sub> OH: Hydrogen-Bonded Intermediate Along the Hydrogen Abstraction Reaction Path. <i>Journal of Physical Chemistry A</i> , 2015, 119, 8125-8132.	2.5	26
25	Anomalous $\hat{I}$ -Doubling in the Infrared Spectrum of the Hydroxyl Radical in Helium Nanodroplets. <i>Journal of Physical Chemistry A</i> , 2013, 117, 8103-8110.	2.5	24
26	Dipole Moment of the HOOO Radical: Resolution of a Structural Enigma. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3584-3589.	4.6	23
27	Mid-infrared signatures of hydroxyl containing water clusters: Infrared laser Stark spectroscopy of OH $\cdot$ -H <sub>2</sub> O and OH(D <sub>2</sub> O) <sub>n</sub> ( <i>n</i> = 1-3). <i>Journal of Chemical Physics</i> , 2015, 143, 164304.	3.0	23
28	Formation of Exotic Networks of Water Clusters in Helium Droplets Facilitated by the Presence of Neon Atoms. <i>Journal of the American Chemical Society</i> , 2017, 139, 4152-4156.	13.7	20
29	Infrared laser spectroscopy of the <i>n</i> -propyl and <i>i</i> -propyl radicals: Stretch-bend Fermi coupling in the alkyl CH stretch region. <i>Journal of Chemical Physics</i> , 2016, 145, 224304.	3.0	19
30	(HCN) <sub>m</sub> <sup>+</sup> M <sub>n</sub> (M = K, Ca, Sr): Vibrational Excitation Induced Solvation and Desolvation of Dopants in and on Helium Nanodroplets. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3391-3402.	2.5	18
31	Rotamers of Isoprene: Infrared Spectroscopy in Helium Droplets and <i>Ab Initio</i> Thermochemistry. <i>Journal of Physical Chemistry A</i> , 2018, 122, 148-158.	2.5	17
32	Infrared Spectra in the 3 $\frac{1}{4}$ $\mu$ m Region of Ethane and Ethane Clusters in Helium Droplets. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13648-13653.	2.5	16
33	Infrared laser spectroscopy of the helium-solvated allyl and allyl peroxy radicals. <i>Journal of Chemical Physics</i> , 2013, 139, 234301.	3.0	16
34	Ethyl + O <sub>2</sub> in Helium Nanodroplets: Infrared Spectroscopy of the Ethylperoxy Radical. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3558-3568.	2.5	16
35	Rotational Dynamics of HCN <sup>+</sup> M (M = Na, K, Rb, Cs) van der Waals Complexes Formed on the Surface of Helium Nanodroplets. <i>Journal of Physical Chemistry A</i> , 2007, 111, 7292-7302.	2.5	15
36	Liquid Hot NAGMA Cooled to 0.4 K: Benchmark Thermochemistry of a Gas-Phase Peptide. <i>Journal of Physical Chemistry A</i> , 2014, 118, 9692-9700.	2.5	14

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37	Infrared Infrared Double Resonance Spectroscopy of the Isomers of Acetylene-HCN and Cyanoacetylene-HCN in Helium Nanodroplets. Journal of Physical Chemistry A, 2007, 111, 7282-7291.	2.5	13
38	Single and double resonance spectroscopy of methanol embedded in superfluid helium nanodroplets. Journal of Chemical Physics, 2014, 141, 044301.	3.0	13
39	Two-center three-electron bonding in ClNH <sub>3</sub> revealed via helium droplet infrared laser Stark spectroscopy: Entrance channel complex along the Cl + NH <sub>3</sub> → ClNH <sub>2</sub> + H reaction. Journal of Chemical Physics, 2016, 144, 164301.	3.0	13
40	Infrared Spectroscopy of Prereactive Aluminum, Gallium, and Indium-HCN Entrance Channel Complexes Solvated in Helium Nanodroplets. Journal of Physical Chemistry A, 2007, 111, 12304-12316.	2.5	12
41	Infrared spectroscopy and tunneling dynamics of the vinyl radical in 4He nanodroplets. Journal of Chemical Physics, 2013, 138, 174302.	3.0	12
42	Helium Nanodroplet Isolation of the Cyclobutyl, 1-Methylallyl, and Allylcarbinyl Radicals: Infrared Spectroscopy and Ab Initio Computations. Journal of Physical Chemistry A, 2017, 121, 7576-7587.	2.5	12
43	Rovibrational spectroscopy of formaldehyde in helium nanodroplets. Journal of Molecular Spectroscopy, 2013, 292, 15-19.	1.2	11
44	Characterization of the 2-methylvinoxy radical + O <sub>2</sub> reaction: A focal point analysis and composite multireference study. Journal of Chemical Physics, 2019, 151, 124302.	3.0	11
45	Infrared spectroscopy of propene in solid para-hydrogen and helium droplets: The role of matrix shifts in the analysis of anharmonic resonances. Journal of Molecular Spectroscopy, 2018, 354, 7-14.	1.2	10
46	Communication: Helium nanodroplet isolation and rovibrational spectroscopy of hydroxymethylene. Journal of Chemical Physics, 2014, 140, 171102.	3.0	9
47	Infrared rovibrational spectroscopy of OH-C <sub>2</sub> H <sub>2</sub> in 4He nanodroplets: Parity splitting due to partially quenched electronic angular momentum. Journal of Chemical Physics, 2015, 142, 134306.	3.0	9
48	Rovibrational Spectra for the HCCCN-HCN and HCN-HCCCN Binary Complexes in 4He Droplets. Journal of Physical Chemistry A, 2007, 111, 7516-7528.	2.5	8
49	Infrared Laser Spectroscopy of the L-Shaped Cl-HCl Complex Formed in Superfluid <sup>4</sup> He Nanodroplets. Journal of Physical Chemistry A, 2015, 119, 12028-12035.	2.5	8
50	Infrared spectroscopy of the n-propyl and i-propyl radicals in solid para-hydrogen. Journal of Molecular Spectroscopy, 2019, 363, 111170.	1.2	8
51	Sulfurous and sulfonic acids: Predicting the infrared spectrum and setting the surface straight. Journal of Chemical Physics, 2020, 152, 024302.	3.0	8
52	<i>tert</i> -Butyl peroxy radical: ground and first excited state energetics and fundamental frequencies. Physical Chemistry Chemical Physics, 2019, 21, 9747-9758.	2.8	7
53	On the Al+HCN reaction in helium nanodroplets. Chemical Physics Letters, 2012, 551, 54-59.	2.6	6
54	Helium Nanodroplet Isolation Spectroscopy and ab Initio Calculations of HO <sub>3</sub> (O <sub>2</sub> ) <sub>n</sub> Clusters. ChemPhysChem, 2013, 14, 764-770.	2.1	6

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55	Reactive intermediates in 4He nanodroplets: Infrared laser Stark spectroscopy of dihydroxycarbene. <i>Journal of Chemical Physics</i> , 2015, 142, 144309.	3.0	6
56	Infrared Stark and Zeeman spectroscopy of OH <sup>+</sup> CO: The entrance channel complex along the OH + CO $\hat{\rightarrow}$ trans-HOCO reaction pathway. <i>Journal of Chemical Physics</i> , 2016, 145, 124310.	3.0	6
57	Infrared Spectroscopy of the Tropyli Radical in Helium Droplets. <i>Journal of Physical Chemistry A</i> , 2016, 120, 6768-6773.	2.5	6
58	Infrared Spectroscopy of the Entrance Channel Complex Formed Between the Hydroxyl Radical and Methane in Helium Nanodroplets. <i>Journal of Physical Chemistry A</i> , 2017, 121, 7597-7602.	2.5	6
59	Infrared Spectrum of Fulvenallene and Fulvenallenyl in Helium Droplets. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3782-3792.	2.5	5
60	Four isomers of In <sub>2</sub> H <sub>2</sub> : a careful comparison between theory and experiment. <i>Molecular Physics</i> , 2021, 119, .	1.7	5
61	Kinetic Stability of Pentazole. <i>Journal of Physical Chemistry A</i> , 2021, 125, 9092-9098.	2.5	5
62	High-resolution infrared spectroscopy of Mg <sup>+</sup> HF and Mg <sup>+</sup> (HF) <sub>2</sub> solvated in helium nanodroplets. <i>Journal of Chemical Physics</i> , 2009, 130, 184313.	3.0	4
63	Observation of the $Q(3/2)$ $\hat{\rightarrow}$ doublet transitions for $X^{2\Sigma^+}$ $\hat{\rightarrow}$ $OD$ in helium nanodroplets. <i>Molecular Physics</i> , 2014, 112, 301-303.	1.7	4
64	Sequential Capture of O(3P) and HCN by Helium Nanodroplets: Infrared Spectroscopy and ab Initio Computations of the $3\Sigma^-$ O <sup>+</sup> HCN Complex. <i>Journal of Physical Chemistry A</i> , 2017, 121, 9466-9473.	2.5	4
65	Convergent energies and anharmonic vibrational spectra of Ca <sub>2</sub> H <sub>2</sub> and Ca <sub>2</sub> H <sub>4</sub> constitutional isomers. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10914-10922.	2.8	4
66	Infrared spectroscopy of H+(CO) <sub>2</sub> in the gas phase and in para-hydrogen matrices. <i>Journal of Chemical Physics</i> , 2020, 153, 084305.	3.0	4
67	Vibrational dynamics of the linear and bent isomers of HF <sup>+</sup> N <sub>2</sub> O trapped in 0.4K helium nanodroplets. <i>Chemical Physics</i> , 2009, 361, 118-124.	1.9	3
68	Infrared photodissociation spectroscopy and anharmonic vibrational study of the HO <sub>4</sub> <sup>+</sup> molecular ion. <i>Journal of Chemical Physics</i> , 2020, 152, 174309.	3.0	3
69	On the Stark effect in open shell complexes exhibiting partially quenched electronic angular momentum: Infrared laser Stark spectroscopy of OH <sup>+</sup> C <sub>2</sub> H <sub>2</sub> , OH <sup>+</sup> C <sub>2</sub> H <sub>4</sub> , and OH <sup>+</sup> H <sub>2</sub> O. <i>Journal of Molecular Spectroscopy</i> , 2015, 314, 54-62.	1.2	2
70	Infrared laser Stark spectroscopy of hydroxymethoxycarbene in 4He nanodroplets. <i>Chemical Physics Letters</i> , 2015, 639, 99-104.	2.6	2
71	Potential energy profile for the Cl + (H <sub>2</sub> O) <sub>3</sub> $\hat{\rightarrow}$ HCl + (H <sub>2</sub> O) <sub>2</sub> OH reaction. A CCSD(T) study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 26837-26842.	2.8	2
72	The 75th International Symposium on Molecular Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4873-4874.	2.5	0

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73	The noncovalent interaction between water and the $3P$ ground state of the oxygen atom*. Molecular Physics, 0, , .	1.7	0