G Barney Ellison

List of Publications by Year
in descending order

60 papers	5,343 citations	136740 32 h-index	138251 58 g-index
61 all docs	61 docs citations	61 times ranked	5852 citing authors

#	Article	IF	Citations
1	A Conical Intersection Influences the Ground State Rearrangement of Fulvene to Benzene. Journal of Physical Chemistry A, 2022, 126, 1429-1447.	1.1	6
2	Five Birds with One Stone: Photoelectron Photoion Coincidence Unveils Rich Phthalide Pyrolysis Chemistry. Journal of Physical Chemistry A, 2021, 125, 1738-1746.	1.1	15
3	The Threshold Photoelectron Spectrum of Fulvenone: A Reactive Ketene Derivative in Lignin Valorization. ChemPhysChem, 2020, 21, 2217-2222.	1.0	21
4	The Molecular Structure of gauche â€1,3â€Butadiene: Experimental Establishment of Nonâ€planarity. Angewandte Chemie, 2018, 130, 1839-1843.	1.6	10
5	The Molecular Structure of gaucheâ€1,3â€Butadiene: Experimental Establishment of Nonâ€planarity. Angewandte Chemie - International Edition, 2018, 57, 1821-1825.	7.2	46
6	Thermal Decompositions of the Lignin Model Compounds: Salicylaldehyde and Catechol. Journal of Physical Chemistry A, 2018, 122, 5911-5924.	1.1	20
7	Thermal Decomposition of Potential Ester Biofuels. Part I: Methyl Acetate and Methyl Butanoate. Journal of Physical Chemistry A, 2017, 121, 4658-4677.	1.1	31
8	Active Thermochemical Tables: The Adiabatic Ionization Energy of Hydrogen Peroxide. Journal of Physical Chemistry A, 2017, 121, 8799-8806.	1.1	33
9	Tabletop Femtosecond VUV Photoionization and PEPICO Detection of Microreactor Pyrolysis Products. Journal of Physical Chemistry A, 2017, 121, 5280-5289.	1.1	8
10	Measuring flow profiles in heated miniature reactors with X-ray fluorescence spectroscopy. Proceedings of the Combustion Institute, 2017, 36, 4603-4610.	2.4	17
11	The thermal decomposition of the benzyl radical in a heated micro-reactor. II. Pyrolysis of the tropyl radical. Journal of Chemical Physics, 2016, 145, 014305.	1.2	28
12	An optically accessible pyrolysis microreactor. Review of Scientific Instruments, 2016, 87, 014101.	0.6	9
13	DSMC Simulations of a Photoionization Mass Spectrometer. , 2016, , .		2
14	Pyrolysis Mechanisms of Lignin Model Compounds Using a Heated Micro-Reactor. Green Chemistry and Sustainable Technology, 2016, , 145-171.	0.4	6
15	Isomerization and Fragmentation of Cyclohexanone in a Heated Micro-Reactor. Journal of Physical Chemistry A, 2015, 119, 12635-12647.	1.1	11
16	Pyrolysis of Cyclopentadienone: Mechanistic Insights from a Direct Measurement of Product Branching Ratios. Journal of Physical Chemistry A, 2015, 119, 7222-7234.	1.1	23
17	The ionisation energy of cyclopentadienone: a photoelectronâ€“photoion coincidence study. Molecular Physics, 2015, 113, 2350-2358.	0.8	16
18	The thermal decomposition of the benzyl radical in a heated micro-reactor. I. Experimental findings. Journal of Chemical Physics, 2015, 142, 044307.	1.2	46

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19	Pyrolysis Pathways of the Furanic Ether 2-Methoxyfuran. Journal of Physical Chemistry A, 2015, 119, 9962-9977.	1.1	9
20	Chirped-pulse millimeter-wave spectroscopy for dynamics and kinetics studies of pyrolysis reactions. Physical Chemistry Chemical Physics, 2014, 16, 15739-15751.	1.3	54
21	The properties of a micro-reactor for the study of the unimolecular decomposition of large molecules. International Reviews in Physical Chemistry, 2014, 33, 447-487.	0.9	129
22	Polarized Matrix Infrared Spectra of Cyclopentadienone: Observations, Calculations, and Assignment for an Important Intermediate in Combustion and Biomass Pyrolysis. Journal of Physical Chemistry A, 2014, 118, 708-718.	1.1	27
23	Unimolecular thermal decomposition of dimethoxybenzenes. Journal of Chemical Physics, 2014, 140, 234302.	1.2	30
24	Chirped-Pulse Fourier Transform Microwave Spectroscopy Coupled with a Flash Pyrolysis Microreactor: Structural Determination of the Reactive Intermediate Cyclopentadienone. Journal of Physical Chemistry Letters, 2014, 5, 2201-2207.	2.1	27
25	Theoretical Study of Reaction of Ketene with Water in the Gas Phase: Formation of Acetic Acid?. Journal of Physical Chemistry A, 2013, 117, 10997-11005.	1.1	22
26	Acetic acid formation via the hydration of gas-phase ketene under ambient conditions. Chemical Physics Letters, 2013, 565, 1-4.	1.2	27
27	Pyrolysis of furan in a microreactor. Journal of Chemical Physics, 2013, 139, 124305.	1.2	63
28	Biomass pyrolysis: Thermal decomposition mechanisms of furfural and benzaldehyde. Journal of Chemical Physics, 2013, 139, 104310.	1.2	63
29	Oxidative Activity of Hydrogen on Nickel and Inconel. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	0.5	0
30	Thermal decomposition of CH3CHO studied by matrix infrared spectroscopy and photoionization mass spectroscopy. Journal of Chemical Physics, 2012, 137, 164308.	1.2	49
31	Unimolecular thermal decomposition of phenol and d5-phenol: Direct observation of cyclopentadiene formation via cyclohexadienone. Journal of Chemical Physics, 2012, 136, 044309.	1.2	64
32	Thermal Decomposition Mechanisms of the Methoxyphenols: Formation of Phenol, Cyclopentadienone, Vinylacetylene, and Acetylene. Journal of Physical Chemistry A, 2011, 115, 13381-13389.	1.1	80
33	The products of the thermal decomposition of CH3CHO. Journal of Chemical Physics, 2011, 135, 014306.	1.2	43
34	Laser ablation with resonance-enhanced multiphoton ionization time-of-flight mass spectrometry for determining aromatic lignin volatilization products from biomass. Review of Scientific Instruments, 2011, 82, 033104.	0.6	37
35	Radical Chemistry in the Thermal Decomposition of Anisole and Deuterated Anisoles: An Investigation of Aromatic Growth. Journal of Physical Chemistry A, 2010, 114, 9043-9056.	1.1	96
36	Thermal Decomposition of Furan Generates Propargyl Radicals. Journal of Physical Chemistry A, 2009, 113, 8540-8547.	1.1	81

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37	Vacuum ultraviolet laser pulsed field ionization-photoelectron study of allyl radical CH2CHCH2. Journal of Chemical Physics, 2007, 126, 171101.	1.2	23
38	Unimolecular thermal fragmentation ofortho-benzyne. Journal of Chemical Physics, 2007, 126, 044312.	1.2	73
39	Propargyl Radical:â€‰ Ab Initio Anharmonic Modes and the Polarized Infrared Absorption Spectra of Matrix-Isolated HCCCH2. Journal of Physical Chemistry A, 2005, 109, 3812-3821.	1.1	55
40	Use of a Flowing Afterglow SIFT Apparatus To Study the Reactions of Ions with Organic Radicalsâ€. Journal of Physical Chemistry A, 2004, 108, 9733-9741.	1.1	20
41	Bond Dissociation Energies of Organic Molecules. Accounts of Chemical Research, 2003, 36, 255-263.	7.6	2,601
42	Chemistry of Atmospheres: An Introduction to the Chemistry of the Atmospheres of Earth, the Planets, and their Satellites, 3rd Edition (Wayne, Richard P.). Journal of Chemical Education, 2003, 80, 264.	1.1	0
43	Intense, hyperthermal source of organic radicals for matrix-isolation spectroscopy. Review of Scientific Instruments, 2003, 74, 3077-3086.	0.6	83
44	Photoelectron spectroscopy of HCCNâ^’ and HCNCâ^’ reveals the quasilinear triplet carbenes, HCCN and HCNC. Journal of Chemical Physics, 2002, 117, 4323-4339.	1.2	52
45	Polarized Infrared Absorption Spectra of Matrix-Isolated Allyl Radicals. Journal of Physical Chemistry A, 2001, 105, 7514-7524.	1.1	45
46	Identification of Adsorbed Phenyl (C6H5) Groups on Metal Surfaces:â€‰ Electron-Induced Dissociation of Benzene on Au(111). Journal of Physical Chemistry B, 2001, 105, 8387-8394.	1.2	128
47	Photochemistry of Matrix-Isolated and Thin Film Acid Chlorides:â€‰ Quantum Yields and Product Structures. Journal of Physical Chemistry A, 1999, 103, 965-970.	1.1	5
48	Organic Peroxyl Radical Photolysis in the Near-Infrared:Â Effects on Tropospheric Chemistry. Journal of Physical Chemistry A, 1999, 103, 10169-10178.	1.1	41
49	Photoelectron spectroscopy, gas phase acidity, and thermochemistry of tert-butyl hydroperoxide: Mechanisms for the rearrangement of peroxyl radicals. Journal of Chemical Physics, 1998, 109, 10293-10310.	1.2	71
50	Thermochemistry of the benzyl and allyl radicals and ions. International Journal of Mass Spectrometry and Ion Processes, 1996, 156, 109-131.	1.9	124
51	Fourier transform infrared absorption spectroscopy of jetâ€cooled radicals. Review of Scientific Instruments, 1995, 66, 2430-2441.	0.6	34
52	The C-H Bond Energy of Benzene. Journal of the American Chemical Society, 1995, 117, 2590-2599.	6.6	293
53	Photoelectron spectroscopy of CH2Nâ^’. Journal of Chemical Physics, 1991, 94, 3517-3528.	1.2	41
54	Photoelectron spectroscopy of BHâ^’3. Journal of Chemical Physics, 1989, 90, 795-806.	1.2	28

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55	NH2electron affinity. Journal of Chemical Physics, 1989, 91, 2762-2763.	1.2	61
56	The electronic states of Si2 and Siâˆ’2 as revealed by photoelectron spectroscopy. Journal of Chemical Physics, 1987, 87, 5116-5124.	1.2	96
57	The photoelectron spectroscopy of HOâˆ’2. Journal of Chemical Physics, 1985, 83, 5400-5406.	1.2	41
58	Laserâ€induced fluorescence studies of ion collisional excitation in a drift field: Rotational excitation of N+2 in helium. Journal of Chemical Physics, 1983, 79, 5448-5456.	1.2	38
59	Photoelectron spectroscopy of HNOâˆ’ and DNOâˆ’. Journal of Chemical Physics, 1983, 78, 6541-6558.	1.2	71
60	Electronic states of organic molecules. 3. Photoelectron spectra of cycloalkenes and methylenecycloalkanes. Journal of the American Chemical Society, 1976, 98, 7179-7182.	6.6	64