Steven L Baughcum

List of Publications by Year
in descending order

39 papers	1,420 citations	516710 16 h-index	414414 32 g-index
39 all docs	39 docs citations	39 times ranked	801 citing authors

#	Article	IF	Citations
1	Potential Impacts of Supersonic Aircraft Emissions on Ozone and Resulting Forcing on Climate: An Update on Historical Analysis. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034130.	3.3	10
2	Stratospheric Ozone and Climate Forcing Sensitivity to Cruise Altitudes for Fleets of Potential Supersonic Transport Aircraft. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034971.	3.3	7
3	The Impact on the Ozone Layer of a Potential Fleet of Civil Hypersonic Aircraft. Earth's Future, 2020, 8, e2020EF001626.	6.3	10
4	Numerical modeling of particle deposition in the environmental control systems of commercial airliners on ground. Building Simulation, 2017, 10, 265-275.	5.6	9
5	In-flight monitoring of particle deposition in the environmental control systems of commercial airliners in China. Atmospheric Environment, 2017, 154, 118-128.	4.1	21
6	Experimental study of particle deposition in the environmental control systems of commercial airliners. Building and Environment, 2016, 96, 62-71.	6.9	22
7	Correction to â€œOH reaction rate constant, IR absorption spectrum, ozone depletion potentials and global warming potentials of 2â€bromoâ€3,3,3â€trifluoropropeneâ€. Journal of Geophysical Research, 2012, 117, .	3.3	2
8	OH reaction rate constant, IR absorption spectrum, ozone depletion potentials and global warming potentials of 2-bromo-3,3,3-trifluoropropene. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	13
9	Direct deposition of subsonic aircraft emissions into the stratosphere. Journal of Geophysical Research, 1999, 104, 8317-8327.	3.3	16
10	An evaluation of upper troposphere NOxwith two models. Journal of Geophysical Research, 1998, 103, 22097-22113.	3.3	31
11	Direct measurements of methoxy removal rate constants for collisions with CH4, Ar, N2, Xe, and CF4 in the temperature range 673â€“973 K. Proceedings of the Combustion Institute, 1989, 22, 973-981.	0.3	10
12	Absorption by ground-state lead atoms of the 283.3-nm resonant line from a lead hollow cathode lamp: an absolute number density calibration. The Journal of Physical Chemistry, 1989, 93, 7336-7338.	2.9	1
13	A Hybrid Chemical/Excimer Laser Concept. Proceedings of SPIE, 1988, 0875, 149.	0.8	1
14	Thermodynamics of lead diiodide dissociation and the laser-induced fluorescence excitation spectrum of lead monoiodide(A-X). The Journal of Physical Chemistry, 1987, 91, 3840-3845.	2.9	6
15	Collisional quenching of methoxy(A2A1) radical. The Journal of Physical Chemistry, 1987, 91, 3253-3259.	2.9	19
16	Removal rate constant measurements for methoxy radical by oxygen over the 298-973 K range. The Journal of Physical Chemistry, 1987, 91, 4653-4655.	2.9	50
17	CH3O+CO removal rate constant measurements over the 473â€“973 K temperature range. Chemical Physics Letters, 1987, 138, 548-552.	2.6	19
18	Gas-phase oxidation of atomic boron and boron monoxide. AIP Conference Proceedings, 1986, , .	0.4	5

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19	Photofragment fluorescence as an analytical technique: application to gas-phase alkali chlorides. Analytical Chemistry, 1986, 58, 1430-1436.	6.5	68
20	Photochemistry of trimethylgallium with applications to atomic gallium reaction kinetics. AIP Conference Proceedings, 1986, , .	0.4	0
21	Photofragment fluorescence as an analytical technique: Application to gas-phase alkali compounds. AIP Conference Proceedings, 1986, , .	0.4	0
22	Laser Photochemistry Of Gallium-Containing Compounds. Proceedings of SPIE, 1986, , .	0.8	0
23	Laser-Initiated Chain Reactions In The Partial Oxidation Of Methane. , 1986, , .		2
24	Photofragment Fluorescence As A Sensitive Probe For Gas-Phase Alkali Compounds And Their Photochemistry. Proceedings of SPIE, 1985, , .	0.8	1
25	Optically pumped NO (Aâ€‰2Î£+â†'Xâ€‰2Ï€) ultraviolet laser. Applied Physics Letters, 1985, 46, 22-24.	3.3	21
26	Production Of Gallium Atoms By Excimer Laser Photolysis Of Trimethylgallium. Proceedings of SPIE, 1985, , .	0.8	0
27	Absorption sensitivity enhancement in methyl fluoride at 1200cm^â^'1 using Stark polarization rotation. Journal of the Optical Society of America B: Optical Physics, 1985, 2, 1480.	2.1	0
28	Microwave spectroscopic study of malonaldehyde. 4. Vibration-rotation interaction in parent species. Journal of the American Chemical Society, 1984, 106, 2265-2267.	13.7	138
29	Microwave spectroscopic study of malonaldehyde. 3. Vibration-rotation interaction and one-dimensional model for proton tunneling. Journal of the American Chemical Society, 1984, 106, 2260-2265.	13.7	221
30	Measurement of the C₂(a³Î_u) and C₂(X¹Î£⁺_g) Disappearance Rates with O₂ from 298 to 1300 Kelvin. ACS Symposium Series, 1983, , 257-266.	0.5	5
31	Laser photodissociation of Hg(CH3)2: Infrared emission studies of vibrational and rotational excitation in the CH3 fragments. Chemical Physics Letters, 1982, 89, 183-188.	2.6	41
32	Real-time detection of methyl radicals by diode laser absorption at 608 cmâ^'1. Chemical Physics Letters, 1982, 88, 568-571.	2.6	50
33	Microwave spectroscopic study of malonaldehyde (3-hydroxy-2-propenal). 2. Structure, dipole moment, and tunneling. Journal of the American Chemical Society, 1981, 103, 6296-6303.	13.7	262
34	Laser UV photofragmentation of halogenated molecules. Selective bond dissociation and wavelength-specific quantum yields for excited iodine (2P1/2) and bromine (2P1/2) atoms. The Journal of Physical Chemistry, 1981, 85, 3844-3851.	2.9	122
35	Photofragmentation infrared emission studies of vibrationally excited free radicals CH3 and CH2I. Journal of Chemical Physics, 1980, 72, 6531-6545.	3.0	197
36	Photofragmentation dynamics and reactive collisions of laser-excited electronic states. Faraday Discussions of the Chemical Society, 1979, 67, 306.	2.2	29

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37	<title>Free Radical Studies By Excimer Laser Ultraviolet Photolysis</title>. Proceedings of SPIE, 1978, , .	0.8	2
38	NMR studies of furan and thiophene partially oriented in a lyotropic liquid crystal. Journal of Magnetic Resonance, 1972, 7, 253-259.	0.5	9
39	Quantifying the Fuel Consumption Penalties for an Operational Contrail Avoidance System. , 0, , .		0