William P L Carter

List of Publications by Year
in descending order

102	9,711	36303 51	38395 95
papers	citations	h-index	g-index

106	106	106	4641
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Observation-Based Estimations of Relative Ozone Impacts by Using Volatile Organic Compounds Reactivities. Environmental Science and Technology Letters, 2022, 9, 10-15.	8.7	10
2	Development of ozone reactivity scales for volatile organic compounds in a Chinese megacity. Atmospheric Chemistry and Physics, 2021, 21, 11053-11068.	4.9	53
3	Estimation of Rate Constants for Reactions of Organic Compounds under Atmospheric Conditions. Atmosphere, 2021, 12, 1250.	2.3	1
4	Development and Evaluation of a Detailed Mechanism for Gas-Phase Atmospheric Reactions of Furans. ACS Earth and Space Chemistry, 2020, 4, 1254-1268.	2.7	10
5	Database for the kinetics of the gas-phase atmospheric reactions of organic compounds. Earth System Science Data, 2020, 12, 1203-1216.	9.9	50
6	Perspective on Mechanism Development and Structureâ€Activity Relationships for Gasâ€Phase Atmospheric Chemistry. International Journal of Chemical Kinetics, 2018, 50, 435-469.	1.6	45
7	Analysis of SAPRC16 chemical mechanism for ambient simulations. Atmospheric Environment, 2018, 192, 136-150.	4.1	13
8	Updating the SAPRC Maximum Incremental Reactivity (MIR) scale for the United States from 1988 to 2010. Journal of the Air and Waste Management Association, 2018, 68, 1301-1316.	1.9	69
9	New directions: Atmospheric chemical mechanisms for the future. Atmospheric Environment, 2015, 122, 609-610.	4.1	19
10	Development of a database for chemical mechanism assignments for volatile organic emissions. Journal of the Air and Waste Management Association, 2015, 65, 1171-1184.	1.9	32
11	Modeling the Current and Future Roles of Particulate Organic Nitrates in the Southeastern United States. Environmental Science & Technology, 2015, 49, 14195-14203.	10.0	147
12	Development of revised SAPRC aromatics mechanisms. Atmospheric Environment, 2013, 77, 404-414.	4.1	112
13	Potential impacts of two SO2 oxidation pathways on regional sulfate concentrations: Aqueous-phase oxidation by NO2 and gas-phase oxidation by Stabilized Criegee Intermediates. Atmospheric Environment, 2013, 68, 186-197.	4.1	87
14	Understanding the impact of recent advances in isoprene photooxidation on simulations of regional air quality. Atmospheric Chemistry and Physics, 2013, 13, 8439-8455.	4.9	106
15	Winter ozone formation and VOC incremental reactivities in the Upper Green River Basin of Wyoming. Atmospheric Environment, 2012, 50, 255-266.	4.1	92
16	Modeling ozone formation from alkene reactions using the Carbon Bond chemical mechanism. Atmospheric Environment, 2012, 59, 141-150.	4.1	10
17	Secondary Organic Aerosol from Ozonolysis of Biogenic Volatile Organic Compounds: Chamber Studies of Particle and Reactive Oxygen Species Formation. Environmental Science & Technology, 2011, 45, 276-282.	10.0	91
18	Modeling alkene chemistry using condensed mechanisms for conditions relevant to southeast Texas, USA. Atmospheric Environment, 2010, 44, 5365-5374.	4.1	3

#	Article	IF	Citations
19	A new condensed toluene mechanism for Carbon Bond: CB05-TUâ˜†. Atmospheric Environment, 2010, 44, 5346-5355.	4.1	174
20	Development of a condensed SAPRC-07 chemical mechanism. Atmospheric Environment, 2010, 44, 5336-5345.	4.1	92
21	Development of the SAPRC-07 chemical mechanism. Atmospheric Environment, 2010, 44, 5324-5335.	4.1	434
22	Rate of Gas Phase Association of Hydroxyl Radical and Nitrogen Dioxide. Science, 2010, 330, 646-649.	12.6	123
23	Reactivity Scales as Comparative Tools for Chemical Mechanisms. Journal of the Air and Waste Management Association, 2010, 60, 914-924.	1.9	28
24	A study of VOC reactivity in the Houston-Galveston air mixture utilizing an extended version of SAPRC-99 chemical mechanism. Atmospheric Environment, 2008, 42, 5733-5742.	4.1	43
25	Impact of an Updated Carbon Bond Mechanism on Predictions from the CMAQ Modeling System: Preliminary Assessment. Journal of Applied Meteorology and Climatology, 2008, 47, 3-14.	1.5	190
26	A detailed mechanism for the gas-phase atmospheric reactions of organic compounds. Atmospheric Environment, 2007, 41, 80-117.	4.1	15
27	Evaluation of Î±- and Î²-pinene degradation in the detailed tropospheric chemistry mechanism, MCM v3.1, using environmental chamber data. Journal of Atmospheric Chemistry, 2007, 57, 171-202.	3.2	22
28	Evaluation of alkene degradation in the detailed tropospheric chemistry mechanism, MCM v3, using environmental chamber data. Journal of Atmospheric Chemistry, 2006, 55, 55-79.	3.2	19
29	A new environmental chamber for evaluation of gas-phase chemical mechanisms and secondary aerosol formation. Atmospheric Environment, 2005, 39, 7768-7788.	4.1	192
30	The Ozone Formation Potential of 1-Bromo-Propane. Journal of the Air and Waste Management Association, 2003, 53, 262-272.	1.9	4
31	Uncertainty analysis of chamber-derived incremental reactivity estimates for n-butyl acetate and 2-butoxy ethanol. Atmospheric Environment, 2002, 36, 115-135.	4.1	5
32	The concept of species age in photochemical modeling. Atmospheric Environment, 1998, 32, 3403-3413.	4.1	6
33	The Reactions of Selected Acetates with the OH Radical in the Presence of NO:Â Novel Rearrangement of Alkoxy Radicals of Structure RC(O)OCH(OÌ‡)Å”. Journal of Physical Chemistry A, 1998, 102, 2316-2321.	2.5	68
34	Investigation of the atmospheric reactions of chloropicrin. Atmospheric Environment, 1997, 31, 1425-1439.	4.1	36
35	Condensed atmospheric photooxidation mechanisms for isoprene. Atmospheric Environment, 1996, 30, 4275-4290.	4.1	140
36	Rate constants for the reactions of O(3P) with selected monoterpenes. International Journal of Chemical Kinetics, 1996, 28, 1-8.	1.6	7

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37	Development and evaluation of a detailed mechanism for the atmospheric reactions of isoprene and NOx. International Journal of Chemical Kinetics, 1996, 28, 497-530.	1.6	210
38	Development and evaluation of a detailed mechanism for the atmospheric reactions of isoprene and NOx. International Journal of Chemical Kinetics, 1996, 28, 497-530.	1.6	1
39	Environmental chamber study of maximum incremental reactivities of volatile organic compounds. Atmospheric Environment, 1995, 29, 2499-2511.	4.1	115
40	Computer modeling of environmental chamber measurements of maximum incremental reactivities of volatile organic compounds. Atmospheric Environment, 1995, 29, 2513-2527.	4.1	137
41	Development of Ozone Reactivity Scales for Volatile Organic Compounds. Journal of the Air and Waste Management Association, 1994, 44, 881-899.	0.6	1,037
42	Evaluation of a detailed gas-phase atmospheric reaction mechanism using environmental chamber data. Atmospheric Environment Part A General Topics, 1991, 25, 2771-2806.	1.3	69
43	Thermal decomposition of peroxyacetyl nitrate and reactions of acetyl peroxy radicals with nitric oxide and nitrogen dioxide over the temperature range 283-313 K. The Journal of Physical Chemistry, 1991, 95, 2434-2437.	2.9	63
44	Products of the gas-phase reaction of methyltert-butyl ether with the OH radical in the presence of NOx. International Journal of Chemical Kinetics, 1991, 23, 1003-1015.	1.6	63
45	Reactions of alkoxy radicals under atmospheric conditions: The relative importance of decomposition versus reaction with O2. Journal of Atmospheric Chemistry, 1991, 13, 195-210.	3.2	83
46	A detailed mechanism for the gas-phase atmospheric reactions of organic compounds. Atmospheric Environment Part A General Topics, 1990, 24, 481-518.	1.3	457
47	Aggregation and analysis of volatile organic compound emissions for regional modeling. Atmospheric Environment Part A General Topics, 1990, 24, 1107-1133.	1.3	213
48	Formation of ring-retaining products from the OH radical-initiated reactions of benzene and toluene. International Journal of Chemical Kinetics, 1989, 21, 801-827.	1.6	162
49	Alkyl nitrate formation from the atmospheric photoxidation of alkanes; a revised estimation method. Journal of Atmospheric Chemistry, 1989, 8, 165-173.	3.2	132
50	Computer modeling study of incremental hydrocarbon reactivity. Environmental Science & Technology, 1989, 23, 864-880.	10.0	171
51	An experimental study of incremental hydrocarbon reactivity. Environmental Science & Technology, 1987, 21, 670-679.	10.0	87
52	.alpha.-Dicarbonyl yields from the NOx-air photooxidations of a series of aromatic hydrocarbons in air. Environmental Science & Technology, 1986, 20, 383-387.	10.0	140
53	Measurements of nitrous acid in an urban area. Atmospheric Environment, 1986, 20, 408-409.	1.0	12
54	Atmospheric chemistry of alkanes. Journal of Atmospheric Chemistry, 1985, 3, 377-405.	3.2	105

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55	The wall as a source of hydroxyl radicals in smog chambers. Atmospheric Environment, 1985, 19, 1977-1978.	1.0	5
56	Extent of H-atom abstraction from the reaction of the OH radical with 1-butene under atmospheric conditions. International Journal of Chemical Kinetics, 1985, 17, 725-734.	1.6	42
57	Rate constants for the gas-phase reactions of nitrate radicals with furan, thiophene, and pyrrole at 295 .+-. 1 K and atmospheric pressure. Environmental Science & Technology, 1985, 19, 87-90.	10.0	48
58	Atmospheric chemistry of cis- and trans-3-hexene-2,5-dione. Environmental Science & Technology, 1985, 19, 265-269.	10.0	37
59	Rate constants for the gas phase reactions of OH radicals and O3 with pyrrole at 295 Â± 1 K and atmospheric pressure. Atmospheric Environment, 1984, 18, 2105-2107.	1.0	38
60	Kinetics of the reaction of oh radicals with a series of branched alkanes at 297 Â± 2 K. International Journal of Chemical Kinetics, 1984, 16, 469-481.	1.6	40
61	Kinetics of the gas-phase reactions of NO3radicals with a series of aromatics at 296 Â± 2 K. International Journal of Chemical Kinetics, 1984, 16, 887-898.	1.6	67
62	An investigation of the dark formation of nitrous acid in environmental chambers. International Journal of Chemical Kinetics, 1984, 16, 919-939.	1.6	167
63	Kinetics of the reactions of O3and OH radicals with a series of dialkenes and trialkenes at 294 Â± 2 K. International Journal of Chemical Kinetics, 1984, 16, 967-976.	1.6	11
64	Formation of alkyl nitrates from the reaction of branched and cyclic alkyl peroxy radicals with NO. International Journal of Chemical Kinetics, 1984, 16, 1085-1101.	1.6	75
65	Rate constants for the gas-phase reactions of nitrate radicals with a series of organics in air at 298 .+-. 1 K. The Journal of Physical Chemistry, 1984, 88, 1210-1215.	2.9	202
66	Effect of temperature and pressure on the photochemical reactivity of a representative aviation fuel. Environmental Science & Technology, 1984, 18, 556-561.	10.0	1
67	Atmospheric reactions of N-nitrosodimethylamine and dimethylnitramine. Environmental Science & Technology, 1984, 18, 49-54.	10.0	59
68	Direct determination of the equilibrium constant at 298 K for the nitrogen dioxide + nitrogen trioxide (NO3) .dblarw. nitrogen pentoxide (N2O5) reactions. The Journal of Physical Chemistry, 1984, 88, 3095-3098.	2.9	45
69	Yields of glyoxal and methylglyoxal from the nitrogen oxide(NOx)-air photooxidations of toluene and m- and p-xylene. Environmental Science & Technology, 1984, 18, 981-984.	10.0	71
70	Kinetics and mechanisms of the gas-phase reactions of ozone with organic compounds under atmospheric conditions. Chemical Reviews, 1984, 84, 437-470.	47.7	600
71	Kinetics of the gas-phase reactions of nitrate (NO3) radicals with a series of alkanes at 296 .+-. 2 K. The Journal of Physical Chemistry, 1984, 88, 2361-2364.	2.9	37
72	Rate constants for the gas-phase reactions of OH radicals with a series of bi- and tricycloalkanes at 299 Â± 2 K: Effects of ring strain. International Journal of Chemical Kinetics, 1983, 15, 37-50.	1.6	35

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73	Kinetics of the reactions of O3and OH radicals with furan and thiophene at 298 Â± 2 K. International Journal of Chemical Kinetics, 1983, 15, 51-61.	1.6	77
74	The gas-phase reaction of hydrazine and ozone: A nonphotolytic source of OH radicals for measurement of relative OH radical rate constants. International Journal of Chemical Kinetics, 1983, 15, 619-629.	1.6	36
75	Effects of ring strain on gas-phase rate constants. I. Ozone reactions with cycloalkenes. International Journal of Chemical Kinetics, 1983, 15, 721-731.	1.6	39
76	Effects of ring strain on gas-phase rate constants. 2. OH radical reactions with cycloalkenes. International Journal of Chemical Kinetics, 1983, 15, 1161-1177.	1.6	50
77	Hydroxyl radical rate constants and photolysis rates of .alpha.-dicarbonyls. Environmental Science & Technology, 1983, 17, 479-484.	10.0	137
78	Comment on "Effect of nitrogen oxide emissions on ozone levels in metropolitan regions", "Effect of nitrogen oxide (NOx) emission rates on smog formation in the California South Coast Air Basin", and "Effect of hydrocarbon and nitrogen oxide (NOx) on photochemical smog formation under simulated transport conditions". Environmental Science & Technology, 1983, 17, 54-57.	10.0	15
79	Gas-phase reaction of 1,1-dimethylhydrazine with nitrogen dioxide. The Journal of Physical Chemistry, 1983, 87, 1600-1605.	2.9	15
80	Effects of pressure on product yields in the nitrogen oxide (NOx) photooxidations of selected aromatic hydrocarbons. The Journal of Physical Chemistry, 1983, 87, 1605-1610.	2.9	44
81	Effects of temperature and pressure on alkyl nitrate yields in the nitrogen oxide (NOx) photooxidations of n-pentane and n-heptane. The Journal of Physical Chemistry, 1983, 87, 2012-2018.	2.9	102
82	Observations of nitrous acid in the Los Angeles atmosphere and implications for predictions of ozone-precursor relationships. Environmental Science & Technology, 1982, 16, 414-419.	10.0	235
83	Alkyl nitrate formation from the nitrogen oxide (NOx)-air photooxidations of C2-C8 n-alkanes. The Journal of Physical Chemistry, 1982, 86, 4563-4569.	2.9	327
84	Effects of kinetic mechanisms and hydrocarbon composition on oxidant-precursor relationships predicted by the ekma isopleth technique. Atmospheric Environment, 1982, 16, 113-120.	1.0	16
85	Kinetics of the reactions of OH radicals withn-alkanes at 299 Â± 2 K. International Journal of Chemical Kinetics, 1982, 14, 781-788.	1.6	64
86	Rate constants for the gas-phase reaction of OH radicals with a series of ketones at 299 Â± 2 K. International Journal of Chemical Kinetics, 1982, 14, 839-847.	1.6	50
87	Kinetics of the gas-phase reactions of OH radicals with alkyl nitrates at 299 Â± 2 K. International Journal of Chemical Kinetics, 1982, 14, 919-926.	1.6	44
88	Experimental investigation of chamber-dependent radical sources. International Journal of Chemical Kinetics, 1982, 14, 1071-1103.	1.6	107
89	Effect of peroxyacetyl nitrate on the initiation of photochemical smog. Environmental Science & Technology, 1981, 15, 831-834.	10.0	33
90	Major atmospheric sink for phenol and the cresols. Reaction with the nitrate radical. Environmental Science & Technology, 1981, 15, 829-831.	10.0	71

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91	Reactions of hydrazines with ozone under simulated atmospheric conditions. Environmental Science & Technology, 1981, 15, 823-828.	10.0	37
92	Evidence for chamber-dependent radical sources: Impact on kinetic computer models for air pollution. International Journal of Chemical Kinetics, 1981, 13, 735-740.	1.6	50
93	Gas Phase Reactions of N,N-Dimethylhydrazine with Ozone and NOx in Simulated Atmospheres. ACS Symposium Series, 1981, , 117-131.	0.5	4
94	An Experimental Protocol for the Determination of OH Radical Rate Constants with Organics Using Methyl Nitrite Photolysis as an OH Radical Source. Journal of the Air Pollution Control Association, 1981, 31, 1090-1092.	0.5	183
95	A smog chamber and modeling study of the gas phase NOx-air photooxidation of toluene and the cresols. International Journal of Chemical Kinetics, 1980, 12, 779-836.	1.6	159
96	Smog chamber studies of temperature effects in photochemical smog. Environmental Science & Technology, 1979, 13, 1094-1100.	10.0	28
97	Computer modeling of smog chamber data: Progress in validation of a detailed mechanism for the photooxidation of propene andn-butane in photochemical smog. International Journal of Chemical Kinetics, 1979, 11, 45-101.	1.6	135
98	Effects of ultraviolet spectral distribution on the photochemistry of simulated polluted atmospheres. Atmospheric Environment, 1979, 13, 989-998.	1.0	13
99	Reactions of C2 and C4 .alpha.-hydroxy radicals with oxygen. The Journal of Physical Chemistry, 1979, 83, 2305-2311.	2.9	49
100	Evidence for alkoxy radical isomerization in photooxidations of C4î—¸C6 alkanes under simulated atmospheric conditions. Chemical Physics Letters, 1976, 42, 22-27.	2.6	62
101	Importance of RO2 + nitric oxide in alkyl nitrate formation from C4-C6 alkane photooxidations under simulated atmospheric conditions. The Journal of Physical Chemistry, 1976, 80, 1948-1950.	2.9	95
102	A Method for Evaluating the Atmospheric Ozone Impact of Actual Vehicle Emissions. , 0, , .		46