Max R Mcgillen

List of Publications by Year
in descending order

44 papers	1,167 citations	394421 19 h-index	414414 32 g-index
45 all docs	45 docs citations	45 times ranked	1315 citing authors

#	Article	IF	Citations
1	Criegee Intermediateâ€"Alcohol Reactions, A Potential Source of Functionalized Hydroperoxides in the Atmosphere. ACS Earth and Space Chemistry, 2017, 1, 664-672.	2.7	104
2	Criegee Intermediate Reactions with Carboxylic Acids: A Potential Source of Secondary Organic Aerosol in the Atmosphere. ACS Earth and Space Chemistry, 2018, 2, 833-842.	2.7	102
3	Structural Analysis of Oligomeric Molecules Formed from the Reaction Products of Oleic Acid Ozonolysis. Environmental Science & Technology, 2006, 40, 6674-6681.	10.0	69
4	Temperatureâ€Ðependence of the Rates of Reaction of Trifluoroacetic Acid with Criegee Intermediates. Angewandte Chemie - International Edition, 2017, 56, 9044-9047.	13.8	62
5	Airborne observations of formic acid using a chemical ionization mass spectrometer. Atmospheric Measurement Techniques, 2012, 5, 3029-3039.	3.1	61
6	Atmospheric transformation of enols: A potential secondary source of carboxylic acids in the urban troposphere. Geophysical Research Letters, 2007, 34, .	4.0	55
7	Database for the kinetics of the gas-phase atmospheric reactions of organic compounds. Earth System Science Data, 2020, 12, 1203-1216.	9.9	50
8	Experimental and computational studies of Criegee intermediate reactions with NH₃ and CH₃NH₂. Physical Chemistry Chemical Physics, 2019, 21, 14042-14052.	2.8	46
9	Acid-yield measurements of the gas-phase ozonolysis of ethene as a function of humidity using Chemical Ionisation Mass Spectrometry (CIMS). Atmospheric Chemistry and Physics, 2012, 12, 469-479.	4.9	44
10	Structureâ€"activity relationship (SAR) for the gas-phase ozonolysis of aliphatic alkenes and dialkenes. Physical Chemistry Chemical Physics, 2008, 10, 1757.	2.8	42
11	Gas-Phase Rate Coefficients for the OH + <i>n</i>-, <i>i</i>-, <i>s</i>-, and <i>t</i>-Butanol Reactions Measured Between 220 and 380 K: Non-Arrhenius Behavior and Site-Specific Reactivity. Journal of Physical Chemistry A, 2013, 117, 4636-4656.	2.5	42
12	Ethylenediurea (EDU) mitigates the negative effects of ozone in rice: Insights into its mode of action. Plant, Cell and Environment, 2018, 41, 2882-2898.	5.7	36
13	Is hydrogen abstraction an important pathway in the reaction of alkenes with the OH radical?. Physical Chemistry Chemical Physics, 2007, 9, 4349.	2.8	35
14	An experimental study of incongruent dissolution of CaCO₃ under analogue glacial conditions. Journal of Glaciology, 2005, 51, 383-390.	2.2	33
15	Structureâ€"activity relationship (SAR) for the prediction of gas-phase ozonolysis rate coefficients: an extension towards heteroatomic unsaturated species. Physical Chemistry Chemical Physics, 2011, 13, 2842-2849.	2.8	31
16	Ozonolysis of organic compounds and mixtures in solution. Part I: Oleic, maleic, nonanoic and benzoic acids. Physical Chemistry Chemical Physics, 2009, 11, 1427.	2.8	28
17	Temperature-dependent ozonolysis kinetics of selected alkenes in the gas phase: an experimental and structureâ€"activity relationship (SAR) study. Physical Chemistry Chemical Physics, 2010, 12, 2935.	2.8	28
18	The role of ortho, meta, para isomerism in measured solid state and derived sub-cooled liquid vapour pressures of substituted benzoic acids. RSC Advances, 2012, 2, 4430.	3.6	23

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19	Kinetics and branching ratio studies of the reaction of C2H5O2 + HO2 using chemical ionisation mass spectrometry. Physical Chemistry Chemical Physics, 2007, 9, 4338.	2.8	22
20	Can topological indices be used to predict gas-phase rate coefficients of importance to tropospheric chemistry? Free radical abstraction reactions of alkanes. Atmospheric Environment, 2006, 40, 2488-2500.	4.1	20
21	Kinetics of the CH₃O₂ + HO₂ reaction: A temperature and pressure dependence study using chemical ionization mass spectrometry. International Journal of Chemical Kinetics, 2007, 39, 571-579.	1.6	20
22	Can topological indices be used to predict gas-phase rate coefficients of importance to tropospheric chemistry? Reactions of alkenes with OH, NO3 and O3. Chemosphere, 2006, 65, 2035-2044.	8.2	19
23	Investigating the Tropospheric Chemistry of Acetic Acid Using the Global 3â€Đ Chemistry Transport Model, STOCHEMâ€CRI. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6267-6281.	3.3	19
24	NF₃: UV absorption spectrum temperature dependence and the atmospheric and climate forcing implications. Geophysical Research Letters, 2013, 40, 440-445.	4.0	17
25	Kinetics of the HO2Â+ÂNO2 Reaction: On the impact of new gas-phase kinetic data for the formation of HO2NO2 on HOx, NOx and HO2NO2 levels in the troposphere. Atmospheric Environment, 2011, 45, 6414-6422.	4.1	15
26	UV and infrared absorption spectra, atmospheric lifetimes, and ozone depletion and global warming potentials for CCl₂FCCl₂F (CFC-112), CCl₃CClF₂ (CFC-112a), CCl₃CF₃ (CFC-113a), and CCl₂FCF₃ (CFC-114a).	4.9	13
27	NO₃ chemistry of wildfire emissions: a kinetic study of the gas-phase reactions of furans with the NO₃ radical. Atmospheric Chemistry and Physics, 2022, 22, 1761-1772.	4.9	12
28	<scp>HCFCâ€133a (CF₃CH₂Cl): OH</scp> rate coefficient, <scp>UV</scp> and infrared absorption spectra, and atmospheric implications. Geophysical Research Letters, 2015, 42, 6098-6105.	4.0	11
29	The fate of methyl salicylate in the environment and its role as signal in multitrophic interactions. Science of the Total Environment, 2020, 749, 141406.	8.0	11
30	Temperatureâ€dependent kinetics for the ozonolysis of selected chlorinated alkenes in the gas phase. International Journal of Chemical Kinetics, 2011, 43, 120-129.	1.6	10
31	Determination of gas-phase ozonolysis rate coefficients of a number of sesquiterpenes at elevated temperatures using the relative rate method. Physical Chemistry Chemical Physics, 2012, 14, 6596.	2.8	9
32	CBrF3 (Halon-1301): UV absorption spectrum between 210 and 320K, atmospheric lifetime, and ozone depletion potential. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 306, 13-20.	3.9	9
33	Experimentally Determined Site-Specific Reactivity of the Gas-Phase OH and Cl + <i>i</i>-Butanol Reactions Between 251 and 340 K. Journal of Physical Chemistry A, 2016, 120, 9968-9981.	2.5	9
34	Determination of gas-phase ozonolysis rate coefficients of C8â€“14 terminal alkenes at elevated temperatures using the relative rate method. Physical Chemistry Chemical Physics, 2011, 13, 10965.	2.8	8
35	1,2-Dichlorohexafluoro-cyclobutane (1,2-c-C₄F₆Cl₂, R-316c) a Potent Ozone Depleting Substance and Greenhouse Gas: Atmospheric Loss Processes, Lifetimes, and Ozone Depletion and Global Warming Potentials for the (<i>E</i>) and (<i>Z</i>) Stereoisomers. Journal of Physical Chemistry A, 2013, 117, 11049-11065.	2.5	8
36	CFCl₃ (CFCâ€11): UV absorption spectrum temperature dependence measurements and the impact on its atmospheric lifetime and uncertainty. Geophysical Research Letters, 2013, 40, 4772-4776.	4.0	8

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37	An atmospheric photochemical source of the persistent greenhouse gas CF₄. Geophysical Research Letters, 2015, 42, 9505-9511.	4.0	7
38	Kinetic and product studies of the reactions of NO3 with a series of unsaturated organic compounds. Journal of Environmental Sciences, 2020, 95, 111-120.	6.1	7
39	Gas-phase photodissociation of CF3C(O)Cl between 193 and 280 nm. Chemical Physics Letters, 2015, 639, 189-194.	2.6	6
40	Temperatureâ€Đependence of the Rates of Reaction of Trifluoroacetic Acid with Criegee Intermediates. Angewandte Chemie, 2017, 129, 9172-9175.	2.0	5
41	Gas-Phase Rate Coefficient of OH + 1,2-Epoxybutane Determined between 220 and 950 K. ACS Earth and Space Chemistry, 2021, 5, 960-968.	2.7	5
42	FC(O)C(O)F, FC(O)CF₂C(O)F, and FC(O)CF₂CF₂C(O)F: Ultraviolet and Infrared Absorption Spectra and 248 nm Photolysis Products. Journal of Physical Chemistry A, 2020, 124, 7123-7133.	2.5	3
43	Gas-phase rate coefficient of OHÂ+Âcyclohexene oxide measured from 251 to 373ÂK. Chemical Physics Letters, 2021, 783, 139056.	2.6	3
44	Atmospheric chemistry processes: general discussion. Faraday Discussions, 2017, 200, 353-378.	3.2	0