Toms Sherwen

List of Publications by Year in Descending Order

52 papers	1,131 citations	19 h-index	33 g-index
79 ext. papers	1,477 ext. citations	6.5 avg, IF	4.3 L-index

#	Paper	IF	Citations
52	Iodine chemistry in the chemistry□climate model SOCOL-AERv2-I. *Geoscientific Model Development*, **2021**, 14, 6623-6645	6.3	1
51	Marine iodine emissions in a changing world.. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2021**, 477, 20200824	2.4	8
50	Heterogeneous Nitrate Production Mechanisms in Intense Haze Events in the North China Plain. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD034688	4.4	5
49	Isotopic evidence for acidity-driven enhancement of sulfate formation after SO emission control. *Science Advances*, **2021**, 7,	14.3	6
48	Anthropogenic Impacts on Tropospheric Reactive Chlorine Since the Preindustrial. *Geophysical Research Letters*, **2021**, 48, e2021GL093808	4.9	2
47	Atmospheric-methane source and sink sensitivity analysis using Gaussian process emulation. *Atmospheric Chemistry and Physics*, **2021**, 21, 1717-1736	6.8	0
46	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. *Atmospheric Chemistry and Physics*, **2021**, 21, 13973-13996	6.8	7
45	Influences of oceanic ozone deposition on tropospheric photochemistry. *Atmospheric Chemistry and Physics*, **2020**, 20, 4227-4239	6.8	15
44	Evaluating the impact of blowing-snow sea salt aerosol on springtime BrO and O₃ in the Arctic. *Atmospheric Chemistry and Physics*, **2020**, 20, 7335-7358	6.8	9
43	Estimation of Reactive Inorganic Iodine Fluxes in the Indian and Southern Ocean Marine Boundary Layer **2020**,		1
42	Effects of Sea Salt Aerosol Emissions for Marine Cloud Brightening on Atmospheric Chemistry: Implications for Radiative Forcing. *Geophysical Research Letters*, **2020**, 47, e2019GL085838	4.9	3
41	Global inorganic nitrate production mechanisms: comparison of a global model with nitrate isotope observations. *Atmospheric Chemistry and Physics*, **2020**, 20, 3859-3877	6.8	40
40	Estimation of reactive inorganic iodine fluxes in the Indian and Southern Ocean marine boundary layer. *Atmospheric Chemistry and Physics*, **2020**, 20, 12093-12114	6.8	8
39	Constraining remote oxidation capacity with ATom observations. *Atmospheric Chemistry and Physics* , **2020**, 20, 7753-7781	6.8	18
38	Effect of sea salt aerosol on tropospheric bromine chemistry. *Atmospheric Chemistry and Physics*, **2019**, 19, 6497-6507	6.8	22
37	Importance of reactive halogens in the tropical marine atmosphere: a□regional modelling study using WRF-Chem. *Atmospheric Chemistry and Physics*, **2019**, 19, 3161-3189	6.8	22
36	The role of chlorine in global tropospheric chemistry. *Atmospheric Chemistry and Physics*, **2019**, 19, 3981-4003	6.8	96

35	Global inorganic nitrate production mechanisms: Comparison of a global model with nitrate isotope observations **2019**,		2
34	Influence of bromine and iodine chemistry on annual, seasonal, diurnal, and background ozone: CMAQ simulations over the Northern Hemisphere. *Atmospheric Environment*, **2019**, 213, 395-404	5.3	14
33	A machine-learning-based global sea-surface iodide distribution. *Earth System Science Data*, **2019**, 11, 1239-1262	10.5	17
32	Global sea-surface iodide observations, 1967-2018. *Scientific Data*, **2019**, 6, 286	8.2	16
31	Impacts of bromine and iodine chemistry on tropospheric OH and HO₂: comparing observations with box and global model perspectives. *Atmospheric Chemistry and Physics* , **2018**, 18, 3541-3561	6.8	17
30	The atmospheric impacts of monoterpene ozonolysis on global stabilised Criegee intermediate budgets and SO₂ oxidation: experiment, theory and modelling. *Atmospheric Chemistry and Physics*, **2018**, 18, 6095-6120	6.8	23
29	Observed NO/NO2 Ratios in the Upper Troposphere Imply Errors in NO-NO2-O3 Cycling Kinetics or an Unaccounted NOx Reservoir. *Geophysical Research Letters*, **2018**, 45, 4466-4474	4.9	24
28	DMS oxidation and sulfur aerosol formation in the marine troposphere: a focus on reactive halogen and multiphase chemistry. *Atmospheric Chemistry and Physics*, **2018**, 18, 13617-13637	6.8	62
27	Global simulation of tropospheric chemistry at 12.5 km resolution: performance and evaluation of the GEOS-Chem chemical module (v10-1) within the NASA GEOS Earth System Model (GEOS-5 ESM) **2018**,		1
26	The role of chlorine in tropospheric chemistry **2018**,		1
25	Effect of sea-salt aerosol on tropospheric bromine chemistry **2018**,		1
24	Alpine ice evidence of a three-fold increase in atmospheric iodine deposition since 1950 in Europe due to increasing oceanic emissions. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12136-12141	11.5	34
23	Global simulation of tropospheric chemistry at 12.5 km resolution: performance and evaluation of the GEOS-Chem chemical module (v10-1) within the NASA GEOS Earth system model (GEOS-5 ESM). *Geoscientific Model Development*, **2018**, 11, 4603-4620	6.3	36
22	Seasonal and geographical variability of nitryl chloride and its precursors in Northern Europe. *Atmospheric Science Letters*, **2018**, 19, e844	2.4	9
21	Global impact of nitrate photolysis in sea-salt aerosol on NO_{<i>x</i>}, OH, and O₃ in the marine boundary layer. *Atmospheric Chemistry and Physics*, **2018**, 18, 11185-11203	6.8	38
20	Effects of halogens on European air-quality. *Faraday Discussions*, **2017**, 200, 75-100	3.6	36
19	Importance of reactive halogens in the tropical marine atmosphere: A regional modelling study using WRF-Chem **2017**,		3
18	The atmospheric impacts of monoterpene ozonolysis on global stabilised Criegee intermediate budgets and SO₂ oxidation: experiment, theory and modelling **2017**,		3

17	Sulfate production by reactive bromine: Implications for the global sulfur and reactive bromine budgets. *Geophysical Research Letters*, **2017**, 44, 7069-7078	4.9	43
16	Atmospheric chemistry and the biosphere: general discussion. *Faraday Discussions*, **2017**, 200, 195-228	3.6	1
15	BrO and inferred Br_{<i>y</i>} profiles over the western Pacific: relevance of inorganic bromine sources and a Br_{<i>y</i>} minimum in the aged tropical tropopause layer. *Atmospheric Chemistry and Physics*, **2017**, 17, 15245-15270	6.8	22
14	Halogen chemistry reduces tropospheric O₃ radiative forcing. *Atmospheric Chemistry and Physics*, **2017**, 17, 1557-1569	6.8	35
13	Evidence for renoxification in the tropical marine boundary layer. *Atmospheric Chemistry and Physics*, **2017**, 17, 4081-4092	6.8	26
12	Modeling the observed tropospheric BrO background: Importance of multiphase chemistry and implications for ozone, OH, and mercury. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 11,819	4.4	86
11	Global impacts of tropospheric halogens (Cl, Br, I) on oxidants and composition in GEOS-Chem. *Atmospheric Chemistry and Physics*, **2016**, 16, 12239-12271	6.8	160
10	Iodine impact on tropospheric oxidants: a global model study in GEOS-Chem. *Atmospheric Chemistry and Physics*, **2016**, 16, 1161-1186	6.8	79
9	Atmospheric ethanol in London and the potential impacts of future fuel formulations. *Faraday Discussions*, **2016**, 189, 105-20	3.6	10
8	Halogen chemistry reduces tropospheric O₃ radiative forcing **2016**,		3
7	Global impacts of tropospheric halogens (Cl, Br, I) on oxidants and composition in GEOS-Chem **2016** ,		3
6	Global modeling of tropospheric iodine aerosol. *Geophysical Research Letters*, **2016**, 43, 10012-10019	4.9	13
5	Biofuels and their potential to aid the UK towards achieving emissions reduction policy targets. *Renewable and Sustainable Energy Reviews*, **2012**, 16, 5414-5422	16.2	39
4	Constraining remote oxidation capacity with ATom observations		2
3	Iodine impact on tropospheric oxidants: a global model study in GEOS-Chem		2
2	A machine learning based global sea-surface iodide distribution		2
1	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants		2