Mary E Whelan

List of Publications by Year
in descending order

25 papers	973 citations	567281 15 h-index	580821 25 g-index
43 all docs	43 docs citations	43 times ranked	1533 citing authors

#	Article	IF	Citations
1	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO₂. New Phytologist, 2021, 229, 2413-2445.	7.3	286
2	Reviews and syntheses: Carbonyl sulfide as aÂmulti-scale tracer for carbon and water cycles. Biogeosciences, 2018, 15, 3625-3657.	3.3	98
3	Atmospheric carbonyl sulfide sources from anthropogenic activity: Implications for carbon cycle constraints. Geophysical Research Letters, 2015, 42, 3004-3010.	4.0	83
4	Salt marsh vegetation as a carbonyl sulfide (COS) source to the atmosphere. Atmospheric Environment, 2013, 73, 131-137.	4.1	74
5	Carbonyl sulfide exchange in soils for better estimates of ecosystem carbon uptake. Atmospheric Chemistry and Physics, 2016, 16, 3711-3726.	4.9	54
6	Global gridded anthropogenic emissions inventory of carbonyl sulfide. Atmospheric Environment, 2018, 183, 11-19.	4.1	40
7	Peak growing season gross uptake of carbon in North America is largest in the Midwest USA. Nature Climate Change, 2017, 7, 450-454.	18.8	39
8	Carbonyl sulfide produced by abiotic thermal and photodegradation of soil organic matter from wheat field substrate. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 54-62.	3.0	33
9	Coupled Biological and Abiotic Mechanisms Driving Carbonyl Sulfide Production in Soils. Soil Systems, 2018, 2, 37.	2.6	24
10	Large methyl halide emissions from south Texas salt marshes. Biogeosciences, 2014, 11, 6427-6434.	3.3	23
11	Carbonyl sulfide: comparing a mechanistic representation of the vegetation uptake in a land surface model and the leaf relative uptake approach. Biogeosciences, 2021, 18, 2917-2955.	3.3	21
12	COS-derived GPP relationships with temperature and light help explain high-latitude atmospheric CO ₂ seasonal cycle amplification. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
13	Evaluation of carbonyl sulfide biosphere exchange in the Simple Biosphere Model (SiB4). Biogeosciences, 2021, 18, 6547-6565.	3.3	21
14	Soil exchange rates of COS and CO18O differ with the diversity of microbial communities and their carbonic anhydrase enzymes. ISME Journal, 2019, 13, 290-300.	9.8	20
15	Seasonal Evolution of Canopy Stomatal Conductance for a Prairie and Maize Field in the Midwestern United States from Continuous Carbonyl Sulfide Fluxes. Geophysical Research Letters, 2020, 47, e2019GL085652.	4.0	16
16	Large Uptake of Atmospheric OCS Observed at a Moist Old Growth Forest: Controls and Implications for Carbon Cycle Applications. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3424-3438.	3.0	15
17	Large variability in ecosystem models explains uncertainty in a critical parameter for quantifying GPP with carbonyl sulphide. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 26329.	1.6	14
18	Gridded anthropogenic emissions inventory and atmospheric transport of carbonyl sulfide in the U.S.. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2169-2178.	3.3	14

#	Article	IF	Citations
19	Reduced sulfur trace gas exchange between a seasonally dry grassland and the atmosphere. Biogeochemistry, 2016, 128, 267-280.	3.5	13
20	Ecosystem fluxes of carbonyl sulfide in an old-growth forest: temporal dynamics and responses to diffuse radiation and heat waves. Biogeosciences, 2018, 15, 7127-7139.	3.3	13
21	Plant Uptake of Atmospheric Carbonyl Sulfide in Coast Redwood Forests. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3391-3404.	3.0	11
22	Global modelling of soil carbonyl sulfide exchanges. Biogeosciences, 2022, 19, 2427-2463.	3.3	10
23	Covariation of Airborne Biogenic Tracers (CO₂, COS, and CO) Supports Stronger Than Expected Growing Season Photosynthetic Uptake in the Southeastern US. Global Biogeochemical Cycles, 2021, 35, e2021GB006956.	4.9	7
24	Scientific Communities Striving for a Common Cause: Innovations in Carbon Cycle Science. Bulletin of the American Meteorological Society, 2020, 101, E1537-E1543.	3.3	6
25	Exploring the Potential of Using Carbonyl Sulfide to Track the Urban Biosphere Signal. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034106.	3.3	2