

# Roger Seco

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

2,899  
citations

218677

26  
h-index

189892

50  
g-index

82  
all docs

82  
docs citations

82  
times ranked

3826  
citing authors

#	ARTICLE	IF	CITATIONS
1	Identification and quantification of organic aerosol from cooking and other sources in Barcelona using aerosol mass spectrometer data. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1649-1665.	4.9	449
2	Highly functionalized organic nitrates in the southeast United States: Contribution to secondary organic aerosol and reactive nitrogen budgets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1516-1521.	7.1	269
3	Short-chain oxygenated VOCs: Emission and uptake by plants and atmospheric sources, sinks, and concentrations. <i>Atmospheric Environment</i> , 2007, 41, 2477-2499.	4.1	256
4	Fossil versus contemporary sources of fine elemental and organic carbonaceous particulate matter during the DAURE campaign in Northeast Spain. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 12067-12084.	4.9	157
5	Biomass burning contributions to urban aerosols in a coastal Mediterranean City. <i>Science of the Total Environment</i> , 2012, 427-428, 175-190.	8.0	130
6	Contrasting winter and summer VOC mixing ratios at a forest site in the Western Mediterranean Basin: the effect of local biogenic emissions. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 13161-13179.	4.9	85
7	Isoprene photochemistry over the Amazon rainforest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 6125-6130.	7.1	85
8	Volatility and lifetime against OH heterogeneous reaction of ambient isoprene-epoxydiols-derived secondary organic aerosol (IEPOX-SOA). <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11563-11580.	4.9	82
9	Influences of emission sources and meteorology on aerosol chemistry in a polluted urban environment: results from DISCOVER-AQ California. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 5427-5451.	4.9	80
10	Ecosystem-scale volatile organic compound fluxes during an extreme drought in a broadleaf temperate forest of the Missouri Ozarks (central USA). <i>Global Change Biology</i> , 2015, 21, 3657-3674.	9.5	76
11	Molecular composition of organic aerosols in central Amazonia: an ultra-high-resolution mass spectrometry study. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11899-11913.	4.9	73
12	Floral advertisement scent in a changing plant-pollinators market. <i>Scientific Reports</i> , 2013, 3, 3434.	3.3	71
13	Secondary organic aerosol formation from ambient air in an oxidation flow reactor in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 467-493.	4.9	63
14	Isoprene emission response to drought and the impact on global atmospheric chemistry. <i>Atmospheric Environment</i> , 2018, 183, 69-83.	4.1	62
15	Increase in isoprene and monoterpene emissions after re-watering of droughted <i>Quercus ilex</i> seedlings. <i>Biologia Plantarum</i> , 2009, 53, 351-354.	1.9	61
16	Airborne observations reveal elevational gradient in tropical forest isoprene emissions. <i>Nature Communications</i> , 2017, 8, 15541.	12.8	53
17	Instrument intercomparison of glyoxal, methyl glyoxal and NO <sub>2</sub> under simulated atmospheric conditions. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 1835-1862.	3.1	50
18	Effects of sources and meteorology on particulate matter in the Western Mediterranean Basin: An overview of the DAURE campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 4978-5010.	3.3	49

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19	Volatile organic compounds in the western Mediterranean basin: urban and rural winter measurements during the DAURE campaign. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 4291-4306.	4.9	46
20	Short-chained oxygenated VOC emissions in <i>Pinus halepensis</i> in response to changes in water availability. <i>Acta Physiologiae Plantarum</i> , 2009, 31, 311-318.	2.1	44
21	Metabolic responses of <i>Quercus ilex</i> seedlings to wounding analysed with nuclear magnetic resonance profiling. <i>Plant Biology</i> , 2014, 16, 395-403.	3.8	44
22	New Particle Formation and Growth in an Isoprene-Dominated Ozark Forest: From Sub-5Ånm to CCN-Active Sizes. <i>Aerosol Science and Technology</i> , 2014, 48, 1285-1298.	3.1	41
23	Photosynthesis, stomatal conductance and terpene emission response to water availability in dry and mesic Mediterranean forests. <i>Trees - Structure and Function</i> , 2016, 30, 749-759.	1.9	38
24	Formaldehyde emission and uptake by Mediterranean trees <i>Quercus ilex</i> and <i>Pinus halepensis</i> . <i>Atmospheric Environment</i> , 2008, 42, 7907-7914.	4.1	37
25	An ecosystem-scale perspective of the net land methanol flux: synthesis of micrometeorological flux measurements. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 7413-7427.	4.9	31
26	OH reactivity in urban and suburban regions in Seoul, South Korea – an East Asian megacity in a rapid transition. <i>Faraday Discussions</i> , 2016, 189, 231-251.	3.2	31
27	Isoprene photo-oxidation products quantify the effect of pollution on hydroxyl radicals over Amazonia. <i>Science Advances</i> , 2018, 4, eaar2547.	10.3	28
28	Volatile organic compound fluxes in a subarctic peatland and lake. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 13399-13416.	4.9	28
29	GLOVOCS - Master compound assignment guide for proton transfer reaction mass spectrometry users. <i>Atmospheric Environment</i> , 2021, 244, 117929.	4.1	26
30	Seasonal changes in the daily emission rates of terpenes by <i>Quercus ilex</i> and the atmospheric concentrations of terpenes in the natural park of Montseny, NE Spain. <i>Journal of Atmospheric Chemistry</i> , 2012, 69, 215-230.	3.2	25
31	Integration of airborne and ground observations of nitryl chloride in the Seoul metropolitan area and the implications on regional oxidation capacity during KORUS-AQ 2016. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 12779-12795.	4.9	24
32	Intercomparison of OH and OH reactivity measurements in a high isoprene and low NO environment during the Southern Oxidant and Aerosol Study (SOAS). <i>Atmospheric Environment</i> , 2018, 174, 227-236.	4.1	22
33	Methanol as a signal triggering isoprenoid emissions and photosynthetic performance in <i>Quercus ilex</i> . <i>Acta Physiologiae Plantarum</i> , 2011, 33, 2413-2422.	2.1	21
34	PTR-TOF-MS eddy covariance measurements of isoprene and monoterpene fluxes from an eastern Amazonian rainforest. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 7179-7191.	4.9	21
35	The Controlling Factors of Photochemical Ozone Production in Seoul, South Korea. <i>Aerosol and Air Quality Research</i> , 2018, 18, 2253-2261.	2.1	18
36	Global Perspective of Drought Impacts on Ozone Pollution Episodes. <i>Environmental Science &amp; Technology</i> , 2022, 56, 3932-3940.	10.0	17

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37	The Role of Frass and Cocoon Volatiles in Host Location by <i>Monodontomerus aeneus</i> , a Parasitoid of Megachilid Solitary Bees. <i>Environmental Entomology</i> , 2011, 40, 126-131.	1.4	16
38	A new paradigm of quantifying ecosystem stress through chemical signatures. <i>Ecosphere</i> , 2016, 7, e01559.	2.2	16
39	Large drought-induced variations in oak leaf volatile organic compound emissions during PINOT NOIR 2012. <i>Chemosphere</i> , 2016, 146, 8-21.	8.2	16
40	Drought impacts on photosynthesis, isoprene emission and atmospheric formaldehyde in a mid-latitude forest. <i>Atmospheric Environment</i> , 2017, 167, 190-201.	4.1	16
41	Springtime ecosystem-scale monoterpene fluxes from Mediterranean pine forests across a precipitation gradient. <i>Agricultural and Forest Meteorology</i> , 2017, 237-238, 150-159.	4.8	15
42	Evaluation of semi-static enclosure technique for rapid surveys of biogenic volatile organic compounds (BVOCs) emission measurements. <i>Atmospheric Environment</i> , 2019, 212, 1-5.	4.1	14
43	Floral Scent Composition and Fine-Scale Timing in Two Moth-Pollinated Hawaiian <i>Schiedea</i> (Caryophyllaceae). <i>Frontiers in Plant Science</i> , 2020, 11, 1116.	3.6	13
44	Constraining nucleation, condensation, and chemistry in oxidation flow reactors using size-distribution measurements and aerosol microphysical modeling. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 12433-12460.	4.9	12
45	A MODIS Photochemical Reflectance Index (PRI) as an Estimator of Isoprene Emissions in a Temperate Deciduous Forest. <i>Remote Sensing</i> , 2018, 10, 557.	4.0	10
46	Phenological stage of tundra vegetation controls bidirectional exchange of BVOCs in a climate change experiment on a subarctic heath. <i>Global Change Biology</i> , 2021, 27, 2928-2944.	9.5	10
47	Intensive measurements of gas, water, and energy exchange between vegetation and troposphere during the MONTES campaign in a vegetation gradient from short semi-desertic shrublands to tall wet temperate forests in the NW Mediterranean Basin. <i>Atmospheric Environment</i> , 2013, 75, 348-364.	4.1	9
48	Dynamics of volatile organic compounds in a western Mediterranean oak forest. <i>Atmospheric Environment</i> , 2021, 257, 118447.	4.1	9
49	A tethered-balloon PTRMS sampling approach for surveying of landscape-scale biogenic VOC fluxes. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 2263-2271.	3.1	7
50	Contributions to OH reactivity from unexplored volatile organic compounds measured by PTR-ToF-MS â€” a case study in a suburban forest of the Seoul metropolitan area during the Koreaâ€”United States Air Quality Study (KORUS-AQ) 2016. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6331-6345.	4.9	6
51	Reconciling Observed and Predicted Tropical Rainforest OH Concentrations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	6
52	Impact of Drought on Isoprene Fluxes Assessed Using Field Data, Satellite-Based GLEAM Soil Moisture and HCHO Observations from OMI. <i>Remote Sensing</i> , 2022, 14, 2021.	4.0	5
53	The role of a suburban forest in controlling vertical trace gas and OH reactivity distributions â€” a case study for the Seoul metropolitan area. <i>Faraday Discussions</i> , 2021, 226, 537-550.	3.2	3
54	BIOMASS BURNING CONTRIBUTIONS TO URBAN AEROSOLS IN A COASTAL MEDITERRANEAN CITY. ISEE Conference Abstracts, 2011, 2011, .	0.0	2

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55	Impact of heat stress on foliar biogenic volatile organic compound emission and gene expression in tomato ( <i>Solanum lycopersicum</i> ) seedlings. <i>Elementa</i> , 2022, 10, .	3.2	2
56	Bidirectional Exchange of Biogenic Volatile Organic Compounds in Subarctic Heath Mesocosms During Autumn Climate Scenarios. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	2
57	Aspectos micrometeorológicos da emissão de monoterpenos em uma floresta na Amazônia central. <i>Ciência E Natura</i> , 0, 40, 150.	0.0	1