Johan Uddling

List of Publications by Year
in descending order

66 papers	4,393 citations	109321 35 h-index	110387 64 g-index
70 all docs	70 docs citations	70 times ranked	5897 citing authors

#	Article	IF	Citations
1	Evaluating the relationship between leaf chlorophyll concentration and SPAD-502 chlorophyll meter readings. Photosynthesis Research, 2007, 91, 37-46.	2.9	585
2	Optimal stomatal behaviour around the world. Nature Climate Change, 2015, 5, 459-464.	18.8	397
3	Acclimation and adaptation components of the temperature dependence of plant photosynthesis at the global scale. New Phytologist, 2019, 222, 768-784.	7.3	171
4	Ozone pollution will compromise efforts to increase global wheat production. Global Change Biology, 2018, 24, 3560-3574.	9.5	163
5	Closing the global ozone yield gap: Quantification and cobenefits for multistress tolerance. Global Change Biology, 2018, 24, 4869-4893.	9.5	163
6	A test of the â€˜oneâ€point methodâ€™ for estimating maximum carboxylation capacity from fieldâ€measured, lightâ€saturated photosynthesis. New Phytologist, 2016, 210, 1130-1144.	7.3	159
7	New critical levels for ozone effects on young trees based on AOT40 and simulated cumulative leaf uptake of ozone. Atmospheric Environment, 2004, 38, 2283-2294.	4.1	157
8	Assessing foliar chlorophyll contents with the SPAD-502 chlorophyll meter: a calibration test with thirteen tree species of tropical rainforest in French Guiana. Annals of Forest Science, 2010, 67, 607-607.	2.0	153
9	Constraints to nitrogen acquisition of terrestrial plants under elevated <scp>CO</scp>₂. Global Change Biology, 2015, 21, 3152-3168.	9.5	146
10	Transpiration of urban trees and its cooling effect in a high latitude city. International Journal of Biometeorology, 2016, 60, 159-172.	3.0	138
11	Yield vs. Quality tradeâ€offs for wheat in response to carbon dioxide and ozone. Global Change Biology, 2012, 18, 596-605.	9.5	114
12	Patchy field sampling biases understanding of climate change impacts across the Arctic. Nature Ecology and Evolution, 2018, 2, 1443-1448.	7.8	112
13	Ozone â€” the persistent menace: interactions with the N cycle and climate change. Current Opinion in Environmental Sustainability, 2014, 9-10, 9-19.	6.3	100
14	A stomatal ozone fluxâ€“response relationship to assess ozone-induced yield loss of winter wheat in subtropical China. Environmental Pollution, 2012, 164, 16-23.	7.5	85
15	Leaf and canopy conductance in aspen and aspen-birch forests under free-air enrichment of carbon dioxide and ozone. Tree Physiology, 2009, 29, 1367-1380.	3.1	84
16	DO₃SE modelling of soil moisture to determine ozone flux to forest trees. Atmospheric Chemistry and Physics, 2012, 12, 5537-5562.	4.9	83
17	Current surface ozone concentrations significantly decrease wheat growth, yield and quality. Science of the Total Environment, 2018, 613-614, 687-692.	8.0	80
18	Photosynthetic temperature responses of tree species in Rwanda: evidence of pronounced negative effects of high temperature in montane rainforest climax species. New Phytologist, 2015, 206, 1000-1012.	7.3	75

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19	Differences in ozone sensitivity among woody species are related to leaf morphology and antioxidant levels. Tree Physiology, 2016, 36, 1105-1116.	3.1	72
20	Dominant effect of increasing forest biomass on evapotranspiration: interpretations of movement in Budyko space. Hydrology and Earth System Sciences, 2018, 22, 567-580.	4.9	65
21	A unifying explanation for variation in ozone sensitivity among woody plants. Global Change Biology, 2018, 24, 78-84.	9.5	62
22	Interactive influences of ozone and climate on streamflow of forested watersheds. Global Change Biology, 2012, 18, 3395-3409.	9.5	57
23	Sap flux in pure aspen and mixed aspen-birch forests exposed to elevated concentrations of carbon dioxide and ozone. Tree Physiology, 2008, 28, 1231-1243.	3.1	56
24	Temperature responses of photosynthesis and respiration in evergreen trees from boreal to tropical latitudes. New Phytologist, 2022, 234, 353-374.	7.3	52
25	Stomatal and non-stomatal fluxes of ozone to a northern mixed hardwood forest. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, 514-525.	1.6	51
26	Mesophyll conductance limitation of photosynthesis in poplar under elevated ozone. Science of the Total Environment, 2019, 657, 136-145.	8.0	48
27	Photosynthetic capacity of tropical montane tree species in relation to leaf nutrients, successional strategy and growth temperature. Oecologia, 2015, 177, 1183-1194.	2.0	46
28	Crop quality under rising atmospheric CO2. Current Opinion in Plant Biology, 2018, 45, 262-267.	7.1	46
29	Negative impact of ozone on the stem basal area increment of mature Norway spruce in south Sweden. Forest Ecology and Management, 2006, 232, 146-151.	3.2	45
30	Carbon stocks and dynamics at different successional stages in an Afromontane tropical forest. Biogeosciences, 2017, 14, 1285-1303.	3.3	44
31	Comparison of crop yield sensitivity to ozone between openâ€top chamber and freeâ€air experiments. Global Change Biology, 2018, 24, 2231-2238.	9.5	41
32	Ozone impairs autumnal resorption of nitrogen from birch (Betula pendula) leaves, causing an increase in whole-tree nitrogen loss through litter fall. Tree Physiology, 2006, 26, 113-120.	3.1	40
33	Physiological acclimation dampens initial effects of elevated temperature and atmospheric CO₂ concentration in mature boreal Norway spruce. Plant, Cell and Environment, 2018, 41, 300-313.	5.7	40
34	Sourceâ€“sink balance of wheat determines responsiveness of grain production to increased [CO2] and water supply. Agriculture, Ecosystems and Environment, 2008, 127, 215-222.	5.3	37
35	Northern Environment Predisposes Birches to Ozone Damage. Plant Biology, 2007, 9, 191-196.	3.8	36
36	Ozone impact on wheat in Europe, Asia and North America â€“ A comparison. Science of the Total Environment, 2019, 664, 908-914.	8.0	36

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37	Influence of Dynamic Ozone Dry Deposition on Ozone Pollution. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032398.	3.3	34
38	Measuring and modelling stomatal conductance and photosynthesis in mature birch in Sweden. Agricultural and Forest Meteorology, 2005, 132, 115-131.	4.8	32
39	Water use by Swedish boreal forests in a changing climate. Functional Ecology, 2016, 30, 690-699.	3.6	31
40	Fertilizer efficiency in wheat is reduced by ozone pollution. Science of the Total Environment, 2017, 607-608, 876-880.	8.0	30
41	Nitrogen application is required to realize wheat yield stimulation by elevated CO₂ but will not remove the CO₂â€induced reduction in grain protein concentration. Global Change Biology, 2019, 25, 1868-1876.	9.5	30
42	Stomatal uptake of O3 in aspen and aspen-birch forests under free-air CO2 and O3 enrichment. Environmental Pollution, 2010, 158, 2023-2031.	7.5	29
43	Mycorrhiza Symbiosis Increases the Surface for Sunlight Capture in Medicago truncatula for Better Photosynthetic Production. PLoS ONE, 2015, 10, e0115314.	2.5	28
44	Limited thermal acclimation of photosynthesis in tropical montane tree species. Global Change Biology, 2021, 27, 4860-4878.	9.5	26
45	Weak vertical canopy gradients of photosynthetic capacities and stomatal responses in a fertile Norway spruce stand. Oecologia, 2013, 173, 1179-1189.	2.0	25
46	Measuring and modelling leaf diffusive conductance in juvenile silver birch, Betula pendula. Trees - Structure and Function, 2004, 18, 686-695.	1.9	23
47	Exposure to moderate concentrations of tropospheric ozone impairs tree stomatal response to carbon dioxide. Environmental Pollution, 2011, 159, 2350-2354.	7.5	23
48	Interacting effects of elevated CO2 and weather variability on photosynthesis of mature boreal Norway spruce agree with biochemical model predictions. Tree Physiology, 2012, 32, 1509-1521.	3.1	23
49	Stomatal CO2 responsiveness and photosynthetic capacity of tropical woody species in relation to taxonomy and functional traits. Oecologia, 2017, 184, 43-57.	2.0	23
50	A reporting format for leaf-level gas exchange data and metadata. Ecological Informatics, 2021, 61, 101232.	5.2	22
51	Complete or overcompensatory thermal acclimation of leaf dark respiration in African tropical trees. New Phytologist, 2021, 229, 2548-2561.	7.3	18
52	Handling the heat â€“ photosynthetic thermal stress in tropical trees. New Phytologist, 2022, 233, 236-250.	7.3	17
53	Effects of ground surface permeability on the growth of urban linden trees. Urban Ecosystems, 2018, 21, 691-696.	2.4	16
54	Climate Sensitivity of Tropical Trees Along an Elevation Gradient in Rwanda. Forests, 2018, 9, 647.	2.1	15

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55	Traits controlling shade tolerance in tropical montane trees. Tree Physiology, 2020, 40, 183-197.	3.1	14
56	Evaluation of simulated ozone effects in forest ecosystems against biomass damage estimates from fumigation experiments. Biogeosciences, 2018, 15, 6941-6957.	3.3	11
57	Temperature acclimation of net photosynthesis and its underlying component processes in four tropical tree species. Tree Physiology, 2022, 42, 1188-1202.	3.1	11
58	Warming Responses of Leaf Morphology Are Highly Variable among Tropical Tree Species. Forests, 2022, 13, 219.	2.1	11
59	Contrasting Dependencies of Photosynthetic Capacity on Leaf Nitrogen in Early- and Late-Successional Tropical Montane Tree Species. Frontiers in Plant Science, 2020, 11, 500479.	3.6	9
60	Changes in stomatal conductance and net photosynthesis during phenological development in spring wheat: implications for gas exchange modelling. International Journal of Biometeorology, 2006, 51, 37-48.	3.0	8
61	Combining carbon and oxygen isotopic signatures to identify ozone-induced declines in tree water-use efficiency. Tree Physiology, 2021, 41, 2234-2244.	3.1	8
62	Stomatal and non-stomatal fluxes of ozone to a northern mixed hardwood forest. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, .	1.6	8
63	Evidence for Impacts of Near-ambient Ozone Concentrations on Vegetation in Southern Sweden. Ambio, 2009, 38, 425-432.	5.5	7
64	Genetic controls of short- and long-term stomatal CO2 responses in Arabidopsis thaliana. Annals of Botany, 2020, 126, 179-190.	2.9	7
65	Letter to the editor regarding Pleijel et al. 2019: Ozone sensitivity of wheat in different continents â€“ An addendum. Science of the Total Environment, 2021, 773, 146335.	8.0	7
66	To what extent do molecular collisions arising from water vapour efflux impede stomatal O3 influx?. Environmental Pollution, 2012, 170, 39-42.	7.5	4