Danielle A Way

List of Publications by Year
in descending order

85 papers	7,683 citations	94381 37 h-index	54882 84 g-index
86 all docs	86 docs citations	86 times ranked	9563 citing authors

#	Article	IF	Citations
1	Temperature response of photosynthesis in C3, C4, and CAM plants: temperature acclimation and temperature adaptation. Photosynthesis Research, 2014, 119, 101-117.	1.6	756
2	A multi-species synthesis of physiological mechanisms in drought-induced tree mortality. Nature Ecology and Evolution, 2017, 1, 1285-1291.	3.4	739
3	Differential responses to changes in growth temperature between trees from different functional groups and biomes: a review and synthesis of data. Tree Physiology, 2010, 30, 669-688.	1.4	663
4	Plant carbon metabolism and climate change: elevated <scp>CO</scp>₂ and temperature impacts on photosynthesis, photorespiration and respiration. New Phytologist, 2019, 221, 32-49.	3.5	571
5	A roadmap for improving the representation of photosynthesis in Earth system models. New Phytologist, 2017, 213, 22-42.	3.5	365
6	Photoperiod constraints on tree phenology, performance and migration in a warming world. Plant, Cell and Environment, 2015, 38, 1725-1736.	2.8	274
7	Thermal acclimation of photosynthesis: on the importance of adjusting our definitions and accounting for thermal acclimation of respiration. Photosynthesis Research, 2014, 119, 89-100.	1.6	258
8	Sunflecks in trees and forests: from photosynthetic physiology to global change biology. Tree Physiology, 2012, 32, 1066-1081.	1.4	248
9	Photoperiodic regulation of the seasonal pattern of photosynthetic capacity and the implications for carbon cycling. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8612-8617.	3.3	247
10	Rubisco, Rubisco activase, and global climate change. Journal of Experimental Botany, 2008, 59, 1581-1595.	2.4	220
11	Role of aquaporins in determining transpiration and photosynthesis in waterâ€stressed plants: crop waterâ€use efficiency, growth and yield. Plant, Cell and Environment, 2015, 38, 1785-1793.	2.8	195
12	Acclimation and adaptation components of the temperature dependence of plant photosynthesis at the global scale. New Phytologist, 2019, 222, 768-784.	3.5	171
13	Non-structural carbohydrates in woody plants compared among laboratories. Tree Physiology, 2015, 35, tpv073.	1.4	163
14	Leaf day respiration: low <scp>CO</scp>₂ flux but high significance for metabolism and carbon balance. New Phytologist, 2017, 216, 986-1001.	3.5	159
15	Elevated growth temperatures reduce the carbon gain of black spruce [<i>Picea mariana</i> (Mill.) B.S.P.]. Global Change Biology, 2008, 14, 624-636.	4.2	154
16	Plant heat stress: Concepts directing future research. Plant, Cell and Environment, 2021, 44, 1992-2005.	2.8	144
17	Growth and physiological responses of isohydric and anisohydric poplars to drought. Journal of Experimental Botany, 2015, 66, 4373-4381.	2.4	137
18	Thermal acclimation of photosynthesis in black spruce [<i>Picea mariana</i> (Mill.) B.S.P.]. Plant, Cell and Environment, 2008, 31, 1250-1262.	2.8	129

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19	Increasing water use efficiency along the C3 to C4 evolutionary pathway: a stomatal optimization perspective. Journal of Experimental Botany, 2014, 65, 3683-3693.	2.4	101
20	The spaceâ€time continuum: the effects of elevated <scp><scp>CO</scp></scp>₂ and temperature on trees and the importance of scaling. Plant, Cell and Environment, 2015, 38, 991-1007.	2.8	100
21	Reviews and syntheses: Carbon use efficiency from organisms to ecosystems â€" definitions, theories, and empirical evidence. Biogeosciences, 2018, 15, 5929-5949.	1.3	98
22	Response of ecosystem intrinsic water use efficiency and gross primary productivity to rising vapor pressure deficit. Environmental Research Letters, 2019, 14, 074023.	2.2	94
23	Systemic effects of rising atmospheric vapor pressure deficit on plant physiology and productivity. Global Change Biology, 2021, 27, 1704-1720.	4.2	92
24	Contrasting acclimation responses to elevated CO₂ and warming between an evergreen and a deciduous boreal conifer. Global Change Biology, 2020, 26, 3639-3657.	4.2	62
25	Tree phenology responses to warming: spring forward, fall back?. Tree Physiology, 2011, 31, 469-471.	1.4	59
26	<scp>CO</scp>₂ studies remain key to understanding a future world. New Phytologist, 2017, 214, 34-40.	3.5	56
27	Enhanced isoprene-related tolerance of heat- and light-stressed photosynthesis at low, but not high, CO2 concentrations. Oecologia, 2011, 166, 273-282.	0.9	51
28	Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in <i>Pinus taeda</i> L.. Global Change Biology, 2010, 16, 1046-1056.	4.2	50
29	Soil-mediated effects of subambient to increased carbon dioxide on grassland productivity. Nature Climate Change, 2012, 2, 742-746.	8.1	49
30	Carbon fluxes acclimate more strongly to elevated growth temperatures than to elevated <scp>CO</scp>₂ concentrations in a northern conifer. Global Change Biology, 2016, 22, 2913-2928.	4.2	49
31	Two decades of sunfleck research: looking back to move forward. Tree Physiology, 2012, 32, 1059-1061.	1.4	48
32	Contribution of Various Carbon Sources Toward Isoprene Biosynthesis in Poplar Leaves Mediated by Altered Atmospheric CO2 Concentrations. PLoS ONE, 2012, 7, e32387.	1.1	47
33	Climate warming causes intensification of the hydrological cycle, resulting in changes to the vernal and autumnal windows in a northern temperate forest. Hydrological Processes, 2015, 29, 3519-3534.	1.1	47
34	Elevated growth temperatures alter hydraulic characteristics in trembling aspen (<i>Populus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 2013, 36, 103-115.	2.8	44
35	Combined effects of rising [CO₂] and temperature on boreal forests: growth, physiology and limitations. Botany, 2014, 92, 425-436.	0.5	44
36	On the variability of the ecosystem response to elevated atmospheric CO2 across spatial and temporal scales at the Duke Forest FACE experiment. Agricultural and Forest Meteorology, 2017, 232, 367-383.	1.9	41

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37	Tracking the origins of the Kok effect, 70 years after its discovery. New Phytologist, 2017, 214, 506-510.	3.5	40
38	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.	2.8	40
39	Civil disobedience movements such as School Strike for the Climate are raising public awareness of the climate change emergency. Global Change Biology, 2020, 26, 1042-1044.	4.2	40
40	Essential outcomes for COP26. Global Change Biology, 2022, 28, 1-3.	4.2	40
41	Increasing atmospheric <scp>CO</scp>₂ reduces metabolic and physiological differences between isopreneâ€and nonâ€isopreneâ€emitting poplars. New Phytologist, 2013, 200, 534-546.	3.5	39
42	Kudzu [Pueraria montana (Lour.) Merr. Variety lobata]: A new source of carbohydrate for bioethanol production. Biomass and Bioenergy, 2009, 33, 57-61.	2.9	36
43	Contrasting acclimation abilities of two dominant boreal conifers to elevated CO₂ and temperature. Plant, Cell and Environment, 2018, 41, 1331-1345.	2.8	36
44	Water transport through tall trees: A vertically explicit, analytical model of xylem hydraulic conductance in stems. Plant, Cell and Environment, 2018, 41, 1821-1839.	2.8	36
45	Warming delays autumn declines in photosynthetic capacity in a boreal conifer, Norway spruce (<i>Picea abies</i>). Tree Physiology, 2015, 35, 1303-1313.	1.4	35
46	Can leaf net photosynthesis acclimate to rising and more variable temperatures?. Plant, Cell and Environment, 2019, 42, 1913-1928.	2.8	35
47	On the role of ecological adaptation and geographic distribution in the response of trees to climate change. Tree Physiology, 2011, 31, 1273-1276.	1.4	34
48	Diurnal and seasonal variation in light and dark respiration in field-grown<i>Eucalyptus pauciflora</i>. Tree Physiology, 2015, 35, 840-849.	1.4	33
49	Autumn photosynthetic decline and growth cessation in seedlings of white spruce are decoupled under warming and photoperiod manipulations. Plant, Cell and Environment, 2017, 40, 1296-1316.	2.8	32
50	Seed quality and carbon primary metabolism. Plant, Cell and Environment, 2019, 42, 2776-2788.	2.8	32
51	Responses of respiration in the light to warming in fieldâ€grown trees: a comparison of the thermal sensitivity of the Kok and Laisk methods. New Phytologist, 2019, 222, 132-143.	3.5	32
52	How well do stomatal conductance models perform on closing plant carbon budgets? A test using seedlings grown under current and elevated air temperatures. Journal of Geophysical Research, 2011, 116, .	3.3	28
53	Limited thermal acclimation of photosynthesis in tropical montane tree species. Global Change Biology, 2021, 27, 4860-4878.	4.2	26
54	A hot and dry future: warming effects on boreal tree drought tolerance. Tree Physiology, 2013, 33, 1003-1005.	1.4	23

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55	Improving models of photosynthetic thermal acclimation: Which parameters are most important and how many should be modified?. Global Change Biology, 2018, 24, 1580-1598.	4.2	23
56	A reporting format for leaf-level gas exchange data and metadata. Ecological Informatics, 2021, 61, 101232.	2.3	22
57	How well do growing season dynamics of photosynthetic capacity correlate with leaf biochemistry and climate fluctuations?. Tree Physiology, 2017, 37, 879-888.	1.4	21
58	Parasitic plants and forests: a climate change perspective. Tree Physiology, 2011, 31, 1-2.	1.4	20
59	What lies between: the evolution of stomatal traits on the road to C₄ photosynthesis. New Phytologist, 2012, 193, 291-293.	3.5	18
60	Is the Kok effect a respiratory phenomenon? Metabolic insight using ¹³C labeling in <i>Helianthus annuus</i> leaves. New Phytologist, 2020, 228, 1243-1255.	3.5	18
61	Will rising CO2 and temperatures exacerbate the vulnerability of trees to drought?. Tree Physiology, 2013, 33, 775-778.	1.4	17
62	Estimation of the whole-plant CO2 compensation point of tobacco (Nicotiana tabacum L.). Global Change Biology, 2005, 11, 050922094851001-???.	4.2	16
63	Just the right temperature. Nature Ecology and Evolution, 2019, 3, 718-719.	3.4	15
64	The effect of carbon and nutrient loading during nursery culture on the growth of black spruce seedlings: a six-year field study. New Forests, 2007, 34, 307-312.	0.7	11
65	Tree competition and defense against herbivores: currency matters when counting the cost. Tree Physiology, 2011, 31, 579-581.	1.4	11
66	The bigger they are, the harder they fall: CO2 concentration and tree size affect drought tolerance. Tree Physiology, 2011, 31, 115-116.	1.4	11
67	Wheat respiratory O2 consumption falls with night warming alongside greater respiratory CO2 loss and reduced biomass. Journal of Experimental Botany, 2022, 73, 915-926.	2.4	11
68	Late winter light exposure increases summer growth in the grass Poa pratensis : Implications for snow removal experiments and winter melt events. Environmental and Experimental Botany, 2016, 131, 32-38.	2.0	9
69	Photosynthetic and Respiratory Responses of Two Bog Shrub Species to Whole Ecosystem Warming and Elevated CO2 at the Boreal-Temperate Ecotone. Frontiers in Forests and Global Change, 2019, 2, .	1.0	9
70	Modelled net carbon gain responses to climate change in boreal trees: Impacts of photosynthetic parameter selection and acclimation. Global Change Biology, 2019, 25, 1445-1465.	4.2	9
71	Warming induces divergent stomatal dynamics in coâ€occurring boreal trees. Global Change Biology, 2021, 27, 3079-3094.	4.2	9
72	Warming puts the squeeze on photosynthesis â€“ lessons from tropical trees. Journal of Experimental Botany, 2017, 68, 2073-2077.	2.4	8

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73	Scaling plant responses to high temperature from cell to ecosystem. Plant, Cell and Environment, 2021, 44, 1987-1991.	2.8	8
74	Mechanisms for minimizing heightâ€related stomatal conductance declines in tall vines. Plant, Cell and Environment, 2019, 42, 3121-3139.	2.8	7
75	Reducing model uncertainty of climate change impacts on high latitude carbon assimilation. Global Change Biology, 2022, 28, 1222-1247.	4.2	6
76	Climateâ€smart agriculture and forestry: maintaining plant productivity in a changing world while minimizing production system effects on climate. Plant, Cell and Environment, 2015, 38, 1683-1685.	2.8	5
77	Warming and elevated CO2 alter tamarack C fluxes, growth and mortality: evidence for heat stress-related C starvation in the absence of water stress. Tree Physiology, 2021, 41, 2341-2358.	1.4	5
78	Nitrogen fertilisation influences low CO2 effects on plant performance. Functional Plant Biology, 2020, 47, 134.	1.1	5
79	Uncertainty and risk: purchase intentions of new and expectant adopting parents. Young Consumers, 2013, 14, 79-88.	2.3	4
80	Respiratory and Photosynthetic Responses of Antarctic Vascular Plants Are Differentially Affected by CO2 Enrichment and Nocturnal Warming. Plants, 2022, 11, 1520.	1.6	4
81	The effects of rising CO₂ concentrations on terrestrial systems: scaling it up. New Phytologist, 2021, 229, 2383-2385.	3.5	3
82	Stomatal conductance, not biochemistry, drives low temperature acclimation of photosynthesis in <i>Populus balsamifera</i>, regardless of nitrogen availability. Plant Biology, 2022, 24, 766-779.	1.8	2
83	Announcing <i>GCB</i> reviews â€“ The past, present and future of global change biology at your fingertips. Global Change Biology, 2021, 27, 1326-1327.	4.2	1
84	Chapter 1 Leaf Carbon Flux Responses to Climate Change: Challenges and Opportunities. Advances in Photosynthesis and Respiration, 2021, , 3-13.	1.0	0
85	Chapter 4 Photosynthetic Acclimation to Temperature and CO2: The Role of Leaf Nitrogen. Advances in Photosynthesis and Respiration, 2021, , 79-101.	1.0	0