Michael E Loik

List of Publications by Year
in descending order

63	5,559	136885	123376
papers	citations	32 h-index	61 g-index

65	65	65	6869
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Convergence across biomes to a common rain-use efficiency. Nature, 2004, 429, 651-654.	13.7	968
2	Assessing the Response of Terrestrial Ecosystems to Potential Changes in Precipitation. BioScience, 2003, 53, 941.	2.2	680
3	A multi-scale perspective of water pulses in dryland ecosystems: climatology and ecohydrology of the western USA. Oecologia, 2004, 141, 269-281.	0.9	459
4	An Evolutionary Approach to Understanding the Biology of Invasions: Local Adaptation and General-Purpose Genotypes in the Weed Verbascum thapsus. Conservation Biology, 2003, 17, 59-72.	2.4	326
5	Quantifying ecological memory in plant and ecosystem processes. Ecology Letters, 2015, 18, 221-235.	3.0	324
6	Thresholds, memory, and seasonality: understanding pulse dynamics in arid/semi-arid ecosystems. Oecologia, 2004, 141, 191-193.	0.9	309
7	Characterizing differences in precipitation regimes of extreme wet and dry years: implications for climate change experiments. Global Change Biology, 2015, 21, 2624-2633.	4.2	233
8	Pushing precipitation to the extremes in distributed experiments: recommendations for simulating wet and dry years. Global Change Biology, 2017, 23, 1774-1782.	4.2	132
9	Title is missing!. Plant Ecology, 2000, 148, 183-193.	0.7	131
10	Tropicalization of temperate ecosystems in North America: The northward range expansion of tropical organisms in response to warming winter temperatures. Global Change Biology, 2021, 27, 3009-3034.	4.2	108
11	The temperature responses of soil respiration in deserts: a seven desert synthesis. Biogeochemistry, 2011, 103, 71-90.	1.7	101
12	Differential daytime and nightâ€time stomatal behavior in plants from North American deserts. New Phytologist, 2012, 194, 464-476.	3.5	99
13	Genetic variation in circadian regulation of nocturnal stomatal conductance enhances carbon assimilation and growth. Plant, Cell and Environment, 2016, 39, 3-11.	2.8	93
14	Wavelengthâ€Selective Solar Photovoltaic Systems: Powering Greenhouses for Plant Growth at the Foodâ€Energyâ€Water Nexus. Earth's Future, 2017, 5, 1044-1053.	2.4	90
15	Effects of an increase in summer precipitation on leaf, soil, and ecosystem fluxes of CO2 and H2O in a sotol grassland in Big Bend National Park, Texas. Oecologia, 2007, 151, 704-718.	0.9	80
16	Utilizing intraspecific variation in phenotypic plasticity to bolster agricultural and forest productivity under climate change. Plant, Cell and Environment, 2015, 38, 1752-1764.	2.8	74
17	Gas exchange and chlorophyll fluorescence responses of three south-western Yucca species to elevated CO2 and high temperature. Plant, Cell and Environment, 1998, 21, 1275-1283.	2.8	69
18	Photosynthetic responses of Mojave Desert shrubs to free air CO2 enrichment are greatest during wet years. Global Change Biology, 2003, 9, 276-285.	4.2	69

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19	Photosynthetic responses to a climate-warming manipulation for contrasting meadow species in the Rocky Mountains, Colorado, USA. Functional Ecology, 2000, 14, 166-175.	1.7	66
20	Sensitivity of water relations and photosynthesis to summer precipitation pulses for Artemisia tridentata and Purshia tridentata. Plant Ecology, 2007, 191, 95-108.	0.7	63
21	Effects of Changing Climate on the Hydrological Cycle in Cold Desert Ecosystems of the Great Basin and Columbia Plateau. Rangeland Ecology and Management, 2019, 72, 1-12.	1.1	59
22	In situ photosynthetic freezing tolerance for plants exposed to a global warming manipulation in the Rocky Mountains, Colorado, USA. New Phytologist, 2004, 162, 331-341.	3.5	56
23	Global change effects on <scp>B</scp>romus tectorum <scp>L</scp>. (<scp>P</scp>oaceae) at its highâ€elevation range margin. Global Change Biology, 2013, 19, 161-172.	4.2	52
24	Reproductive and physiological responses to simulated climate warming for four subalpine species. New Phytologist, 2007, 173, 121-134.	3.5	46
25	Differential responses of soil bacteria and fungi to altered precipitation in a meadow steppe. Geoderma, 2021, 384, 114812.	2.3	45
26	Photosynthetic Responses to Light for Rainforest Seedlings Planted in Abandoned Pasture, Costa Rica. Restoration Ecology, 1999, 7, 382-391.	1.4	44
27	Effects of climate and snow depth on Bromus tectorum population dynamics at high elevation. Oecologia, 2010, 164, 821-832.	0.9	42
28	Freezing Tolerance and Water Relations of Opuntia Fragilis from Canada and the United States. Ecology, 1993, 74, 1722-1732.	1.5	41
29	High-temperature tolerance of Artemisia tridentata and Potentilla gracilis under a climate change manipulation. Oecologia, 1996, 108, 224-231.	0.9	41
30	Photosynthetic responses of tree seedlings in grass and under shrubs in early-successional tropical old fields, Costa Rica. Oecologia, 2001, 127, 40-50.	0.9	41
31	Influence of summer marine fog and low cloud stratus on water relations of evergreen woody shrubs (Arctostaphylos: Ericaceae) in the chaparral of central California. Oecologia, 2012, 170, 325-337.	0.9	40
32	Changes in water relations for leaves exposed to a climate-warming manipulation in the Rocky Mountains of Colorado. Environmental and Experimental Botany, 1997, 37, 115-123.	2.0	37
33	Nitrogen Addition Increases the Sensitivity of Photosynthesis to Drought and Re-watering Differentially in C3 Versus C4 Grass Species. Frontiers in Plant Science, 2019, 10, 815.	1.7	34
34	Title is missing!. Plant Ecology, 2000, 146, 195-204.	0.7	32
35	Microclimate, freezing tolerance, and cold acclimation along an elevation gradient for seedlings of the Great Basin Desert shrub, Artemisia tridentata. Journal of Arid Environments, 2003, 54, 769-782.	1.2	32
36	Lightâ€limited photosynthesis under energyâ€saving film decreases eggplant yield. Food and Energy Security, 2020, 9, e245.	2.0	31

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37	Photosynthetic responses of Larrea tridentata to seasonal temperature extremes under elevated CO 2. New Phytologist, 2004, 162, 323-330.	3.5	29
38	Water relations and mucopolysaccharide increases for a winter hardy cactus during acclimation to subzero temperatures. Oecologia, 1991, 88, 340-346.	0.9	27
39	Low temperature tolerance and cold acclimation for seedlings of three Mojave Desert Yucca species exposed to elevated CO2. Journal of Arid Environments, 2000, 46, 43-56.	1.2	27
40	Impacts of long-term snow climate change on a high-elevation cold desert shrubland, California, USA. Plant Ecology, 2013, 214, 255-266.	0.7	23
41	Variation in phenotypic plasticity for native and invasive populations of Bromus tectorum. Biological Invasions, 2014, 16, 2627-2638.	1.2	23
42	Exogenous Abscisic Acid Mimics Cold Acclimation for Cacti Differing in Freezing Tolerance. Plant Physiology, 1993, 103, 871-876.	2.3	22
43	The relative importance of climate change and the physiological effects of CO2 on freezing tolerance for the future distribution of Yucca brevifolia. Global and Planetary Change, 2003, 36, 137-146.	1.6	22
44	The effect of cactus spines on light interception and Photosystem II for three sympatric species ofOpuntiafrom the Mojave Desert. Physiologia Plantarum, 2008, 134, 87-98.	2.6	22
45	Coastal low cloudiness and fog enhance crop water use efficiency in a California agricultural system. Agricultural and Forest Meteorology, 2018, 252, 109-120.	1.9	22
46	Combined drought and episodic freezing effects on seedlings of low- and high-elevation subspecies of sagebrush (Artemisia tridentata). Physiologia Plantarum, 2007, 130, 207-217.	2.6	21
47	Photosynthesis and carbon allocation are both important predictors of genotype productivity responses to elevated CO2 in Eucalyptus camaldulensis. Tree Physiology, 2018, 38, 1286-1301.	1.4	21
48	Water relations and photosynthesis along an elevation gradient for Artemisia tridentata during an historic drought. Oecologia, 2016, 181, 65-76.	0.9	19
49	Droughtâ€Net rainfall shelters did not cause nondrought effects on photosynthesis for California central coast plants. Ecohydrology, 2019, 12, e2138.	1.1	19
50	Microhabitat and Diel Tissue Acidity Changes for Two Sympatric Cactus Species Differing in Growth Habit. Journal of Ecology, 1991, 79, 167.	1.9	18
51	Elevated nitrogen effects on <scp>B</scp>romus tectorum dominance and native plant diversity in an arid montane ecosystem. Applied Vegetation Science, 2013, 16, 598-609.	0.9	16
52	Leaf traits and phylogeny explain plant survival and community dynamics in response to extreme drought in a restored coastal grassland. Journal of Applied Ecology, 2021, 58, 1670-1680.	1.9	14
53	Maritime climate influence on chaparral composition and diversity in the coast range of central California. Ecology and Evolution, 2014, 4, 3662-3674.	0.8	12
54	Plant Uptake of Atmospheric Carbonyl Sulfide in Coast Redwood Forests. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3391-3404.	1.3	11

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55	Water and Lightâ€Use Efficiency Are Enhanced Under Summer Coastal Fog in a California Agricultural System. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006193.	1.3	11
56	Impact of intra- versus inter-annual snow depth variation on water relations and photosynthesis for two Great Basin Desert shrubs. Oecologia, 2015, 178, 403-414.	0.9	8
57	Simulating International Drought Experiment field observations using the Community Land Model. Agricultural and Forest Meteorology, 2019, 266-267, 173-183.	1.9	8
58	Adjustments in physiological and morphological traits suggest droughtâ€induced competitive release of some California plants. Ecology and Evolution, 2022, 12, e8773.	0.8	7
59	Relationships between climate of origin and photosynthetic responses to an episodic heatwave depend on growth CO2 concentration for Eucalyptus camaldulensis var. camaldulensis. Functional Plant Biology, 2017, 44, 1053.	1.1	4
60	A spring rainfall pulse causes greater in situ photosynthetic upregulation for Bromus tectorum compared to co-occurring native herbaceous species. Environmental and Experimental Botany, 2017, 143, 51-58.	2.0	2
61	Photosynthesis of seedlings of Otoba novogranatensis (Myristicaceae) and Ruagea glabra (Meliaceae) in abandoned pasture, secondary forest and plantation habitats in Costa Rica. Revista De Biologia Tropical, 2013, 61, 1493-507.	0.1	1
62	There's no place like home. Frontiers in Ecology and the Environment, 2011, 9, 318-318.	1.9	0
63	Photosynthetic sensitivity to historic meteorological variability for conifers in the eastern Sierra Nevada. International Journal of Biometeorology, 2021, 65, 851-863.	1.3	0