Michael F Allen

List of Publications by Citations

117	7,555	49	85
papers	citations	h-index	g-index
126	8,270	5.8	6.01
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
117	FINE ROOT ARCHITECTURE OF NINE NORTH AMERICAN TREES. *Ecological Monographs*, **2002**, 72, 293-309	9	618
116	Direct nitrogen and phosphorus limitation of arbuscular mycorrhizal fungi: a model and field test. *New Phytologist*, **2002**, 155, 507-515	9.8	340
115	The Spread of Va Mycorrhizal Fungal Hyphae in the Soil: Inoculum Types and External Hyphal Architecture. *Mycologia*, **1991**, 83, 409-418	2.4	248
114	Mycorrhizal Fungi: Highways for Water and Nutrients in Arid Soils. *Vadose Zone Journal*, **2007**, 6, 291-297	2.7	243
113	COUPLING FINE ROOT DYNAMICS WITH ECOSYSTEM CARBON CYCLING IN BLACK SPRUCE FORESTS OF INTERIOR ALASKA. *Ecological Monographs*, **2003**, 73, 643-662	9	200
112	COMPARATIVE WATER RELATIONS AND PHOTOSYNTHESIS OF MYCORRHIZAL AND NON-MYCORRHIZAL BOUTELOUA GRACILIS H.B.K. LAG EX STEUD.. *New Phytologist*, **1981**, 88, 683-693	9.8	188
111	Direct nocturnal water transfer from oaks to their mycorrhizal symbionts during severe soil drying. *Oecologia*, **2003**, 134, 55-64	2.9	177
110	INFLUENCE OF VESICULAR-ARBUSCULAR MYCORRHIZAE ON WATER MOVEMENT THROUGH BOUTELOUA GRACILIS (H.B.K.) LAG EX STEUD*. *New Phytologist*, **1982**, 91, 191-196	9.8	177
109	EFFECTS OF TWO SPECIES OF V A MYCORRHIZAL FUNGI ON DROUGHT TOLERANCE OF WINTER WHEAT*. *New Phytologist*, **1983**, 93, 67-76	9.8	174
108	Common mycorrhizal networks provide a potential pathway for the transfer of hydraulically lifted water between plants. *Journal of Experimental Botany*, **2007**, 58, 1473-83	7	170
107	The Spread of VA Mycorrhizal Fungal Hyphae in the Soil: Inoculum Types and External Hyphal Architecture. *Mycologia*, **1991**, 83, 409	2.4	167
106	Environmental controls and the influence of vegetation type, fine roots and rhizomorphs on diel and seasonal variation in soil respiration. *New Phytologist*, **2008**, 179, 460-471	9.8	160
105	Soil biota responses to long-term atmospheric CO enrichment in two California annual grasslands. *Oecologia*, **1999**, 119, 572-577	2.9	153
104	Responses of the non7hyphen;mycotrophic plant Salsola kali to invasion by vesicular□arbuscular mycorrhizal fungi. *New Phytologist*, **1989**, 111, 45-49	9.8	141
103	Designing belowground field experiments with the help of semi-variance and power analyses. *Applied Soil Ecology*, **1999**, 12, 227-238	5	137
102	Rise in carbon dioxide changes soil structure. *Nature*, **1999**, 400, 628-628	50.4	135
101	Phytohormone changes in Bouteloua gracilis infected by vesicular□arbuscular mycorrhizae. II. Altered levels of gibberellin-like substances and abscisic acid in the host plant. *Canadian Journal of Botany*, **1982**, 60, 468-471		131

100	Wide geographical and ecological distribution of nitrogen and carbon gains from fungi in pyroloids and monotropoids (Ericaceae) and in orchids. *New Phytologist*, **2007**, 175, 166-175	9.8	128
99	Habitat shifts of endangered species under altered climate conditions: importance of biotic interactions. *Global Change Biology*, **2008**, 14, 2501-2515	11.4	127
98	Environmental sensor networks in ecological research. *New Phytologist*, **2009**, 182, 589-607	9.8	121
97	Multiscale analysis of temporal variability of soil CO2 production as influenced by weather and vegetation. *Global Change Biology*, **2010**, 16, 1589-1605	11.4	120
96	Dispersal Agents of Vesicular-Arbuscular Mycorrhizal Fungi in a Disturbed Arid Ecosystem. *Mycologia*, **1987**, 79, 721-730	2.4	117
95	Solar energy development impacts on land cover change and protected areas. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 13579-84	11.5	113
94	Using soundscape recordings to estimate bird species abundance, richness, and composition. *Journal of Field Ornithology*, **2009**, 80, 64-78	0.9	102
93	IMPACTS OF EARLY- AND LATE-SERAL MYCORRHIZAE DURING RESTORATION IN SEASONAL TROPICAL FOREST, MEXICO **2003**, 13, 1701-1717		96
92	Topographic position modulates the mycorrhizal response of oak trees to interannual rainfall variability. *Ecology*, **2009**, 90, 649-62	4.6	92
91	Biomass and carbon accumulation in a fire chronosequence of a seasonally dry tropical forest. *Global Change Biology*, **2008**, 14, 109-124	11.4	92
90	The ecology of arbuscular mycorrhizas: a look back into the 20th century and a peek into the 21st. *Mycological Research*, **1996**, 100, 769-782		91
89	FACILITATION OF SUCCESSION BY THE NONMYCOTROPHIC COLONIZER SALSOLA KALI (CHENOPODIACEAE) ON A HARSH SITE: EFFECTS OF MYCORRHIZAL FUNGI. *American Journal of Botany*, **1988**, 75, 257-266	2.7	88
88	Techno-ecological synergies of solar energy for global sustainability. *Nature Sustainability*, **2019**, 2, 560-568	28.1	87
87	Re-formation of mycorrhizal symbioses on Mount St Helens, 1980–1990: interactions of rodents and mycorrhizal fungi. *Mycological Research*, **1992**, 96, 447-453		84
86	Evidence of old carbon used to grow new fine roots in a tropical forest. *New Phytologist*, **2009**, 182, 710-718	9.8	81
85	Interspecific differences in the response of arbuscular mycorrhizal fungi to Artemisia tridentata grown under elevated atmospheric CO2. *New Phytologist*, **1998**, 138, 599-605	9.8	75
84	What is the role of arbuscular mycorrhizal fungi in plant-to-ecosystem responses to Elevated atmospheric CO2?. *Mycorrhiza*, **1999**, 9, 1-8	3.9	75
83	Disturbance and Seasonal Dynamics of Mycorrhizae in a Tropical Deciduous Forest in Mexico1. *Biotropica*, **1998**, 30, 261-274	2.3	71

82	Formation of Vesicular-Arbuscular Mycorrhizae in Atriplex Gardneri (Chenopodiaceae): Seasonal Response in a Cold Desert. *Mycologia*, **1983**, 75, 773-776	2.4	70
81	INFLUENCE OF PHOSPHATE SOURCE ON VESICULAR-ARBUSCULAR MYCORRHIZAE OF BOUTELOUA GRACILIS. *New Phytologist*, **1981**, 87, 687-694	9.8	70
80	Endo- and ectomycorrhizas in Quercus agrifolia Nee. (Fagaceae): patterns of root colonization and effects on seedling growth. *Mycorrhiza*, **2001**, 11, 283-90	3.9	68
79	The Effects of Soil Texture on Extraction of Vesicular-Arbuscular Mycorrhizal Fungal Spores from Arid Sites. *Mycologia*, **1986**, 78, 164-168	2.4	68
78	Dynamics of Fine Root, Fungal Rhizomorphs, and Soil Respiration in a Mixed Temperate Forest: Integrating Sensors and Observations. *Vadose Zone Journal*, **2008**, 7, 1055-1064	2.7	67
77	Differential response of delta13C and water use efficiency to arbuscular mycorrhizal infection in two aridland woody plant species. *Oecologia*, **2003**, 135, 510-5	2.9	64
76	The importance of limestone bedrock and dissolution karst features on tree root distribution in northern Yucat□, M□ico. *Plant and Soil*, **2013**, 362, 37-50	4.2	63
75	Diel patterns of soil respiration in a tropical forest after Hurricane Wilma. *Journal of Geophysical Research*, **2008**, 113,		63
74	Effects of Mycorrhizae and Nontarget Organisms on Restoration of a Seasonal Tropical Forest in Quintana Roo, Mexico: Factors Limiting Tree Establishment. *Restoration Ecology*, **2005**, 13, 325-333	3.1	60
73	Plant species-specific changes in root-inhabiting fungi in a California annual grassland: responses to elevated CO and nutrients. *Oecologia*, **1998**, 113, 252-259	2.9	57
72	Utilization of bedrock water by Brosimum alicastrum trees growing on shallow soil atop limestone in a dry tropical climate. *Plant and Soil*, **2006**, 287, 187-197	4.2	54
71	Modeling arbuscular mycorrhizal infection: is % infection an appropriate variable?. *Mycorrhiza*, **2001**, 10, 255-258	3.9	52
70	Reconstruction of the historical changes in mycorrhizal fungal communities under anthropogenic nitrogen deposition. *Proceedings of the Royal Society B: Biological Sciences*, **2001**, 268, 2479-84	4.4	51
69	Assessing the Infectivity of Commercial Mycorrhizal Inoculants in Plant Nursery Conditions. *Journal of Environmental Horticulture*, **2004**, 22, 149-154	0.7	51
68	Cross-Ecosystem Comparisons of In Situ Plant Uptake of Amino Acid-N and NH4 +. *Ecosystems*, **2010**, 13, 177-193	3.9	49
67	Soil Sensor Technology: Life within a Pixel. *BioScience*, **2007**, 57, 859-867	5.7	49
66	Lifespans of fungal rhizomorphs under nitrogen fertilization in a pinyon-juniper woodland. *Plant and Soil*, **2005**, 270, 249-255	4.2	49
65	Alteration of Soil Carbon Pools and Communities of Mycorrhizal Fungi in Chaparral Exposed to Elevated Carbon Dioxide. *Ecosystems*, **2003**, 6, 786-796	3.9	48

64	Wind dispersal and subsequent establishment of VA mycorrhizal fungi across a successional arid landscape. *Landscape Ecology*, **1989**, 2, 165-171	4.3	47
63	Land-Sparing Opportunities for Solar Energy Development in Agricultural Landscapes: A Case Study of the Great Central Valley, CA, United States. *Environmental Science & Technology*, **2017**, 51, 14472-14482	10.3	43
62	FACILITATION OF SUCCESSION BY THE NONMYCOTROPHIC COLONIZER SALSOLA KALI (CHENOPODIACEAE) ON A HARSH SITE: EFFECTS OF MYCORRHIZAL FUNGI **1988**, 75, 257		43
61	Bidirectional water flows through the soil-fungal-plant mycorrhizal continuum. *New Phytologist*, **2009**, 182, 290-293	9.8	40
60	Reestablishment of Endogonaceae on Mount St. Helens: Survival of Residuals. *Mycologia*, **1984**, 76, 1031-1038	2.4	40
59	The Effects of Soil Texture on Extraction of Vesicular-Arbuscular Mycorrhizal Fungal Spores from Arid Sites. *Mycologia*, **1986**, 78, 164		38
58	The Effect of a Disturbance Corridor on an Ecological Reserve. *Restoration Ecology*, **1995**, 3, 304-310	3.1	37
57	Fungal root colonization responses in natural grasslands after long-term exposure to elevated atmospheric CO2. *Global Change Biology*, **1999**, 5, 577-585	11.4	35
56	Responses of Hedysarum boreale Nutt. to mycorrhizas and Rhizobium: plant and soil nutrient changes in a disturbed shrub-steppe. *New Phytologist*, **1988**, 109, 125-132	9.8	35
55	In situ high-frequency observations of mycorrhizas. *New Phytologist*, **2013**, 200, 222-228	9.8	34
54	Plant isotopic composition provides insight into mechanisms underlying growth stimulation by AM fungi in a semiarid environment. *Functional Plant Biology*, **2007**, 34, 683-691	2.7	34
53	RESPONSES OF SOIL BIOTA TO ELEVATED CO2 IN A CHAPARRAL ECOSYSTEM **2005**, 15, 1701-1711		33
52	Oxalate-metabolizing microorganisms in sagebrush steppe soil. *Biology and Fertility of Soils*, **1994**, 18, 255-259	6.1	33
51	Effects of an invasive plant on a desert sand dune landscape. *Biological Invasions*, **2009**, 11, 673-686	2.7	32
50	FINE ROOT ARCHITECTURE OF NINE NORTH AMERICAN TREES **2002**, 72, 293		32
49	Survival of Arbuscular Mycorrhizal Fungi Following Reciprocal Transplanting Across the Great Basin, USA **1996**, 6, 1365-1372		29
48	Changes in soil hyphal abundance and viability can alter the patterns of hydraulic redistribution by plant roots. *Plant and Soil*, **2012**, 355, 63-73	4.2	27
47	Belowground nitrogen dynamics in relation to hurricane damage along a tropical dry forest chronosequence. *Biogeochemistry*, **2010**, 98, 89-100	3.8	27

46	Welcome to the Atta world: A framework for understanding the effects of leaf-cutter ants on ecosystem functions. *Functional Ecology*, **2019**, 33, 1386-1399	5.6	26
45	Mycorrhizae and rehabilitation of disturbed arid soils: Processes and practices. *Arid Land Research and Management*, **1989**, 3, 229-241		26
44	Source water, phenology and growth of two tropical dry forest tree species growing on shallow karst soils. *Trees - Structure and Function*, **2013**, 27, 1297-1307	2.6	25
43	Plant hydraulic responses to long-term dry season nitrogen deposition alter drought tolerance in a Mediterranean-type ecosystem. *Oecologia*, **2016**, 181, 721-31	2.9	25
42	Diurnal patterns of productivity of arbuscular mycorrhizal fungi revealed with the Soil Ecosystem Observatory. *New Phytologist*, **2013**, 200, 547-557	9.8	24
41	Effect of soil temperature and soil water content on fine root turnover rate in a California mixed conifer ecosystem. *Journal of Geophysical Research*, **2010**, 115,		24
40	Responses to chronic N fertilization of ectomycorrhizal pi□n but not arbuscular mycorrhizal juniper in a pi□n-juniper woodland. *Journal of Arid Environments*, **2010**, 74, 1170-1176	2.5	23
39	Effects of a Hurricane Disturbance on Aboveground Forest Structure, Arbuscular Mycorrhizae and Belowground Carbon in a Restored Tropical Forest. *Ecosystems*, **2010**, 13, 118-128	3.9	23
38	Arbuscular mycorrhizae of Gutierrezia sarothrae and elevated carbon dioxide: evidence for shifts in C allocation to and within the mycobiont. *Soil Biology and Biochemistry*, **1998**, 30, 2001-2008	7.5	23
37	Effects of Vegetation Thinning on Above- and Belowground Carbon in a Seasonally Dry Tropical Forest in Mexico. *Biotropica*, **2009**, 41, 302-311	2.3	22
36	Arbuscular mycorrhizal percent root infection and infection intensity of Bromus hordeaceus grown in elevated atmospheric CO2. *Mycologia*, **1998**, 90, 199-205	2.4	22
35	Net primary production of ectomycorrhizas in a California forest. *Fungal Ecology*, **2014**, 10, 81-90	4.1	21
34	Using soil sensing technology to examine interactions and controls between ectomycorrhizal growth and environmental factors on soil CO2 dynamics. *Plant and Soil*, **2010**, 331, 17-29	4.2	21
33	A new Ediacaran fossil with a novel sediment displacive life habit. *Journal of Paleontology*, **2014**, 88, 145-151	1.1	19
32	Identification of Underground Karst Features using Ground-Penetrating Radar in Northern Yucat□, M□ico. *Vadose Zone Journal*, **2010**, 9, 653-661	2.7	18
31	Seed germination conditions and implications for establishment of an epiphyte, Aechmea bracteata (Bromeliaceae). *Plant Ecology*, **2009**, 204, 179-188	1.7	18
30	Microbial and Phosphate Dynamics in a Restored Shrub Steppe in Southwestern Wyoming. *Restoration Ecology*, **2006**, 1, 196-205	3.1	18
29	Contribution of hydraulically lifted deep moisture to the water budget in a Southern California mixed forest. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 1561-1572	3.7	16

28	Water dynamics of mycorrhizas in arid soils74-97		16
27	Population Dynamics of Sugar Beets, Rhizoctonia solani, and Laetisaria arvalis: Responses of a Host, Plant Pathogen, and Hyperparasite to Perturbation in the Field. *Applied and Environmental Microbiology*, **1985**, 50, 1123-7	4.8	16
26	A pulse of summer precipitation after the dry season triggers changes in ectomycorrhizal formation, diversity, and community composition in a Mediterranean forest in California, USA. *Mycorrhiza*, **2018**, 28, 665-677	3.9	14
25	Direct Va Mycorrhizal Inoculation of Colonizing Plants by Pocket Gophers (Thomomys Talpoides) on Mount St. Helens. *Mycologia*, **1988**, 80, 754-756	2.4	14
24	Arbuscular Mycorrhizal Percent Root Infection and Infection Intensity of Bromus hordeaceus Grown in Elevated Atmospheric CO2. *Mycologia*, **1998**, 90, 199	2.4	13
23	Dust Sources in the Salton Sea Basin: A Clear Case of an Anthropogenically Impacted Dust Budget. *Environmental Science & Technology*, **2019**, 53, 9378-9388	10.3	12
22	Identifying habitat linkages to maintain connectivity for corridor dwellers in a fragmented landscape. *Journal of Wildlife Management*, **2011**, 75, 682-691	1.9	11
21	Patterns and regulation of mycorrhizal plant and fungal diversity **1995**, 47-62		9
20	Differences in root phenology and water depletion by an invasive grass explains persistence in a Mediterranean ecosystem. *American Journal of Botany*, **2019**, 106, 1210-1218	2.7	8
19	Precipitation-drainage cycles lead to hot moments in soil carbon dioxide dynamics in a Neotropical wet forest. *Global Change Biology*, **2020**, 26, 5303-5319	11.4	6
18	First report of the ectomycorrhizal status of boletes on the Northern Yucatan Peninsula, Mexico determined using isotopic methods. *Mycorrhiza*, **2011**, 21, 465-471	3.9	6
17	BLACK BOXES AND MISSING SINKS: FUNGI IN GLOBAL CHANGE RESEARCH. *Mycological Research*, **2000**, 104, 1281-1283		6
16	High-resolution minirhizotrons advance our understanding of root-fungal dynamics in an experimentally warmed peatland. *Plants People Planet*, **2021**, 3, 640-652	4.1	4
15	Mycorrhizae and Global Change. *Plant Ecophysiology*, **2014**, 37-59		3
14	Micro-organisms **2002**, 257-278		3
13	Re-establishment of VA mycorrhizas following severe disturbance: comparative patch dynamics of a shrub desert and a subalpine volcano. *Proceedings of the Royal Society of Edinburgh Section B Biological Sciences*, **1988**, 94, 63-71		2
12	Corrigendum to: Plant isotopic composition provides insight into mechanisms underlying growth stimulation by AM fungi in a semiarid environment. *Functional Plant Biology*, **2007**, 34, 860	2.7	2
11	Looking deeper into the soil: biophysical controls and seasonal lags of soil CO2 production and efflux **2010**, 20, 1569		1

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