Ian R Sanders

List of Publications by Year
in descending order

98 papers	13,796 citations	41258 49 h-index	38300 95 g-index
108 all docs	108 docs citations	108 times ranked	9392 citing authors

#	Article	IF	Citations
1	Decreasing relatedness among mycorrhizal fungi in a shared plant network increases fungal network size but not plant benefit. Ecology Letters, 2022, 25, 509-520.	3.0	4
2	Reciprocal recombination genomic signatures in the symbiotic arbuscular mycorrhizal fungi Rhizophagus irregularis. PLoS ONE, 2022, 17, e0270481.	1.1	2
3	Hierarchical spatial sampling reveals factors influencing arbuscular mycorrhizal fungus diversity in CÃ´te dâ€™Ivoire cocoa plantations. Mycorrhiza, 2021, 31, 289-300.	1.3	7
4	Co-existence of AMF with different putative MAT-alleles induces genes homologous to those involved in mating in other fungi: a reply to Malar et al.. ISME Journal, 2021, 15, 2180-2182.	4.4	3
5	The Phosphate Inhibition Paradigm: Host and Fungal Genotypes Determine Arbuscular Mycorrhizal Fungal Colonization and Responsiveness to Inoculation in Cassava With Increasing Phosphorus Supply. Frontiers in Plant Science, 2021, 12, 693037.	1.7	21
6	The methylome of the model arbuscular mycorrhizal fungus, Rhizophagus irregularis, shares characteristics with early diverging fungi and Dikarya. Communications Biology, 2021, 4, 901.	2.0	17
7	Generation of unequal nuclear genotype proportions in <i>Rhizophagus irregularis</i> progeny causes allelic imbalance in gene transcription. New Phytologist, 2021, 231, 1984-2001.	3.5	10
8	Efecto de la inoculaciÃ³n Rhizophagus irregularis y de la fertilizaciÃ³n fosfatada sobre la comunidad local de hongos formadores de micorrizas arbusculares. BiotecnologÃa En El Sector Agropecuario Y Agroindustrial, 2021, 19, 184-200.	0.2	0
9	Greater topoclimatic control of aboveâ€•versus belowâ€ground communities. Global Change Biology, 2020, 26, 6715-6728.	4.2	11
10	Genetically Different Isolates of the Arbuscular Mycorrhizal Fungus Rhizophagus irregularis Induce Differential Responses to Stress in Cassava. Frontiers in Plant Science, 2020, 11, 596929.	1.7	4
11	Coexistence of genetically different <i>Rhizophagus irregularis</i> isolates induces genes involved in a putative fungal mating response. ISME Journal, 2020, 14, 2381-2394.	4.4	10
12	Genetic variation and evolutionary history of a mycorrhizal fungus regulate the currency of exchange in symbiosis with the food security crop cassava. ISME Journal, 2020, 14, 1333-1344.	4.4	12
13	Effect of co-application of phosphorus fertilizer and in vitro-produced mycorrhizal fungal inoculants on yield and leaf nutrient concentration of cassava. PLoS ONE, 2019, 14, e0218969.	1.1	24
14	Investigating unexplained genetic variation and its expression in the arbuscular mycorrhizal fungus Rhizophagus irregularis: A comparison of whole genome and RAD sequencing data. PLoS ONE, 2019, 14, e0226497.	1.1	10
15	Dual RNA-seq reveals large-scale non-conserved genotype Ã— genotype-specific genetic reprograming and molecular crosstalk in the mycorrhizal symbiosis. ISME Journal, 2019, 13, 1226-1238.	4.4	49
16	Variation in allele frequencies at the bg112 locus reveals unequal inheritance of nuclei in a dikaryotic isolate of the fungus Rhizophagus irregularis. Mycorrhiza, 2018, 28, 369-377.	1.3	15
17	A population genomics approach shows widespread geographical distribution of cryptic genomic forms of the symbiotic fungus <i>Rhizophagus irregularis</i>. ISME Journal, 2018, 12, 17-30.	4.4	92
18	Sex, plasticity, and biologically significant variation in one Glomeromycotina species. New Phytologist, 2018, 220, 968-970.	3.5	9

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19	Within-species phylogenetic relatedness of a common mycorrhizal fungus affects evenness in plant communities through effects on dominant species. PLoS ONE, 2018, 13, e0198537.	1.1	7
20	Cost-efficient production of in vitro Rhizophagus irregularis. Mycorrhiza, 2017, 27, 477-486.	1.3	33
21	Aligning molecular studies of mycorrhizal fungal diversity with ecologically important levels of diversity in ecosystems. ISME Journal, 2016, 10, 2780-2786.	4.4	36
22	Population genomics reveals that within-fungus polymorphism is common and maintained in populations of the mycorrhizal fungus <i>Rhizophagus irregularis</i>. ISME Journal, 2016, 10, 2514-2526.	4.4	54
23	Bacteria with Phosphate Solubilizing Capacity Alter Mycorrhizal Fungal Growth Both Inside and Outside the Root and in the Presence of Native Microbial Communities. PLoS ONE, 2016, 11, e0154438.	1.1	75
24	The role of community and population ecology in applying mycorrhizal fungi for improved food security. ISME Journal, 2015, 9, 1053-1061.	4.4	160
25	Mycorrhizal ecology and evolution: the past, the present, and the future. New Phytologist, 2015, 205, 1406-1423.	3.5	1,390
26	Rapid genotypic change and plasticity in arbuscular mycorrhizal fungi is caused by a host shift and enhanced by segregation. ISME Journal, 2014, 8, 284-294.	4.4	60
27	Soil fungal communities of grasslands are environmentally structured at a regional scale in the <scp>A</scp>lps. Molecular Ecology, 2014, 23, 4274-4290.	2.0	125
28	Relatedness among arbuscular mycorrhizal fungi drives plant growth and intraspecific fungal coexistence. ISME Journal, 2013, 7, 2137-2146.	4.4	63
29	Predicting community and ecosystem outcomes of mycorrhizal responses to global change. Ecology Letters, 2013, 16, 140-153.	3.0	175
30	Genome of an arbuscular mycorrhizal fungus provides insight into the oldest plant symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20117-20122.	3.3	717
31	Identity and combinations of arbuscular mycorrhizal fungal isolates influence plant resistance and insect preference. Ecological Entomology, 2013, 38, 330-338.	1.1	42
32	Plant species distributions along environmental gradients: do belowground interactions with fungi matter?. Frontiers in Plant Science, 2013, 4, 500.	1.7	38
33	Density-based hierarchical clustering of pyro-sequences on a large scaleâ€"the case of fungal ITS1. Bioinformatics, 2013, 29, 1268-1274.	1.8	19
34	Consequences of Segregation and Genetic Exchange on Adaptability in Arbuscular Mycorrhizal Fungi (AMF). , 2013, , 231-243.		0
35	The In Vitro Mass-Produced Model Mycorrhizal Fungus, Rhizophagus irregularis, Significantly Increases Yields of the Globally Important Food Security Crop Cassava. PLoS ONE, 2013, 8, e70633.	1.1	135
36	Significant genetic and phenotypic changes arising from clonal growth of a single spore of an arbuscular mycorrhizal fungus over multiple generations. New Phytologist, 2012, 196, 853-861.	3.5	66

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37	The transcriptome of the arbuscular mycorrhizal fungus <i>Glomus intraradices</i> (DAOM 197198) reveals functional tradeoffs in an obligate symbiont. New Phytologist, 2012, 193, 755-769.	3.5	305
38	Effect of segregation and genetic exchange on arbuscular mycorrhizal fungi in colonization of roots. New Phytologist, 2011, 189, 652-657.	3.5	39
39	Mycorrhizal Symbioses: How to Be Seen as a Good Fungus. Current Biology, 2011, 21, R550-R552.	1.8	13
40	Fungal Sex: Meiosis Machinery in Ancient Symbiotic Fungi. Current Biology, 2011, 21, R896-R897.	1.8	10
41	Genetic Exchange in an Arbuscular Mycorrhizal Fungus Results in Increased Rice Growth and Altered Mycorrhiza-Specific Gene Transcription. Applied and Environmental Microbiology, 2011, 77, 6510-6515.	1.4	45
42	The role of mycorrhizas in more sustainable oil palm cultivation. Agriculture, Ecosystems and Environment, 2010, 135, 187-193.	2.5	33
43	Segregation in a Mycorrhizal Fungus Alters Rice Growth and Symbiosis-Specific Gene Transcription. Current Biology, 2010, 20, 1216-1221.	1.8	140
44	â€˜Designerâ€™ mycorrhizas?: Using natural genetic variation in AM fungi to increase plant growth. ISME Journal, 2010, 4, 1081-1083.	4.4	22
45	Characterisation of microbial communities colonising the hyphal surfaces of arbuscular mycorrhizal fungi. ISME Journal, 2010, 4, 752-763.	4.4	215
46	Arbuscular Mycorrhiza: The Challenge to Understand the Genetics of the Fungal Partner. Annual Review of Genetics, 2010, 44, 271-292.	3.2	104
47	High-Level Molecular Diversity of Copper-Zinc Superoxide Dismutase Genes among and within Species of Arbuscular Mycorrhizal Fungi. Applied and Environmental Microbiology, 2009, 75, 1970-1978.	1.4	25
48	Recombination in Glomus intraradices, a supposed ancient asexual arbuscular mycorrhizal fungus. BMC Evolutionary Biology, 2009, 9, 13.	3.2	86
49	Nonself vegetative fusion and genetic exchange in the arbuscular mycorrhizal fungus <i>Glomus intraradices</i>. New Phytologist, 2009, 181, 924-937.	3.5	165
50	Changes in arbuscular mycorrhizal fungal phenotypes and genotypes in response to plant species identity and phosphorus concentration. New Phytologist, 2009, 184, 412-423.	3.5	57
51	The genome of Laccaria bicolor provides insights into mycorrhizal symbiosis. Nature, 2008, 452, 88-92.	13.7	1,003
52	Genetic diversity and host plant preferences revealed by simple sequence repeat and mitochondrial markers in a population of the arbuscular mycorrhizal fungus <i>Glomus intraradices</i>. New Phytologist, 2008, 178, 672-687.	3.5	120
53	Gene organization of the mating type regions in the ectomycorrhizal fungus <i>Laccaria bicolor</i> reveals distinct evolution between the two mating type loci. New Phytologist, 2008, 180, 329-342.	3.5	59
54	Multilocus genotyping of arbuscular mycorrhizal fungi and marker suitability for population genetics. New Phytologist, 2008, 180, 564-568.	3.5	19

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55	Gene Copy Number Polymorphisms in an Arbuscular Mycorrhizal Fungal Population. Applied and Environmental Microbiology, 2007, 73, 366-369.	1.4	69
56	Molecular characterization of chromosome termini of the arbuscular mycorrhizal fungus Glomus intraradices (Glomeromycota). Fungal Genetics and Biology, 2007, 44, 1380-1386.	0.9	37
57	Rapid disease emergence through horizontal gene transfer between eukaryotes. Trends in Ecology and Evolution, 2006, 21, 656-658.	4.2	41
58	Genetic variability in a population of arbuscular mycorrhizal fungi causes variation in plant growth. Ecology Letters, 2006, 9, 103-110.	3.0	185
59	The mycorrhizal contribution to plant productivity, plant nutrition and soil structure in experimental grassland. New Phytologist, 2006, 172, 739-752.	3.5	336
60	Evolution of the P-type II ATPase gene family in the fungi and presence of structural genomic changes among isolates of Glomus intraradices. BMC Evolutionary Biology, 2006, 6, 21.	3.2	42
61	Low gene copy number shows that arbuscular mycorrhizal fungi inherit genetically different nuclei. Nature, 2005, 433, 160-163.	13.7	160
62	Conspirators in blight. Nature, 2005, 437, 823-824.	13.7	14
63	High genetic variability and low local diversity in a population of arbuscular mycorrhizal fungi. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2369-2374.	3.3	188
64	Plant and arbuscular mycorrhizal fungal diversity â€" are we looking at the relevant levels of diversity and are we using the right techniques?. New Phytologist, 2004, 164, 415-418.	3.5	118
65	Does the generalist parasitic plant Cuscuta campestris selectively forage in heterogeneous plant communities?. New Phytologist, 2004, 162, 147-155.	3.5	46
66	Intraspecific genetic variation in arbuscular mycorrhizal fungi and its consequences for molecular biology, ecology, and development of inoculum. Canadian Journal of Botany, 2004, 82, 1057-1062.	1.2	21
67	The arbuscular mycorrhizal fungus Glomus intraradices is haploid and has a small genome size in the lower limit of eukaryotes. Fungal Genetics and Biology, 2004, 41, 253-261.	0.9	96
68	Monophyly of Î²-tubulin and H+-ATPase gene variants in Glomus intraradices: consequences for molecular evolutionary studies of AM fungal genes. Fungal Genetics and Biology, 2004, 41, 262-273.	0.9	51
69	Arbuscular mycorrhizal fungi (Glomeromycota) harbour ancient fungal tubulin genes that resemble those of the chytrids (Chytridiomycota). Fungal Genetics and Biology, 2004, 41, 1037-1045.	0.9	45
70	Different arbuscular mycorrhizal fungi alter coexistence and resource distribution between coâ€occurring plant. New Phytologist, 2003, 157, 569-578.	3.5	249
71	Arbuscular mycorrhizal fungi: genetics of multigenomic, clonal networks and its ecological consequences. Biological Journal of the Linnean Society, 2003, 79, 59-60.	0.7	12
72	Preference, specificity and cheating in the arbuscular mycorrhizal symbiosis. Trends in Plant Science, 2003, 8, 143-145.	4.3	101

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73	Evidence of Recombination in Putative Ancient Asexuals. Molecular Biology and Evolution, 2003, 20, 754-761.	3.5	57
74	SOIL TILLAGE AFFECTS THE COMMUNITY STRUCTURE OF MYCORRHIZAL FUNGI IN MAIZE ROOTS. , 2003, 13, 1164-1176.		285
75	Identification and Isolation of Two Ascomycete Fungi from Spores of the Arbuscular Mycorrhizal Fungus Scutellospora castanea. Applied and Environmental Microbiology, 2002, 68, 4567-4573.	1.4	61
76	Mycorrhizal Ecology: Synthesis and Perspectives. Ecological Studies, 2002, , 441-456.	0.4	18
77	Specificity in the Arbuscular Mycorrhizal Symbiosis. Ecological Studies, 2002, , 415-437.	0.4	43
78	Ecology and Evolution of Multigenomic Arbuscular Mycorrhizal Fungi. American Naturalist, 2002, 160, S128-S141.	1.0	66
79	THE ECOLOGICAL SIGNIFICANCE OF ARBUSCULAR MYCORRHIZAL FUNGAL EFFECTS ON CLONAL REPRODUCTION IN PLANTS. Ecology, 2001, 82, 2846-2859.	1.5	77
80	Evidence for the evolution of multiple genomes in arbuscular mycorrhizal fungi. Nature, 2001, 414, 745-748.	13.7	306
81	Arbuscular mycorrhizal fungi influence life history traits of a lepidopteran herbivore. Oecologia, 2000, 125, 362-369.	0.9	136
82	No sex please, we're fungi. Nature, 1999, 399, 737-738.	13.7	80
83	Phylogenetic Analysis of a Dataset of Fungal 5.8S rDNA Sequences Shows That Highly Divergent Copies of Internal Transcribed Spacers Reported from Scutellospora castanea Are of Ascomycete Origin. Fungal Genetics and Biology, 1999, 28, 238-244.	0.9	81
84	"Sampling Effect", a Problem in Biodiversity Manipulation? A Reply to David A. Wardle. Oikos, 1999, 87, 408.	1.2	33
85	Diversity and Structure in Natural Communities: The Role of the Mycorrhizal Symbiosis. , 1999, , 571-593.		4
86	Mycorrhizal fungal diversity determines plant biodiversity, ecosystem variability and productivity. Nature, 1998, 396, 69-72.	13.7	2,907
87	Increased allocation to external hyphae of arbuscular mycorrhizal fungi under CO 2 enrichment. Oecologia, 1998, 117, 496-503.	0.9	76
88	DIFFERENT ARBUSCULAR MYCORRHIZAL FUNGAL SPECIES ARE POTENTIAL DETERMINANTS OF PLANT COMMUNITY STRUCTURE. Ecology, 1998, 79, 2082-2091.	1.5	623
89	Clonal Growth Traits of Two Prunella Species are Determined by Co-Occurring Arbuscular Mycorrhizal Fungi from a Calcareous Grassland. Journal of Ecology, 1997, 85, 181.	1.9	182
90	The genetic diversity of arbuscular mycorrhizal fungi in natural ecosystems - a key to understanding the ecology and functioning of the mycorrhizal symbiosis. New Phytologist, 1996, 133, 123-134.	3.5	127

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91	Identification of ribosomal DNA polymorphisms among and within spores of the Glomales: application to studies on the genetic diversity of arbuscular mycorrhizal fungal communities. New Phytologist, 1995, 130, 419-427.	3.5	304
92	Nutrient Acquisition and Community Structure in Co-Occurring Mycotrophic and Non-mycotrophic Oldfield Annuals. Functional Ecology, 1994, 8, 77.	1.7	51
93	Temporal infectivity and specificity of vesicular-arbuscular mycorrhizas in co-existing grassland species. Oecologia, 1993, 93, 349-355.	0.9	29
94	Mycorrhizal stimulation of plant parasitism. Canadian Journal of Botany, 1993, 71, 1143-1146.	1.2	31
95	Detection of specific antigens in the vesicular-arbuscular mycorrhizal fungi Gigaspora margarita and Acaulospora laevis using polyclonal antibodies to soluble spore fractions. Mycological Research, 1992, 96, 477-480.	2.5	47
96	Evidence for differential responses between host-fungus combinations of vesicular-arbuscular mycorrhizas from a grassland. Mycological Research, 1992, 96, 415-419.	2.5	112
97	The ecology and functioning of vesicular-arbuscular mycorrhizas in co-existing grassland species. I. Seasonal patterns of mycorrhizal occurrence and morphology.. New Phytologist, 1992, 120, 517-524.	3.5	97
98	The ecology and functioning of vesicular-arbuscular mycorrhizas in co-existing grassland species. II. Nutrient uptake and growth of vesicular-arbuscular mycorrhizal plants in a semi-natural grassland. New Phytologist, 1992, 120, 525-533.	3.5	79