

Francis Martin

List of Publications by Year in descending order

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109
papers

14,044
citations

34105

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105
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146
docs citations

146
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11432
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#	ARTICLE	IF	CITATIONS
1	The ectomycorrhizal basidiomycete <i>Laccaria bicolor</i> releases a GH28 polygalacturonase that plays a key role in symbiosis establishment. <i>New Phytologist</i> , 2022, 233, 2534-2547.	7.3	16
2	Mycorrhiza-induced mycocypins of <i>Laccaria bicolor</i> are potent protease inhibitors with nematotoxic and collembola antifeedant activity. <i>Environmental Microbiology</i> , 2022, 24, 4607-4622.	3.8	2
3	Genomic Analysis Enlightens Agaricales Lifestyle Evolution and Increasing Peroxidase Diversity. <i>Molecular Biology and Evolution</i> , 2021, 38, 1428-1446.	8.9	72
4	Intra-species genetic variability drives carbon metabolism and symbiotic host interactions in the ectomycorrhizal fungus <i>Pisolithus microcarpus</i> . <i>Environmental Microbiology</i> , 2021, 23, 2004-2020.	3.8	14
5	Gene family expansions and transcriptome signatures uncover fungal adaptations to wood decay. <i>Environmental Microbiology</i> , 2021, 23, 5716-5732.	3.8	44
6	C-STABILITY an innovative modeling framework to leverage the continuous representation of organic matter. <i>Nature Communications</i> , 2021, 12, 810.	12.8	21
7	Contrasting demographic histories revealed in two invasive populations of the dry rot fungus <i>Serpula lacrymans</i> . <i>Molecular Ecology</i> , 2021, 30, 2772-2789.	3.9	6
8	Cryptic genetic structure and copy number variation in the ubiquitous forest symbiotic fungus <i>Cenococcum geophilum</i> . <i>Environmental Microbiology</i> , 2021, 23, 6536-6556.	3.8	5
9	Heterospecific Neighbor Plants Impact Root Microbiome Diversity and Molecular Function of Root Fungi. <i>Frontiers in Microbiology</i> , 2021, 12, 680267.	3.5	3
10	A Transcriptomic Atlas of the Ectomycorrhizal Fungus <i>Laccaria bicolor</i> . <i>Microorganisms</i> , 2021, 9, 2612.	3.6	11
11	A fungal family of lytic polysaccharide monooxygenase-like copper proteins. <i>Nature Chemical Biology</i> , 2020, 16, 345-350.	8.0	63
12	An ectomycorrhizal fungus alters sensitivity to jasmonate, salicylate, gibberellin, and ethylene in host roots. <i>Plant, Cell and Environment</i> , 2020, 43, 1047-1068.	5.7	30
13	Fungal ecological strategies reflected in gene transcription – a case study of two litter decomposers. <i>Environmental Microbiology</i> , 2020, 22, 1089-1103.	3.8	32
14	A Viable New Strategy for the Discovery of Peptide Proteolytic Cleavage Products in Plant-Microbe Interactions. <i>Molecular Plant-Microbe Interactions</i> , 2020, 33, 1177-1188.	2.6	8
15	The mutualism effector MiSSP7 of <i>Laccaria bicolor</i> alters the interactions between the poplar JAZ6 protein and its associated proteins. <i>Scientific Reports</i> , 2020, 10, 20362.	3.3	21
16	Mycorrhizal effector PaMiSSP10b alters polyamine biosynthesis in <i>Eucalyptus</i> root cells and promotes root colonization. <i>New Phytologist</i> , 2020, 228, 712-727.	7.3	24
17	Genome sequencing of <i>Rigidoporus microporus</i> provides insights on genes important for wood decay, latex tolerance and interspecific fungal interactions. <i>Scientific Reports</i> , 2020, 10, 5250.	3.3	16
18	The <i>Wolfiporia cocos</i> Genome and Transcriptome Shed Light on the Formation of Its Edible and Medicinal Sclerotium. <i>Genomics, Proteomics and Bioinformatics</i> , 2020, 18, 455-467.	6.9	11

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19	The lichen symbiosis re-viewed through the genomes of <i>Cladonia grayi</i> and its algal partner <i>Asterochloris glomerata</i> . <i>BMC Genomics</i> , 2019, 20, 605.	2.8	98
20	Fungal Endophytes of <i>Populus trichocarpa</i> Alter Host Phenotype, Gene Expression, and Rhizobiome Composition. <i>Molecular Plant-Microbe Interactions</i> , 2019, 32, 853-864.	2.6	52
21	Broad-specificity GH131 β -glucanases are a hallmark of fungi and oomycetes that colonize plants. <i>Environmental Microbiology</i> , 2019, 21, 2724-2739.	3.8	18
22	Molecular Signalling During the Ectomycorrhizal Symbiosis. , 2019, , 95-109.		3
23	Draft Genome Sequence of the Ectomycorrhizal Ascomycete <i>Sphaerospora brunnea</i> . <i>Microbiology Resource Announcements</i> , 2019, 8, .	0.6	3
24	Genome-based estimates of fungal rDNA copy number variation across phylogenetic scales and ecological lifestyles. <i>Molecular Ecology</i> , 2019, 28, 721-730.	3.9	163
25	The ectomycorrhizal basidiomycete <i>Laccaria bicolor</i> releases a secreted β -1,4 endoglucanase that plays a key role in symbiosis development. <i>New Phytologist</i> , 2018, 220, 1309-1321.	7.3	49
26	High intraspecific genome diversity in the model arbuscular mycorrhizal symbiont <i>Rhizophagus irregularis</i> . <i>New Phytologist</i> , 2018, 220, 1161-1171.	7.3	206
27	Secretome Analysis from the Ectomycorrhizal Ascomycete <i>Cenococcum geophilum</i> . <i>Frontiers in Microbiology</i> , 2018, 9, 141.	3.5	24
28	Multi-omic Analyses of Extensively Decayed <i>Pinus contorta</i> Reveal Expression of a Diverse Array of Lignocellulose-Degrading Enzymes. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	24
29	The Identification of Phytohormone Receptor Homologs in Early Diverging Fungi Suggests a Role for Plant Sensing in Land Colonization by Fungi. <i>MBio</i> , 2017, 8, .	4.1	41
30	The ectomycorrhizal basidiomycete <i>Hebeloma cylindrosporum</i> undergoes early waves of transcriptional reprogramming prior to symbiotic structures differentiation. <i>Environmental Microbiology</i> , 2017, 19, 1338-1354.	3.8	22
31	The transcriptional landscape of basidiosporogenesis in mature <i>Pisolithus microcarpus</i> basidiocarp. <i>BMC Genomics</i> , 2017, 18, 157.	2.8	3
32	Five years investigation of female and male genotypes in Périgord black truffle (<i>Tuber</i>) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 T</i> . <i>Microbiology</i> , 2017, 19, 2604-2615.	3.8	33
33	<i>Populus trichocarpa</i> encodes small, effector-like secreted proteins that are highly induced during mutualistic symbiosis. <i>Scientific Reports</i> , 2017, 7, 382.	3.3	36
34	The Fungal Tree of Life: from Molecular Systematics to Genome-Scale Phylogenies. <i>Microbiology Spectrum</i> , 2017, 5, .	3.0	169
35	Fungal and plant gene expression in the <i>Tulasnella calospora</i> \times <i>Serapias vomeracea</i> symbiosis provides clues about nitrogen pathways in orchid mycorrhizas. <i>New Phytologist</i> , 2017, 213, 365-379.	7.3	125
36	The Fungal Tree of Life: From Molecular Systematics to Genome-Scale Phylogenies. , 2017, , 1-34.		25

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37	Ectomycorrhizal fungi decompose soil organic matter using oxidative mechanisms adapted from saprotrophic ancestors. <i>New Phytologist</i> , 2016, 209, 1705-1719.	7.3	264
38	Reconstructing the evolutionary history of gypsy retrotransposons in the Périgord black truffle (<i>Tuber melanosporum</i> Vittad.). <i>Mycorrhiza</i> , 2016, 26, 553-563.	2.8	7
39	Understanding plant cell-wall remodelling during the symbiotic interaction between <i>Tuber melanosporum</i> and <i>Corylus avellana</i> using a carbohydrate microarray. <i>Planta</i> , 2016, 244, 347-359.	3.2	24
40	Truffle Genomics: Investigating an Early Diverging Lineage of Pezizomycotina. <i>Soil Biology</i> , 2016, , 137-149.	0.8	2
41	Fine-scale genetic structure of natural <i>Tuber aestivum</i> sites in southern Germany. <i>Mycorrhiza</i> , 2016, 26, 895-907.	2.8	27
42	Unearthing the roots of ectomycorrhizal symbioses. <i>Nature Reviews Microbiology</i> , 2016, 14, 760-773.	28.6	317
43	Certainties and uncertainties about the life cycle of the Périgord black truffle (<i>Tuber melanosporum</i>) Tj ETQq1 1 0.784314 ggBT /Over 2.0 69	2.0	69
44	Comparative genomics, proteomics and transcriptomics give new insight into the exoproteome of the basidiomycete <i>Habelema cylindrosporum</i> and its involvement in ectomycorrhizal symbiosis. <i>New Phytologist</i> , 2015, 208, 1169-1187.	7.3	78
45	Diversity and evolution of ABC proteins in mycorrhiza-forming fungi. <i>BMC Evolutionary Biology</i> , 2015, 15, 249.	3.2	19
46	Metagenome sequence of <i>Elaphomyces granulatus</i> from sporocarp tissue reveals Ascomycota ectomycorrhizal fingerprints of genome expansion and a Proteobacteria-rich microbiome. <i>Environmental Microbiology</i> , 2015, 17, 2952-2968.	3.8	34
47	Functional guild classification predicts the enzymatic role of fungi in litter and soil biogeochemistry. <i>Soil Biology and Biochemistry</i> , 2015, 88, 441-456.	8.8	121
48	The effect of elevated carbon dioxide on the interaction between <i>Eucalyptus grandis</i> and diverse isolates of <i>Pisolithus</i> sp. is associated with a complex shift in the root transcriptome. <i>New Phytologist</i> , 2015, 206, 1423-1436.	7.3	43
49	A survey of genome-wide single nucleotide polymorphisms through genome resequencing in the Périgord black truffle (<i>Tuber melanosporum</i> Vittad.). <i>Molecular Ecology Resources</i> , 2015, 15, 1243-1255.	4.8	18
50	Convergent losses of decay mechanisms and rapid turnover of symbiosis genes in mycorrhizal mutualists. <i>Nature Genetics</i> , 2015, 47, 410-415.	21.4	870
51	Study of nitrogen and carbon transfer from soil organic matter to <i>Tuber melanosporum</i> mycorrhizas and ascocarps using ¹⁵ N and ¹³ C soil labelling and whole-genome oligoarrays. <i>Plant and Soil</i> , 2015, 395, 351-373.	3.7	26
52	Reconsidering mutualistic plant-fungal interactions through the lens of effector biology. <i>Current Opinion in Plant Biology</i> , 2015, 26, 45-50.	7.1	87
53	Development of the Poplar <i>Laccaria bicolor</i> Ectomycorrhiza Modifies Root Auxin Metabolism, Signaling, and Response. <i>Plant Physiology</i> , 2015, 169, 890-902.	4.8	70
54	The Mutualist <i>Laccaria bicolor</i> Expresses a Core Gene Regulon During the Colonization of Diverse Host Plants and a Variable Regulon to Counteract Host-Specific Defenses. <i>Molecular Plant-Microbe Interactions</i> , 2015, 28, 261-273.	2.6	82

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55	Extreme diversification of the mating type <i>high</i> mobility group (<i>MATA</i> <i>h</i> gene family in a plant-associated arbuscular mycorrhizal fungus. <i>New Phytologist</i> , 2014, 201, 254-268.	7.3	53
56	Genomics of Arbuscular Mycorrhizal Fungi. <i>Advances in Botanical Research</i> , 2014, 70, 259-290.	1.1	13
57	Effector MiSSP7 of the mutualistic fungus <i>Laccaria bicolor</i> stabilizes the <i>Populus</i> JAZ6 protein and represses jasmonic acid (JA) responsive genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8299-8304.	7.1	329
58	Ethylene and jasmonic acid act as negative modulators during mutualistic symbiosis between <i>Laccaria bicolor</i> and <i>Populus</i> roots. <i>New Phytologist</i> , 2014, 202, 270-286.	7.3	87
59	Ectomycorrhizal <i>Cortinarius</i> species participate in enzymatic oxidation of humus in northern forest ecosystems. <i>New Phytologist</i> , 2014, 203, 245-256.	7.3	256
60	Genomic and transcriptomic analysis of <i>Laccaria bicolor</i> CAZome reveals insights into polysaccharides remodelling during symbiosis establishment. <i>Fungal Genetics and Biology</i> , 2014, 72, 168-181.	2.1	81
61	Extensive sampling of basidiomycete genomes demonstrates inadequacy of the white-rot/brown-rot paradigm for wood decay fungi. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9923-9928.	7.1	595
62	The genome of the white-rot fungus <i>Pycnoporus cinnabarinus</i> : a basidiomycete model with a versatile arsenal for lignocellulosic biomass breakdown. <i>BMC Genomics</i> , 2014, 15, 486.	2.8	91
63	Non-exhaustive DNA methylation-mediated transposon silencing in the black truffle genome, a complex fungal genome with massive repeat element content. <i>Genome Biology</i> , 2014, 15, 411.	8.8	67
64	<i>Populus trichocarpa</i> and <i>Populus deltoides</i> Exhibit Different Metabolomic Responses to Colonization by the Symbiotic Fungus <i>Laccaria bicolor</i> . <i>Molecular Plant-Microbe Interactions</i> , 2014, 27, 546-556.	2.6	69
65	10 New Insights into Ectomycorrhizal Symbiosis Evolution and Function. , 2013, , 273-293.		1
66	Genome of an arbuscular mycorrhizal fungus provides insight into the oldest plant symbiosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 20117-20122.	7.1	717
67	Carbohydrate utilization and metabolism is highly differentiated in <i>Agaricus bisporus</i> . <i>BMC Genomics</i> , 2013, 14, 663.	2.8	35
68	Microbe-Independent Entry of Oomycete RxLR Effectors and Fungal RxLR-Like Effectors Into Plant and Animal Cells Is Specific and Reproducible. <i>Molecular Plant-Microbe Interactions</i> , 2013, 26, 611-616.	2.6	57
69	Laser microdissection and microarray analysis of <i>Tuber melanosporum</i> ectomycorrhizas reveal functional heterogeneity between mantle and Hartig net compartments. <i>Environmental Microbiology</i> , 2013, 15, 1853-1869.	3.8	62
70	Involvement of auxin pathways in modulating root architecture during beneficial plant-microorganism interactions. <i>Plant, Cell and Environment</i> , 2013, 36, 909-919.	5.7	192
71	Fine-scale spatial genetic structure of the black truffle (<i>Tuber melanosporum</i>) investigated with neutral microsatellites and functional mating type genes. <i>New Phytologist</i> , 2013, 199, 176-187.	7.3	83
72	Community genetics in the time of next-generation molecular technologies. <i>Molecular Ecology</i> , 2013, 22, 3198-3207.	3.9	25

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73	Functional Assays and Metagenomic Analyses Reveals Differences between the Microbial Communities Inhabiting the Soil Horizons of a Norway Spruce Plantation. PLoS ONE, 2013, 8, e55929.	2.5	147
74	Genomics and Spectroscopy Provide Novel Insights into the Mechanisms of Litter Decomposition and Nitrogen Assimilation by Ectomycorrhizal Fungi. Soil Biology, 2013, , 191-211.	0.8	0
75	Poplar root exudates contain compounds that induce the expression of MiSSP7 in <i>Laccaria bicolor</i> . Plant Signaling and Behavior, 2012, 7, 12-15.	2.4	43
76	RNA-Seq of Early-Infected Poplar Leaves by the Rust Pathogen <i>Melampsora larici-populina</i> Uncovers PtSultr3;5, a Fungal-Induced Host Sulfate Transporter. PLoS ONE, 2012, 7, e44408.	2.5	57
77	A Comprehensive Analysis of Genes Encoding Small Secreted Proteins Identifies Candidate Effectors in <i>Melampsora larici-populina</i> (Poplar Leaf Rust). Molecular Plant-Microbe Interactions, 2012, 25, 279-293.	2.6	150
78	Genome sequence of the button mushroom <i>Agaricus bisporus</i> reveals mechanisms governing adaptation to a humic-rich ecological niche. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17501-17506.	7.1	359
79	Communication Between Plant, Ectomycorrhizal Fungi and Helper Bacteria. , 2012, , 229-247.		4
80	Secretome of the Free-living Mycelium from the Ectomycorrhizal Basidiomycete <i>Laccaria bicolor</i> . Journal of Proteome Research, 2012, 11, 157-171.	3.7	47
81	The importance of individuals: intraspecific diversity of mycorrhizal plants and fungi in ecosystems. New Phytologist, 2012, 194, 614-628.	7.3	157
82	Phylogenetic, genomic organization and expression analysis of hydrophobin genes in the ectomycorrhizal basidiomycete <i>Laccaria bicolor</i> . Fungal Genetics and Biology, 2012, 49, 199-209.	2.1	47
83	The Paleozoic Origin of Enzymatic Lignin Decomposition Reconstructed from 31 Fungal Genomes. Science, 2012, 336, 1715-1719.	12.6	1,424
84	Genome-wide analysis of cell wall-related genes in <i>Tuber melanosporum</i> . Current Genetics, 2012, 58, 165-177.	1.7	30
85	Characterization of Transposable Elements in the Ectomycorrhizal Fungus <i>Laccaria bicolor</i> . PLoS ONE, 2012, 7, e40197.	2.5	38
86	<i>Melampsora larici-populina</i> Transcript Profiling During Germination and Timecourse Infection of Poplar Leaves Reveals Dynamic Expression Patterns Associated with Virulence and Biotrophy. Molecular Plant-Microbe Interactions, 2011, 24, 808-818.	2.6	80
87	Obligate biotrophy features unraveled by the genomic analysis of rust fungi. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9166-9171.	7.1	640
88	The Perigord black truffle responds to cold temperature with an extensive reprogramming of its transcriptional activity. Fungal Genetics and Biology, 2011, 48, 585-591.	2.1	45
89	Genome-wide inventory of metal homeostasis-related gene products including a functional phytochelatin synthase in the hypogeous mycorrhizal fungus <i>Tuber melanosporum</i> . Fungal Genetics and Biology, 2011, 48, 573-584.	2.1	56
90	On the road to understanding truffles in the underground. Fungal Genetics and Biology, 2011, 48, 555-560.	2.1	54

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91	Endophytic Life Strategies Decoded by Genome and Transcriptome Analyses of the Mutualistic Root Symbiont <i>Piriformospora indica</i> . <i>PLoS Pathogens</i> , 2011, 7, e1002290.	4.7	361
92	Isolation and characterization of <i>MAT</i> genes in the symbiotic ascomycete <i>Tuber melanosporum</i> . <i>New Phytologist</i> , 2011, 189, 710-722.	7.3	108
93	<i>Tuber melanosporum</i> : mating type distribution in a natural plantation and dynamics of strains of different mating types on the roots of nursery-inoculated host plants. <i>New Phytologist</i> , 2011, 189, 723-735.	7.3	104
94	Genome-wide search and functional identification of transcription factors in the mycorrhizal fungus <i>Tuber melanosporum</i> . <i>New Phytologist</i> , 2011, 189, 736-750.	7.3	35
95	Unearthing the truffle genome. <i>New Phytologist</i> , 2011, 189, 645-646.	7.3	12
96	Blurred boundaries: lifestyle lessons from ectomycorrhizal fungal genomes. <i>Trends in Genetics</i> , 2011, 27, 14-22.	6.7	165
97	Mutualistic interactions on a knife-edge between saprotrophy and pathogenesis. <i>Current Opinion in Plant Biology</i> , 2011, 14, 444-450.	7.1	42
98	A Secreted Effector Protein of <i>Laccaria bicolor</i> Is Required for Symbiosis Development. <i>Current Biology</i> , 2011, 21, 1197-1203.	3.9	447
99	Survey and analysis of simple sequence repeats in the <i>Laccaria bicolor</i> genome, with development of microsatellite markers. <i>Current Genetics</i> , 2011, 57, 75-88.	1.7	38
100	The Plant Cell Wall "Decomposing Machinery Underlies the Functional Diversity of Forest Fungi. <i>Science</i> , 2011, 333, 762-765.	12.6	512
101	Pyrigord black truffle genome uncovers evolutionary origins and mechanisms of symbiosis. <i>Nature</i> , 2010, 464, 1033-1038.	27.8	641
102	Insights into evolution of multicellular fungi from the assembled chromosomes of the mushroom <i>Coprinopsis cinerea</i> (<i>Coprinus cinereus</i>). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 11889-11894.	7.1	389
103	Pyrosequencing reveals a contrasted bacterial diversity between oak rhizosphere and surrounding soil. <i>Environmental Microbiology Reports</i> , 2010, 2, 281-288.	2.4	309
104	The Ectomycorrhizal Fungus <i>Laccaria bicolor</i> Stimulates Lateral Root Formation in Poplar and <i>Arabidopsis</i> through Auxin Transport and Signaling. <i>Plant Physiology</i> , 2009, 151, 1991-2005.	4.8	244
105	RNA silencing in the model mycorrhizal fungus <i>Laccaria bicolor</i> : gene knockdown of nitrate reductase results in inhibition of symbiosis with <i>Populus</i> . <i>Environmental Microbiology</i> , 2009, 11, 1878-1896.	3.8	68
106	Poplar and Pathogen Interactions: Insights from <i>Populus</i> Genome-Wide Analyses of Resistance and Defense Gene Families and Gene Expression Profiling. <i>Critical Reviews in Plant Sciences</i> , 2009, 28, 309-334.	5.7	97
107	The <i>Laccaria</i> genome: a symbiont blueprint decoded. <i>New Phytologist</i> , 2008, 180, 296-310.	7.3	92
108	T-DNA insertion, plasmid rescue and integration analysis in the model mycorrhizal fungus <i>Laccaria bicolor</i> . <i>Microbial Biotechnology</i> , 2008, 1, 258-269.	4.2	38

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109	Polymorphism at the ribosomal DNA ITS and its relation to postglacial re-colonization routes of the Perigord truffle <i>Tuber melanosporum</i> . <i>New Phytologist</i> , 2004, 164, 401-411.	7.3	153