StÃ©phane Declerck

List of Publications by Year
in descending order

120 papers	4,138 citations	109264 35 h-index	143943 57 g-index
120 all docs	120 docs citations	120 times ranked	3041 citing authors

#	Article	IF	Citations
1	Phytophthora Root Rot: Importance of the Disease, Current and Novel Methods of Control. Agronomy, 2022, 12, 610.	1.3	10
2	In vitro propagation of Alkanna tinctoria Tausch.: a medicinal plant of the Boraginaceae family with high pharmaceutical value. Industrial Crops and Products, 2022, 182, 114860.	2.5	5
3	Twoâ€component system in <i>Rahnella aquatilis</i> is impacted by the hyphosphere of the arbuscular mycorrhizal fungus <i>Rhizophagus irregularis</i>. Environmental Microbiology Reports, 2022, 14, 119-129.	1.0	4
4	Mycelium chemistry differs markedly between ectomycorrhizal and arbuscular mycorrhizal fungi. Communications Biology, 2022, 5, 398.	2.0	9
5	Arbuscular mycorrhizal fungi and production of secondary metabolites in medicinal plants. Mycorrhiza, 2022, 32, 221-256.	1.3	46
6	The Metabolic Profile of Anchusa officinalis L. Differs According to Its Associated Arbuscular Mycorrhizal Fungi. Metabolites, 2022, 12, 573.	1.3	8
7	Diversity and species composition of arbuscular mycorrhizal fungi across maize fields in the southern part of Belgium. Mycorrhiza, 2021, 31, 265-272.	1.3	6
8	Combinatorial reprogramming of lipid metabolism in plants: a way towards massâ€production of bioâ€fortified arbuscular mycorrhizal fungi inoculants. Microbial Biotechnology, 2021, 14, 31-34.	2.0	7
9	Diesel fuel differentially affects hyphal healing in Gigaspora sp. and Rhizophagus irregularis. Mycorrhiza, 2021, 31, 413-421.	1.3	0
10	Fungicides With Contrasting Mode of Action Differentially Affect Hyphal Healing Mechanism in Gigaspora sp. and Rhizophagus irregularis. Frontiers in Plant Science, 2021, 12, 642094.	1.7	10
11	In vitro colonization of date palm plants by Rhizophagus irregularis during the rooting stage. Symbiosis, 2021, 84, 83-89.	1.2	4
12	Macrophomina phaseolina: General Characteristics of Pathogenicity and Methods of Control. Frontiers in Plant Science, 2021, 12, 634397.	1.7	111
13	A coumarin exudation pathway mitigates arbuscular mycorrhizal incompatibility in Arabidopsis thaliana. Plant Molecular Biology, 2021, 106, 319-334.	2.0	22
14	Direct transfer of zinc between plants is channelled by common mycorrhizal network of arbuscular mycorrhizal fungi and evidenced by changes in expression of zinc transporter genes in fungus and plant. Environmental Microbiology, 2021, 23, 5883-5900.	1.8	14
15	In vitro mycorrhization of Argania spinosa L. using germinated seeds. Symbiosis, 2021, 85, 57-68.	1.2	4
16	Ectomycorrhizal fungi and trees: brothers in arms in the face of anthropogenic activities and their consequences. Symbiosis, 2021, 84, 337-351.	1.2	5
17	The Arbuscular Mycorrhizal Fungus Rhizophagus irregularis MUCL 41833 Modulates Metabolites Production of Anchusa officinalis L. Under Semi-Hydroponic Cultivation. Frontiers in Plant Science, 2021, 12, 724352.	1.7	9
18	Synthetic Mono-Rhamnolipids Display Direct Antifungal Effects and Trigger an Innate Immune Response in Tomato against Botrytis Cinerea. Molecules, 2020, 25, 3108.	1.7	27

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19	Common Mycorrhizal Network Induced JA/ET Genes Expression in Healthy Potato Plants Connected to Potato Plants Infected by Phytophthora infestans. Frontiers in Plant Science, 2020, 11, 602.	1.7	21
20	The Mycorrhizal Donor Plant (MDP) In Vitro Culture System for the Efficient Colonization of Whole Plants. Methods in Molecular Biology, 2020, 2146, 19-31.	0.4	5
21	Community composition of arbuscular mycorrhizal fungi associated with native plants growing in a petroleumâ€polluted soil of the Amazon region of Ecuador. MicrobiologyOpen, 2019, 8, e00703.	1.2	15
22	Rhizophagus irregularis MUCL 41833 Improves Phosphorus Uptake and Water Use Efficiency in Maize Plants During Recovery From Drought Stress. Frontiers in Plant Science, 2019, 10, 897.	1.7	21
23	A Stimulatory Role for Cytokinin in the Arbuscular Mycorrhizal Symbiosis of Pea. Frontiers in Plant Science, 2019, 10, 262.	1.7	18
24	Genetic analysis of tomato root colonization by arbuscular mycorrhizal fungi. Annals of Botany, 2019, 124, 933-946.	1.4	22
25	The arbuscular mycorrhizal fungus Rhizophagus irregularis MUCL 43194 induces the gene expression of citrate synthase in the tricarboxylic acid cycle of the phosphate-solubilizing bacterium Rahnella aquatilis HX2. Mycorrhiza, 2019, 29, 69-75.	1.3	14
26	Transcriptional Changes in Mycorrhizal and Nonmycorrhizal Soybean Plants upon Infection with the Fungal Pathogen <i>Macrophomina phaseolina</i>. Molecular Plant-Microbe Interactions, 2018, 31, 842-855.	1.4	30
27	Impact of Rhizophagus irregularis MUCL 41833 on disease symptoms caused by Phytophthora infestans in potato grown under field conditions. Crop Protection, 2018, 107, 26-33.	1.0	30
28	In situ Orchid Seedling-Trap Experiment Shows Few Keystone and Many Randomly Associated Mycorrhizal Fungal Species During Early Plant Colonization. Frontiers in Plant Science, 2018, 9, 1664.	1.7	26
29	Untangling factors that drive community composition of root associated fungal endophytes of Neotropical epiphytic orchids. Fungal Ecology, 2018, 34, 67-75.	0.7	21
30	Reducing Water Availability Impacts the Development of the Arbuscular Mycorrhizal Fungus Rhizophagus irregularis MUCL 41833 and Its Ability to Take Up and Transport Phosphorus Under in Vitro Conditions. Frontiers in Microbiology, 2018, 9, 1254.	1.5	6
31	The arbuscular mycorrhizal fungus Rhizophagus irregularis MUCL 41833 increases the phosphorus uptake and biomass of Medicago truncatula, a benzo[a]pyrene-tolerant plant species. Mycorrhiza, 2018, 28, 761-771.	1.3	18
32	Signal beyond nutrient, fructose, exuded by an arbuscular mycorrhizal fungus triggers phytate mineralization by a phosphate solubilizing bacterium. ISME Journal, 2018, 12, 2339-2351.	4.4	153
33	Increased Silicon Acquisition in Bananas Colonized by Rhizophagus irregularis MUCL 41833 Reduces the Incidence of Pseudocercospora fijiensis. Frontiers in Plant Science, 2018, 9, 1977.	1.7	16
34	Genetic stability of ectomycorrhizal fungi is not affected by cryopreservation at â˘130Â°C or cold storage with repeated sub-cultivations over a period of 2Âyears. Mycorrhiza, 2017, 27, 595-601.	1.3	1
35	Tracing native and inoculated Rhizophagus irregularis in three potato cultivars (Charlotte, Nicola) Tj ETQq1 1 0.784314 rgBT /Overlock	2.1	12
36	Potato field-inoculation in Ecuador with Rhizophagus irregularis: no impact on growth performance and associated arbuscular mycorrhizal fungal communities. Symbiosis, 2017, 73, 45-56.	1.2	28

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37	Rhizosphere microbiomes of potato cultivated in the High Andes show stable and dynamic core microbiomes with different responses to plant development. FEMS Microbiology Ecology, 2017, 93, fiw242.	1.3	114
38	Short-term chromium (VI) exposure increases phosphorus uptake by the extraradical mycelium of the arbuscular mycorrhizal fungus Rhizophagus irregularis MUCL 41833. Chemosphere, 2017, 187, 27-34.	4.2	13
39	Rhizophagus irregularis MUCL 41833 transitorily reduces tomato bacterial wilt incidence caused by Ralstonia solanacearum under in vitro conditions. Mycorrhiza, 2017, 27, 719-723.	1.3	13
40	Impact of plant growth-promoting rhizobacteria on root colonization potential and life cycle of<i>Rhizophagus irregularis</i>following co-entrapment into alginate beads. Journal of Applied Microbiology, 2017, 122, 429-440.	1.4	21
41	Are there keystone mycorrhizal fungi associated to tropical epiphytic orchids?. Mycorrhiza, 2017, 27, 225-232.	1.3	41
42	An In Vitro Method for Studying the Three-Way Interaction between Soybean, Rhizophagus irregularis and the Soil-Borne Pathogen Fusarium virguliforme. Frontiers in Plant Science, 2017, 8, 1033.	1.7	10
43	Dynamics of Short-Term Phosphorus Uptake by Intact Mycorrhizal and Non-mycorrhizal Maize Plants Grown in a Circulatory Semi-Hydroponic Cultivation System. Frontiers in Plant Science, 2017, 8, 1471.	1.7	37
44	Arbuscular Mycorrhizal Fungal Community Composition in Carludovica palmata, Costus scaber and Euterpe precatoria from Weathered Oil Ponds in the Ecuadorian Amazon. Frontiers in Microbiology, 2017, 8, 2134.	1.5	22
45	Exploring the use of recombinant inbred lines in combination with beneficial microbial inoculants (AM fungus and PGPR) to improve drought stress tolerance in tomato. Environmental and Experimental Botany, 2016, 131, 47-57.	2.0	104
46	Inoculation of Medicago sativa cover crop with Rhizophagus irregularis and Trichoderma harzianum increases the yield of subsequently-grown potato under low nutrient conditions. Applied Soil Ecology, 2016, 105, 137-143.	2.1	46
47	Increasing phosphorus concentration in the extraradical hyphae of Rhizophagus irregularis DAOM 197198 leads to a concomitant increase in metal minerals. Mycorrhiza, 2016, 26, 909-918.	1.3	9
48	Mitigating Abiotic Stresses in Crop Plants by Arbuscular Mycorrhizal Fungi. Signaling and Communication in Plants, 2016, , 341-400.	0.5	26
49	Silicon acquisition by bananas (c.V. Grande Naine) is increased in presence of the arbuscular mycorrhizal fungus Rhizophagus irregularis MUCL 41833. Plant and Soil, 2016, 409, 77-85.	1.8	25
50	Combination of Crotalaria spectabilis with Rhizophagus irregularis MUCL41833 decreases the impact of Radopholus similis in banana. Applied Soil Ecology, 2016, 106, 11-17.	2.1	6
51	Rhizophagus irregularis MUCL 41833 can colonize and improve P uptake of Plantago lanceolata after exposure to ionizing gamma radiation in root organ culture. Mycorrhiza, 2016, 26, 257-262.	1.3	1
52	In vitro mycorrhization of banana (Musa acuminata) plantlets improves their growth during acclimatization. In Vitro Cellular and Developmental Biology - Plant, 2015, 51, 265-273.	0.9	12
53	PERN: an EUâ€“Russia initiative for rhizosphere microbial resources. Trends in Biotechnology, 2015, 33, 377-380.	4.9	9
54	Plant identity and density can influence arbuscular mycorrhizal fungi colonization, plant growth, and reproduction investment in coculture. Botany, 2015, 93, 405-412.	0.5	9

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55	The induction of Ethylene response factor 3 (<i>ERF3</i>) in potato as a result of co-inoculation with<i>Pseudomonas</i>sp. R41805 and<i>Rhizophagus irregularis</i>MUCL 41833 â€“ a possible role in plant defense. Plant Signaling and Behavior, 2015, 10, e988076.	1.2	26
56	Do fungicides used to control Rhizoctonia solani impact the non-target arbuscular mycorrhizal fungus Rhizophagus irregularis?. Mycorrhiza, 2015, 25, 277-288.	1.3	49
57	The arbuscular mycorrhiza fungus<i>Rhizophagus irregularis</i>MUCL 41833 decreases disease severity of Black Sigatoka on banana c.v. Grande naine, under<i>in vitro</i>culture conditions. Fruits, 2015, 70, 37-46.	0.3	10
58	Maintenance and preservation of ectomycorrhizal and arbuscular mycorrhizal fungi. Mycorrhiza, 2014, 24, 323-337.	1.3	26
59	Polyaromatic hydrocarbons impair phosphorus transport by the arbuscular mycorrhizal fungus Rhizophagus irregularis. Chemosphere, 2014, 104, 97-104.	4.2	21
60	Effect of activated charcoal and pruning of the taproot on the in vitro mycorrhization of Hevea brasiliensis MÃ¼ll. Arg.. In Vitro Cellular and Developmental Biology - Plant, 2014, 50, 317-325.	0.9	2
61	Cryopreservation of arbuscular mycorrhizal fungi from root organ and plant cultures. Mycorrhiza, 2014, 24, 233-237.	1.3	2
62	Biological control agents: from field to market, problems, and challenges. Trends in Biotechnology, 2014, 32, 493-496.	4.9	109
63	Hevea brasiliensis and Urtica dioica impact the in vitro mycorrhization of neighbouring Medicago truncatula seedlings. Symbiosis, 2013, 60, 123-132.	1.2	8
64	Colletotrichum gigasporum sp. nov., a new species of Colletotrichum producing long straight conidia. Mycological Progress, 2013, 12, 403-412.	0.5	23
65	Cryopreservation of ectomycorrhizal fungi has minor effects on root colonization of Pinus sylvestris plantlets and their subsequent nutrient uptake capacity. Mycorrhiza, 2013, 23, 463-471.	1.3	7
66	Viability of ectomycorrhizal fungi following cryopreservation. Fungal Biology, 2013, 117, 103-111.	1.1	14
67	Study in vitro of the impact of endophytic bacteria isolated from Centella asiatica on the disease incidence caused by the hemibiotrophic fungus Colletotrichum higginsianum. Antonie Van Leeuwenhoek, 2013, 103, 121-133.	0.7	22
68	Cryopreservation of in vitro-produced Rhizophagus species has minor effects on their morphology, physiology, and genetic stability. Mycorrhiza, 2013, 23, 675-682.	1.3	7
69	In vitro mycorrhization of the rubber tree Hevea brasiliensis MÃ¼ll Arg. In Vitro Cellular and Developmental Biology - Plant, 2013, 49, 207-215.	0.9	9
70	Effects of Rhizophagus irregularis MUCL 41833 on the reproduction of Radopholus similis in banana plantlets grown under in vitro culture conditions. Mycorrhiza, 2013, 23, 279-288.	1.3	37
71	Rhizophagus irregularis MUCL 41833 decreases the reproduction ratio of Radopholus similis in the banana cultivar Yangambi km5. Nematology, 2013, 15, 629-632.	0.2	5
72	Characterization of an endophytic whorl-forming Streptomyces from Catharanthus roseus stems producing polyene macrolide antibiotic. Canadian Journal of Microbiology, 2012, 58, 617-627.	0.8	12

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73	Preservation at ultra-low temperature of inÂvitro cultured arbuscular mycorrhizal fungi via encapsulationâ€“drying. Fungal Biology, 2012, 116, 1032-1041.	1.1	9
74	Exposure to warming and CO2 enrichment promotes greater above-ground biomass, nitrogen, phosphorus and arbuscular mycorrhizal colonization in newly established grasslands. Plant and Soil, 2012, 359, 121-136.	1.8	51
75	Transcriptional regulation of defence genes and involvement of the WRKY transcription factor in arbuscular mycorrhizal potato root colonization. Functional and Integrative Genomics, 2012, 12, 183-198.	1.4	61
76	Mycorrhizal colonization of major banana genotypes in six East African environments. Agriculture, Ecosystems and Environment, 2012, 157, 40-46.	2.5	8
77	Association of highly and weakly mycorrhizal seedlings can promote the extra- and intraradical development of a common mycorrhizal network. FEMS Microbiology Ecology, 2012, 79, 251-259.	1.3	14
78	Effects of arbuscular mycorrhizal fungi on grassland productivity are altered by future climate and below-ground resource availability. Environmental and Experimental Botany, 2012, 81, 62-71.	2.0	25
79	Mycorrhiza induced resistance in potato plantlets challenged by Phytophthora infestans. Physiological and Molecular Plant Pathology, 2011, 76, 20-26.	1.3	71
80	<i>Trichoderma harzianum</i>might impact phosphorus transport by arbuscular mycorrhizal fungi. FEMS Microbiology Ecology, 2011, 77, 558-567.	1.3	25
81	Methods for large-scale production of AM fungi: past, present, and future. Mycorrhiza, 2011, 21, 1-16.	1.3	173
82	Fenpropimorph and fenhexamid impact phosphorus translocation by arbuscular mycorrhizal fungi. Mycorrhiza, 2011, 21, 363-374.	1.3	34
83	The sterol biosynthesis inhibitor molecule fenhexamid impacts the vegetative compatibility of Glomus clarum. Mycorrhiza, 2011, 21, 443-449.	1.3	13
84	Fast track in vitro mycorrhization of potato plantlets allow studies on gene expression dynamics. Mycorrhiza, 2010, 20, 201-207.	1.3	17
85	Impact of multispores in vitro subcultivation of Glomus sp. MUCL 43194 (DAOM 197198) on vegetative compatibility and genetic diversity detected by AFLP. Mycorrhiza, 2010, 20, 415-425.	1.3	22
86	Effect of potassium and phosphorus on the transport of radiocesium by arbuscular mycorrhizal fungi. Journal of Environmental Radioactivity, 2010, 101, 482-487.	0.9	30
87	Arbuscular mycorrhizal fungi decrease radiocesium accumulation in Medicago truncatula. Journal of Environmental Radioactivity, 2010, 101, 591-596.	0.9	19
88	Do arbuscular mycorrhizal fungi with contrasting life-history strategies differ in their responses to repeated defoliation?. FEMS Microbiology Ecology, 2010, 72, 114-122.	1.3	48
89	Mycoparasitism of arbuscular mycorrhizal fungi: a pathway for the entry of saprotrophic fungi into roots. FEMS Microbiology Ecology, 2010, 73, no-no.	1.3	31
90	Radiocesium transfer between <i>Medicago truncatula</i> plants via a common mycorrhizal network. Environmental Microbiology, 2010, 12, 2180-2189.	1.8	20

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91	Extraradical mycelium network of arbuscular mycorrhizal fungi allows fast colonization of seedlings under in vitro conditions. Mycorrhiza, 2009, 19, 347-356.	1.3	64
92	Trichoderma harzianum elicits defence response genes in roots of potato plantlets challenged by Rhizoctonia solani. European Journal of Plant Pathology, 2009, 124, 219-230.	0.8	63
93	Absence of carbon transfer between Medicago truncatula plants linked by a mycorrhizal network, demonstrated in an experimental microcosm. FEMS Microbiology Ecology, 2008, 65, 350-360.	1.3	39
94	Effects of two sterol biosynthesis inhibitor fungicides (fenpropimorph and fenhexamid) on the development of an arbuscular mycorrhizal fungus. Mycological Research, 2008, 112, 592-601.	2.5	47
95	Hyphal healing mechanism in the arbuscular mycorrhizal fungiScutellospora reticulataandGlomus clarumdiffers in response to severe physical stress. FEMS Microbiology Letters, 2007, 268, 120-125.	0.7	25
96	Transport of radiocaesium by arbuscular mycorrhizal fungi to Medicago truncatula under in vitro conditions. Environmental Microbiology, 2006, 8, 1926-1934.	1.8	64
97	Glomeraceae and Gigasporaceae differ in their ability to form hyphal networks. New Phytologist, 2006, 172, 185-188.	3.5	79
98	Arbuscular mycorrhizal fungi reveal distinct patterns of anastomosis formation and hyphal healing mechanisms between different phylogenic groups. New Phytologist, 2005, 165, 261-271.	3.5	158
99	Morphological, ontogenetic and molecular characterization of Scutellospora reticulata (Glomeromycota). Mycological Research, 2005, 109, 697-706.	2.5	31
100	Development of an autotrophic culture system for the in vitro mycorrhization of potato plantlets. FEMS Microbiology Letters, 2005, 248, 111-118.	0.7	77
101	Effects of arbuscular mycorrhizal fungi on the root uptake and translocation of radiocaesium. Environmental Pollution, 2005, 134, 515-524.	3.7	29
102	Methodologies for in Vitro Cultivation of Arbuscular Mycorrhizal Fungi with Root Organs. , 2005, , 341-375.		72
103	Comparison of 233U and 33P uptake and translocation by the arbuscular mycorrhizal fungus Glomus intraradices in root organ culture conditions. Mycorrhiza, 2004, 14, 203-207.	1.3	36
104	Development of extraradical mycelium of Scutellospora reticulata under root-organ culture: spore production and function of auxiliary cells. Mycological Research, 2004, 108, 84-92.	2.5	41
105	Extraradical mycelium of the arbuscular mycorrhizal fungus Glomus lamellosum can take up, accumulate and translocate radiocaesium under root-organ culture conditions. Environmental Microbiology, 2003, 5, 510-516.	1.8	53
106	Contribution of hyphae and roots to uranium uptake and translocation by arbuscular mycorrhizal carrot roots under root-organ culture conditions. New Phytologist, 2003, 158, 391-399.	3.5	75
107	Use of Root Organ Cultures To Investigate the Interaction between Glomus intraradices and Pratylenchus coffeae. Applied and Environmental Microbiology, 2003, 69, 4308-4311.	1.4	37
108	Mycelium Development and Architecture, and Spore Production of Scutellospora reticulata in Monoxenic Culture with Ri T-DNA Transformed Carrot Roots. Mycologia, 2003, 95, 1004.	0.8	19

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109	Mycelium development and architecture, and spore production of<i>Scutellospora reticulata</i>in monoxenic culture with Ri T-DNA transformed carrot roots. Mycologia, 2003, 95, 1004-1012.	0.8	38
110	Mycelium development and architecture, and spore production of Scutellospora reticulata in monoxenic culture with Ri T-DNA transformed carrot roots. Mycologia, 2003, 95, 1004-12.	0.8	11
111	Development of<i>Acaulospora rehmii</i>spore and hyphal swellings under root-organ culture. Mycologia, 2002, 94, 850-855.	0.8	20
112	Arbuscular mycorrhiza on root-organ cultures. Canadian Journal of Botany, 2002, 80, 1-20.	1.2	231
113	Development of Acaulospora rehmii Spore and Hyphal Swellings under Root-Organ Culture. Mycologia, 2002, 94, 850.	0.8	6
114	Greenhouse response of micropropagated bananas inoculated with in vitro monoxenically produced arbuscular mycorrhizal fungi. Scientia Horticulturae, 2002, 93, 301-309.	1.7	37
115	Uranium uptake and translocation by the arbuscular mycorrhizal fungus, Glomus intraradices , under rootâ€organ culture conditions. New Phytologist, 2002, 156, 275-281.	3.5	74
116	<i>Glomus proliferum</i> sp. nov.: a description based on morphological, biochemical, molecular and monoxenic cultivation data. Mycologia, 2000, 92, 1178-1187.	0.8	47
117	Glomus proliferum sp. nov.: A Description Based on Morphological, Biochemical, Molecular and Monoxenic Cultivation Data. Mycologia, 2000, 92, 1178.	0.8	41
118	Reproduction of the burrowing nematode (Radopholus similis) on Ri T-DNA transformed carrot roots. Nematology, 2000, 2, 247-249.	0.2	4
119	Monoxenic Culture of the Intraradical Forms of Glomus sp. Isolated from a Tropical Ecosystem: A Proposed Methodology for Germplasm Collection. Mycologia, 1998, 90, 579.	0.8	105
120	Monoxenic culture of the intraradical forms of<i>Glomus</i>sp. isolated from a tropical ecosystem: a proposed methodology for germplasm collection. Mycologia, 1998, 90, 579-585.	0.8	179