Antonio Roldan

List of Publications by Citations

161 papers	7,639 citations	53 h-index	79 g-index
163 ext. papers	8,437 ext. citations	5.4 avg, IF	5.95 L-index

#	Paper	IF	Citations
161	Induction of antioxidant enzymes is involved in the greater effectiveness of a PGPR versus AM fungi with respect to increasing the tolerance of lettuce to severe salt stress. *Environmental and Experimental Botany*, **2009**, 65, 245-252	5.9	273
160	Plant-growth-promoting rhizobacteria and arbuscular mycorrhizal fungi modify alleviation biochemical mechanisms in water-stressed plants. *Functional Plant Biology*, **2008**, 35, 141-151	2.7	250
159	Agricultural use of digestate for horticultural crop production and improvement of soil properties. *European Journal of Agronomy*, **2012**, 43, 119-128	5	178
158	Contribution of arbuscular mycorrhizal fungi and/or bacteria to enhancing plant drought tolerance under natural soil conditions: effectiveness of autochthonous or allochthonous strains. *Journal of Plant Physiology*, **2015**, 174, 87-96	3.6	176
157	Soil microbial biomass and activity under different agricultural management systems in a semiarid Mediterranean agroecosystem. *Soil and Tillage Research*, **2010**, 109, 110-115	6.5	168
156	Ability of different plant species to promote microbiological processes in semiarid soil. *Geoderma*, **2005**, 124, 193-202	6.7	135
155	The impact of tillage practices on arbuscular mycorrhizal fungal diversity in subtropical crops **2008**, 18, 527-36		132
154	No-tillage, crop residue additions, and legume cover cropping effects on soil quality characteristics under maize in Patzcuaro watershed (Mexico). *Soil and Tillage Research*, **2003**, 72, 65-73	6.5	129
153	An incubation experiment to determine factors involving aggregation changes in an arid soil receiving urban refuse. *Soil Biology and Biochemistry*, **1994**, 26, 1699-1707	7.5	125
152	Soil structural stability and erosion rates influenced by agricultural management practices in a semi-arid Mediterranean agro-ecosystem. *Soil Use and Management*, **2012**, 28, 571-579	3.1	123
151	Effect of plant cover decline on chemical and microbiological parameters under Mediterranean climate. *Soil Biology and Biochemistry*, **2002**, 34, 635-642	7.5	123
150	Differential activity of autochthonous bacteria in controlling drought stress in native Lavandula and Salvia plants species under drought conditions in natural arid soil. *Microbial Ecology*, **2014**, 67, 410-20	4.4	121
149	Changes in soil enzyme activity, fertility, aggregation and C sequestration mediated by conservation tillage practices and water regime in a maize field. *Applied Soil Ecology*, **2005**, 30, 11-20	5	118
148	Contribution of Pseudomonas mendocina and Glomus intraradices to aggregate stabilization and promotion of biological fertility in rhizosphere soil of lettuce plants under field conditions. *Soil Use and Management*, **2006**, 22, 298-304	3.1	118
147	Establishment of shrub species in a degraded semiarid site after inoculation with native or allochthonous arbuscular mycorrhizal fungi. *Applied Soil Ecology*, **2003**, 22, 103-111	5	118
146	Interactions between a plant growth-promoting rhizobacterium, an AM fungus and a phosphate-solubilising fungus in the rhizosphere of Lactuca sativa. *Applied Soil Ecology*, **2007**, 35, 480-487	5	115
145	Soil enzyme activities suggest advantages of conservation tillage practices in sorghum cultivation under subtropical conditions. *Geoderma*, **2005**, 129, 178-185	6.7	114

144	An AM fungus and a PGPR intensify the adverse effects of salinity on the stability of rhizosphere soil aggregates of Lactuca sativa. *Soil Biology and Biochemistry*, **2010**, 42, 429-434	7.5	112
143	Bioencapsulation of microbial inoculants for better soil–plant fertilization. A review. *Agronomy for Sustainable Development*, **2013**, 33, 751-765	6.8	111
142	Analysis of the mycorrhizal potential in the rhizosphere of representative plant species from desertification-threatened Mediterranean shrublands. *Applied Soil Ecology*, **2003**, 22, 29-37	5	111
141	Host preferences of arbuscular mycorrhizal fungi colonizing annual herbaceous plant species in semiarid Mediterranean prairies. *Applied and Environmental Microbiology*, **2012**, 78, 6180-6	4.8	106
140	Antioxidant enzyme activities in shoots from three mycorrhizal shrub species afforested in a degraded semi-arid soil. *Physiologia Plantarum*, **2003**, 118, 562-570	4.6	106
139	Improvement of rhizosphere aggregate stability of afforested semiarid plant species subjected to mycorrhizal inoculation and compost addition. *Geoderma*, **2002**, 108, 133-144	6.7	100
138	Use of microbiological indicators for evaluating success in soil restoration after revegetation of a mining area under subtropical conditions. *Applied Soil Ecology*, **2005**, 30, 3-10	5	99
137	Plant type mediates rhizospheric microbial activities and soil aggregation in a semiarid Mediterranean salt marsh. *Geoderma*, **2005**, 124, 375-382	6.7	98
136	Assessing the effectiveness of mycorrhizal inoculation and soil compost addition for enhancing reafforestation with Olea europaea subsp. sylvestris through changes in soil biological and physical parameters. *Applied Soil Ecology*, **2002**, 20, 107-118	5	90
135	Re-establishment of Retama sphaerocarpa as a target species for reclamation of soil physical and biological properties in a semi-arid Mediterranean area. *Forest Ecology and Management*, **2003**, 182, 49-58	3.9	88
134	Aggregate stability changes after organic amendment and mycorrhizal inoculation in the afforestation of a semiarid site with Pinus halepensis. *Applied Soil Ecology*, **2002**, 19, 199-208	5	86
133	Changes in Microbial Activity after Abandonment of Cultivation in a Semiarid Mediterranean Environment. *Journal of Environmental Quality*, **1997**, 26, 285-292	3.4	76
132	Arbuscular mycorrhizal fungi, Bacillus cereus, and Candida parapsilosis from a multicontaminated soil alleviate metal toxicity in plants. *Microbial Ecology*, **2010**, 59, 668-77	4.4	74
131	Plant type differently promote the arbuscular mycorrhizal fungi biodiversity in the rhizosphere after revegetation of a degraded, semiarid land. *Soil Biology and Biochemistry*, **2011**, 43, 167-173	7.5	73
130	Differential modulation of host plant delta13C and delta18O by native and nonnative arbuscular mycorrhizal fungi in a semiarid environment. *New Phytologist*, **2006**, 169, 379-87	9.8	72
129	The interaction with arbuscular mycorrhizal fungi or Trichoderma harzianum alters the shoot hormonal profile in melon plants. *Phytochemistry*, **2011**, 72, 223-9	4	71
128	Phosphorus fertilisation management modifies the biodiversity of AM fungi in a tropical savanna forage system. *Soil Biology and Biochemistry*, **2010**, 42, 1114-1122	7.5	71
127	Formation of stable aggregates in degraded soil by amendment with urban refuse and peat. *Geoderma*, **1994**, 63, 277-288	6.7	71

126	Native plant growth promoting bacteria Bacillus thuringiensis and mixed or individual mycorrhizal species improved drought tolerance and oxidative metabolism in Lavandula dentata plants. *Journal of Plant Physiology*, **2016**, 192, 1-12	3.6	68
125	Antioxidant activities and metal acquisition in mycorrhizal plants growing in a heavy-metal multicontaminated soil amended with treated lignocellulosic agrowaste. *Applied Soil Ecology*, **2009**, 41, 168-177	5	67
124	Soil water availability improved by site preparation in a Pinus halepensis afforestation under semiarid climate. *Forest Ecology and Management*, **2001**, 149, 115-128	3.9	66
123	The application of an organic amendment modifies the arbuscular mycorrhizal fungal communities colonizing native seedlings grown in a heavy-metal-polluted soil. *Soil Biology and Biochemistry*, **2011** , 43, 1498-1508	7.5	64
122	Soil degradation and desertification induced by vegetation removal in a semiarid environment. *Soil Use and Management*, **1998**, 14, 1-5	3.1	64
121	Soil sustainability indicators following conservation tillage practices under subtropical maize and bean crops. *Soil and Tillage Research*, **2007**, 93, 273-282	6.5	64
120	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
119	Poultry manure and banana waste are effective biofertilizer carriers for promoting plant growth and soil sustainability in banana crops. *Soil Biology and Biochemistry*, **2008**, 40, 3092-3095	7.5	62
118	Organic amendment and mycorrhizal inoculation as a practice in afforestation of soils with Pinus halepensis Miller: effect on their microbial activity. *Soil Biology and Biochemistry*, **2000**, 32, 1173-1181	7.5	62
117	Involvement of antioxidant enzyme and nitrate reductase activities during water stress and recovery of mycorrhizal Myrtus communis and Phillyrea angustifolia plants. *Plant Science*, **2005**, 169, 191-197	5.3	61
116	Microbial inoculants and organic amendment improves plant establishment and soil rehabilitation under semiarid conditions. *Journal of Environmental Management*, **2014**, 134, 1-7	7.9	58
115	Survival of inocula and native AM fungi species associated with shrubs in a degraded Mediterranean ecosystem. *Soil Biology and Biochemistry*, **2005**, 37, 227-233	7.5	58
114	Revegetation in Semiarid Zones: Influence of Terracing and Organic Refuse on Microbial Activity. *Soil Science Society of America Journal*, **1998**, 62, 670-676	2.5	58
113	Combined use of beneficial soil microorganism and agrowaste residue to cope with plant water limitation under semiarid conditions. *Geoderma*, **2014**, 232-234, 640-648	6.7	57
112	Interactions between arbuscular mycorrhizal fungi and Trichoderma harzianum and their effects on Fusarium wilt in melon plants grown in seedling nurseries. *Journal of the Science of Food and Agriculture*, **2009**, 89, 1843-1850	4.3	56
111	Aggregate stability changes in a semiarid soil after treatment with different organic amendments. *Arid Land Research and Management*, **1996**, 10, 139-148		55
110	Changes in the composition and diversity of AMF communities mediated by management practices in a Mediterranean soil are related with increases in soil biological activity. *Soil Biology and Biochemistry*, **2014**, 76, 34-44	7.5	54
109	Significance of treated agrowaste residue and autochthonous inoculates (Arbuscular mycorrhizal fungi and Bacillus cereus) on bacterial community structure and phytoextraction to remediate soils contaminated with heavy metals. *Chemosphere*, **2009**, 75, 327-34	8.4	54

108	Interaction between arbuscular mycorrhizal fungi and Trichoderma harzianum under conventional and low input fertilization field condition in melon crops: Growth response and Fusarium wilt biocontrol. *Applied Soil Ecology*, **2011**, 47, 98-105	5	51
107	Increased diversity of arbuscular mycorrhizal fungi in a long-term field experiment via application of organic amendments to a semiarid degraded soil. *Applied and Environmental Microbiology*, **2009**, 75, 4254-63	4.8	51
106	Effect of drought on the stability of rhizosphere soil aggregates of Lactuca sativa grown in a degraded soil inoculated with PGPR and AM fungi. *Applied Soil Ecology*, **2009**, 42, 160-165	5	51
105	Trichoderma harzianum and Glomus intraradices modify the hormone disruption induced by Fusarium oxysporum infection in melon plants. *Phytopathology*, **2010**, 100, 682-8	3.8	48
104	Assessing changes in physical and biological properties in a soil contaminated by oil sludges under semiarid Mediterranean conditions. *Geoderma*, **2003**, 117, 53-61	6.7	48
103	Comparing the effectiveness of mycorrhizal inoculation and amendment with sugar beet, rock phosphate and Aspergillus niger to enhance field performance of the leguminous shrub Dorycnium pentaphyllum L.. *Applied Soil Ecology*, **2004**, 25, 169-180	5	48
102	Soil Characteristics Driving Arbuscular Mycorrhizal Fungal Communities in Semiarid Mediterranean Soils. *Applied and Environmental Microbiology*, **2016**, 82, 3348-3356	4.8	46
101	Changes in rhizosphere microbial activity mediated by native or allochthonous AM fungi in the reafforestation of a Mediterranean degraded environment. *Biology and Fertility of Soils*, **2005**, 41, 59-68	6.1	46
100	The cover crop determines the AMF community composition in soil and in roots of maize after a ten-year continuous crop rotation. *Science of the Total Environment*, **2019**, 660, 913-922	10.2	46
99	Application of composted urban residue enhanced the performance of afforested shrub species in a degraded semiarid land. *Bioresource Technology*, **2003**, 90, 65-70	11	45
98	Establishment of two ectomycorrhizal shrub species in a semiarid site after in situ amendment with sugar beet, rock phosphate, and Aspergillus niger. *Microbial Ecology*, **2005**, 49, 73-82	4.4	44
97	Assessing the diversity of AM fungi in arid gypsophilous plant communities. *Environmental Microbiology*, **2009**, 11, 2649-59	5.2	43
96	Arbuscular mycorrhizal fungi inoculation mediated changes in rhizosphere bacterial community structure while promoting revegetation in a semiarid ecosystem. *Science of the Total Environment*, **2017**, 584-585, 838-848	10.2	42
95	The combination of compost addition and arbuscular mycorrhizal inoculation produced positive and synergistic effects on the phytomanagement of a semiarid mine tailing. *Science of the Total Environment*, **2015**, 514, 42-8	10.2	42
94	Differences in the AMF diversity in soil and roots between two annual and perennial gramineous plants co-occurring in a Mediterranean, semiarid degraded area. *Plant and Soil*, **2012**, 354, 97-106	4.2	40
93	Differential effects of Pseudomonas mendocina and Glomus intraradices on lettuce plants physiological response and aquaporin PIP2 gene expression under elevated atmospheric CO2 and drought. *Microbial Ecology*, **2009**, 58, 942-51	4.4	40
92	Estimation by PLFA of microbial community structure associated with the rhizosphere of Lygeum spartum and Piptatherum miliaceum growing in semiarid mine tailings. *Microbial Ecology*, **2010**, 60, 265-71	4.4	40
91	Superoxide dismutase and total peroxidase activities in relation to drought recovery performance of mycorrhizal shrub seedlings grown in an amended semiarid soil. *Journal of Plant Physiology*, **2008** , 165, 715-22	3.6	39

90	Organic Fertilization in Traditional Mediterranean Grapevine Orchards Mediates Changes in Soil Microbial Community Structure and Enhances Soil Fertility. *Land Degradation and Development*, **2016**, 27, 1622-1628	4.4	39
89	Synergistic influence of an arbuscular mycorrhizal fungus and organic amendment on Pistacia lentiscus L. seedlings afforested in a degraded semiarid soil. *Soil Biology and Biochemistry*, **2002**, 34, 1139-1145	7.5	37
88	Improvement of soil characteristics and growth of Dorycnium pentaphyllum by amendment with agrowastes and inoculation with AM fungi and/or the yeast Yarowia lipolytica. *Chemosphere*, **2004**, 56, 449-56	8.4	35
87	Perennial plant species from semiarid gypsum soils support higher AMF diversity in roots than the annual Bromus rubens. *Soil Biology and Biochemistry*, **2012**, 49, 132-138	7.5	34
86	Elevated CO2 increases the effect of an arbuscular mycorrhizal fungus and a plant-growth-promoting rhizobacterium on structural stability of a semiarid agricultural soil under drought conditions. *Soil Biology and Biochemistry*, **2009**, 41, 1710-1716	7.5	34
85	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
84	Formation of stable aggregates in rhizosphere soil of Juniperus oxycedrus: Effect of AM fungi and organic amendments. *Applied Soil Ecology*, **2006**, 33, 30-38	5	34
83	Inoculation with arbuscular mycorrhizal fungi and addition of composted olive-mill waste enhance plant establishment and soil properties in the regeneration of a heavy metal-polluted environment. *Environmental Science and Pollution Research*, **2014**, 21, 7403-12	5.1	33
82	Effects of water stress, organic amendment and mycorrhizal inoculation on soil microbial community structure and activity during the establishment of two heavy metal-tolerant native plant species. *Microbial Ecology*, **2012**, 63, 794-803	4.4	33
81	Striking alterations in the soil bacterial community structure and functioning of the biological N cycle induced by Pennisetum setaceum invasion in a semiarid environment. *Soil Biology and Biochemistry*, **2017**, 109, 176-187	7.5	32
80	Photosynthetic and Transpiration Rates of Olea europaea subsp. sylvestris and Rhamnus lycioides as Affected by Water Deficit and Mycorrhiza. *Biologia Plantarum*, **2003**, 46, 637-639	2.1	32
79	Modularity reveals the tendency of arbuscular mycorrhizal fungi to interact differently with generalist and specialist plant species in gypsum soils. *Applied and Environmental Microbiology*, **2014**, 80, 5457-66	4.8	29
78	Complexity of semiarid gypsophilous shrub communities mediates the AMF biodiversity at the plant species level. *Microbial Ecology*, **2009**, 57, 718-27	4.4	29
77	Effect of Arbuscular Mycorrhizae and Induced Drought Stress on Antioxidant Enzyme and Nitrate Reductase Activities in Juniperus oxycedrus L. Grown in a Composted Sewage Sludge-amended Semi-arid Soil. *Plant and Soil*, **2006**, 279, 209-218	4.2	29
76	Long-term effects of irrigation with waste water on soil AM fungi diversity and microbial activities: the implications for agro-ecosystem resilience. *PLoS ONE*, **2012**, 7, e47680	3.7	28
75	Changes in the diversity of soil arbuscular mycorrhizal fungi after cultivation for biofuel production in a Guantanamo (Cuba) tropical system. *PLoS ONE*, **2012**, 7, e34887	3.7	28
74	Biological and Biochemical Quality of a Semiarid Soil after Induced Devegetation. *Journal of Environmental Quality*, **1997**, 26, 1116-1122	3.4	28
73	Growth response of Pinus halepensis to inoculation with Pisolithus arhizus in a terraced rangeland amended with urban refuse. *Plant and Soil*, **1996**, 179, 35-43	4.2	28

72	The effectiveness of arbuscular-mycorrhizal fungi and Aspergillus niger or Phanerochaete chrysosporium treated organic amendments from olive residues upon plant growth in a semi-arid degraded soil. *Journal of Environmental Management*, **2010**, 91, 2547-53	7.9	27
71	Testing the MEDALUS hillslope model. *Catena*, **1996**, 26, 137-160	5.8	27
70	A molecular approach to ascertain the success of "in situ" AM fungi inoculation in the revegetation of a semiarid, degraded land. *Science of the Total Environment*, **2011**, 409, 2874-80	10.2	26
69	Effects of elevated CO2, water stress, and inoculation with Glomus intraradices or Pseudomonas mendocina on lettuce dry matter and rhizosphere microbial and functional diversity under growth chamber conditions. *Journal of Soils and Sediments*, **2010**, 10, 1585-1597	3.4	25
68	Stability of desiccated rhizosphere soil aggregates of mycorrhizal Juniperus oxycedrus grown in a desertified soil amended with a composted organic residue. *Soil Biology and Biochemistry*, **2006**, 38, 2722-2730	7.5	25
67	Microbial processes in the rhizosphere soil of a heavy metals-contaminated Mediterranean salt marsh: a facilitating role of AM fungi. *Chemosphere*, **2006**, 64, 104-11	8.4	25
66	Effect of Mycorrhizal Inoculation on Nutrient Acquisition, Gas Exchange, and Nitrate Reductase Activity of Two Mediterranean-Autochthonous Shrub Species Under Drought Stress. *Journal of Plant Nutrition*, **2004**, 27, 57-74	2.3	25
65	Survival and growth of Pinus halepensis Miller seedlings in a semi-arid environment after forest soil transfer, terracing and organic amendments. *Annales Des Sciences Forestières*, **1996**, 53, 1099-1112		25
64	Performance of a Trichoderma harzianum Bentonite–Vermiculite Formulation Against Fusarium Wilt in Seedling Nursery Melon Plants. *Hortscience: A Publication of the American Society for Hortcultural Science*, **2009**, 44, 2025-2027	2.4	25
63	Combined effects of clay immobilized Azospirillum brasilense and Pantoea dispersa and organic olive residue on plant performance and soil properties in the revegetation of a semiarid area. *Science of the Total Environment*, **2014**, 466-467, 67-73	10.2	24
62	Alteration in rhizosphere soil properties of afforested Rhamnus lycioides seedlings in short-term response to mycorrhizal inoculation with Glomus intraradices and organic amendment. *Environmental Management*, **2003**, 31, 412-20	3.1	24
61	Unraveling the role of hyphal networks from arbuscular mycorrhizal fungi in aggregate stabilization of semiarid soils with different textures and carbonate contents. *Plant and Soil*, **2017**, 410, 273-281	4.2	23
60	Effect of mycorrhizal inoculation and soil restoration on the growth of Pinus halepensis seedlings in a semiarid soil. *Biology and Fertility of Soils*, **1994**, 18, 143-149	6.1	23
59	Medium-term effects of mycorrhizal inoculation and composted municipal waste addition on the establishment of two Mediterranean shrub species under semiarid field conditions. *Agriculture, Ecosystems and Environment*, **2003**, 97, 95-105	5.7	22
58	Species-specific roles of ectomycorrhizal fungi in facilitating interplant transfer of hydraulically redistributed water between Pinus halepensis saplings and seedlings. *Plant and Soil*, **2016**, 406, 15-27	4.2	21
57	Comparative effects of native filamentous and arbuscular mycorrhizal fungi in the establishment of an autochthonous, leguminous shrub growing in a metal-contaminated soil. *Science of the Total Environment*, **2011**, 409, 1205-9	10.2	21
56	A microcosm approach to assessing the effects of earthworm inoculation and oat cover cropping on CO2 fluxes and biological properties in an amended semiarid soil. *Chemosphere*, **2005**, 59, 1625-31	8.4	21
55	Effects of mycorrhizal inoculation of shrubs from Mediterranean ecosystems and composted residue application on transplant performance and mycorrhizal developments in a desertified soil. *Biology and Fertility of Soils*, **2002**, 36, 170-175	6.1	21

54	Effect of Eisenia foetida earthworms on mineralization kinetics, microbial biomass, enzyme activities, respiration and labile C fractions of three soils treated with a composted organic residue. *Biology and Fertility of Soils*, **2003**, 38, 45-51	6.1	21
53	Suitability of the microbial community composition and function in a semiarid mine soil for assessing phytomanagement practices based on mycorrhizal inoculation and amendment addition. *Journal of Environmental Management*, **2016**, 169, 236-46	7.9	20
52	Influence of habitat and climate variables on arbuscular mycorrhizal fungus community distribution, as revealed by a case study of facultative plant epiphytism under semiarid conditions. *Applied and Environmental Microbiology*, **2013**, 79, 7203-9	4.8	20
51	Evidence of differences between the communities of arbuscular mycorrhizal fungi colonizing galls and roots of Prunus persica infected by the root-knot nematode Meloidogyne incognita. *Applied and Environmental Microbiology*, **2011**, 77, 8656-61	4.8	20
50	Vesicular-Arbuscular Mycorrhiza (VAM) fungal populations in a xeric torriorthent receiving urban refuse. *Soil Biology and Biochemistry*, **1993**, 25, 451-456	7.5	20
49	Pure culture studies on Tetracladium. *Mycological Research*, **1989**, 93, 452-465		20
48	The Role of Relict Vegetation in Maintaining Physical, Chemical, and Biological Properties in an Abandoned Stipa -Grass Agroecosystem. *Arid Land Research and Management*, **2003**, 17, 103-111	1.8	19
47	Microbial activities and arbuscular mycorrhizal fungi colonization in the rhizosphere of the salt marsh plantInula crithmoides L. along a spatial salinity gradient. *Wetlands*, **2005**, 25, 350-355	1.7	19
46	Water-spender strategy is linked to higher leaf nutrient concentrations across plant species colonizing a dry and nutrient-poor epiphytic habitat. *Environmental and Experimental Botany*, **2018**, 153, 302-310	5.9	18
45	Advantages of inoculation with immobilized rhizobacteria versus amendment with olive-mill waste in the afforestation of a semiarid area with Pinus halepensis Mill. *Ecological Engineering*, **2014**, 73, 1-8	3.9	18
44	Changes in biological activity of a degraded Mediterranean soil after using microbially-treated dry olive cake as a biosolid amendment and arbuscular mycorrhizal fungi. *European Journal of Soil Biology*, **2008**, 44, 347-354	2.9	18
43	Establishment of Retama sphaerocarpa L. seedlings on a degraded semiarid soil as influenced by mycorrhizal inoculation and sewage-sludge amendment. *Journal of Plant Nutrition and Soil Science*, **2004**, 167, 637-644	2.3	18
42	Use of Nitrate Reductase Activity for Assessing Effectiveness of Mycorrhizal Symbiosis in Dorycnium pentaphyllum Under Induced Water Deficit. *Communications in Soil Science and Plant Analysis*, **2003**, 34, 2291-2302	1.5	18
41	Selection of Plant SpeciesOrganic Amendment Combinations to Assure Plant Establishment and Soil Microbial Function Recovery in the Phytostabilization of a Metal-Contaminated Soil. *Water, Air, and Soil Pollution*, **2014**, 225, 1	2.6	17
40	Changes in physical and biological soil quality indicators in a tropical crop system (Havana, Cuba) in response to different agroecological management practices. *Environmental Management*, **2003**, 32, 639-45	2.1	17
39	Arbuscular mycorrhizal fungi communities in a coral cay system (Morrocoy, Venezuela) and their relationships with environmental variables. *Science of the Total Environment*, **2015**, 505, 805-13	10.2	16
38	Effects of reafforestation techniques on the nutrient content, photosynthetic rate and stomatal conductance of Pinus Halepensis seedlings under semiarid conditions. *Land Degradation and Development*, **2000**, 11, 475-486	4.4	16
37	Host identity and functional traits determine the community composition of the arbuscular mycorrhizal fungi in facultative epiphytic plant species. *Fungal Ecology*, **2019**, 39, 307-315	4.1	15

36	Prolonged irrigation with municipal wastewater promotes a persistent and active soil microbial community in a semiarid agroecosystem. *Agricultural Water Management*, **2015**, 149, 115-122	5.9	15
35	AM fungal abundance and activity in a chronosequence of abandoned fields in a semiarid mediterranean site. *Arid Land Research and Management*, **1997**, 11, 211-220		15
34	Plant colonization and biomass production in a xeric torriorthent amended with urban solid refuse. *Land Degradation and Development*, **1997**, 8, 245-255	4.4	15
33	Improvements in soil quality and performance of mycorrhizal Cistus albidus L. seedlings resulting from addition of microbially treated sugar beet residue to a degraded semiarid Mediterranean soil. *Soil Use and Management*, **2003**, 19, 277-283	3.1	15
32	AM fungi inoculation and addition of microbially-treated dry olive cake-enhanced afforestation of a desertified Mediterranean site. *Land Degradation and Development*, **2004**, 15, 153-161	4.4	14
31	Mycorrhizal colonization and drought interactions of Mediterranean shrubs under greenhouse conditions. *Arid Land Research and Management*, **1995**, 9, 167-175		14
30	Microbial populations in the rhizosphere of Brachypodium retusum and their relationship with stable aggregates in a semiarid soil of southeastern Spain. *Arid Land Research and Management*, **1994**, 8, 105-114		13
29	Nutrient acquisition and nitrate reductase activity of mycorrhizal Retama sphaerocarpa L. seedlings afforested in an amended semiarid soil under two water regimes. *Soil Use and Management*, **2005**, 21, 10-16	3.1	13
28	Assessment of the potential role of Streptomyces strains in the revegetation of semiarid sites: the relative incidence of strain origin and plantation site on plant performance and soil quality indicators. *Biology and Fertility of Soils*, **2016**, 52, 53-64	6.1	12
27	No tillage affects the phosphorus status, isotopic composition and crop yield of Phaseolus vulgaris in a rain-fed farming system. *Journal of the Science of Food and Agriculture*, **2011**, 91, 268-72	4.3	12
26	Spatial Shifts in Soil Microbial Activity and Degradation of Pasture Cover Caused by Prolonged Exposure to Cement Dust. *Land Degradation and Development*, **2017**, 28, 1329-1335	4.4	11
25	Characterization and management of autochthonous bacterial strains from semiarid soils of Spain and their interactions with fermented agrowastes to improve drought tolerance in native shrub species. *Applied Soil Ecology*, **2015**, 96, 306-318	5	11
24	The invader Carpobrotus edulis promotes a specific rhizosphere microbiome across globally distributed coastal ecosystems. *Science of the Total Environment*, **2020**, 719, 137347	10.2	11
23	Impact of DOM from composted "alperujo" on soil structure, AM fungi, microbial activity and growth of Medicago sativa. *Waste Management*, **2008**, 28, 1423-31	8.6	11
22	Effect of VAM-fungal inoculation on growth and phosphorus uptake of two Hedysarum Species in a xeric Torriorthent soil from southeast Spain. *Arid Land Research and Management*, **1992**, 6, 33-39		11
21	Arbuscular mycorrhizal fungal assemblages in biological crusts from a Neotropical savanna are not related to the dominant perennial Trachypogon. *Science of the Total Environment*, **2017**, 575, 1203-1210	10.2	10
20	Addition of microbially-treated sugar beet residue and a native bacterium increases structural stability in heavy metal-contaminated Mediterranean soils. *Science of the Total Environment*, **2009**, 407, 5448-54	10.2	9
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