Carlos Garcia

List of Publications by Citations

235 papers	12,372 citations	65 h-index	100 g-index
236 ext. papers	13,714 ext. citations	5.7 avg, IF	6.42 L-index

#	Paper	IF	Citations
235	Past, present and future of soil quality indices: A biological perspective. *Geoderma*, **2008**, 147, 159-171	6.7	413
234	Use of organic amendment as a strategy for saline soil remediation: Influence on the physical, chemical and biological properties of soil. *Soil Biology and Biochemistry*, **2006**, 38, 1413-1421	7.5	347
233	Potential use of dehydrogenase activity as an index of microbial activity in degraded soils. *Communications in Soil Science and Plant Analysis*, **1997**, 28, 123-134	1.5	345
232	Soil microbial activity after restoration of a semiarid soil by organic amendments. *Soil Biology and Biochemistry*, **2003**, 35, 463-469	7.5	258
231	Application of fresh and composted organic wastes modifies structure, size and activity of soil microbial community under semiarid climate. *Applied Soil Ecology*, **2008**, 40, 318-329	5	231
230	Microbiological degradation index of soils in a semiarid climate. *Soil Biology and Biochemistry*, **2006**, 38, 3463-3473	7.5	229
229	Microbial activity in soils under mediterranean environmental conditions. *Soil Biology and Biochemistry*, **1994**, 26, 1185-1191	7.5	216
228	Soil microbial activity as a biomarker of degradation and remediation processes. *Soil Biology and Biochemistry*, **2000**, 32, 1877-1883	7.5	182
227	Chemical and biochemical characterisation of biochar-blended composts prepared from poultry manure. *Bioresource Technology*, **2012**, 110, 396-404	11	180
226	Effect of hydrocarbon pollution on the microbial properties of a sandy and a clay soil. *Chemosphere*, **2007**, 66, 1863-71	8.4	166
225	Severe drought conditions modify the microbial community structure, size and activity in amended and unamended soils. *Soil Biology and Biochemistry*, **2012**, 50, 167-173	7.5	161
224	Hydrolase activities, microbial biomass and bacterial community in a soil after long-term amendment with different composts. *Soil Biology and Biochemistry*, **2006**, 38, 3443-3452	7.5	159
223	Soil restoration using composted plant residues: Effects on soil properties. *Soil and Tillage Research* , **2009**, 102, 109-117	6.5	157
222	Biochar influences the microbial community structure during manure composting with agricultural wastes. *Science of the Total Environment*, **2012**, 416, 476-81	10.2	152
221	Changes in the microbial activity of an arid soil amended with urban organic wastes. *Biology and Fertility of Soils*, **1997**, 24, 429-434	6.1	146
220	Short-term effect of wildfire on the chemical, biochemical and microbiological properties of Mediterranean pine forest soils. *Biology and Fertility of Soils*, **1997**, 25, 109-116	6.1	144
219	Influence of salinity on the biological and biochemical activity of a calciorthird soil. *Plant and Soil*, **1996**, 178, 255-263	4.2	144

218	Ability of different plant species to promote microbiological processes in semiarid soil. *Geoderma*, **2005**, 124, 193-202	6.7	135
217	Growth, yield and solute content of barley in soils treated with sewage sludge under semiarid Mediterranean conditions. *Field Crops Research*, **2005**, 94, 224-237	5.5	132
216	Enzymatic activities in an arid soil amended with urban organic wastes: Laboratory experiment. *Bioresource Technology*, **1998**, 64, 131-138	11	131
215	Application of two organic amendments on soil restoration: effects on the soil biological properties. *Journal of Environmental Quality*, **2006**, 35, 1010-7	3.4	131
214	Effects of a cadmium-contaminated sewage sludge compost on dynamics of organic matter and microbial activity in an arid soil. *Biology and Fertility of Soils*, **1999**, 28, 230-237	6.1	131
213	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
212	Effect of plant cover decline on chemical and microbiological parameters under Mediterranean climate. *Soil Biology and Biochemistry*, **2002**, 34, 635-642	7.5	123
211	Root growth promotion by humic acids from composted and non-composted urban organic wastes. *Plant and Soil*, **2012**, 353, 209-220	4.2	122
210	Study on water extract of sewage sludge composts. *Soil Science and Plant Nutrition*, **1991**, 37, 399-408	1.6	118
209	Bioremediation of oil refinery sludge by landfarming in semiarid conditions: influence on soil microbial activity. *Environmental Research*, **2005**, 98, 185-95	7.9	115
208	Composting anaerobic and aerobic sewage sludges using two proportions of sawdust. *Waste Management*, **2007**, 27, 1317-27	8.6	112
207	Biochemical Parameters in Soils Regenerated By the Addition of Organic Wastes. *Waste Management and Research*, **1994**, 12, 457-466	4	109
206	A study of biochemical parameters of composted and fresh municipal wastes. *Bioresource Technology*, **1993**, 44, 17-23	11	104
205	Lasting microbiological and biochemical effects of the addition of municipal solid waste to an arid soil. *Biology and Fertility of Soils*, **1999**, 30, 1-6	6.1	102
204	A full-scale study of treatment of pig slurry by composting: kinetic changes in chemical and microbial properties. *Waste Management*, **2006**, 26, 1108-18	8.6	101
203	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
202	Evaluation of the maturity of municipal waste compost using simple chemical parameters. *Communications in Soil Science and Plant Analysis*, **1992**, 23, 1501-1512	1.5	98
201	The ecological and physiological responses of the microbial community from a semiarid soil to hydrocarbon contamination and its bioremediation using compost amendment. *Journal of Proteomics*, **2016**, 135, 162-169	3.9	96

200	The active microbial diversity drives ecosystem multifunctionality and is physiologically related to carbon availability in Mediterranean semi-arid soils. *Molecular Ecology*, **2016**, 25, 4660-73	5.7	96
199	Toxic effect of cadmium and nickel on soil enzymes and the influence of adding sewage sludge. *European Journal of Soil Science*, **2003**, 54, 377-386	3.4	94
198	Differential sensitivity of total and active soil microbial communities to drought and forest management. *Global Change Biology*, **2017**, 23, 4185-4203	11.4	89
197	Soil restoration with organic amendments: linking cellular functionality and ecosystem processes. *Scientific Reports*, **2015**, 5, 15550	4.9	88
196	Soil metaproteomics: a review of an emerging environmental science. Significance, methodology and perspectives. *European Journal of Soil Science*, **2009**, 60, 845-859	3.4	88
195	Pathogenic bacteria and mineral N in soils following the land spreading of biogas digestates and fresh manure. *Applied Soil Ecology*, **2011**, 49, 18-25	5	87
194	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
193	Persistence of immobilised and total urease and phosphatase activities in a soil amended with organic wastes. *Bioresource Technology*, **2002**, 82, 73-8	11	85
192	Biological and biochemical indicators in derelict soils subject to erosion. *Soil Biology and Biochemistry*, **1997**, 29, 171-177	7.5	82
191	Influence of one or two successive annual applications of organic fertilisers on the enzyme activity of a soil under barley cultivation. *Bioresource Technology*, **2001**, 79, 147-54	11	81
190	Characterization of Urban Wastes According To Fertility and Phytotoxicity Parameters. *Waste Management and Research*, **1997**, 15, 103-112	4	79
189	Long-term effect of municipal solid waste amendment on microbial abundance and humus-associated enzyme activities under semiarid conditions. *Microbial Ecology*, **2008**, 55, 651-61	4.4	79
188	Comparison of fresh and composted organic waste in their efficacy for the improvement of arid soil quality. *Bioresource Technology*, **1999**, 68, 255-264	11	78
187	Microbial communities involved in the bioremediation of an aged recalcitrant hydrocarbon polluted soil by using organic amendments. *Bioresource Technology*, **2010**, 101, 6916-23	11	77
186	The ecological dose value (ED50) for assessing Cd toxicity on ATP content and dehydrogenase and urease activities of soil. *Soil Biology and Biochemistry*, **2001**, 33, 483-489	7.5	77
185	Soil microbial community under a nurse-plant species changes in composition, biomass and activity as the nurse grows. *Soil Biology and Biochemistry*, **2013**, 64, 139-146	7.5	76
184	Changes in Microbial Activity after Abandonment of Cultivation in a Semiarid Mediterranean Environment. *Journal of Environmental Quality*, **1997**, 26, 285-292	3.4	76
183	Soil agro-ecological management: Fertirrigation and vermicompost treatments. *Bioresource Technology*, **1997**, 59, 199-206	11	76

182	Microbiological activity in a soil 15 years after its devegetation. *Soil Biology and Biochemistry*, **2006**, 38, 2503-2507	7.5	74
181	Nitrogen mineralisation potential in calcareous soils amended with sewage sludge. *Bioresource Technology*, **2002**, 83, 213-9	11	74
180	Abiotic stress tolerance and competition-related traits underlie phylogenetic clustering in soil bacterial communities. *Ecology Letters*, **2014**, 17, 1191-201	10	73
179	Changes in ATP content, enzyme activity and inorganic nitrogen species during composting of organic wastes. *Canadian Journal of Soil Science*, **1992**, 72, 243-253	1.4	73
178	Use of compost as an alternative to conventional inorganic fertilizers in intensive lettuce (Lactuca sativa L.) crops: effects on soil and plant. *Soil and Tillage Research*, **2016**, 160, 14-22	6.5	73
177	The long-term effects of the management of a forest soil on its carbon content, microbial biomass and activity under a semi-arid climate. *Applied Soil Ecology*, **2007**, 37, 53-62	5	72
176	Burning fire-prone Mediterranean shrublands: immediate changes in soil microbial community structure and ecosystem functions. *Microbial Ecology*, **2012**, 64, 242-55	4.4	71
175	Adaptation of methanogenic communities to the cofermentation of cattle excreta and olive mill wastes at 37 degrees C and 55 degrees C. *Applied and Environmental Microbiology*, **2010**, 76, 6564-71	4.8	71
174	Changes in carbon fractions during composting and maturation of organic wastes. *Environmental Management*, **1991**, 15, 433-439	3.1	69
173	Metaproteomics of soils from semiarid environment: functional and phylogenetic information obtained with different protein extraction methods. *Journal of Proteomics*, **2014**, 101, 31-42	3.9	68
172	Phylogenetic and functional changes in the microbial community of long-term restored soils under semiarid climate. *Soil Biology and Biochemistry*, **2013**, 65, 12-21	7.5	68
171	Soil Bioremediation: Combination of Earthworms and Compost for the Ecological Remediation of a Hydrocarbon Polluted Soil. *Water, Air, and Soil Pollution*, **2006**, 177, 383-397	2.6	65
170	Transference of heavy metals from a calcareous soil amended with sewage-sludge compost to barley plants. *Bioresource Technology*, **1996**, 55, 251-258	11	65
169	Resistance and resilience of the soil microbial biomass to severe drought in semiarid soils: The importance of organic amendments. *Applied Soil Ecology*, **2011**, 50, 27-27	5	64
168	Application of composted sewage sludges contaminated with heavy metals to an agricultural soil. *Soil Science and Plant Nutrition*, **1997**, 43, 565-573	1.6	64
167	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
166	Combined effects of reduced irrigation and water quality on the soil microbial community of a citrus orchard under semi-arid conditions. *Soil Biology and Biochemistry*, **2017**, 104, 226-237	7.5	61
165	Effects of atrazine on microbial activity in semiarid soil. *Applied Soil Ecology*, **2007**, 35, 120-127	5	61

164	Stimulation of barley growth and nutrient absorption by humic substances originating from various organic materials. *Bioresource Technology*, **1996**, 57, 251-257	11	61
163	Do plant clumps constitute microbial hotspots in semiarid Mediterranean patchy landscapes?. *Soil Biology and Biochemistry*, **2007**, 39, 1047-1054	7.5	60
162	Bioremediation by composting of heavy oil refinery sludge in semiarid conditions. *Biodegradation*, **2006**, 17, 251-61	4.1	60
161	Dissipation rates of cyprodinil and fludioxonil in lettuce and table grape in the field and under cold storage conditions. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 4708-11	5.7	60
160	Towards a more sustainable fertilization: Combined use of compost and inorganic fertilization for tomato cultivation. *Agriculture, Ecosystems and Environment*, **2014**, 196, 178-184	5.7	59
159	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
158	Can the labile carbon contribute to carbon immobilization in semiarid soils? Priming effects and microbial community dynamics. *Soil Biology and Biochemistry*, **2013**, 57, 892-902	7.5	57
157	Application of different organic amendments in a gasoline contaminated soil: effect on soil microbial properties. *Bioresource Technology*, **2008**, 99, 2872-80	11	57
156	Molecular and physiological bacterial diversity of a semi-arid soil contaminated with different levels of formulated atrazine. *Applied Soil Ecology*, **2006**, 34, 93-102	5	57
155	Plant availability of heavy metals in a soil amended with a high dose of sewage sludge under drought conditions. *Biology and Fertility of Soils*, **2004**, 40, 291-299	6.1	57
154	Global ecological predictors of the soil priming effect. *Nature Communications*, **2019**, 10, 3481	17.4	56
153	Organic Amendment Based on Fresh and Composted Beet Vinasse. *Soil Science Society of America Journal*, **2006**, 70, 900-908	2.5	56
152	Toxicity of cadmium to soil microbial activity: effect of sewage sludge addition to soil on the ecological dose. *Applied Soil Ecology*, **2002**, 21, 149-158	5	56
151	Evaluation of urban wastes for agricultural use. *Soil Science and Plant Nutrition*, **1996**, 42, 105-111	1.6	56
150	Changes in organic matter composition during composting of two digested sewage sludges. *Waste Management*, **2006**, 26, 1370-6	8.6	55
149	Surface and subsurface organic carbon, microbial biomass and activity in a forest soil sequence. *Soil Biology and Biochemistry*, **2006**, 38, 2233-2243	7.5	54
148	Biopesticide effect of green compost against fusarium wilt on melon plants. *Journal of Applied Microbiology*, **2005**, 98, 845-54	4.7	54
147	Hydrolases in the organic matter fractions of sewage sludge: Changes with composting. *Bioresource Technology*, **1993**, 45, 47-52	11	53

146	In situ vermicomposting of biological sludges and impacts on soil quality. *Soil Biology and Biochemistry*, **2000**, 32, 1015-1024	7.5	52
145	The influence of composting and maturation processes on the heavy-metal extractability from some organic wastes. *Biological Wastes*, **1990**, 31, 291-301		50
144	Soil amendments with organic wastes reduce the toxicity of nickel to soil enzyme activities. *European Journal of Soil Biology*, **2008**, 44, 129-140	2.9	49
143	Effectiveness of municipal waste compost and its humic fraction in suppressing Pythium ultimum. *Microbial Ecology*, **2002**, 44, 59-68	4.4	49
142	Soil organic carbon buffers heavy metal contamination on semiarid soils: Effects of different metal threshold levels on soil microbial activity. *European Journal of Soil Biology*, **2009**, 45, 220-228	2.9	48
141	Effect of water deficit on microbial characteristics in soil amended with sewage sludge or inorganic fertilizer under laboratory conditions. *Bioresource Technology*, **2007**, 98, 29-37	11	48
140	Influence of orientation, vegetation and season on soil microbial and biochemical characteristics under semiarid conditions. *Applied Soil Ecology*, **2008**, 38, 62-70	5	47
139	Phytotoxicity due to the agricultural use of urban wastes. Germination experiments. *Journal of the Science of Food and Agriculture*, **1992**, 59, 313-319	4.3	47
138	Effect of composting on sewage sludges contaminated with heavy metals. *Bioresource Technology*, **1995**, 53, 13-19	11	45
137	The role of lignin and cellulose in the carbon-cycling of degraded soils under semiarid climate and their relation to microbial biomass. *Soil Biology and Biochemistry*, **2014**, 75, 152-160	7.5	44
136	Biochemical and chemical-structural characterization of different organic materials used as manures. *Bioresource Technology*, **1996**, 57, 201-207	11	44
135	Characterization of humic acids from uncomposted and composted sewage sludge by degradative and non-degradative techniques. *Bioresource Technology*, **1992**, 41, 53-57	11	44
134	The impacts of organic amendments: Do they confer stability against drought on the soil microbial community?. *Soil Biology and Biochemistry*, **2017**, 113, 173-183	7.5	43
133	Effects of biosolarization as methyl bromide alternative for Meloidogyne incognita control on quality of soil under pepper. *Biology and Fertility of Soils*, **2008**, 45, 37-44	6.1	43
132	Effects of organic amendments on soil carbon fractions, enzyme activity and humus–enzyme complexes under semi-arid conditions. *European Journal of Soil Biology*, **2012**, 53, 94-102	2.9	42
131	Application of two beet vinasse forms in soil restoration: Effects on soil properties in an arid environment in southern Spain. *Agriculture, Ecosystems and Environment*, **2007**, 119, 289-298	5.7	42
130	Addition of Urban Waste to Semiarid Degraded Soil: Long-term Effect. *Pedosphere*, **2007**, 17, 557-567	5	42
129	Proteomic analysis of enzyme production by Bacillus licheniformis using different feather wastes as the sole fermentation media. *Enzyme and Microbial Technology*, **2014**, 57, 1-7	3.8	41

128	The influence of composting on the fertilizing value of an aerobic sewage sludge. *Plant and Soil*, **1991**, 136, 269-272	4.2	41
127	Soil aggregation in a semiarid soil amended with composted and non-composted sewage sludge A field experiment. *Geoderma*, **2014**, 219-220, 24-31	6.7	39
126	A role for biotic filtering in driving phylogenetic clustering in soil bacterial communities. *Global Ecology and Biogeography*, **2014**, 23, 1346-1355	6.1	39
125	The combination of quarry restoration strategies in semiarid climate induces different responses in biochemical and microbiological soil properties. *Applied Soil Ecology*, **2016**, 107, 33-47	5	38
124	Pinus halepensis Mill. plantations did not restore organic carbon, microbial biomass and activity levels in a semi-arid Mediterranean soil. *Applied Soil Ecology*, **2007**, 36, 107-115	5	37
123	A strategy for marginal semiarid degraded soil restoration: A sole addition of compost at a high rate. A five-year field experiment. *Soil Biology and Biochemistry*, **2015**, 89, 61-71	7.5	36
122	Agricultural use of leachates obtained from two different vermicomposting processes. *Bioresource Technology*, **2008**, 99, 6228-32	11	36
121	Plant phylodiversity enhances soil microbial productivity in facilitation-driven communities. *Oecologia*, **2014**, 174, 909-20	2.9	35
120	Long-term suppression of Pythium ultimum in arid soil using fresh and composted municipal wastes. *Biology and Fertility of Soils*, **2000**, 30, 478-484	6.1	35
119	What nurse shrubs can do for barren soils: rapid productivity shifts associated with a 40 years ontogenetic gradient. *Plant and Soil*, **2015**, 388, 197-209	4.2	34
118	Benefactor and allelopathic shrub species have different effects on the soil microbial community along an environmental severity gradient. *Soil Biology and Biochemistry*, **2015**, 88, 48-57	7.5	33
117	Role of amendments on N cycling in Mediterranean abandoned semiarid soils. *Applied Soil Ecology*, **2009**, 41, 195-205	5	33
116	Evaluation of the organic matter composition of raw and composted municipal wastes. *Soil Science and Plant Nutrition*, **1993**, 39, 99-108	1.6	33
115	Bioremediation of soil degraded by sewage sludge: effects on soil properties and erosion losses. *Environmental Management*, **2003**, 31, 741-7	3.1	32
114	Native soil organic matter conditions the response of microbial communities to organic inputs with different stability. *Geoderma*, **2017**, 295, 1-9	6.7	31
113	Fire modifies the phylogenetic structure of soil bacterial co-occurrence networks. *Environmental Microbiology*, **2017**, 19, 317-327	5.2	31
112	Carbon mineralization in an arid soil amended with organic wastes of varying degrees of stability. *Communications in Soil Science and Plant Analysis*, **1998**, 29, 835-846	1.5	31
111	Soil microbial diversity-biomass relationships are driven by soil carbon content across global biomes. *ISME Journal*, **2021**, 15, 2081-2091	11.9	31

110	Phosphatase and β-glucosidase activities in humic substances from animal wastes. *Bioresource Technology*, **1995**, 53, 79-87	11	30
109	The effects of fresh and stabilized pruning wastes on the biomass, structure and activity of the soil microbial community in a semiarid climate. *Applied Soil Ecology*, **2015**, 89, 1-9	5	29
108	Boron in soil: The impacts on the biomass, composition and activity of the soil microbial community. *Science of the Total Environment*, **2019**, 685, 564-573	10.2	28
107	Behavior of oxyfluorfen in soils amended with different sources of organic matter. Effects on soil biology. *Journal of Hazardous Materials*, **2014**, 273, 207-14	12.8	28
106	Biological and Biochemical Quality of a Semiarid Soil after Induced Devegetation. *Journal of Environmental Quality*, **1997**, 26, 1116-1122	3.4	28
105	Variation in some chemical parameters and organic matter in soils regenerated by the addition of municipal solid waste. *Environmental Management*, **1992**, 16, 763-768	3.1	28
104	Characterisation and evaluation of humic acids extracted from urban waste as liquid fertilisers. *Journal of the Science of Food and Agriculture*, **1997**, 75, 481-488	4.3	27
103	Bioremediation of Sewage Sludge by Composting. *Communications in Soil Science and Plant Analysis* , **2003**, 34, 957-971	1.5	27
102	Deforestation fosters bacterial diversity and the cyanobacterial community responsible for carbon fixation processes under semiarid climate: a metaproteomics study. *Applied Soil Ecology*, **2015**, 93, 65-67	5	26
101	Field trial on removal of petroleum-hydrocarbon pollutants using a microbial consortium for bioremediation and rhizoremediation. *Environmental Microbiology Reports*, **2015**, 7, 85-94	3.7	26
100	Ecological and functional adaptations to water management in a semiarid agroecosystem: a soil metaproteomics approach. *Scientific Reports*, **2017**, 7, 10221	4.9	26
99	Comparison of humic acids derived from city refuse with more developed humic acids. *Soil Science and Plant Nutrition*, **1992**, 38, 339-346	1.6	26
98	When drought meets forest management: Effects on the soil microbial community of a Holm oak forest ecosystem. *Science of the Total Environment*, **2019**, 662, 276-286	10.2	25
97	Study of the lipidic and humic fractions from organic wastes before and after the composting process. *Science of the Total Environment*, **1989**, 81-82, 551-560	10.2	25
96	The effects of struvite and sewage sludge on plant yield and the microbial community of a semiarid Mediterranean soil. *Geoderma*, **2019**, 337, 1051-1057	6.7	25
95	Utilization of Vermicomposts in Soil Restoration: Effects on Soil Biological Properties. *Soil Science Society of America Journal*, **2010**, 74, 525-532	2.5	24
94	Kinetics of phosphatase activity in organic wastes. *Soil Biology and Biochemistry*, **1993**, 25, 561-565	7.5	24
93	Possible Uses for Sludge from Drinking Water Treatment Plants. *Journal of Environmental Engineering, ASCE*, **2017**, 143, 04016088	2	23

92	Response of soil microbial activity and biodiversity in soils polluted with different concentrations of cypermethrin insecticide. *Archives of Environmental Contamination and Toxicology*, **2015**, 69, 8-19	3.2	22
91	Bacterial community in semiarid hydrocarbon contaminated soils treated by aeration and organic amendments. *International Biodeterioration and Biodegradation*, **2014**, 94, 200-206	4.8	22
90	Changes in soil biochemical and cracking properties induced by "living mulch" systems. *Canadian Journal of Soil Science*, **1997**, 77, 579-587	1.4	21
89	Changes in the organic matter mineralization rates of an arid soil after amendment with organic wastes. *Arid Land Research and Management*, **1998**, 12, 63-72		21
88	New Eco-Friendly Polymeric-Coated Urea Fertilizers Enhanced Crop Yield in Wheat. *Agronomy*, **2020** , 10, 438	3.6	20
87	Comparing the impacts of drip irrigation by freshwater and reclaimed wastewater on the soil microbial community of two citrus species. *Agricultural Water Management*, **2018**, 203, 53-62	5.9	20
86	Prokaryotic communities and potential pathogens in sewage sludge: Response to wastewaster origin, loading rate and treatment technology. *Science of the Total Environment*, **2018**, 615, 360-368	10.2	20
85	Characterization of the microbial community in biological soil crusts dominated by Fulgensia desertorum (Tomin) Poelt and Squamarina cartilaginea (With.) P. James and in the underlying soil. *Soil Biology and Biochemistry*, **2014**, 76, 70-79	7.5	20
84	Response of Eisenia fetida to the application of different organic wastes in an aluminium-contaminated soil. *Ecotoxicology and Environmental Safety*, **2010**, 73, 1944-9	7	20
83	Tracing Changes in the Microbial Community of a Hydrocarbon-Polluted Soil by Culture-Dependent Proteomics. *Pedosphere*, **2010**, 20, 479-485	5	20
82	Influence of Stability and Origin of Organic Amendments on Humification in Semiarid Soils. *Soil Science Society of America Journal*, **2011**, 75, 2178-2187	2.5	20
81	Application of two organic wastes in a soil polluted by lead: effects on the soil enzymatic activities. *Journal of Environmental Quality*, **2007**, 36, 216-25	3.4	20
80	Organic matter in bare soils of the mediterranean region with a semiarid climate. *Arid Land Research and Management*, **1996**, 10, 31-41		20
79	Mineralization in a Calcareous Soil of a Sewage Sludge Composted With Different Organic Residues. *Waste Management and Research*, **1992**, 10, 445-452	4	20
78	Organic amendments as strategy to increase organic matter in particle-size fractions of a semi-arid soil. *Applied Soil Ecology*, **2012**, 57, 50-58	5	19
77	Effect of cadmium on microbial activity and a ryegrass crop in two semiarid soils. *Environmental Management*, **2006**, 37, 626-33	3.1	19
76	Humic Substances in Composted Sewage Sludge. *Waste Management and Research*, **1991**, 9, 189-194	4	19
75	Persistence of simazine and terbuthylazine in a semiarid soil after organic amendment with urban sewage sludge. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 7359-65	5.7	18

74	A chemical-structural study of organic wastes and their humic acids during composting by means of pyrolysis-gas chromatography. *Science of the Total Environment*, **1992**, 119, 157-168	10.2	18
73	Characterization of the organic fraction of an uncomposted and composted sewage sludge by isoelectric focusing and gel filtration. *Biology and Fertility of Soils*, **1992**, 13, 112-118	6.1	18
72	Behavior of two pesticides in a soil subjected to severe drought. Effects on soil biology. *Applied Soil Ecology*, **2016**, 105, 17-24	5	18
71	Feasibility of a cell separation-proteomic based method for soils with different edaphic properties and microbial biomass. *Soil Biology and Biochemistry*, **2012**, 45, 136-138	7.5	17
70	Organic amendments for soil restoration in arid and semiarid areas: a review. *AIMS Environmental Science*, **2017**, 4, 640-676	1.9	17
69	Organic matter characteristics and nutrient content in eroded soils. *Environmental Management*, **1996**, 20, 133-141	3.1	16
68	Agronomic value of urban waste and the growth of ryegrass (Lolium perenne) in a calciorthid soil amended with this waste. *Journal of the Science of Food and Agriculture*, **1991**, 56, 457-467	4.3	16
67	Land use shapes the resistance of the soil microbial community and the C cycling response to drought in a semi-arid area. *Science of the Total Environment*, **2019**, 648, 1018-1030	10.2	15
66	Co-digestion, biostimulation and bioaugmentation to enhance methanation of brewer's spent grain. *Waste Management and Research*, **2013**, 31, 805-10	4	15
65	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
64	The extracellular metaproteome of soils under semiarid climate: A methodological comparison of extraction buffers. *Science of the Total Environment*, **2018**, 619-620, 707-711	10.2	14
63	Accelerated degradation of PAHs using edaphic biostimulants obtained from sewage sludge and chicken feathers. *Journal of Hazardous Materials*, **2015**, 300, 235-242	12.8	14
62	Chemical-Structural Changes of Organic Matter in a Semi-Arid Soil After Organic Amendment. *Pedosphere*, **2012**, 22, 283-293	5	14
61	Microbial activity in soils under fast-growing Paulownia (Paulownia elongata x fortunei) plantations in Mediterranean areas. *Applied Soil Ecology*, **2011**, 51, 42-51	5	14
60	Evaluation of Microbial Community Activity, Abundance and Structure in a Semiarid Soil Under Cadmium Pollution at Laboratory Level. *Water, Air, and Soil Pollution*, **2009**, 203, 229-242	2.6	14
59	The biochemical response to different Cr and Cd concentrations in soils amended with organic wastes. *Journal of Hazardous Materials*, **2011**, 185, 204-11	12.8	14
58	The effects on soil aggregation and carbon fixation of different organic amendments for restoring degraded soil in semiarid areas. *European Journal of Soil Science*, **2017**, 68, 941-950	3.4	13
57	The enzymatic and physiological response of the microbial community in semiarid soil to carbon compounds from plants. *European Journal of Soil Science*, **2016**, 67, 456-469	3.4	13

56	Agro-forestry management of Paulownia plantations and their impact on soil biological quality: The effects of fertilization and irrigation treatments. *Applied Soil Ecology*, **2017**, 117-118, 46-56	5	12
55	Methodological interference of biochar in the determination of extracellular enzyme activities in composting samples. *Solid Earth*, **2014**, 5, 713-719	3.3	12
54	Short-Term Effects of Human Trampling on Vegetation and Soil Microbial Activity. *Communications in Soil Science and Plant Analysis*, **2004**, 35, 1591-1603	1.5	12
53	Climatic vulnerabilities and ecological preferences of soil invertebrates across biomes. *Molecular Ecology*, **2020**, 29, 752-761	5.7	12
52	Enhanced Agronomic Efficiency Using a New Controlled-Released, Polymeric-Coated Nitrogen Fertilizer in Rice. *Plants*, **2020**, 9,	4.5	12
51	Impact of Compost Application during 5 Years on Crop Production, Soil Microbial Activity, Carbon Fraction, and Humification Process. *Communications in Soil Science and Plant Analysis*, **2016**,	1.5	12
50	Functional rarity and evenness are key facets of biodiversity to boost multifunctionality. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	12
49	Microbial activity in non-agricultural degraded soils exposed to semiarid climate. *Science of the Total Environment*, **2007**, 378, 183-6	10.2	11
48	Evaluation of different pig slurry composts as fertilizer of horticultural crops: Effects on selected chemical and microbial properties. *Renewable Agriculture and Food Systems*, **2007**, 22, 307-315	1.8	11
47	Influence of the stabilisation of organic materials on their biopesticide effect in soils. *Bioresource Technology*, **2004**, 95, 215-21	11	11
46	Organic plum cultivation in the Mediterranean region: The medium-term effect of five different organic soil management practices on crop production and microbiological soil quality. *Agriculture, Ecosystems and Environment*, **2016**, 221, 60-70	5.7	10
45	The use of urban organic wastes in the control of erosion in a semiarid Mediterranean soil. *Soil Use and Management*, **2006**, 17, 292-293	3.1	10
44	A Comparative Study of the Effect on Barley Growth of Humic Substances Extracted from Municipal Wastes and from Traditional Organic Materials **1996**, 72, 493-500		10
43	Climate shapes the protein abundance of dominant soil bacteria. *Science of the Total Environment*, **2018**, 640-641, 18-21	10.2	10
42	Production of an innovative biowaste-derived fertilizer: Rapid monitoring of physical-chemical parameters by hyperspectral imaging. *Waste Management*, **2018**, 75, 141-148	8.6	9
41	Long-term effects of devegetation on composition and activities (including transcription) of fungal communities of a semi-arid soil. *Biology and Fertility of Soils*, **2009**, 45, 435-441	6.1	9
40	Testing decontaminated sediments as a substrate for ornamentals in field nursery plantations. *Journal of Environmental Management*, **2017**, 197, 681-693	7.9	8
39	Soil Biology Changes as a Consequence of Organic Amendments Subjected to a Severe Drought. *Land Degradation and Development*, **2017**, 28, 897-905	4.4	8

38	A tree from waste: Decontaminated dredged sediments for growing forest tree seedlings. *Journal of Environmental Management*, **2018**, 211, 269-277	7.9	8
37	Assessing the microbiological, biochemical, soil-physical and hydrological effects of amelioration of degraded soils in semiarid Spain. *Biologia (Poland)*, **2007**, 62, 542-546	1.5	8
36	Changes in organic matter and enzymatic activity of an agricultural soil amended with metal-contaminated sewage sludge compost. *Communications in Soil Science and Plant Analysis*, **1998**, 29, 2247-2262	1.5	8
35	Solarization-based pesticide degradation results in decreased activity and biomass of the soil microbial community. *Geoderma*, **2019**, 354, 113893	6.7	7
34	Changes in humic fraction characteristics and humus-enzyme complexes formation in semiarid degraded soils restored with fresh and composted urban wastes. A 5-year field experiment. *Journal of Soils and Sediments*, **2018**, 18, 1376-1388	3.4	7
33	The Future of Soil Carbon **2018**, 239-267		7
32	Evaluation of the suitability of using large amounts of urban wastes for degraded arid soil restoration and C fixation. *European Journal of Soil Science*, **2012**, 63, 650-658	3.4	7
31	HUMIC SUBSTANCES AND CLAY MINERALS IN ORGANICALLY-AMENDED SEMIARID SOILS. *Soil Science*, **2006**, 171, 322-333	0.9	7
30	A comparative chemical-structural study of fossil humic acids and those extracted from urban wastes. *Resources, Conservation and Recycling*, **1992**, 6, 231-241	11.9	7
29	Production of biostimulants from okara through enzymatic hydrolysis and fermentation with : comparative effect on soil biological properties. *Environmental Technology (United Kingdom)*, **2019**, 40, 2073-2084	2.6	7
28	Response of Soil Microbial Community to a High Dose of Fresh Olive Mill Wastewater. *Pedosphere*, **2013**, 23, 281-289	5	6
27	Total And Immobilized Enzymatic Activity Of Organic Materials Before And After Composting. *Compost Science and Utilization*, **2007**, 15, 93-100	1.2	6
26	EFFECT OF LONG-TERM MONOCULTURE ON MICROBIOLOGICAL AND BIOCHEMICAL PROPERTIES IN SEMIARID SOILS. *Communications in Soil Science and Plant Analysis*, **2001**, 32, 537-552	1.5	6
25	A soil-quality index for soil from Mediterranean forests. *European Journal of Soil Science*, **2019**, 70, 1001	3.4	6
24	Soil Erosion and C Losses: Strategies for Building Soil Carbon **2018**, 215-238		5
23	Influence of the activity of Allobophora molleri in microbial activity and metal availability of arsenic-polluted soils. *Archives of Environmental Contamination and Toxicology*, **2013**, 65, 449-57	3.2	5
22	Semiarid soils submitted to severe drought stress: influence on humic acid characteristics in organic-amended soils. *Journal of Soils and Sediments*, **2012**, 12, 503-512	3.4	5
21	Soil Degradation and Rehabilitation: Microorganisms and Functionality **2010**, 253-270		5

20	Relationship between the Agricultural Management of a Semi-arid Soil and Microbiological Quality. *Communications in Soil Science and Plant Analysis*, **2008**, 39, 421-439	1.5	5
19	Innovative system for biochemical monitoring of degraded soils restoration. *Catena*, **2017**, 152, 173-181	5.8	4
18	Effect of bromacil and sewage sludge addition on soil enzymatic activity. *Soil Science and Plant Nutrition*, **1996**, 42, 191-195	1.6	4
17	Composts as alternative to inorganic fertilization for cereal crops. *Environmental Science and Pollution Research*, **2019**, 26, 35340-35352	5.1	4
16	The Impact of Allolobophora molleri on Soil Biology Under Different Organic Amendments. *Land Degradation and Development*, **2017**, 28, 918-925	4.4	3
15	Fractionation and characterization of humic substance fractions with different molecular weights, obtained from animal wastes. *Soil Science and Plant Nutrition*, **1995**, 41, 649-658	1.6	3
14	Color changes of organic wastes during composting and maturation processes. *Soil Science and Plant Nutrition*, **1990**, 36, 243-250	1.6	3
13	Type and quantity of organic amendments determine the amount of carbon stabilized in particle-size fractions of a semiarid degraded soil. *Arid Land Research and Management*, **2017**, 31, 14-28	1.8	2
12	Thermostability of selected enzymes in organic wastes and in their humic extract. *Applied Biochemistry and Biotechnology*, **2008**, 149, 277-86	3.2	2
11	Physiological performance and growth of Viburnum tinus L. on phytoremediated sediments for plant nursing purpose. *IForest*, **2017**, 10, 55-63	1.3	2
10	Agronomic Assessment of a Controlled-Release Polymer-Coated Urea-Based Fertilizer in Maize. *Plants*, **2021**, 10,	4.5	2
9	Organic versus inorganic fertilizers: Response of soil properties and crop yield. *AIMS Geosciences*, **2021**, 7, 415-439	1.6	2
8	Production of an innovative fertilizer from organic waste: process monitoring by hyperspectral imaging **2015**,		1
7	2. Soils in Arid and Semiarid Environments: the Importance of Organic Carbon and Microbial Populations. Facing the Future **2017**, 15-30		1
6	Characterization by isoelectric focusing of the organic matter of a regenerated soil. *Communications in Soil Science and Plant Analysis*, **1995**, 26, 3033-3041	1.5	1
5	Use of Microbial Activity and Community Structure Shifts to Estimate the Toxicological Risk of Heavy Metal Pollution in Soils with Different Organic Matter Contents. *Environmental Science and Engineering*, **2011**, 149-166	0.2	1
4	Use of biostimulants obtained from okara in the bioremediation of soils polluted by imazamox. *Bioremediation Journal*,1-11	2.3	1
3	ORGANIC WASTES AS ALTERNATIVE TO INORGANIC FERTILIZERS IN CROP CULTIVATION. *Acta Horticulturae*, **2014**, 371-376	0.3	

2	L-glutaminase Activity of Organic Amendments. *Environmental Science and Engineering*, **2011**, 311-323	0.2
1	Examining the bentonite produced in a biodiesel refinery process as soil amendment in a well-draining soil. *Clean Technologies and Environmental Policy*, **2020**, 22, 1855-1870	4.3