Antonio Gallardo

List of Publications by Year
in descending order

100 papers	9,156 citations	66234 42 h-index	42291 92 g-index
103 all docs	103 docs citations	103 times ranked	9776 citing authors

#	Article	IF	Citations
1	Temperature Increases Soil Respiration Across Ecosystem Types and Soil Development, But Soil Properties Determine the Magnitude of This Effect. Ecosystems, 2022, 25, 184-198.	1.6	17
2	Biocrusts increase the resistance to warmingâ€induced increases in topsoil P pools. Journal of Ecology, 2022, 110, 2074-2087.	1.9	4
3	Efficiency of a pilot scheme for the separate collection of the biowaste from municipal solid waste in Spain. Scientific Reports, 2021, 11, 11569.	1.6	7
4	Climatic vulnerabilities and ecological preferences of soil invertebrates across biomes. Molecular Ecology, 2020, 29, 752-761.	2.0	29
5	The influence of soil age on ecosystem structure and function across biomes. Nature Communications, 2020, 11, 4721.	5.8	47
6	Climate and soil microâ€organisms drive soil phosphorus fractions in coastal dune systems. Functional Ecology, 2020, 34, 1690-1701.	1.7	20
7	Simulated nitrogen deposition influences soil greenhouse gas fluxes in a Mediterranean dryland. Science of the Total Environment, 2020, 737, 139610.	3.9	13
8	Biocrusts Modulate Responses of Nitrous Oxide and Methane Soil Fluxes to Simulated Climate Change in a Mediterranean Dryland. Ecosystems, 2020, 23, 1690-1701.	1.6	16
9	The pedogenic Walker and Syers model under high atmospheric P deposition rates. Biogeochemistry, 2020, 148, 237-253.	1.7	4
10	Multiple elements of soil biodiversity drive ecosystem functions across biomes. Nature Ecology and Evolution, 2020, 4, 210-220.	3.4	543
11	Interactive effects of forest die-off and drying-rewetting cycles on C and N mineralization. Geoderma, 2019, 333, 81-89.	2.3	28
12	Global ecological predictors of the soil priming effect. Nature Communications, 2019, 10, 3481.	5.8	148
13	Changes in belowground biodiversity during ecosystem development. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6891-6896.	3.3	151
14	Wildfires decrease the local-scale ecosystem spatial variability of Pinus canariensis forests during the first two decades post fire. International Journal of Wildland Fire, 2019, 28, 288.	1.0	3
15	Pathogen-induced tree mortality interacts with predicted climate change to alter soil respiration and nutrient availability in Mediterranean systems. Biogeochemistry, 2019, 142, 53-71.	1.7	14
16	Holm oak decline triggers changes in plant succession and microbial communities, with implications for ecosystem C and N cycling. Plant and Soil, 2017, 414, 247-263.	1.8	20
17	Wetting-drying cycles influence on soil respiration in two Mediterranean ecosystems. European Journal of Soil Biology, 2017, 82, 10-16.	1.4	12
18	El ciclo global del nitrÃ³geno. Una visiÃ³n para el ecÃ³logo terrestre. Ecosistemas, 2017, 26, 4-6.	0.2	3

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19	<i>Quercus suber</i> dieback alters soil respiration and nutrient availability in Mediterranean forests. Journal of Ecology, 2016, 104, 1441-1452.	1.9	49
20	Temporal dynamic of parasiteâ€mediated linkages between the forest canopy and soil processes and the microbial community. New Phytologist, 2016, 211, 1382-1392.	3.5	26
21	Human impacts and aridity differentially alter soil <scp>N</scp> availability in drylands worldwide. Global Ecology and Biogeography, 2016, 25, 36-45.	2.7	33
22	Structure and Functioning of Dryland Ecosystems in a Changing World. Annual Review of Ecology, Evolution, and Systematics, 2016, 47, 215-237.	3.8	330
23	Biological Soil Crusts as a Model System in Ecology. Ecological Studies, 2016, , 407-425.	0.4	12
24	Optimization of the Location of the Municipal Solid Waste Bins Using Geographic Information Systems. Lecture Notes in Management and Industrial Engineering, 2016, , 171-184.	0.3	2
25	Climatic conditions, soil fertility and atmospheric nitrogen deposition largely determine the structure and functioning of microbial communities in biocrust-dominated Mediterranean drylands. Plant and Soil, 2016, 399, 271-282.	1.8	32
26	Intransitive competition is widespread in plant communities and maintains their species richness. Ecology Letters, 2015, 18, 790-798.	3.0	149
27	Factors determining waste generation in Spanish towns and cities. Environmental Monitoring and Assessment, 2015, 187, 4098.	1.3	17
28	Increasing aridity reduces soil microbial diversity and abundance in global drylands. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15684-15689.	3.3	728
29	Differences in thallus chemistry are related to speciesâ€specific effects of biocrustâ€forming lichens on soil nutrients and microbial communities. Functional Ecology, 2015, 29, 1087-1098.	1.7	76
30	Biological soil crusts and wetting events: Effects on soil N and C cycles. Applied Soil Ecology, 2015, 94, 1-6.	2.1	20
31	Nitrogen supply modulates the effect of changes in dryingâ€“rewetting frequency on soil C and N cycling and greenhouse gas exchange. Global Change Biology, 2015, 21, 3854-3863.	4.2	72
32	Understanding long-term post-fire regeneration of a fire-resistant pine species. Annals of Forest Science, 2015, 72, 609-619.	0.8	13
33	Soil characteristics determine soil carbon and nitrogen availability during leaf litter decomposition regardless of litter quality. Soil Biology and Biochemistry, 2015, 81, 134-142.	4.2	83
34	Wheat growth and yield responses to biochar addition under Mediterranean climate conditions. Biology and Fertility of Soils, 2014, 50, 1177-1187.	2.3	103
35	Changes in biocrust cover drive carbon cycle responses to climate change in drylands. Global Change Biology, 2014, 20, 2697-2698.	4.2	8
36	Plant diversity and ecosystem multifunctionality peak at intermediate levels of woody cover in global drylands. Global Ecology and Biogeography, 2014, 23, 1408-1416.	2.7	93

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37	Effects of biochars produced from different feedstocks on soil properties and sunflower growth. Journal of Plant Nutrition and Soil Science, 2014, 177, 16-25.	1.1	198
38	What explains variation in the impacts of exotic plant invasions on the nitrogen cycle? A metaâ€analysis. Ecology Letters, 2014, 17, 1-12.	3.0	194
39	Direct and indirect impacts of climate change on microbial and biocrust communities alter the resistance of the N cycle in a semiarid grassland. Journal of Ecology, 2014, 102, 1592-1605.	1.9	71
40	Short-term effects of litter from 21 woody species on plant growth and root development. Plant and Soil, 2014, 381, 177-191.	1.8	33
41	Biological soil crusts increase the resistance of soil nitrogen dynamics to changes in temperatures in a semi-arid ecosystem. Plant and Soil, 2013, 366, 35-47.	1.8	41
42	Vascular plants mediate the effects of aridity and soil properties on ammonia-oxidizing bacteria and archaea. FEMS Microbiology Ecology, 2013, 85, 273-282.	1.3	28
43	Biocrusts control the nitrogen dynamics and microbial functional diversity of semi-arid soils in response to nutrient additions. Plant and Soil, 2013, 372, 643-654.	1.8	48
44	Enhanced wheat yield by biochar addition under different mineral fertilization levels. Agronomy for Sustainable Development, 2013, 33, 475-484.	2.2	251
45	Decoupling of soil nutrient cycles as a function of aridity in global drylands. Nature, 2013, 502, 672-676.	13.7	733
46	Changes in biocrust cover drive carbon cycle responses to climate change in drylands. Global Change Biology, 2013, 19, 3835-3847.	4.2	230
47	Wetting and drying events determine soil N pools in two Mediterranean ecosystems. Applied Soil Ecology, 2013, 72, 161-170.	2.1	27
48	Ionic exchange membranes (IEMs): A good indicator of soil inorganic N production. Soil Biology and Biochemistry, 2013, 57, 964-968.	4.2	32
49	Biological soil crusts affect small-scale spatial patterns of inorganic N in a semiarid Mediterranean grassland. Journal of Arid Environments, 2013, 91, 147-150.	1.2	27
50	Biological soil crusts promote N accumulation in response to dew events in dryland soils. Soil Biology and Biochemistry, 2013, 62, 22-27.	4.2	49
51	Aridity Modulates N Availability in Arid and Semiarid Mediterranean Grasslands. PLoS ONE, 2013, 8, e59807.	1.1	42
52	Nutritional status of Quercus suber populations under contrasting tree dieback. Forestry, 2012, 85, 369-378.	1.2	10
53	Evolution of sorted waste collection: a case study of Spanish cities. Waste Management and Research, 2012, 30, 859-863.	2.2	9
54	Plant Species Richness and Ecosystem Multifunctionality in Global Drylands. Science, 2012, 335, 214-218.	6.0	1,043

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55	Comparing the use of leaf and soil analysis as N and P availability indices in a wildfire chronosequence. European Journal of Forest Research, 2012, 131, 1327-1335.	1.1	4
56	Soil chemical properties in abandoned Mediterranean cropland after succession and oak reforestation. Acta Oecologica, 2012, 38, 58-65.	0.5	28
57	Effects of exotic and native tree leaf litter on soil properties of two contrasting sites in the Iberian Peninsula. Plant and Soil, 2012, 350, 179-191.	1.8	91
58	Soil nutrient heterogeneity modulates ecosystem responses to changes in the identity and richness of plant functional groups. Journal of Ecology, 2011, 99, 551-562.	1.9	58
59	Dissolved Organic Nitrogen in Mediterranean Ecosystems. Pedosphere, 2011, 21, 309-318.	2.1	30
60	Depolymerization and mineralization rates at 12 Mediterranean sites with varying soil N availability. A test for the Schimel and Bennett model. Soil Biology and Biochemistry, 2011, 43, 693-696.	4.2	21
61	Early-successional vegetation changes after roadside prairie restoration modify processes related with soil functioning by changing microbial functional diversity. Soil Biology and Biochemistry, 2011, 43, 1245-1253.	4.2	33
62	Spatial pattern and variability in soil N and P availability under the influence of two dominant species in a pine forest. Plant and Soil, 2011, 345, 211-221.	1.8	22
63	Temporal changes in the spatial pattern of leaf traits in a Quercus robur population. Annals of Forest Science, 2011, 68, 453-460.	0.8	4
64	DÃ©croissance Ã long terme des concentrations dâ€™azote organique et inorganique, attribuable au feu dans une forÃªt de pins. Annals of Forest Science, 2010, 67, 207-207.	0.8	17
65	Changes in leaf nutrient traits in a wildfire chronosequence. Plant and Soil, 2010, 331, 69-77.	1.8	15
66	Biological soil crusts modulate nitrogen availability in semi-arid ecosystems: insights from a Mediterranean grassland. Plant and Soil, 2010, 333, 21-34.	1.8	143
67	Plants and biological soil crusts modulate the dominance of N forms in a semi-arid grassland. Soil Biology and Biochemistry, 2010, 42, 376-378.	4.2	48
68	Comparison of different collection systems for sorted household waste in Spain. Waste Management, 2010, 30, 2430-2439.	3.7	85
69	Effects of exotic invasive trees on nitrogen cycling: a case study in Central Spain. Biological Invasions, 2009, 11, 1973-1986.	1.2	77
70	Spatial variability of soil properties under Pinus canariensis canopy in two contrasting soil textures. Plant and Soil, 2009, 322, 139-150.	1.8	33
71	Changes in net N mineralization rates and soil N and P pools in a pine forest wildfire chronosequence. Biology and Fertility of Soils, 2009, 45, 781-788.	2.3	56
72	Shrub encroachment can reverse desertification in semiâ€arid Mediterranean grasslands. Ecology Letters, 2009, 12, 930-941.	3.0	285

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73	Wildfire changes the spatial pattern of soil nutrient availability in Pinus canariensis forests. Annals of Forest Science, 2009, 66, 210-210.	0.8	25
74	Short-term wildfire effects on the spatial pattern and scale of labile organic-N and inorganic-N and P pools. Forest Ecology and Management, 2009, 257, 739-746.	1.4	45
75	Changes in the spatial structure of oak carbon-based secondary compounds after pine harvesting. Forest Ecology and Management, 2009, 258, 2511-2518.	1.4	2
76	Spatial pattern and scale of soil N and P fractions under the influence of a leguminous shrub in a Pinus canariensis forest. Geoderma, 2009, 151, 303-310.	2.3	33
77	Spatial pattern and scale of leaf N and P resorption efficiency and proficiency in a Quercus robur population. Plant and Soil, 2008, 311, 109-119.	1.8	30
78	Serendipia: Castilla-La Mancha telepathology network. Diagnostic Pathology, 2008, 3, S5.	0.9	6
79	Laurel forest recovery during 20 years in an abandoned firebreak in Tenerife, Canary Islands. Acta Oecologica, 2008, 33, 1-9.	0.5	6
80	Leaf resorption efficiency and proficiency in a Quercus robur population following forest harvest. Forest Ecology and Management, 2008, 255, 2264-2271.	1.4	11
81	Changes in soil N and P availability in a Pinus canariensis fire chronosequence. Forest Ecology and Management, 2008, 256, 384-387.	1.4	55
82	Spatial variability of soil elements in two plant communities of NW Spain. Geoderma, 2007, 139, 199-208.	2.3	76
83	Differences between Soil Ammonium and Nitrate Spatial Pattern in Six Plant Communities. Simulated Effect on Plant Populations. Plant and Soil, 2006, 279, 333-346.	1.8	37
84	Spatial pattern and scale of leaf N and P concentration in a Quercus robur population. Plant and Soil, 2005, 273, 269-277.	1.8	31
85	Soil Ammonium vs. Nitrate Spatial Pattern in Six Plant Communities: Simulated Effect on Plant Populations. Plant and Soil, 2005, 277, 207-219.	1.8	10
86	Green and senescent leaf phenolics showed spatial autocorrelation in a Quercus robur population in northwestern Spain. Plant and Soil, 2004, 259, 267-276.	1.8	15
87	Spatial Variability of Soil Properties in a Floodplain Forest in Northwest Spain. Ecosystems, 2003, 6, 564-576.	1.6	142
88	Changes in chemical composition of Pinus sylvestris needle litter during decomposition along a European coniferous forest climatic transect. Soil Biology and Biochemistry, 2003, 35, 801-812.	4.2	74
89	Effect of tree canopy on the spatial distribution of soil nutrients in a Mediterranean Dehesa. Pedobiologia, 2003, 47, 117-125.	0.5	110
90	Effect of pine harvesting on leaf nutrient dynamics in young oak trees at NW Spain. Forest Ecology and Management, 2002, 167, 161-172.	1.4	26

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91	Temporal variation in total leaf phenolics concentration of <i>Quercus robur</i> in forested and harvested stands in northwestern Spain. Canadian Journal of Botany, 2001, 79, 1262-1269.	1.2	18
92	Temporal variation in total leaf phenolics concentration of <i>Quercus robur</i> in forested and harvested stands in northwestern Spain. Canadian Journal of Botany, 2001, 79, 1262-1269.	1.2	33
93	Soil nitrogen dynamics in response to carbon increase in a mediterranean shrubland of SW Spain. Soil Biology and Biochemistry, 1998, 30, 1349-1358.	4.2	30
94	Factors determining soil microbial biomass and nutrient immobilization in desert soils. Biogeochemistry, 1995, 28, 55-68.	1.7	89
95	Factors limiting microbial biomass in the mineral soil and forest floor of a warm-temperate forest. Soil Biology and Biochemistry, 1994, 26, 1409-1415.	4.2	172
96	Litter mass loss rates in pine forests of Europe and Eastern United States: some relationships with climate and litter quality. Biogeochemistry, 1993, 20, 127-159.	1.7	451
97	Leaf Decomposition in Two Mediterranean Ecosystems of Southwest Spain: Influence of Substrate Quality. Ecology, 1993, 74, 152-161.	1.5	284
98	Carbon and nitrogen limitations of soil microbial biomass in desert ecosystems. Biogeochemistry, 1992, 18, 1-17.	1.7	164
99	Nitrogen immobilization in leaf litter at two Mediterranean ecosystems of SW Spain. Biogeochemistry, 1992, 15, 213.	1.7	101
100	Estimating microbial biomass nitrogen using the fumigation-incubation and fumigation-extraction methods in a warm-temperate forest soil. Soil Biology and Biochemistry, 1990, 22, 927-932.	4.2	38