Carmen Gonzalez-Murua

List of Publications by Year
in descending order

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97	2,931	126858	206029
papers	citations	33 h-index	48 g-index

98	98	98	2690
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Efficiency of nitrification inhibitor DMPP to reduce nitrous oxide emissions under different temperature and moisture conditions. Soil Biology and Biochemistry, 2012, 53, 82-89.	4.2	168
2	N2O and NO emissions from different N sources and under a range of soil water contents. Nutrient Cycling in Agroecosystems, 2006, 74, 229-243.	1.1	101
3	Exploring ammonium tolerance in a large panel of Arabidopsis thaliana natural accessions. Journal of Experimental Botany, 2014, 65, 6023-6033.	2.4	95
4	3,4-Dimethylpyrazol Phosphate Effect on Nitrous Oxide, Nitric Oxide, Ammonia, and Carbon Dioxide Emissions from Grasslands. Journal of Environmental Quality, 2006, 35, 973-981.	1.0	89
5	Dicyandiamide and 3,4-dimethyl pyrazole phosphate decrease N2O emissions from grassland but dicyandiamide produces deleterious effects in clover. Journal of Plant Physiology, 2003, 160, 1517-1523.	1.6	88
6	High irradiance improves ammonium tolerance in wheat plants by increasing N assimilation. Journal of Plant Physiology, 2013, 170, 758-771.	1.6	81
7	Effectiveness of mycorrhizal inoculation in the nursery on growth and water relations of Pinus radiata in different water regimes. Tree Physiology, 2004, 24, 65-73.	1.4	78
8	Soil water content modulates the effect of the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) on nitrifying and denitrifying bacteria. Geoderma, 2017, 303, 1-8.	2.3	75
9	Effect of Nâ€(nâ€butyl) Thiophosphoric Triamide and 3,4 Dimethylpyrazole Phosphate on Gaseous Emissions from Grasslands under Different Soil Water Contents. Journal of Environmental Quality, 2009, 38, 27-35.	1.0	69
10	Dimethyl pyrazol-based nitrification inhibitors effect on nitrifying and denitrifying bacteria to mitigate N2O emission. Scientific Reports, 2017, 7, 13810.	1.6	62
11	3,â€‰4-Dimethylpyrazole phosphate reduces nitrous oxide emissions from grassland after slurry application. Soil Use and Management, 2005, 21, 53-57.	2.6	62
12	Zea mays L. amylacea from the Lluta Valley (Arica-Chile) tolerates salinity stress when high levels of boron are available. Plant and Soil, 2004, 267, 73-84.	1.8	60
13	Long-term effect of tillage, crop rotation and N fertilization to wheat on gaseous emissions under rainfed Mediterranean conditions. European Journal of Agronomy, 2008, 28, 559-569.	1.9	54
14	Quantitative proteomics reveals the importance of nitrogen source to control glucosinolate metabolism inArabidopsis thalianaandBrassica oleracea. Journal of Experimental Botany, 2016, 67, 3313-3323.	2.4	52
15	Splitting the application of 3,4-dimethylpyrazole phosphate (DMPP): Influence on greenhouse gases emissions and wheat yield and quality under humid Mediterranean conditions. European Journal of Agronomy, 2015, 64, 47-57.	1.9	51
16	CO 2 enrichment modulates ammonium nutrition in tomato adjusting carbon and nitrogen metabolism to stomatal conductance. Plant Science, 2015, 241, 32-44.	1.7	50
17	Nitrogen Source and External Medium pH Interaction Differentially Affects Root and Shoot Metabolism in Arabidopsis. Frontiers in Plant Science, 2016, 7, 29.	1.7	50
18	Enlisting wild grass genes to combat nitrification in wheat farming: A nature-based solution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	49

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19	Glycolate accumulation causes a decrease of photosynthesis by inhibiting RUBISCO activity in maize. Journal of Plant Physiology, 1997, 150, 388-394.	1.6	46
20	Physiological consequences of continuous, sublethal imazethapyr supply to pea plants. Journal of Plant Physiology, 2000, 157, 345-354.	1.6	46
21	Boric acid and salinity effects on maize roots. Response of aquaporins ZmPIP1 and ZmPIP2, and plasma membrane H⁺â€ATPase, in relation to water and nutrient uptake. Physiologia Plantarum, 2008, 132, 479-490.	2.6	46
22	The new nitrification inhibitor 3,4-dimethylpyrazole succinic (DMPSA) as an alternative to DMPP for reducing N 2 O emissions from wheat crops under humid Mediterranean conditions. European Journal of Agronomy, 2016, 80, 78-87.	1.9	46
23	Elevated CO2 Induces Root Defensive Mechanisms in Tomato Plants When Dealing with Ammonium Toxicity. Plant and Cell Physiology, 2017, 58, 2112-2125.	1.5	45
24	Urea-based fertilization strategies to reduce yield-scaled N oxides and enhance bread-making quality in a rainfed Mediterranean wheat crop. Agriculture, Ecosystems and Environment, 2018, 265, 421-431.	2.5	45
25	Ammonium as sole N source improves grain quality in wheat. Journal of the Science of Food and Agriculture, 2013, 93, 2162-2171.	1.7	43
26	Effect of Phosphinothricin (Glufosinate) on Activities of Glutamine Synthetase and Glutamate Dehydrogenase in Medicago sativa L.. Journal of Plant Physiology, 1989, 134, 304-307.	1.6	42
27	Spatial and temporal dynamics of the colonization of Pinus radiata by Fusarium circinatum, of conidiophora development in the pith and of traumatic resin duct formation. New Phytologist, 2013, 198, 1215-1227.	3.5	42
28	Temporal Study of the Effect of Phosphinothricin on the Activity of Glutamine Synthetase, Glutamate Dehydrogenase and Nitrate Reductase in Medicago sativa L.. Journal of Plant Physiology, 1990, 136, 410-414.	1.6	41
29	Effect of Phosphlnothricin (Glufosinate) on Photosynthesis and Chlorophyll Fluorescence Emission by Barley Leaves Illuminated Under Photorespiratory and Non-Photorespiratory Conditions. Journal of Experimental Botany, 1992, 43, 159-165.	2.4	41
30	Denitrification losses from a natural grassland in the Basque Country under organic and inorganic fertilization. Plant and Soil, 1994, 162, 19-29.	1.8	41
31	Depletion of the heaviest stable N isotope is associated with NH4+/NH3 toxicity in NH4+-fed plants. BMC Plant Biology, 2011, 11, 83.	1.6	41
32	Root phosphoenolpyruvate carboxylase and NAD-malic enzymes activity increase the ammonium-assimilating capacity in tomato. Journal of Plant Physiology, 2014, 171, 49-63.	1.6	41
33	Title is missing!. Nutrient Cycling in Agroecosystems, 2001, 60, 9-14.	1.1	37
34	Mechanism of action of nitrification inhibitors based on dimethylpyrazole: A matter of chelation. Science of the Total Environment, 2021, 752, 141885.	3.9	35
35	Durum wheat quality traits affected by mycorrhizal inoculation, water availability and atmospheric CO2 concentration. Crop and Pasture Science, 2016, 67, 147.	0.7	33
36	The effect of NaCl salinity and water stress with polyethylene glycol on nitrogen fixation, stomatal response and transpiration of Medicago sativa, Trifolium repens and Trifolium brachycalycinum (subclover). Physiologia Plantarum, 1982, 54, 361-366.	2.6	32

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37	Isotopic labelling reveals the efficient adaptation of wheat root TCA cycle flux modes to match carbon demand under ammonium nutrition. Scientific Reports, 2019, 9, 8925.	1.6	32
38	Metabolic Effects of Elevated CO₂ on Wheat Grain Development and Composition. Journal of Agricultural and Food Chemistry, 2019, 67, 8441-8451.	2.4	29
39	Physiological aspects underlying the improved outplanting performance of Pinus pinaster Ait. seedlings associated with ectomycorrhizal inoculation. Mycorrhiza, 2013, 23, 627-640.	1.3	27
40	Joint application of urease and nitrification inhibitors to diminish gaseous nitrogen losses under different tillage systems. Journal of Cleaner Production, 2021, 289, 125701.	4.6	27
41	Effects of glyphosate [N-(phosphonomethyl)glycine] on photosynthetic pigments, stomatal response and photosynthetic electron transport in Medicago sativa and Trifolium pratense. Physiologia Plantarum, 1986, 66, 63-68.	2.6	26
42	Mild ammonium stress increases chlorophyll content inArabidopsis thaliana. Plant Signaling and Behavior, 2015, 10, e991596.	1.2	26
43	3,4-Dimethylpyrazole phosphate and 2-(N-3,4-dimethyl-1H-pyrazol-1-yl) succinic acid isomeric mixture nitrification inhibitors: Quantification in plant tissues and toxicity assays. Science of the Total Environment, 2018, 624, 1180-1186.	3.9	26
44	DMPSA and DMPP equally reduce N2O emissions from a maize-ryegrass forage rotation under Atlantic climate conditions. Atmospheric Environment, 2018, 187, 255-265.	1.9	26
45	Relationship between tillage management and DMPSA nitrification inhibitor efficiency. Science of the Total Environment, 2020, 718, 134748.	3.9	26
46	Denitrifying ability of thirteen Rhizobium meliloti strains. Plant and Soil, 1993, 149, 43-50.	1.8	25
47	15N Natural Abundance Evidences a Better Use of N Sources by Late Nitrogen Application in Bread Wheat. Frontiers in Plant Science, 2018, 9, 853.	1.7	22
48	Mitigation of yield-scaled nitrous oxide emissions and global warming potential in an oilseed rape crop through N source management. Journal of Environmental Management, 2021, 288, 112304.	3.8	22
49	Inhibition of endogenous urease activity by NBPT application reveals differential N metabolism responses to ammonium or nitrate nutrition in pea plants: a physiological study. Plant and Soil, 2013, 373, 813-827.	1.8	21
50	Greenhouse gas fluxes (CO2, N2O and CH4) from forest soils in the Basque Country: Comparison of different tree species and growth stages. Forest Ecology and Management, 2013, 310, 600-611.	1.4	21
51	Differential Regulation of Stomatal Conductance as a Strategy to Cope With Ammonium Fertilizer Under Ambient Versus Elevated CO2. Frontiers in Plant Science, 2019, 10, 597.	1.7	21
52	Effect of Glyphosate on the Greening Process and Photosynthetic Metabolism in Chlorella pyrenoidosa. Journal of Plant Physiology, 1989, 134, 26-31.	1.6	20
53	Clover and ryegrass are tolerant species to ammonium nutrition. Journal of Plant Physiology, 2007, 164, 1583-1594.	1.6	20
54	Title is missing!. Plant and Soil, 1997, 188, 49-58.	1.8	19

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55	New insights into radiata pine seedling root infection by Fusarium circinatum. Plant Pathology, 2015, 64, 1336-1348.	1.2	19
56	Assessment of the diversity and abundance of the total and active fungal population and its correlation with humification during two-phase olive mill waste (â€˜â€˜alperujoâ€) composting. Bioresource Technology, 2020, 295, 122267.	4.8	19
57	Nitrogen Assimilation in the Highly Salt- and Boron-Tolerant Ecotype Zea mays L. Amylacea. Plants, 2020, 9, 322.	1.6	19
58	Involvement of the metabolically active bacteria in the organic matter degradation during olive mill waste composting. Science of the Total Environment, 2021, 789, 147975.	3.9	18
59	Impact of dimethylpyrazole-based nitrification inhibitors on soil-borne bacteria. Science of the Total Environment, 2021, 792, 148374.	3.9	18
60	The contribution of Rhizobium meliloti to soil denitrification. Plant and Soil, 1993, 157, 207-213.	1.8	17
61	Effect of cow slurry N on herbage productivity, efficiency of N utilization and on white clover content in a natural sward in the Basque Country, Spain. Grass and Forage Science, 1996, 51, 1-7.	1.2	17
62	The Effect of NaCl and Water Stress on Germination and Î±-Galactosidase Activity in Germinated Seeds of Medicago sativa, Trifolium repens and T. brachycalycinum. Journal of Plant Physiology, 1985, 119, 317-326.	1.6	16
63	In vitro and in vivo Effects of Chlorsulfuron in Sensitive and Tolerant plants. Journal of Plant Physiology, 1991, 139, 235-239.	1.6	16
64	Comparative effects of PPT and AOA on photosynthesis and fluorescence chlorophyll parameters in Zea mays. Journal of Plant Physiology, 1997, 151, 641-648.	1.6	16
65	Imazethapyr inhibition of acetolactate synthase inRhizobiumand its symbiosis with pea. Pest Management Science, 1998, 52, 372-380.	0.6	16
66	Unraveling DMPSA nitrification inhibitor impact on soil bacterial consortia under different tillage systems. Agriculture, Ecosystems and Environment, 2020, 301, 107029.	2.5	16
67	C and N metabolism in barley leaves and peduncles modulates responsiveness to changing CO2. Journal of Experimental Botany, 2019, 70, 599-611.	2.4	14
68	Effect of Low Nitrate Supply on Nitrogen Fixation in Alfalfa Root Nodules Induced by Rhizobium meliloti Strains with Varied Nitrate Reductase Activity. Journal of Plant Physiology, 1989, 135, 207-211.	1.6	13
69	Late nitrogen fertilization affects nitrogen remobilization in wheat. Journal of Plant Nutrition and Soil Science, 2012, 175, 115-124.	1.1	13
70	A Multi-Species Analysis Defines Anaplerotic Enzymes and Amides as Metabolic Markers for Ammonium Nutrition. Frontiers in Plant Science, 2020, 11, 632285.	1.7	13
71	Dimethylpyrazole-based nitrification inhibitors have a dual role in N2O emissions mitigation in forage systems under Atlantic climate conditions. Science of the Total Environment, 2022, 807, 150670.	3.9	13
72	Glutamine synthetase from mesophyll and bundle sheath maize cells: isoenzyme complements and different sensitivities to phosphinothricin. Plant Cell Reports, 2000, 19, 1127-1134.	2.8	12

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73	Phosphinothricin Reverts the Ammonia-DependentEnhancement of Phosphoenolpyruvate Carboxylase Activity. Journal of Plant Physiology, 1995, 145, 11-16.	1.6	11
74	Foliar heavy metals and stable isotope (Î´13C, Î´15N) profiles as reliable urban pollution biomonitoring tools. Urban Forestry and Urban Greening, 2021, 57, 126918.	2.3	11
75	Performance and Soil Persistence of Chlorsulfuron when Used for Wheat Production in Spain. Weed Science, 1990, 38, 546-552.	0.8	10
76	Nitrogen losses by denitrification and leaching in grassland. Fertilizer Research, 1996, 43, 197-201.	0.5	10
77	Effect of Photorespiratory C2Acids on CO2Assimilation, PS II Photochemistry and the Xanthophyll Cycle in Maize. Photosynthesis Research, 2003, 78, 161-173.	1.6	9
78	3,4-dimethylpyrazole phosphate (DMPP) Reduces N2O Emissions from a Tilled Grassland in the BogotÃ¡ Savanna. Agronomy, 2019, 9, 102.	1.3	9
79	Effect of atrazine and methabenzthiazuron on oxygen evolution and cell growth of Chlorella pyrenoidosa. Weed Research, 1985, 25, 61-66.	0.8	8
80	Quality assessment of Pinus radiata production under sustainable nursery management based on compost tea. Journal of Plant Nutrition and Soil Science, 2019, 182, 356-366.	1.1	8
81	Evaluation of a crop rotation with biological inhibition potential to avoid N2O emissions in comparison with synthetic nitrification inhibition. Journal of Environmental Sciences, 2023, 127, 222-233.	3.2	8
82	The nitrification inhibitor 3,4-dimethylpyrazole phosphate decreases leaf nitrate content in lettuce while maintaining yield and N2O emissions in the Savanna of BogotÃ¡. Plant, Soil and Environment, 2016, 62, 533-539.	1.0	6
83	Assessing the efficiency of dimethylpyrazole-based nitrification inhibitors under elevated CO2 conditions. Geoderma, 2021, 400, 115160.	2.3	6
84	Effects of Glyphosate N-(phosphonomethyl)-glycine on Water Potential, and Activities of Nitrate and Nitrite Reductase and Aspartate Aminotransferase in Lucerne and Clover. Journal of Plant Physiology, 1986, 123, 107-115.	1.6	5
85	Multi-omic and physiologic approach to understand Lotus japonicus response upon exposure to 3,4 dimethylpyrazole phosphate nitrification inhibitor. Science of the Total Environment, 2019, 660, 1201-1209.	3.9	5
86	The scarcity and distribution of rainfall drove the performance (i.e., mitigation of N oxide emissions,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 semiarid conditions. Archives of Agronomy and Soil Science, 2020, 66, 1827-1844.	1.3	5
87	Interactive effects of excess boron and salinity on histological and ultrastructural leaves of Zea mays amylacea from the Lluta Valley (Arica-Chile). Ciencia E Investigacion Agraria, 2013, 40, 581-595.	0.2	4
88	Compost and PGP-Based Biostimulant as Alternative to Peat and NPK Fertilization in Chestnut (Castanea Sativa Mill.) Nursery Production. Forests, 2021, 12, 850.	0.9	4
89	Short-Term Exposure to High Atmospheric Vapor Pressure Deficit (VPD) Severely Impacts Durum Wheat Carbon and Nitrogen Metabolism in the Absence of Edaphic Water Stress. Plants, 2021, 10, 120.	1.6	3
90	The effect of asulam on water potential and nitrate reduction. Plant Science, 1986, 46, 21-27.	1.7	2

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91	Interactive effects of excess boron and salinity on response curves of gas exchange to increase in the intensity of light of Zea mays amylacea from the Lluta Valley (Arica-Chile). Idesia, 2015, 33, 33-38.	0.1	2
92	Combined effects of excess boron and salinity on root histology of Zea mays L. amylacea from the Lluta Valley (Arica, Chile). Idesia, 2015, 33, 09-20.	0.1	2
93	Biological and synthetic approaches to inhibiting nitrification in non-tilled Mediterranean soils. Chemical and Biological Technologies in Agriculture, 2021, 8, .	1.9	1
94	Nitrous Oxide (N2O) Emissions from Forests, Grasslands and Agricultural Soils in Northern Spain. , 2020, , 341-349.		1
95	The Effect of Cattle Slurry Electroflotation Products as Fertilizers on Gaseous Emissions and Grassland Yield. Journal of Environmental Quality, 2008, 37, 956-962.	1.0	0
96	Response of Wheat Storage Proteins and Breadmaking Quality to Dimethylpyrazole-Based Nitrification Inhibitors under Different Nitrogen Fertilization Splitting Strategies. Plants, 2021, 10, 703.	1.6	0
97	Leaf micromorphology in Zea mays L. amylacea from the Lluta Valley (Arica-Chile) with excess boron and salinity. Idesia, 2013, 31, 75-80.	0.1	0