Carmen Gonzalez-Murua

List of Publications by Year in Descending Order

92 papers	2,165 citations	31 h-index	41 g-index
97 ext. papers	2,562 ext. citations	4.8 avg, IF	4.87 L-index

#	Paper	IF	Citations
92	Dimethylpyrazole-based nitrification inhibitors have a dual role in NO emissions mitigation in forage systems under Atlantic climate conditions. *Science of the Total Environment*, **2022**, 807, 150670	10.2	0
91	Joint application of urease and nitrification inhibitors to diminish gaseous nitrogen losses under different tillage systems. *Journal of Cleaner Production*, **2021**, 289, 125701	10.3	12
90	Compost and PGP-Based Biostimulant as Alternative to Peat and NPK Fertilization in Chestnut (Castanea Sativa Mill.) Nursery Production. *Forests*, **2021**, 12, 850	2.8	2
89	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	7.9	5
88	Mechanism of action of nitrification inhibitors based on dimethylpyrazole: A matter of chelation. *Science of the Total Environment*, **2021**, 752, 141885	10.2	14
87	Foliar heavy metals and stable isotope (13C, 15N) profiles as reliable urban pollution biomonitoring tools. *Urban Forestry and Urban Greening*, **2021**, 57, 126918	5.4	5
86	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,	11.5	15
85	Assessing the efficiency of dimethylpyrazole-based nitrification inhibitors under elevated CO2 conditions. *Geoderma*, **2021**, 400, 115160	6.7	0
84	Involvement of the metabolically active bacteria in the organic matter degradation during olive mill waste composting. *Science of the Total Environment*, **2021**, 789, 147975	10.2	7
83	Impact of dimethylpyrazole-based nitrification inhibitors on soil-borne bacteria. *Science of the Total Environment*, **2021**, 792, 148374	10.2	5
82	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,	4.5	1
81	Nitrogen Assimilation in the Highly Salt- and Boron-Tolerant Ecotype L. Amylacea. *Plants*, **2020**, 9,	4.5	13
80	Unraveling DMPSA nitrification inhibitor impact on soil bacterial consortia under different tillage systems. *Agriculture, Ecosystems and Environment*, **2020**, 301, 107029	5.7	8
79	Nitrous Oxide (N2O) Emissions from Forests, Grasslands and Agricultural Soils in Northern Spain **2020**, 341-349		1
78	Relationship between tillage management and DMPSA nitrification inhibitor efficiency. *Science of the Total Environment*, **2020**, 718, 134748	10.2	16
77	The scarcity and distribution of rainfall drove the performance (i.e., mitigation of N oxide emissions, crop yield and quality) of calcium ammonium nitrate management in a wheat crop under rainfed semiarid conditions. *Archives of Agronomy and Soil Science*, **2020**, 66, 1827-1844	2	2
76	Assessment of the diversity and abundance of the total and active fungal population and its correlation with humification during two-phase olive mill waste (Alperujo") composting. *Bioresource Technology*, **2020**, 295, 122267	11	9

75	A Multi-Species Analysis Defines Anaplerotic Enzymes and Amides as Metabolic Markers for Ammonium Nutrition. *Frontiers in Plant Science*, **2020**, 11, 632285	6.2	2
74	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	10.2	2
73	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	4.9	10
72	Differential Regulation of Stomatal Conductance as a Strategy to Cope With Ammonium Fertilizer Under Ambient Versus Elevated CO. *Frontiers in Plant Science*, **2019**, 10, 597	6.2	15
71	C and N metabolism in barley leaves and peduncles modulates responsiveness to changing CO2. *Journal of Experimental Botany*, **2019**, 70, 599-611	7	6
70	Metabolic Effects of Elevated CO on Wheat Grain Development and Composition. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 8441-8451	5.7	15
69	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	2.3	2
68	3,4-dimethylpyrazole phosphate (DMPP) Reduces N2O Emissions from a Tilled Grassland in the Bogot□ Savanna. *Agronomy*, **2019**, 9, 102	3.6	6
67	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	10.2	18
66	N Natural Abundance Evidences a Better Use of N Sources by Late Nitrogen Application in Bread Wheat. *Frontiers in Plant Science*, **2018**, 9, 853	6.2	9
65	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	5.7	31
64	DMPSA and DMPP equally reduce N2O emissions from a maize-ryegrass forage rotation under Atlantic climate conditions. *Atmospheric Environment*, **2018**, 187, 255-265	5.3	17
63	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	6.7	49
62	Dimethyl pyrazol-based nitrification inhibitors effect on nitrifying and denitrifying bacteria to mitigate NO emission. *Scientific Reports*, **2017**, 7, 13810	4.9	42
61	Elevated CO2 Induces Root Defensive Mechanisms in Tomato Plants When Dealing with Ammonium Toxicity. *Plant and Cell Physiology*, **2017**, 58, 2112-2125	4.9	29
60	The nitrification inhibitor 3,4-dimethylpyrazole phosphate decreases leaf nitrate content in lettuce while maintaining yield and N2O emissions in the Savanna of Bogot□. *Plant, Soil and Environment*, **2016**, 62, 533-539	2.2	5
59	Nitrogen Source and External Medium pH Interaction Differentially Affects Root and Shoot Metabolism in Arabidopsis. *Frontiers in Plant Science*, **2016**, 7, 29	6.2	33
58	Durum wheat quality traits affected by mycorrhizal inoculation, water availability and atmospheric CO2 concentration. *Crop and Pasture Science*, **2016**, 67, 147	2.2	22

57	Quantitative proteomics reveals the importance of nitrogen source to control glucosinolate metabolism in Arabidopsis thaliana and Brassica oleracea. *Journal of Experimental Botany*, **2016**, 67, 3313-23	7	43
56	The new nitrification inhibitor 3,4-dimethylpyrazole succinic (DMPSA) as an alternative to DMPP for reducing N2O emissions from wheat crops under humid Mediterranean conditions. *European Journal of Agronomy*, **2016**, 80, 78-87	5	34
55	New insights into radiata pine seedling root infection by Fusarium circinatum. *Plant Pathology*, **2015**, 64, 1336-1348	2.8	13
54	Mild ammonium stress increases chlorophyll content in Arabidopsis thaliana. *Plant Signaling and Behavior*, **2015**, 10, e991596	2.5	18
53	CO2 enrichment modulates ammonium nutrition in tomato adjusting carbon and nitrogen metabolism to stomatal conductance. *Plant Science*, **2015**, 241, 32-44	5.3	36
52	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	1.4	2
51	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	5	35
50	Exploring ammonium tolerance in a large panel of Arabidopsis thaliana natural accessions. *Journal of Experimental Botany*, **2014**, 65, 6023-33	7	73
49	Root phosphoenolpyruvate carboxylase and NAD-malic enzymes activity increase the ammonium-assimilating capacity in tomato. *Journal of Plant Physiology*, **2014**, 171, 49-63	3.6	31
48	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	4.2	16
47	Physiological aspects underlying the improved outplanting performance of Pinus pinaster Ait. seedlings associated with ectomycorrhizal inoculation. *Mycorrhiza*, **2013**, 23, 627-40	3.9	18
46	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	3.9	16
45	High irradiance improves ammonium tolerance in wheat plants by increasing N assimilation. *Journal of Plant Physiology*, **2013**, 170, 758-71	3.6	61
44	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	9.8	32
43	Ammonium as sole N source improves grain quality in wheat. *Journal of the Science of Food and Agriculture*, **2013**, 93, 2162-71	4.3	31
42	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		4
41	Efficiency of nitrification inhibitor DMPP to reduce nitrous oxide emissions under different temperature and moisture conditions. *Soil Biology and Biochemistry*, **2012**, 53, 82-89	7.5	120
40	Late nitrogen fertilization affects nitrogen remobilization in wheat. *Journal of Plant Nutrition and Soil Science*, **2012**, 175, 115-124	2.3	8

39	Depletion of the heaviest stable N isotope is associated with NH4+/NH3 toxicity in NH4+-fed plants. *BMC Plant Biology*, **2011**, 11, 83	5.3	35
38	Effect of N-(n-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	3.4	58
37	Boric acid and salinity effects on maize roots. Response of aquaporins ZmPIP1 and ZmPIP2, and plasma membrane H+-ATPase, in relation to water and nutrient uptake. *Physiologia Plantarum*, **2008**, 132, 479-90	4.6	38
36	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	5	48
35	The effect of cattle slurry electroflotation products as fertilizers on gaseous emissions and grassland yield. *Journal of Environmental Quality*, **2008**, 37, 956-62	3.4	
34	Clover and ryegrass are tolerant species to ammonium nutrition. *Journal of Plant Physiology*, **2007**, 164, 1583-94	3.6	18
33	3,4-Dimethylpyrazol phosphate effect on nitrous oxide, nitric oxide, ammonia, and carbon dioxide emissions from grasslands. *Journal of Environmental Quality*, **2006**, 35, 973-81	3.4	73
32	N2O and NO emissions from different N sources and under a range of soil water contents. *Nutrient Cycling in Agroecosystems*, **2006**, 74, 229-243	3.3	90
31	3, 4-Dimethylpyrazole phosphate reduces nitrous oxide emissions from grassland after slurry application. *Soil Use and Management*, **2005**, 21, 53-57	3.1	59
30	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	4.2	63
29	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	4.2	49
28	Effect of Photorespiratory C(2) Acids on CO(2) Assimilation, PS II Photochemistry and the Xanthophyll Cycle in Maize. *Photosynthesis Research*, **2003**, 78, 161-73	3.7	8
27	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, 1517-23	3.6	81
26	Nitrification and denitrification derived N2O production from a grassland soil under application of DCD and Actilith F2. *Nutrient Cycling in Agroecosystems*, **2001**, 60, 9-14	3.3	35
25	Glutamine synthetase from mesophyll and bundle sheath maize cells: isoenzyme complements and different sensitivities to phosphinothricin. *Plant Cell Reports*, **2000**, 19, 1127-1134	5.1	12
24	Physiological consequences of continuous, sublethal imazethapyr supply to pea plants. *Journal of Plant Physiology*, **2000**, 157, 345-354	3.6	44
23	Imazethapyr inhibition of acetolactate synthase in Rhizobium and its symbiosis with pea. *Pest Management Science*, **1998**, 52, 372-380		15
22	Comparative effects of PPT and AOA on photosynthesis and fluorescence chlorophyll parameters in Zea mays. *Journal of Plant Physiology*, **1997**, 151, 641-648	3.6	15

21	Glycolate accumulation causes a decrease of photosynthesis by inhibiting RUBISCO activity in maize. *Journal of Plant Physiology*, **1997**, 150, 388-394	3.6	34
20	Effects of cattle slurry and mineral N fertilizer applications on various components of the nitrogen balance of mown grassland. *Plant and Soil*, **1997**, 188, 49-58	4.2	17
19	Nitrogen losses by denitrification and leaching in grassland. *Fertilizer Research*, **1996**, 43, 197-201		7
18	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	2.3	12
17	Phosphinothricin Reverts the Ammonia-DependentEnhancement of Phosphoenolpyruvate Carboxylase Activity. *Journal of Plant Physiology*, **1995**, 145, 11-16	3.6	10
16	Denitrification losses from a natural grassland in the Basque Country under organic and inorganic fertilization. *Plant and Soil*, **1994**, 162, 19-29	4.2	39
15	Denitrifying ability of thirteen Rhizobium meliloti strains. *Plant and Soil*, **1993**, 149, 43-50	4.2	23
14	The contribution of Rhizobium meliloti to soil denitrification. *Plant and Soil*, **1993**, 157, 207-213	4.2	16
13	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	7	40
12	In vitro and in vivo Effects of Chlorsulfuron in Sensitive and Tolerant plants. *Journal of Plant Physiology*, **1991**, 139, 235-239	3.6	14
11	Performance and Soil Persistence of Chlorsulfuron when Used for Wheat Production in Spain. *Weed Science*, **1990**, 38, 546-552	2	10
10	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	3.6	36
9	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	3.6	13
8	Effect of Glyphosate on the Greening Process and Photosynthetic Metabolism in Chlorella pyrenoidosa. *Journal of Plant Physiology*, **1989**, 134, 26-31	3.6	12
7	Effect of Phosphinothricin (Glufosinate) on Activities of Glutamine Synthetase and Glutamate Dehydrogenase in Medicago sativa L.. *Journal of Plant Physiology*, **1989**, 134, 304-307	3.6	37
6	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	4.6	25
5	The effect of asulam on water potential and nitrate reduction. *Plant Science*, **1986**, 46, 21-27	5.3	2
4	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	3.6	5

3	Effect of atrazine and methabenzthiazuron on oxygen evolution and cell growth of Chlorella pyrenoidosa. *Weed Research*, **1985**, 25, 61-66	1.9	5
2	The Effect of NaCl and Water Stress on Germination and Galactosidase Activity in Germinated Seeds of Medicago sativa, Trifolium repens and T. brachycalycinum. *Journal of Plant Physiology*, **1985**, 119, 317-326	3.6	16
1	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	4.6	32