

# Raúl Zornoza

## List of Publications by Year in descending order

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Version: 2024-02-01

94  
papers

4,414  
citations

94269

37  
h-index

110170

64  
g-index

108  
all docs

108  
docs citations

108  
times ranked

4958  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stability, nutrient availability and hydrophobicity of biochars derived from manure, crop residues, and municipal solid waste for their use as soil amendments. <i>Chemosphere</i> , 2016, 144, 122-130.	4.2	248
2	Near infrared spectroscopy for determination of various physical, chemical and biochemical properties in Mediterranean soils. <i>Soil Biology and Biochemistry</i> , 2008, 40, 1923-1930.	4.2	238
3	Identification of sensitive indicators to assess the interrelationship between soil quality, management practices and human health. <i>Soil</i> , 2015, 1, 173-185.	2.2	209
4	Soil microbial biomass and activity under different agricultural management systems in a semiarid Mediterranean agroecosystem. <i>Soil and Tillage Research</i> , 2010, 109, 110-115.	2.6	198
5	Multivariate statistical and GIS-based approach to evaluate heavy metals behavior in mine sites for future reclamation. <i>Journal of Geochemical Exploration</i> , 2011, 109, 8-17.	1.5	183
6	Effects of agricultural management on surface soil properties and soil water losses in eastern Spain. <i>Soil and Tillage Research</i> , 2009, 106, 117-123.	2.6	181
7	Changes in Soil Microbial Community Structure Influenced by Agricultural Management Practices in a Mediterranean Agro-Ecosystem. <i>PLoS ONE</i> , 2013, 8, e80522.	1.1	163
8	Low density-microplastics detected in sheep faeces and soil: A case study from the intensive vegetable farming in Southeast Spain. <i>Science of the Total Environment</i> , 2021, 755, 142653.	3.9	148
9	Spiking of NIR regional models using samples from target sites: Effect of model size on prediction accuracy. <i>Geoderma</i> , 2010, 158, 66-77.	2.3	134
10	The impact of intercropping, tillage and fertilizer type on soil and crop yield in fruit orchards under Mediterranean conditions: A meta-analysis of field studies. <i>Agricultural Systems</i> , 2020, 178, 102736.	3.2	131
11	Changes in soil microbial community structure following the abandonment of agricultural terraces in mountainous areas of Eastern Spain. <i>Applied Soil Ecology</i> , 2009, 42, 315-323.	2.1	122
12	Influence of population density on the concentration and speciation of metals in the soil and street dust from urban areas. <i>Chemosphere</i> , 2015, 134, 328-337.	4.2	121
13	Assessing air-drying and rewetting pre-treatment effect on some soil enzyme activities under Mediterranean conditions. <i>Soil Biology and Biochemistry</i> , 2006, 38, 2125-2134.	4.2	99
14	Immediate effects of wildfires on water repellency and aggregate stability in Mediterranean calcareous soils. <i>Catena</i> , 2008, 74, 219-226.	2.2	88
15	Do we really need large spectral libraries for local scale SOC assessment with NIR spectroscopy?. <i>Soil and Tillage Research</i> , 2016, 155, 501-509.	2.6	88
16	Assessment of soil organic carbon at local scale with spiked NIR calibrations: effects of selection and extra-weighting on the spiking subset. <i>European Journal of Soil Science</i> , 2014, 65, 248-263.	1.8	85
17	Microbial growth and community structure in acid mine soils after addition of different amendments for soil reclamation. <i>Geoderma</i> , 2016, 272, 64-72.	2.3	81
18	Effect of marble waste and pig slurry on the growth of native vegetation and heavy metal mobility in a mine tailing pond. <i>Journal of Geochemical Exploration</i> , 2012, 123, 69-76.	1.5	72

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19	Plant Cover and Soil Biochemical Properties in a Mine Tailing Pond Five Years After Application of Marble Wastes and Organic Amendments. <i>Pedosphere</i> , 2012, 22, 22-32.	2.1	71
20	Phytoremediation of mine tailings with <i>Atriplex halimus</i> and organic/inorganic amendments: A five-year field case study. <i>Chemosphere</i> , 2018, 204, 71-78.	4.2	71
21	Evaluation of soil quality using multiple lineal regression based on physical, chemical and biochemical properties. <i>Science of the Total Environment</i> , 2007, 378, 233-237.	3.9	65
22	Assessment of the lead and zinc contents in natural soils and tailing ponds from the Cartagena-La Unión mining district, SE Spain. <i>Journal of Geochemical Exploration</i> , 2013, 124, 166-175.	1.5	60
23	Effect of land use and soil properties in the feasibility of two sequential extraction procedures for metals fractionation. <i>Chemosphere</i> , 2019, 218, 266-272.	4.2	58
24	Factors controlling the water repellency induced by fire in calcareous Mediterranean forest soils. <i>European Journal of Soil Science</i> , 2007, 58, 1254-1259.	1.8	56
25	Soil properties under natural forest in the Alicante Province of Spain. <i>Geoderma</i> , 2007, 142, 334-341.	2.3	55
26	Carbon mineralization, microbial activity and metal dynamics in tailing ponds amended with pig slurry and marble waste. <i>Chemosphere</i> , 2013, 90, 2606-2613.	4.2	54
27	Organic matter dynamics, soil aggregation and microbial biomass and activity in Technosols created with metalliferous mine residues, biochar and marble waste. <i>Geoderma</i> , 2017, 301, 19-29.	2.3	54
28	A protocol for the assay of arylesterase activity in soil. <i>Soil Biology and Biochemistry</i> , 2009, 41, 659-662.	4.2	51
29	Assessing the effects of air-drying and rewetting pre-treatment on soil microbial biomass, basal respiration, metabolic quotient and soluble carbon under Mediterranean conditions. <i>European Journal of Soil Biology</i> , 2007, 43, 120-129.	1.4	48
30	Soil properties as key factors controlling water repellency in fire-affected areas: Evidences from burned sites in Spain and Israel. <i>Catena</i> , 2013, 108, 6-13.	2.2	48
31	Carbon and nitrogen mineralization during decomposition of crop residues in a calcareous soil. <i>Geoderma</i> , 2014, 230-231, 58-63.	2.3	48
32	Main factors controlling microbial community structure and function after reclamation of a tailing pond with aided phytostabilization. <i>Geoderma</i> , 2015, 245-246, 1-10.	2.3	48
33	Native soil organic matter conditions the response of microbial communities to organic inputs with different stability. <i>Geoderma</i> , 2017, 295, 1-9.	2.3	45
34	Microbial biomass and activity of an agricultural soil amended with the solid phase of pig slurries. <i>Bioresource Technology</i> , 2007, 98, 3259-3264.	4.8	43
35	Storage Effects on Biochemical Properties of Air-Dried Soil Samples from Southeastern Spain. <i>Arid Land Research and Management</i> , 2009, 23, 213-222.	0.6	43
36	Efficient irrigation management can contribute to reduce soil CO <sub>2</sub> emissions in agriculture. <i>Geoderma</i> , 2016, 263, 70-77.	2.3	42

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37	A first-year melon/cowpea intercropping system improves soil nutrients and changes the soil microbial community. <i>Agriculture, Ecosystems and Environment</i> , 2022, 328, 107856.	2.5	42
38	Validating the effectiveness and sensitivity of two soil quality indices based on natural forest soils under Mediterranean conditions. <i>Soil Biology and Biochemistry</i> , 2008, 40, 2079-2087.	4.2	39
39	Assessment of metals behaviour in industrial soil using sequential extraction, multivariable analysis and a geostatistical approach. <i>Journal of Geochemical Exploration</i> , 2017, 172, 174-183.	1.5	38
40	The impact of crop diversification, tillage and fertilization type on soil total microbial, fungal and bacterial abundance: A worldwide meta-analysis of agricultural sites. <i>Agriculture, Ecosystems and Environment</i> , 2022, 329, 107867.	2.5	38
41	Evaluation of the suitability of three Mediterranean shrub species for phytostabilization of pyritic mine soils. <i>Catena</i> , 2016, 136, 59-65.	2.2	36
42	Comparing legumes for use in multiple cropping to enhance soil organic carbon, soil fertility, aggregates stability and vegetables yields under semi-arid conditions. <i>Scientia Horticulturae</i> , 2019, 246, 835-841.	1.7	36
43	Greenhouse gas emissions and soil organic matter dynamics in woody crop orchards with different irrigation regimes. <i>Science of the Total Environment</i> , 2018, 644, 1429-1438.	3.9	34
44	Evaluation of carbon and nitrogen dynamics in different soil types amended with pig slurry, pig manure and its biochar by chemical and thermogravimetric analysis. <i>Biology and Fertility of Soils</i> , 2015, 51, 183-196.	2.3	33
45	Influence of plant species on physical, chemical and biological soil properties in a Mediterranean forest soil. <i>European Journal of Forest Research</i> , 2010, 129, 15-24.	1.1	31
46	The Effect of Former Mining Activities on Contamination Dynamics in Sediments, Surface Water and Vegetation in El Avenque Stream, SE Spain. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 519-532.	1.1	29
47	Use of <i>Piptatherum miliaceum</i> for the phytomanagement of biochar amended Technosols derived from pyritic tailings to enhance soil aggregation and reduce metal(loid) mobility. <i>Geoderma</i> , 2017, 307, 159-171.	2.3	29
48	Assessment of environmental risk of reclaimed mining ponds using geophysics and geochemical techniques. <i>Journal of Geochemical Exploration</i> , 2014, 147, 80-90.	1.5	28
49	Seedling emergence, growth and trace elements tolerance and accumulation by Lamiaceae species in a mine soil. <i>Chemosphere</i> , 2014, 113, 132-140.	4.2	28
50	Influence of cropping system management and crop residue addition on soil carbon turnover through the microbial biomass. <i>Biology and Fertility of Soils</i> , 2015, 51, 839-845.	2.3	24
51	Is aided phytostabilization a suitable technique for the remediation of tailings?. <i>European Journal of Soil Science</i> , 2019, 70, 862-875.	1.8	22
52	Short-term impact of crop diversification on soil carbon fluxes and balance in rainfed and irrigated woody cropping systems under semiarid Mediterranean conditions. <i>Plant and Soil</i> , 2021, 467, 499-514.	1.8	20
53	Cultivation of <i>Opuntia ficus-indica</i> under different soil management practices: A possible sustainable agricultural system to promote soil carbon sequestration and increase soil microbial biomass and activity. <i>Land Degradation and Development</i> , 2018, 29, 38-46.	1.8	19
54	Comparison of Soil Physical, Chemical, and Biochemical Properties Among Native Forest, Maintained and Abandoned Almond Orchards in Mountainous Areas of Eastern Spain. <i>Arid Land Research and Management</i> , 2009, 23, 267-282.	0.6	18

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55	The presence of ash as an interference factor in the estimation of the maximum temperature reached in burned soils using near-infrared spectroscopy (NIR). <i>Catena</i> , 2008, 74, 177-184.	2.2	16
56	Carbon stocks and dynamics in grazing highlands from the Andean Plateau. <i>Catena</i> , 2013, 104, 136-143.	2.2	15
57	A laboratory comparison of the interactions between three plastic mulch types and 38 active substances found in pesticides. <i>PeerJ</i> , 2020, 8, e9876.	0.9	15
58	Effects of Biochar and Marble mud on Mine Waste Properties to Reclaim Tailing Ponds. <i>Land Degradation and Development</i> , 2016, 27, 1227-1235.	1.8	14
59	Does the use of cowpea in rotation with a vegetable crop improve soil quality and crop yield and quality? A field study in SE Spain. <i>European Journal of Agronomy</i> , 2019, 107, 10-17.	1.9	14
60	Marble wastes and pig slurry improve the environmental and plant-relevant properties of mine tailings. <i>Environmental Geochemistry and Health</i> , 2014, 36, 41-54.	1.8	13
61	Bioaugmentation in Technosols created in abandoned pyritic tailings can contribute to enhance soil C sequestration and plant colonization. <i>Science of the Total Environment</i> , 2017, 593-594, 357-367.	3.9	13
62	Measurement of the broadband complex permittivity of soils in the frequency domain with a low-cost Vector Network Analyzer and an Open-Ended coaxial probe. <i>Computers and Electronics in Agriculture</i> , 2022, 195, 106847.	3.7	13
63	Environmental pollution and depth distribution of metal(loid)s and rare earth elements in mine tailing. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107526.	3.3	13
64	Estimation of the maximum temperature reached in burned soils using near-infrared spectroscopy: Effects of soil sample pre-treatments. <i>Geoderma</i> , 2010, 158, 85-92.	2.3	12
65	Arylesterase activity in trace element contaminated soils. <i>European Journal of Soil Science</i> , 2011, 62, 590-597.	1.8	12
66	Creation of Technosols to Decrease Metal Availability in Pyritic Tailings with Addition of Biochar and Marble Waste. <i>Land Degradation and Development</i> , 2017, 28, 1943-1951.	1.8	12
67	Nutritional status and its interaction with soil properties and trace elements in six Mediterranean shrub species grown in reclaimed pyritic tailings. <i>Ecological Engineering</i> , 2017, 109, 25-34.	1.6	11
68	Changes in Bacterial and Fungal Soil Communities in Long-Term Organic Cropping Systems. <i>Agriculture (Switzerland)</i> , 2021, 11, 445.	1.4	10
69	Soil Water Content Prediction Using Electrical Resistivity Tomography (ERT) in Mediterranean Tree Orchard Soils. <i>Sensors</i> , 2022, 22, 1365.	2.1	10
70	Syrian Bean-Caper ( <i>Zygophyllum fabago</i> L.) Improves Organic Matter and Other Properties of Mine Wastes Deposits. <i>International Journal of Phytoremediation</i> , 2014, 16, 366-378.	1.7	9
71	Effectiveness of pig sludge as organic amendment of different textural class mine tailings with different periods of amendment-contact time. <i>Journal of Environmental Management</i> , 2019, 230, 311-318.	3.8	9
72	Comparison of soil organic carbon pools, microbial activity and crop yield and quality in two vegetable multiple cropping systems under mediterranean conditions. <i>Scientia Horticulturae</i> , 2020, 261, 109025.	1.7	9

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73	Effect of South American grazing camelids on soil fertility and vegetation at the Bolivian Andean grasslands. <i>Agriculture, Ecosystems and Environment</i> , 2015, 207, 203-210.	2.5	8
74	Mining environments. <i>Advances in Chemical Pollution, Environmental Management and Protection</i> , 2019, 4, 157-205.	0.3	8
75	A comparative greenhouse gas emissions study of legume and non-legume crops grown using organic and conventional fertilizers. <i>Scientia Horticulturae</i> , 2020, 260, 108902.	1.7	7
76	Barriers and Opportunities for the Implementation of Sustainable Farming Practices in Mediterranean Tree Orchards. <i>Agronomy</i> , 2021, 11, 821.	1.3	7
77	Cowpea Crop Response to Mineral and Organic Fertilization in SE Spain. <i>Processes</i> , 2021, 9, 822.	1.3	7
78	Metals and metalloids in primary gold mining districts of Western Bolivia: anthropogenic and natural sources. <i>Environmental Earth Sciences</i> , 2014, 71, 5027-5036.	1.3	5
79	Kaolinite neoformation from palygorskite in the rhizosphere of citrus trees in semi-arid regions. <i>Catena</i> , 2020, 185, 104292.	2.2	5
80	Pepper crop residues and chemical fertilizers effect on soil fertility, yield and nutritional status in a crop of <i>Brassica oleracea</i> . <i>Journal of Soil Science and Plant Nutrition</i> , 2017, 17, 648-661.	1.7	5
81	Long-Term Compost Amendment Changes Interactions and Specialization in the Soil Bacterial Community, Increasing the Presence of Beneficial N-Cycling Genes in the Soil. <i>Agronomy</i> , 2022, 12, 316.	1.3	5
82	Effects of pepper crop residues and inorganic fertilizers on soil properties relevant to carbon cycling and broccoli production. <i>Soil Use and Management</i> , 2013, 29, 519-530.	2.6	4
83	Evaluation of the performance of chemical extractants to mobilise metals for remediation of contaminated samples. <i>Journal of Geochemical Exploration</i> , 2018, 193, 22-31.	1.5	4
84	Changes in carbon pools and enzyme activities in soil amended with pig slurry derived from different feeding diets and filtration process. <i>Geoderma</i> , 2020, 380, 114640.	2.3	4
85	Are the soils and vegetation of a forest close to tailings ponds affected by metals and arsenic?. <i>Environmental Geochemistry and Health</i> , 2022, 44, 15-28.	1.8	4
86	Use of <i>Piptatherum miliaceum</i> to enable the establishment success of <i>Salvia rosmarinus</i> in Technosols developed from pyritic tailings. <i>Chemosphere</i> , 2021, 267, 129281.	4.2	2
87	Rehabilitaci3n de una presa de residuos mineros mediante la aplicaci3n de lodo de m3rml y pur3n de cerdo para el desarrollo de una fitoestabilizaci3n asistida. <i>Boletín Geológico Y Minero</i> , 2017, 128, 421-435.	0.0	2
88	Agricultural Diversification. <i>Agriculture (Switzerland)</i> , 2022, 12, 369.	1.4	2
89	Decision Pattern for Changing Polluted Areas into Recreational Places. <i>Agronomy</i> , 2022, 12, 775.	1.3	2
90	Soil sodium, magnesium and potassium contents contribute to metals uptake and accumulation in leaves of <i>Atriplex halimus</i> in tailings ponds. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107948.	3.3	2

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91	Nitrogen Dynamic in Soils Amended with Legislated and Extremely High Doses of Pig Slurry. Communications in Soil Science and Plant Analysis, 2014, 45, 2429-2446.	0.6	1
92	Environmental Risk Assessment of Tailings Ponds Using Geophysical and Geochemical Techniques. , 2017, , 135-148.		1
93	Nitrogen Assessment in Amended Mining Soils Sown with Coronilla juncea and Piptatherum miliaceum. Minerals (Basel, Switzerland), 2022, 12, 433.	0.8	1
94	Suitability of Different Mediterranean Plants for Phytoremediation of Mine Soils Affected with Cadmium. , 2016, , 385-399.		0