Aguasanta Miguel Sarmiento

List of Publications by Citations

56 papers	1,967 citations	24 h-index	43 g-index
58 ext. papers	2,206 ext. citations	6.3 avg, IF	4.6 L-index

#	Paper	IF	Citations
56	Acid mine drainage pollution in the Tinto and Odiel rivers (Iberian Pyrite Belt, SW Spain) and bioavailability of the transported metals to the Huelva Estuary. *Environment International*, **2007**, 33, 445-55	13.9	223
55	Seasonal water quality variations in a river affected by acid mine drainage: the Odiel River (South West Spain). *Science of the Total Environment*, **2004**, 333, 267-81	10.2	191
54	Hydrogeochemical characteristics of the Tinto and Odiel Rivers (SW Spain). Factors controlling metal contents. *Science of the Total Environment*, **2007**, 373, 363-82	10.2	138
53	Evaluation of the dissolved contaminant load transported by the Tinto and Odiel rivers (South West Spain). *Applied Geochemistry*, **2006**, 21, 1733-1749	3.5	136
52	Hydrochemical characteristics and seasonal influence on the pollution by acid mine drainage in the Odiel river Basin (SW Spain). *Applied Geochemistry*, **2009**, 24, 697-714	3.5	131
51	Pollutant flows from a phosphogypsum disposal area to an estuarine environment: An insight from geochemical signatures. *Science of the Total Environment*, **2016**, 553, 42-51	10.2	76
50	Toxicity and potential risk assessment of a river polluted by acid mine drainage in the Iberian Pyrite Belt (SW Spain). *Science of the Total Environment*, **2011**, 409, 4763-71	10.2	65
49	Acid mine drainage in the Iberian Pyrite Belt: 1. Hydrochemical characteristics and pollutant load of the Tinto and Odiel rivers. *Environmental Science and Pollution Research*, **2013**, 20, 7509-19	5.1	59
48	Effects on the mobility of metals from acidification caused by possible CO2 leakage from sub-seabed geological formations. *Science of the Total Environment*, **2014**, 470-471, 356-63	10.2	56
47	Inorganic arsenic speciation at river basin scales: the Tinto and Odiel rivers in the Iberian Pyrite Belt, SW Spain. *Environmental Pollution*, **2009**, 157, 1202-9	9.3	55
46	Natural attenuation processes in two water reservoirs receiving acid mine drainage. *Science of the Total Environment*, **2009**, 407, 2051-62	10.2	52
45	Metal mobility and toxicity to microalgae associated with acidification of sediments: CO2 and acid comparison. *Marine Environmental Research*, **2014**, 96, 136-44	3.3	51
44	Assessment of metal contamination, bioavailability, toxicity and bioaccumulation in extreme metallic environments (Iberian Pyrite Belt) using Corbicula fluminea. *Science of the Total Environment*, **2016**, 544, 1031-44	10.2	50
43	Application of the SWAT model to an AMD-affected river (Meca River, SW Spain). Estimation of transported pollutant load. *Journal of Hydrology*, **2009**, 377, 445-454	6	44
42	Environmental Impact of Mining Activities in the Southern Sector of the Guadiana Basin (SW of the Iberian Peninsula). *Water, Air, and Soil Pollution*, **2009**, 199, 323-341	2.6	37
41	Metal cycling during sediment early diagenesis in a water reservoir affected by acid mine drainage. *Science of the Total Environment*, **2013**, 461-462, 416-29	10.2	33
40	Diel cycles of arsenic speciation due to photooxidation in acid mine drainage from the Iberian Pyrite Belt (Sw Spain). *Chemosphere*, **2007**, 66, 677-83	8.4	30

39	Pollutant transport processes in the Odiel River (SW Spain) during rain events. *Water Resources Research*, **2012**, 48,	5.4	29
38	Evaluation of heavy metals and arsenic speciation discharged by the industrial activity on the Tinto-Odiel estuary, SW Spain. *Marine Pollution Bulletin*, **2011**, 62, 405-11	6.7	29
37	New preservation method for inorganic arsenic speciation in acid mine drainage samples. *Talanta*, **2006**, 69, 1182-9	6.2	28
36	A novel approach for acid mine drainage pollution biomonitoring using rare earth elements bioaccumulated in the freshwater clam Corbicula fluminea. *Journal of Hazardous Materials*, **2017**, 338, 466-471	12.8	27
35	Dissolved and particulate metals and arsenic species mobility along a stream affected by Acid Mine Drainage in the Iberian Pyrite Belt (SW Spain). *Applied Geochemistry*, **2012**, 27, 1944-1952	3.5	27
34	Water Quality in the Future Alcolea Reservoir (Odiel River, SW Spain): A Clear Example of the Inappropriate Management of Water Resources in Spain. *Water Resources Management*, **2011**, 25, 201-215	3.7	26
33	Iron isotopes in acid mine waters and iron-rich solids from the Tinto□Odiel Basin (Iberian Pyrite Belt, Southwest Spain). *Chemical Geology*, **2008**, 253, 162-171	4.2	26
32	Evaluation of organic substrates to enhance the sulfate-reducing activity in phosphogypsum. *Science of the Total Environment*, **2012**, 439, 106-13	10.2	24
31	Source and impact of lead contamination on □aminolevulinic acid dehydratase activity in several marine bivalve species along the Gulf of Cadiz. *Aquatic Toxicology*, **2011**, 101, 146-54	5.1	23
30	Assessment of phosphogypsum impact on the salt-marshes of the Tinto river (SW Spain): role of natural attenuation processes. *Marine Pollution Bulletin*, **2011**, 62, 2787-96	6.7	22
29	Controls on acid mine water composition from the Iberian Pyrite Belt (SW Spain). *Catena*, **2016**, 137, 12-23	5.8	21
28	A geochemical approach to the restoration plans for the Odiel River basin (SW Spain), a watershed deeply polluted by acid mine drainage. *Environmental Science and Pollution Research*, **2017**, 24, 4506-4516	5.1	19
27	Negative pH values in an open-air radical environment affected by acid mine drainage. Characterization and proposal of a hydrogeochemical model. *Science of the Total Environment*, **2018** , 644, 1244-1253	10.2	19
26	Simulation of the potential effects of CO2 leakage from carbon capture and storage activities on the mobilization and speciation of metals. *Marine Pollution Bulletin*, **2014**, 86, 59-67	6.7	19
25	Hydrological modeling of a watershed affected by acid mine drainage (Odiel River, SW Spain). Assessment of the pollutant contributing areas. *Journal of Hydrology*, **2016**, 540, 196-206	6	18
24	Preservation procedures for arsenic speciation in a stream affected by acid mine drainage in southwestern Spain. *Analytical and Bioanalytical Chemistry*, **2006**, 384, 1594-9	4.4	18
23	Seasonal variations in the formation of Al and Si rich Fe-stromatolites in the highly polluted acid mine drainage of Agua Agria Creek (Tharsis, SW Spain). *Chemical Geology*, **2011**, 284, 97-104	4.2	17
22	The use of a Weight-of-Evidence approach to address sediment quality in the Odiel River basin (SW, Spain). *Ecotoxicology and Environmental Safety*, **2016**, 133, 243-51	7	14

21	Rare earth elements mobility processes in an AMD-affected estuary: Huelva Estuary (SW Spain). *Marine Pollution Bulletin*, **2017**, 121, 282-291	6.7	13
20	Effects of seawater mixing on the mobility of trace elements in acid phosphogypsum leachates. *Marine Pollution Bulletin*, **2018**, 127, 695-703	6.7	13
19	Geochemical behavior of an acid drainage system: the case of the Amarillo River, Famatina (La Rioja, Argentina). *Environmental Science and Pollution Research*, **2017**, 24, 1630-1647	5.1	13
18	Refining the estimation of metal loads dissolved in acid mine drainage by continuous monitoring of specific conductivity and water level. *Applied Geochemistry*, **2012**, 27, 1932-1943	3.5	12
17	River acid mine drainage: sediment and water mapping through hyperspectral Hymap data. *International Journal of Remote Sensing*, **2012**, 33, 6163-6185	3.1	11
16	Metal fractionation in marine sediments acidified by enrichment of CO: A risk assessment. *Marine Pollution Bulletin*, **2018**, 131, 611-619	6.7	10
15	The Negro River (Ancash-Peru): A unique case of water pollution, three environmental scenarios and an unresolved issue. *Science of the Total Environment*, **2019**, 648, 398-407	10.2	10
14	Monitoring acidic water in a polluted river with hyperspectral remote sensing (HyMap). *Hydrological Sciences Journal*, **2015**, 60, 1064-1077	3.5	9
13	Physico-Chemical Influence of Surface Water Contaminated by Acid Mine Drainage on the Populations of Diatoms in Dams (Iberian Pyrite Belt, SW Spain). *International Journal of Environmental Research and Public Health*, **2019**, 16,	4.6	9
12	Bioavailability and toxicity of metals from a contaminated sediment by acid mine drainage: linking exposure-response relationships of the freshwater bivalve Corbicula fluminea to contaminated sediment. *Environmental Science and Pollution Research*, **2016**, 23, 22957-22967	5.1	8
11	Application of fuzzy logic tools for the biogeochemical characterisation of (un)contaminated waters from Aljustrel mining area (South Portugal). *Chemosphere*, **2018**, 211, 736-744	8.4	7
10	The UNESCO national biosphere reserve (Marismas del Odiel, SW Spain): an area of 18,875 ha affected by mining waste. *Environmental Science and Pollution Research*, **2019**, 26, 33594-33606	5.1	5
9	Metal contamination and fractionation in sediments from the lower basin of the Vale do Ribeira (SE, Brazil). *Environmental Monitoring and Assessment*, **2017**, 189, 245	3.1	4
8	Determination of the extreme reduction of concrete strength due to acid mine drainage by laboratory tests on specimens located in a real environment. *Construction and Building Materials*, **2021**, 269, 121817	6.7	3
7	Preliminary Results of Ecotoxicological Assessment of an Acid Mine Drainage (AMD) Passive Treatment System Testing Water Quality of Depurated Lixiviates. *Procedia Earth and Planetary Science*, **2017**, 17, 269-272		2
6	Acid Mine Drainage as Energizing Microbial Niches for the Formation of Iron Stromatolites: The Tintillo River in Southwest Spain. *Astrobiology*, **2021**, 21, 443-463	3.7	2
5	Corrosion of Metallic and Structural Elements Exposed to Acid Mine Drainage (AMD). *Mine Water and the Environment*, **2020**, 39, 195-203	2.4	1
4	Integrative assessment of sediment quality in lower basin affected by former mining in Brazil. *Environmental Geochemistry and Health*, **2018**, 40, 1465-1480	4.7	1

3	Application of a Fuzzy Logic Based Methodology to Validate the Hydrochemical Characterization and Determining Seasonal Influence of a Watershed Affected by Acid Mine Drainage. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	1
2	Biogeochemical indicators (waters/diatoms) of acid mine drainage pollution in the Odiel river (Iberian Pyritic Belt, SW Spain).. *Environmental Science and Pollution Research*, **2022**, 1	5.1	0
1	Wasted Critical Raw Materials: a Polluted Environmental Scenario as Potential Source of Economic Interest Elements in the Spanish Part of the Iberian Pyrite Belt. *Water, Air, and Soil Pollution*, **2021**, 232, 1	2.6	0