Francisco A Macas

List of Publications by Year in Descending Order

59 papers	1,313 citations	22 h-index	34 g-index
59 ext. papers	1,598 ext. citations	7.7 avg, IF	4.83 L-index

#	Paper	IF	Citations
59	Environmental management and potential valorization of wastes generated in passive treatments of fertilizer industry effluents.. *Chemosphere*, **2022**, 295, 133876	8.4	0
58	Stream-pit lake interactions in an abandoned mining area affected by acid drainage (Iberian Pyrite Belt).. *Science of the Total Environment*, **2022**, 155224	10.2	0
57	Thallium distribution in an estuary affected by acid mine drainage (AMD): The Río de Huelva estuary (SW Spain).. *Environmental Pollution*, **2022**, 119448	9.3	0
56	Temporal evolution of acid mine drainage (AMD) leachates from the abandoned tharsis mine (Iberian Pyrite Belt, Spain).. *Environmental Pollution*, **2021**, 295, 118697	9.3	2
55	Metal(loid) release from sulfide-rich wastes to the environment: The case of the Iberian Pyrite Belt (SW Spain). *Current Opinion in Environmental Science and Health*, **2021**, 20, 100240	8.1	2
54	Geochemical behaviour and transport of technology critical metals (TCMs) by the Tinto River (SW Spain) to the Atlantic Ocean. *Science of the Total Environment*, **2021**, 764, 143796	10.2	4
53	Mine waters as a secondary source of rare earth elements worldwide: The case of the Iberian Pyrite Belt. *Journal of Geochemical Exploration*, **2021**, 224, 106742	3.8	7
52	Eco-sustainable passive treatment for mine waters: Full-scale and long-term demonstration. *Journal of Environmental Management*, **2021**, 280, 111699	7.9	4
51	Combined procedure of metal removal and recovery of technology elements from fertilizer industry effluents. *Journal of Geochemical Exploration*, **2021**, 221, 106698	3.8	2
50	Geochemical behavior of rare earth elements in acid drainages: Modeling achievements and limitations. *Journal of Geochemical Exploration*, **2020**, 216, 106577	3.8	8
49	Toxicity and Anti-promastigote Activity of Benzoxazinoid Analogs Against and. *Advanced Pharmaceutical Bulletin*, **2020**, 10, 119-124	4.5	1
48	Rare earth elements in a historical mining district (south-west Spain): Hydrogeochemical behaviour and seasonal variability. *Chemosphere*, **2020**, 253, 126742	8.4	3
47	Release of technology critical metals during sulfide oxidation processes: the case of the Poderosa sulfide mine (south-west Spain). *Environmental Chemistry*, **2020**, 17, 93	3.2	9
46	Seasonal variability of extremely metal rich acid mine drainages from the Tharsis mines (SW Spain). *Environmental Pollution*, **2020**, 259, 113829	9.3	21
45	Design and optimization of sustainable passive treatment systems for phosphogypsum leachates in an orphan disposal site. *Journal of Environmental Management*, **2020**, 275, 111251	7.9	6
44	Distribution and availability of rare earth elements and trace elements in the estuarine waters of the Río of Huelva (SW Spain). *Environmental Pollution*, **2020**, 267, 115506	9.3	10
43	The Evolution of Pollutant Concentrations in a River Severely Affected by Acid Mine Drainage: Río Tinto (SW Spain). *Minerals (Basel, Switzerland)*, **2020**, 10, 598	2.4	11

42	Recovery of Critical Raw Materials from Acid Mine Drainage (AMD) **2020**, 219-233		0
41	Assessment of metals mobility during the alkaline treatment of highly acid phosphogypsum leachates. *Science of the Total Environment*, **2019**, 660, 395-405	10.2	13
40	Causes and impacts of a mine water spill from an acidic pit lake (Iberian Pyrite Belt). *Environmental Pollution*, **2019**, 250, 127-136	9.3	21
39	Mineral reactivity in sulphide mine wastes: influence of mineralogy and grain size on metal release. *European Journal of Mineralogy*, **2019**, 31, 263-273	2.2	4
38	Mineralogically-induced metal partitioning during the evaporative precipitation of efflorescent sulfate salts from acid mine drainage. *Chemical Geology*, **2019**, 530, 119339	4.2	11
37	Ecological improvement assessment of a passive remediation technology for acid mine drainage: Water quality biomonitoring using bivalves. *Chemosphere*, **2019**, 219, 695-703	8.4	5
36	Synthesis and antimicrobial activity of some benzoxazinoids derivatives of 2-nitrophenol and 3-hydroxy-2-nitropyridine. *Synthetic Communications*, **2019**, 49, 286-296	1.7	5
35	Assessing the quality of potentially reclaimed mine soils: Environmental implications for the construction of a nearby water reservoir. *Chemosphere*, **2019**, 216, 19-30	8.4	7
34	Life cycle assessment of a passive remediation system for acid mine drainage: Towards more sustainable mining activity. *Journal of Cleaner Production*, **2019**, 211, 1100-1111	10.3	23
33	Sulfate reduction processes in salt marshes affected by phosphogypsum: Geochemical influences on contaminant mobility. *Journal of Hazardous Materials*, **2018**, 350, 154-161	12.8	18
32	Passive elimination of sulfate and metals from acid mine drainage using combined limestone and barium carbonate systems. *Journal of Cleaner Production*, **2018**, 182, 114-123	10.3	26
31	Hydrogeochemical behavior of an anthropogenic mine aquifer: Implications for potential remediation measures. *Science of the Total Environment*, **2018**, 636, 85-93	10.2	8
30	Stable isotope insights into the weathering processes of a phosphogypsum disposal area. *Water Research*, **2018**, 140, 344-353	12.5	9
29	Mobility of rare earth elements, yttrium and scandium from a phosphogypsum stack: Environmental and economic implications. *Science of the Total Environment*, **2018**, 618, 847-857	10.2	36
28	Uncertainty in the measurement of toxic metals mobility in mining/mineral wastes by standardized BCRSEP. *Journal of Hazardous Materials*, **2018**, 360, 587-593	12.8	23
27	Valorization of wastes from the fertilizer industry: Current status and future trends. *Journal of Cleaner Production*, **2018**, 174, 678-690	10.3	49
26	Hydrological characterization and prediction of flood levels of acidic pit lakes in the Tharsis mines, Iberian Pyrite Belt. *Journal of Hydrology*, **2018**, 566, 807-817	6	11
25	Environmental Assessment and Management of Phosphogypsum According to European and United States of America Regulations. *Procedia Earth and Planetary Science*, **2017**, 17, 666-669		35

24	An anomalous metal-rich phosphogypsum: Characterization and classification according to international regulations. *Journal of Hazardous Materials*, **2017**, 331, 99-108	12.8	43
23	Exploration of fertilizer industry wastes as potential source of critical raw materials. *Journal of Cleaner Production*, **2017**, 143, 497-505	10.3	28
22	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
21	Metal-fluxes characterization at a catchment scale: Study of mixing processes and end-member analysis in the Meca River watershed (SW Spain). *Journal of Hydrology*, **2017**, 550, 590-602	6	5
20	Management strategies and valorization for waste sludge from active treatment of extremely metal-polluted acid mine drainage: A contribution for sustainable mining. *Journal of Cleaner Production*, **2017**, 141, 1057-1066	10.3	40
19	Controls on acid mine water composition from the Iberian Pyrite Belt (SW Spain). *Catena*, **2016**, 137, 12-23	5.8	21
18	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
17	Metal and acidity fluxes controlled by precipitation/dissolution cycles of sulfate salts in an anthropogenic mine aquifer. *Journal of Contaminant Hydrology*, **2016**, 188, 29-43	3.9	12
16	Water acidification trends in a reservoir of the Iberian Pyrite Belt (SW Spain). *Science of the Total Environment*, **2016**, 541, 400-411	10.2	23
15	Long term fluctuations of groundwater mine pollution in a sulfide mining district with dry Mediterranean climate: Implications for water resources management and remediation. *Science of the Total Environment*, **2016**, 539, 427-435	10.2	42
14	Recovery of Rare Earth Elements and Yttrium from Passive-Remediation Systems of Acid Mine Drainage. *Environmental Science & Technology*, **2016**, 50, 8255-62	10.3	145
13	Geochemical processes in a highly acidic pit lake of the Iberian Pyrite Belt (SW Spain). *Chemical Geology*, **2015**, 395, 144-153	4.2	10
12	Acid mine drainage in the Iberian Pyrite Belt: 2. Lessons learned from recent passive remediation experiences. *Environmental Science and Pollution Research*, **2013**, 20, 7837-53	5.1	60
11	Metastability, nanocrystallinity and pseudo-solid solution effects on the understanding of schwertmannite solubility. *Chemical Geology*, **2013**, 360-361, 22-31	4.2	39
10	Natural pretreatment and passive remediation of highly polluted acid mine drainage. *Journal of Environmental Management*, **2012**, 104, 93-100	7.9	56
9	From highly polluted Zn-rich acid mine drainage to non-metallic waters: implementation of a multi-step alkaline passive treatment system to remediate metal pollution. *Science of the Total Environment*, **2012**, 433, 323-30	10.2	58
8	Environmental assessment and management of metal-rich wastes generated in acid mine drainage passive remediation systems. *Journal of Hazardous Materials*, **2012**, 229-230, 107-14	12.8	35
7	Long term remediation of highly polluted acid mine drainage: a sustainable approach to restore the environmental quality of the Odiel river basin. *Environmental Pollution*, **2011**, 159, 3613-9	9.3	59

6	A bacterial consortium isolated from an Icelandic fumarole displays exceptionally high levels of sulfate reduction and metals resistance. *Journal of Hazardous Materials*, **2011**, 187, 362-70	12.8	21
5	Mineralogy and geochemistry of Zn-rich mine-drainage precipitates from an MgO passive treatment system by synchrotron-based X-ray analysis. *Environmental Science & Technology*, **2011**, 45, 7826-33	10.3	15
4	Hydrochemical performance and mineralogical evolution of a dispersed alkaline substrate (DAS) remediating the highly polluted acid mine drainage in the full-scale passive treatment of Mina Esperanza (SW Spain). *American Mineralogist*, **2011**, 96, 1270-1277	2.9	25
3	Field multi-step limestone and MgO passive system to treat acid mine drainage with high metal concentrations. *Applied Geochemistry*, **2009**, 24, 2301-2311	3.5	64
2	New herbicide models from benzoxazinones: aromatic ring functionalization effects. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 9843-51	5.7	23
1	Partition of Rare Earth Elements Between Sulfate Salts Formed by the Evaporation of Acid Mine Drainage. *Mine Water and the Environment*,1	2.4	