

# Rafael PÃ©rez-LÃ³pez

## List of Publications by Year in descending order

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Version: 2024-02-01

83  
papers

3,718  
citations

126708

33  
h-index

138251

58  
g-index

85  
all docs

85  
docs citations

85  
times ranked

3336  
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental management and potential valorization of wastes generated in passive treatments of fertilizer industry effluents. <i>Chemosphere</i> , 2022, 295, 133876.	4.2	10
2	Thallium distribution in an estuary affected by acid mine drainage (AMD): The RÃ©a de Huelva estuary (SW Spain). <i>Environmental Pollution</i> , 2022, 306, 119448.	3.7	2
3	Eco-sustainable passive treatment for mine waters: Full-scale and long-term demonstration. <i>Journal of Environmental Management</i> , 2021, 280, 111699.	3.8	14
4	Combined procedure of metal removal and recovery of technology elements from fertilizer industry effluents. <i>Journal of Geochemical Exploration</i> , 2021, 221, 106698.	1.5	7
5	Metal(loid) release from sulfide-rich wastes to the environment: The case of the Iberian Pyrite Belt (SW Spain). <i>Current Opinion in Environmental Science and Health</i> , 2021, 20, 100240.	2.1	7
6	Geochemical behaviour and transport of technology critical metals (TCMs) by the Tinto River (SW) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	3.9	11
7	Mine waters as a secondary source of rare earth elements worldwide: The case of the Iberian Pyrite Belt. <i>Journal of Geochemical Exploration</i> , 2021, 224, 106742.	1.5	19
8	Effects of redox oscillations on the phosphogypsum waste in an estuarine salt-marsh system. <i>Chemosphere</i> , 2020, 242, 125174.	4.2	6
9	Design and optimization of sustainable passive treatment systems for phosphogypsum leachates in an orphan disposal site. <i>Journal of Environmental Management</i> , 2020, 275, 111251.	3.8	13
10	Metal partitioning and speciation in a mining-impacted estuary by traditional and passive sampling methods. <i>Science of the Total Environment</i> , 2020, 722, 137905.	3.9	16
11	Release of technology critical metals during sulfide oxidation processes: the case of the Poderosa sulfide mine (south-west Spain). <i>Environmental Chemistry</i> , 2020, 17, 93.	0.7	10
12	Assessment of metals mobility during the alkaline treatment of highly acid phosphogypsum leachates. <i>Science of the Total Environment</i> , 2019, 660, 395-405.	3.9	23
13	Influence of As(V) on precipitation and transformation of schwertmannite in acid mine drainage-impacted waters. <i>European Journal of Mineralogy</i> , 2019, 31, 237-245.	0.4	15
14	Mineralogically-induced metal partitioning during the evaporative precipitation of efflorescent sulfate salts from acid mine drainage. <i>Chemical Geology</i> , 2019, 530, 119339.	1.4	12
15	Assessing the quality of potentially reclaimed mine soils: Environmental implications for the construction of a nearby water reservoir. <i>Chemosphere</i> , 2019, 216, 19-30.	4.2	11
16	Characterization of the role of phosphogypsum foam in the transport of metals and radionuclides in the Southern Mediterranean Sea. <i>Journal of Hazardous Materials</i> , 2019, 363, 258-267.	6.5	49
17	Mineral reactivity in sulphide mine wastes: influence of mineralogy and grain size on metal release. <i>European Journal of Mineralogy</i> , 2019, 31, 263-273.	0.4	12
18	Sulfate reduction processes in salt marshes affected by phosphogypsum: Geochemical influences on contaminant mobility. <i>Journal of Hazardous Materials</i> , 2018, 350, 154-161.	6.5	25

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19	Unraveling the impact of chronic exposure to metal pollution through human gallstones. <i>Science of the Total Environment</i> , 2018, 624, 1031-1040.	3.9	10
20	Effects of seawater mixing on the mobility of trace elements in acid phosphogypsum leachates. <i>Marine Pollution Bulletin</i> , 2018, 127, 695-703.	2.3	30
21	Stable isotope insights into the weathering processes of a phosphogypsum disposal area. <i>Water Research</i> , 2018, 140, 344-353.	5.3	30
22	Valorization of wastes from the fertilizer industry: Current status and future trends. <i>Journal of Cleaner Production</i> , 2018, 174, 678-690.	4.6	81
23	Assessment of natural radionuclides mobility in a phosphogypsum disposal area. <i>Chemosphere</i> , 2018, 211, 775-783.	4.2	32
24	Uncertainty in the measurement of toxic metals mobility in mining/mineral wastes by standardized BCR <sup>+</sup> SEP. <i>Journal of Hazardous Materials</i> , 2018, 360, 587-593.	6.5	30
25	Environmental Assessment and Management of Phosphogypsum According to European and United States of America Regulations. <i>Procedia Earth and Planetary Science</i> , 2017, 17, 666-669.	0.6	56
26	New method for carbon dioxide mineralization based on phosphogypsum and aluminium-rich industrial wastes resulting in valuable carbonated by-products. <i>Journal of CO2 Utilization</i> , 2017, 18, 15-22.	3.3	34
27	An anomalous metal-rich phosphogypsum: Characterization and classification according to international regulations. <i>Journal of Hazardous Materials</i> , 2017, 331, 99-108.	6.5	60
28	A novel approach for acid mine drainage pollution biomonitoring using rare earth elements bioaccumulated in the freshwater clam <i>Corbicula fluminea</i> . <i>Journal of Hazardous Materials</i> , 2017, 338, 466-471.	6.5	41
29	Role of Arsenic During the Aging of Acid Mine Drainage Precipitates. <i>Procedia Earth and Planetary Science</i> , 2017, 17, 233-236.	0.6	9
30	Basaluminite Structure and its Environmental Implications. <i>Procedia Earth and Planetary Science</i> , 2017, 17, 237-240.	0.6	6
31	A geochemical approach to the restoration plans for the Odiel River basin (SW Spain), a watershed deeply polluted by acid mine drainage. <i>Environmental Science and Pollution Research</i> , 2017, 24, 4506-4516.	2.7	25
32	Arsenate and Selenate Scavenging by Basaluminite: Insights into the Reactivity of Aluminum Phases in Acid Mine Drainage. <i>Environmental Science &amp; Technology</i> , 2017, 51, 28-37.	4.6	37
33	New insights into the metal partitioning in different microphases of human gallstones. <i>Journal of Trace Elements in Medicine and Biology</i> , 2017, 44, 339-348.	1.5	5
34	Management strategies and valorization for waste sludge from active treatment of extremely metal-polluted acid mine drainage: A contribution for sustainable mining. <i>Journal of Cleaner Production</i> , 2017, 141, 1057-1066.	4.6	65
35	Whole-nanoparticle atomistic modeling of the schwertmannite structure from total scattering data. <i>Journal of Applied Crystallography</i> , 2017, 50, 1617-1626.	1.9	11
36	The nanocrystalline structure of basaluminite, an aluminum hydroxide sulfate from acid mine drainage. <i>American Mineralogist</i> , 2017, 102, 2381-2389.	0.9	19

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37	Recovery of Rare Earth Elements and Yttrium from Passive-Remediation Systems of Acid Mine Drainage. <i>Environmental Science &amp; Technology</i> , 2016, 50, 8255-8262.	4.6	204
38	Trace element-mineral associations in modern and ancient iron terraces in acid drainage environments. <i>Catena</i> , 2016, 147, 386-393.	2.2	12
39	Combined microstructural and mineralogical phase characterization of gallstones in a patient-based study in SW Spain - Implications for environmental contamination in their formation. <i>Science of the Total Environment</i> , 2016, 573, 433-443.	3.9	16
40	Pollutant flows from a phosphogypsum disposal area to an estuarine environment: An insight from geochemical signatures. <i>Science of the Total Environment</i> , 2016, 553, 42-51.	3.9	126
41	Metal and acidity fluxes controlled by precipitation/dissolution cycles of sulfate salts in an anthropogenic mine aquifer. <i>Journal of Contaminant Hydrology</i> , 2016, 188, 29-43.	1.6	16
42	Controls on acid mine water composition from the Iberian Pyrite Belt (SW Spain). <i>Catena</i> , 2016, 137, 12-23.	2.2	26
43	The potential role of aluminium hydroxysulphates in the removal of contaminants in acid mine drainage. <i>Chemical Geology</i> , 2015, 417, 414-423.	1.4	56
44	Major hydrogeochemical processes in an Acid Mine Drainage affected estuary. <i>Marine Pollution Bulletin</i> , 2015, 91, 295-305.	2.3	24
45	Raman identification of Fe precipitates and evaluation of As fate during phase transformation in Tinto and Odiel River Basins. <i>Chemical Geology</i> , 2015, 398, 22-31.	1.4	19
46	Fractionation and fluxes of metals and radionuclides during the recycling process of phosphogypsum wastes applied to mineral CO <sub>2</sub> sequestration. <i>Waste Management</i> , 2015, 45, 412-419.	3.7	90
47	Environmental tracers for elucidating the weathering process in a phosphogypsum disposal site: Implications for restoration. <i>Journal of Hydrology</i> , 2015, 529, 1313-1323.	2.3	45
48	<i>Erica andevalensis</i> and <i>Erica australis</i> growing in the same extreme environments: Phytostabilization potential of mining areas. <i>Geoderma</i> , 2014, 230-231, 194-203.	2.3	38
49	Experimental and theoretical evidence of zinc structurally bound in vermiculite from naturally metal-enriched soils. <i>Clay Minerals</i> , 2013, 48, 529-541.	0.2	5
50	Assessment of the dissolved pollutant flux of the Odiel River (SW Spain) during a wet period. <i>Science of the Total Environment</i> , 2013, 463-464, 572-580.	3.9	6
51	Formation of a hardpan in the co-disposal of fly ash and sulfide mine tailings and its influence on the generation of acid mine drainage. <i>Chemical Geology</i> , 2013, 355, 45-55.	1.4	22
52	The role of mineralogy on element mobility in two sulfide mine tailings from the Iberian Pyrite Belt (SW Spain). <i>Chemical Geology</i> , 2013, 345, 119-129.	1.4	21
53	Arsenic attenuation in tailings at a former Cu-As mine, SW Finland. <i>Applied Geochemistry</i> , 2012, 27, 2289-2299.	1.4	26
54	Evaluation of organic substrates to enhance the sulfate-reducing activity in phosphogypsum. <i>Science of the Total Environment</i> , 2012, 439, 106-113.	3.9	29

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55	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. <i>Science of the Total Environment</i> , 2012, 433, 323-330.	3.9	66
56	Enrichment of rare earth elements as environmental tracers of contamination by acid mine drainage in salt marshes: A new perspective. <i>Marine Pollution Bulletin</i> , 2012, 64, 1799-1808.	2.3	95
57	Arsenic speciation in soils and <i>Erica andevalensis</i> Cabezudo & Rivera and <i>Erica australis</i> L. from São Domingos Mine area, Portugal. <i>Journal of Geochemical Exploration</i> , 2012, 119-120, 51-59.	1.5	27
58	Changes in mobility of hazardous elements during coal combustion in Santa Catarina power plant (Brazil). <i>Fuel</i> , 2012, 94, 495-503.	3.4	185
59	Biologically-induced precipitation of sphalerite-wurtzite nanoparticles by sulfate-reducing bacteria: Implications for acid mine drainage treatment. <i>Science of the Total Environment</i> , 2012, 423, 176-184.	3.9	57
60	Mineralogy and Geochemistry of Zn-Rich Mine-Drainage Precipitates From an MgO Passive Treatment System by Synchrotron-Based X-ray Analysis. <i>Environmental Science &amp; Technology</i> , 2011, 45, 7826-7833.	4.6	18
61	Synchrotron-based X-ray study of iron oxide transformations in terraces from the Tinto-Odiel river system: Influence on arsenic mobility. <i>Chemical Geology</i> , 2011, 280, 336-343.	1.4	22
62	Procedure to use phosphogypsum industrial waste for mineral CO <sub>2</sub> sequestration. <i>Journal of Hazardous Materials</i> , 2011, 196, 431-435.	6.5	99
63	Evaluation of heavy metals and arsenic speciation discharged by the industrial activity on the Tinto-Odiel estuary, SW Spain. <i>Marine Pollution Bulletin</i> , 2011, 62, 405-411.	2.3	50
64	Assessment of phosphogypsum impact on the salt-marshes of the Tinto river (SW Spain): Role of natural attenuation processes. <i>Marine Pollution Bulletin</i> , 2011, 62, 2787-2796.	2.3	31
65	Leaching of potential hazardous elements of coal cleaning rejects. <i>Environmental Monitoring and Assessment</i> , 2011, 175, 109-126.	1.3	102
66	Acid neutralization by dissolution of alkaline paper mill wastes and implications for treatment of sulfide-mine drainage. <i>American Mineralogist</i> , 2011, 96, 781-791.	0.9	19
67	Neutralization of acid mine drainage using the final product from CO <sub>2</sub> emissions capture with alkaline paper mill waste. <i>Journal of Hazardous Materials</i> , 2010, 177, 762-772.	6.5	46
68	Rare earth element geochemistry of sulphide weathering in the São Domingos mine area (Iberian Pyrite Belt). <i>Journal of Geochemical Exploration</i> , 2010, 100, 29-40.	1.4	82
69	Dynamics of contaminants in phosphogypsum of the fertilizer industry of Huelva (SW Spain): From phosphate rock ore to the environment. <i>Applied Geochemistry</i> , 2010, 25, 705-715.	1.4	126
70	Combination of sequential chemical extraction and modelling of dam-break wave propagation to aid assessment of risk related to the possible collapse of a roasted sulphide tailings dam. <i>Science of the Total Environment</i> , 2009, 407, 5761-5771.	3.9	27
71	Mineral sequestration of CO <sub>2</sub> by aqueous carbonation of coal combustion fly-ash. <i>Journal of Hazardous Materials</i> , 2009, 161, 1347-1354.	6.5	286
72	Evaluation of heavy metal bio-availability from Almagrera pyrite-rich tailings dam (Iberian Pyrite Belt). <i>Journal of Geochemical Exploration</i> , 2009, 100, 87-94.	1.5	75

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73	Attenuation of pyrite oxidation with a fly ash pre-barrier: Reactive transport modelling of column experiments. <i>Applied Geochemistry</i> , 2009, 24, 1712-1723.	1.4	35
74	Prediction of the environmental impact of modern slags: A petrological and chemical comparative study with Roman age slags. <i>American Mineralogist</i> , 2009, 94, 1417-1427.	0.9	23
75	Potential environmental impact at São Domingos mining district (Iberian Pyrite Belt, SW Iberian) Tj ETQq1 1 0.784314 rgBT /Overload 2008, 55, 1797-1809.	1.2	88
76	Long-term interaction of wollastonite with acid mine water and effects on arsenic and metal removal. <i>Applied Geochemistry</i> , 2008, 23, 1288-1298.	1.4	16
77	Carbonation of alkaline paper mill waste to reduce CO <sub>2</sub> greenhouse gas emissions into the atmosphere. <i>Applied Geochemistry</i> , 2008, 23, 2292-2300.	1.4	94
78	Use of sequential extraction procedure for assessing the environmental impact at regional scale of the São Domingos Mine (Iberian Pyrite Belt). <i>Applied Geochemistry</i> , 2008, 23, 3452-3463.	1.4	112
79	Mineralogy of the hardpan formation processes in the interface between sulfide-rich sludge and fly ash: Applications for acid mine drainage mitigation. <i>American Mineralogist</i> , 2007, 92, 1966-1977.	0.9	20
80	Immobilization of toxic elements in mine residues derived from mining activities in the Iberian Pyrite Belt (SW Spain): Laboratory experiments. <i>Applied Geochemistry</i> , 2007, 22, 1919-1935.	1.4	45
81	Utilization of fly ash to improve the quality of the acid mine drainage generated by oxidation of a sulphide-rich mining waste: Column experiments. <i>Chemosphere</i> , 2007, 67, 1637-1646.	4.2	68
82	The iron-coating role on the oxidation kinetics of a pyritic sludge doped with fly ash. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 1921-1934.	1.6	49
83	Changes in mobility of toxic elements during the production of phosphoric acid in the fertilizer industry of Huelva (SW Spain) and environmental impact of phosphogypsum wastes. <i>Journal of Hazardous Materials</i> , 2007, 148, 745-750.	6.5	127