

Pablo Higuera

List of Publications by Year in descending order

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113
papers

3,222
citations

136740

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189595

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all docs

129
docs citations

129
times ranked

3268
citing authors

#	ARTICLE	IF	CITATIONS
1	Mercury Speciation and Microbial Transformations in Mine Wastes, Stream Sediments, and Surface Waters at the Almad�n Mining District, Spain. <i>Environmental Science & Technology</i> , 2004, 38, 4285-4292.	4.6	194
2	A first insight into mercury distribution and speciation in soils from the Almad�n mining district, Spain. <i>Journal of Geochemical Exploration</i> , 2003, 80, 95-104.	1.5	152
3	The Almad�n district (Spain): Anatomy of one of the world's largest Hg-contaminated sites. <i>Science of the Total Environment</i> , 2006, 356, 112-124.	3.9	139
4	Microprobe Techniques for Speciation Analysis and Geochemical Characterization of Mine Environments: The Mercury District of Almad�n in Spain. <i>Environmental Science & Technology</i> , 2006, 40, 4090-4095.	4.6	108
5	Influence of the soil pH in the uptake and bioaccumulation of heavy metals (Fe, Zn, Cu, Pb and Mn) and other elements (Ca, K, Al, Sr and Ba) in vine leaves, Castilla-La Mancha (Spain). <i>Journal of Geochemical Exploration</i> , 2017, 174, 79-83.	1.5	93
6	Mercury accumulation in soils and plants in the Almad�n mining district, Spain: one of the most contaminated sites on Earth. <i>Environmental Geochemistry and Health</i> , 2006, 28, 487-498.	1.8	91
7	Strong arsenic enrichment in sediments from the Elqui watershed, Northern Chile: industrial (gold) Tj ETQq1 1 0.784314 rgBT /Overlook 84, 53-64.	1.5	76
8	The Almad�n mercury mining district, Spain. <i>Mineralium Deposita</i> , 1999, 34, 539-548.	1.7	74
9	Environmental assessment of copper-gold-mercury mining in the Andacollo and Punitaqui districts, northern Chile. <i>Applied Geochemistry</i> , 2004, 19, 1855-1864.	1.4	74
10	In Vitro Studies Evaluating Leaching of Mercury from Mine Waste Calcine Using Simulated Human Body Fluids. <i>Environmental Science & Technology</i> , 2010, 44, 4782-4788.	4.6	74
11	Adsorption of biosolids and their main components on chalcopyrite, molybdenite and pyrite: Zeta potential and FTIR spectroscopy studies. <i>Minerals Engineering</i> , 2015, 78, 128-135.	1.8	72
12	Low-cost geochemical surveys for environmental studies in developing countries: Testing a field portable XRF instrument under quasi-realistic conditions. <i>Journal of Geochemical Exploration</i> , 2012, 113, 3-12.	1.5	68
13	Dating of alteration episodes related to mercury mineralization in the Almad�n district, Spain. <i>Earth and Planetary Science Letters</i> , 1997, 148, 287-298.	1.8	64
14	Distribution of gaseous Hg in the Mercury mining district of Mt. Amiata (Central Italy): A geochemical survey prior the reclamation project. <i>Environmental Research</i> , 2013, 125, 179-187.	3.7	59
15	Heavy metal contamination in sediments of an artificial reservoir impacted by long-term mining activity in the Almad�n mercury district (Spain). <i>Environmental Science and Pollution Research</i> , 2016, 23, 6024-6038.	2.7	56
16	Mercury-resistant rhizobial bacteria isolated from nodules of leguminous plants growing in high Hg-contaminated soils. <i>Applied Microbiology and Biotechnology</i> , 2012, 96, 543-554.	1.7	50
17	XANES speciation of mercury in three mining districts - Almad�n, Asturias (Spain), Idria (Slovenia). <i>Journal of Synchrotron Radiation</i> , 2010, 17, 179-186.	1.0	49
18	A compilation of field surveys on gaseous elemental mercury (GEM) from contrasting environmental settings in Europe, South America, South Africa and China: separating fads from facts. <i>Environmental Geochemistry and Health</i> , 2014, 36, 713-734.	1.8	49

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19	Evaluation of Mercury Stress in Plants from the Almad�n Mining District by Analysis of Phytochelatins and Their Hg Complexes. <i>Environmental Science & Technology</i> , 2014, 48, 6256-6263.	4.6	49
20	Size fractionation in mercury-bearing airborne particles (HgPM10) at Almad�n, Spain: Implications for inhalation hazards around old mines. <i>Atmospheric Environment</i> , 2005, 39, 6409-6419.	1.9	47
21	The Mazarr�n Pb�(Ag)�Zn mining district (SE Spain) as a source of heavy metal contamination in a semiarid realm: Geochemical data from mine wastes, soils, and stream sediments. <i>Journal of Geochemical Exploration</i> , 2011, 109, 113-124.	1.5	46
22	Determinants of exposure to mercury in hair from inhabitants of the largest mercury mine in the world. <i>Chemosphere</i> , 2011, 84, 571-577.	4.2	42
23	Atmospheric mercury pollution around a chlor-alkali plant in Flix (NE Spain): an integrated analysis. <i>Environmental Science and Pollution Research</i> , 2015, 22, 4842-4850.	2.7	42
24	Sampling high to extremely high Hg concentrations at the Cerco de Almadenejos, Almad�n mining district (Spain): The old metallurgical precinct (1794 to 1861AD) and surrounding areas. <i>Journal of Geochemical Exploration</i> , 2011, 109, 70-77.	1.5	41
25	Mercury isotope fractionation during ore retorting in the Almad�n mining district, Spain. <i>Chemical Geology</i> , 2013, 357, 150-157.	1.4	41
26	The As-Contaminated Elqui River Basin: a Long Lasting Perspective (1975�1995) Covering the Initiation and Development of Au�Cu�As Mining in the High Andes of Northern Chile. <i>Environmental Geochemistry and Health</i> , 2006, 28, 431-443.	1.8	39
27	Does mercury presence in soils promote their microbial activity? The Almadenejos case (Almad�n) Tj ETQq1 1 0.784314 rgBT /Over	4.2	39
28	Intraplate mafic magmatism, degasification, and deposition of mercury: The giant Almad�n mercury deposit (Spain) revisited. <i>Ore Geology Reviews</i> , 2013, 51, 93-102.	1.1	37
29	Bioaccumulation of thallium and other trace metals in <i>Biscutella laevigata</i> nearby a decommissioned zinc-lead mine (Northeastern Italian Alps). <i>Journal of Environmental Management</i> , 2017, 186, 214-224.	3.8	36
30	Mercury emission and dispersion models from soils contaminated by cinnabar mining and metallurgy. <i>Journal of Environmental Monitoring</i> , 2011, 13, 3460.	2.1	35
31	<i>Lupinus albus</i> plants acquire mercury tolerance when inoculated with an Hg-resistant <i>Bradyrhizobium</i> strain. <i>Plant Physiology and Biochemistry</i> , 2013, 73, 168-175.	2.8	35
32	Greening Chilean copper mining operations through industrial ecology strategies. <i>Journal of Cleaner Production</i> , 2014, 84, 671-679.	4.6	35
33	Mobility and fate of Thallium and other potentially harmful elements in drainage waters from a decommissioned Zn-Pb mine (North-Eastern Italian Alps). <i>Journal of Geochemical Exploration</i> , 2018, 188, 1-10.	1.5	34
34	Time and space variations in mercury and other trace element contents in olive tree leaves from the Almad�n Hg-mining district. <i>Journal of Geochemical Exploration</i> , 2012, 123, 143-151.	1.5	32
35	Mercury in air and plant specimens in herbaria: A pilot study at the MAF Herbarium in Madrid (Spain). <i>Science of the Total Environment</i> , 2007, 387, 346-352.	3.9	31
36	Mineral deposits and Cu�Zn�As dispersion�contamination in stream sediments from the semiarid Coquimbo Region, Chile. <i>Environmental Geology</i> , 2007, 53, 283-294.	1.2	31

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37	Characterization of mechanisms involved in tolerance and accumulation of Cd in <i>Biscutella auriculata</i> L. <i>Ecotoxicology and Environmental Safety</i> , 2020, 201, 110784.	2.9	29
38	Industrial and natural sources of gaseous elemental mercury in the Almad�n district (Spain): An updated report on this issue after the ceasing of mining and metallurgical activities in 2003 and major land reclamation works. <i>Environmental Research</i> , 2013, 125, 197-208.	3.7	28
39	The role of native lichens in the biomonitoring of gaseous mercury at contaminated sites. <i>Journal of Environmental Management</i> , 2017, 186, 207-213.	3.8	27
40	Environmental geochemistry of a highly polluted area: The La Union Pb-Zn mine (Castilla-La Mancha) Tj ETQq0 0,0rgBT /Overlock 10	1.5	26
41	Trace metal pollution in freshwater sediments of the world's largest mercury mining district: sources, spatial distribution, and environmental implications. <i>Journal of Soils and Sediments</i> , 2017, 17, 1893-1904.	1.5	26
42	Geochemical distribution of major and trace elements in agricultural soils of Castilla-La Mancha (central Spain): finding criteria for baselines and delimiting regional anomalies. <i>Environmental Science and Pollution Research</i> , 2019, 26, 3100-3114.	2.7	26
43	The Las Cuevas deposit, Almaden district (Spain): An unusual case of deep-seated advanced argillic alteration related to mercury mineralization. <i>Mineralium Deposita</i> , 1999, 34, 211-214.	1.7	24
44	Temporal variations in gaseous elemental mercury concentrations at a contaminated site: Main factors affecting nocturnal maxima in daily cycles. <i>Atmospheric Environment</i> , 2016, 125, 8-14.	1.9	24
45	Microbial diversity and activity assessment in a 100-year-old lead mine. <i>Journal of Hazardous Materials</i> , 2021, 410, 124618.	6.5	24
46	A combined photovoltaic and novel renewable energy system: An optimized techno-economic analysis for mining industry applications. <i>Journal of Cleaner Production</i> , 2017, 149, 999-1010.	4.6	23
47	First lead isotopic data for cinnabar in the Almad�n district (Spain): implications for the genesis of the mercury deposits. <i>Mineralium Deposita</i> , 2005, 40, 115-122.	1.7	22
48	Comparison of mercury distribution and mobility in soils affected by anthropogenic pollution around chloralkali plants and ancient mining sites. <i>Science of the Total Environment</i> , 2019, 671, 1066-1076.	3.9	22
49	Multi-pathway human exposure risk assessment using Bayesian modeling at the historically largest mercury mining district. <i>Ecotoxicology and Environmental Safety</i> , 2020, 201, 110833.	2.9	22
50	Environmental assessment of the arsenic-rich, Rodalquilar gold-copper-lead-zinc mining district, SE Spain: data from soils and vegetation. <i>Environmental Geology</i> , 2009, 58, 761.	1.2	21
51	Assessment of the floatability of chalcopyrite, molybdenite and pyrite using biosolids and their main components as collectors for greening the froth flotation of copper sulphide ores. <i>Minerals Engineering</i> , 2014, 64, 38-43.	1.8	21
52	Potentially harmful elements in soils and holm-oak trees (<i>Quercus ilex</i> L.) growing in mining sites at the Valle de Alcudia Pb-Zn district (Spain) - Some clues on plant metal uptake. <i>Journal of Geochemical Exploration</i> , 2017, 182, 166-179.	1.5	21
53	Predicting the Stability of Homologous Gene Duplications in a Plant RNA Virus. <i>Genome Biology and Evolution</i> , 2016, 8, 3065-3082.	1.1	20
54	Abandoned Mine Lands Reclamation by Plant Remediation Technologies. <i>Sustainability</i> , 2021, 13, 6555.	1.6	19

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55	Geology and geochemistry of high-grade, volcanic rock-hosted, mercury mineralisation in the Nuevo Entredicho deposit, Almad�n district, Spain. <i>Mineralium Deposita</i> , 2002, 37, 421-432.	1.7	17
56	Mercury emissions in equilibrium: a novel approach for the quantification of mercury emissions from contaminated soils. <i>Analytical Methods</i> , 2013, 5, 2793.	1.3	17
57	Stream bottom sediments as a means to assess metal contamination in the historic mining district of Almad�n (Spain). <i>International Journal of Mining, Reclamation and Environment</i> , 2014, 28, 357-376.	1.2	17
58	Assessment of Potentially Toxic Elements in Technosols by Tailings Derived from Pb-Zn-Ag Mining Activities at San Quint�n (Ciudad Real, Spain): Some Insights into the Importance of Integral Studies to Evaluate Metal Contamination Pollution Hazards. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 346.	0.8	17
59	Tailing�s geomorphology of the San Quint�n mining site (Spain): landform catalogue, aeolian erosion and environmental implications. <i>Environmental Earth Sciences</i> , 2019, 78, 1.	1.3	17
60	Deciphering lead tolerance mechanisms in a population of the plant species <i>Biscutella auriculata</i> L. from a mining area: Accumulation strategies and antioxidant defenses. <i>Chemosphere</i> , 2020, 261, 127721.	4.2	17
61	Atmospheric mercury data for the Coquimbo region, Chile: influence of mineral deposits and metal recovery practices. <i>Atmospheric Environment</i> , 2005, 39, 7587-7596.	1.9	16
62	The MERSADE (European Union) project: Testing procedures and environmental impact for the safe storage of liquid mercury in the Almad�n district, Spain. <i>Science of the Total Environment</i> , 2010, 408, 4901-4905.	3.9	16
63	An estimation of mercury concentrations in the local atmosphere of Almad�n (Ciudad Real Province, Spain). <i>Environmental Science and Technology</i> , 2015, 22, 4833-4841.	0.784314	16
64	Assessment of mercury uptake routes at the soil-plant-atmosphere interface. <i>Geochemistry: Exploration, Environment, Analysis</i> , 2019, 19, 146-154.	0.5	16
65	Strong Metal Anomalies in Stream Sediments from Semiarid Watersheds in Northern Chile: When Geological and Structural Analyses Contribute to Understanding Environmental Disturbances. <i>International Geology Review</i> , 2006, 48, 1133-1144.	1.1	15
66	Effect of the addition of sewage sludge as a fertilizer on a sandy vineyard soil. <i>Journal of Soils and Sediments</i> , 2016, 16, 1360-1365.	1.5	15
67	Assessment of EDDS and vermicompost for the phytoextraction of Cd and Pb by sunflower (<i>Helianthus annuus</i> L.). <i>International Journal of Phytoremediation</i> , 2019, 21, 191-199.	1.7	15
68	Ecological and Health Risk Assessments of an Abandoned Gold Mine (Remance, Panama): Complex Scenarios Need a Combination of Indices. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 9369.	1.2	15
69	Sequential extraction procedure as a tool to investigate PTHE geochemistry and potential geoavailability of dam sediments (Almad�n mining district, Spain). <i>Catena</i> , 2016, 147, 394-403.	2.2	14
70	Mercury transfer from soil to olive trees. A comparison of three different contaminated sites. <i>Environmental Science and Pollution Research</i> , 2016, 23, 6055-6061.	2.7	14
71	Spatial and Temporal Trends of Gaseous Elemental Mercury over a Highly Impacted Coastal Environment (Northern Adriatic, Italy). <i>Atmosphere</i> , 2020, 11, 935.	1.0	14
72	Experimental assessment of the daily exchange of atmospheric mercury in <i>Epipremnum aureum</i> . <i>Environmental Geochemistry and Health</i> , 2020, 42, 3185-3198.	1.8	14

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73	Mercury vapor emissions from the Ingenios in Potosí-(Bolivia). <i>Journal of Geochemical Exploration</i> , 2012, 116-117, 1-7.	1.5	13
74	Usage Proposal of a common urban decorative tree (<i>Salix alba</i> L.) to monitor the dispersion of gaseous mercury: A case study from Turda (Romania). <i>Chemosphere</i> , 2018, 193, 74-81.	4.2	13
75	Factors influencing mercury uptake by leaves of stone pine (<i>Pinus pinea</i> L.) in Almadén (Central Spain). <i>Environmental Science and Pollution Research</i> , 2019, 26, 3129-3137.	2.7	13
76	Contaminated sites, waste management, and green chemistry: new challenges from monitoring to remediation. <i>Environmental Science and Pollution Research</i> , 2019, 26, 3095-3099.	2.7	12
77	Environmental challenges related to cyanidation in Central American gold mining; the Remance mine (Panama). <i>Journal of Environmental Management</i> , 2022, 302, 113979.	3.8	12
78	Elimination of inorganic mercury from waste waters using crandallite-type compounds. <i>Journal of Chemical Technology and Biotechnology</i> , 2003, 78, 399-405.	1.6	11
79	Modelling the mercury removal from polluted waters by using TOMAC microcapsules considering the metal speciation. <i>Chemical Engineering Journal</i> , 2018, 341, 308-316.	6.6	11
80	Iron uptake in vineyard soils and relationships with other elements (Zn, Mn and Ca). The case of Castilla-La Mancha, Central Spain. <i>Applied Geochemistry</i> , 2018, 88, 17-22.	1.4	11
81	Spatial Distribution and Biomonitoring of Atmospheric Mercury Concentrations over a Contaminated Coastal Lagoon (Northern Adriatic, Italy). <i>Atmosphere</i> , 2020, 11, 1280.	1.0	11
82	Fuchsite and other Cr-rich phyllosilicates in ultramafic enclaves from the Almadén mercury mining district, Spain. <i>Clay Minerals</i> , 2001, 36, 345-354.	0.2	10
83	Distribution of chemical elements in calc-alkaline igneous rocks, soils, sediments and tailings deposits in northern central Chile. <i>Journal of South American Earth Sciences</i> , 2016, 69, 25-42.	0.6	10
84	Evolution of the Speciation and Mobility of Pb, Zn and Cd in Relation to Transport Processes in a Mining Environment. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 4912.	1.2	10
85	Biogeochemical assessment of the impact of Zn mining activity in the area of the Jebel Trozza mine, Central Tunisia. <i>Environmental Geochemistry and Health</i> , 2020, 42, 3529-3542.	1.8	10
86	The evolution of the subcontinental mantle beneath the Central Iberian Zone: Geochemical tracking of its mafic magmatism from the Neoproterozoic to the Cenozoic. <i>Earth-Science Reviews</i> , 2022, 228, 103997.	4.0	10
87	Approach to the potential usage of two wood ashes waste as soil amendments on the basis of the dehydrogenase activity and soil oxygen consumption. <i>Journal of Soils and Sediments</i> , 2018, 18, 2148-2156.	1.5	8
88	Mineralogical and Geochemical Nature of Calcareous Vineyard Soils from Alcubillas (La Mancha, Tj ETQq0 0 0 rgBT/Overlock_10 Tf 50 1	1.2	8
89	Geochemical Characterization and Trace-Element Mobility Assessment for Metallic Mine Reclamation in Soils Affected by Mine Activities in the Iberian Pyrite Belt. <i>Geosciences (Switzerland)</i> , 2021, 11, 233.	1.0	8
90	Pre-industrial Metal Anomalies in Ice Cores: A Simplified Reassessment of Windborne Soil Dust Contribution and Volcanic Activity during the Last Glaciation. <i>International Geology Review</i> , 2005, 47, 1120-1130.	1.1	7

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91	Mercury Soil Pollution in Spain: A Review. Handbook of Environmental Chemistry, 2014, , 135-158.	0.2	7
92	Biomonitoring of Hg ⁰ , Hg ²⁺ and Particulate Hg in a Mining Context Using Tree Barks+. International Journal of Environmental Research and Public Health, 2021, 18, 5191.	1.2	7
93	4D dispersion of total gaseous mercury derived from a mining source: identification of criteria to assess risks related to high concentrations of atmospheric mercury. Atmospheric Chemistry and Physics, 2020, 20, 12995-13010.	1.9	7
94	Feasibility study of fluorescent lamp waste recycling by thermal desorption. Environmental Science and Pollution Research, 2021, 28, 61860-61868.	2.7	7
95	Palaeozoic magmatic-related hydrothermal activity in the Almad�n syncline, Spain: a long-lasting Silurian to Devonian process?. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2000, 109, 199-202.	0.8	6
96	Variations in mercury and other trace elements contents in soil and in vine leaves from the Almad�n Hg-mining district. Journal of Soils and Sediments, 2014, 14, 773-777.	1.5	6
97	Seasonal and spatial distribution of mercury in stream sediments from Almad�n mining district. Geochemistry: Exploration, Environment, Analysis, 2019, 19, 121-128.	0.5	6
98	Plate Interactions, Evolving Magmatic Styles, and Inheritance of Structural Paths: Development of the Gold-Rich, Miocene El Indio Epithermal Belt, Northern Chile. International Geology Review, 2007, 49, 844-853.	1.1	5
99	Soil pollution related to mercury-mining activities in the proximity of Usagre (Badajoz, SW Spain). International Journal of Mining, Reclamation and Environment, 2014, 28, 377-388.	1.2	5
100	Time variations of gaseous and reactive mercury in the industrial area of Puertollano (south-central Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.9	5
101	Particulate matter and particulate-bound mercury in a heavily polluted site related to ancient mining and metallurgy: a proposal for dry deposition modeling based on micrometeorological conditions. Environmental Science and Pollution Research, 2018, 25, 35312-35321.	2.7	5
102	Use of humic substances in froth flotation processes. Journal of Environmental Management, 2019, 252, 109699.	3.8	5
103	Occurrence and environmental constraints of gray monazite in red soils from the Campo de Montiel area (SW Ciudad Real province, south central Spain). Environmental Science and Pollution Research, 2021, 28, 4573-4584.	2.7	5
104	Characterization and remediation of contamination: the influences of mining and other human activities. Environmental Science and Pollution Research, 2016, 23, 5997-6001.	2.7	4
105	An approach for evaluating the bioavailability and risk assessment of potentially toxic elements using edible and inedible plants�the Remance (Panama) mining area as a model. Environmental Geochemistry and Health, 2023, 45, 151-170.	1.8	3
106	Pb�Zn�Cd�As Pollution in Soils Affected by Mining Activities in Central and Southern Spain: A Scattered Legacy Posing Potential Environmental and Health Concerns. Handbook of Environmental Chemistry, 2014, , 175-205.	0.2	2
107	Hydrochemistry of Ground Waters from Urban Wells in Almad�n (Central Spain): Water Quality Around the World�s Largest Mercury Mining-Metallurgical Complex. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	2
108	Biogeochemical Mapping: A New Tool to Assess the Soil Quality and Health. Advances in Science, Technology and Innovation, 2019, , 3-5.	0.2	2

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109	Incidence of the Almad�n historical mining district on the hydrochemical characteristics of Valdezogues Basin (Spain). IOP Conference Series: Earth and Environmental Science, 2016, 44, 052034.	0.2	1
110	Characterization of the biochemical basis for copper homeostasis and tolerance in <i>Biscutella auriculata</i> L.. <i>Physiologia Plantarum</i> , 2020, 173, 167-179.	2.6	1
111	Environmental assessment of copper?gold?mercury mining in the Andacollo and Punitaqui districts, northern Chile. <i>Applied Geochemistry</i> , 2004, , .	1.4	0
112	Treatment of Wastewater Contaminated by Mercury by Adsorption on the Crandallite Mineral. , 2005, , 243-250.		0
113	Zonificaci�n de suelos vit�colas en Villanueva de Alcardete (Toledo, La Mancha, Espa�a) utilizando elementos traza.. <i>E3S Web of Conferences</i> , 2018, 50, 01025.	0.2	0