

Giovanni De Giudici

List of Publications by Year in descending order

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67
papers

1,284
citations

331670

21
h-index

434195

31
g-index

74
all docs

74
docs citations

74
times ranked

1400
citing authors

#	ARTICLE	IF	CITATIONS
1	Metals and metalloids in hair samples of children living near the abandoned mine sites of Sulcis-Inglesiente (Sardinia, Italy). <i>Environmental Research</i> , 2014, 134, 366-374.	7.5	55
2	Arsenopyrite dissolution rates in O ₂ -bearing solutions. <i>Chemical Geology</i> , 2010, 273, 272-285.	3.3	54
3	Surface control vs. diffusion control during calcite dissolution: Dependence of step-edge velocity upon solution pH. <i>American Mineralogist</i> , 2002, 87, 1279-1285.	1.9	50
4	Mechanisms of galena dissolution in oxygen-saturated solutions: Evaluation of pH effect on apparent activation energies and mineral-water interface. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 2321-2331.	3.9	48
5	The role of natural biogeochemical barriers in limiting metal loading to a stream affected by mine drainage. <i>Applied Geochemistry</i> , 2017, 76, 124-135.	3.0	43
6	Zinc isotope and transition-element dynamics accompanying hydrozincite biomineralization in the Rio Naracauli, Sardinia, Italy. <i>Chemical Geology</i> , 2013, 337-338, 1-10.	3.3	42
7	Microscopic Processes Ruling the Bioavailability of Zn to Roots of <i>Euphorbia pithyusa</i> L. Pioneer Plant. <i>Environmental Science & Technology</i> , 2015, 49, 1400-1408.	10.0	42
8	In situ investigation of galena dissolution in oxygen saturated solution: evolution of surface features and kinetic rate. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 1381-1389.	3.9	38
9	Evidence of calcium carbonates in coastal (Talos Dome and Ross Sea area) East Antarctica snow and firn: Environmental and climatic implications. <i>Earth and Planetary Science Letters</i> , 2008, 271, 43-52.	4.4	37
10	Impact of Zn excess on biomineralization processes in <i>Juncus acutus</i> grown in mine polluted sites. <i>Journal of Hazardous Materials</i> , 2019, 370, 98-107.	12.4	35
11	Fluorite dissolution at acidic pH: In situ AFM and ex situ VSI experiments and Monte Carlo simulations. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4298-4311.	3.9	33
12	Microstructure of Cu-Be alloy trioxidative wear debris. <i>Acta Materialia</i> , 2007, 55, 2531-2538.	7.9	32
13	Geochemistry of rare earth elements in water and solid materials at abandoned mines in SW Sardinia (Italy). <i>Journal of Geochemical Exploration</i> , 2013, 133, 149-159.	3.2	32
14	Structural properties of biologically controlled hydrozincite: An HRTEM and NMR spectroscopic study. <i>American Mineralogist</i> , 2009, 94, 1698-1706.	1.9	31
15	Microscopic biomineralization processes and Zn bioavailability: a synchrotron-based investigation of <i>Pistacia lentiscus</i> L. roots. <i>Environmental Science and Pollution Research</i> , 2015, 22, 19352-19361.	5.3	31
16	The amorphous Zn biomineralization at Naracauli stream, Sardinia: electron microscopy and X-ray absorption spectroscopy. <i>Environmental Science and Pollution Research</i> , 2014, 21, 6775-6782.	5.3	29
17	Quantifying biomineralization of zinc in the Rio Naracauli (Sardinia, Italy), using a tracer injection and synoptic sampling. <i>Chemical Geology</i> , 2014, 384, 110-119.	3.3	29
18	Hydrozincite seasonal precipitation at Naracauli (Sardinia - Italy): Hydrochemical factors and morphological features of the biomineralization process. <i>Applied Geochemistry</i> , 2012, 27, 1814-1820.	3.0	27

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19	Assessment of the applicability of a "toolbox"-designed for microbially assisted phytoremediation: the case study at Ingurtoosu mining site (Italy). <i>Environmental Science and Pollution Research</i> , 2014, 21, 6939-6951.	5.3	27
20	Zn biomineralization processes and microbial biofilm in a metal-rich stream (Naracauli, Sardinia). <i>Environmental Science and Pollution Research</i> , 2014, 21, 6793-6808.	5.3	26
21	Cigarette butts, a threat for marine environments: Lessons from benthic foraminifera (Protista). <i>Marine Environmental Research</i> , 2020, 162, 105150.	2.5	24
22	Stability of biological and inorganic hemimorphite: Implications for hemimorphite precipitation in non-sulfide Zn deposits. <i>Ore Geology Reviews</i> , 2017, 89, 808-821.	2.7	22
23	Coupled pot and lysimeter experiments assessing plant performance in microbially assisted phytoremediation. <i>Environmental Science and Pollution Research</i> , 2014, 21, 6905-6920.	5.3	20
24	Apparent energy of hydrated biomineral surface and apparent solubility constant: An investigation of hydrozincite. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 140, 349-364.	3.9	20
25	Metal Tolerance Capability of <i>Helichrysum microphyllum</i> Cambess. subsp. <i>tyrrhenicum</i> Bacch., Brullo & Giusso: A Candidate for Phytostabilization in Abandoned Mine Sites. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2018, 101, 758-765.	2.7	20
26	Microscopic surface processes observed during the oxidative dissolution of sphalerite. <i>European Journal of Mineralogy</i> , 2002, 14, 757-762.	1.3	19
27	Bioerosion by microbial euendoliths in benthic foraminifera from heavy metal-polluted coastal environments of Portovesme (south-western Sardinia, Italy). <i>Biogeosciences</i> , 2012, 9, 4607-4620.	3.3	19
28	Effects of zinc and lead on seed germination of <i>Helichrysum microphyllum</i> subsp. <i>tyrrhenicum</i> , a metal-tolerant plant. <i>International Journal of Environmental Science and Technology</i> , 2020, 17, 1917-1928.	3.5	19
29	Natural attenuation can lead to environmental resilience in mine environment. <i>Applied Geochemistry</i> , 2020, 117, 104597.	3.0	19
30	The marine sedimentary record of natural and anthropogenic contribution from the Sulcis-Iglesiente mining district (Sardinia, Italy). <i>Marine Pollution Bulletin</i> , 2017, 122, 331-343.	5.0	18
31	XRD-Thermal Combined Analyses: An Approach to Evaluate the Potential of Phytoremediation, Phytomining, and Biochar Production. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 1976.	2.6	18
32	Coordination environment of Zn in foraminifera <i>Elphidium aculeatum</i> and <i>Quinqueloculina seminula</i> shells from a polluted site. <i>Chemical Geology</i> , 2018, 477, 100-111.	3.3	17
33	Mineralogy and Zn Chemical Speciation in a Soil-Plant System from a Metal-Extreme Environment: A Study on <i>Helichrysum microphyllum</i> subsp. <i>tyrrhenicum</i> (Campo Pisano Mine, SW Sardinia, Italy). <i>Minerals</i> (Basel, Switzerland), 2020, 10, 259.	2.0	17
34	Dissolution of nanocrystalline fluorite powders: An investigation by XRD and solution chemistry. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 4073-4083.	3.9	16
35	Dissolution of the (001) surface of galena: An in situ assessment of surface speciation by fluid-cell micro-Raman spectroscopy. <i>American Mineralogist</i> , 2007, 92, 518-524.	1.9	16
36	Investigation of the hydrozincite structure by infrared and solid-state NMR spectroscopy. <i>American Mineralogist</i> , 2013, 98, 1219-1226.	1.9	16

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37	Application of hydrologic-tracer techniques to the Casargiu adit and Rio Irvi (SW-Sardinia, Italy): Using enhanced natural attenuation to reduce extreme metal loads. <i>Applied Geochemistry</i> , 2018, 96, 42-54.	3.0	16
38	Plastics, (bio)polymers and their apparent biogeochemical cycle: An infrared spectroscopy study on foraminifera. <i>Environmental Pollution</i> , 2021, 279, 116912.	7.5	16
39	Future precipitation in a Mediterranean island and streamflow changes for a small basin using EURO-CORDEX regional climate simulations and the SWAT model. <i>Journal of Hydrology</i> , 2021, 603, 127025.	5.4	15
40	Lead isotopic fingerprint in human scalp hair: The case study of Iglesias mining district (Sardinia, Italy). <i>Environmental Pollution</i> , 2021, 279, 116912.	8.0	14
41	Uptake of Pb by hydrozincite, $Zn_5(CO_3)_2(OH)_6$: Implications for remediation. <i>Journal of Hazardous Materials</i> , 2010, 177, 1138-1144.	12.4	13
42	Assessment of origin and fate of contaminants along mining-affected Rio Montevecchio (SW Sardinia, Italy). <i>Environmental Pollution</i> , 2021, 279, 116912.	3.0	12
43	Natural Biomineralization in the Contaminated Sediment-Water System at the Ingurtosu Abandoned Mine. <i>Soil Biology</i> , 2012, , 113-130.	0.8	12
44	The Pb-Zn-Ag vein system at Montevecchio-Ingurtosu, southwestern Sardinia, Italy: A summary of previous knowledge and new mineralogical, fluid inclusion, and isotopic data. <i>Ore Geology Reviews</i> , 2019, 115, 103194.	2.7	11
45	Surface reactivity of Etna volcanic ash and evaluation of health risks. <i>Science of the Total Environment</i> , 2021, 761, 143248.	8.0	11
46	Groundwater Chemistry of the Mornag Aquifer System in NE Tunisia. <i>Resource Geology</i> , 2010, 60, 377-388.	0.8	10
47	Uptake of Cd in hydrozincite, $Zn_5(CO_3)_2(OH)_6$: evidence from X-ray absorption spectroscopy and anomalous X-ray diffraction. <i>European Journal of Mineralogy</i> , 2010, 22, 557-564.	1.3	10
48	Formation of a Low-Crystalline Zn-Silicate in a Stream in SW Sardinia, Italy. <i>Procedia Earth and Planetary Science</i> , 2013, 7, 888-891.	0.6	10
49	Structure of low-order hemimorphite produced in a Zn-rich environment by cyanobacterium <i>Leptolingbya frigida</i> . <i>American Mineralogist</i> , 2018, 103, 711-719.	1.9	10
50	Zinc incorporation in marine bivalve shells grown in mine-polluted seabed sediments: a case study in the Malfidano mining area (SW Sardinia, Italy). <i>Environmental Science and Pollution Research</i> , 2018, 25, 36645-36660.	5.3	10
51	Ex situ phytoremediation trial of Sardinian mine waste using a pioneer plant species. <i>Environmental Science and Pollution Research</i> , 2021, 28, 55736-55753.	5.3	9
52	Phonon confinement effect in calcium fluoride nanoparticles. <i>Chemical Physics Letters</i> , 2007, 444, 145-148.	2.6	8
53	Binding of bis-(2-ethylhexyl) phthalate at the surface of hydrozincite nanocrystals: An example of organic molecules absorption onto nanocrystalline minerals. <i>Journal of Colloid and Interface Science</i> , 2015, 457, 298-306.	9.4	8
54	Geochemical Behaviour of Rare Earth Elements in Mining Environments under Non-Acidic Conditions. <i>Procedia Earth and Planetary Science</i> , 2013, 7, 578-581.	0.6	7

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55	Analysis of polydisperse ball-milled fluorite powders using a full pattern technique. Zeitschrift für Kristallographie, Supplement, 2006, 2006, 111-116.	0.5	7
56	An integrated geochemical and mineralogical investigation on soil-plant system of <i>Pinus halepensis</i> pioneer tree growing on heavy metal polluted mine tailing. Plant Biosystems, 2023, 157, 272-285.	1.6	6
57	Trace-element XAFS sensitivity: a stress test for a new XRF multi-detector. Journal of Synchrotron Radiation, 2021, 28, 1811-1819.	2.4	5
58	Biominalization Processes in Heavily Metal-Polluted Environments. Procedia Earth and Planetary Science, 2013, 7, 199-202.	0.6	4
59	Coagulating and flocculating ferrihydrite: application of zinc acetate salt. Environmental Science: Water Research and Technology, 2020, 6, 2057-2064.	2.4	4
60	Microbial Diversity of Bacteria Involved in Biominalization Processes in Mine-Impacted Freshwaters. Frontiers in Microbiology, 2021, 12, 778199.	3.5	4
61	Isotopic Insights into Biological Regulation of Zinc in Contaminated Systems. Procedia Earth and Planetary Science, 2015, 13, 60-63.	0.6	3
62	Synchrotron Radiation and Environmental Sciences. , 2015, , 661-676.		3
63	Historical mine pollution and environmental resilience: biominalization processes and biogeochemical barriers. E3S Web of Conferences, 2019, 98, 01010.	0.5	1
64	Chemical data on environmental matrices from an abandoned mining site. Data in Brief, 2019, 23, 103801.	1.0	1
65	Geochemical and mineralogical datasets on waters and stream precipitates from an abandoned mining site: Montevecchio-Ingurto district, Rio Irvi (SW Sardinia). Data in Brief, 2019, 24, 103951.	1.0	1
66	Data on rare earth elements in mining environments under non-acidic conditions. Data in Brief, 2019, 22, 836-850.	1.0	0
67	Zn Distribution and Chemical Speciation in Marine Biominalerals: An Example on Bivalve and Foraminifera Shells from Polluted Sites. Springer Proceedings in Physics, 2021, , 125-140.	0.2	0