Rachid Hakkou

List of Publications by Year
in descending order

96	2,443	186265	233421
papers	citations	28 h-index	45 g-index

98	98	98	1707
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Assessment of soil contamination around an abandoned mine in a semi-arid environment using geochemistry and geostatistics: Pre-work of geochemical process modeling with numerical models. Journal of Geochemical Exploration, 2013, 125, 117-129.	3.2	124
2	Recycling of phosphate mine tailings for the production of geopolymers. Journal of Cleaner Production, 2018, 185, 891-903.	9.3	115
3	Valorization of Phosphate Waste Rocks and Sludge from the Moroccan Phosphate Mines: Challenges and Perspectives. Procedia Engineering, 2016, 138, 110-118.	1.2	111
4	Coal mine wastes recycling for coal recovery and eco-friendly bricks production. Minerals Engineering, 2017, 107, 123-138.	4.3	104
5	Acid Mine Drainage at the Abandoned Kettara Mine (Morocco): 1. Environmental Characterization. Mine Water and the Environment, 2008, 27, 145-159.	2.0	103
6	Alkaline fused phosphate mine tailings for geopolymer mortar synthesis: Thermal stability, mechanical and microstructural properties. Journal of Non-Crystalline Solids, 2019, 511, 76-85.	3.1	94
7	Acid Mine Drainage at the Abandoned Kettara Mine (Morocco): 2. Mine Waste Geochemical Behavior. Mine Water and the Environment, 2008, 27, 160-170.	2.0	69
8	Phosphate sludge: Thermal transformation and use as lightweight aggregate material. Journal of Environmental Management, 2013, 130, 354-360.	7.8	68
9	Natural clay substitution by calamine processing wastes to manufacture fired bricks. Journal of Cleaner Production, 2016, 135, 847-858.	9.3	67
10	Valorization of clay by-product from moroccan phosphate mines for the production of fired bricks. Journal of Cleaner Production, 2019, 229, 169-179.	9.3	62
11	Laboratory Evaluation of the Use of Alkaline Phosphate Wastes for the Control of Acidic Mine Drainage. Mine Water and the Environment, 2009, 28, 206.	2.0	59
12	Reuse of base-metal tailings as aggregates for rendering mortars: Assessment of immobilization performances and environmental behavior. Construction and Building Materials, 2015, 96, 296-306.	7.2	59
13	Phosphogypsum recycling: New horizons for a more sustainable road material application. Journal of Building Engineering, 2020, 30, 101267.	3.4	59
14	Elaboration of geopolymers based on clays by-products from phosphate mines for construction applications. Journal of Cleaner Production, 2020, 261, 121317.	9.3	51
15	Mine wastes based geopolymers: A critical review. Cleaner Engineering and Technology, 2020, 1, 100014.	4.0	48
16	A comparative study on the practical use of low sulfide base-metal tailings as aggregates for rendering and masonry mortars. Journal of Cleaner Production, 2016, 112, 914-925.	9.3	47
17	Valorization of Phosphate Mine Waste Rocks as Materials for Road Construction. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlo	2.0	43
18	Assessment of Phosphate Limestone Wastes as a Component of a Store-and-Release Cover in a Semiarid Climate. Mine Water and the Environment, 2013, 32, 152-167.	2.0	41

#	Article	IF	Citations
19	Hydrogeochemical behavior around the abandoned Kettara mine site, Morocco. Journal of Geochemical Exploration, 2014, 144, 456-467.	3.2	38
20	GIS-based environmental database for assessing the mine pollution: A case study of an abandoned mine site in Morocco. Journal of Geochemical Exploration, 2014, 144, 468-477.	3.2	37
21	The Potential Use of Phosphatic Limestone Wastes in the Passive Treatment of AMD: A Laboratory Study. Mine Water and the Environment, 2013, 32, 266-277.	2.0	34
22	Review of the Main Factors Affecting the Flotation of Phosphate Ores. Minerals (Basel, Switzerland), 2020, 10, 1109.	2.0	34
23	Electrical and Seismic Tomography Used to Image the Structure of a Tailings Pond at the Abandoned Kettara Mine, Morocco. Mine Water and the Environment, 2012, 31, 53-61.	2.0	32
24	Leaching and geochemical behavior of fired bricks containing coal wastes. Journal of Environmental Management, 2018, 209, 227-235.	7.8	32
25	Mechanisms and Performances of Na1.5Fe0.5Ti1.5(PO4)3/C Composite as Electrode Material for Na-Ion Batteries. Journal of Physical Chemistry C, 2015, 119, 25220-25234.	3.1	31
26	On the LiCo2/3Ni1/6Mn1/6O2 positive electrode material. Electrochimica Acta, 2011, 56, 4081-4086.	5.2	29
27	In-depth characterization of bacterial and archaeal communities present in the abandoned Kettara pyrrhotite mine tailings (Morocco). Extremophiles, 2017, 21, 671-685.	2.3	29
28	Use of clays by-products from phosphate mines for the manufacture of sustainable lightweight aggregates. Journal of Cleaner Production, 2021, 280, 124361.	9.3	29
29	Use of flint from phosphate mine waste rocks as an alternative aggregates for concrete. Construction and Building Materials, 2021, 271, 121886.	7.2	29
30	Recycling Feasibility of Glass Wastes and Calamine Processing Tailings in Fired Bricks Making. Waste and Biomass Valorization, 2017, 8, 1479-1489.	3.4	28
31	Desulfurization of the Old Tailings at the Au-Ag-Cu Tiouit Mine (Anti-Atlas Morocco). Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Ove	2.0	28
32	Field experimental cells to assess hydrogeological behaviour of store-and-release covers made with phosphate mine waste. Canadian Geotechnical Journal, 2015, 52, 1255-1269.	2.8	27
33	Geochemical behavior and environmental risks related to the use of abandoned base-metal tailings as construction material in the upper-Moulouya district, Morocco. Environmental Science and Pollution Research, 2016, 23, 598-611.	5.3	26
34	Phosphate Mine Tailing Recycling in Membrane Filter Manufacturing: Microstructure and Filtration Suitability. Minerals (Basel, Switzerland), 2019, 9, 318.	2.0	25
35	Sustainable Reuse of Coal Mine Waste: Experimental and Economic Assessments for Embankments and Pavement Layer Applications in Morocco. Minerals (Basel, Switzerland), 2020, 10, 851.	2.0	25
36	Heptanoic acid adsorption on grafted palygorskite and its application as controlled-release corrosion inhibitor of steel. Materials Chemistry and Physics, 2014, 148, 335-342.	4.0	23

#	Article	IF	Citations
37	Towards Zero Solid Waste in the Sedimentary Phosphate Industry: Challenges and Opportunities. Minerals (Basel, Switzerland), 2021, 11, 1250.	2.0	21
38	Guidelines for a phytomanagement plan by the phytostabilization of mining wastes. Scientific African, 2020, 10, e00654.	1.5	20
39	Phosphate Carbonated Wastes Used as Drains for Acidic Mine Drainage Passive Treatment. Procedia Engineering, 2014, 83, 407-414.	1.2	19
40	Hydrogeological behaviour of an inclined store-and-release cover experimental cell made with phosphate mine wastes. Canadian Geotechnical Journal, 2017, 54, 102-116.	2.8	19
41	Thermo-physical characterization of a metakaolin-based geopolymer incorporating calcium carbonate: A case study. Materials Chemistry and Physics, 2020, 252, 123266.	4.0	19
42	Cement hydration and durability of low sulfide tailings-based renders: A case study in Moroccan constructions. Minerals Engineering, 2015, 76, 97-108.	4.3	18
43	Heated blends of phosphate waste: Microstructure characterization, effects of processing factors and use as a phosphorus source for alfalfa growth. Journal of Environmental Management, 2016, 177, 169-176.	7.8	17
44	Manufacturing of ceramic products using calamine hydrometallurgical processing wastes. Journal of Cleaner Production, 2016, 127, 500-510.	9.3	17
45	Pbâ€“Zn mine tailings reprocessing using centrifugal dense media separation. Minerals Engineering, 2019, 131, 28-37.	4.3	17
46	Elaboration of alkali activated materials using a non-calcined red clay from phosphate mines amended with fly ash or slag: A structural study. Materials Chemistry and Physics, 2020, 256, 123678.	4.0	17
47	Wild Plants for the Phytostabilization of Phosphate Mine Waste in Semi-Arid Environments: A Field Experiment. Minerals (Basel, Switzerland), 2021, 11, 42.	2.0	17
48	Feasibility of using phosphate wastes for enhancing high-temperature rheological characteristics of asphalt binder. Journal of Material Cycles and Waste Management, 2020, 22, 1407-1417.	3.0	16
49	Sustainable use of phosphate waste rocks: From characterization to potential applications. Materials Chemistry and Physics, 2021, 260, 124119.	4.0	16
50	Heated blends of clay and phosphate sludge: Microstructure and physical properties. Journal of Asian Ceramic Societies, 2016, 4, 11-18.	2.3	14
51	Tailings Weathering and Arsenic Mobility at the Abandoned Zgounder Silver Mine, Morocco. Mine Water and the Environment, 2016, 35, 508-524.	2.0	14
52	Etude gÃ©ophysique et hydrogÃ©ologique du site minier abandonnÃ© de Kettara (rÃ©gion de Marrakech,) Tj ETQq0 0 0 rgBT /Overlo	2.6	13
53	Geochemical Behavior of Mine Tailings and Waste Rock at the Abandoned Cuâ€“Moâ€“W Azegour Mine (Occidental High Atlas, Morocco). Mine Water and the Environment, 2013, 32, 121-132.	2.0	13
54	The design and study of new Li-ion full cells of LiCo2/3Ni1/6Mn1/6O2 positive electrode paired with MnSn2 and Li4Ti5O12 negative electrodes. Solid State Ionics, 2017, 300, 175-181.	2.7	13

#	Article	IF	Citations
55	Use of phosphate mine by-products as supplementary cementitious materials. Materials Today: Proceedings, 2021, 37, 3781-3788.	1.8	13
56	Assessment of the selective flotation of calcite, apatite and quartz using bio-based collectors: Flaxseed, nigella, and olive oils. Minerals Engineering, 2022, 182, 107589.	4.3	13
57	Phosphate sludge-based ceramics: Microstructure and effects of processing factors. Journal of Building Engineering, 2017, 11, 48-55.	3.4	12
58	Reuse of sewage sludge and waste glass in the production of lightweight aggregates. Materials Today: Proceedings, 2021, 37, 3866-3870.	1.8	12
59	Using Calcined Marls as Non-Common Supplementary Cementitious Materialsâ€"A Critical Review. Minerals (Basel, Switzerland), 2021, 11, 517.	2.0	11
60	Integrated valorization of silver mine tailings through silver recovery and ceramic materials production. Minerals Engineering, 2021, 170, 107060.	4.3	11
61	Impact of human activities on the physico-chemical quality of surface water and groundwater in the north of Marrakech (Morocco). Environmental Technology (United Kingdom), 2012, 33, 2077-2088.	2.2	10
62	Recovery of Residual Silver-Bearing Minerals from Low-Grade Tailings by Froth Flotation: The Case of Zgounder Mine, Morocco. Minerals (Basel, Switzerland), 2018, 8, 273.	2.0	10
63	Valorization of phosphate mine waste rocks as aggregates for concrete. Materials Today: Proceedings, 2021, 37, 3840-3846.	1.8	10
64	Environmental characterization of mine waste at the Pbâ€"Zn Sidi Kamber abandoned mine (NE Algeria). Rendiconti Lincei, 2019, 30, 427-441.	2.2	9
65	An experimental investigation on collapsible behavior of dry compacted phosphate mine waste rock in road embankment. Transportation Geotechnics, 2021, 26, 100439.	4.5	9
66	Geopolymer Materials Based on Natural Pozzolans from the Moroccan Middle Atlas. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.0	9
67	Recycling of marls from phosphate by-products to produce alkali-activated geopolymers. Materials Today: Proceedings, 2022, 51, 1931-1936.	1.8	8
68	Hydrogeological Behavior of a Store-and-Release Cover: A Comparison Between Field Column Tests and Numerical Predictions With or Without Hysteresis Effects. Mine Water and the Environment, 2016, 35, 221-234.	2.0	7
69	Effects of surface heterogeneities on wetting and contact line dynamics as observed with the captive bubble technique. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 615, 126041.	4.7	7
70	Layered aluminum tri-polyphosphate as intercalation host for 6-aminohexanoic acid â€" Synthesis, characterization and application as corrosion protection inhibitor for low carbon steel. Corrosion Science, 2021, 181, 109239.	6.6	7
71	Description of Microbial Communities of Phosphate Mine Wastes in Morocco, a Semi-Arid Climate, Using High-Throughput Sequencing and Functional Prediction. Frontiers in Microbiology, 2021, 12, 666936.	3.5	7
72	Acid and Oxidizing Leaching of Copper Refinery Anodic Slimes in Hexafluorosilicic Acid and Nitric Acid Media. Separation Science and Technology, 1996, 31, 569-577.	2.5	6

#	Article	IF	Citations
73	Role of iron in Na 1.5Fe 0.5Ti 1.5(PO 4) 3/C as electrode material for Na-ion batteries studied by operando MÃ¶ssbauer spectroscopy. Hyperfine Interactions, 2016, 237, 1.	0.5	6
74	Occurrence of Sesquioxide in a Mid-Low Grade Collophane-Sedimentary Apatite Ore from Guizhou, China. Minerals (Basel, Switzerland), 2020, 10, 1038.	2.0	6
75	Manufacturing of high-performance ceramics using clays by-product from phosphate mines. Materials Today: Proceedings, 2021, 37, 3994-4000.	1.8	6
76	Chemical Composition, Antioxidant, and Antibacterial Activities of Essential Oil of Atriplex semibaccata R.Br. Aerial Parts: First Assessment against Multidrug-Resistant Bacteria. Agronomy, 2021, 11, 362.	3.0	6
77	Formulation and characterization of hydroxyapatiteâ€based composite with enhanced compressive strength and controlled antibiotic release. Journal of Biomedical Materials Research - Part A, 2021, 109, 1942-1954.	4.0	6
78	Assessment of the Transfer of Trace Metals to Spontaneous Plants on Abandoned Pyrrhotite Mine: Potential Application for Phytostabilization of Phosphate Wastes. Plants, 2022, 11, 179.	3.5	6
79	The clayey quarry sludge from a waste to a valuable raw material for red ceramics. Journal of Material Cycles and Waste Management, 2022, 24, 1047-1058.	3.0	6
80	Silver Recycling from Photographic Bleach-Fix Baths by Ionic Flotation and Thermal Decomposition and Reuse of the Baths. Separation Science and Technology, 1995, 30, 2211-2221.	2.5	5
81	Lead Mobilization and Speciation in Mining Waste: Experiments and Modeling. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.0	5
82	Towards an integrated approach for zero coal mine waste storage: solutions based on materials circularity and sustainable resource governance. Mineral Processing and Extractive Metallurgy Review, 2023, 44, 375-388.	5.0	5
83	Fusion of phosphate by-products and glass waste for preparation of alkali-activated binders. Composites Part B: Engineering, 2022, 242, 110044.	12.0	5
84	Clayey Quarry Sludges: Thermal Transformation, Microstructure and Technological Properties. Waste and Biomass Valorization, 2018, 9, 1805-1815.	3.4	4
85	Phytostabilization of Phosphate Mine Wastes Used as a Store-and-Release Cover to Control Acid Mine Drainage in a Semiarid Climate. Plants, 2021, 10, 900.	3.5	4
86	Assessment of Trace Elements in Soils and Mine Water Surrounding a Closed Manganese Mine (Anti) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.0	3
87	Determination of the contact angles and pseudo-line tensions on heterogeneous surfaces with different size of bubbles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 611, 125772.	4.7	3
88	Effect of 6-Aminohexanoic Acid Released from Its Aluminum Tri-Polyphosphate Intercalate (ATP-6-AHA) on the Corrosion Protection Mechanism of Steel in 3.5% Sodium Chloride Solution. Corrosion and Materials Degradation, 2021, 2, 666-677.	2.4	3
89	Evaluation of the Long-Term Contaminated Neutral Drainage CND Generation Potential of Waste Rock Piles at the Abandoned Zn-Pb Erdouz Mine (Occidental High Atlas, Morocco). Mining, Metallurgy and Exploration, 2022, 39, 643-654.	0.8	3
90	Column Kinetic Tests Assessing Geochemical Behavior of Mine Wastes in the Jerada Coal District (Morocco). Mine Water and the Environment, 2016, 35, 497-507.	2.0	2

#	Article	IF	Citations
91	Remediation scenario of the abandoned Kettara mine site (Morocco): acid mine drainage (AMD) transport modeling. SN Applied Sciences, 2021, 3, 1.	2.9	2
92	Floristic and ecological monitoring on a store-and-release cover in arid and semi-arid environment of Kettara mine, Morocco. Acta Ecologica Sinica, 2021, 41, 432-441.	1.9	2
93	Introduction of an innovative corrosion-protective alkyd steel coating based on a novel layered aluminum tripolyphosphate loaded with 6-amino hexanoic acid (ATP-6-AHA). Progress in Organic Coatings, 2021, 161, 106500.	3.9	2
94	Recycling Way of Sludge in Handcraft Pottery (Marrakesh, Morocco). Environmental Science and Engineering, 2021, , 2265-2269.	0.2	1
95	Control of acid mine drainage from an abandoned mine in Morocco by using cement kiln dust and fly ash as amendments. Journal of Materials and Environmental Science, 2017, 8, 4457-4466.	0.5	1
96	Thermal resistance of alkaline fused phosphate sludge-based geopolymer mortar. , 0, , .		0