Qiusong Chen

List of Publications by Year
in descending order

58 papers	2,857 citations	159358 30 h-index	174990 52 g-index
58 all docs	58 docs citations	58 times ranked	1202 citing authors

#	Article	IF	Citations
1	Recycling phosphogypsum and construction demolition waste for cemented paste backfill and its environmental impact. Journal of Cleaner Production, 2018, 186, 418-429.	4.6	282
2	Neural network and particle swarm optimization for predicting the unconfined compressive strength of cemented paste backfill. Construction and Building Materials, 2018, 159, 473-478.	3.2	205
3	A strength prediction model using artificial intelligence for recycling waste tailings as cemented paste backfill. Journal of Cleaner Production, 2018, 183, 566-578.	4.6	173
4	A new procedure for recycling waste tailings as cemented paste backfill to underground stopes and open pits. Journal of Cleaner Production, 2018, 188, 601-612.	4.6	134
5	Utilization of phosphogypsum and phosphate tailings for cemented paste backfill. Journal of Environmental Management, 2017, 201, 19-27.	3.8	128
6	An intelligent modelling framework for mechanical properties of cemented paste backfill. Minerals Engineering, 2018, 123, 16-27.	1.8	102
7	Experimental investigation on the strength characteristics of cement paste backfill in a similar stope model and its mechanism. Construction and Building Materials, 2017, 154, 34-43.	3.2	99
8	Compressive behavior and microstructural properties of tailings polypropylene fibre-reinforced cemented paste backfill. Construction and Building Materials, 2018, 190, 211-221.	3.2	89
9	Characterization and evaluation of the pozzolanic activity of granulated copper slag modified with CaO. Journal of Cleaner Production, 2019, 232, 1112-1120.	4.6	87
10	Lithium slag and fly ash-based binder for cemented fine tailings backfill. Journal of Environmental Management, 2019, 248, 109282.	3.8	86
11	Towards Intelligent Mining for Backfill: A genetic programming-based method for strength forecasting of cemented paste backfill. Minerals Engineering, 2019, 133, 69-79.	1.8	84
12	Pressure drop in pipe flow of cemented paste backfill: Experimental and modeling study. Powder Technology, 2018, 333, 9-18.	2.1	81
13	Effect of overflow tailings properties on cemented paste backfill. Journal of Environmental Management, 2019, 235, 133-144.	3.8	78
14	Constitutive modelling of cemented paste backfill: A data-mining approach. Construction and Building Materials, 2019, 197, 262-270.	3.2	69
15	Utilization of modified copper slag activated by Na2SO4 and CaO for unclassified lead/zinc mine tailings based cemented paste backfill. Journal of Environmental Management, 2021, 290, 112608.	3.8	67
16	The rheological, mechanical and heavy metal leaching properties of cemented paste backfill under the influence of anionic polyacrylamide. Chemosphere, 2022, 286, 131630.	4.2	64
17	Mechanical Activation of Granulated Copper Slag and Its Influence on Hydration Heat and Compressive Strength of Blended Cement. Materials, 2019, 12, 772.	1.3	62
18	Integrated and intelligent design framework for cemented paste backfill: A combination of robust machine learning modelling and multi-objective optimization. Minerals Engineering, 2020, 155, 106422.	1.8	54

#	ARTICLE	IF	CITATIONS
19	Data-driven modelling of the flocculation process on mineral processing tailings treatment. Journal of Cleaner Production, 2018, 196, 505-516.	4.6	52
20	A hydraulic gradient model of paste-like crude tailings backfill slurry transported by a pipeline system. Environmental Earth Sciences, 2016, 75, 1.	1.3	51
21	Pressure drops of fresh cemented paste backfills through coupled test loop experiments and machine learning techniques. Powder Technology, 2020, 361, 748-758.	2.1	47
22	Flocculation-dewatering prediction of fine mineral tailings using a hybrid machine learning approach. Chemosphere, 2020, 244, 125450.	4.2	46
23	Utilisation of Water-Washing Pre-Treated Phosphogypsum for Cemented Paste Backfill. Minerals (Basel, Switzerland), 2019, 9, 175.	0.8	45
24	Modification of glass structure via CaO addition in granulated copper slag to enhance its pozzolanic activity. Construction and Building Materials, 2020, 240, 117970.	3.2	45
25	Application of first-principles theory in ferrite phases of cemented paste backfill. Minerals Engineering, 2019, 133, 47-51.	1.8	44
26	Understanding Cement Hydration of Cemented Paste Backfill: DFT Study of Water Adsorption on Tricalcium Silicate (111) Surface. Minerals (Basel, Switzerland), 2019, 9, 202.	0.8	43
27	Mechanical and environmental characteristics of cemented paste backfill containing lithium slag-blended binder. Construction and Building Materials, 2021, 271, 121567.	3.2	43
28	Hydration and strength development in blended cement with ultrafine granulated copper slag. PLoS ONE, 2019, 14, e0215677.	1.1	41
29	Mechanical properties of cemented tailings backfill containing alkalized rice straw of various lengths. Journal of Environmental Management, 2020, 276, 111124.	3.8	37
30	Effects of temperatures and pH values on rheological properties of cemented paste backfill. Journal of Central South University, 2021, 28, 1707-1723.	1.2	36
31	Initial hydration process of calcium silicates in Portland cement: A comprehensive comparison from molecular dynamics simulations. Cement and Concrete Research, 2021, 149, 106576.	4.6	32
32	In-situ stabilization/solidification of lead/zinc mine tailings by cemented paste backfill modified with low-carbon bentonite alternative. Journal of Materials Research and Technology, 2022, 17, 1200-1210.	2.6	28
33	Rapid identification of reactivity for the efficient recycling of coal fly ash: Hybrid machine learning modeling and interpretation. Journal of Cleaner Production, 2022, 343, 130958.	4.6	28
34	Recycling Leadâ€"Zinc Tailings for Cemented Paste Backfill and Stabilisation of Excessive Metal. Minerals (Basel, Switzerland), 2019, 9, 710.	0.8	24
35	Cemented Backfilling Technology of Paste-Like Based on Aeolian Sand and Tailings. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlo	0.8	23
36	Hydration reactivity difference between dicalcium silicate and tricalcium silicate revealed from structural and Bader charge analysis. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 335-344.	2.4	23

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37	CFD Simulation of Pipeline Transport Properties of Mine Tailings Three-Phase Foam Slurry Backfill. Minerals (Basel, Switzerland), 2017, 7, 149.	0.8	21
38	Hydration development of blended cement paste with granulated copper slag modified with CaO and Al2O3. Journal of Materials Research and Technology, 2022, 18, 909-920.	2.6	21
39	Feasibility of Recycling Ultrafine Leaching Residue by Backfill: Experimental and CFD Approaches. Minerals (Basel, Switzerland), 2017, 7, 54.	0.8	20
40	Influence of coarse tailings on flocculation settlement. International Journal of Minerals, Metallurgy and Materials, 2020, 27, 1065-1074.	2.4	18
41	Retention of phosphorus and fluorine in phosphogypsum for cemented paste backfill: Experimental and numerical simulation studies. Environmental Research, 2022, 214, 113775.	3.7	15
42	A Novel Combination of Gradient Boosted Tree and Optimized ANN Models for Forecasting Ground Vibration Due to Quarry Blasting. Natural Resources Research, 2021, 30, 4657-4671.	2.2	13
43	Strength Investigation of the Silt-Based Cemented Paste Backfill Using Lab Experiments and Deep Neural Network. Advances in Materials Science and Engineering, 2020, 2020, 1-12.	1.0	12
44	Superiority of Filtered Tailings Storage Facility to Conventional Tailings Impoundment in Southern Rainy Regions of China. Sustainability, 2016, 8, 1130.	1.6	10
45	Stability Evaluation of Layered Backfill Considering Filling Interval, Backfill Strength and Creep Behavior. Minerals (Basel, Switzerland), 2022, 12, 271.	0.8	10
46	Resistance Loss in Cemented Paste Backfill Pipelines: Effect of Inlet Velocity, Particle Mass Concentration, and Particle Size. Materials, 2022, 15, 3339.	1.3	10
47	Backfilling behavior of a mixed aggregate based on construction waste and ultrafine tailings. PLoS ONE, 2017, 12, e0179872.	1.1	9
48	Chemical signatures to identify the origin of solid ashes for efficient recycling using machine learning. Journal of Cleaner Production, 2022, 368, 133020.	4.6	9
49	Safety Analysis of Synergetic Operation of Backfilling the Open Pit Using Tailings and Excavating the Ore Deposit Underground. Minerals (Basel, Switzerland), 2021, 11, 818.	0.8	8
50	Coverage-dependent adsorption of H2O on dicalcium silicate (1 0 0) surface: A DFT study. Construction and Building Materials, 2022, 321, 126403.	3.2	8
51	Evolutionary Random Forest Algorithms for Predicting the Maximum Failure Depth of Open Stope Hangingwalls. IEEE Access, 2018, 6, 72808-72813.	2.6	7
52	Role of Mg Impurity in the Water Adsorption over Low-Index Surfaces of Calcium Silicates: A DFT-D Study. Minerals (Basel, Switzerland), 2020, 10, 665.	0.8	7
53	In Situ Remediation of Phosphogypsum with Water-Washing Pre-Treatment Using Cemented Paste Backfill: Rheology Behavior and Damage Evolution. Materials, 2021, 14, 6993.	1.3	6
54	Hydration and Mechanical Properties of Blended Cement with Copper Slag Pretreated by Thermochemical Modification. Materials, 2022, 15, 3477.	1.3	6

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55	Comparison and Determination of Optimal Machine Learning Model for Predicting Generation of Coal Fly Ash. Crystals, 2022, 12, 556.	1.0	5
56	Analytical Solution for Stress Distribution around Arbitrary Stopes Using Evolutionary Complex Variable Methods. International Journal of Geomechanics, 2019, 19, .	1.3	4
57	Mechanical Properties and Microstructure Evolution of Cemented Tailings Backfill Under Seepage Pressure. Frontiers in Materials, 2022, 8, .	1.2	4
58	Effect of single water adsorption on the bond order of calcium silicates and its implication for hydration variation. Journal of the American Ceramic Society, 2022, 105, 3510-3520.	1.9	2