

# Ki-Il Song

## List of Publications by Year in descending order

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Version: 2024-02-01

82  
papers

3,354  
citations

147566

31  
h-index

149479

56  
g-index

82  
all docs

82  
docs citations

82  
times ranked

1672  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cemented paste backfill for mineral tailings management: Review and future perspectives. <i>Minerals Engineering</i> , 2019, 144, 106025.	1.8	360
2	Recycling phosphogypsum and construction demolition waste for cemented paste backfill and its environmental impact. <i>Journal of Cleaner Production</i> , 2018, 186, 418-429.	4.6	282
3	Neural network and particle swarm optimization for predicting the unconfined compressive strength of cemented paste backfill. <i>Construction and Building Materials</i> , 2018, 159, 473-478.	3.2	205
4	A strength prediction model using artificial intelligence for recycling waste tailings as cemented paste backfill. <i>Journal of Cleaner Production</i> , 2018, 183, 566-578.	4.6	173
5	Experimental investigation on the relationship between pore characteristics and unconfined compressive strength of cemented paste backfill. <i>Construction and Building Materials</i> , 2018, 179, 254-264.	3.2	166
6	A new procedure for recycling waste tailings as cemented paste backfill to underground stopes and open pits. <i>Journal of Cleaner Production</i> , 2018, 188, 601-612.	4.6	134
7	An intelligent modelling framework for mechanical properties of cemented paste backfill. <i>Minerals Engineering</i> , 2018, 123, 16-27.	1.8	102
8	An experimental study on the early-age hydration kinetics of cemented paste backfill. <i>Construction and Building Materials</i> , 2019, 212, 283-294.	3.2	101
9	Numerical study on the pipe flow characteristics of the cemented paste backfill slurry considering hydration effects. <i>Powder Technology</i> , 2019, 343, 454-464.	2.1	89
10	Lithium slag and fly ash-based binder for cemented fine tailings backfill. <i>Journal of Environmental Management</i> , 2019, 248, 109282.	3.8	86
11	Towards Intelligent Mining for Backfill: A genetic programming-based method for strength forecasting of cemented paste backfill. <i>Minerals Engineering</i> , 2019, 133, 69-79.	1.8	84
12	Pressure drop in pipe flow of cemented paste backfill: Experimental and modeling study. <i>Powder Technology</i> , 2018, 333, 9-18.	2.1	81
13	A microstructural hydration model for cemented paste backfill considering internal sulfate attacks. <i>Construction and Building Materials</i> , 2019, 211, 99-108.	3.2	75
14	Xanthan Gum Biopolymer as Soil-Stabilization Binder for Road Construction Using Local Soil in Sri Lanka. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	69
15	Constitutive modelling of cemented paste backfill: A data-mining approach. <i>Construction and Building Materials</i> , 2019, 197, 262-270.	3.2	69
16	Pore and strength characteristics of cemented paste backfill using sulphide tailings: Effect of sulphur content. <i>Construction and Building Materials</i> , 2020, 237, 117452.	3.2	64
17	Effects of spatially variable weathered rock properties on tunnel behavior. <i>Probabilistic Engineering Mechanics</i> , 2011, 26, 413-426.	1.3	58
18	Co-disposal of magnesium slag and high-calcium fly ash as cementitious materials in backfill. <i>Journal of Cleaner Production</i> , 2021, 279, 123684.	4.6	56

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19	Experimental investigation of mechanical, hydration, microstructure and electrical properties of cemented paste backfill. <i>Construction and Building Materials</i> , 2020, 263, 120137.	3.2	54
20	Experimental study on thermal and mechanical properties of cemented paste backfill with phase change material. <i>Journal of Materials Research and Technology</i> , 2020, 9, 2164-2175.	2.6	53
21	Data-driven modelling of the flocculation process on mineral processing tailings treatment. <i>Journal of Cleaner Production</i> , 2018, 196, 505-516.	4.6	52
22	Experimental investigation of solid-liquid two-phase flow in cemented rock-tailings backfill using Electrical Resistance Tomography. <i>Construction and Building Materials</i> , 2018, 175, 267-276.	3.2	48
23	Effects of curing time and ice-to-water ratio on performance of cemented paste backfill containing ice slag. <i>Construction and Building Materials</i> , 2019, 228, 116639.	3.2	45
24	Application of first-principles theory in ferrite phases of cemented paste backfill. <i>Minerals Engineering</i> , 2019, 133, 47-51.	1.8	44
25	Understanding Cement Hydration of Cemented Paste Backfill: DFT Study of Water Adsorption on Tricalcium Silicate (111) Surface. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 202.	0.8	43
26	Mechanical and environmental characteristics of cemented paste backfill containing lithium slag-blended binder. <i>Construction and Building Materials</i> , 2021, 271, 121567.	3.2	43
27	Long-Wavelength Elastic Wave Propagation Across Naturally Fractured Rock Masses. <i>Rock Mechanics and Rock Engineering</i> , 2014, 47, 561-573.	2.6	42
28	Observation of the Degradation Characteristics and Scale of Unevenness on Three-dimensional Artificial Rock Joint Surfaces Subjected to Shear. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 3-17.	2.6	38
29	Study on hydration reaction and structure evolution of cemented paste backfill in early-age based on resistivity and hydration heat. <i>Construction and Building Materials</i> , 2021, 272, 121827.	3.2	37
30	Bonding state evaluation of tunnel shotcrete applied onto hard rocks using the impact-echo method. <i>NDT and E International</i> , 2009, 42, 487-500.	1.7	35
31	DFT-D study of single water adsorption on low-index surfaces of calcium silicate phases in cement. <i>Applied Surface Science</i> , 2020, 518, 146255.	3.1	34
32	Destabilization of Marine Gas Hydrate-Bearing Sediments Induced by a Hot Wellbore: A Numerical Approach. <i>Energy &amp; Fuels</i> , 2010, 24, 5493-5507.	2.5	33
33	Experimental and numerical study on rheological properties of ice-containing cement paste backfill slurry. <i>Powder Technology</i> , 2020, 370, 206-214.	2.1	33
34	Effect of curing time on the mesoscopic parameters of cemented paste backfill simulated using the particle flow code technique. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 590-602.	2.4	26
35	Rheological Properties of Cemented Tailing Backfill and the Construction of a Prediction Model. <i>Materials</i> , 2015, 8, 2076-2092.	1.3	25
36	A light barricade for tailings recycling as cemented paste backfill. <i>Journal of Cleaner Production</i> , 2020, 247, 119388.	4.6	25

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37	Precutting of tunnel perimeter for reducing blasting-induced vibration and damaged zone "numerical analysis. KSCE Journal of Civil Engineering, 2014, 18, 1165-1175.	0.9	23
38	Effect of the Cement"Tailoring Ratio on the Hydration Products and Microstructure Characteristics of Cemented Paste Backfill. Arabian Journal for Science and Engineering, 2019, 44, 6547-6556.	1.7	23
39	Structural, electronic, and mechanical properties of calcium aluminate cements: Insight from first-principles theory. Construction and Building Materials, 2020, 264, 120259.	3.2	23
40	Prediction of unconfined compressive strength of pulverized fuel ash"cement" sand mixture. Materials and Structures/Materiaux Et Constructions, 2015, 48, 1061-1073.	1.3	22
41	Numerical simulation on heat storage performance of backfill body based on tube-in-tube heat exchanger. Construction and Building Materials, 2020, 265, 120340.	3.2	22
42	Impact of high-temperature-water cooling damage on the mechanical properties of concrete. Construction and Building Materials, 2019, 215, 233-243.	3.2	20
43	Long-Term Assessment of an Innovative Mangrove Rehabilitation Project: Case Study on Carey Island, Malaysia. Scientific World Journal, The, 2014, 2014, 1-12.	0.8	19
44	Real-Time Location Tracking of Multiple Construction Laborers. Sensors, 2016, 16, 1869.	2.1	16
45	Evaluation of Morphodynamic Changes in the Vicinity of Low-Crested Breakwater on Cohesive Shore of Carey Island, Malaysia. Coastal Engineering Journal, 2015, 57, 1550023-1-1550023-27.	0.7	15
46	Auto-detection of acoustic emission signals from cracking of concrete structures using convolutional neural networks: Upscaling from specimen. Expert Systems With Applications, 2021, 186, 115863.	4.4	15
47	Utilization of Geotextile Tube for Sandy and Muddy Coastal Management: A Review. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	14
48	Stabilization of Gob-Side Entry with an Artificial Side for Sustaining Mining Work. Sustainability, 2016, 8, 627.	1.6	14
49	Magnesium chloride and sulfate attacks on gravel-sand-cement-inorganic binder mixture. Construction and Building Materials, 2018, 187, 565-571.	3.2	14
50	Quantitative investigation on micro-parameters of cemented paste backfill and its sensitivity analysis. Journal of Central South University, 2020, 27, 267-276.	1.2	14
51	The Concept, Technical System and Heat Transfer Analysis on Phase-Change Heat Storage Backfill for Exploitation of Geothermal Energy. Energies, 2020, 13, 4755.	1.6	11
52	Estimation of Wind-Driven Coastal Waves Near a Mangrove Forest Using Adaptive Neuro-Fuzzy Inference System. Water Resources Management, 2016, 30, 2391-2404.	1.9	10
53	Evolution of Joint Roughness Degradation from Cyclic Loading and Its Effect on the Elastic Wave Velocity. Rock Mechanics and Rock Engineering, 2016, 49, 3363-3370.	2.6	10
54	Prediction of ultrasonic pulse velocity for enhanced peat bricks using adaptive neuro-fuzzy methodology. Ultrasonics, 2015, 61, 103-113.	2.1	9

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55	Extraction of Pressurized Gas in Low Air-Conductivity Coal Seam Using Drainage Roadway. Sustainability, 2017, 9, 223.	1.6	8
56	An Experimental Study on the Microstructures of Cemented Paste Backfill during Its Developing Process. Advances in Civil Engineering, 2018, 2018, 1-10.	0.4	8
57	Use of Acoustic Emission for the Detection of Brittle Rock Failure under Various Loading Rates. Advances in Civil Engineering, 2018, 2018, 1-9.	0.4	8
58	Stress Wave Propagation in Viscoelastic-Plastic Rock-Like Materials. Materials, 2016, 9, 377.	1.3	7
59	Prediction of Fragmentation Zone Induced by Blasting in Rock. Rock Mechanics and Rock Engineering, 2017, 50, 2177-2192.	2.6	7
60	The Effect of Confining Pressure and Water Content on Energy Evolution Characteristics of Sandstone under Stepwise Loading and Unloading. Advances in Civil Engineering, 2018, 2018, 1-8.	0.4	7
61	Back analysis of an operating subsea tunnel considering the degradation of ground and concrete lining. Marine Georesources and Geotechnology, 2019, 37, 517-523.	1.2	7
62	Hydration and Mechanical Properties of Blended Cement with Copper Slag Pretreated by Thermochemical Modification. Materials, 2022, 15, 3477.	1.3	6
63	Use of a Pre-Drilled Hole for Implementing Thermal Needle Probe Method for Soils and Rocks. Energies, 2016, 9, 846.	1.6	5
64	Parameter Sensitivity Study for Typical Expander-Based Transcritical CO2 Refrigeration Cycles. Energies, 2018, 11, 1279.	1.6	5
65	Study on thermal performance of casing-type mine heat recovery device with phase change materials filling in annular space. International Journal of Energy Research, 2021, 45, 17577-17596.	2.2	5
66	Electrical resistivity and elastic wave velocity of sand-cement-inorganic binder mixture. Environmental Geotechnics, 2020, 7, 318-329.	1.3	3
67	Real-Time Prediction of Operating Parameter of TBM during Tunneling. Applied Sciences (Switzerland), 2021, 11, 2967.	1.3	3
68	Numerical simulation on thermal accumulation of cemented tailings backfill. Journal of Central South University, 2021, 28, 2221-2237.	1.2	3
69	EVALUATION OF THE TIME-DEPENDENT CHARACTERISTICS OF GROUTED SAND USING AN ELASTIC WAVE. Modern Physics Letters B, 2008, 22, 899-904.	1.0	2
70	Performance-Based Evaluation of a Double-Deck Tunnel and Design Optimization. Sustainability, 2019, 11, 201.	1.6	2
71	Tunnel Back Analysis Based on Differential Evolution Using Stress and Displacement. Advances in Civil Engineering, 2020, 2020, 1-10.	0.4	2
72	Improvement of Bearing Capacity of Shallow Foundation with the Wall Attached to the Base-Slab: Model Test. KSCE Journal of Civil Engineering, 2021, 25, 1276-1282.	0.9	2

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73	Stochastic numerical study on the propagation characteristics of P-Wave in heterogeneous ground. Journal of Korean Tunnelling and Underground Space Association, 2013, 15, 13-24.	0.0	2
74	Comparison of earth pressure around pipe-roof between UPRS and front-jacking method. Journal of Korean Tunnelling and Underground Space Association, 2015, 17, 513-522.	0.0	2
75	Effect of micro soil properties on the macro behavior of a tunnel. Japanese Geotechnical Society Special Publication, 2016, 2, 625-629.	0.2	1
76	Development of Equivalent Stress- and Strain- Dependent Model for Jointed Rock Mass and Its Application to Underground Structure. KSCE Journal of Civil Engineering, 2021, 25, 4887-4896.	0.9	1
77	Optimal design for concrete pavement situated above box culvert: experimental and numerical study. International Journal of Pavement Engineering, 2017, 18, 433-442.	2.2	0
78	Impact of Interbedded Structure of Sand and Clay Layers on Geomechanical Responses of Hydrate-Bearing Sediments During Depressurization. , 2019, , .		0
79	Analysis on the characteristics of the earth pressure distribution induced by the integrated steel pipe-roof construction. Journal of Korean Tunnelling and Underground Space Association, 2013, 15, 455.	0.0	0
80	Estimation of subsea tunnel stability considering ground and lining stiffness degradation measurements. Journal of Korean Tunnelling and Underground Space Association, 2016, 18, 389-399.	0.0	0
81	The development of a back analysis program for subsea tunnel stability under operation: longitudinal direction. Journal of Korean Tunnelling and Underground Space Association, 2016, 18, 545-556.	0.0	0
82	Development of beam-spring model to analyse the stability of double-deck tunnel. Journal of Korean Tunnelling and Underground Space Association, 2017, 19, 301-317.	0.0	0