Ahmadreza Hedayat

List of Publications by Year
in descending order

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62 papers	1,596 citations	279798 23 h-index	315739 38 g-index
71 all docs	71 docs citations	71 times ranked	911 citing authors

#	Article	IF	Citations
1	Evolution of tensile and shear cracking in crystalline rocks under compression. Theoretical and Applied Fracture Mechanics, 2022, 118, 103254.	4.7	22
2	Microstructure and Dissolution of Aluminosilicate Geopolymers Made from Mine Tailings Source Material. , 2022, , .		1
3	Experimental studies on the durability and leaching properties of alkali-activated tailings subjected to different environmental conditions. Cement and Concrete Composites, 2022, 130, 104531.	10.7	21
4	Effect of the Class C Fly Ash on Low-Reactive Gold Mine Tailing Geopolymers. Polymers, 2022, 14, 2809.	4.5	2
5	Fracture properties of tailings-based geopolymer incorporated with class F fly ash under mode I loading conditions. Engineering Fracture Mechanics, 2022, 271, 108646.	4.3	9
6	New Physical Model to Study Tunnels in Squeezing Clay-Rich Rocks. Geotechnical Testing Journal, 2021, 44, 1055-1078.	1.0	2
7	Time-Dependent Behavior of the Tunnels in Squeezing Ground: An Experimental Study. Rock Mechanics and Rock Engineering, 2021, 54, 1755-1777.	5.4	17
8	Specimen size effects on the mechanical behaviors and failure patterns of the mine tailings-based geopolymer under uniaxial compression. Construction and Building Materials, 2021, 281, 122525.	7.2	25
9	Damage evaluation and deformation behavior of mine tailing-based Geopolymer under uniaxial cyclic compression. Ceramics International, 2021, 47, 10773-10785.	4.8	33
10	Detection of Seismic Precursors in Converted Ultrasonic Waves to Shear Failure of Natural Sandstone Rock Joints. Rock Mechanics and Rock Engineering, 2021, 54, 3611-3627.	5.4	3
11	Face stability of slurry-driven shield with permeable filter cake. Tunnelling and Underground Space Technology, 2021, 111, 103841.	6.2	20
12	Damage monitoring in rock specimens with pre-existing flaws by non-linear ultrasonic waves and digital image correlation. International Journal of Rock Mechanics and Minings Sciences, 2021, 142, 104758.	5.8	22
13	Estimation of the mode I fracture toughness and evaluations on the strain behaviors of the compacted mine tailings from full-field displacement fields via digital image correlation. Theoretical and Applied Fracture Mechanics, 2021, 114, 103014.	4.7	28
14	Fracture properties of the gold mine tailings-based geopolymer under mode I loading condition through semi-circular bend tests with digital image correlation. Theoretical and Applied Fracture Mechanics, 2021, 116, 103116.	4.7	28
15	Crack evolution in the Brazilian disks of the mine tailings-based geopolymers measured from digital image correlations: An experimental investigation considering the effects of class F fly ash additions. Ceramics International, 2021, 47, 32382-32396.	4.8	22
16	Mechanical and fracture behaviors of compacted gold mine tailings by semi-circular bending tests and digital image correlation. Construction and Building Materials, 2021, 306, 124841.	7.2	16
17	On the incorporation of class F fly-ash to enhance the geopolymerization effects and splitting tensile strength of the gold mine tailings-based geopolymer. Construction and Building Materials, 2021, 308, 125112.	7.2	35
18	The influence law of concrete aggregate particle size on acoustic emission wave attenuation. Scientific Reports, 2021, 11, 22685.	3.3	8

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19	The use of new intelligent techniques in designing retaining walls. Engineering With Computers, 2020, 36, 283-294.	6.1	61
20	Evaluation of an Ultrasonic Method for Damage Characterization of Brittle Rocks. Rock Mechanics and Rock Engineering, 2020, 53, 2077-2094.	5.4	28
21	Ultrasonic imaging of microscale processes in quartz gouge during compression and shearing. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 1137-1151.	8.1	0
22	Illumination of Damage in Intact Rocks by Ultrasonic Transmissionâ€Reflection and Digital Image Correlation. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019526.	3.4	13
23	Ultrasonic Investigation of Shear Slip Nucleation in Granular Materials under Variable Normal Stresses. , 2020, , .		0
24	Effect of contact surface area on frictional behaviour of dry and saturated rock joints. Journal of Structural Geology, 2020, 135, 104044.	2.3	23
25	Evaluation of Crack Initiation and Damage in Intact Barre Granite Rocks Using Acoustic Emission. , 2020, , .		3
26	Experimental investigation of multi-scale strain-field heterogeneity in rocks. International Journal of Rock Mechanics and Minings Sciences, 2020, 127, 104212.	5.8	41
27	Physical Modeling of Lined Tunnel in Squeezing Ground Conditions. , 2020, , .		1
28	Practical Risk Assessment of Ground Vibrations Resulting from Blasting, Using Gene Expression Programming and Monte Carlo Simulation Techniques. Applied Sciences (Switzerland), 2020, 10, 472.	2.5	50
29	Evaluation of the structural integrity of tunnel liners with two component backfill grout using ground-penetrating radar. , 2020, , .		0
30	Applying various hybrid intelligent systems to evaluate and predict slope stability under static and dynamic conditions. Soft Computing, 2019, 23, 5913-5929.	3.6	151
31	A new hybrid method for predicting ripping production in different weathering zones through in situ tests. Measurement: Journal of the International Measurement Confederation, 2019, 147, 106826.	5.0	42
32	Analysis of the effects of blast-induced damage zone with attenuating disturbance factor on the ground support interaction. Geomechanics and Geoengineering, 2019, , 1-11.	1.8	3
33	Coupling Taguchi and Response Surface Methodologies for the Efficient Characterization of Jointed Rocksâ€™ Mechanical Properties. Rock Mechanics and Rock Engineering, 2019, 52, 4807-4819.	5.4	12
34	Effect of Gravity of the Plastic Zones on the Behavior of Supports in Very Deep Tunnels Excavated in Rock Masses. International Journal of Geomechanics, 2019, 19, .	2.7	8
35	Assessment of the Safety Factor Evolution of the Shotcrete Lining for Different Curing Ages. Geotechnical and Geological Engineering, 2019, 37, 5555-5563.	1.7	6
36	Relating Plastic Potential Function to Experimentally Obtained Dilatancy Observations for Geomaterials with a Confinement-Dependent Dilation Angle. International Journal of Geomechanics, 2019, 19, .	2.7	3

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37	Experimental Relationship Between Compressional Wave Attenuation and Surface Strains in Brittle Rock. Journal of Geophysical Research: Solid Earth, 2019, 124, 5770-5793.	3.4	16
38	Application of deep neural networks in predicting the penetration rate of tunnel boring machines. Bulletin of Engineering Geology and the Environment, 2019, 78, 6347-6360.	3.5	108
39	The Elasto-Plastic Response of Deep Tunnels with Damaged Zone and Gravity Effects. Rock Mechanics and Rock Engineering, 2019, 52, 5123-5135.	5.4	22
40	Developing a new intelligent technique to predict overbreak in tunnels using an artificial bee colony-based ANN. Environmental Earth Sciences, 2019, 78, 1.	2.7	63
41	Flow-induced alterations of ultrasonic signatures and fracture aperture under constant state of stress in a single-fractured rock. Geophysics, 2019, 84, WA115-WA125.	2.6	7
42	Void detection in two-component annulus grout behind a pre-cast segmental tunnel liner using Ground Penetrating Radar. Tunnelling and Underground Space Technology, 2019, 83, 381-392.	6.2	38
43	Determination of tensile strength of concrete using a novel apparatus. Construction and Building Materials, 2018, 166, 817-832.	7.2	30
44	Ultrasonic investigation of granular materials subjected to compression and crushing. Ultrasonics, 2018, 87, 112-125.	3.9	33
45	Scale-Size Dependency of Intact Rock under Point-Load and Indirect Tensile Brazilian Testing. International Journal of Geomechanics, 2018, 18, .	2.7	34
46	Geophysical Signatures of Shearâ€Induced Damage and Frictional Processes on Rock Joints. Journal of Geophysical Research: Solid Earth, 2018, 123, 1143-1160.	3.4	32
47	Experimental and Numerical Investigation of the Center-Cracked Horseshoe Disk Method for Determining the Mode I Fracture Toughness of Rock-Like Material. Rock Mechanics and Rock Engineering, 2018, 51, 173-185.	5.4	27
48	Investigation of static/dynamic moduli and plastic response of shale specimens. International Journal of Rock Mechanics and Minings Sciences, 2018, 110, 231-245.	5.8	22
49	Non-linear ultrasonic monitoring of damage progression in disparate rocks. International Journal of Rock Mechanics and Minings Sciences, 2018, 111, 33-44.	5.8	14
50	The Relation between Static Youngâ€™s Modulus and Dynamic Bulk Modulus of Granular Materials and the Role of Stress History. , 2018, , .		1
51	Post-yield Strength and Dilatancy Evolution Across the Brittleâ€“Ductile Transition in Indiana Limestone. Rock Mechanics and Rock Engineering, 2017, 50, 1691-1710.	5.4	66
52	Geophysical Waveformâ€™s Frequency Attenuation as a Precursor to Rock Shear Failure. , 2017, , .		2
53	Laboratory Determination of Rock Fracture Shear Stiffness Using Seismic Wave Propagation and Digital Image Correlation. Geotechnical Testing Journal, 2017, 40, 20160035.	1.0	15
54	Effect of tensile strength of rock on tensile fracture toughness using experimental test and PFC2D simulation. Journal of Mining Science, 2016, 52, 647-661.	0.6	4

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55	Experimental and Numerical Study of Shear Fracture in Brittle Materials with Interference of Initial Double Cracks. Acta Mechanica Solida Sinica, 2016, 29, 555-566.	1.9	24
56	Suggesting a new testing device for determination of tensile strength of concrete. Structural Engineering and Mechanics, 2016, 60, 939-952.	1.0	23
57	Precursors to the shear failure of rock discontinuities. Geophysical Research Letters, 2014, 41, 5467-5475.	4.0	58
58	Multi-Modal Monitoring of Slip Along Frictional Discontinuities. Rock Mechanics and Rock Engineering, 2014, 47, 1575-1587.	5.4	27
59	Detection and Quantification of Slip Along Non-Uniform Frictional Discontinuities Using Digital Image Correlation. Geotechnical Testing Journal, 2014, 37, 20130141.	1.0	20
60	Elasto-plastic analysis in conventional tunnelling excavation. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2010, 163, 37-45.	1.6	8
61	Analytical solution for the excavation of circular tunnels in a visco-elastic Burgerâ€™s material under hydrostatic stress field. Tunnelling and Underground Space Technology, 2010, 25, 297-304.	6.2	133
62	An Integrated Approach for Evaluation of Linear Cohesive Zone Modelâ€™s Performance in Fracturing of Rocks. Rock Mechanics and Rock Engineering, 0, , 1.	5.4	3