

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

120 papers	1,482 citations	25 h-index	32 g-index
124 ext. papers	1,982 ext. citations	3.5 avg, IF	5.38 L-index

#	Paper	IF	Citations
120	Modelling the time-dependent rheological behaviour of heterogeneous brittle rocks. <i>Geophysical Journal International</i> , <b>2012</b> , 189, 1781-1796	2.6	74
119	The influence of porosity and vesicle size on the brittle strength of volcanic rocks and magma. <i>Bulletin of Volcanology</i> , <b>2014</b> , 76, 1	2.4	61
118	Thermomechanical Characterization of Shape Memory PolymerBased Self-Healing Syntactic Foam Sealant for Expansion Joints. <i>Journal of Transportation Engineering</i> , <b>2011</b> , 137, 805-814		43
117	Combustion properties of saturates, aromatics, resins, and asphaltenes in asphalt binder. <i>Construction and Building Materials</i> , <b>2017</b> , 136, 515-523	6.7	41
116	The evolution of rock failure with discontinuities due to shear creep. <i>Acta Geotechnica</i> , <b>2013</b> , 8, 567-581	4.9	41
115	Preparation, properties and modification mechanism of polyurethane modified emulsified asphalt. <i>Construction and Building Materials</i> , <b>2018</b> , 189, 375-383	6.7	41
114	Investigation into engineering properties and strength mechanism of grouted macadam composite materials. <i>International Journal of Pavement Engineering</i> , <b>2016</b> , 17, 878-886	2.6	40
113	A numerical analysis of rock creep-induced slide: a case study from Jiweishan Mountain, China. <i>Environmental Earth Sciences</i> , <b>2014</b> , 72, 2111-2128	2.9	39
112	Combustion mechanism of four components separated from asphalt binder. <i>Fuel</i> , <b>2017</b> , 192, 18-26	7.1	37
111	Thermal behaviors and harmful volatile constituents released from asphalt components at high temperature. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 373, 741-752	12.8	37
110	A shape memory polymer based syntactic foam with negative Poisson's ratio. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6804-6814	5.3	36
109	Impact of stylolites on the mechanical strength of limestone. <i>Tectonophysics</i> , <b>2016</b> , 690, 4-20	3.1	34
108	Microseismicity Induced by Fault Activation During the Fracture Process of a Crown Pillar. <i>Rock Mechanics and Rock Engineering</i> , <b>2015</b> , 48, 1673-1682	5.7	33
107	Photocatalytic degradation properties of V-doped TiO <sub>2</sub> to automobile exhaust. <i>Science of the Total Environment</i> , <b>2017</b> , 586, 347-354	10.2	31
106	Mechanical behavior and failure analysis of brittle sandstone specimens containing combined flaws under uniaxial compression. <i>Journal of Central South University</i> , <b>2014</b> , 21, 2059-2073	2.1	31
105	Physicochemical and pyrolysis properties of SARA fractions separated from asphalt binder. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2015</b> , 122, 241-249	4.1	30
104	Preparation and effectiveness of composite phase change material for performance improvement of Open Graded Friction Course. <i>Journal of Cleaner Production</i> , <b>2019</b> , 214, 259-269	10.3	30

103	Anisotropic characteristics of jointed rock mass: A case study at Shirengou iron ore mine in China. <i>Tunnelling and Underground Space Technology</i> , <b>2015</b> , 48, 129-139	5.7	29
102	Development of shape memory polyurethane based sealant for concrete pavement. <i>Construction and Building Materials</i> , <b>2018</b> , 174, 474-483	6.7	29
101	Combustion mechanism of asphalt binder with TGMs technique based on components separation. <i>Construction and Building Materials</i> , <b>2015</b> , 80, 125-131	6.7	28
100	The Modeling of Time-Dependent Deformation and Fracturing of Brittle Rocks Under Varying Confining and Pore Pressures. <i>Rock Mechanics and Rock Engineering</i> , <b>2018</b> , 51, 3241-3263	5.7	27
99	Inhibitory action of flame retardant on the dynamic evolution of asphalt pyrolysis volatiles. <i>Fuel</i> , <b>2013</b> , 105, 757-763	7.1	26
98	Modeling of Rheological Deformation of Inhomogeneous Rock and Associated Time-Dependent Response of Tunnels. <i>International Journal of Geomechanics</i> , <b>2012</b> , 12, 147-159	3.1	25
97	The strength of heterogeneous volcanic rocks: A 2D approximation. <i>Journal of Volcanology and Geothermal Research</i> , <b>2016</b> , 319, 1-11	2.8	25
96	Study of a Seepage Channel Formation Using the Combination of Microseismic Monitoring Technique and Numerical Method in Zhangmatun Iron Mine. <i>Rock Mechanics and Rock Engineering</i> , <b>2016</b> , 49, 3699-3708	5.7	25
95	Numerical analysis on scale effect of elasticity, strength and failure patterns of jointed rock masses. <i>Geosciences Journal</i> , <b>2016</b> , 20, 539-549	1.4	24
94	Preparation, shape memory performance and microstructures of emulsified asphalt modified by multi-walled carbon nanotubes. <i>Construction and Building Materials</i> , <b>2020</b> , 230, 116954	6.7	23
93	Mesoscopic Damage and Fracturing of Heterogeneous Brittle Rocks Based on Three-dimensional Polycrystalline Discrete Element Method. <i>Rock Mechanics and Rock Engineering</i> , <b>2020</b> , 53, 5389-5409	5.7	21
92	Heating effects of asphalt pavement during hot in-place recycling using DEM. <i>Construction and Building Materials</i> , <b>2016</b> , 115, 62-69	6.7	21
91	Formation process and mechanism of seepage channels around grout curtain from microseismic monitoring: A case study of Zhangmatun iron mine, China. <i>Engineering Geology</i> , <b>2017</b> , 226, 301-315	6	20
90	Rheological Characteristics of Weak Rock Mass and Effects on the Long-Term Stability of Slopes. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 2253-2263	5.7	20
89	Laboratory Study on Cement Slurry Formulation and Its Strength Mechanism for Semi-Flexible Pavement. <i>Journal of Testing and Evaluation</i> , <b>2016</b> , 44, 20150230	1	20
88	Thermal-oxidative aging mechanism of asphalt binder based on isothermal thermal analysis at the SARA level. <i>Construction and Building Materials</i> , <b>2020</b> , 255, 119349	6.7	19
87	Numerical Study of Zonal Disintegration within a Rock Mass around a Deep Excavated Tunnel. <i>International Journal of Geomechanics</i> , <b>2012</b> , 12, 471-483	3.1	19
86	Effects of N Doping on the Microstructures and Optical Properties of TiO <sub>2</sub> . <i>Journal Wuhan University of Technology, Materials Science Edition</i> , <b>2019</b> , 34, 55-63	1	18

85	The feasibility of DEM to analyze the temperature field of asphalt mixture. <i>Construction and Building Materials</i> , <b>2016</b> , 106, 592-599	6.7	18
84	Combustion kinetics of asphalt binder components and the release processes of gaseous products. <i>Combustion and Flame</i> , <b>2019</b> , 206, 322-333	5.3	16
83	Experimental and Numerical Study on Stress Relaxation of Sandstones Disturbed by Dynamic Loading. <i>Rock Mechanics and Rock Engineering</i> , <b>2016</b> , 49, 3963-3982	5.7	16
82	Combustion properties of asphalt binder containing flame retardant. <i>Fire and Materials</i> , <b>2012</b> , 36, 97-106	6.8	15
81	Effects of flame retardants on thermal decomposition of SARA fractions separated from asphalt binder. <i>Construction and Building Materials</i> , <b>2018</b> , 173, 209-219	6.7	14
80	Aggregate Gradation Influence on Grouting Results and Mix Design of Asphalt Mixture Skeleton for Semi-Flexible Pavement. <i>Journal of Testing and Evaluation</i> , <b>2017</b> , 45, 20150190	1	14
79	Fracture of magma containing overpressurised pores. <i>Journal of Volcanology and Geothermal Research</i> , <b>2015</b> , 301, 180-190	2.8	12
78	Dynamic evolution of emitted volatiles from thermal decomposed bituminous materials. <i>Construction and Building Materials</i> , <b>2014</b> , 64, 47-53	6.7	12
77	Effects of vanadium doping on microstructures and optical properties of TiO <sub>2</sub> . <i>Ceramics International</i> , <b>2017</b> , 43, 1558-1564	5.1	11
76	Combustion Properties and Multistage Kinetics Models of Asphalt Binder Filled with Flame Retardant. <i>Combustion Science and Technology</i> , <b>2011</b> , 183, 1027-1038	1.5	11
75	Gradation Design of the Aggregate Skeleton in Asphalt Mixture. <i>Journal of Testing and Evaluation</i> , <b>2012</b> , 40, 20120142	1	11
74	A Numerical Meso-Scale Elasto-Plastic Damage Model for Modeling the Deformation and Fracturing of Sandstone Under Cyclic Loading. <i>Rock Mechanics and Rock Engineering</i> , <b>2021</b> , 54, 4569-4591	5.7	11
73	Microstructures and optical performances of nitrogen-vanadium co-doped TiO with enhanced purification efficiency to vehicle exhaust. <i>Environmental Research</i> , <b>2021</b> , 193, 110560	7.9	10
72	Deformational behavior of underground opening using a stress-seepage coupled model considering anisotropic characteristics. <i>Arabian Journal of Geosciences</i> , <b>2015</b> , 8, 6635-6642	1.8	9
71	Microstructural and mechanical property evolutions of shape memory polyurethane during a thermodynamic cycle. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 45703	2.9	9
70	Numerical Tests on Failure Process of Rock Particle under Impact Loading. <i>Shock and Vibration</i> , <b>2015</b> , 2015, 1-12	1.1	9
69	Microwave-assisted damage and fracturing of hard rocks and its implications for effective mineral resources recovery. <i>Minerals Engineering</i> , <b>2021</b> , 160, 106663	4.9	9
68	A comparative study of hydraulic fracturing with various boreholes in coal seam. <i>Geosciences Journal</i> , <b>2015</b> , 19, 489-502	1.4	8

67	Dynamic disaster control of backfill mining under thick magmatic rock in one side goaf: A case study. <i>Journal of Central South University</i> , <b>2020</b> , 27, 3103-3117	2.1	8
66	Pyrolysis properties and kinetic model of an asphalt binder containing a flame retardant. <i>Journal of Applied Polymer Science</i> , <b>2011</b> , 119, 2661-2665	2.9	8
65	Three-Dimensional Material Failure Process Analysis. <i>Key Engineering Materials</i> , <b>2005</b> , 297-300, 1196-1201.	1.4	8
64	3-D Micromechanics Model for Progressive Failure Analysis of Laminated Cylindrical Composite Shell. <i>Key Engineering Materials</i> , <b>2005</b> , 297-300, 1113-1119	0.4	8
63	Flame retarding and smoke suppressing mechanisms of nano composite flame retardants on bitumen and bituminous mixture. <i>Construction and Building Materials</i> , <b>2021</b> , 266, 121203	6.7	8
62	Inhibitory effects of developed composite flame retardant on bituminous combustion and volatile emissions. <i>Journal of Cleaner Production</i> , <b>2021</b> , 279, 123538	10.3	7
61	Development on recycling, aging simulation and regeneration methods of reclaimed styrene-butadiene-styrene modified asphalt. <i>Journal of Cleaner Production</i> , <b>2021</b> , 312, 127767	10.3	7
60	Time-dependent deformation and fracture evolution around underground excavations. <i>Geomatics, Natural Hazards and Risk</i> , <b>2020</b> , 11, 2615-2633	3.6	6
59	Microcrack Evolution and Associated Deformation and Strength Properties of Sandstone Samples Subjected to Various Strain Rates. <i>Minerals (Basel, Switzerland)</i> , <b>2018</b> , 8, 231	2.4	6
58	Synthesis and Performance Evaluation of Epoxy Resin Modified Shape Memory Polyurethane Sealant. <i>Journal of Testing and Evaluation</i> , <b>2018</b> , 46, 20170298	1	6
57	Preparation, properties and compound modification mechanism of waterborne epoxy resin/styrene butadiene rubber latex modified emulsified asphalt. <i>Construction and Building Materials</i> , <b>2022</b> , 318, 126178	6.7	6
56	Mass loss evolution of bituminous fractions at different heating rates and constituent conformation of emitted volatiles. <i>Energy Science and Engineering</i> , <b>2019</b> , 7, 2782-2796	3.4	5
55	Thermal effects of asphalt SARA fractions, kinetic parameter calculation using isoconversional method and distribution models. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2020</b> , 1	4.1	5
54	Preparation, properties and modification mechanism of vulcanized eucommia ulmoides gum modified asphalt. <i>Construction and Building Materials</i> , <b>2021</b> , 274, 121992	6.7	5
53	Programming effects on thermal decomposition of shape memory polymer-based composites. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2017</b> , 130, 1953-1960	4.1	4
52	Effects of microbial degradation on morphology, chemical compositions and microstructures of bitumen. <i>Construction and Building Materials</i> , <b>2020</b> , 248, 118569	6.7	4
51	Improvements of Developed Graphite Based Composite Anti-Aging Agent on Thermal Aging Properties of Asphalt. <i>Materials</i> , <b>2020</b> , 13,	3.5	4
50	Thermal Characteristics, Kinetic Models, and Volatile Constituents during the Energy Conversion of Bituminous SARA Fractions in Air. <i>ACS Omega</i> , <b>2020</b> , 5, 20831-20841	3.9	4

49	Method for Evaluating Compatibility between SBS Modifier and Asphalt Matrix Using Molecular Dynamics Models. <i>Journal of Materials in Civil Engineering</i> , <b>2021</b> , 33, 04021207	3	4
48	Developed compound flame retardant for bitumen based on thermal properties of four components. <i>Construction and Building Materials</i> , <b>2020</b> , 250, 118692	6.7	3
47	Effects of different modifiers on thermal stability, constituents and microstructures of asphalt-based sealant. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2020</b> , 142, 1183-1192	4.1	3
46	Modeling of Transverse Thermal Cracking of FRP Bars Embedded in Concrete. <i>Arabian Journal for Science and Engineering</i> , <b>2014</b> , 39, 2621-2629		3
45	Modeling of Stress-Induced Permeability Evolution and Damage of Rock. <i>Advanced Materials Research</i> , <b>2008</b> , 33-37, 609-616	0.5	3
44	Numerical Approach to Investigating Pre-Existed Cracks in Rocks. <i>Key Engineering Materials</i> , <b>2005</b> , 297-300, 2612-2616	0.4	3
43	Avalanche Behaviour in Microfracturing Process of 3-D Brittle Disordered Material. <i>Key Engineering Materials</i> , <b>2005</b> , 297-300, 2567-2572	0.4	3
42	Full-field quantification of time-dependent and -independent deformation and fracturing of double-notch flawed rock using digital image correlation. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2021</b> , 7,	3.8	3
41	The Difference in Molecular Orientation and Interphase Structure of SiO/Shape Memory Polyurethane in Original, Programmed and Recovered States during Shape Memory Process. <i>Polymers</i> , <b>2020</b> , 12,	4.5	3
40	Experimental investigation of influence of alternating cyclic loadings on creep behaviors of sandstone. <i>Mechanics of Time-Dependent Materials</i> , <b>2021</b> , 25, 1-19	1.2	3
39	Rock Stability Assessment Based on the Chronological Order of the Characteristic Acoustic Emission Phenomena. <i>Shock and Vibration</i> , <b>2018</b> , 2018, 1-10	1.1	3
38	Mesoscale Modeling of Spallation Failure in Fiber-Reinforced Concrete Slab due to Impact Loading. <i>International Journal of Geomechanics</i> , <b>2016</b> , 16,	3.1	2
37	Study on the effect of transition temperature on shape memory behavior in polyurethane based on molecular dynamics simulation. <i>Materials Research Express</i> , <b>2019</b> , 6, 115323	1.7	2
36	Hydro-Mechanical Coupled Analysis of the Stability of Surrounding Rock Mass of Underground Water-Sealed Oil Storage. <i>Applied Mechanics and Materials</i> , <b>2013</b> , 405-408, 402-405	0.3	2
35	Application of RFPA2D in Sublevel Caving Mining Extra-Thick Coal Seams. <i>Materials Science Forum</i> , <b>2008</b> , 575-578, 1246-1251	0.4	2
34	Numerical Simulation and Analysis on Crack Path Deviation in Brittle Solid. <i>Key Engineering Materials</i> , <b>2006</b> , 324-325, 931-934	0.4	2
33	Inhibitory action of halogen-free fire retardants on combustion and volatile emission of bituminous components. <i>Science Progress</i> , <b>2021</b> , 104, 368504211035215	1.1	2
32	A meso-mechanical approach to time-dependent deformation and fracturing of partially saturated sandstone. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2021</b> , 145, 104840	6	2

31	Experimental study on creep of double-rock samples disturbed by dynamic impact. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2021</b> , 146, 104895	6	2
30	Developed photocatalytic semi-flexible pavement for automobile exhaust purification using iron-doped titanium dioxide. <i>Construction and Building Materials</i> , <b>2020</b> , 262, 119924	6.7	1
29	Effects of two-dimensional programming on microstructures and thermal properties of shape memory polymer-based composites. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134, 45480	2.9	1
28	Spallation of Concrete under Dynamic Loading: Mesh Size Effect. <i>Applied Mechanics and Materials</i> , <b>2011</b> , 50-51, 929-933	0.3	1
27	A Numerical Study on the Effect of Bond Length on the Bonding Performance of FRP-Concrete Interface. <i>Advanced Materials Research</i> , <b>2011</b> , 268-270, 857-862	0.5	1
26	Numerical Simulation of Thermal Induced Crack Propagation in Laminated Composites. <i>Materials Science Forum</i> , <b>2008</b> , 575-578, 886-891	0.4	1
25	Numerical Simulation on Fracture Formation on Surfaces of Bi-Layered Materials. <i>Key Engineering Materials</i> , <b>2007</b> , 353-358, 993-996	0.4	1
24	Three Dimensional Numerical Approach to Splitting Failure of Rock Discs. <i>Key Engineering Materials</i> , <b>2007</b> , 353-358, 921-924	0.4	1
23	Theoretical, Numerical and Experimental Study of Deformation and Failure Process of Rock. <i>Key Engineering Materials</i> , <b>2004</b> , 261-263, 1529-1534	0.4	1
22	Displacemental and Mesomechanical Responses of Semi-flexible Pavement Based on Discrete Element Method. <i>International Journal of Pavement Research and Technology</i> , 1	2	1
21	Nanoindentation-based characterization of micromechanical properties of greenish mudstone from deep Fushun West open-pit mine (Fushun city, China). <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2022</b> , 8, 1	3.8	1
20	Study of Reasonable Length of Coal Seam Mining under Different Fault Dips. <i>Advanced Materials Research</i> , <b>2014</b> , 919-921, 747-750	0.5	0
19	Effects of Prepared Carbon Nanofibers on Properties of Emulsified Asphalt. <i>Journal of Testing and Evaluation</i> , <b>2021</b> , 49, 20200589	1	0
18	Temperature Changes of Interlaminar Bonding Layer in Different Seasons and Effects on Mechanical Properties of Asphalt Pavement. <i>International Journal of Pavement Research and Technology</i> , 1	2	0
17	Inhibitory effects of developed composite anti-aging agent on microbial degradation of asphalt. <i>Construction and Building Materials</i> , <b>2021</b> , 292, 123399	6.7	0
16	Effects of healing agent on shape memory, mechanical and self- healing properties of joint filler on cement concrete pavement. <i>Construction and Building Materials</i> , <b>2021</b> , 304, 124592	6.7	0
15	Syncretization mechanism between emulsified asphalt and aged asphalt in cold recycled asphalt mixture using developed demulsification-dehydration method. <i>Construction and Building Materials</i> , <b>2022</b> , 326, 126860	6.7	0
14	Study of the Effect of Joint Trace Lengths on Failure Strength of Rock. <i>Applied Mechanics and Materials</i> , <b>2014</b> , 501-504, 603-606	0.3	



13	Stability Analysis of Steep Bedding Rock Slope with Strength Reduction Method. <i>Applied Mechanics and Materials</i> , <b>2014</b> , 501-504, 399-402	0.3
12	Dynamic Performance Analysis of Steel Truss Bridge. <i>Applied Mechanics and Materials</i> , <b>2013</b> , 423-426, 1548-1551	0.3
11	Numerical Simulation of the Effect of Joint Orientation on the Failure Strength of Rock. <i>Applied Mechanics and Materials</i> , <b>2013</b> , 477-478, 577-581	0.3
10	Hydro-Mechanical Coupled Analysis of the Variable Permeability Coefficient of Fractured Rock Mass. <i>Applied Mechanics and Materials</i> , <b>2013</b> , 477-478, 531-534	0.3
9	Numerical Simulation of the Effect of Temperature on the Failure Strength of Rock. <i>Advanced Materials Research</i> , <b>2013</b> , 690-693, 1737-1740	0.5
8	Study of Strength Criterion for Dynamic Compression of Concrete under Biaxial Equal Proportion Loading. <i>Advanced Materials Research</i> , <b>2010</b> , 163-167, 1819-1822	0.5
7	Numerical Study of Stress Intensity Factor in Notched Specimens Using Extended Finite Element Method. <i>Applied Mechanics and Materials</i> , <b>2012</b> , 166-169, 2995-2998	0.3
6	Effect of Non-Homogeneity on Limit Bearing Capacity of Rock Block. <i>Advanced Materials Research</i> , <b>2008</b> , 33-37, 631-638	0.5
5	Sustained Loading Fracture and Strength of Concrete Modelled by Creep-Damage Interaction. <i>Key Engineering Materials</i> , <b>2006</b> , 324-325, 51-54	0.4
4	Numerical Study of Crack Propagation in Stiff Clays. <i>Key Engineering Materials</i> , <b>2006</b> , 324-325, 201-204	0.4
3	Numerical Simulation of Fracture Process Zone in Concrete Tension Specimen. <i>Key Engineering Materials</i> , <b>2007</b> , 353-358, 1045-1048	0.4
2	Modelling of Thermal Cracking Behaviours of Fiber-Reinforced Composites. <i>Key Engineering Materials</i> , <b>2007</b> , 334-335, 237-240	0.4
1	Numerical Study on Shear Strength and Failure Pattern of Jointed Rock under Shear Testing. <i>Key Engineering Materials</i> , <b>2005</b> , 297-300, 2617-2622	0.4