

# CITATION REPORT

List of articles citing

Effect of heterogeneity of brittle rock on micromechanical extensile behavior during compression loading

DOI: 10.1029/2009jb006496

Journal of Geophysical Research, 2010, 115, .

**Source:** <https://exaly.com/paper-pdf/49378914/citation-report.pdf>

**Version:** 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
289	Cracking Processes in Rock-Like Material Containing a Single Flaw Under Uniaxial Compression: A Numerical Study Based on Parallel Bonded-Particle Model Approach. <i>Rock Mechanics and Rock Engineering</i> , <b>2011</b> , 45, 711	5.7	78
288	Experimental Study of the Brittle Behavior of Clay shale in Rapid Unconfined Compression. <i>Rock Mechanics and Rock Engineering</i> , <b>2011</b> , 44, 415-430	5.7	149
287	A novel approach for micro-scale characterization and modeling of geomaterials incorporating actual material heterogeneity. <b>2012</b> , 39, n/a-n/a		72
286	Y-Geo: New Combined Finite-Discrete Element Numerical Code for Geomechanical Applications. <i>International Journal of Geomechanics</i> , <b>2012</b> , 12, 676-688	3.1	210
285	Evolution of In Situ Rock Mass Damage Induced by Mechanical/Thermal Loading. <i>Rock Mechanics and Rock Engineering</i> , <b>2013</b> , 46, 153-168	5.7	42
284	A discontinuum-based model to simulate compressive and tensile failure in sedimentary rock. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2013</b> , 5, 378-388	5.3	23
283	Effect of micromechanical parameters of microstructure on compressive and tensile failure process of rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 64, 44-55	6	64
282	Nonlinear dynamic failure process of tunnel-fault system in response to strong seismic event. <b>2013</b> , 64, 125-135		16
281	A coupled thermo-hydrologic-mechanical damage model and associated application in a stability analysis on a rock pillar. <b>2013</b> , 34, 38-53		50
280	Crack Initiation, Propagation and Coalescence in Rock-Like Material Containing Two Flaws: a Numerical Study Based on Bonded-Particle Model Approach. <i>Rock Mechanics and Rock Engineering</i> , <b>2013</b> , 46, 1001-1021	5.7	223
279	Evaluation of valley closure subsidence effects under irregular topographic conditions. <b>2013</b> , 122, 172-183		1
278	A 3D generalized rigid particle contact model for rock fracture. <b>2013</b> , 30, 277-300		7
277	3D random Voronoi grain-based models for simulation of brittle rock damage and fabric-guided micro-fracturing. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2014</b> , 6, 506-521	5.3	127
276	Choosing a proper loading rate for bonded-particle model of intact rock. <b>2014</b> , 189, 163-179		53
275	Influence of microscale heterogeneity and microstructure on the tensile behavior of crystalline rocks. <b>2014</b> , 119, 5324-5341		73
274	Three-Dimensional DEM Numerical Simulation of Rock Failure Progress with Different Microscopic Heterogeneities. <b>2014</b> , 580-583, 767-773		
273	Nanomechanical Characterization of Brittle Rocks. <b>2014</b> , 209-229		

272	A new contact model to improve the simulated ratio of unconfined compressive strength to tensile strength in bonded particle models. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 69, 111-119	6	80
271	Factors Affecting Crack Initiation in Low Porosity Crystalline Rocks. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 1165-1181	5.7	90
270	A review of discrete modeling techniques for fracturing processes in discontinuous rock masses. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2014</b> , 6, 301-314	5.3	276
269	DEM Simulation of Direct Shear: 2. Grain Boundary and Mineral Grain Strength Component Influence on Shear Rupture. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 1673-1692	5.7	44
268	DEM Simulation of Direct Shear: 1. Rupture Under Constant Normal Stress Boundary Conditions. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 1647-1671	5.7	52
267	Fracture initiation and propagation in intact rock – A review. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2014</b> , 6, 287-300	5.3	313
266	Simulation of heterogeneity, creep, damage and lifetime for loaded brittle rocks. <b>2014</b> , 633, 164-175		60
265	Modeling of viscoplastic deformation in geomaterials with a polycrystalline approach. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 72, 182-190	6	3
264	A Microstructure-Based Model to Characterize Micromechanical Parameters Controlling Compressive and Tensile Failure in Crystallized Rock. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 435-452	5.7	28
263	Numerical Modelling of the Anisotropic Mechanical Behaviour of Opalinus Clay at the Laboratory-Scale Using FEM/DEM. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 187-206	5.7	81
262	The bonded-particle model as a tool for rock mechanics research and application: current trends and future directions. <b>2015</b> , 18, 1-28		169
261	A calibration procedure for two-dimensional laboratory-scale hybrid finite-discrete element simulations. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 75, 56-72	6	91
260	A mine shaft case study on the accurate prediction of yield and displacements in stressed ground using lab-derived material properties. <b>2015</b> , 49, 98-113		21
259	Micro-textural effects on crack initiation and crack propagation of andesitic rocks. <b>2015</b> , 193, 267-275		37
258	Modeling failure of jointed rock slope with two main joint sets using a novel DEM bond contact model. <b>2015</b> , 193, 79-96		64
257	Numerical simulation of time-independent and -dependent fracturing in sandstone. <b>2015</b> , 193, 118-131		26
256	Characterizing the influence of stress-induced microcracks on the laboratory strength and fracture development in brittle rocks using a finite-discrete element method-micro discrete fracture network FDEM-DFN approach. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2015</b> , 7, 609-625	5.3	41
255	A grain based modeling study of mineralogical factors affecting strength, elastic behavior and micro fracture development during compression tests in granites. <b>2015</b> , 147, 261-275		85

254	Numerical simulation of damage and failure in brittle rocks using a modified rigid block spring method. <b>2015</b> , 64, 48-60		40
253	Numerical Simulation of Heterogeneous Rock Using Discrete Element Model Based on Digital Image Processing. <i>Rock Mechanics and Rock Engineering</i> , <b>2016</b> , 49, 4957-4964	5-7	60
252	Evolution of stress-induced borehole breakout in inherently anisotropic rock: Insights from discrete element modeling. <b>2016</b> , 121, 2361-2381		47
251	Numerical simulation of microstructure of brittle rock using a grain-breakable distinct element grain-based model. <b>2016</b> , 78, 203-217		70
250	Numerical investigation of the influence of specimen size on the unconfined strength of defected rocks. <b>2016</b> , 77, 56-67		53
249	Assessment of mineralogical and petrographic factors affecting petro-physical properties, strength and cracking processes of volcanic rocks. <b>2016</b> , 210, 10-22		38
248	Pre-failure damage analysis for brittle rocks under triaxial compression. <b>2016</b> , 74, 45-55		38
247	A discrete approach for modeling damage and failure in anisotropic cohesive brittle materials. <b>2016</b> , 155, 102-118		31
246	Influence of single flaw on the failure process and energy mechanics of rock-like material. <b>2017</b> , 86, 150-162		68
245	Self-similar distributions of fluid velocity and stress heterogeneity in a dissolving porous limestone. <b>2017</b> , 122, 1726		3
244	Influence of grain size heterogeneity on strength and microcracking behavior of crystalline rocks. <b>2017</b> , 122, 1054-1073		116
243	Numerical Investigation of Damage Evolution and Localized Fracturing of Brittle Rock in Compression. <b>2017</b> , 31, 04017065		5
242	A lattice discrete particle model for pressure-dependent inelasticity in granular rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2017</b> , 91, 49-58	6	16
241	Voronoi-Based DEM Simulation Approach for Sandstone Considering Grain Structure and Pore Size. <i>Rock Mechanics and Rock Engineering</i> , <b>2017</b> , 50, 2749-2761	5-7	29
240	Numerical investigation of the opening effect on the mechanical behaviours in rocks under uniaxial loading using hybrid continuum-discrete element method. <b>2017</b> , 90, 55-72		29
239	Grain-Based Discrete-Element Modeling Study on the Effects of Cementation on the Mechanical Behavior of Low-Porosity Brittle Rocks. <i>International Journal of Geomechanics</i> , <b>2017</b> , 17, 04017061	3-1	17
238	Discrete element method simulation of random Voronoi grain-based models. <b>2017</b> , 20, 335-345		11
237	Plastic-strain-dependent strength model to simulate the cracking process of brittle rocks with an existing non-persistent joint. <b>2017</b> , 231, 114-125		21

236	An enhanced understanding of the Basinal Bowland shale in Lancashire (UK), through microtextural and mineralogical observations. <b>2017</b> , 86, 1374-1390		19
235	Distinction of Crack Nature in Brittle Rock-Like Materials: A Numerical Study Based on Moment Tensors. <i>Rock Mechanics and Rock Engineering</i> , <b>2017</b> , 50, 2837-2845	5.7	33
234	Exploration into the causes of uncertainty in UDEC Grain Boundary Models. <b>2017</b> , 82, 110-123		35
233	Development of Synthetic Rock Mass Bonded Block Models to Simulate the Behaviour of Intact Veined Rock. <b>2017</b> , 35, 313-335		11
232	Polygonal grain-based distinct element modeling for mechanical behavior of brittle rock. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2017</b> , 41, 880-898	4	17
231	Numerical Studies on the Failure Process of Heterogeneous Brittle Rocks or Rock-Like Materials under Uniaxial Compression. <i>Materials</i> , <b>2017</b> , 10,	3.5	16
230	Investigation of the Quasi-Brittle Failure of Alashan Granite Viewed from Laboratory Experiments and Grain-Based Discrete Element Modeling. <i>Materials</i> , <b>2017</b> , 10,	3.5	30
229	Evaluation of strength and failure of brittle rock containing initial cracks under lithospheric conditions. <b>2018</b> , 66, 141-152		12
228	Extended Rigid Body Spring Network method for the simulation of brittle rocks. <b>2018</b> , 99, 31-41		18
227	Dynamic tensile behaviours of heterogeneous rocks: The grain scale fracturing characteristics on strength and fragmentation. <b>2018</b> , 118, 98-118		58
226	Heterogeneity in deformation of granite under dynamic combined compression/shear loading. <b>2018</b> , 123, 1-18		20
225	Modeling deformation and damage of rock salt using the discrete element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 103, 230-241	6	31
224	The Grain-Based Model Numerical Simulation of Unconfined Compressive Strength Experiment Under Thermal-Mechanical Coupling Effect. <b>2018</b> , 22, 2764-2775		5
223	Quantifying the effects of scale and heterogeneity on the confined strength of micro-defected rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 102, 131-143	6	20
222	Mechanical properties of brittle rock governed by micro-geometric heterogeneity. <b>2018</b> , 104, 358-372		68
221	Investigation of the Rock Fragmentation Process by a Single TBM Cutter Using a Voronoi Element-Based Numerical Manifold Method. <i>Rock Mechanics and Rock Engineering</i> , <b>2018</b> , 51, 1137-1152	5.7	16
220	A review of numerical techniques approaching microstructures of crystalline rocks. <b>2018</b> , 115, 167-187		35
219	New Method for Obtaining the Homogeneity Index m of Weibull Distribution Using Peak and Crack-Damage Strains. <i>International Journal of Geomechanics</i> , <b>2018</b> , 18, 04018034	3.1	12

218	Numerical analysis on mining-induced fracture development around river valleys. <b>2018</b> , 32, 463-485		12
217	Evaluation of Pore Size and Distribution Impacts on Uniaxial Compressive Strength of Lithophysal Rock. <b>2018</b> , 43, 1235-1246		9
216	Modeling Micro-cracking Behavior of Bukit Timah Granite Using Grain-Based Model. <i>Rock Mechanics and Rock Engineering</i> , <b>2018</b> , 51, 135-154	5-7	46
215	Modelling transient heat conduction of granular materials by numerical manifold method. <b>2018</b> , 86, 45-55		22
214	Influence of Grain Size Heterogeneity and In-Situ Stress on the Hydraulic Fracturing Process by PFC2D Modeling. <b>2018</b> , 11, 1413		11
213	A new method to model the non-linear crack closure behavior of rocks under uniaxial compression. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 112, 171-183	6	29
212	Grain-Based Discrete Element Method (GB-DEM) Modelling of Multi-scale Fracturing in Rocks Under Dynamic Loading. <i>Rock Mechanics and Rock Engineering</i> , <b>2018</b> , 51, 3785-3817	5-7	83
211	Thermomechanical Model of an Impermeable Porous Medium with a Chemically Active Filler. <b>2018</b> , 10, 459-471		1
210	Non-linear ultrasonic monitoring of damage progression in disparate rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 111, 33-44	6	8
209	Numerical modeling of acoustic emission during rock failure process using a Voronoi element based explicit numerical manifold method. <b>2018</b> , 79, 175-189		10
208	A Voronoi element based-numerical manifold method (VE-NMM) for investigating micro/macro-mechanical properties of intact rocks. <b>2018</b> , 199, 71-85		17
207	Grain based modelling of rocks using the combined finite-discrete element method. <b>2018</b> , 103, 73-81		40
206	Geothermal-Related Thermo-Elastic Fracture Analysis by Numerical Manifold Method. <b>2018</b> , 11, 1380		8
205	Roles of model size and particle size distribution on macro-mechanical properties of Lac du Bonnet granite using flat-joint model. <b>2018</b> , 103, 43-60		40
204	Discrete element modelling of stress-induced instability of directional drilling boreholes in anisotropic rock. <b>2018</b> , 81, 55-67		17
203	Investigation of the characteristics of rock fracture process zone using coupled FEM/DEM method. <b>2018</b> , 200, 355-374		34
202	Modeling of brittle rock failure considering inter- and intra-grain contact failures. <b>2018</b> , 101, 224-244		45
201	Cracking Processes and Coalescence Modes in Rock-Like Specimens with Two Parallel Pre-existing Cracks. <i>Rock Mechanics and Rock Engineering</i> , <b>2018</b> , 51, 3377-3393	5-7	63

200	Variability in spatial distribution of mineral phases in the Lower Bowland Shale, UK, from the mm- to $\mu$ m-scale: Quantitative characterization and modelling. <b>2018</b> , 92, 109-127		14
199	Influence of stress path on stress memory and stress fracturing in brittle rocks. <b>2019</b> , 56, 852-867		1
198	The crack nature analysis of primary and secondary cracks: A numerical study based on moment tensors. <b>2019</b> , 210, 70-83		18
197	Numerical Investigation of Mineral Grain Shape Effects on Strength and Fracture Behaviors of Rock Material. <b>2019</b> , 9, 2855		4
196	A Multicomponent Particle Model and Linear Fitting Calibration Method for Heterogeneous Rocks. <b>2019</b> , 2019, 1-15		1
195	Meso-Scale Simulation of Concrete Uniaxial Behavior Based on Numerical Modeling of CT Images. <i>Materials</i> , <b>2019</b> , 12,	3.5	10
194	Weibull linear parallel bond model (WLPBM) for simulating micro-mechanical characteristics of heterogeneous rocks. <b>2019</b> , 108, 82-94		7
193	Micro-mechanism study on rock breaking behavior under water jet impact using coupled SPH-FEM/DEM method with Voronoi grains. <b>2019</b> , 108, 472-483		22
192	Distribution characteristics and controlling factors of vertical joint spacing in sand-mud interbedded strata. <b>2019</b> , 128, 103886		27
191	Investigation of Hydraulic Fracturing Behavior in Heterogeneous Laminated Rock Using a Micromechanics-Based Numerical Approach. <b>2019</b> , 12, 3500		1
190	Investigation of the nucleation, propagation and coalescence of hydraulic fractures in glutenite reservoirs using a coupled fluid flow-DEM approach. <b>2019</b> , 354, 301-313		8
189	Understanding continuum and discontinuum models of rock-support interaction for excavations undergoing stress-induced spalling. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 123, 104089	6	7
188	Phase partitioning during fragmentation revealed by QEMSCAN Particle Mineralogical Analysis of volcanic ash. <i>Scientific Reports</i> , <b>2019</b> , 9, 126	4.9	14
187	A comprehensive parametric study of grain-based models for rock failure process simulation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 115, 60-76	6	25
186	Effect of Fracture Heterogeneity on Rock Mass Stability in a Highly Heterogeneous Underground Roadway. <i>Rock Mechanics and Rock Engineering</i> , <b>2019</b> , 52, 4547-4564	5.7	34
185	PFC simulation of crack evolution and energy conversion during basalt failure process. <b>2019</b> , 16, 639-651		21
184	Numerical Investigation of Radial Strain-Controlled Uniaxial Compression Test of $\mu$ PDiorite in Grain-Based Model. <i>Rock Mechanics and Rock Engineering</i> , <b>2019</b> , 52, 3659-3674	5.7	5
183	Numerical Investigation on the Mechanical Properties of Australian Strathbogie Granite Under Different Temperatures Using Discrete Element Method. <i>Rock Mechanics and Rock Engineering</i> , <b>2019</b> , 52, 3719-3735	5.7	3



182	DEM Investigation of the Influence of Minerals on Crack Patterns and Mechanical Properties of Red Mudstone. <b>2019</b> , 7, 162		1
181	A numerical approach to investigate the effects of rock texture on the damage and crack propagation of a pre-cracked granite. <b>2019</b> , 111, 89-111		40
180	Calibration of micro-scaled mechanical parameters of granite based on a bonded-particle model with 2D particle flow code. <b>2019</b> , 21, 1		31
179	Simulating damage evolution and fracture propagation in sandstone containing a preexisting 3-D surface flaw under uniaxial compression. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2019</b> , 43, 1448-1466	4	16
178	Novel grain-based model for simulation of brittle failure of Alxa porphyritic granite. <b>2019</b> , 251, 100-114		40
177	Effect of Shear Stresses on Pillar Stability: A Back Analysis of the Troy Mine Experience to Predict Pillar Performance at Montanore Mine. <i>Rock Mechanics and Rock Engineering</i> , <b>2019</b> , 52, 4979-4996	5-7	8
176	Shear Mechanical Behaviours and Multistrength Parameter Characteristics of Fault Gouge. <b>2019</b> , 2019, 1-14		0
175	Insights From Micromechanical Modeling of Intact Rock Failure: Event Characteristics, Stress Drops, and Force Networks. <b>2019</b> , 124, 12955-12980		4
174	Elastic Properties Calibration Approach for Discrete Element Method Model Based on Voronoi Tessellation Method. <b>2019</b> , 37, 2227-2236		7
173	Numerical analyses of pillar behavior with variation in yield criterion, dilatancy, rock heterogeneity and length to width ratio. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2019</b> , 11, 46-60	5-3	4
172	Numerical Discrete-Element Method Investigation on Failure Process of Recycled Aggregate Concrete. <b>2019</b> , 31, 04018353		24
171	Numerical Modeling of the Relationship Between Mechanical Properties of Granite and Microparameters of the Flat-Joint Model Considering Particle Size Distribution. <b>2019</b> , 51, 319-336		7
170	Seismic wave propagation characteristic and its effects on the failure of steep jointed anti-dip rock slope. <i>Landslides</i> , <b>2019</b> , 16, 105-123	6.6	21
169	An experimental approach for determination of the Weibull homogeneity index of rock or rock-like materials. <b>2020</b> , 15, 375-391		1
168	A discrete element exploration of V-shaped breakout failure mechanisms in underground opening. <b>2020</b> , 5, 281-291		1
167	Crack Evolution in Damage Stress Thresholds in Different Minerals of Granite Rock. <i>Rock Mechanics and Rock Engineering</i> , <b>2020</b> , 53, 1163-1178	5-7	22
166	Influence of inclination angles and confining pressures on mechanical behavior of rock materials containing a preexisting crack. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2020</b> , 44, 353-370	4	4
165	Coupled poromechanics-damage mechanics modeling of fracturing during injection in brittle rocks. <b>2020</b> , 121, 256-276		6



164	Reduced rate of land subsidence since 2016 in Beijing, China: evidence from Tomo-PSInSAR using RadarSAT-2 and Sentinel-1 datasets. <b>2020</b> , 41, 1259-1285		13
163	Factors Controlling the Difference in Brazilian and Direct Tensile Strengths of the Lac du Bonnet Granite. <i>Rock Mechanics and Rock Engineering</i> , <b>2020</b> , 53, 1005-1019	5-7	11
162	On the initiation, propagation and reorientation of simultaneously-induced multiple hydraulic fractures. <b>2020</b> , 117, 103226		24
161	Numerical modeling of geomaterial fracture using a cohesive crack model in grain-based DEM. <b>2020</b> , 7, 645-654		7
160	A distinct element based two-stage-structural model for investigation of the development process and failure mechanism of strainburst. <b>2020</b> , 118, 103333		13
159	Numerical investigation on the cooling-related mechanical properties of heated Australian Strathbogie granite using Discrete Element Method. <b>2020</b> , 264, 105371		4
158	The effect of mineralogy and textural characteristics on the strength of crystalline igneous rocks using image-based textural quantification. <b>2020</b> , 266, 105467		14
157	A 2D DEM-based approach for modeling water-induced degradation of carbonate rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2020</b> , 126, 104188	6	4
156	Modeling time-dependent deformation behavior of brittle rock using grain-based stress corrosion method. <b>2020</b> , 118, 103323		13
155	Geometrical heterogeneity of the joint roughness coefficient revealed by 3D laser scanning. <b>2020</b> , 265, 105415		21
154	FDEM Simulation of Rocks with Microstructure Generated by Voronoi Grain-Based Model with Particle Growth. <i>Rock Mechanics and Rock Engineering</i> , <b>2020</b> , 53, 1909-1921	5-7	9
153	A study on Bonded Block Model (BBM) complexity for simulation of laboratory-scale stress-strain behavior in granitic rocks. <b>2020</b> , 118, 103363		14
152	Numerical study on tensile failures of heterogeneous rocks. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2020</b> , 12, 50-58	5-3	5
151	A grain-based time-to-failure creep model for brittle rocks. <b>2020</b> , 119, 103344		13
150	Influence of degree of interlock on confined strength of jointed hard rock masses. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2020</b> , 12, 1152-1170	5-3	4
149	Automatic generation of landslide profile for complementing landslide inventory. <b>2020</b> , 11, 1000-1030		4
148	Compression-Induced Tensile Mechanical Behaviors of the Crystalline Rock under Dynamic Loads. <i>Materials</i> , <b>2020</b> , 13,	3-5	0
147	Sensitivity of the damage response and fracture path to material heterogeneity present in a sandstone specimen containing a pre-existing 3-D surface flaw under uniaxial loading. <b>2020</b> , 126, 103728		4

146	Thermal-Stress-Aperture Coupled Model for Analyzing the Thermal Failure of Fractured Rock Mass. <i>International Journal of Geomechanics</i> , <b>2020</b> , 20, 04020176	3.1	4
145	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
144	Investigation of granite fracture under three-point bending using the meso-modeling approach considering the random distribution of poly-crystals. <b>2020</b> , 13, 1		1
143	Effect of heterogeneity on failure of natural rock samples. <i>Scientific Reports</i> , <b>2020</b> , 10, 14723	4.9	0
142	Numerical simulation on effect of heterogeneity on mode I fracture characteristics of rock. <b>2020</b> , 27, 3063-3077		1
141	Simulation of compression-induced shear-mode cracks in rocks based on experimental investigations performed on gypsum specimens. <b>2020</b> , 79, 4309-4319		5
140	Evaluation of Fracture Evolution of Granite during Brazilian Test by Numerical Analysis of Fracturing Process Considering Mineral Distribution. <b>2020</b> , 69, 236-242		1
139	Illumination of Damage in Intact Rocks by Ultrasonic Transmission-Reflection and Digital Image Correlation. <b>2020</b> , 125, e2020JB019526		4
138	Grain-scale failure mechanism of porous sandstone: An experimental and numerical FDEM study of the Brazilian Tensile Strength test using CT-Scan microstructure. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2020</b> , 132, 104348	6	11
137	Investigation of the Micromechanical Damage Process in a Granitic Rock Using an Inelastic Bonded Block Model (BBM). <b>2020</b> , 125, e2019JB018844		6
136	Effect of mechanical heterogeneity on hydraulic fracture propagation in unconventional gas reservoirs. <b>2020</b> , 125, 103652		16
135	Numerical study on the progressive failure of heterogeneous geomaterials under varied confining stresses. <b>2020</b> , 269, 105556		6
134	Study of microstructure effect on the nonlinear mechanical behavior and failure process of rock using an image-based-FDEM model. <b>2020</b> , 121, 103480		13
133	Investigating the crack initiation and propagation mechanism in brittle rocks using grain-based finite-discrete element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2020</b> , 127, 104219	6	43
132	Coupled Evolution of Preferential Paths for Force and Damage in the Pre-failure Regime in Disordered and Heterogeneous, Quasi-Brittle Granular Materials. <b>2020</b> , 7,		5
131	On the mechanism of thermally induced micro-cracking assisted rock cutting in hard formation. <b>2021</b> , 196, 107666		5
130	Calibration of coupled hydro-mechanical properties of grain-based model for simulating fracture process and associated pore pressure evolution in excavation damage zone around deep tunnels. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2021</b> , 13, 60-83	5.3	4
129	Transgranular fracturing of crystalline rocks and its influence on rock strengths: Insights from a grain-scale continuum-discontinuum approach. <b>2021</b> , 373, 113462		19

128	Microwave-assisted damage and fracturing of hard rocks and its implications for effective mineral resources recovery. <b>2021</b> , 160, 106663		9
127	An advanced grain-based model to characterize mechanical behaviors of crystalline rocks with different weathering degrees. <b>2021</b> , 280, 105951		1
126	Integration of three-dimensional continuum model and two-dimensional bonded block model for studying the damage process in a granite pillar at the Creighton Mine, Sudbury, Canada. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2021</b> , 13, 275-288	5.3	7
125	Modelling size effect on rock aggregates strength using a DEM bonded-cell model. <b>2021</b> , 16, 699-709		4
124	Comparative Study on Mineral-Scale Microcrack Propagation of Shale under Different Loading Methods. <b>2021</b> , 2021, 1-18		
123	Microcracking Behavior of Gabbro During Monotonic and Cyclic Loading. <i>Rock Mechanics and Rock Engineering</i> , <b>2021</b> , 54, 2441-2463	5.7	4
122	A Shear Model for Rock Microfracture Size Estimation Based on AE Measurement. <i>Rock Mechanics and Rock Engineering</i> , <b>2021</b> , 54, 2533-2546	5.7	1
121	Investigation of Microcrack Propagation and Energy Evolution in Brittle Rocks Based on the Voronoi Model. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
120	Study on the effect of micro-geometric heterogeneity on mechanical properties of brittle rock using a grain-based discrete element method coupling with the cohesive zone model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2021</b> , 140, 104680	6	12
119	Brittle fracturing in low-porosity rock and implications to fault nucleation. <b>2021</b> , 285, 106025		3
118	A new look at rock mechanical behavior from the meso-scale grain. <b>2021</b> , 200, 108373		1
117	Numerical simulation for compressive and tensile behaviors of rock with virtual microcracks. <b>2021</b> , 14, 1		0
116	A 3D Voronoi clump based model for simulating failure behavior of brittle rock. <b>2021</b> , 248, 107720		9
115	Numerical investigation of blast-induced fractures in granite: insights from a hybrid LS-DYNA and UDEC grain-based discrete element method. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2021</b> , 7, 1	3.8	6
114	The Strength of Massive to Moderately Jointed Rock and its Application to Cave Mining. <i>Rock Mechanics and Rock Engineering</i> , <b>2021</b> , 54, 3629-3661	5.7	3
113	Numerical study on penetration mode of steel with prefabricated double cracks. <b>2021</b> , 1941, 012035		
112	Damage monitoring in rock specimens with pre-existing flaws by non-linear ultrasonic waves and digital image correlation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2021</b> , 142, 104758	6	5
111	Towards a better understanding of hot-mixed mortars for the conservation of historic buildings: the role of water temperature and steam during lime slaking. <b>2021</b> , 9,		3

110	Machine learning-assisted distinct element model calibration: ANFIS, SVM, GPR, and MARS approaches. 1		10
109	Statistical Assessment of the Effects of Grain-Structure Representation and Micro-Properties on the Behavior of Bonded Block Models for Brittle Rock Damage Prediction. <b>2021</b> , 13, 7889		0
108	An Analysis of Relationship between the Microfracture Features and Mineral Morphology of Granite. <b>2021</b> , 2021, 1-6		
107	Investigation into the effects of grain size on strength and failure behaviors of granites using a breakable polygonal grain-based model. <b>2021</b> , 80, 6989-7007		0
106	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. <b>2021</b> , 114, 103014		7
105	Effect of Damping Mode in Laboratory and Field-Scale Universal Distinct Element Code (UDEC) Models. <i>Rock Mechanics and Rock Engineering</i> , 1	5-7	1
104	Techniques for Progressive Failure Simulation of Hard Brittle Surrounding Rockmass: Taking the URL Test Tunnel as an Example. <b>2021</b> , 2021, 1-12		2
103	Influence of grain size on strength of polymineralic crystalline rock: New insights from DEM grain-based modeling. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2021</b> , 13, 755-766	5-3	5
102	An Illustrative Study of the Potential Sensitivity, of Predicted Long-Term EDZ Development, to Internal Fabric of Argillaceous Limestone. <i>Rock Mechanics and Rock Engineering</i> , 1	5-7	
101	Strength and failure mechanism of highly interlocked jointed pillars: Insights from upscaled continuum grain-based models of a jointed rock mass analogue. <b>2021</b> , 137, 104278		1
100	Numerical Analysis of the Effect of Heterogeneity on Underground Roadway Stability under Dynamic Loads. <b>2021</b> , 2021, 1-23		2
99	Fracture properties of the gold mine tailings-based geopolymer under mode I loading condition through semi-circular bend tests with digital image correlation. <b>2021</b> , 103116		6
98	Image-based grain partitioning using skeleton extension erosion method. <b>2021</b> , 205, 108797		2
97	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. <b>2021</b> , 47, 32382-32396		6
96	Damage evolution and crack propagation in rocks with dual elliptic flaws in compression. <b>2017</b> , 30, 573-582		6
95	Earth Science for Civil and Environmental Engineers. <b>2019</b> ,		1
94	Experimental and numerical investigation of the fatigue behaviour and crack evolution mechanism of granite under ultra-high-frequency loading. <b>2020</b> , 7, 200091		11
93	Progressive Damage of a Canadian Granite in Laboratory Compression Tests and Underground Excavations. <b>2021</b> , 11, 10		2

92	PHYSICAL PARAMETERS, TENSILE AND COMPRESSIVE STRENGTH OF DOLOMITE ROCK SAMPLES: INFLUENCE OF GRAIN SIZE. <b>2020</b> , 26, 789-799		3
91	On the incorporation of class F fly-ash to enhance the geopolymerization effects and splitting tensile strength of the gold mine tailings-based geopolymer. <b>2021</b> , 308, 125112		7
90	A mathematical model for impermeable porous media under thermomechanical loads. <i>Keldysh Institute Preprints</i> , <b>2017</b> , 1-34	0.3	3
89	Mathematical modelling of thermomechanical behaviour of impermeable porous media. <i>Keldysh Institute Preprints</i> , <b>2018</b> , 1-23	0.3	
88	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 303-326		
87	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 150-174		
86	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 459-474		
85	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 19-20		
84	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 196-218		
83	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 301-302		
82	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 21-52		
81	Introduction. <b>2019</b> , 1-18		
80	Acknowledgements. <b>2019</b> , xv-xv		
79	Soils and Sediments. <b>2019</b> , 121-122		
78	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 327-353		
77	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 97-120		
76	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 175-195		
75	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 245-246		

74	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 410-429		
73	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 123-149		
72	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 381-409		
71	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 75-96		
70	Earth Science for Civil and Environmental Engineers. <b>2019</b> , xi-xiv		
69	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 354-380		
68	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 247-274		
67	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 455-458		
66	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 53-74		
65	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 275-300		
64	Earth Science for Civil and Environmental Engineers. <b>2019</b> , 219-244		
63	Mathematical Simulation of Thermomechanics in an Impermeable Porous Medium. <i>Herald of the Bauman Moscow State Technical University, Series Natural Sciences</i> , <b>2020</b> , 4-23	0.8	0
62	The Continuum Voronoi Block Model for simulation of fracture process in hard rocks. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> ,	4	1
61	Modeling the behavior of a coal pillar rib using Bonded Block Models with emphasis on ground-support interaction. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2021</b> , 148, 104965	6	0
60	Effect of Heterogeneity in Micro-Structure and Micro-Strength on the Discrepancies Between Direct and Indirect Tensile Tests on Brittle Rock. <i>Rock Mechanics and Rock Engineering</i> , 1	5.7	0
59	Microstructural origins of crushing strength for inherently anisotropic brittle materials. <i>International Journal of Solids and Structures</i> , <b>2022</b> , 238, 111399	3.1	0
58	Discrete element simulation of effects of multicontact loading on single particle crushing. <i>Particuology</i> , <b>2022</b> , 69, 49-60	2.8	0
57	Effects of Gravel Size and Content on the Mechanical Properties of Conglomerate. <i>Rock Mechanics and Rock Engineering</i> , 1	5.7	0

56	Thermal Cracking in Granite During a Heating/Cooling Cycle up to 1000°C: Laboratory Testing and Real-Time Simulation. <i>Rock Mechanics and Rock Engineering</i> , <b>2022</b> , 55, 1411	5.7	1
55	A breakable grain-based model for bi-modular rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2022</b> , 151, 105028	6	0
54	Experimental and Numerical Investigations of Cerchar Scratching Rock Interaction. <i>International Journal of Geomechanics</i> , <b>2022</b> , 22,	3.1	
53	Crack propagation in jointed rock and its effect on rock macrofracture resistance: insights from discrete element analysis. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2022</b> , 8, 1	3.8	2
52	Evolutionary Analysis of Heterogeneous Granite Microcracks Based on Digital Image Processing in Grain-Block Model.. <i>Materials</i> , <b>2022</b> , 15,	3.5	0
51	Challenges associated with numerical back analysis in rock mechanics. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , <b>2022</b> ,	5.3	1
50	Classification and Characterization of Tire-Road Wear Particles in Road Dust by Density.. <i>Polymers</i> , <b>2022</b> , 14,	4.5	2
49	The role of discontinuities in the susceptibility, development, and runout of rock avalanches: a review. <i>Landslides</i> ,	6.6	1
48	Quantitative investigation on the heterogeneity of deformation fields in sandstone pre-existing cracks during damage evolution.. <i>Scientific Reports</i> , <b>2022</b> , 12, 5951	4.9	0
47	Experimental and numerical investigations on tensile mechanical properties and fracture mechanism of granite after cyclic thermal shock. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2022</b> , 8, 1	3.8	0
46	Breaking down chipping and fragmentation in sediment transport: the control of material strength. <i>Earth Surface Dynamics</i> , <b>2021</b> , 9, 1531-1543	3.8	0
45	Discrete Element Bonded-Block Models for Detailed Analysis of Masonry. <i>Infrastructures</i> , <b>2022</b> , 7, 31	2.6	0
44	Data_Sheet_1.pdf. <b>2020</b> ,		
43	Microscale deformation behavior of sandstone mineral particles based on XCT scanning. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2022</b> , 32, 1261-1276	3.3	
42	Effect of Heterogeneity on the Extension of Ubiquitiformal Cracks in Rock Materials. <i>Fractal and Fractional</i> , <b>2022</b> , 6, 317	3	0
41	A Flexible Particle Model for Rock Fracture: Validation and Assessment of the Influence of Deformability on the Macroscopic Response. <i>Geotechnics</i> , <b>2022</b> , 2, 523-549		
40	Fracture Characteristics of Sliding Crack in Brittle Rock: Analysis Based on an Improved Equivalent Crack Model. <i>Frontiers in Earth Science</i> , 10,	3.5	0
39	Numerical Investigation of the Scale Effects of Rock Bridges. <i>Rock Mechanics and Rock Engineering</i> ,	5.7	0



- 38 Simulation of Brittle Failure Around Canada's Mine-By Experiment Tunnel Using 2D Continuum-Based Voronoi Tessellated Models. *Rock Mechanics and Rock Engineering*, 5-7 ○
- 37 Investigation into Rock Breakage with Expansive Cement Under Biaxial Confinement. *Rock Mechanics and Rock Engineering*, 5-7 ○
- 36 Reconstruction of 3D Shapes of Granite Minerals and Generation of Random Numerical Specimens. **2022**, 2022, ○
- 35 Analysis of Extent of Deformation Range and Failure Characteristics of Rocks Surrounding a Tunnel Crossing Fault Zone Based on FDEM. **2022**, 2022, 1-12 ○
- 34 Effect of the mineral spatial distribution heterogeneity on the tensile strength of granite: Insights from PFC3D-GBM numerical analysis. **2022**, ○
- 33 Numerical reproduction and prediction of rock failure behavior: From short term to long term. **2022**, 151, 104971 ○
- 32 Strength estimation of granular rocks using a microstructure-based empirical model. **2022**, 142, 106761 ○
- 31 Quantification analysis of geometric characteristics of micro crack network on fault rock surface. **2022**, 81, ○
- 30 The theory of compression-shear coupled composite wave propagation in rock. ○
- 29 Temperature damage regularity of granite based on micro-inhomogeneity. 10, ○
- 28 Effect of the crystal habit on micromechanical extensile behaviors of the crystalline rock during compression. **2022**, 106874 ○
- 27 Investigation of the Influence of Grain-Scale Heterogeneity on Strainburst Proneness Using Rock-Like Material. ○
- 26 A multilevel parallel bonded-grain based model (Multi Pb-GBM) accounting for microstructure failures of typical crystalline rocks. **2022**, 81, ○
- 25 Microstructure-based Modelling of Hydraulic Fracturing in silicified metamorphic rock using the Cohesive Element Method. **2022**, 108912 ○
- 24 FDEM numerical study on the mechanical characteristics and failure behavior of heterogeneous rock based on the Weibull distribution of mechanical parameters. **2023**, 154, 105138 ○
- 23 The Influence of Grain Size Distribution on Mechanical Compaction and Compaction Localization in Porous Rocks. **2022**, 127, ○
- 22 Characteristics of the Fracture Process Zone for Reservoir Rock with Various Heterogeneity. **2022**, 15, 8332 ○
- 21 Mechanism of excavation-induced cracking of the protective layer of a rock bench in a large underground powerhouse under high tectonic stress. **2023**, 312, 106951 ○

20	Grain-scale numerical simulation of crystalline rock fracturing using Soundless Cracking Demolition Agents for in-situ preconditioning. <b>2023</b> , 155, 105187	0
19	Evaluating Size Effects for a Porous, Weak, Homogeneous Limestone.	0
18	Application of the FDEM Based on the CZM in Simulating Three-Point Bending Test of Frozen Soil. <b>2022</b> , 13, 2083	0
17	Numerical Investigation of Fracture Morphology Characteristics in Heterogeneous Reservoirs. <b>2022</b> , 10, 2604	1
16	Mixed-mode fracture of compacted tailing soils. II: Crack properties from full-field displacement fields. <b>2022</b> , 103707	0
15	Numerical Simulation of Thermally Stressed Core Samples. <b>2023</b> , 371-388	0
14	Computed Tomography Observation and Image-Based Simulation of Fracture Propagation in Compressed Coal. <b>2023</b> , 16, 260	0
13	Effect of water saturation on dynamic behavior of sandstone after wetting-drying cycles. <b>2023</b> , 319, 107105	0
12	A three-dimensional grain-based model for studying the microscopic fracture behaviour of granite. <b>2023</b> , 159, 105427	0
11	Experimental and numerical study on the dynamic behavior of a transversely isotropic rock. <b>2023</b> , 314, 107016	0
10	Quantitative Evaluation of the Effects of Input Parameter Heterogeneity on Model Behavior for Bonded Block Models of Laboratory Rock Specimens.	0
9	Rapid intelligent evaluation method and technology for determining engineering rock mass quality. <b>2023</b> , 2, 100038	0
8	Inverse analysis of micro-mechanical parameters of rock-forming minerals based on nano-indentation technology. <b>2023</b> , 98, 055003	0
7	Effect of bedding dip angle and dynamic load on spatial variation of microscopic failure stress of shale. <b>2023</b> , 13,	0
6	Discrete Element Study on Bending Resistance of Geogrid Reinforced Cement-Treated Sand. <b>2023</b> , 16, 2636	0
5	Creep Behavior and Associated Acoustic Characteristics of Heterogeneous Granite Containing a Single Pre-existing Flaw Using a Grain-Based Parallel-Bonded Stress Corrosion Model.	0
4	Analysis of Rock-Breaking Mechanism and Drillstring Dynamics of an Innovative Multi-Ridge-Curve-Shaped PDC Cutter.	0
3	Pseudo-discontinuum model to simulate hard-rock mine pillars. <b>2023</b> , 11, 81-95	0

2 Geometric form changes of soil quartz minerals under Freeze-thaw weathering. **2023**, 320, 107133 ○

1 ??????????????????. **2023**, 48, 1603 ○