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## A bonded-particle model for rock

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2293	Innovative laboratory testing. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2004</b> , 41, 1427-1445	6	80
2292	Nuclear waste disposal and rock mechanics: contributions of the Underground Research Laboratory (URL), Pinawa, Manitoba, Canada. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2004</b> , 41, 1221-1227	6	26
2291	Developing tools for excavation design at Canada's Underground Research Laboratory. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2004</b> , 41, 1229-1249	6	7
2290	Quantification and interpretation of seismicity. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2004</b> , 41, 1317-1327	6	46
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2286	Analyse de la rupture dynamique du béton par un modèle discret. <b>2006</b> , 10, 1281-1308		4
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2283	Discrete Element Simulations of the Compaction of Aggregated Ceramic Powders. <b>2006</b> , 89, 3379-3387		59
2282	Hybrid discrete element/finite element method for fracture analysis. <b>2006</b> , 195, 4579-4593		59
2281	A Simple Method for Analysis of Point Anchored Rockbolts in Circular Tunnels in Elastic Ground. <b>2006</b> , 39, 315-338		20
2280	Comparison of Numerical and Physical Models for Understanding Shear Fracture Processes. <b>2006</b> , 163, 1153-1174		3
2279	Shear banding in drained and undrained triaxial tests on a saturated sandstone: Porosity and permeability evolution. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2006</b> , 43, 292-310	6	61
2278	A review of the state of the art in modelling progressive mechanical breakdown and associated fluid flow in intact heterogeneous rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2006</b> , 43, 1001-1022	6	64
2277	Static and dynamic stability analysis using 3D-DDA with incision body scheme. <b>2006</b> , 5, 273-283		23

2276	Localisation of normal faults in multilayer sequences. <b>2006</b> , 28, 816-833	119
2275	Laboratory and numerical investigation into the characteristics of rock fragmentation. <b>2006</b> , 19, 1418-1429	55
2274	A study on the effects of microparameters on macroproperties for specimens created by bonded particles. <b>2006</b> , 23, 607-631	119
2273	A new discrete fracture modelling approach for rock masses. <b>2007</b> , 57, 757-766	27
2272	Chapter 4 The Principles of Single-Particle Crushing. <b>2007</b> , 12, 117-225	6
2271	Rock physics and geomechanics in the study of reservoirs and repositories. <b>2007</b> , 284, 1-14	2
2270	Validation of a synthetic rock mass model using excavation induced microseismicity. <b>2007</b> , 365-369	6
2269	PFC modeling of rock cutting under high pressure conditions. <b>2007</b> , 511-518	10
2268	Advanced characterization and numerical simulation of indentation induced damage in hard sandstone. <b>2007</b> , 647-653	
2267	The Application of Stress Corrosion Cracking to Time-dependent Shale Stability. <b>2007</b> ,	2
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2265	Computational Fracture Mechanics. <b>2007</b> ,	2
2264	Nature of stress accommodation in sheared granular material: Insights from 3D numerical modeling. <b>2007</b> , 259, 469-485	62
2263	Discrete Element Modeling of Masonry Structures. <b>2007</b> , 1, 190-213	285
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2260	Two-dimensional distinct element modeling of the structure and growth of normal faults in multilayer sequences: 1. Model calibration, boundary conditions, and selected results. <b>2007</b> , 112,	41
2259	Two-dimensional distinct element modeling of the structure and growth of normal faults in multilayer sequences: 2. Impact of confining pressure and strength contrast on fault zone geometry and growth. <b>2007</b> , 112,	30

2258	Particle simulation of spontaneous crack generation problems in large-scale quasi-static systems. <b>2007</b> , 69, 2302-2329		37
2257	Discrete element method for modelling solid and particulate materials. <b>2007</b> , 70, 379-404		131
2256	An upscale theory of particle simulation for two-dimensional quasi-static problems. <b>2007</b> , 72, 397-421		17
2255	On the relative use of micro-mechanical lattice analysis of 3-phase particle composites. <b>2007</b> , 74, 1174-1189		35
2254	Mechanical degradation of emplacement drifts at Yucca Mountain: A modeling case study. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2007</b> , 44, 368-399	6	43
2253	FLAC/PFC coupled numerical simulation of AE in large-scale underground excavations. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2007</b> , 44, 550-564	6	251
2252	Simulating stress corrosion with a bonded-particle model for rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2007</b> , 44, 677-691	6	182
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2250	Lamb's problem with the lattice model Mka3D. <b>2007</b> , 171, 857-864		15
2249	Use of rock mechanical properties to predict the Bond crushing index. <b>2007</b> , 20, 662-669		12
2248	Phenomenological modelling of crack generation in brittle crustal rocks using the particle simulation method. <b>2007</b> , 29, 1034-1048		20
2247	Discrete Element Methods for Granular Materials. <b>2007</b> , 85, 399-444		27
2246	The 2003 Canadian Geotechnical Colloquium: Mechanistic interpretation and practical application of damage and spalling prediction criteria for deep tunnelling. <b>2007</b> , 44, 1082-1116		320
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2244	Discrete 3D model as complimentary numerical testing for anisotropic damage. <b>2007</b> , 148, 115-128		30
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2242	Effects of model scale and particle size on micro-mechanical properties and failure processes of rocks: A particle mechanics approach. <b>2007</b> , 31, 458-472		114
2241	Measurement of fracture toughness using the distinct element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2007</b> , 44, 449-456	6	31

2240	Application of experimental design and optimization to PFC model calibration in uniaxial compression simulation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2007</b> , 44, 871-889 <sup>6</sup>	6	313
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2238	Simulating excavation damaged zone around a circular opening under hydromechanical conditions. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2008</b> , 45, 815-830	6	52
2237	Modeling Wing Crack Extension: Implications for the Ingredients of Discrete Element Model. <b>2008</b> , 165, 609-620		38
2236	DEM analysis of bonded granular geomaterials. <b>2008</b> , 32, 1997-2031		118
2235	Particle simulation of spontaneous crack generation associated with the laccolithic type of magma intrusion processes. <b>2008</b> , 75, 1172-1193		31
2234	Effective simulation of flexible lateral boundaries in two- and three-dimensional DEM simulations. <b>2008</b> , 6, 483-500		76
2233	Discrete particle simulation of particulate systems: A review of major applications and findings. <b>2008</b> , 63, 5728-5770		1006
2232	Modified generalized beam lattice model associated with fracture of reinforced fiber/particle composites. <b>2008</b> , 50, 132-141		11
2231	Influence of aggregate deformation and contact behaviour on discrete particle modelling of fracture of concrete. <b>2008</b> , 75, 1569-1586		34
2230	Interpretations on how the macroscopic mechanical behavior of sandstone affected by microscopic properties Revealed by bonded-particle model. <b>2008</b> , 99, 1-10		76
2229	Study of polycrystalline Al <sub>2</sub> O <sub>3</sub> machining cracks using discrete element method. <b>2008</b> , 48, 975-982		58
2228	Numerical modelling of uniaxial compressive failure of granite with and without saline porewater. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2008</b> , 45, 1126-1142	6	34
2227	Numerical simulation of blasting-induced rock fractures. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2008</b> , 45, 966-975	6	243
2226	Development of a shear zone in brittle rock subjected to direct shear. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2008</b> , 45, 1335-1346	6	72
2225	A coefficient of restitution of rock materials. <b>2008</b> , 34, 339-350		57
2224	Fragmentation processes in impact of spheres. <b>2008</b> , 77, 051302		88
2223	A discrete element model for the development of compaction localization in granular rock. <b>2008</b> , 113,		51

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2220	Intrinsic Length Scales in Tool-Rock Interaction. <b>2008</b> , 8, 39-44	63
2219	Influences of Microscopic Factors on Macroscopic Strength and Stiffness of Inter-Layered Rocks $\square$ Revealed by a Bonded Particle Model. <b>2008</b> , 24, 379-389	5
2218	Effective properties of shear band structures in rock at different length scales. <b>2008</b> , 3, 953-968	1
2217	The Applicability of Distinct Element Modeling for Rock Fracture. <b>2008</b> , 124, 777-784	4
2216	Modeling of Agglutinates and its Mechanical Properties. <b>2008</b> ,	
2215	Application of a recycling Krylov subspace strategy for discrete element method applied to brittle crack problems. <b>2009</b> , 18, 647-667	
2214	Distinct element modelling of the material removal process in conventional and Laser Assisted Machining of silicon nitride ceramics. <b>2009</b> , 4, 74	4
2213	DEM Study of a Shallow Foundation under Vertical Loading. <b>2009</b> ,	3
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2210	Numerical Simulation of Seismicity Induced by Hydraulic Fracturing in Naturally Fractured Reservoirs. <b>2009</b> ,	12
2209	Dike-induced deformation and Martian graben systems. <b>2009</b> , 185, 1-11	23
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2203	Numerical investigation of crack growth in concrete subjected to compression by the generalized beam lattice model. <b>2009</b> , 43, 277-295		24
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2201	An efficient method for packing polygonal domains with disks for 2D discrete element simulation. <b>2009</b> , 36, 568-576		8
2200	The impact of porosity and crack density on the elasticity, strength and friction of cohesive granular materials: Insights from DEM modelling. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2009</b> , 46, 250-261	6	191
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2191	Modeling Lac du Bonnet granite using a discrete element model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2009</b> , 46, 1124-1135	6	113
2190	Discrete element method (DEM) modeling of fracture and damage in the machining process of polycrystalline SiC. <b>2009</b> , 29, 1029-1037		117
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2098	An experimental and numerical study of fracture coalescence in pre-cracked specimens under uniaxial compression. <b>2011</b> , 48, 979-999		445
2097	Modelling rock fracturing and blast-induced rock mass failure via advanced discretisation within the discontinuous deformation analysis framework. <b>2011</b> , 38, 40-49		144

2096	Face stability analysis of shallow shield tunnels in dry sandy ground using the discrete element method. <b>2011</b> , 38, 187-195		136
2095	Dynamic simulation of crack initiation and propagation in cross-ply laminates by DEM. <b>2011</b> , 71, 1410-1418		26
2094	Assessing the integrity of fault- and top seals at CO2 storage sites. <b>2011</b> , 4, 4798-4805		13
2093	Computational simulation of frictional drill-bit movement in cemented granular materials. <b>2011</b> , 47, 877-885		8
2092	Discrete element analysis of the effect of pore size and pore distribution on the mechanical behavior of rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2011</b> , 48, 77-85	6	46
2091	Numerical simulation of rock cutting using the discrete element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2011</b> , 48, 434-442	6	141
2090	The synthetic rock mass approach for jointed rock mass modelling. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2011</b> , 48, 219-244	6	296
2089	Numerical simulation of compressive failure of heterogeneous rock-like materials using SPH method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2011</b> , 48, 353-363	6	82
2088	The distinct element analysis for hydraulic fracturing in hard rock considering fluid viscosity and particle size distribution. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2011</b> , 48, 712-727 <sup>6</sup>		225
2087	Application of Taguchi methods to DEM calibration of bonded agglomerates. <b>2011</b> , 210, 230-240		67
2086	Numerical Modelling of Damage Progression in Single-Fiber Composite under Axial Tension. <b>2011</b> , 268-270, 280-285		
2085	Research on Rock Burst Loading Test and PFC3D Numerical Simulation. <b>2011</b> , 243-249, 3012-3020		1
2084	Influence of Loading Rate on Uniaxial Compression Test of Rock Specimen with Random Joints. <b>2011</b> , 396-398, 217-220		
2083	Numerical Simulation Study on Size Effect of Dynamic Properties of Coarse Materials. <b>2011</b> , 368-373, 2749-2754		
2082	HIGH ROCK SLOPE STABILITY ANALYSIS USING THE ENRICHED MESHLESS SHEPARD AND LEAST SQUARES METHOD. <b>2011</b> , 08, 209-228		46
2081	Numerical Analysis on Failure Mechanism of Intermittent Joints. <b>2011</b> , 255-260, 113-117		1
2080	Numerical Study on Effects of Rock Bridge Angle in Uniaxial Compression Test. <b>2011</b> , 137, 140-143		
2079	Numerical Simulation on Combined Deformation of Tip-Loaded Cantilever Beam with Particle Flow Code. <b>2011</b> , 378-379, 31-34		

2078	Fracture network engineering for hydraulic fracturing. <b>2011</b> , 30, 844-853	16
2077	Particle-Based Discrete Element Modeling: Geomechanics Perspective. <b>2011</b> , 11, 449-464	131
2076	Determination of reactional cutting forces on a circular sawblade machine by using experimental studies and numerical modelling. <b>2012</b> , 226, 775-784	9
2075	PFC/FLAC Coupled Numerical Simulation of Excavation Damage Zone in Deep Schist Tunnel. <b>2012</b> , 236-237, 622-626	3
2074	Numerical Simulation of Meso-Mechanism of Liquefaction in Saturated Stratified Silty Sands. <b>2012</b> , 601, 222-226	
2073	Geomechanical modeling of rock fracturing and associated microseismicity. <b>2012</b> , 31, 1348-1354	10
2072	Discrete-element model for the interaction between ocean waves and sea ice. <b>2012</b> , 85, 016703	14
2071	Characterization and DEM Modeling of Shear Zones at a Large Dam Foundation. <b>2012</b> , 12, 648-664	24
2070	DEM Analysis of Stresses and Deformations of Geogrid-Reinforced Embankments over Piles. <b>2012</b> , 12, 340-350	106
2069	A MLS-BASED LATTICE SPRING MODEL FOR SIMULATING ELASTICITY OF MATERIALS. <b>2012</b> , 09, 1250037	12
2068	A Discrete Element Approach to Model Breakable Railway Ballast. <b>2012</b> , 7,	16
2067	Evaluation of Crushing Performance of Concrete Blocks by Mobile Crusher using Distinct Element Method. <b>2012</b> , 68, I_455-I_466	1
2066	Distinct Element Analysis for Mechanical Behavior in HLW Disposal Tunnel Considering Pre-existing Cracks. <b>2012</b> , 68, I_477-I_486	
2065	An energy-preserving Discrete Element Method for elastodynamics. <b>2012</b> , 46, 1527-1553	9
2064	Simulation of progressive failure in slope using distinct element method with the gravity increased procedure. <b>2012</b> , 339-344	
2063	A three-dimensional stochastic granule model with real shapes and numerical simulation of rockfill behavior. <b>2012</b> , 371-376	
2062	Application of Data Mining techniques for the development of new geomechanical characterization models for rock masses. <b>2012</b> , 257-276	8
2061	Recent developments and future trends in distinct element methods UDEC/3DEC and PFC codes. <b>2012</b> , 29-42	5

2060	Does ultra-mild wear play any role for dry friction applications, such as automotive braking?. <b>2012</b> , 156, 159-71; discussion 197-215		9
2059	The brittle-ductile transition in porous rock: A review. <b>2012</b> , 44, 25-53		325
2058	Engineering Hydraulic Treatment of Existing Fracture Networks. <b>2012</b> ,		1
2057	Strength characterization of rock masses, using a coupled DEM-DFN model. <b>2012</b> , 191, 467-480		37
2056	Geomechanical modeling of stress and strain evolution during contractional fault-related folding. <b>2012</b> , 576-577, 171-196		56
2055	Understanding the Soil Contact Problem for the LWD and Static Drum Roller by Using the DEM. <b>2012</b> , 138, 124-132		8
2054	Micromechanical model of weakly-cemented sediments. <b>2012</b> , 36, 944-958		6
2053	The influence of particle orientation on the loading condition of pebbles in fluvial gravel. <b>2012</b> , 14, 639		4
2052	A discrete model for simulating shear strength and deformation behaviour of rockfill material, considering the particle breakage phenomenon. <b>2012</b> , 14, 707-717		42
2051	Two-dimensional discrete element modelling of bender element tests on an idealised granular material. <b>2012</b> , 14, 733-747		32
2050	Numerical analysis of confinement effect on crack propagation mechanism from a flaw in a pre-cracked rock under compression. <b>2012</b> , 28, 1389-1397		64
2049	Numerical modelling of circular sawing system using discrete element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2012</b> , 55, 86-96	6	10
2048	Relationship between the deformation characteristics and microscopic properties of sandstone explored by the bonded-particle model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2012</b> , 56, 34-43	6	28
2047	Deformation bands in porous carbonate grainstones: Field and laboratory observations. <b>2012</b> , 45, 137-157		75
2046	Meso-scale particle modeling of concrete deterioration caused by alkali-aggregate reaction. <b>2012</b> , 37, n/a-n/a		3
2045	Macro- and Micro-Scale Effects of Pluviation Based Sample Preparation in DEM. <b>2012</b> ,		1
2044	Simulation of the elastic properties of porous ceramics with realistic microstructure. <b>2012</b> , 20, 045009		21
2043	Progress and challenges in some areas of deep mining. <b>2012</b> , 121, 177-191		18

2042	Scale effects in rockfill behaviour. <b>2012</b> , 2, 155-160	47
2041	Discrete element modelling of a flexible membrane for triaxial testing of granular material at high pressures. <b>2012</b> , 2, 199-203	38
2040	3D assessment of fracture of sand particles using discrete element method. <b>2012</b> , 2, 161-166	85
2039	Characterization of artificial spherical particles for DEM validation studies. <b>2012</b> , 10, 209-220	40
2038	Simulation of the toughness of partially sintered ceramics with realistic microstructures. <b>2012</b> , 60, 4685-4694	22
2037	Influence of flaw inclination angle and loading condition on crack initiation and propagation. <b>2012</b> , 49, 2482-2499	133
2036	Implementation of a high order lattice spring model for elasticity. <b>2012</b> , 49, 2568-2581	24
2035	Discrete element modeling of boudinage: Insights on rock rheology, matrix flow, and evolution of geometry. <b>2012</b> , 117, n/a-n/a	38
2034	Modeling of stress-dependent static and dynamic moduli of weak sandstones. <b>2012</b> , 117, n/a-n/a	8
2033	A discrete element model predicting the strength of ballast stones. <b>2012</b> , 108-109, 3-13	45
2032	Discrete element modelling of the quasi-static uniaxial compression of individual infant formula agglomerates. <b>2012</b> , 10, 523-531	10
2031	An elasto-plastic constitutive model incorporating strain softening and dilatancy for interface thin-layer element and its verification. <b>2012</b> , 19, 1988-1998	1
2030	A Bonded Particle Model Simulation of Shear Strength and Asperity Degradation for Rough Rock Fractures. <b>2012</b> , 45, 649	96
2029	A Study of the Failure Mechanism of Planar Non-Persistent Open Joints Using PFC2D. <b>2012</b> , 45, 677	81
2028	A Lattice Spring Model for Coupled Fluid Flow and Deformation Problems in Geomechanics. <b>2012</b> , 45, 781-799	15
2027	Modeling Particle Rolling Behavior by the Modified Eccentric Circle Model of DEM. <b>2012</b> , 45, 851	7
2026	Discrete Element Modeling of Drop Tests. <b>2012</b> , 45, 863	4
2025	Vector-based model of elastic bonds for simulation of granular solids. <b>2012</b> , 86, 051301	17



2024	Y-Geo: New Combined Finite-Discrete Element Numerical Code for Geomechanical Applications. <b>2012</b> , 12, 676-688		210
2023	The Hungtsaiping landslides: from ancient to recent. <b>2012</b> , 9, 205-214		14
2022	DEM-Simulation des schiefen Stoßvorgangs modellierter Granulate. <b>2012</b> , 84, 272-278		
2021	Modeling rock failure using the numerical manifold method followed by the discontinuous deformation analysis. <b>2012</b> , 28, 760-773		11
2020	Discrete element method to simulate continuous material by using the cohesive beam model. <b>2012</b> , 213-216, 113-125		120
2019	Frictional crack initiation and propagation analysis using the numerical manifold method. <b>2012</b> , 39, 38-53		221
2018	Characteristics of the unloading process of rocks under high initial stress. <b>2012</b> , 45, 83-92		73
2017	Breaking processes in three-dimensional bonded granular materials with general shapes. <b>2012</b> , 183, 266-277		80
2016	Simulating fracture and friction of Aue granite under confined asymmetric compressive test using clumped particle model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2012</b> , 49, 68-83	6	82
2015	Modelling progressive failure in fractured rock masses using a 3D discrete element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2012</b> , 52, 18-30	6	163
2014	Particle mechanics model for the effects of shear on solute retardation coefficient in rock fractures. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2012</b> , 52, 92-102	6	44
2013	Comparative study of different discrete element models and evaluation of equivalent micromechanical parameters. <b>2012</b> , 49, 1497-1517		78
2012	Application of the Discrete Element Method to crack propagation and crack branching in a vitreous dense biopolymer material. <b>2012</b> , 49, 1893-1899		22
2011	A statistical damage constitutive model for softening behavior of rocks. <b>2012</b> , 143-144, 1-17		133
2010	Development and applications of the elasto-plastic cellular automaton. <b>2012</b> , 25, 126-143		15
2009	Determining parameters of a discrete element model for soil/rock interaction. <b>2012</b> , 118, 117-122		66
2008	Mode I crack in an elasto-perfectly plastic material under pore water pressure of a finite medium. <b>2012</b> , 57, 31-35		3
2007	Possible impacts of third body nanostructure on friction performance during dry sliding determined by computer simulation based on the method of movable cellular automata. <b>2012</b> , 48, 128-136		40

2006	Numerical investigation of the breakage of bonded agglomerates during impact. <b>2012</b> , 217, 304-314	39
2005	Simulating fracture propagation in rock and concrete by an augmented virtual internal bond method. <b>2012</b> , 36, 459-482	23
2004	Relating discrete element method parameters to rock properties using classical and micropolar elasticity theories. <b>2012</b> , 36, 1350-1367	7
2003	Simulation of the sliding process of Donghekou landslide triggered by the Wenchuan earthquake using a distinct element method. <b>2012</b> , 65, 1049-1054	48
2002	3D numerical modelling of bit-rock fracture mechanisms in percussive drilling with a multiple-button bit. <b>2013</b> , 37, 309-324	31
2001	LBM-DEM modeling of fluid-solid interaction in porous media. <b>2013</b> , 37, 1391-1407	107
2000	A discrete element approach to elastic properties of layered geomaterials. <b>2013</b> , 37, 685-700	3
1999	Influence of damage on pore size distribution and permeability of rocks. <b>2013</b> , 37, 810-831	44
1998	Coupled Simulation of Seismic Wave Propagation and Failure Phenomena by Use of an MPS Method. <b>2013</b> , 170, 561-570	3
1997	Using the discrete element method to simulate brittle fracture in the indentation of a silica glass with a blunt indenter. <b>2013</b> , 265, 136-147	72
1996	The mechanism of the 1941 Tsaoling landslide, Taiwan: insight from a 2D discrete element simulation. <b>2013</b> , 70, 1005-1019	31
1995	Microparameter Prediction for a Triaxial Compression PFC3D Model of Rock Using Full Factorial Designs and Artificial Neural Networks. <b>2013</b> , 31, 1249-1259	10
1994	Influence of Features of Interphase Boundaries on Mechanical Properties and Fracture Pattern in Metal-Ceramic Composites. <b>2013</b> , 29, 1025-1034	28
1993	Multiscale Simulation of Agglomerate Breakage in Fluidized Beds. <b>2013</b> , 52, 11275-11281	44
1992	The evolution of rock failure with discontinuities due to shear creep. <b>2013</b> , 8, 567-581	41
1991	Micromechanical assessment of an internal stability criterion. <b>2013</b> , 8, 81-90	67
1990	Modelling and simulation of stamp-charged coke making by 2-D discrete element method. <b>2013</b> , 24, 1039-1047	7
1989	Stability Analysis of the 19A Ore Pass at Brunswick Mine Using a Two-Stage Numerical Modeling Approach. <b>2013</b> , 46, 1323-1338	10

1988	Constraints on the Sealing Capacity of Faults with Clay Smears from Discrete Element Models Validated by Laboratory Experiments. <b>2013</b> , 46, 465-478		5
1987	Computational modeling of free-surface slurry flow problems using particle simulation method. <b>2013</b> , 20, 1653-1660		5
1986	Numerical direct shear tests to model the shear behaviour of rock joints. <b>2013</b> , 51, 101-115		159
1985	A discontinuum-based model to simulate compressive and tensile failure in sedimentary rock. <b>2013</b> , 5, 378-388		23
1984	Discrete element approach in brittle fracture mechanics. <b>2013</b> , 30, 263-276		9
1983	Numerical method for the determination of contact areas of a rock joint under normal and shear loads. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 58, 8-22	6	77
1982	Coupled discrete element modeling of fluid injection into dense granular media. <b>2013</b> , 118, 2703-2722		48
1981	Numerical investigation of the effect of joint geometrical parameters on the mechanical properties of a non-persistent jointed rock mass under uniaxial compression. <b>2013</b> , 49, 206-225		219
1980	Three-dimensional discrete element modeling of micromechanical bending tests of ceramic/polymer composite materials. <b>2013</b> , 248, 77-83		10
1979	Modeling nanoindentation of TiCCaPON coating on Ti substrate using movable cellular automaton method. <b>2013</b> , 76, 89-98		15
1978	A numerical study of the scale effect in coal strength. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 63, 62-71	6	54
1977	The contribution of DEM to the science of comminution. <b>2013</b> , 248, 3-24		206
1976	Dynamic process analysis for the formation of Yangjiagou landslide-dammed lake triggered by the Wenchuan earthquake, China. <b>2013</b> , 10, 331-342		70
1975	Tensile strength and toughness of partially sintered ceramics using discrete element simulations. <b>2013</b> , 103, 132-140		6
1974	Green strength of binder-free ceramics. <b>2013</b> , 33, 975-984		23
1973	Approach to failure in porous granular materials under compression. <b>2013</b> , 88, 062207		43
1972	The orientation and dilatancy of shear bands in a bonded particle model for rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 57, 75-88	6	28
1971	Modelling soil-sweep interaction with discrete element method. <b>2013</b> , 134, 223-231		48

1970	Modeling the anisotropic behavior of jointed rock mass using a modified smooth-joint model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 62, 14-22	6	61
1969	Two-dimensional discrete element simulations of the fracture behaviour of slate. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 61, 161-170	6	36
1968	Process zone and size effect in fracture testing of rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 60, 95-102	6	43
1967	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
1966	Kinematics and internal deformation of granular slopes: insights from discrete element modeling. <b>2013</b> , 10, 139-160		19
1965	Three-dimensional failure envelopes and the brittle-ductile transition. <b>2013</b> , 118, 1378-1392		30
1964	Diverse calving patterns linked to glacier geometry. <b>2013</b> , 6, 833-836		88
1963	Two-Dimensional Discrete Damage Models: Discrete Element Methods, Particle Models, and Fractal Theories. <b>2013</b> , 1-27		
1962	Microscopic modelling of the hydraulic fracturing process. <b>2013</b> , 68, 1169-1186		39
1961	A method to design microtunnelling installations in randomly cemented Torino alluvial soil. <b>2013</b> , 33, 73-81		22
1960	Failure Process of Brittle Rock Using Smoothed Particle Hydrodynamics. <b>2013</b> , 139, 1551-1565		27
1959	A distinct element method for large scale simulations of carbon nanotube assemblies. <b>2013</b> , 61, 762-782		49
1958	Setting up virgin stress conditions in discrete element models. <b>2013</b> , 48, 228-248		22
1957	Application of the discrete element method for modeling of rock crack propagation and coalescence in the step-path failure mechanism. <b>2013</b> , 153, 80-94		102
1956	Discrete element method simulations of analogue reservoir sandstones. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 63, 93-103	6	40
1955	Numerical modeling for the coupled thermo-mechanical processes and spalling phenomena in $\text{E}_p$ Pillar Stability Experiment (APSE). <b>2013</b> , 5, 58-72		12
1954	Investigation into macroscopic and microscopic behaviors of bonded sands using distinct element method. <b>2013</b> , 53, 804-819		30
1953	Discrete element modelling of cutter roof failure in coal mine roadways. <b>2013</b> , 116-117, 158-171		30

1952	Fast determination of meso-level mechanical parameters of PFC models. <b>2013</b> , 23, 157-162		8
1951	Discrete crack model for simulating rock comminution processes with the Discrete Element Method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 60, 125-133	6	15
1950	Numerical simulation of acoustic emission in brittle rocks by two-dimensional finite-discrete element analysis. <b>2013</b> , 195, 423-443		112
1949	Simulation of Vickers indentation of silica glass. <b>2013</b> , 378, 15-24		30
1948	Numerical study on coalescence of two pre-existing coplanar flaws in rock. <b>2013</b> , 50, 3685-3706		94
1947	Microcrack-based coupled damage and flow modeling of fracturing evolution in permeable brittle rocks. <b>2013</b> , 49, 226-244		74
1946	Simulation of crack formation in an anisotropic coke using discrete element method. <b>2013</b> , 106, 357-364		9
1945	Validation and time step determination of discrete element modeling of flexible fibers. <b>2013</b> , 249, 386-395		43
1944	The impact of a weak horizon on kinematics and internal deformation of a failure mass using discrete element method. <b>2013</b> , 586, 95-111		3
1943	A bonded-particle model for cemented sand. <b>2013</b> , 49, 299-313		101
1942	Adapting granular materials through artificial evolution. <b>2013</b> , 12, 326-31		93
1941	Crack Initiation, Propagation and Coalescence in Rock-Like Material Containing Two Flaws: a Numerical Study Based on Bonded-Particle Model Approach. <b>2013</b> , 46, 1001-1021		223
1940	Gouge Particle Evolution in a Rock Fracture Undergoing Shear: a Microscopic DEM Study. <b>2013</b> , 46, 1461-1479		45
1939	Simulation of the breakage of bonded agglomerates in a ball mill. <b>2013</b> , 237, 286-302		31
1938	Use of a two-dimensional discrete-element line-sink model to gain insight into tunnelling-induced deformations. <b>2013</b> , 63, 791-795		14
1937	Jointed Rock Slopes Stability Analysis Using PFC2D. <b>2013</b> ,		1
1936	Effects of grain size and gradation on the dynamic responses of quartz sands. <b>2013</b> , 59, 1-10		53
1935	Quantifying long-term strength and rock damage properties from plots of shear strain versus volume strain. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 59, 105-110	6	30

1934	Rock failure analysis using smoothed-particle hydrodynamics. <b>2013</b> , 16, 92-99	5
1933	A DEM model for soft and hard rocks: Role of grain interlocking on strength. <b>2013</b> , 61, 352-369	162
1932	A discrete element model for soil-sweep interaction in three different soils. <b>2013</b> , 126, 34-41	90
1931	Towards an understanding of the drilling process for fossil fuel energy: A continuum-discrete approach. <b>2013</b> , 59, 273-283	8
1930	The influence of excavation damaged zone on the mechanical and thermal behavior of cement mortar block around an opening. <b>2013</b> , 17, 1263-1274	4
1929	A simple distinct element modeling of the mechanical behavior of methane hydrate-bearing sediments in deep seabed. <b>2013</b> , 15, 209-220	34
1928	Meshless numerical modeling of brittle-viscous deformation: first results on boudinage and hydrofracturing using a coupling of discrete element method (DEM) and smoothed particle hydrodynamics (SPH). <b>2013</b> , 17, 373-390	35
1927	Elastic-plastic cracking analysis for brittle-ductile rocks using manifold method. <b>2013</b> , 180, 71-91	39
1926	Loading rate effects on cracking behavior of flaw-contained specimens under uniaxial compression. <b>2013</b> , 180, 93-110	120
1925	Discrete element modeling of tool-rock interaction I: rock cutting. <b>2013</b> , 37, 1913-1929	127
1924	Analytical solutions and numerical tests of elastic and failure behaviors of close-packed lattice for brittle rocks and crystals. <b>2013</b> , 118, 71-82	40
1923	Numerical Study of Dynamic Behavior of Concrete by Mesoscale Particle Element Modeling. <b>2013</b> , 595-617	0
1922	Evaluation of valley closure subsidence effects under irregular topographic conditions. <b>2013</b> , 122, 172-183	1
1921	Meso-Mechanical Simulation of Fracture Grouting under Fluid-Solid Coupling Environment and Engineering Applications. <b>2013</b> , 477-478, 485-491	1
1920	A Review on Application of Discrete Element Method in Soil Cutting Process. <b>2013</b> , 444-445, 1477-1482	
1919	3D SPH Modeling of Heterogeneous Materials Failure under Dynamic Loads. <b>2013</b> , 535-536, 553-556	
1918	Porosity and Permeability Change under Stress and Correlation to Rock Texture. <b>2013</b> ,	1
1917	Coupling Calculation of Continuous and Discrete Method. <b>2013</b> , 671-674, 31-34	

1916	A particle based simulation model for glacier dynamics. <b>2013</b> , 7, 1591-1602	48
1915	A 3D generalized rigid particle contact model for rock fracture. <b>2013</b> , 30, 277-300	7
1914	Simulation of Fully Sintering Dental Zirconia Milling Process Based on Discrete Element Method. <b>2013</b> , 568, 49-54	1
1913	Static and dynamic behaviour of compacted sand and clay: Comparison between measurements in Triaxial and Oedometric test systems. <b>2013</b> , 61, 329-340	9
1912	Efficient generation of densely packed convex polyhedra for 3D discrete and finite-discrete element methods. <b>2013</b> , 94, 1-19	7
1911	Applications of Finite/Discrete Element Modeling to Rock Engineering Problems. <b>2013</b> , 13, 565-580	50
1910	Discrete-element modelling of rock breakage using dense random packing agglomerates. <b>2013</b> , 3, 98-102	6
1909	A small laboratory test and discontinuous modeling using DEM on flexural toppling failure of rock slopes. <b>2013</b> , 399-404	
1908	Influence of Particle Geometry on the Simulation of Sand Cutting Process. <b>2013</b> ,	
1907	Numerical estimation of the restitution coefficient for dry and wet agglomerates. <b>2013</b> ,	3
1906	Discrete element modeling of subglacial sediment deformation. <b>2013</b> , 118, 2230-2242	26
1905	WITHDRAWN: Discrete element modelling of cutter roof failure in coal mine roadways. <b>2013</b> ,	1
1904	Fracture patterns in nonplane strain boudinage: Insights from 3-D discrete element models. <b>2013</b> , 118, 1304-1315	14
1903	Extension fracture propagation in rocks with veins: Insight into the crack-seal process using Discrete Element Method modeling. <b>2013</b> , 118, 5236-5251	43
1902	Numerical analyses of the hangingwall failure due to sublevel caving: study case. <b>2013</b> , 4, 201	11
1901	Review of Sand Production Prediction Models. <b>2013</b> , 2013, 1-16	36
1900	Effect of particle shape on mechanical behaviors of rocks: a numerical study using clumped particle model. <b>2013</b> , 2013, 589215	28
1899	Analysis of Seismic Damage of Underground Powerhouse Structure of Hydropower Plants Based on Dynamic Contact Force Method. <b>2014</b> , 2014, 1-13	6

1898	Mechanism of the Donghekou landslide triggered by the 2008 Wenchuan earthquake revealed by discrete element modeling. <b>2014</b> , 14, 1195-1205	27
1897	From fracture to fragmentation: Discrete element modeling. <b>2014</b> , 223, 2369-2382	15
1896	Applications of Discrete Element Method in Modeling of Grain Postharvest Operations. <b>2014</b> , 6, 128-149	64
1895	Numerical Study on Coalescence of Pre-Existing Flaw Pairs in Rock-Like Material. <b>2014</b> , 47, 2087-2105	39
1894	3D random Voronoi grain-based models for simulation of brittle rock damage and fabric-guided micro-fracturing. <b>2014</b> , 6, 506-521	127
1893	Choosing a proper loading rate for bonded-particle model of intact rock. <b>2014</b> , 189, 163-179	53
1892	An algorithm for the grain-level modelling of a dry sand particulate system. <b>2014</b> , 22, 055021	15
1891	Influence of microscale heterogeneity and microstructure on the tensile behavior of crystalline rocks. <b>2014</b> , 119, 5324-5341	73
1890	Effect of fracture roughness on seismic source and fluid transport responses. <b>2014</b> , 41, 1530-1536	7
1889	On the Pressure of Loose Material on the Bottom and Walls of a Drum. <b>2014</b> , 682, 375-379	2
1888	Optimization Inversion of the Micro-Properties of Bonded Particle Model in PFC Based on the Asynchronous Particle Swarm Algorithm. <b>2014</b> , 1082, 240-245	1
1887	DEM Analysis of Using the Scratch Test to Probe Rock Heterogeneity. <b>2014</b> ,	1
1886	Rock-Arch Instability Characteristics of the Sandstone Plate under Different Loading Conditions. <b>2014</b> , 2014, 1-9	2
1885	3D Discrete Element Method Simulations of a Laminar-Type Simple Shear Apparatus. <b>2014</b> ,	2
1884	Nonlinear Dynamic Analysis of Space Frame Structures by Discrete Element Method. <b>2014</b> , 638-640, 1716-1719	4
1883	Particle Flow Simulation of Direct Shear Test of Rock Discontinuities. <b>2014</b> , 1065-1069, 159-163	163
1882	Three-dimensional FDEM numerical simulation of failure processes observed in Opalinus Clay laboratory samples. <b>2014</b> , 6, 591-606	35
1881	Three-dimensional movable cellular automata simulation of elastoplastic deformation and fracture of coatings in contact interaction with a rigid indenter. <b>2014</b> , 17, 292-303	17



1880	Fabric and Effective Stress Distribution in Internally Unstable Soils. <b>2014</b> , 140, 04014072	89
1879	Degradation mechanism of rock under impact loadings by integrated investigation on crack and damage development. <b>2014</b> , 21, 4646-4652	5
1878	Exploring the Evolution of Lateral Earth Pressure using the Distinct Element Method. <b>2014</b> , 30, 77-86	3
1877	A Modified SPH Method for Dynamic Failure Simulation of Heterogeneous Material. <b>2014</b> , 2014, 1-14	7
1876	Discrete Element Modelling of uniaxial compression test of hardened concrete. <b>2014</b> , 66, 113-119	3
1875	Implementation of Boundary Conditions in Discrete Element Modeling of Rock Cutting under Pressure. <b>2014</b> , 598, 114-118	2
1874	Discrete Element Simulation of Coal Cutting. <b>2014</b> , 711, 48-52	0
1873	Discrete Element and Experimental Investigations of the Earth Pressure Distribution on Cylindrical Shafts. <b>2014</b> , 14, 80-91	28
1872	A bonded particle model for analysis of the flaw orientation effect on crack propagation mechanism in brittle materials under compression. <b>2014</b> , 14, 40-52	80
1871	DEMBPH simulation of rock blasting. <b>2014</b> , 55, 158-164	67
1870	Influence of particle breakage on the dynamic compression responses of brittle granular materials. <b>2014</b> , 68, 15-28	45
1869	Distinct element simulation of lugged wheel performance under extraterrestrial environmental effects. <b>2014</b> , 99, 37-51	25
1868	Three-dimensional discrete element modelling of tillage: Determination of a suitable contact model and parameters for a cohesionless soil. <b>2014</b> , 121, 105-117	101
1867	Continuum-discontinuum analysis of failure mechanisms around unsupported circular excavations in anisotropic clay shales. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 65, 96-115 <sup>6</sup>	146
1866	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
1865	First reported occurrence of deformation bands in a platform limestone, the Jurassic Calcare Massiccio Fm., northern Apennines, Italy. <b>2014</b> , 628, 85-104	19
1864	Numerical investigation on optimized stimulation of intact and naturally fractured deep geothermal reservoirs using hydro-mechanical coupled discrete particles joints model. <b>2014</b> , 52, 165-184	97
1863	Computational simulation of fracture of materials in comminution devices. <b>2014</b> , 61, 73-81	5

1862	Numerical Simulation of the Process of Fracture of Echelon Rock Joints. <b>2014</b> , 47, 1355-1371		78
1861	Factors Affecting Crack Initiation in Low Porosity Crystalline Rocks. <b>2014</b> , 47, 1165-1181		90
1860	In-situ Rock Spalling Strength near Excavation Boundaries. <b>2014</b> , 47, 659-675		84
1859	Size Effects on Cracking Behavior of Flaw-Containing Specimens Under Compressive Loading. <b>2014</b> , 47, 1921-1930		63
1858	Modelling the Sliding Behaviour of Tribofilms Forming During Automotive Braking: Impact of Loading Parameters and Property Range of Constituents. <b>2014</b> , 53, 337-351		18
1857	Effect of Model Scale and Particle Size Distribution on PFC3D Simulation Results. <b>2014</b> , 47, 2139-2156		124
1856	Numerical Investigations of the Dynamic Shear Behavior of Rough Rock Joints. <b>2014</b> , 47, 1727-1743		18
1855	A review of discrete modeling techniques for fracturing processes in discontinuous rock masses. <b>2014</b> , 6, 301-314		276
1854	Rupture cascades in a discrete element model of a porous sedimentary rock. <b>2014</b> , 112, 065501		56
1853	Displacement field analysis for cracking processes in bonded-particle model. <b>2014</b> , 73, 13-21		54
1852	Discrete element modelling of one-dimensional compression of cemented sand. <b>2014</b> , 16, 79-90		28
1851	DEM Simulation of Direct Shear: 1. Rupture Under Constant Normal Stress Boundary Conditions. <b>2014</b> , 47, 1647-1671		52
1850	The application of a modified Voronoi logic to brittle fracture modelling at the laboratory and field scale. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 68, 1-14	6	143
1849	Influence of stress path on excavation unloading response. <b>2014</b> , 42, 237-246		92
1848	Analysis of the excavation damaged zone around a tunnel accounting for geostress and unloading. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 69, 59-66	6	75
1847	3D simulation of dependence of mechanical properties of porous ceramics on porosity. <b>2014</b> , 130, 53-64		30
1846	Simulation of hydraulic fracturing using particle flow method and application in a coal mine. <b>2014</b> , 121, 1-13		144
1845	DEM analyses of one-dimensional compression and collapse behaviour of unsaturated structural loess. <b>2014</b> , 60, 47-60		46

1844	Study of mechanical behavior and strain localization of methane hydrate bearing sediments with different saturations by a new DEM model. <b>2014</b> , 57, 122-138		38
1843	Landslide at Su-Hua Highway 115.9k triggered by Typhoon Megi in Taiwan. <b>2014</b> , 11, 293-304		30
1842	Overview of continuum and particle dynamics methods for mechanical modeling of contractional geologic structures. <b>2014</b> , 59, 19-36		25
1841	Numerical investigation of the scale effect and anisotropy in the strength and deformability of coal. <b>2014</b> , 136, 25-37		44
1840	Numerical analyses in the design of umbrella arch systems. <b>2014</b> , 6, 546-564		23
1839	Shear rupture under constant normal stiffness boundary conditions. <b>2014</b> , 634, 76-90		15
1838	Modelling 3D crack propagation in hard rock pillars using a synthetic rock mass approach. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 72, 199-213	6	16
1837	The evolution of crack seal vein and fracture networks in an evolving stress field: Insights from Discrete Element Models of fracture sealing. <b>2014</b> , 119, 8708-8727		40
1836	Finite Element study of fracture initiation in flaws subject to internal fluid pressure and vertical stress. <b>2014</b> , 51, 4122-4136		20
1835	Scale effect on the shear behaviour of rock joints based on a numerical study. <b>2014</b> , 181, 212-223		96
1834	Discrete element method for simulation of early-life thermal fracturing behavior in ceramic nuclear fuel pellets. <b>2014</b> , 278, 515-528		28
1833	Numerical and analytical description of the mechanical properties of quasi tetrahedral agglomerates. <b>2014</b> , 268, 59-71		
1832	Investigating the effects of micro-defects on the dynamic properties of rock using Numerical Manifold method. <b>2014</b> , 72, 72-82		34
1831	3D evolution of sand fracture under 1D compression. <b>2014</b> , 64, 351-364		78
1830	Discrete element modeling on fracture coalescence behavior of red sandstone containing two unparallel fissures under uniaxial compression. <b>2014</b> , 178, 28-48		202
1829	Evaluation of particle simulation methods using aggregate angularity and slump tests. <b>2014</b> , 66, 549-566		5
1828	Discrete element analysis of uplift and lateral capacity of a single pile in methane hydrate bearing sediments. <b>2014</b> , 62, 61-76		5
1827	Numerical analysis of FRP anchorage zones with variable width. <b>2014</b> , 67, 410-426		29

1826	Discrete element simulation of the effect of particle size on the size of fracture process zone in quasi-brittle materials. <b>2014</b> , 62, 51-60		38
1825	Distinct element method simulation of an analogue for a highly interlocked, non-persistently jointed rockmass. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 71, 117-130	6	94
1824	Simulation of rock deformation and mechanical characteristics using clump parallel-bond models. <b>2014</b> , 21, 2885-2893		13
1823	A distinct element method numerical investigation of compaction processes in highly porous cemented granular materials. <b>2014</b> , 38, 1101-1130		14
1822	Forecasting landslide hazard by the 3D discrete element method: A case study of the unstable slope in the Lushan hot spring district, central Taiwan. <b>2014</b> , 183, 14-30		66
1821	Numerical Simulation of the Rock SHPB Test with a Special Shape Striker Based on the Discrete Element Method. <b>2014</b> , 47, 1693-1709		99
1820	A bond model for DEM simulation of cementitious materials and deformable structures. <b>2014</b> , 16, 299-311		59
1819	DEM of triaxial tests on crushable cemented sand. <b>2014</b> , 16, 563-572		30
1818	Numerical direct shear tests for outwash deposits with random structure and composition. <b>2014</b> , 16, 771-783		16
1817	Fracture initiation and propagation in intact rock [A review]. <b>2014</b> , 6, 287-300		313
1816	Mesoplasticity approach to studies of the cutting mechanism in ultra-precision machining. <b>2014</b> , 27, 219-228		2
1815	Discrete element visco-elastic modelling of a realistic graded asphalt mixture. <b>2014</b> , 54, 12-22		33
1814	Prediction of Transport Properties of Deformed Natural Fracture Through Micro-scale Hydro-mechanical Modeling. <b>2014</b> , 104, 1-23		3
1813	A combined continuous-discontinuous approach for failure process of quasi-brittle materials. <b>2014</b> , 57, 550-559		18
1812	Macro and meso analysis of jointed rock mass triaxial compression test by using equivalent rock mass (ERM) technique. <b>2014</b> , 21, 1125-1135		23
1811	Influence of intermediate principal stress on failure mechanism of hard rock with a pre-existing circular opening. <b>2014</b> , 21, 1571-1582		5
1810	Investigation of geomechanical responses of reservoirs induced by carbon dioxide storage. <b>2014</b> , 71, 3999-4020		16
1809	A bond failure criterion for DEM simulations of cemented geomaterials considering variable bond thickness. <b>2014</b> , 38, 1871-1897		16

1808	Microscopic measurements of planar viscoelastic body eccentric impacts on a convex corner. <b>2014</b> , 67, 133-143		2
1807	Failure of transversely isotropic rock under Brazilian test conditions. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 70, 343-352	6	97
1806	Simulation of heterogeneity, creep, damage and lifetime for loaded brittle rocks. <b>2014</b> , 633, 164-175		60
1805	Multi-scale analysis of cone penetration test (CPT) in a virtual calibration chamber. <b>2014</b> , 51, 51-66		60
1804	Discrete modeling of rock joints with a smooth-joint contact model. <b>2014</b> , 6, 1-12		60
1803	Numerical simulation of desiccation cracking in a thin clay layer using 3D discrete element modeling. <b>2014</b> , 56, 168-180		60
1802	Modelling of hydraulic fracturing process by coupled discrete element and fluid dynamic methods. <b>2014</b> , 72, 3383-3399		16
1801	R-curve behaviour in weak interface-toughened SiC-C laminates by discrete element modelling. <b>2014</b> , 34, 217-227		12
1800	A mathematical model of particle-particle interaction for discrete element based modeling of deformation and fracture of heterogeneous elastic-plastic materials. <b>2014</b> , 130, 96-115		54
1799	Measurement and simulation of micromechanical properties of nanostructured aggregates via nanoindentation and DEM-simulation. <b>2014</b> , 259, 1-13		37
1798	Discrete element simulation of tribological interactions in rock cutting. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 65, 8-19	6	48
1797	Delamination process analysis of FRP-to-parent material bonded joints with and without anchorage systems using the Distinct Element Method. <b>2014</b> , 116, 104-119		26
1796	Particle simulation of thermally-induced rock damage with consideration of temperature-dependent elastic modulus and strength. <b>2014</b> , 55, 461-473		42
1795	Discrete element modelling of deformation and damage of a roadway driven along an unstable goaf A case study. <b>2014</b> , 127, 100-110		55
1794	Discrete element modeling for the study of the effect of soft inclusions on the behavior of soil mix material. <b>2014</b> , 55, 342-351		10
1793	Numerical study of agglomerate abrasion in a tumbling mixer. <b>2014</b> , 114, 21-29		3
1792	Simulation and calibration of granules using the discrete element method. <b>2014</b> , 12, 40-43		19
1791	Evolution of coseismic fault-related folds induced by the ChiChi earthquake: A case study of the Wufeng site, Central Taiwan by using 2D distinct element modeling. <b>2014</b> , 79, 130-143		12

1790	Effect of sample size on the response of DEM samples with a realistic grading. <b>2014</b> , 15, 107-115	78
1789	Assessing the energy efficiency of a jaw crusher. <b>2014</b> , 74, 119-130	18
1788	Simulation of shale-proppant interaction in hydraulic fracturing by the discrete element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 70, 219-228	6 49
1787	Application of the numerical manifold method to model progressive failure in rock slopes. <b>2014</b> , 119, 1-20	57
1786	Simulation of drilling-induced compaction bands using discrete element method. <b>2014</b> , 38, 37-50	13
1785	A Microstructure-Based Model to Characterize Micromechanical Parameters Controlling Compressive and Tensile Failure in Crystallized Rock. <b>2014</b> , 47, 435-452	28
1784	Numerical Modelling of the Anisotropic Mechanical Behaviour of Opalinus Clay at the Laboratory-Scale Using FEM/DEM. <b>2014</b> , 47, 187-206	81
1783	ADEM Simulation of Particle Breakage Behavior. <b>2014</b> , 51, 407-414	13
1782	Chapter 3. Two-way Coupling of Solid-Fluid with Discrete Element Model and Lattice Boltzmann Model.	
1781	A New Approach to Model Hyperbaric Rock Cutting Processes. <b>2014</b> ,	1
1780	Discrete-element modelling of rock comminution in a cone crusher using a bonded particle model. <b>2014</b> , 4, 79-82	9
1779	Discrete modeling of micro-structure evolution during concrete fracture using DEM. <b>2014</b> , 345-354	2
1778	Distinct element method simulation of stress fracturing around an underground opening. <b>2014</b> , 499-504	
1777	A theory predicting breakage dependence of critical state in sand. <b>2014</b> , 714-717	
1776	Microscale modeling of fluid flow-geomechanics-seismicity: Relationship between permeability and seismic source response in deformed rock joints. <b>2014</b> , 119, 6958-6975	13
1775	Modelling fracturing process of geomaterial using Lattice Element Method. <b>2014</b> , 417-422	4
1774	Computational study of granular shear flows of dry flexible fibres using the discrete element method. <b>2015</b> , 775, 24-52	38
1773	A tensorial description of stresses in triphasic granular materials with interfaces. <b>2015</b> , 4, 73-87	12

1772	Quantifying Dry Milling in Pharmaceutical Processing: A Review on Experimental and Modeling Approaches. <b>2015</b> , 104, 2401-13	24
1771	Particle-scale mechanics of sand crushing in compression and shearing using DEM. <b>2015</b> , 55, 1100-1112	59
1770	Aging in Sand: Fatigue at Grain Contacts and Modeling Using Discrete Element Method. <b>2015</b> ,	
1769	Numerical study of one-dimensional compression in granular materials. <b>2015</b> , 5, 96-103	14
1768	Network flow model of force transmission in unbonded and bonded granular media. <b>2015</b> , 91, 062204	24
1767	Mechanism of formation of wiggly compaction bands in porous sandstone: 2. Numerical simulation using discrete element method. <b>2015</b> , 120, 8153-8168	23
1766	On the size-dependent compressive resistance of bonded granules. <b>2015</b> , 5, 104-111	2
1765	The role of fluid viscosity in hydraulic fracturing in naturally fractured rock. <b>2015</b> ,	2
1764	Effects of cohesion on the structural and mechanical evolution of fold and thrust belts and contractional wedges: Discrete element simulations. <b>2015</b> , 120, 3870-3896	29
1763	Micromechanical Analysis of Seismic Triggered by Hydraulic Fracturing in Unconsolidated Formations. <b>2015</b> ,	
1762	Differentiation and analysis on rock breaking characteristics of TBM disc cutter at different rock temperatures. <b>2015</b> , 22, 4807-4818	3
1761	Contact fatigue in silica sand Observations and modeling. <b>2015</b> , 4, 88-99	13
1760	Numerical study of concrete mixing transport process and mixing mechanism of truck mixer. <b>2015</b> , 32, 1041-1065	12
1759	Study on the damage mechanism of articular cartilage based on the fluid-solid coupled particle model. <b>2015</b> , 7, 168781401558126	3
1758	A simple three-dimensional distinct element modeling of the mechanical behavior of bonded sands. <b>2015</b> , 39, 1791-1820	13
1757	A coupled discrete element and finite element model for multiscale simulation of geological carbon sequestration. <b>2015</b> , 5, 474-486	1
1756	DEM analyses of shear behaviour of rock joints by a novel bond contact model. <b>2015</b> , 26, 012021	1
1755	Numerische und analytische Beschreibung der mechanischen Eigenschaften quasi-tetraederförmiger Agglomerate. <b>2015</b> , 87, 976-985	

1754	Analysis of ice load on conical structure with discrete element method. <b>2015</b> , 32, 1121-1134		34
1753	A 2D Electromechanical Model of Human Atrial Tissue Using the Discrete Element Method. <b>2015</b> , 2015, 854953		6
1752	A Hierarchical Lattice Spring Model to Simulate the Mechanics of 2-D Materials-Based Composites. <b>2015</b> , 2,		18
1751	Bibliography. <b>2015</b> , 145-159		
1750	Recent Developments in Multiscale and Multiphase Modelling of the Hydraulic Fracturing Process. <b>2015</b> , 2015, 1-15		7
1749	Bolt Pull-Out Tests of Anchorage Body under Different Loading Rates. <b>2015</b> , 2015, 1-8		12
1748	DEM simulations of amorphous irregular shaped micrometer-sized titania agglomerates at compression. <b>2015</b> , 26, 767-777		35
1747	Discrete element analysis of breakage of irregularly shaped railway ballast. <b>2015</b> , 10, 1-9		14
1746	Discrete element modeling of anisotropic rock under Brazilian test conditions. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 78, 46-56	6	61
1745	Experimental and numerical study of geosynthetic reinforced soil over a channel. <b>2015</b> , 43, 382-392		10
1744	Numerical Modeling of Excavation Process in Dredging Engineering. <b>2015</b> , 102, 804-814		4
1743	Ice collapse over trapped water bodies on Enceladus and Europa. <b>2015</b> , 42, 712-719		23
1742	Mechanical behavior of rock-like jointed blocks with multi-non-persistent joints under uniaxial loading: A particle mechanics approach. <b>2015</b> , 190, 17-32		112
1741	Algorithm for particle packing based on Aristotelian mechanics. <b>2015</b> , 18, 244-249		1
1740	Numerical simulation of drilling-induced core damage and its influence on mechanical properties of rocks under unconfined condition. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 80, 40-50	6	12
1739	Convergence of synthetic rock mass modelling and the HoekBrown strength criterion. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 80, 171-180	6	24
1738	The Shear Dilation and Shear Band of Coarse Grained Soil Based on Discrete Element Method. <b>2015</b> , 744-746, 679-685		1
1737	A novel three-dimensional contact model for granulates incorporating rolling and twisting resistances. <b>2015</b> , 65, 147-163		124



1736	Simulation of particle flows and breakage in crushers using DEM: Part 1 [Compression crushers. <b>2015</b> , 74, 178-197		71
1735	Contact based void partitioning to assess filtration properties in DEM simulations. <b>2015</b> , 64, 120-131		20
1734	Micromechanical analysis of the failure process of brittle rock. <b>2015</b> , 39, 618-634		44
1733	Modeling the influence of particle morphology on the fracture behavior of silica sand using a 3D discrete element method. <b>2015</b> , 343, 133-142		9
1732	A tool for modelling the breathing of hydride powder in its container while cyclically absorbing and desorbing hydrogen. <b>2015</b> , 40, 2283-2294		10
1731	Modeling mechanical behaviors of composites with various ratios of matrix/inclusion properties using movable cellular automaton method. <b>2015</b> , 11, 18-34		29
1730	Discrete element modeling of cyclic rate fluid injection at multiple locations in naturally fractured reservoirs. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 74, 15-23	6	46
1729	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
1728	Effects of the ratio of flaw size to specimen size on cracking behavior. <b>2015</b> , 74, 181-193		25
1727	Bonded-cell model for particle fracture. <b>2015</b> , 91, 022203		40
1726	A statistical meso-damage mechanical method for modeling trans-scale progressive failure process of rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 74, 133-150	6	76
1725	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
1724	Simulation of the hydraulic fracturing process of fractured rocks by the discrete element method. <b>2015</b> , 73, 8451-8469		19
1723	Gravitational deformation mechanisms of slate slopes revealed by model tests and discrete element analysis. <b>2015</b> , 189, 116-132		28
1722	A fully coupled porous flow and geomechanics model for fluid driven cracks: a peridynamics approach. <b>2015</b> , 55, 561-576		99
1721	Capturing the complete stress/strain behaviour of jointed rock using a numerical approach. <b>2015</b> , 39, 1027-1044		11
1720	The role of contact friction in the dynamic breakage behavior of granular materials. <b>2015</b> , 17, 111-120		14
1719	Hybrid finite/discrete element modeling of geomaterials fracture and fragment muck-piling. <b>2015</b> , 9, 115-131		28

1718	Crack propagation patterns and energy evolution rules of coal within slotting disturbed zone under various lateral pressure coefficients. <b>2015</b> , 8, 6643-6654	24
1717	Investigating the micro mechanics of cemented sand using DEM. <b>2015</b> , 39, 655-675	22
1716	Contrasting fracture patterns induced by volume-increasing and -decreasing reactions: Implications for the progress of metamorphic reactions. <b>2015</b> , 417, 9-18	23
1715	Numerical simulation of excavation damaged zone under coupled thermal-mechanical conditions with varying mechanical parameters. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 75, 169-181	6 30
1714	Analysis of loads on grinding wheel binder in grinding process: insights from discontinuum-hypothesis-based grinding simulation. <b>2015</b> , 78, 1943-1960	21
1713	Studying the influence of heterogeneity on particle breakage using distinct lattice spring model. <b>2015</b> , 8, 6595-6621	4
1712	Experimental and Numerical Investigations into the Strength of Intact Veined Rock. <b>2015</b> , 48, 1897-1912	16
1711	Modelling of concrete behaviour in uniaxial compression and tension with DEM. <b>2015</b> , 17, 145-164	81
1710	Laboratory Observation and Micromechanics-Based Modelling of Sandstone on Different Scales. <b>2015</b> , 48, 1407-1422	14
1709	Fluid-driven fractures in granular materials. <b>2015</b> , 74, 621-636	25
1708	Numerical Modelling of Die and Unconfined Compactions of Wet Particles. <b>2015</b> , 102, 1390-1398	6
1707	A size-dependent bond failure criterion for cemented granules based on experimental studies. <b>2015</b> , 69, 182-198	9
1706	Visualization of cracks by using the local Voronoi decompositions and distributed software. <b>2015</b> , 84, 85-94	5
1705	Statistical investigation of agglomerate breakage based on combined stochastic microstructure modeling and DEM simulations. <b>2015</b> , 26, 1021-1030	29
1704	Determining the impact behavior of concrete beams through experimental testing and meso-scale simulation: II. Particle element simulation and comparison. <b>2015</b> , 135, 113-125	12
1703	Experimental study on the formation of faults from en-echelon fractures in Carrara Marble. <b>2015</b> , 195, 312-326	42
1702	A grain based modeling study of fracture branching during compression tests in granites. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 77, 152-162	6 50
1701	Shear Failure Mechanism of Infilling Rock Joints and its PFC Simulation. <b>2015</b> , 723, 317-321	2

1700	A DEM Methodology for Simulating the Grinding Process of SiC Ceramics. <b>2015</b> , 102, 1803-1810		9
1699	Numerical simulation of a jointed rock block mechanical behavior adjacent to an underground excavation and comparison with physical model test results. <b>2015</b> , 50, 129-142		70
1698	Imbibition inducing tensile fractures and its influence on in-situ stress analyses: A case study of shale gas drilling. <b>2015</b> , 26, 927-939		37
1697	Stress evolution during caldera collapse. <b>2015</b> , 421, 139-151		24
1696	Mechanics of Nanocrystalline Particles With the Distinct Element Method. <b>2015</b> , 137,		1
1695	Discrete element modeling of vibrating tillage tools. <b>2015</b> , 32, 308-328		5
1694	Numerical modeling of rock mechanical behavior and fracture propagation by a new bond contact model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 78, 175-189	6	34
1693	DEM modelling of non-spherical particle breakage and flow in an industrial scale cone crusher. <b>2015</b> , 74, 112-122		75
1692	DEM investigation of weathered rocks using a novel bond contact model. <b>2015</b> , 7, 327-336		11
1691	Damage quantification of intact rocks using acoustic emission energies recorded during uniaxial compression test and discrete element modeling. <b>2015</b> , 67, 94-102		90
1690	A viscoelastic model for flexible fibers with material damping. <b>2015</b> , 276, 175-182		6
1689	Deformation tests and failure process analysis of an anchorage structure. <b>2015</b> , 25, 237-242		8
1688	Particle mechanics modeling of creep behavior of rockfill materials under dry and wet conditions. <b>2015</b> , 68, 137-146		23
1687	A novel meshless numerical method for modeling progressive failure processes of slopes. <b>2015</b> , 192, 139-153		27
1686	Couple stresses and the fracture of rock. <b>2015</b> , 373,		4
1685	Bonded-particle discrete element modeling of mechanical behavior of transversely isotropic rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 76, 243-255	6	106
1684	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
1683	Discrete element modelling of rock cutting: from ductile to brittle transition. <b>2015</b> , 39, 1331-1351		27

1682	Parametric Study of Smooth Joint Parameters on the Shear Behaviour of Rock Joints. <b>2015</b> , 48, 923-940	76	
1681	Microscopic modeling of the creep behavior of rockfills with a delayed particle breakage model. <b>2015</b> , 10, 481-496	35	
1680	Progressive failure constitutive model for softening behavior of rocks based on maximum entropy theory. <b>2015</b> , 73, 5905-5915	8	
1679	Review on the influence of elastic particle properties on DEM simulation results. <b>2015</b> , 283, 66-76	56	
1678	Overcoming the limitations of distinct element method for multiscale modeling of materials with multimodal internal structure. <b>2015</b> , 102, 267-285	59	
1677	Influence of Particle Gradation Curve on Granular Packing Characteristics. <b>2015</b> , 102, 1827-1834	2	
1676	Numerical simulation of time-independent and -dependent fracturing in sandstone. <b>2015</b> , 193, 118-131	26	
1675	Micromechanical behavior of granular materials in direct shear modeling. <b>2015</b> , 38, 469-480	0	
1674	Mechanical properties optimization of resin mineral composite for machine tool bed. <b>2015</b> , 34, 329-340	6	
1673	Numerical study of pressure on dams in a backfilled mining shaft based on PFC3D code. <b>2015</b> , 66, 230-244	12	
1672	Volumetric changes of rock massif preceding mining seismic events. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 80, 147-154	6	2
1671	A comprehensive study on the smooth joint model in DEM simulation of jointed rock masses. <b>2015</b> , 17, 775-791	28	
1670	Formulation and implementation of coupled forced heat convection and heat conduction in DEM. <b>2015</b> , 10, 421-433	21	
1669	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	
1668	DEM study of the mechanical strength of iron ore compacts. <b>2015</b> , 142, 73-81	27	
1667	Fragmentation of Corrosion Protection Coatings: A Combined Finite-element Discrete-element Study. <b>2015</b> , 109, 3-7		
1666	Mesoscale modeling of the mechanical and tribological behavior of a polymer matrix composite based on epoxy and 6vol.% silica nanoparticles. <b>2015</b> , 110, 204-214	15	
1665	Modelling of concrete fracture at aggregate level using FEM and DEM based on X-ray CT images of internal structure. <b>2015</b> , 147, 13-35	92	

1664	Effects of an underlying drainage gallery on coal bed methane capture effectiveness and the mechanical behavior of a gate road. <b>2015</b> , 27, 616-631	23
1663	Study of Acoustic Emission in a Compression Test of Andesite Rock. <b>2015</b> , 9, 292-297	14
1662	Evolution of the large landslide induced by Typhoon Morakot: A case study in the Butangbunasi River, southern Taiwan using the discrete element method. <b>2015</b> , 197, 172-187	53
1661	Spring Method for modelling of particulate solid composed of spherical particles and weak matrix. <b>2015</b> , 15, 775-785	2
1660	Simulating the Poisson effect in lattice models of elastic continua. <b>2015</b> , 70, 60-67	21
1659	A local constitutive model for the discrete element method. Application to geomaterials and concrete. <b>2015</b> , 2, 139-160	53
1658	Step-path failure of rock slopes with intermittent joints. <b>2015</b> , 12, 911-926	84
1657	Studying the effect of non-spherical micro-particles on Hoek-Brown strength parameter $m_i$ using numerical true triaxial compressive tests. <b>2015</b> , 39, 96-114	12
1656	Characterization of strength and damage of hard rock pillars using a synthetic rock mass method. <b>2015</b> , 65, 56-72	22
1655	Nanostructuring burnishing and subsurface shear instability. <b>2015</b> , 217, 327-335	36
1654	Three-dimensional discrete element modelling (DEM) of tillage: Accounting for soil cohesion and adhesion. <b>2015</b> , 129, 298-306	74
1653	Numerical simulation of damage and failure in brittle rocks using a modified rigid block spring method. <b>2015</b> , 64, 48-60	40
1652	Two-dimensional DEM analysis of behavior of geogrid-reinforced uniform granular bases under a vertical cyclic load. <b>2015</b> , 10, 469-480	16
1651	Effect of the acceleration component normal to the sliding surface on earthquake-induced landslide triggering. <b>2015</b> , 12, 335-344	30
1650	Evaluation of Mode I Fracture Toughness Assisted by the Numerical Determination of K-Resistance. <b>2015</b> , 48, 143-157	41
1649	Relationship Between Pre-failure and Post-failure Mechanical Properties of Rock Material of Different Origin. <b>2015</b> , 48, 121-141	27
1648	Discussion of Stresses Developed around Displacement Piles Penetration in Sand by Z. X. Yang, R. J. Jardine, B. T. Zhu, and S. Rimoy. <b>2015</b> , 141, 07014037	1
1647	Celebrating Soft Matter's 10th Anniversary: toward jamming by design. <b>2015</b> , 11, 12-27	125

1646	Impact erosion by high velocity micro-particles on a quartz crystal. <b>2015</b> , 82, 200-210	34
1645	Influence of static pre-loading on the dynamic bending strength of concrete with particle element modeling. <b>2015</b> , 58, 284-296	6
1644	Simulation of growth normal fault sandbox tests using the 2D discrete element method. <b>2015</b> , 74, 1-12	6
1643	Discrete Element Method Simulations for Complex Granular Flows. <b>2015</b> , 47, 21-46	163
1642	A Rigid Particle Model for Rock Fracture Following the Voronoi Tessellation of the Grain Structure: Formulation and Validation. <b>2015</b> , 48, 535-557	19
1641	Micro-Strength Analysis of Sand Mold for Casting Based on Bonded-Particle Model. <b>2016</b> , 723, 316-321	
1640	Rock Testing. <b>2016</b> , 1-60	1
1639	Numerical Simulation of Tensile Failure of Concrete in Direct, Flexural, Double Punch Tensile and Ring Tests. <b>2016</b> ,	0
1638	Numerical Simulation of Rock Blasting. <b>2016</b> , 393-407	1
1637	Discrete-Element bonded-particle Sea Ice model DESign, version '1.3a [model description and implementation. <b>2016</b> , 9, 1219-1241	35
1636	Load Bearing and Deformation Characteristics of Granular Spoils under Unconfined Compressive Loading for Coal Mine Backfill. <b>2016</b> , 2016, 1-11	8
1635	A hybrid discrete/finite element modeling study of complex hydraulic fracture development for enhanced geothermal systems (EGS) in granitic basements. <b>2016</b> , 64, 362-381	40
1634	Physics-based simulation of multiple interacting crack growth in brittle rocks driven by thermal cooling. <b>2016</b> , 40, 2163-2177	5
1633	Micromechanics of seismic wave propagation in granular materials. <b>2016</b> , 18, 1	26
1632	Numerical study of inter-particle bond failure by 3D discrete element method. <b>2016</b> , 40, 523-545	15
1631	Characterisation of confinement effect on jointed rock pillars using a Synthetic Rock Mass approach. <b>2016</b> , 40, 1690-1711	8
1630	Discrete element model for quasi-brittle rupture under tensile and compressive loading. <b>2016</b> , 40, 2339-2352	3
1629	A coupled discrete element-finite difference approach for modeling mechanical response of fluid-saturated porous materials. <b>2016</b> , 106, 623-643	28

1628	Numerical Simulation of Heterogeneous Rock Using Discrete Element Model Based on Digital Image Processing. <b>2016</b> , 49, 4957-4964	60
1627	Modeling fluid pressure effects when cutting saturated rock. <b>2016</b> , 211, 50-60	19
1626	Evolution of stress-induced borehole breakout in inherently anisotropic rock: Insights from discrete element modeling. <b>2016</b> , 121, 2361-2381	47
1625	The influence of loading conditions on fracture initiation, propagation, and interaction in rocks with veins: Results from a comparative Discrete Element Method study. <b>2016</b> , 121, 1730-1738	10
1624	. <b>2016</b> , 4, 5710-5720	34
1623	Investigation and 3D Discrete Element Modeling of Fracture of Sea Ice Beams. <b>2016</b> ,	1
1622	Perspective: Evolutionary design of granular media and block copolymer patterns. <b>2016</b> , 4, 053209	25
1621	Effect of tensile strength of rock on tensile fracture toughness using experimental test and PFC2D simulation. <b>2016</b> , 52, 647-661	2
1620	A Review of Discrete Element Method Research on Particulate Systems. <b>2016</b> , 136, 012034	1
1619	DEM modeling of a monowire cutting system. <b>2016</b> , 9, 1	5
1618	FEM-DEM coupling simulations of the tool wear characteristics in prestressed machining superalloy. <b>2016</b> , 80, 04001	3
1617	Comparison of six major intact rock failure criteria using a particle flow approach under true-triaxial stress condition. <b>2016</b> , 2, 203-229	35
1616	Mechanical behaviors and failure processes of precracked specimens under uniaxial compression: A perspective from microscopic displacement patterns. <b>2016</b> , 672-673, 104-120	34
1615	Discrete element modeling of the process zone shape in mode I fracture at peak load and in post-peak regime. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2016</b> , 85, 119-128	6 8
1614	Numerical simulation of microstructure of brittle rock using a grain-breakable distinct element grain-based model. <b>2016</b> , 78, 203-217	70
1613	Fracture Toughness Determination of Cracked Chevron Notched Brazilian Disc Rock Specimen via Griffith Energy Criterion Incorporating Realistic Fracture Profiles. <b>2016</b> , 49, 3083-3093	48
1612	Statistical meso-damage model for quasi-brittle rocks to account for damage tolerance principle. <b>2016</b> , 75, 1	16
1611	Drop-weight tests of concrete beams prestressed with unbonded tendons and meso-scale simulation. <b>2016</b> , 93, 166-183	11

1610	Mesh-Free Numerical Simulation of Pressure-Driven Fractures in Brittle Rocks. <b>2016</b> ,		3
1609	Numerical and experimental analysis of influence of granule microstructure on its compression breakage. <b>2016</b> , 299, 87-97		47
1608	Failure mechanism and stability analysis of the Zhenggang landslide in Yunnan Province of China using 3D particle flow code simulation. <b>2016</b> , 13, 891-905		18
1607	Experimental and numerical investigation into surface strength of mine tailings after biopolymer stabilization. <b>2016</b> , 11, 1075-1085		8
1606	Beam-particle approach to model cracking and energy dissipation in concrete: Identification strategy and validation. <b>2016</b> , 70, 1-14		13
1605	Mechanical Behavior of Brittle Rock-Like Specimens with Pre-existing Fissures Under Uniaxial Loading: Experimental Studies and Particle Mechanics Approach. <b>2016</b> , 49, 763-783		163
1604	Hydraulic behaviour of parallel fibres under longitudinal flow: a numerical treatment. <b>2016</b> , 53, 1081-1092		15
1603	Discrete element modelling of a soil-rock mixture used in an embankment dam. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2016</b> , 86, 141-156	6	53
1602	Simulating hydro mechanical effects in rock deformation by combination of the discrete element method and the smoothed particle method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2016</b> , 86, 224-234	6	12
1601	Cracking Process and Stress Field Evolution in Specimen Containing Combined Flaw Under Uniaxial Compression. <b>2016</b> , 49, 3095-3113		53
1600	Numerical investigation of the influence of specimen size on the unconfined strength of defected rocks. <b>2016</b> , 77, 56-67		53
1599	Tensile test simulation of high-carbon steel by discrete element method. <b>2016</b> , 33, 1224-1245		5
1598	Numerical simulation of soilbone penetrometer interaction using discrete element method. <b>2016</b> , 125, 63-73		26
1597	Earthquake-induced deep-seated landslide and landscape evolution process at Hungtsaiping, Nantou County, Taiwan. <b>2016</b> , 75, 1		11
1596	Numerical simulation of propagation and coalescence of flaws in rock materials under compressive loads using the extended non-ordinary state-based peridynamics. <b>2016</b> , 163, 248-273		163
1595	CDEM-based analysis of the 3D initiation and propagation of hydrofracturing cracks in heterogeneous glutenites. <b>2016</b> , 35, 614-623		59
1594	Discrete element method as an approach to model the wheat milling process. <b>2016</b> , 302, 350-356		20
1593	A new shear strength model incorporating influence of infill materials for rock joints. <b>2016</b> , 2, 183-193		19



1592	Bonded-particle extraction and stochastic modeling of internal agglomerate structures. <b>2016</b> , 27, 1761-1774	14
1591	Experimental validation study of 3D direct simple shear DEM simulations. <b>2016</b> , 56, 336-347	34
1590	A coupled SPH-DEM model for fluid-structure interaction problems with free-surface flow and structural failure. <b>2016</b> , 177, 141-161	71
1589	Hybrid finite-discrete element modelling of asperity degradation and gouge grinding during direct shearing of rough rock joints. <b>2016</b> , 3, 295-310	13
1588	Micromechanical Modeling of Proppants for Hydraulic Fracturing. <b>2016</b> ,	
1587	Probabilistic Approach for Analysis of Strength of Ceramics With Different Porous Structure Based on Movable Cellular Automaton Modeling. <b>2016</b> , 2, 2742-2749	4
1586	A phenomenological model of single particle breakage as a multi-stage process. <b>2016</b> , 98, 90-100	20
1585	Mechanical properties and failure modes of rock samples with grout-infilled flaws: A particle mechanics modeling. <b>2016</b> , 34, 702-715	36
1584	Anchorage behaviour of reinforced specimens containing a single fissure under uniaxial loading: a particle mechanics approach. <b>2016</b> , 9, 1	7
1583	A DEM model for visualising damage evolution and predicting failure envelope of composite laminae under biaxial loads. <b>2016</b> , 102, 9-28	16
1582	Multi-peak deformation behavior of jointed rock mass under uniaxial compression: Insight from particle flow modeling. <b>2016</b> , 213, 25-45	48
1581	Experimental investigation of the effects of heterogeneity and geostress difference on the 3D growth and distribution of hydrofracturing cracks in unconventional reservoir rocks. <b>2016</b> , 35, 541-554	62
1580	Effects of Micro-structure and Micro-parameters on Brazilian Tensile Strength Using Flat-Joint Model. <b>2016</b> , 49, 3575-3595	58
1579	The roles of fluid transport and surface reaction in reaction-induced fracturing, with implications for the development of mesh textures in serpentinites. <b>2016</b> , 171, 1	18
1578	The Mechanism of Complex Hydraulic Fracture Creation Due to Strength Heterogeneity. <b>2016</b> ,	
1577	Discrete element modeling of a mining-induced rock slide. <b>2016</b> , 5, 1633	18
1576	Exploring the micro-mechanics of triaxial instability in granular materials. <b>2016</b> , 66, 725-740	16
1575	Multi-branched growth of fractures in shales for effective reservoir contact: A particle based distinct element modeling study. <b>2016</b> , 35, 509-521	5

1574	The grain effect of intact rock modelling using discrete element method with Voronoi grains. <b>2016</b> , 6, 136-143		16
1573	Effect of rubber size on the behaviour of sand-rubber mixtures: A numerical investigation. <b>2016</b> , 80, 199-214	60	
1572	Discrete element modeling of shielding and size effects during single particle crushing. <b>2016</b> , 78, 227-236		40
1571	DEM investigation of the fracture mechanism of rock disc containing hole(s) and its influence on tensile strength. <b>2016</b> , 86, 197-216		56
1570	The influence of fines content and size-ratio on the micro-scale properties of dense bimodal materials. <b>2016</b> , 18, 1		34
1569	Loading-rate-dependent progressive fracturing of cracked chevron-notched Brazilian disc specimens in split Hopkinson pressure bar tests. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2016</b> , 88, 49-60	6	85
1568	Numerical simulation of initiation, propagation and coalescence of cracks using the non-ordinary state-based peridynamics. <b>2016</b> , 201, 213-234		50
1567	An Experimental and Numerical Study on Mechanical Behavior of Ubiquitous-Joint Brittle Rock-Like Specimens Under Uniaxial Compression. <b>2016</b> , 49, 4319-4338		66
1566	Gradual caldera collapse at B��darbunga volcano, Iceland, regulated by lateral magma outflow. <b>2016</b> , 353, aaf8988		161
1565	Crack initiation and propagation simulation for polycrystalline-based brittle rock utilizing three dimensional distinct element method. <b>2016</b> , 341-348		2
1564	Discrete element simulation of dynamic semi-circular bend flexure tests of rocks using split Hopkinson pressure bar. <b>2016</b> , 9, 1		11
1563	DEM Applications to Granular Flows. <b>2016</b> , 189-256		
1562	Integrated Experimental and Computational Characterization of Shale at Multiple Length Scales. <b>2016</b> , 389-434		7
1561	A discrete element model to link the microseismic energies recorded in caprock to geomechanics. <b>2016</b> , 11, 1351-1367		11
1560	A cohesive granular material with tunable elasticity. <b>2016</b> , 6, 35650		26
1559	Discrete element modeling of indentation tests to investigate mechanisms of CO2-related chemomechanical rock alteration. <b>2016</b> , 121, 7867-7881		27
1558	Failure mechanism analysis of rainfall-induced landslide at Pingguang stream in Taiwan: mapping, investigation, and numerical simulation. <b>2016</b> , 75, 1		11
1557	CONTINUUMNIZATION OF REGULARLY ARRANGED RIGID BODIES. <b>2016</b> , 4, 38-45		3

1556	STUDY ON MECHANISM OF ROCK FALL AT TUNNEL CUTTING FACE AFTER BLASTING. <b>2016</b> , 72, I_199-I_206	
1555	Numerical modelling of railway ballast at the particle scale. <b>2016</b> , 40, 713-737	18
1554	A Discrete Element Model of Armor Glass Fragmentation and Comminution Failure Under Compression. <b>2016</b> , 7, 503-512	
1553	Brittle Rock Modeling Approach and its Validation Using Excavation-Induced Micro-Seismicity. <b>2016</b> , 49, 3175-3188	19
1552	Geo-engineered buffer capacity of two-layered absorbing system under the impact of rock avalanches based on Discrete Element Method. <b>2016</b> , 13, 917-929	14
1551	2. Reproducing the Realistic Compressive-tensile Strength Ratio of Rocks using Discrete Element Model. <b>2016</b> , 142-174	1
1550	Combined finite-discrete element method modeling of rockslides. <b>2016</b> , 33, 1530-1559	21
1549	Fracture of granular materials composed of arbitrary grain shapes: A new cohesive interaction model. <b>2016</b> , 95, 308-319	13
1548	The effects of joints on rock fragmentation by TBM cutters using General Particle Dynamics. <b>2016</b> , 57, 162-172	24
1547	Numerical and experimental study of tensile stresses of biomass combustion ash with temperature variation. <b>2016</b> , 27, 215-222	1
1546	A micromechanical study of the breakage mechanism of microcapsules in concrete using PFC2D. <b>2016</b> , 115, 452-463	40
1545	A numerical study of macro-mesoscopic mechanical properties of gangue backfill under biaxial compression. <b>2016</b> , 26, 309-317	12
1544	Key technologies and risk management of deep tunnel construction at Jinping II hydropower station. <b>2016</b> , 8, 499-512	17
1543	Parameters and contact models for DEM simulations of agricultural granular materials: A review. <b>2016</b> , 147, 206-225	136
1542	Insights on surface spalling of rock. <b>2016</b> , 3, 391-405	7
1541	Discrete element model for crack propagation in brittle materials. <b>2016</b> , 40, 583-595	9
1540	Discrete element method modeling of inherently anisotropic rocks under uniaxial compression loading. <b>2016</b> , 40, 1150-1183	57
1539	Coupled bonded particle and lattice Boltzmann method for modelling fluid-solid interaction. <b>2016</b> , 40, 1383-1401	30

1538	Macroscopic and microscopic behaviors of granular materials under proportional strain path: a DEM study. <b>2016</b> , 40, 2450-2467	22
1537	A new Leapfrog scheme for rotational motion in 3D. <b>2016</b> , 107, 273-289	1
1536	Comparative Study of the Hydromechanical Behavior of Intact, Horizontally Jointed, and Vertically Jointed Rocks under Undrained Conditions. <b>2016</b> , 28, 04016083	2
1535	Discrete Element Modeling of Stick-Slip Instability and Induced Microseismicity. <b>2016</b> , 173, 775-794	11
1534	Thermal Influence on Mechanical Properties of Granite: A Microcracking Perspective. <b>2016</b> , 49, 747-762	101
1533	Pre-failure damage analysis for brittle rocks under triaxial compression. <b>2016</b> , 74, 45-55	38
1532	Residual strength of underground structures in service. <b>2016</b> , 53, 988-999	6
1531	Evolution of soil arching; 2D DEM simulations. <b>2016</b> , 73, 199-209	67
1530	Evolution of the internal structure of fault zones in three-dimensional numerical models of normal faults. <b>2016</b> , 666, 158-163	14
1529	DEM simulation of bonded granular material. Part I: Contact model and application to cemented sand. <b>2016</b> , 75, 192-209	67
1528	Fundamental Study on Applicability of Powder-Based 3D Printer for Physical Modeling in Rock Mechanics. <b>2016</b> , 49, 2065-2074	67
1527	Evolution of the microstructure during the process of consolidation and bonding in soft granular solids. <b>2016</b> , 503, 68-77	22
1526	Kinematic model of a translational slide in the Cidu section of the Formosan Freeway. <b>2016</b> , 13, 141-151	15
1525	Micromechanics of wing crack propagation for different flaw properties. <b>2016</b> , 153, 378-398	33
1524	Vibrations induced by high initial stress release during underground excavations. <b>2016</b> , 53, 78-95	53
1523	3D Numerical Study on the Growth and Coalescence of Pre-existing Flaws in Rocklike Materials Subjected to Uniaxial Compression. <b>2016</b> , 16, 04015096	27
1522	Effects of segregation in binary granular mixture avalanches down inclined chutes impinging on defending structures. <b>2016</b> , 75, 1	13
1521	A discrete approach for modeling damage and failure in anisotropic cohesive brittle materials. <b>2016</b> , 155, 102-118	31

1520	Mechanical behaviour of a granular solid and its contacting deformable structure under uni-axial compression-Part II: Multi-scale exploration of internal physical properties. <b>2016</b> , 144, 421-443	4
1519	DEM simulation of bonded granular material. Part II: Extension to grain-coating type methane hydrate bearing sand. <b>2016</b> , 75, 225-243	36
1518	Modeling damages and cracks growth in composite with a 3D discrete element method. <b>2016</b> , 91, 615-630	41
1517	Effect of packing characteristics on the discrete element simulation of elasticity and buckling. <b>2016</b> , 110, 14-21	21
1516	Numerical simulation of rock fragmentation mechanisms subject to wedge penetration for TBMs. <b>2016</b> , 53, 96-108	63
1515	Effects of pre-existing discontinuities on the residual strength of rock mass [insight from a discrete element method simulation. <b>2016</b> , 85, 40-50	35
1514	Numerical analysis on scale effect of elasticity, strength and failure patterns of jointed rock masses. <b>2016</b> , 20, 539-549	24
1513	Experimental and numerical study of asperity degradation in the direct shear test. <b>2016</b> , 204, 41-52	85
1512	Application of particle and lattice codes to simulation of hydraulic fracturing. <b>2016</b> , 3, 249-261	59
1511	Particle Flow Modeling of Rock Blocks with Nonpersistent Open Joints under Uniaxial Compression. <b>2016</b> , 16, 04016020	39
1510	Experimental and Discrete Element Modeling of Geocell-Stabilized Subballast Subjected to Cyclic Loading. <b>2016</b> , 142, 04015100	46
1509	A Study of Three Intrinsic Problems of the Classic Discrete Element Method Using Flat-Joint Model. <b>2016</b> , 49, 1813-1830	132
1508	Modeling tensile crack propagation in concrete gravity dams via crack-path-field and strain injection techniques. <b>2016</b> , 154, 288-310	24
1507	Pore-scale simulation of miscible displacement in porous media using the lattice Boltzmann method. <b>2016</b> , 88, 30-40	15
1506	Borehole Breakouts Induced in Arkosic Sandstones and a Discrete Element Analysis. <b>2016</b> , 49, 1369-1388	41
1505	An irregular lattice model to simulate crack paths in bonded granular assemblies. <b>2016</b> , 162, 91-101	7
1504	Application of Synthetic Rock Mass modeling to veined core-size samples. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2016</b> , 81, 47-61	6 31
1503	Application of an enhanced discrete element method to oil and gas drilling processes. <b>2016</b> , 3, 29-41	4

1502	Cone crusher modelling and simulation using DEM. <b>2016</b> , 85, 92-105	63
1501	The Automated Design of Materials Far From Equilibrium. <b>2016</b> ,	2
1500	An Experimental and Numerical Study on Cracking Behavior of Brittle Sandstone Containing Two Non-coplanar Fissures Under Uniaxial Compression. <b>2016</b> , 49, 1497-1515	91
1499	Numerical Study of the Mechanical Behavior of Nonpersistent Jointed Rock Masses. <b>2016</b> , 16, 04015035	53
1498	Investigation of the effective elastic parameters in the discrete element model of granular material by the triaxial compression test. <b>2016</b> , 16, 64-75	18
1497	A virtual-surface contact algorithm for the interaction between FE and spherical DE. <b>2016</b> , 108, 32-40	13
1496	Influence of material heterogeneity on failure intensity in unstable rock failure. <b>2016</b> , 71, 237-246	31
1495	Numerical Investigation of the Effect of the Location of Critical Rock Block Fracture on Crack Evolution in a Gob-side Filling Wall. <b>2016</b> , 49, 1041-1058	77
1494	Multiscale model for predicting shear zone structure and permeability in deforming rock. <b>2016</b> , 3, 179-199	11
1493	Strength Anisotropy of Berea Sandstone: Results of X-Ray Computed Tomography, Compression Tests, and Discrete Modeling. <b>2016</b> , 49, 1201-1210	58
1492	Application of distinct element methods to simulation of hydraulic fracturing in naturally fractured reservoirs. <b>2016</b> , 71, 283-294	126
1491	Scaling of discrete element model parameters for cohesionless and cohesive solid. <b>2016</b> , 293, 130-137	78
1490	Numerical Investigation of Dynamic Rock Fracture Toughness Determination Using a Semi-Circular Bend Specimen in Split Hopkinson Pressure Bar Testing. <b>2016</b> , 49, 731-745	94
1489	Numerical investigation of initiation and propagation of hydraulic fracture using the coupled Bonded Particle Lattice Boltzmann Method. <b>2017</b> , 181, 32-40	25
1488	Numerical Simulation of Fracking in Shale Rocks: Current State and Future Approaches. <b>2017</b> , 24, 281-317	15
1487	The characteristics of the seismic signals induced by landslides using a coupling of discrete element and finite difference methods. <b>2017</b> , 14, 661-674	32
1486	Wetting-Induced Collapse Behavior of Unsaturated and Structural Loess under Biaxial Tests Using Distinct Element Method. <b>2017</b> , 17, 06016010	16
1485	DEM Simulation of Uniaxial Compressive and Flexural Strength of Sea Ice: Parametric Study. <b>2017</b> , 143,	14

1484	Analytical study of the accuracy of discrete element simulations. <b>2017</b> , 109, 29-51	14
1483	DEM investigation on fracture mechanism of the CCNSCB specimen under intermediate dynamic loading. <b>2017</b> , 10, 1	8
1482	Investigating the deformation and failure characteristics of argillite consequent slope using discrete element method and Burgers model. <b>2017</b> , 76, 1	5
1481	Dynamic Behavior Analysis of High-Speed Railway Ballast under Moving Vehicle Loads Using Discrete Element Method. <b>2017</b> , 17, 04016157	47
1480	Simulating dynamic processes and hypermobility mechanisms of the Wenjiagou rock avalanche triggered by the 2008 Wenchuan earthquake using discrete element modelling. <b>2017</b> , 76, 923-936	16
1479	Mode I crack in particulate materials with rotational degrees of freedom. <b>2017</b> , 172, 181-195	4
1478	A study of abrasive wear on high speed steel surface in hot rolling by Discrete Element Method. <b>2017</b> , 110, 66-76	23
1477	Effects of Microparameters on Macroparameters of Flat-Jointed Bonded-Particle Materials and Suggestions on Trial-and-Error Method. <b>2017</b> , 35, 663-677	18
1476	Experimental and Numerical Investigation of Mechanical Behaviors of Cemented SoilRock Mixture. <b>2017</b> , 35, 337-354	9
1475	Discrete modeling of low-velocity penetration in sand. <b>2017</b> , 86, 21-32	16
1474	Influence of single flaw on the failure process and energy mechanics of rock-like material. <b>2017</b> , 86, 150-162	68
1473	Copula-based approximation of particle breakage as link between DEM and PBM. <b>2017</b> , 99, 158-170	4
1472	Influence of end effect on rock strength in true triaxial compression test. <b>2017</b> , 54, 862-880	21
1471	Unloading-induced instability of a simulated granular fault and implications for excavation-induced seismicity. <b>2017</b> , 63, 154-161	25
1470	Mechanism and application of pulse hydraulic fracturing in improving drainage of coalbed methane. <b>2017</b> , 40, 79-90	71
1469	Analysis of size effects on the geomechanical parameters of intact granite samples under unconfined conditions. <b>2017</b> , 12, 1229-1242	27
1468	Micromechanical analyses of the effect of rubber size and content on sand-rubber mixtures at the critical state. <b>2017</b> , 45, 81-97	35
1467	Improvements for the smooth joint contact model of the particle flow code and its applications. <b>2017</b> , 87, 163-177	56

1466	Evaluation of the anisotropy and directionality of a jointed rock mass under numerical direct shear tests. <b>2017</b> , 225, 29-41		34
1465	A multiscale framework for the simulation of the anisotropic mechanical behavior of shale. <b>2017</b> , 41, 1494-1522		38
1464	Intensity and volumetric characterizations of hydraulically driven fractures by hydro-mechanical simulations. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2017</b> , 93, 163-178	6	22
1463	Numerical Investigation of Bedding Plane Parameters of Transversely Isotropic Shale. <b>2017</b> , 50, 1183-1204		27
1462	Fully coupled simulation of a hydraulic fracture interacting with natural fractures with a hybrid discrete-continuum method. <b>2017</b> , 41, 1430-1452		77
1461	Dynamic behavior of rock during its post failure stage in SHPB tests. <b>2017</b> , 27, 184-196		25
1460	Mechanical properties and energy conversion of 3D close-packed lattice model for brittle rocks. <b>2017</b> , 103, 12-20		32
1459	Hydraulic fracturing process by using a modified two-dimensional particle flow code - method and validation. <b>2017</b> , 17, 52		11
1458	Multidimensional Space Method for Geometrically Nonlinear Problems under Total Lagrangian Formulation Based on the Extended Finite-Element Method. <b>2017</b> , 143, 04017036		10
1457	Investigation of rock fragmentation during rockfalls and rock avalanches via 3-D discrete element analyses. <b>2017</b> , 122, 678-695		64
1456	Bonded-particle model calibration using response surface methodology. <b>2017</b> , 32, 141-152		28
1455	Shear Model Development of Limestone Joints with Incorporating Variations of Basic Friction Coefficient and Roughness Components During Shearing. <b>2017</b> , 50, 825-855		7
1454	Energetical formulation of size effect law for quasi-brittle fracture. <b>2017</b> , 175, 279-292		14
1453	Discrete-Element-Method/Computational-Fluid-Dynamics Coupling Simulation of Proppant Embedment and Fracture Conductivity After Hydraulic Fracturing. <b>2017</b> , 22, 632-644		63
1452	Influence of grain size heterogeneity on strength and microcracking behavior of crystalline rocks. <b>2017</b> , 122, 1054-1073		116
1451	Three-dimensional DEM analysis of single geogrid-encased stone columns under unconfined compression: a parametric study. <b>2017</b> , 12, 559-572		27
1450	Numerical analysis of impact failure of automotive laminated glass: A review. <b>2017</b> , 122, 47-60		65
1449	Numerical modelling of the NGI-DSS test and cyclic threshold shear strain for degradation in sand. <b>2017</b> , 19, 1		0



1448	Discontinuum Modeling of Solid Deformation Pore-Water Diffusion Coupling. <b>2017</b> , 17, 04017033		23
1447	Micro-scale fracturing mechanisms in coal induced by adsorption of supercritical CO <sub>2</sub> . <b>2017</b> , 175, 40-50		59
1446	A comparison of discrete element and micromechanical methods for determining the effective elastic properties of geomaterials. <b>2017</b> , 87, 1-9		2
1445	Numerical simulation of fracture process of concrete under uniaxial compression via PFC2D. <b>2017</b> , 61, 012069		1
1444	Size-dependent mechanical behavior of an intergranular bond revealed by an analytical model. <b>2017</b> , 89, 153-167		4
1443	On crack propagation in brittle material using the distinct lattice spring model. <b>2017</b> , 118-119, 41-57		35
1442	Modelling micro-crack initiation and propagation of crystal structures with microscopic defects under uni-axial tension by discrete element method. <b>2017</b> , 315, 445-476		5
1441	Influence of Loading System Stiffness on Post-peak Stress-Strain Curve of Stable Rock Failures. <b>2017</b> , 50, 2255-2275		14
1440	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
1439	Evaluating Force Distributions within Virtual Uncemented Mine Backfill Using Discrete Element Method. <b>2017</b> , 17, 06016042		9
1438	A Novel Numerical Algorithm for Simulation of Initiation, Propagation and Coalescence of Flaws Subject to Internal Fluid Pressure and Vertical Stress in the Framework of General Particle Dynamics. <b>2017</b> , 50, 1833-1849		18
1437	Detailed comparison of nine intact rock failure criteria using polyaxial intact coal strength data obtained through PFC3D simulations. <b>2017</b> , 13, 419		4
1436	DEM simulation of polyhedral particle cracking using a combined Mohr-Coulomb-Weibull failure criterion. <b>2017</b> , 19, 1		18
1435	Prediction of strength and deformability of an interlocked blocky rock mass using UDEC. <b>2017</b> , 9, 531-542		26
1434	Virial stress-based model to simulate the silica glass densification with the discrete element method. <b>2017</b> , 112, 1909-1925		4
1433	Experimental and numerical investigation of influence of air-voids on the compressive behaviour of foamed concrete. <b>2017</b> , 130, 103-119		81
1432	Coupling of solid deformation and pore pressure for undrained deformation – discrete element method approach. <b>2017</b> , 41, 1943-1961		49
1431	Assessment of the Energy Balance of Rock Masses through Discrete Element Modelling. <b>2017</b> , 191, 442-450		6

1430	Sensitivity Analysis of the Micro-Parameters Used in a PFC Analysis Towards the Mechanical Properties of Rocks. <b>2017</b> , 191, 488-495	50
1429	Simulation-based investigation of core-shell agglomerates: Influence of spatial heterogeneity in particle sizes on breakage characteristics. <b>2017</b> , 137, 100-106	8
1428	3D polycrystalline discrete element method (3PDEM) for simulation of crack initiation and propagation in granular rock. <b>2017</b> , 90, 96-112	46
1427	The role of seismic triggering in a deep-seated mudstone landslide, China: Historical reconstruction and mechanism analysis. <b>2017</b> , 226, 122-135	27
1426	The modeling of crack propagation and coalescence in rocks under uniaxial compression using the novel conjugated bond-based peridynamics. <b>2017</b> , 128-129, 614-643	109
1425	Effect of the particle shape and swirling intensity on the breakage of lump coal particle in pneumatic conveying. <b>2017</b> , 317, 438-448	36
1424	The estimation of uniaxial compressive strength conversion factor of trona and interbeds from point load tests and numerical modeling. <b>2017</b> , 131, 71-79	13
1423	Grain-Based Discrete-Element Modeling Study on the Effects of Cementation on the Mechanical Behavior of Low-Porosity Brittle Rocks. <b>2017</b> , 17, 04017061	17
1422	Mechanical behavior and failure mechanism of pre-cracked specimen under uniaxial compression. <b>2017</b> , 712-713, 330-343	28
1421	Direct tensile tests on particulate agglomerates for the determination of tensile strength and interparticle bond forces. <b>2017</b> , 28, 2177-2185	2
1420	Evaluation of SoilPipe Interaction under Relative Axial Ground Movement. <b>2017</b> , 8, 04017009	15
1419	Empirical assessment of the critical time increment in explicit particulate discrete element method simulations. <b>2017</b> , 86, 67-79	37
1418	A discrete element thermo-mechanical modelling of diffuse damage induced by thermal expansion mismatch of two-phase materials. <b>2017</b> , 318, 898-916	24
1417	Discrete element modeling of the single-particle crushing test for ballast stones. <b>2017</b> , 88, 61-73	44
1416	A thermodynamics-based cohesive model for discrete element modelling of fracture in cemented materials. <b>2017</b> , 117, 159-176	30
1415	Bonded-cluster simulation of rock-cutting using PFC2D. <b>2017</b> , 20, 1289-1301	11
1414	Three-dimensional DEM investigation of critical state and dilatancy behaviors of granular materials. <b>2017</b> , 12, 527-540	41
1413	A Digital Image-Based Discrete Fracture Network Model and Its Numerical Investigation of Direct Shear Tests. <b>2017</b> , 50, 1801-1816	17

1412	Modeling microcapsule-enabled self-healing cementitious composite materials using discrete element method. <b>2017</b> , 26, 340-357	39
1411	Numerical study of excavation induced fractures using an extended rigid block spring method. <b>2017</b> , 85, 368-383	23
1410	Combined Discrete-Finite Element Modeling of Ballasted Railway Track Under Cyclic Loading. <b>2017</b> , 14, 1750047	11
1409	A methodical calibration procedure for discrete element models. <b>2017</b> , 307, 73-83	91
1408	Initiation and Displacement Analysis of Cohesive Soil Slopes by Discrete Element Modelling. <b>2017</b> , 35, 693-705	2
1407	Application of the discrete element method for the simulation of size effects in concrete samples. <b>2017</b> , 108, 244-253	20
1406	The effect of natural fractures on hydraulic fracturing propagation in coal seams. <b>2017</b> , 150, 180-190	85
1405	Effect of Boundary Condition on the Shear Behaviour of Rock Joints in the Direct Shear Test. <b>2017</b> , 50, 1141-1155	39
1404	The use of discrete fracture networks for modelling coupled geomechanical and hydrological behaviour of fractured rocks. <b>2017</b> , 85, 151-176	217
1403	Fracture of a model cohesive granular material. <b>2017</b> , 13, 1040-1047	13
1402	Discrete element method simulations of bio-cemented sands. <b>2017</b> , 85, 139-150	47
1401	Discrete element method simulation of random Voronoi grain-based models. <b>2017</b> , 20, 335-345	11
1400	Combined Finite-Discrete Element Method Modeling of Rock Failure Problems. <b>2017</b> , 301-309	
1399	Impact of particle shape on breakage of recycled construction and demolition aggregates. <b>2017</b> , 308, 1-12	66
1398	Underground Space for Sustainable Urban Development: Experiences from Urban Underground Metro Constructions in India. <b>2017</b> , 199-222	
1397	Composite wedge failure using photogrammetric measurements and DFN-DEM modelling. <b>2017</b> , 9, 41-53	5
1396	Effect of rubber content on the unstable behaviour of sand-rubber mixtures under static loading: a micro-mechanical study. <b>2017</b> , 1-14	6
1395	Scaling laws for the mechanics of loose and cohesive granular materials based on Baxter's sticky hard spheres. <b>2017</b> , 96, 032914	16

1394	A comparative study of numerical modelling techniques for the fracture of brittle materials with specific reference to glass. <b>2017</b> , 152, 493-505	31
1393	Numerical simulation of stress-strain behaviour of cemented paste backfill in triaxial compression. <b>2017</b> , 231, 165-175	28
1392	Discrete element simulation of ice loads on narrow conical structures. <b>2017</b> , 146, 282-297	17
1391	Morphological Expressions of Crater Infill Collapse: Model Simulations of Chaotic Terrains on Mars. <b>2017</b> , 18, 3687-3699	
1390	Bibliography. <b>2017</b> , 233-253	
1389	Rock Physics II Complete Session. <b>2017</b> ,	
1388	The emergence of asymmetric normal fault systems under symmetric boundary conditions. <b>2017</b> , 104, 159-171	11
1387	Role of natural fractures in damage evolution around tunnel excavation in fractured rocks. <b>2017</b> , 231, 100-113	47
1386	Seepage simulation using pipe network flow model in a discrete element system. <b>2017</b> , 92, 201-209	8
1385	Formulation and numerical implementation of micro-scale boundary conditions for particle aggregates. <b>2017</b> , 19, 1	5
1384	DEM analysis of the effect of joint geometry on the shear behavior of rocks. <b>2017</b> , 345, 779-796	18
1383	Growth and interaction of normal faults and fault network evolution in rifts: insights from three-dimensional discrete element modelling. <b>2017</b> , 439, 219-248	16
1382	Numerical investigation of hydraulic fracturing in transversely isotropic shale reservoirs based on the discrete element method. <b>2017</b> , 46, 398-420	25
1381	Contact-induced deformation and damage of rocks used in pavement materials. <b>2017</b> , 133, 255-265	9
1380	Analysis of Rock Damage Characteristics Based on Particle Discrete Element Model. <b>2017</b> , 36, 897	2
1379	Numerical studies of interactions between hydraulic and natural fractures by Smooth Joint Model. <b>2017</b> , 46, 592-602	37
1378	Numerical investigation on the dynamic progressive fracture mechanism of cracked chevron notched semi-circular bend specimens in split Hopkinson pressure bar tests. <b>2017</b> , 184, 202-217	30
1377	Numerical modelling of fracturing effect stimulated by pulsating hydraulic fracturing in coal seam gas reservoir. <b>2017</b> , 46, 651-663	12

1376	Effects of Host-rock Fracturing on Elastic-deformation Source Models of Volcano Deflation. <b>2017</b> , 7, 10970		18
1375	Initiation of Stimulation Treatments Depends on Wellbore Mechanical Responses During Drilling. <b>2017</b> ,		1
1374	Discrete Element Modeling of Micro-scratch Tests: Investigation of Mechanisms of CO2 Alteration in Reservoir Rocks. <b>2017</b> , 50, 3337-3348		26
1373	Discrete bonded particle modelling of fault activation near a nuclear waste repository site and comparison to static rupture earthquake scaling laws. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2017</b> , 98, 1-9	6	6
1372	Application of discrete element approach in fractured rock masses. <b>2017</b> , 145-176		0
1371	Interpreting Multistage Minifrac Tests using Discrete Element Modeling of Foliated Rock with Various Drilling Mud Properties. <b>2017</b> , 191, 233-241		1
1370	Numerical Simulation of Granite Plates Containing a Cylindrical Opening in Compression. <b>2017</b> , 191, 242-247	6	
1369	Discrete particle modeling and micromechanical characterization of bilayer tablet compaction. <b>2017</b> , 529, 597-607		17
1368	Microscopic interpretation of one-dimensional compressibility of granular materials. <b>2017</b> , 91, 161-168		8
1367	A discrete element model of brittle damages generated by thermal expansion mismatch of heterogeneous media. <b>2017</b> , 140, 15001		
1366	Bond calibration method for Young's modulus determination in the discrete element method framework. <b>2017</b> , 19, 1		11
1365	Accurate modelling of the elastic behavior of a continuum with the Discrete Element Method. <b>2017</b> , 60, 997-1010		26
1364	A numerical study on cracking processes in limestone by the b-value analysis of acoustic emissions. <b>2017</b> , 92, 1-10		47
1363	A cohesive damage-plasticity model for DEM and its application for numerical investigation of soft rock fracture properties. <b>2017</b> , 98, 175-196		63
1362	Formation and fractal characteristics of main fracture surface of red sandstone under restrictive shear creep. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2017</b> , 98, 181-190	6	16
1361	DEM micromechanical modeling and laboratory experiment on creep behavior of salt rock. <b>2017</b> , 46, 38-46		29
1360	Influence of heterogeneity on rock strength and stiffness using discrete element method and parallel bond model. <b>2017</b> , 9, 575-584		15
1359	Numerical simulation and parametric analysis of selective laser melting process of AlSi10Mg powder. <b>2017</b> , 123, 1		41

1358	A discrete numerical method for brittle rocks using mathematical programming. <b>2017</b> , 13, 283		8
1357	A discrete element method-based approach to predict the breakage of coal. <b>2017</b> , 28, 2665-2677		16
1356	The effects of nearby fractures on hydraulically induced fracture propagation and permeability changes. <b>2017</b> , 228, 197-213		24
1355	Discrete element simulation of mine tailings stabilized with biopolymer. <b>2017</b> , 76, 1		5
1354	Failure behavior around a circular opening in a rock mass with non-persistent joints: A parallel-bond stress corrosion approach. <b>2017</b> , 24, 2406-2420		11
1353	Effects of grain size-to-particle size ratio on micro-cracking behavior using a bonded-particle grain-based model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2017</b> , 100, 207-217	6	40
1352	Effect of discretization at laboratory and large scales during discrete element modelling of brittle failure. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2017</b> , 100, 48-61	6	9
1351	Discrete element simulation of SiC ceramic with pre-existing random flaws under uniaxial compression. <b>2017</b> , 43, 13717-13728		18
1350	Numerical Study of Particle Size Distribution Effect on the Failure of Asphalt Mixtures Using Discrete Element Method. <b>2017</b> ,		3
1349	Discrete Element Modelling of the Mechanical Behaviour of a Highly Porous Foamed Concrete. <b>2017</b> ,		1
1348	Modeling the relationship between macro- and meso-parameters of coal using a combined optimization method. <b>2017</b> , 76, 1		13
1347	Shear Behavior of Non-Persistent Joint Under High Normal Load. <b>2017</b> , 49, 320-334		25
1346	Distinction of Crack Nature in Brittle Rock-Like Materials: A Numerical Study Based on Moment Tensors. <b>2017</b> , 50, 2837-2845		33
1345	Developing a Crystal Plasticity Model for Metallic Materials Based on the Discrete Element Method. <b>2017</b> , 2, 2609-2614		1
1344	Measurement and modelling of soil displacement from sweeps with different cutting widths. <b>2017</b> , 161, 1-13		21
1343	Progressive collapse simulation based on DEM for single-layer reticulated domes. <b>2017</b> , 128, 721-731		20
1342	Una nueva estrategia para el estudio de la vulnerabilidad de edificios expuestos a explosiones a cielo abierto. <b>2017</b> , 33, 299-306		
1341	Exploration into the causes of uncertainty in UDEC Grain Boundary Models. <b>2017</b> , 82, 110-123		35

1340	Simulation of continuum electrical conduction and Joule heating using DEM domains. <b>2017</b> , 110, 862-877	2
1339	Characterization of Joint Set Effect on Rock Pillars Using Synthetic Rock Mass Numerical Method. <b>2017</b> , 17, 06016026	8
1338	Estimation of Confined Peak Strength of Crack-Damaged Rocks. <b>2017</b> , 50, 309-326	19
1337	Numerical modelling of fluid-induced soil erosion in granular filters using a coupled bonded particle lattice Boltzmann method. <b>2017</b> , 82, 134-143	34
1336	Predicting breakage of high aspect ratio particles in an agitated bed using the Discrete Element Method. <b>2017</b> , 158, 314-327	27
1335	3D printed agglomerates for granule breakage tests. <b>2017</b> , 306, 103-112	21
1334	Development of Synthetic Rock Mass Bonded Block Models to Simulate the Behaviour of Intact Veined Rock. <b>2017</b> , 35, 313-335	11
1333	Polygonal grain-based distinct element modeling for mechanical behavior of brittle rock. <b>2017</b> , 41, 880-898	17
1332	Run-out prediction and failure mechanism analysis of the Zhenggang deposit in southwestern China. <b>2017</b> , 14, 719-726	10
1331	Modeling scale effects on consequent slope deformation by centrifuge model tests and the discrete element method. <b>2017</b> , 14, 981-993	17
1330	DEM simulations of sandstone under true triaxial compressive tests. <b>2017</b> , 12, 495-510	47
1329	Impact of water and nitrogen fracturing fluids on fracturing initiation pressure and flow pattern in anisotropic shale reservoirs. <b>2017</b> , 81, 59-76	31
1328	Particle-Based Numerical Manifold Method to Model Dynamic Fracture Process in Rock Blasting. <b>2017</b> , 17,	25
1327	Characterization of clastic rock using a biconcave bond model of DEM. <b>2017</b> , 41, 422-441	3
1326	Application of particle simulation methods to composite materials: a review. <b>2017</b> , 26, 1-22	13
1325	Elastically-homogeneous lattice models of damage in geomaterials. <b>2017</b> , 81, 195-206	30
1324	Experimental and numerical investigations into hydraulic behaviour of coir fibre drain. <b>2017</b> , 54, 75-87	18
1323	Numerical Simulation of Failure Process of Rock-Like Materials Subjected to Impact Loads. <b>2017</b> , 17, 04016073	30

1322	Numerical Investigation of the Dynamic Properties of Intermittent Jointed Rock Models Subjected to Cyclic Uniaxial Compression. <b>2017</b> , 50, 89-112	51
1321	DEM Modeling Mechanical Behavior of Unsaturated Structural Loess under Constant Stress Increment Ratio Compression Tests. <b>2017</b> , 17, 04016108	8
1320	Dependencies between internal structure and mechanical properties of spray dried granules □ Experimental study and DEM simulation. <b>2017</b> , 28, 185-196	7
1319	Verification of two-dimensional LBM-DEM coupling approach and its application in modeling episodic sand production in borehole. <b>2017</b> , 3, 179-189	13
1318	Cone crusher performance evaluation using DEM simulations and laboratory experiments for model validation. <b>2017</b> , 103-104, 93-101	28
1317	Analysis of cone crusher performance with changes in material properties and operating conditions using DEM. <b>2017</b> , 100, 49-70	41
1316	Granular contact dynamics with elastic bond model. <b>2017</b> , 12, 479-493	14
1315	Acoustic emission characteristics of the rock-like material containing a single flaw under different compressive loading rates. <b>2017</b> , 83, 83-97	116
1314	Experimental and Numerical Investigation on the Bearing and Failure Mechanism of Multiple Pillars Under Overburden. <b>2017</b> , 50, 995-1010	28
1313	Discrete/Finite Element Modelling of Rock Cutting with a TBM Disc Cutter. <b>2017</b> , 50, 621-638	53
1312	Coupled hydro-thermo-mechanical modeling of hydraulic fracturing in quasi-brittle rocks using BPM-DEM. <b>2017</b> , 9, 92-104	54
1311	Particulate modeling of cementation effects on small and large strain behaviors in granular material. <b>2017</b> , 19, 1	12
1310	Shear deformation and strength of the interphase between the soil/rock mixture and the benched bedrock slope surface. <b>2017</b> , 12, 391-413	48
1309	Three-dimensional Distinct Element Method modelling of the growth of normal faults in layered sequences. <b>2017</b> , 439, 307-332	6
1308	Calibration and Verification of Two Bonded-Particle Models for Simulation of Intact Rock Behavior. <b>2017</b> , 17, 06016030	30
1307	Investigation of the micro-mechanics of sand/rubber mixtures at very small strains. <b>2017</b> , 24, 30-44	26
1306	A new potential function for the calculation of contact forces in the combined finite/discrete element method. <b>2017</b> , 41, 265-283	29
1305	Mechanical and failure characteristics of rock-like material with multiple crossed joint sets under uniaxial compression. <b>2017</b> , 9, 168781401770871	6



1304	Research on crack initiation mechanism and fracture criterion of rock-type materials under compression-shear stress. <b>2017</b> , 9, 168781401772008	5
1303	Simulation of A Hot-rolled H-section Steel Beam Subject to Static Loading Based on Discrete Element Method. <b>2017</b> , 210, 312-319	2
1302	Effects of aggregate size and specimen scale on asphalt mixture cracking using a micromechanical simulation approach. <b>2017</b> , 32, 1503-1510	4
1301	New Ways to Represent Interparticle Forces as Effective Stresses in a Macroscopic Continuum. <b>2017</b> , 17, 04017063	
1300	A 3D LATTICE SPRING MODEL FOR SIMULATION ON DEFORMATION AND FAILURE OF ROCK-LIKE MATERIALS. <b>2017</b> , 73, 11-22	
1299	An Enhanced Pseudo-3D Model of Hydraulic Fracture in Multi-Layered Formation. <b>2017</b> ,	1
1298	Spatial discrete element analysis of problem on floor buckling in underground openings. <b>2017</b> , 53, 012012	1
1297	Information extraction from metamorphic rock textures and compositional zoning of minerals:. <b>2017</b> , 123, 733-745	2
1296	Computational Fracture Mechanics. 1-26	1
1295	What is the Optimal Operation to Eliminate Cuttings Bed by Using Jet Comminuting Technique?. <b>2017</b> ,	
1294	Wave-induced stress and breaking of sea ice in a coupled hydrodynamic discrete-element wavelet model. <b>2017</b> , 11, 2711-2725	13
1293	Relation between High Tectonic Stresses and Endogenous Ring Structures. <b>2017</b> , 53, 1016-1024	1
1292	Fabrication of composites via spouted bed granulation process and simulation of their micromechanical properties. <b>2017</b> , 140, 13005	
1291	Development of Viscoelastic Multi-Body Simulation and Impact Response Analysis of a Ballasted Railway Track under Cyclic Loading. <b>2017</b> , 10,	8
1290	The Quantified Characterization Method of the Micro-Macro Contacts of Three-Dimensional Granular Materials on the Basis of Graph Theory. <b>2017</b> , 10,	3
1289	Anisotropic Failure Strength of Shale with Increasing Confinement: Behaviors, Factors and Mechanism. <b>2017</b> , 10,	8
1288	Discrete Element Modelling of Footwall Rock Mass Damage Induced by Sub-Level Caving at the Kiirunavaara Mine. <b>2017</b> , 7, 109	7
1287	Bonded-Particle Model with Nonlinear Elastic Tensile Stiffness for Rock-Like Materials. <b>2017</b> , 7, 686	6

1286	Failure Mechanical Behavior of Australian Strathbogie Granite at High Temperatures: Insights from Particle Flow Modeling. <b>2017</b> , 10, 756	20
1285	Investigation of Processes of Interaction between Hydraulic and Natural Fractures by PFC Modeling Comparing against Laboratory Experiments and Analytical Models. <b>2017</b> , 10, 1001	16
1284	Acoustic Emission Characteristics and Failure Mechanism of Fractured Rock under Different Loading Rates. <b>2017</b> , 2017, 1-13	8
1283	Effect of Nonsmooth Nose Surface of the Projectile on Penetration Using DEM Simulation. <b>2017</b> , 2017, 1-11	
1282	Calibrating the Micromechanical Parameters of the PFC2D(3D) Models Using the Improved Simulated Annealing Algorithm. <b>2017</b> , 2017, 1-11	6
1281	Numerical Investigation of Acoustic Emission Events of Argillaceous Sandstones under Confining Pressure. <b>2017</b> , 2017, 1-16	6
1280	Dynamic Fracturing Behavior of Layered Rock with Different Inclination Angles in SHPB Tests. <b>2017</b> , 2017, 1-12	7
1279	The Stability Analysis Method of the Cohesive Granular Slope on the Basis of Graph Theory. <b>2017</b> , 10,	5
1278	Numerical Studies on the Failure Process of Heterogeneous Brittle Rocks or Rock-Like Materials under Uniaxial Compression. <b>2017</b> , 10,	16
1277	Investigation of the Quasi-Brittle Failure of Alashan Granite Viewed from Laboratory Experiments and Grain-Based Discrete Element Modeling. <b>2017</b> , 10,	30
1276	A Review of Advanced Ball Mill Modelling. <b>2017</b> , 34, 106-124	44
1275	The effect of salt in dilatant faults on rates and magnitudes of induced seismicity [First results building on the geological setting of the Groningen Rotliegend reservoirs. <b>2017</b> , 96, s87-s104	1
1274	Coupled DEM-CFD Analysis of the Initiation of Internal Instability in a Gap-Graded Granular Embankment Filter. <b>2017</b> , 140, 10005	10
1273	Macro-Micro Failure Mechanisms and Damage Modeling of a Bolted Rock Joint. <b>2017</b> , 2017, 1-15	6
1272	Effect of contact anisotropy on the crushing strength of aggregates. <b>2017</b> , 140, 07010	1
1271	Numerical Investigation into the Effect of Natural Fracture Density on Hydraulic Fracture Network Propagation. <b>2017</b> , 10, 914	15
1270	DEM modeling of hydraulic fracturing in permeable rock: influence of viscosity, injection rate and in situ states. <b>2018</b> , 13, 1187-1202	32
1269	An efficient approach to generating DEM samples having coincident void ratios with actual sand. <b>2018</b> , 13, 159-167	

1268	Discrete Element Method for Modeling the Long-Term Aging Viscoelastic Behavior of Concrete Considering Its Mesostructure. <b>2018</b> , 144, 04018021		
1267	Two sides of a fault: Grain-scale analysis of pore pressure control on fault slip. <b>2018</b> , 97, 022906		9
1266	Dynamic stress concentration and energy evolution of deep-buried tunnels under blasting loads. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 104, 131-146	6	76
1265	Parametric study of smooth joint parameters on the mechanical behavior of transversely isotropic rocks and research on calibration method. <b>2018</b> , 98, 1-7		26
1264	Extended Rigid Body Spring Network method for the simulation of brittle rocks. <b>2018</b> , 99, 31-41		18
1263	Deformation bands, early markers of tectonic activity in front of a fold-and-thrust belt: Example from the Tremp-Graus basin, southern Pyrenees, Spain. <b>2018</b> , 110, 65-85		18
1262	Strength of shear bands in fluid-saturated rocks: a nonlinear effect of competition between dilation and fluid flow. <b>2018</b> , 8, 1428		20
1261	Numerical Study on the Evolution of Mesoscopic Properties and Permeability in Sandstone Under Hydromechanical Coupling Conditions Involving Industrial Internet of Things. <b>2018</b> , 6, 11804-11815		8
1260	Responses of jointed rock masses subjected to impact loading. <b>2018</b> , 10, 624-634		23
1259	Numerical Analysis of Hydrofracturing Behaviors and Mechanisms of Heterogeneous Reservoir Glutenite, Using the Continuum-Based Discrete Element Method While Considering Hydromechanical Coupling and Leak-Off Effects. <b>2018</b> , 123, 3621-3644		15
1258	Process limitations of 3D printing model rock. <b>2018</b> , 3, 173-182		19
1257	Lattice simulation of laboratory hydraulic fracture containment in layered reservoirs. <b>2018</b> , 100, 62-75		13
1256	Mechanisms of Deformation and Fracture of Thin Coatings on Different Substrates in Instrumented Indentation. <b>2018</b> , 60, 2169-2176		3
1255	Numerical analysis of the failure process of soilBlock mixtures through computed tomography and PFC3D models. <b>2018</b> , 5, 126-141		14
1254	Effect of meso-structure on strength and size effect in concrete under compression. <b>2018</b> , 195, 162-185		21
1253	Strength and failure characteristics of brittle jointed rock-like specimens under uniaxial compression: Digital speckle technology and a particle mechanics approach. <b>2018</b> , 28, 669-677		31
1252	Variational inequality-based framework of discontinuous deformation analysis. <b>2018</b> , 115, 358-394		14
1251	Numerical study of the effect of ITZ on the failure behaviour of concrete by using particle element modelling. <b>2018</b> , 170, 776-789		33

1250	Rheology of granular materials composed of crushable particles. <b>2018</b> , 41, 50		8
1249	Numerical study on the dynamic fracture behavior of 3D heterogeneous rocks using General Particle Dynamics. <b>2018</b> , 96, 90-104		8
1248	Quasistatic Discrete Element Modeling of Hydraulic and Thermal Fracturing Processes in Shale and Low-Permeability Crystalline Rocks. <b>2018</b> , 75-109		
1247	A displacement-softening contact model for discrete element modeling of quasi-brittle materials. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 104, 9-19	6	21
1246	Use of an integrated finite/discrete element method-discrete fracture network approach to characterize surface subsidence associated with sub-level caving. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 103, 55-67	6	30
1245	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
1244	Modeling breakage and motion of black pepper seeds in cryogenic mill. <b>2018</b> , 29, 1055-1071		16
1243	On the shear failure of incipient rock discontinuities under CNL and CNS boundary conditions: Insights from DEM modelling. <b>2018</b> , 234, 153-166		35
1242	Effects of curvature-related DEM contact model on the macro- and micro-mechanical behaviours of granular soils. <b>2018</b> , 68, 1085-1098		59
1241	Effects of particle size of mono-disperse granular flows impacting a rigid barrier. <b>2018</b> , 91, 1179-1201		57
1240	Failure response of composite rock-coal samples. <b>2018</b> , 4, 175-192		27
1239	Hydraulic Fracture Interaction with Cemented Natural Fracture: A Three Dimensional Discrete Element Method Analysis. <b>2018</b> ,		4
1238	Discrete Analysis of Damage and Shear Banding in Argillaceous Rocks. <b>2018</b> , 51, 1521-1538		15
1237	Design of strain tolerant porous microstructures I A case for controlled imperfection. <b>2018</b> , 148, 193-201		8
1236	Three-dimensional discrete element modelling of three point bending tests: The effect of surface energy on the tensile strength. <b>2018</b> , 337, 119-126		11
1235	Numerical simulation of 2D granular flow entrainment using DEM. <b>2018</b> , 20, 1		23
1234	Three-dimensional discrete element analysis of triaxial tests and wetting tests on unsaturated compacted silt. <b>2018</b> , 97, 90-102		11
1233	Dynamic structural evolution of overlying strata during shallow coal seam longwall mining. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 103, 20-32	6	45

1232	Discrete modelling of the compaction of non-spherical particles using a multi-sphere approach. <b>2018</b> , 117, 108-116	38
1231	Effects of the micro-structure and micro-parameters on the mechanical behaviour of transversely isotropic rock in Brazilian tests. <b>2018</b> , 13, 887-910	26
1230	Three-dimensional discrete element modeling of direct shear test for granular rubber band. <b>2018</b> , 97, 204-216	33
1229	Quantitative Characterization Method for the Microcontacts and Macrocontacts of Two-Dimensional Granular Materials. <b>2018</b> , 18, 04018016	1
1228	DEM analysis of granular crushing during simple shearing. <b>2018</b> , 36, 522-531	7
1227	The discrete element method with deformable particles. <b>2018</b> , 114, 828-860	21
1226	Effect of Thermal Treatment on Brazilian Tensile Strength of Granites with Different Grain Size Distributions. <b>2018</b> , 51, 1293-1303	48
1225	Numerical Simulation of Thermal Cracking in Rocks Based on General Particle Dynamics. <b>2018</b> , 144, 04017156	28
1224	Strategies for multi-scale simulation of fine grinding and dispersing processes: Drag coefficient and fracture of fractal aggregates. <b>2018</b> , 29, 707-718	9
1223	Three-dimensional Reconstruction of Block Shape Irregularity and its Effects on Block Impacts Using an Energy-Based Approach. <b>2018</b> , 51, 1173-1191	11
1222	The Grain-Based Model Numerical Simulation of Unconfined Compressive Strength Experiment Under Thermal-Mechanical Coupling Effect. <b>2018</b> , 22, 2764-2775	5
1221	Comparison of breakage models in DEM in simulating impact on particle beds. <b>2018</b> , 29, 692-706	52
1220	Experimental and DEM analyses on wheel-soil interaction. <b>2018</b> , 76, 15-28	30
1219	Numerical investigation of the direct tensile behaviour of laminated and transversely isotropic rocks containing incipient bedding planes with different strengths. <b>2018</b> , 104, 373-388	33
1218	Landscape evolution characteristics of large-scale erosion and landslides at the Putanpunas Stream, Taiwan. <b>2018</b> , 9, 175-195	6
1217	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
1216	Particle-Based Modeling of Pull-Apart Basin Development. <b>2018</b> , 37, 343-358	16
1215	Transverse Isotropy of Phyllite Under Brazilian Tests: Laboratory Testing and Numerical Simulations. <b>2018</b> , 51, 1111-1135	27

1214	DEM analysis of failure mechanisms in the intact Brazilian test. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 102, 109-119	6	31
1213	Mechanical properties of brittle rock governed by micro-geometric heterogeneity. <b>2018</b> , 104, 358-372		68
1212	Role of particle crushing on particle kinematics and shear banding in granular materials. <b>2018</b> , 13, 601-618		24
1211	Estimating earth loads on buried pipes under axial loading condition: insights from 3D discrete element analysis. <b>2018</b> , 9, 1		9
1210	Effects of strain rate on the mechanical and fracturing behaviors of rock-like specimens containing two unparallel fissures under uniaxial compression. <b>2018</b> , 110, 195-211		35
1209	Reservoir rock chemo-mechanical alteration quantified by triaxial tests and implications to fracture reactivation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 106, 250-258	6	17
1208	Sensitivity analysis on the interaction between hydraulic and natural fractures based on an explicitly coupled hydro-geomechanical model in PFC2D. <b>2018</b> , 167, 638-653		18
1207	Crushing and oedometer compression of rockfill using DEM. <b>2018</b> , 101, 11-22		15
1206	Ice load on floating structure simulated with dilated polyhedral discrete element method in broken ice field. <b>2018</b> , 75, 53-65		42
1205	A new thermo-mechanical coupled DEM model with non-spherical grains for thermally induced damage of rocks. <b>2018</b> , 116, 54-69		19
1204	Dynamic Fragmentation of Jointed Rock Blocks During Rockslide-Avalanches: Insights From Discrete Element Analyses. <b>2018</b> , 123, 3250-3269		29
1203	Reducing the anisotropy of a Brazilian disc generated in a bonded-particle model. <b>2018</b> , 34, 716-727		3
1202	Numerical investigation of mineralogical composition effect on strength and micro-cracking behavior of crystalline rocks. <b>2018</b> , 53, 191-203		28
1201	Simulating mining-induced strata permeability changes. <b>2018</b> , 237, 208-216		30
1200	Controls of natural fractures on the texture of hydraulic fractures in rock. <b>2018</b> , 165, 616-626		13
1199	A review of numerical techniques approaching microstructures of crystalline rocks. <b>2018</b> , 115, 167-187		35
1198	Numerical modeling of influence parameters in cavability of rock mass in block caving mines. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 105, 22-27	6	23
1197	Landslide hazard zoning based on numerical simulation and hazard assessment. <b>2018</b> , 9, 368-388		11

1196	An overview on advances in computational fracture mechanics of rock. <b>2018</b> , 1-24	23
1195	Influence of layer orientation and interlayer bonding force on the mechanical behavior of shale under Brazilian test conditions. <b>2018</b> , 34, 349-358	27
1194	Micromechanics based discrete damage model with multiple non-smooth yield surfaces: Theoretical formulation, numerical implementation and engineering applications. <b>2018</b> , 27, 611-639	15
1193	Numerical analysis on mining-induced fracture development around river valleys. <b>2018</b> , 32, 463-485	12
1192	Multiscale modeling and analysis of compaction bands in high-porosity sandstones. <b>2018</b> , 13, 575-599	36
1191	DEM Simulation of Simplified Railway Embankment Under the Effect of Train-Induced Dynamic Load. <b>2018</b> , 423-431	1
1190	Analysis of the Aso-Bridge landslide during the 2016 Kumamoto earthquakes in Japan. <b>2018</b> , 77, 1439-1449	9
1189	Investigation on the influence mechanism of rock brittleness on rock fragmentation and cutting performance by discrete element method. <b>2018</b> , 113, 120-130	33
1188	Strength deterioration of a Shaly sandstone under dry/wet cycles: a case study from the Three Gorges Reservoir in China. <b>2018</b> , 77, 1607-1621	30
1187	Investigating the scale-dependency of the geometrical and mechanical properties of a moderately jointed rock using a synthetic rock mass (SRM) approach. <b>2018</b> , 95, 162-179	53
1186	The role of topology in microstructure-property relations: a 2D DEM based study. <b>2018</b> , 26, 014001	1
1185	Deformation analysis of shear band in granular materials via a robust plane shear test and numerical simulation. <b>2018</b> , 323, 385-392	11
1184	Evaluation of Pore Size and Distribution Impacts on Uniaxial Compressive Strength of Lithophysal Rock. <b>2018</b> , 43, 1235-1246	9
1183	A study of the effect of brittleness on hydraulic fracture complexity using a flow-coupled discrete element method. <b>2018</b> , 160, 372-383	22
1182	Mechanical behaviour of porous lanthanide oxide microspheres: Experimental investigation and numerical simulations. <b>2018</b> , 38, 695-703	4
1181	Effects of model size and particle size on the response of sea-ice samples created with a hexagonal-close-packing pattern in discrete-element method simulations. <b>2018</b> , 36, 106-113	10
1180	Physical and numerical studies of rock fragmentation subject to wedge cutter indentation in the mixed ground. <b>2018</b> , 71, 354-365	37
1179	Distinct element method analysis of jointed rock fragmentation induced by TBM cutting. <b>2018</b> , 22, s79-s98	13

1178	DEM/BBM modeling of abrasion dominated ribbon breakage. <b>2018</b> , 64, 1191-1204	2
1177	Modeling Micro-cracking Behavior of Bukit Timah Granite Using Grain-Based Model. <b>2018</b> , 51, 135-154	46
1176	Derivation and verification of a lattice model for bending vibration of a plate. <b>2018</b> , 98, 367-387	4
1175	Energy dissipation in soil samples during drained triaxial shearing. <b>2018</b> , 68, 421-433	16
1174	Effect of meso-structure on strength and size effect in concrete under tension. <b>2018</b> , 42, 181-207	7
1173	Failure behaviour of rock-like materials containing two pre-existing unparallel flaws: an insight from particle flow modeling. <b>2018</b> , 22, s57-s78	9
1172	Experimental and Numerical Investigation of the Center-Cracked Horseshoe Disk Method for Determining the Mode I Fracture Toughness of Rock-Like Material. <b>2018</b> , 51, 173-185	16
1171	Advances in the DEM and Coupled DEM and FEM Techniques in Non Linear Solid Mechanics. <b>2018</b> , 309-335	2
1170	Discrete Simulation of Cone Penetration in Granular Materials. <b>2018</b> , 95-111	0
1169	Discrete element simulations of powder-bed sintering-based additive manufacturing. <b>2018</b> , 149, 373-392	21
1168	Effect Mechanism of Fractures on the Mechanics Characteristics of Jointed Rock Mass Under Compression. <b>2018</b> , 43, 3659-3671	9
1167	Numerical study of coarse coal particle breakage in pneumatic conveying. <b>2018</b> , 38, 204-214	15
1166	Experimental and numerical investigation on the tensile fatigue properties of rocks using the cyclic flattened Brazilian disc method. <b>2018</b> , 105, 68-82	42
1165	A discrete element model of concrete for cyclic loading. <b>2018</b> , 196, 173-185	20
1164	Grain breakage criteria for discrete element models of sand crushing under one-dimensional compression. <b>2018</b> , 95, 231-239	22
1163	An integrated particle model for fluid-particle-structure interaction problems with free-surface flow and structural failure. <b>2018</b> , 76, 166-184	16
1162	Discrete element simulation of SiC ceramic containing a single pre-existing flaw under uniaxial compression. <b>2018</b> , 44, 3261-3276	12
1161	Novel discrete element modeling coupled with finite element method for investigating ballasted railway track dynamics. <b>2018</b> , 96, 40-54	22



1160	Discrete elements and size effects. <b>2018</b> , 189, 246-272	12
1159	On the role of sphericity of falling rock clusters—insights from experimental and numerical investigations. <b>2018</b> , 15, 219-232	33
1158	Thermal Cracking Analysis of Microbial Cemented Sand under Various Strains Based on the DEM. <b>2018</b> , 2018, 1-15	4
1157	Numerical and experimental investigation of rock breaking method under free surface by TBM disc cutter. <b>2018</b> , 25, 2107-2118	6
1156	Borehole damaging under thermo-mechanical loading in the RN-15/IDDP-2 deep well: towards validation of numerical modeling using logging images. <b>2018</b> , 6,	6
1155	Coupled particle-fluid simulations of the initiation of suffusion. <b>2018</b> , 58, 972-985	25
1154	Influence of wavelength-to-tunnel-diameter ratio on dynamic response of underground tunnels subjected to blasting loads. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 112, 323-338	30
1153	Geomechanical modelling of sinkhole development using distinct elements: model verification for a single void space and application to the Dead Sea area. <b>2018</b> , 9, 1341-1373	25
1152	Experimental Study on Limestone Cohesive Particle Model and Crushing Simulation. <b>2018</b> , 2018, 1-12	
1151	Long-term stress-strain response of chalk: a micro-mechanical interpretation. <b>2018</b> ,	1
1150	A Lattice Model for Elastic Particulate Composites. <b>2018</b> , 11,	3
1149	Stability Analysis of Earth Slope Using Combined Numerical Analysis Method Based on DEM and LEM. <b>2018</b> , 25,	1
1148	Joint Elasticity Effect on the Failure Behaviours of Rock Masses using a Discrete Element Model. <b>2018</b> , 11, 2968	
1147	Numerical Simulation of Shear Behavior and Permeability Evolution of Rock Joints with Variable Roughness and Infilling Thickness. <b>2018</b> , 2018, 1-11	6
1146	The Influence of Convex Particles' Irregular Shape and Varying Size on Porosity, Permeability, and Elastic Bulk Modulus of Granular Porous Media: Insights From Numerical Simulations. <b>2018</b> , 123, 10,563-10,582	22
1145	Numerical Investigation of Rainfall-Induced Landslide in Mudstone Using Coupled Finite and Discrete Element Analysis. <b>2018</b> , 2018, 1-15	4
1144	The Influence of Groundwater on the Sliding and Deposition Behaviors of Cataclinal Slopes. <b>2018</b> , 10, 1179	0
1143	Coupling of Discrete and Continuum Approaches in Modeling the Behavior of Materials. <b>2018</b> , 1-40	

1142	DEM simulation of shear vibrational fluidization of granular material. <b>2018</b> , 20, 1		15
1141	Discrete element analysis of the rheological characteristics of self-compacting concrete with irregularly shaped aggregate. <b>2018</b> , 11, 1		7
1140	Influence of Grain Size Heterogeneity and In-Situ Stress on the Hydraulic Fracturing Process by PFC2D Modeling. <b>2018</b> , 11, 1413		11
1139	A parallel-bonded chemical corrosion model for discrete element modelling of chemically corroded limestone. <b>2018</b> , 202, 297-310		7
1138	A numerical estimate method of dynamic fracture initiation toughness of rock under high temperature. <b>2018</b> , 204, 87-102		51
1137	Geomechanical modelling of sinkhole development using Distinct Elements: Model verification for a single void space and application to the Dead Sea area. <b>2018</b> ,		3
1136	Influence of fracture roughness and micro-fracturing on the mechanical response of rock joints: a discrete element approach. <b>2018</b> , 213, 87-105		10
1135	Numerical Investigation of the Failure Mechanism of Transversely Isotropic Rocks with a Particle Flow Modeling Method. <b>2018</b> , 6, 171		5
1134	Multiphysics Lattice Discrete Particle Modeling (M-LDPM) for the Simulation of Shale Fracture Permeability. <b>2018</b> , 51, 3963-3981		21
1133	A feasibility study on confinement effect on blasting performance in narrow vein mining through numerical modelling. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 112, 84-94	6	10
1132	Mechanism of Strain Burst by Laboratory and Numerical Analysis. <b>2018</b> , 2018, 1-15		2
1131	A more efficient method for calibrating discrete element method parameters for simulations of metallic powder used in additive manufacturing. <b>2018</b> , 20, 1		15
1130	On the Dynamic Fragmentation and Lubrication of Coseismic Landslides. <b>2018</b> , 123, 9914-9932		19
1129	Use of fine aggregate matrix for computational modeling of low temperature fracture of asphalt concrete. <b>2018</b> , 51, 1		10
1128	Pore-to Reservoir-Scale Modeling of Depletion-Induced Compaction and Implications on Production Rate. <b>2018</b> ,		4
1127	Mechanical Properties and Failure Behavior of Composite Samples. <b>2018</b> , 2018, 1-16		5
1126	3D Particle-Based DEM Investigation into the Shear Behaviour of Incipient Rock Joints with Various Geometries of Rock Bridges. <b>2018</b> , 51, 3563-3584		20
1125	Application of Discrete Element Methods to Approximate Sea Ice Dynamics. <b>2018</b> , 10, 2228-2244		9

1124	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
1123	Influence of Particle Impact on the Blade Failure. <b>2018</b> , 07,		
1122	Modelling the Behavior of Complex Media by Jointly Using Discrete and Continuum Approaches. <b>2018</b> , 1-35		
1121	New experimental setup for the validation of DEM simulation of brittle crack propagation at grain size level. <b>2018</b> , 128, 312-323		8
1120	Crack nucleation in solid materials under external load - simulations with the Discrete Element Method. <b>2018</b> , 165, 22019		1
1119	Experimental study of the deformation and breakage of 3D printed agglomerates: Effects of packing density and inter-particle bond strength. <b>2018</b> , 340, 299-310		15
1118	Numerical study on pore clogging mechanism in pervious pavements. <b>2018</b> , 565, 589-598		31
1117	Numerical simulation of brittle failure of rock using MPS method and DEM. <b>2018</b> ,		
1116	Dynamic response and damage character of road embankment under strong earthquake. <b>2018</b> , 14, 155014771879461		
1115	A zero-thickness cohesive element-based numerical manifold method for rock mechanical behavior with micro-Voronoi grains. <b>2018</b> , 96, 94-108		63
1114	Grain-Based Discrete Element Method (GB-DEM) Modelling of Multi-scale Fracturing in Rocks Under Dynamic Loading. <b>2018</b> , 51, 3785-3817		83
1113	Grain Size Effect on the Mechanical Behavior of Cohesionless Coarse-Grained Soils with the Discrete Element Method. <b>2018</b> , 2018, 1-6		9
1112	Influence of random pore defects on failure mode and mechanical properties of SiC ceramics under uniaxial compression using discrete element method. <b>2018</b> , 44, 22271-22282		8
1111	Experimental and Numerical Study of the Failure Behavior of Intermittent Rock Joints Subjected to Direct Shear Load. <b>2018</b> , 2018, 1-19		15
1110	A coupled 3-dimensional bonded discrete element and lattice Boltzmann method for fluid-solid coupling in cohesive geomaterials. <b>2018</b> , 42, 1405-1424		32
1109	Micro-mechanics based numerical simulation of NaCl brine induced mechanical strength deterioration of sedimentary host-rock formations. <b>2018</b> , 242, 55-69		17
1108	Study on the Grade Evaluation of Highway Tunnel Cracks Based on PFC Simulation and BP Neural Network. <b>2018</b> , 605-611		1
1107	Calibration of tensile strength to model fracture toughness with distinct element method. <b>2018</b> , 144-145, 180-191		8

1106	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
1105	Study of mixed mode fracture toughness and fracture characteristic in gypsum rock under brine saturation. <b>2018</b> , 77, 1	13
1104	Incorporating the Effect of Pore Pressure in Undrained DEM Simulations. <b>2018</b> , 472-479	
1103	Application of Similitude Rules in Calibrating Microparameters of Particle Mechanics Models. <b>2018</b> , 22, 3791-3801	4
1102	Contact Modeling in the Discrete Element Method. <b>2018</b> , 177-228	0
1101	Contact Modeling for Solids and Particles. <b>2018</b> ,	7
1100	Dynamic process of the Wenjiagou rock landslide in Sichuan Province, China. <b>2018</b> , 11, 1	8
1099	Structural and mechanical characterization of lithium-ion battery electrodes via DEM simulations. <b>2018</b> , 29, 2312-2321	35
1098	Discrete element analysis of a cross-river tunnel under random vibration levels induced by trains operating during the flood season. <b>2018</b> , 19, 346-366	18
1097	Degradation of a discrete infilled joint shear strength subjected to repeated blast-induced vibrations. <b>2018</b> , 28, 561-571	3
1096	The Numerical Simulation of Hard Rocks for Tunnelling Purposes at Great Depths: A Comparison between the Hybrid FDEM Method and Continuous Techniques. <b>2018</b> , 2018, 1-18	11
1095	Influence of Bedding Planes on the Mechanical Characteristics and Fracture Pattern of Transversely Isotropic Rocks in Direct Shear Tests. <b>2018</b> , 2018, 1-14	1
1094	Particle Methods in Computational Fluid Dynamics. 1-41	
1093	Challenges in the characterisation of intact rock bridges in rock slopes. <b>2018</b> , 245, 81-96	39
1092	An Extended Grain-Based Model for Characterizing Crystalline Materials: An Example of Marble. <b>2018</b> , 1, 1800039	9
1091	Discrete Element Simulation of Conical Pick Coal Cutting Process under Different Cutting Parameters. <b>2018</b> , 2018, 1-9	7
1090	Some considerations on the use of numerical methods to simulate past landslides and possible new failures: the case of the recent Xinmo landslide (Sichuan, China). <b>2018</b> , 15, 1359-1375	92
1089	Reassembling fractured sand particles using fracture-region matching algorithm. <b>2018</b> , 338, 55-66	19

1088	Effect of joint angle in coal on failure mechanical behaviour of roof rock-coal combined body. <b>2018</b> , 51, 202-209	59
1087	DEM-CFD coupling simulation and optimization of an inside-filling air-blowing maize precision seed-metering device. <b>2018</b> , 150, 426-438	30
1086	Discrete element simulation of the dynamic response of a dip slope under shaking table tests. <b>2018</b> , 243, 168-180	17
1085	Evolution of the shape parameter in the Weibull distribution for brittle rocks under uniaxial compression. <b>2018</b> , 11, 1	8
1084	DEM Investigation of Particle-Scale Mechanical Properties of Frozen Soil Based on the Nonlinear Microcontact Model Incorporating Rolling Resistance. <b>2018</b> , 2018, 1-13	3
1083	Micromechanical analysis on the compaction of tetrahedral particles. <b>2018</b> , 136, 610-619	7
1082	Numerical modelling to predict fracturing rock (Thanet chalk) due to naturally occurring faults and fluid pressure. <b>2018</b> , 116, 12-33	3
1081	Mechanical Behavior of Polyurethane Polymer Materials under Triaxial Cyclic Loading: A Particle Flow Code Approach. <b>2018</b> , 33, 980-986	9
1080	Review of the Relationships between Crack Initiation Stress, Mode I Fracture Toughness and Tensile Strength of Geo-Materials. <b>2018</b> , 18, 04018136	18
1079	A unified CFD-DEM approach for modeling of debris flow impacts on flexible barriers. <b>2018</b> , 42, 1643-1670	52
1078	Effects of loading waveforms on rock damage using particle simulation method. <b>2018</b> , 25, 1755-1765	4
1077	Pulse fracture simulation in shale rock reservoirs: DEM and FEM/DEM approaches. <b>2018</b> , 5, 355-373	7
1076	Analysis of mechanical properties of polyurethane-mixed ballast based on energy method. <b>2018</b> , 182, 10-19	19
1075	Development of New Three-Dimensional Rock Mass Strength Criteria. <b>2018</b> , 51, 3537-3561	28
1074	An Improved Rock Mass Characterization Method Using a Quantified Geological Strength Index and Synthetic Rock Mass Model. <b>2018</b> , 51, 3521-3536	8
1073	The Fundamental Regularities of the Evolution of Elastic Vortices Generated in the Surface Layers of Solids under Tangential Contact Loading. <b>2018</b> , 6, 51	2
1072	A detailed micro-modelling approach for the structural analysis of masonry assemblages. <b>2018</b> , 206, 66-81	52
1071	Modeling Micro-crack Coalescence in Marble Containing a Single Flaw Under Uniaxial Compression. <b>2018</b> , 242-253	

1070	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
1069	Discrete element modelling of stress-induced instability of directional drilling boreholes in anisotropic rock. <b>2018</b> , 81, 55-67	17
1068	Noncoaxiality between Fabric and Stress in Two-Dimensional Granular Materials. <b>2018</b> , 144, 04018092	6
1067	Discrete element modeling of grain crushing and implications on reservoir compaction. <b>2018</b> , 171, 431-439	16
1066	DEM simulation of mortar-bolt interface behaviour subjected to shearing. <b>2018</b> , 185, 120-137	32
1065	Discrete element modeling of extensional fault-related monocline formation. <b>2018</b> , 115, 82-90	13
1064	Interaction Model for Shelled Particles and Small-Strain Modulus of Granular Materials. <b>2018</b> , 85,	8
1063	Induced Seismicity and Permeability Evolution in Gas Shales, CO <sub>2</sub> Storage and Deep Geothermal Energy. <b>2018</b> , 1-20	1
1062	Distinct element method simulations of rock-concrete interfaces under different boundary conditions. <b>2018</b> , 240, 123-139	45
1061	Effect of Hydraulic Pressure and Tectonic Stress on Fracture Initiation in Rock Flaws. <b>2018</b> , 55, 9-15	0
1060	Experimental and numerical study on the strength and hybrid fracture of sandstone under tension-shear stress. <b>2018</b> , 200, 387-400	25
1059	Three-dimensional bonded-particle discrete element modeling of mechanical behavior of transversely isotropic rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 110, 120-132	18
1058	Influence of particle contact models on soil response of poorly graded sand during cavity expansion in discrete element simulation. <b>2018</b> , 10, 1154-1170	10
1057	Influence of stress induced microcracks on the tensile fracture behavior of rocks. <b>2018</b> , 104, 81-95	9
1056	Elastically-homogeneous lattice modelling of transversely isotropic rocks. <b>2018</b> , 104, 96-108	9
1055	Numerical simulation of lifetime and time-dependent damage for granite by continuous and discontinuous approaches. <b>2018</b> , 77, 1	2
1054	Simulation of tensile behavior of plant fibers using the Discrete Element Method (DEM). <b>2018</b> , 114, 196-203	8
1053	A review of discrete element simulation of ice-structure interaction. <b>2018</b> , 376,	40

1052	Boundary effects in discrete element method modeling of undrained cyclic triaxial and simple shear element tests. <b>2018</b> , 20, 1		17
1051	Time-Dependent Failure of Marble Under Long-Term Loading. <b>2018</b> , 117-125		
1050	DEM-CFD Modeling of Proppant Pillar Deformation and Stability during the Fracturing Fluid Flowback. <b>2018</b> , 2018, 1-18		6
1049	Numerical Study on Effect of Joint Strength Mobilization on Behavior of Rock Masses with Large Nonpersistent Joints under Uniaxial Compression. <b>2018</b> , 18, 04018140		10
1048	Modeling of brittle rock failure considering inter- and intra-grain contact failures. <b>2018</b> , 101, 224-244		45
1047	Simulating the impact damage of laminated glass considering mixed mode delamination using FEM/DEM. <b>2018</b> , 202, 1239-1252		23
1046	Numerical investigation on the dynamic strength and failure behavior of rocks under hydrostatic confinement in SHPB testing. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2018</b> , 108, 43-57	6	45
1045	Numerical analysis of the hydrofracturing behaviour of heterogeneous glutenite considering hydro-mechanical coupling effects based on bonded particle models. <b>2018</b> , 42, 1493-1515		13
1044	Dynamic Response of Pillar Workings Induced by Sudden Pillar Recovery. <b>2018</b> , 51, 3075-3090		28
1043	Cracking Processes and Coalescence Modes in Rock-Like Specimens with Two Parallel Pre-existing Cracks. <b>2018</b> , 51, 3377-3393		63
1042	Internal stress distribution and cracking around flaws and openings of rock block under uniaxial compression: A particle mechanics approach. <b>2018</b> , 102, 28-38		75
1041	Modelling approach for soil displacement in tillage using discrete element method. <b>2018</b> , 183, 60-71		21
1040	Simulating Ballast Breakage Under Repeated Loading Using the Discrete Element Method. <b>2018</b> ,		4
1039	A discrete element method representation of an anisotropic elastic continuum. <b>2018</b> , 121, 363-386		4
1038	Numerical investigation of effect of particle shape on isolated extracted zone (IEZ) in block caving. <b>2018</b> , 11, 1		16
1037	Three-dimensional modeling of geocell-reinforced straight and curved ballast embankments. <b>2018</b> , 102, 53-65		22
1036	Coupled flow network and discrete element modeling of injection-induced crack propagation and coalescence in brittle rock. <b>2019</b> , 14, 843-868		24
1035	Sense and non-sense of shear reloaded. <b>2019</b> , 125, 20-28		4

1034	Influence of initial micro-crack damage on strength and micro-cracking behavior of an intrusive crystalline rock. <b>2019</b> , 78, 2957-2971	17
1033	Mechanical analysis and interpretation of excavation damage zone formation around deep tunnels within massive rock masses using hybrid finite-discrete element approach: case of Atomic Energy of Canada Limited (AECL) Underground Research Laboratory (URL) test tunnel. <b>2019</b> , 56, 35-59	22
1032	Numerical Research on Energy Evolution and Burst Behavior of Unloading Coal-Rock Composite Structures. <b>2019</b> , 37, 295-303	6
1031	A Study of Gravity Flow Based on the Upside-Down Drop Shape Theory and Considering Rock Shape and Breakage. <b>2019</b> , 52, 881-893	6
1030	A discrete element modelling approach for fatigue damage growth in cemented materials. <b>2019</b> , 112, 68-88	33
1029	A New Lattice Element Method (LEM) with Integrated Interface Elements to Determine the Effective Thermal Conductivity of Rock Solids Under Thermo-Mechanical Processes. <b>2019</b> , 266-275	4
1028	Influence of stress path on stress memory and stress fracturing in brittle rocks. <b>2019</b> , 56, 852-867	1
1027	Micromechanical study of loading rate effects between a hole and a crack. <b>2019</b> , 4, 22-30	7
1026	How to model orthotropic materials by the discrete element method (DEM): random sphere packing or regular cubic arrangement?. <b>2019</b> , 6, 145-155	3
1025	Multi-scale modelling of granular materials: numerical framework and study on micro-structural features. <b>2019</b> , 63, 409-427	10
1024	Effect of Joint Micro Mechanical Parameters on a Jointed Rock Block Behavior Adjacent to an Underground Excavation: A Particle Flow Approach. <b>2019</b> , 37, 431-453	6
1023	Investigating Effects of Individual Fracture Length on Behaviour of Weak Rock Using Discrete Element Method. <b>2019</b> , 46-56	
1022	The crack nature analysis of primary and secondary cracks: A numerical study based on moment tensors. <b>2019</b> , 210, 70-83	18
1021	Numerical Study on the Evolution of Agglomerate Breakage and Microstructure of Angular Gravel in Cyclic Soil-Structure Interface Test. <b>2019</b> , 2019, 1-24	1
1020	DEM Analysis of Breakage Behavior of Bicomponent Agglomerates. <b>2019</b> , 165-183	2
1019	A Contact Model for the Discrete Element Simulations of Aggregated Nanoparticle Films. <b>2019</b> , 339-358	
1018	Numerical Study of the Fracturing Process in Marble and Plaster Hollow Plate Specimens Subjected to Uniaxial Compression. <b>2019</b> , 52, 4361-4386	7
1017	Discrete element modeling of the Hongshiyuan landslide triggered by the 2014 Ms 6.5 Ludian earthquake in Yunnan, China. <b>2019</b> , 78, 1	9



1016	Simulation of Lunar Soil With Irregularly Shaped, Crushable Grains: Effects of Grain Shapes on the Mechanical Behaviors. <b>2019</b> , 124, 1157-1176	2
1015	The rock breaking and ROP increase mechanisms for single-tooth torsional impact cutting using DEM. <b>2019</b> , 16, 1134-1147	8
1014	A fully Lagrangian method for fluid-structure interaction problems with deformable floating structure. <b>2019</b> , 90, 379-395	10
1013	Investigation of the elastoplastic and fracture behavior of solid materials considering microstructural anisotropy: A discrete element modeling study. <b>2019</b> , 170, 109164	4
1012	Size-Independent Mechanical Response of Ultrathin Carbon Nanotube Films in Mesoscopic Distinct Element Method Simulations. <b>2019</b> , 86,	3
1011	Contact Models and DEM Simulation of Micrometer-Sized Particles and Agglomerates at Static Loading Based on Experimental Characterization. <b>2019</b> , 115-163	1
1010	Further development of the distinct lattice spring model for quasi-brittle crack propagation in concrete and its application in underground engineering. <b>2019</b> , 92, 103061	9
1009	Numerical simulation of the dynamic evolution of the friction interface of PTFE/45 steel friction pair. <b>2019</b> , 6, 105338	3
1008	Impact of pre-existent Qanats on ground settlements due to mechanized tunneling. <b>2019</b> , 21, 100262	8
1007	Excavation-induced fault instability: Possible causes and implications for seismicity. <b>2019</b> , 92, 103041	16
1006	A bonded discrete element method for modeling ship-ice interactions in broken and unbroken sea ice fields. <b>2019</b> , 6, 739-765	15
1005	Discrete element modelling of flexible membrane boundaries for triaxial tests. <b>2019</b> , 115, 103154	23
1004	Experimental and Numerical Study on Failure Modes and Shear Strength Parameters of Rock-Like Specimens Containing Two Infilled Flaws. <b>2019</b> , 17, 1895-1908	12
1003	Numerical investigation of landslide kinetics for the recent Mabian landslide (Sichuan, China). <b>2019</b> , 16, 2287-2298	34
1002	A damage evolution law enriched by microscopic mechanisms for structured sand in mechanical loading. <b>2019</b> , 14, 1905-1924	1
1001	3D Finite Element Modelling of Fracture of Sand Particles Subjected to High Strain Loading Rate. <b>2019</b> , 5, 444-462	1
1000	A New Method to Estimate the Joint Roughness Coefficient by Back Calculation of Shear Strength. <b>2019</b> , 2019, 1-15	4
999	Mechanical behavior of transversely isotropic rocks with non-continuous planar fabrics under compression tests. <b>2019</b> , 115, 103175	3

998	Three-dimensional particle model based numerical simulation on multi-level compressive cyclic loading of concrete. <b>2019</b> , 225, 661-677	36
997	Modelling of Mechanical Behavior of Biopolymer Alginate Aerogels Using the Bonded-Particle Model. <b>2019</b> , 24,	12
996	Estimation of the shear strength of fractured Gosford sandstone based on fractal theory and numerical modelling. <b>2019</b> , 182, 106278	7
995	Modelling continuous materials using discrete element modelling: investigations on the effect of particle packing. <b>2019</b> , 6, 823-836	
994	Experimental investigation of fracture initiation position and fluid viscosity effect in multi-layered coal strata. <b>2019</b> , 182, 106310	5
993	Microscale Characterization of Fracture Growth and Associated Energy in Granite and Sandstone Analogs: Insights Using the Discrete Element Method. <b>2019</b> , 124, 7993-8012	6
992	Numerical Investigation of Mineral Grain Shape Effects on Strength and Fracture Behaviors of Rock Material. <b>2019</b> , 9, 2855	4
991	A Multicomponent Particle Model and Linear Fitting Calibration Method for Heterogeneous Rocks. <b>2019</b> , 2019, 1-15	1
990	Numerical characterization for rock mass integrating GSI/Hoek-Brown system and synthetic rock mass method. <b>2019</b> , 126, 318-329	7
989	Dynamic boundary setting for discrete element method considering the seismic problems of rock masses. <b>2019</b> , 21, 1	2
988	Numerical Study of the Mechanical and Acoustic Emissions Characteristics of Red Sandstone under Different Double Fracture Conditions. <b>2019</b> , 11, 772	5
987	Macro and micro investigation of gravel content on simple shear behavior of sand-gravel mixture. <b>2019</b> , 221, 730-744	38
986	Origin of Regular Networks of Joints: Experimental Constraints, Theoretical Background, and Numerical Modeling. <b>2019</b> , 124, 9164-9181	2
985	Evolution of mesoscale bonded particle clusters in cemented granular material. <b>2019</b> , 14, 1653-1667	5
984	Influence of the backfill parameters in distinct element modelling of a backfill masonry arch bridge through the PFC2D software. <b>2019</b> , 1-8	
983	PFC model parameter calibration using uniform experimental design and a deep learning network. <b>2019</b> , 304, 032062	2
982	Temperature Drop Model Based on Discrete Element Method for Simulating Damage of Bio-Cemented Sand by Cold Wave. <b>2019</b> , 24, 789-798	
981	Dynamic responses and failure modes of stratified sedimentary rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 122, 104060	6 14

980	Mechanisms of Adhesive Micropatterning of Functional Colloid Thin Layers. <b>2019</b> , 11, 40602-40612	6
979	Cone photoreceptor classification in the living human eye from photostimulation-induced phase dynamics. <b>2019</b> , 116, 7951-7956	66
978	Damage Model and Numerical Experiment of High-Voltage Electro Pulse Boring in Granite. <b>2019</b> , 12, 727	14
977	Numerical Research on Energy Evolution in Granite under Different Confining Pressures Using Otsu's Digital Image Processing and PFC2D. <b>2019</b> , 11, 131	6
976	Meso-Scale Simulation of Concrete Uniaxial Behavior Based on Numerical Modeling of CT Images. <b>2019</b> , 12,	10
975	Multi-scale effect of acoustic emission characteristics of 3D rock damage. <b>2019</b> , 12, 1	27
974	An analytical model for strength of jointed rock masses. <b>2019</b> , 94, 103159	4
973	An Effective Inverse Procedure for Identifying DEM Parameters of Rock-Like Materials. <b>2019</b> , 2019, 1-13	2
972	Weibull linear parallel bond model (WLPBM) for simulating micro-mechanical characteristics of heterogeneous rocks. <b>2019</b> , 108, 82-94	7
971	Experimental and numerical investigation on the mechanical properties and progressive failure mechanism of intermittent multi-jointed rock models under uniaxial compression. <b>2019</b> , 12, 1	11
970	Numerical homogenization study on the effects of columnar jointed structure on the mechanical properties of rock mass. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 124, 104127 <sup>6</sup>	26
969	A particle mechanics approach for the dynamic strength model of the jointed rock mass considering the joint orientation. <b>2019</b> , 43, 2797-2815	17
968	Hybrid Numerical Investigation on Soil-Hammer Interaction during Dynamic Compaction. <b>2019</b> , 2019, 1-11	1
967	Effect of Particle Sizes on the Physical and Mechanical Properties of Briquettes. <b>2019</b> , 12, 3618	7
966	Weibull grain-based model (W-GBM) for simulating heterogeneous mechanical characteristics of salt rock. <b>2019</b> , 108, 227-243	5
965	Correlation Analysis of Macroscopic and Microscopic Parameters of Coal Measure Soil Based on Discrete Element Method. <b>2019</b> , 2019, 1-14	2
964	Recognition of Mesoscale Strike-Slip En Echelon Faults From 2-D Nonporous Models. <b>2019</b> , 124, 10916-10939	5
963	Lattice modelling of gravity and stress-driven failures of rock tunnels. <b>2019</b> , 116, 103183	3

962	Laboratory-scale validation of a DEM model of a toothed double-roll crusher and numerical studies. <b>2019</b> , 356, 60-72		7
961	Evaluation of plow system performance in long-wall mining method using particle flow code. <b>2019</b> , 6, 518-535		8
960	Simulation of solid propellant microstructures by combining the collective rearrangement method with the discrete element method. <b>2019</b> , 9, 075325		
959	Packing structure analysis of flexible rod particles in terms of aspect ratio, bending stiffness, and surface energy. <b>2019</b> , 357, 232-239		2
958	Numerical study of the circular opening effect on mechanical behaviour of rock under confinement. <b>2019</b> , 11, 1201-1210		7
957	Combined DEM-FDM modelling of encased stone column. <b>2019</b> , 92, 16012		3
956	Assessment of the Internal Shaft Friction of Tubular Piles in Jointed Weak Rock Using the Discrete-Element Method. <b>2019</b> , 33, 04019067		3
955	Numerical Simulation Study on Flow and Fracture of Granular Materials. <b>2019</b> , 2019, 1-19		
954	Study of automated top-coal caving in extra-thick coal seams using the continuum-discontinuum element method. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 122, 104033	6	18
953	Numerical simulation of column charge explosive in rock masses with particle flow code. <b>2019</b> , 21, 1		6
952	DEM analysis of compression breakage of 3D printed agglomerates with different structures. <b>2019</b> , 356, 1045-1058		10
951	A tensor-based analysis of stress variability in granular media subjected to various loading conditions. <b>2019</b> , 356, 581-593		2
950	Cyclic performance of adhesively bonded joints using the Distinct Element Method: Damage and parametric analysis. <b>2019</b> , 178, 107468		2
949	Why fumed and precipitated silica have different mechanical behavior: Contribution of discrete element simulations. <b>2019</b> , 524, 119646		3
948	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
947	Discrete element simulation on failure mechanical behavior of transversely isotropic rocks under different confining pressures. <b>2019</b> , 12, 1		7
946	Evaluating failure mechanisms of dip slope using a multiscale investigation and discrete element modelling. <b>2019</b> , 263, 105303		15
945	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

944	Evolution of fragment size distributions from the crushing of granular materials. <b>2019</b> , 99, 012904		9
943	Study on micro-scale properties of cohesive zone in shale. <b>2019</b> , 163, 178-193		16
942	Distinct Element geomechanical modelling of the formation of sinkhole cluster within large-scale karstic depressions. <b>2019</b> ,		0
941	A micromechanical investigation for the effects of pore size and its distribution on geopolymer foam concrete under uniaxial compression. <b>2019</b> , 209, 228-244		49
940	Numerical Experiments on Triaxial Compression Strength of Soil-Rock Mixture. <b>2019</b> , 2019, 1-15		5
939	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
938	Analysis of breakage patterns in a sheared layer of elongated particles. <b>2019</b> , 345, 682-691		2
937	Discrete element modeling of a cross-river tunnel under subway train operation during peak and off-peak periods. <b>2019</b> , 12, 1		7
936	A Fundamental Investigation of the Tensile Failure of Rock Using the Three-Dimensional Lattice Spring Model. <b>2019</b> , 52, 2319-2334		5
935	Numerical Study on Concrete Pumping Behavior via Local Flow Simulation with Discrete Element Method. <b>2019</b> , 12,		11
934	Numerical and Experimental Study on the Cracking Behavior of Marble with En-Echelon Flaws. <b>2019</b> , 52, 4319-4338		13
933	Investigating Hydraulic Fracturing Complexity in Naturally Fractured Rock Masses Using Fully Coupled Multiscale Numerical Modeling. <b>2019</b> , 52, 5137-5160		103
932	Analysis of fluid-particle interaction in granular materials using coupled SPH-DEM method. <b>2019</b> , 353, 459-472		25
931	A damage mechanics based on the constitutive model for strain-softening rocks. <b>2019</b> , 216, 106521		18
930	Numerical study on the rock muck transfer process of TBM cutterhead with clump strategy based on discrete element method. <b>2019</b> , 91, 103000		9
929	Numerical Simulation of Surface Subsidence and Backfill Material Movement Induced by Underground Mining. <b>2019</b> , 2019, 1-17		9
928	PFC simulation of crack evolution and energy conversion during basalt failure process. <b>2019</b> , 16, 639-651		21
927	CFD-DEM modelling of particles attrition in jet-in-fluidized beds. <b>2019</b> , 148, 336-348		7

926	Simulating time-dependent quasi-brittle failures based on a multilinear releasing mechanism of viscous force (VF) fields. <b>2019</b> , 216, 106490		
925	Coupling of Discrete and Continuum Approaches in Modeling the Behavior of Materials. <b>2019</b> , 1675-1714		1
924	The effects of the rock bridge ligament angle and the confinement on crack coalescence in rock bridges: An experimental study and discrete element method. <b>2019</b> , 347, 490-503		4
923	Exploring the influence of rock inherent heterogeneity and grain size on hydraulic fracturing using discrete element modeling. <b>2019</b> , 176-177, 207-220		39
922	Experimental study and numerical simulation of propagation and coalescence processes of pre-existing flaws in a transparent rock-like material. <b>2019</b> , 11, 168781401983409		0
921	Effect of non-persistent joints distribution on shear behavior. <b>2019</b> , 347, 477-489		31
920	Modelling Micro-cracking Behaviour of Pre-cracked Granite Using Grain-Based Distinct Element Model. <b>2019</b> , 52, 4669-4692		30
919	A coupled 3D isogeometric and discrete element approach for modeling interactions between structures and granular matters. <b>2019</b> , 354, 441-463		15
918	Micromechanics of High-Pressure Compaction in Granular Quartz Aggregates. <b>2019</b> , 124, 6560-6580		7
917	A cohesive discrete element based approach to characterizing the shear behavior of cohesive soil and clay-infilled rock joints. <b>2019</b> , 114, 103109		22
916	Study of deformation and failure in an anisotropic rock with a three-dimensional discrete element model. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 120, 17-28	6	13
915	A novel 3D clumped particle method to simulate the complex mechanical behavior of rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 120, 1-16	6	6
914	Similar Material Simulation Study on Protection Effect of Steeply Inclined Upper Protective Layer Mining with Varying Interlayer Distances. <b>2019</b> , 2019, 1-14		9
913	A new discrete method for modeling hydraulic fracturing in cohesive porous materials. <b>2019</b> , 180, 257-267		16
912	Hierarchical Modeling Method for DEM Simulation and Its Application in Soil-BileCap Interaction and Impact Case. <b>2019</b> , 19, 04019076		7
911	Numerical modeling of fracturing in permeable rocks via a micromechanical continuum model. <b>2019</b> , 43, 1885-1915		3
910	DEM modeling of crack coalescence between two parallel flaws in SiC ceramics. <b>2019</b> , 45, 14997-15014		12
909	An overview of particle-based numerical manifold method and its application to dynamic rock fracturing. <b>2019</b> , 11, 684-700		9

908	Tensile strength of pressure-agglomerated potato starch determined via diametral compression test: Discrete element method simulations and experiments. <b>2019</b> , 183, 95-109	5
907	Numerical simulation of permeability evolution during progressive failure of Aue granite at the grain scale level. <b>2019</b> , 112, 185-196	9
906	On the use of discrete element method for multi-scale assessment of clay behavior. <b>2019</b> , 112, 329-341	12
905	Halo approach to evaluate the stress distribution in 3D discrete element method simulation: validation and application to flax/bio based epoxy composite. <b>2019</b> , 27, 065005	7
904	Mathematical and numerical modelling of limestone dissolution. <b>2019</b> , 1-12	2
903	Numerical study of the interfaces of 3D-printed concrete using discrete element method. <b>2019</b> , 50, 629-634	5
902	Fracture and fragmentation patterns within a single cemented glass bead under impact. <b>2019</b> , 131, 152-161	5
901	Numerical Investigation of Radial Strain-Controlled Uniaxial Compression Test of $\text{E}_p$ Diorite in Grain-Based Model. <b>2019</b> , 52, 3659-3674	5
900	Bond and fracture model in dilated polyhedral DEM and its application to simulate breakage of brittle materials. <b>2019</b> , 21, 1	23
899	Assessing fracturing mechanisms and evolution of excavation damaged zone of tunnels in interlocked rock masses at high stresses using a finite-discrete element approach. <b>2019</b> , 11, 701-722	26
898	A cross-river tunnel excavation considering the water pressure effect based on DEM. <b>2019</b> , 1-17	5
897	Discrete element method investigation of particle size distribution effects on the flexural properties of cement-treated base. <b>2019</b> , 113, 103096	9
896	Stochastic Lattice Modelling of the Force-Displacement and Cracking Behaviour of the Steel Reinforced Tie. <b>2019</b> , 2019, 1-17	
895	A rapid granular chute avalanche impinging on a small fixed obstacle: DEM modeling, experimental validation and exploration of granular stress. <b>2019</b> , 74, 540-568	15
894	Effects of particle characteristics and consolidation pressure on the compaction of non-spherical particles. <b>2019</b> , 137, 241-249	7
893	Simplified Method for Calculating the Active Earth Pressure on Retaining Walls of Narrow Backfill Width Based on DEM Analysis. <b>2019</b> , 2019, 1-12	6
892	Thermal simulation of drilling into lunar rock simulant by discrete element method. <b>2019</b> , 160, 378-387	5
891	Evaluation of injection well patterns for optimum fracture network generation host-rock formations: An application in in-situ leaching. <b>2019</b> , 137, 319-333	6

890	DEM study of the microscopic characteristics and internal stability of binary mixtures. <b>2019</b> , 352, 314-324	6
889	Universal and Nonuniversal Aperture-to-Length Scaling of Opening Mode Fractures Developing in a Particle-Based Lattice Solid Model. <b>2019</b> , 124, 3197-3218	1
888	Simulation of permeability of hydraulic fractures by computational fluid dynamics. <b>2019</b> , 67, 122-133	4
887	Cohesion-Induced Enhancement of Aeolian Saltation. <b>2019</b> , 46, 5566-5574	19
886	Experimental and Numerical Study of Rock Stratum Movement Characteristics in Longwall Mining. <b>2019</b> , 2019, 1-15	9
885	Discrete element modelling of tomato tissue deformation and failure at the cellular scale. <b>2019</b> , 15, 3362-3378	11
884	Research on Simulation Analysis Method of Microbial Cemented Sand Based on Discrete Element Method. <b>2019</b> , 2019, 1-13	2
883	Thermo-Mechanical Behavior of Saturated Clays Using Discrete Element Modelling. <b>2019</b> ,	1
882	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
881	Effect of the Interaction between Cavities and Flaws on Rock Mechanical Properties under Uniaxial Compression. <b>2019</b> , 2019, 1-9	2
880	DEM modelling of sequential fragmentation of zeolite granules under oedometric compression based on XCT observations. <b>2019</b> , 347, 66-75	21
879	Mechanism Study of Borehole Instability in Carbonate Reservoir through Discrete Element Modeling. <b>2019</b> ,	
878	Analytic laws for direct calibration of discrete element modeling of brittle elastic media using cohesive beam model. <b>2019</b> , 6, 393-409	12
877	A novel DEM approach for modeling brittle elastic media based on distinct lattice spring model. <b>2019</b> , 350, 100-122	13
876	An Innovative Method for Placement of Gangue Backfilling Material in Steep Underground Coal Mines. <b>2019</b> , 9, 107	30
875	Simulation of Fracture Coalescence in Granite via the Combined Finite Discrete Element Method. <b>2019</b> , 52, 3213-3227	34
874	Numerical investigations on crack propagation and crack branching in brittle solids under dynamic loading using bond-particle model. <b>2019</b> , 212, 41-56	31
873	Influence of proppant fragmentation on fracture conductivity - Insights from three-dimensional discrete element modeling. <b>2019</b> , 177, 1010-1023	22



872	Dynamic mechanisms of lamina-induced fracture propagation in tight oil-sand formations. <b>2019</b> , 7, T179-T193		
871	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
870	Kepler Harmonies and conformal symmetries. <b>2019</b> , 792, 324-328		8
869	Study on the deformation and strength characteristics of hard rock under true triaxial stress state using bonded-particle model. <b>2019</b> , 112, 1-16		15
868	Influence of Flaw Inclination Angle on Unloading Responses of Brittle Rock in Deep Underground. <b>2019</b> , 2019, 1-16		6
867	Shear behavior of Beishan granite fractures after thermal treatment. <b>2019</b> , 213, 223-240		32
866	Fracture modelling of normal concrete using different types of aggregates. <b>2019</b> , 101, 464-472		9
865	Estimating DEM microparameters for uniaxial compression simulation with genetic programming. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 118, 33-41	6	16
864	Recovering the microseismic response from a geomechanical simulation. <b>2019</b> , 84, KS133-KS142		2
863	Influence of surface integrity on fatigue behavior of Inconel 718 and Ti6Al4V workpieces with CBN electroplated wheel. <b>2019</b> , 102, 2345-2356		7
862	Multiscale Computations of Hydraulic Fracture Propagation in Low-Permeability Heterogeneous Rocks. <b>2019</b> ,		
861	A method for numerical simulation based on microseismic information and the interpretation of hard rock fracture. <b>2019</b> , 164, 214-224		9
860	Discrete Element Modeling of Strength and Failure Behavior of Transversely Isotropic Rock under Uniaxial Compression. <b>2019</b> , 93, 235-246		11
859	The role of transgranular capability in grain-based modelling of crystalline rocks. <b>2019</b> , 110, 161-183		44
858	Modelling of ice rubble in the punch shear tests with cohesive 3D discrete element method. <b>2019</b> , 36, 378-399		5
857	An experimental study of mechanical behavior of brittle rock-like specimens with multi-non-persistent joints under uniaxial compression and damage analysis. <b>2019</b> , 28, 1490-1522		37
856	Effect of Brittle Mineral Size on Hydraulic Fracture Propagation in Shale Gas Reservoir. <b>2019</b> , 2019, 1-14		4
855	Coupled continuum-discrete modeling of rammed floating stone column installation. <b>2019</b> , 9, 015222		2

854	Investigation of mechanical properties and crack propagation in pre-cracked marbles using lattice-spring-based synthetic rock mass (LS-SRM) modeling approach. <b>2019</b> , 110, 28-43	13
853	Coal Strength Development with the Increase of Lateral Confinement. <b>2019</b> , 12, 405	5
852	Experimental study of the prepeak cyclic shear mechanical behaviors of artificial rock joints with multiscale asperities. <b>2019</b> , 120, 58-74	17
851	Discrete element method modelling of impact breakage of ellipsoidal agglomerate. <b>2019</b> , 346, 57-69	13
850	Effect of packing characteristics on the simulation of elasticity and brittle fracture by the Cohesive Discrete Element Method. <b>2019</b> , 21, 1	3
849	Elasticity and fracture of brick and mortar materials using discrete element simulations. <b>2019</b> , 126, 101-116	21
848	Comparison of crack processes in single-flawed rock-like material using two bonded particle models under compression. <b>2019</b> , 12, 1	6
847	Thermal conductivity of thermally damaged Beishan granite under uniaxial compression. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 115, 121-136	6 20
846	Damage Evolution of Heterogeneous Rocks Under Uniaxial Compression Based on Distinct Element Method. <b>2019</b> , 52, 2631-2647	13
845	Novel grain-based model for simulation of brittle failure of Alxa porphyritic granite. <b>2019</b> , 251, 100-114	40
844	Investigation of the gradation effect on ballast mechanical behaviors by means of discrete element modeling - part 1. <b>2019</b> , 615, 012056	
843	Nanoscale mechanical properties of 3D printed gypsum-powder-based rocks by nanoindentation and numerical modeling. <b>2019</b> , 25, 1295-1308	1
842	Particle-based modeling of the mechanical behavior of porous fluid-saturated viscoelastic solids. <b>2019</b> , 1391, 012116	1
841	Numerical simulation of rock fragmentation by blasting using Discrete Element Method and Particle Blast Method. <b>2019</b> , 527, 012032	1
840	Regimes of adhesive wear in dry contact: Conditions of realization and determining parameters. <b>2019</b> ,	
839	ADEM Simulation for Analysis of Particle Breakage of Irregular Shaped Particles. <b>2019</b> , 59, 820-827	11
838	Influence of fracture incubation time on dynamic crack propagation in brittle solids. <b>2019</b> , 221, 01013	0
837	The development of the formalism of movable cellular automata for modeling the nonlinear mechanical behavior of viscoelastic materials. <b>2019</b> , 221, 01052	1

836	Implications of Realistic Fracture Criteria on Crack Morphology. <b>2019</b> , 7,	2
835	Micro-Mechanism of Spherical Gypsum Particle Breakage under BallPlane Contact Condition. <b>2019</b> , 9, 4795	7
834	Rock Mass Behavior under Tunnel Widening in Asymmetric and Symmetric Modes Considering Different Shapes and Parametric Conditions. <b>2019</b> , 9, 518	
833	Estimating micro-property parameters of concrete materials based on macro-experimental data. <b>2019</b> , 351, 012027	1
832	Fracture incubation time and scale invariance of dynamic crack propagation in brittle solids. <b>2019</b> ,	1
831	Modeling discrete fractures in continuum analysis and insights for fracture propagation and mechanical behavior of fractured rock. <b>2019</b> , 4, 100070	12
830	Discrete Element Analysis for Hydraulic Fracture Propagations in Laminated Reservoirs with Complex Initial Joint Properties. <b>2019</b> , 2019, 1-23	11
829	Some considerations for measuring the collisional dissipation rate of flexible fibers. <b>2019</b> , 357, 360-366	2
828	Distinct element geomechanical modelling of the formation of sinkhole clusters within large-scale karstic depressions. <b>2019</b> , 10, 1219-1241	13
827	Insights From Micromechanical Modeling of Intact Rock Failure: Event Characteristics, Stress Drops, and Force Networks. <b>2019</b> , 124, 12955-12980	4
826	Design approach and simulation of a peristaltic sortation machine. <b>2019</b> ,	0
825	Modeling of Coke Particle Breakage in Blast Furnace Considering Pore Structure by Discrete Element Method. <b>2019</b> , 105, 1108-1117	2
824	A numerical experiment of backward erosion piping: kinematics and micromechanics. <b>2019</b> , 54, 2099-2117	3
823	DEM verification of the damping effect in a freely falling particle motion for quasi- and non-quasi-static conditions. <b>2019</b> , 12, 1	2
822	Modeling of progressive failures in quasi-brittle media based on a temporal stress-redistribution mechanism. <b>2019</b> , 65, 464-488	
821	Mechanism of shear deformation, failure and energy dissipation of artificial rock joint in terms of physical and numerical consideration. <b>2019</b> , 23, 519-529	13
820	Influence of morphology on the micro-mechanical behavior of soil grain contacts. <b>2019</b> , 5, 103-119	17
819	Elastic Properties Calibration Approach for Discrete Element Method Model Based on Voronoi Tessellation Method. <b>2019</b> , 37, 2227-2236	7

818	Experimental and Numerical Study of the Effects of Layer Orientation on the Mechanical Behavior of Shale. <b>2019</b> , 44, 4725-4743		8
817	DEM analyses of rock block shape effect on the response of rockfall impact against a soil buffering layer. <b>2019</b> , 249, 60-70		25
816	Discrete numerical simulations of torpedo anchor installation in granular soils. <b>2019</b> , 108, 40-52		13
815	Discrete element modeling of deformable pinewood chips in cyclic loading test. <b>2019</b> , 345, 1-14		20
814	Failure criteria for a numerical model of sea ice in multi-directional tension, compression, bending and splitting. <b>2019</b> , 159, 123-141		2
813	Three-dimensional lattice simulation of hydraulic fracture interaction with natural fractures. <b>2019</b> , 107, 214-234		22
812	Numerical analysis of the dynamic evolution of mining-induced stresses and fractures in multilayered rock strata using continuum-based discrete element methods. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 113, 191-210	6	37
811	Sinkhole Morphologies from Photogrammetry and Distinct Element Modeling—An Example from the Dead Sea. <b>2019</b> , 467-471		
810	Failure behavior and crack evolution mechanism of a non-persistent jointed rock mass containing a circular hole. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2019</b> , 114, 101-121	6	66
809	Numerical Discrete-Element Method Investigation on Failure Process of Recycled Aggregate Concrete. <b>2019</b> , 31, 04018353		24
808	Discrete-element modelling of hanging wall deformation along the D-1 fault system, Danish North Sea, with implications for gas chimney interpretations. <b>2019</b> , 118, 250-264		1
807	Simulation of Rock Mechanical Behavior Under Cyclic Loading Using Clump Parallel-Bond Models. <b>2019</b> , 37, 2325-2333		0
806	An Extended Grain-Based Model Accounting for Microstructures in Rock Deformation. <b>2019</b> , 124, 125-148		26
805	Numerical Modeling of Cuttability and Shear Behavior of Chisel Picks. <b>2019</b> , 52, 1803-1817		7
804	Modeling of granular heat transfer in cryogenic grinding system: Black pepper seeds. <b>2019</b> , 141, 302-316		11
803	Discrete element modeling of cultivator sweep-to-soil interaction: Worn and hardened edges effects on soil-tool forces and soil flow. <b>2019</b> , 82, 1-11		24
802	A Preliminary Fractal Interpretation of Effects of Grain Size and Grain Shape on Rock Strength. <b>2019</b> , 52, 1745-1765		15
801	Imaging the 2013 explosive crater excavation and new dome formation at Volcā de Colima with TerraSAR-X, time-lapse cameras and modelling. <b>2019</b> , 369, 224-237		12

800	Effect of joint parameters on fracturing behavior of shale in notched three-point-bending test based on discrete element model. <b>2019</b> , 205, 40-56	23
799	Microstructure characteristics and fractal analysis of 3D-printed sandstone using micro-CT and SEM-EDS. <b>2019</b> , 175, 1039-1048	25
798	Assessment of strain bursting in deep tunnelling by using the finite-discrete element method. <b>2019</b> , 11, 12-37	21
797	Efficient 3D probabilistic stability analysis of rock tunnels using a Lattice Model and cloud computing. <b>2019</b> , 85, 282-293	7
796	Dynamic Weakening of Sandstone Subjected to Repetitive Impact Loading. <b>2019</b> , 52, 2197-2206	7
795	DEM Modeling of Interaction Between the Propagating Fracture and Multiple Pre-existing Cemented Discontinuities in Shale. <b>2019</b> , 52, 1993-2001	6
794	Numerical investigation of the mechanical properties of coal masses with T-junctions cleat networks under uniaxial compression. <b>2019</b> , 202, 128-146	6
793	Hydro-Mechanical Coupled Discrete Element Modeling of Geothermal Reservoir Stimulation and Induced Seismicity. <b>2013</b> , 221-231	2
792	Implementation of Particle-scale Rotation in the 3-D Lattice Solid Model. <b>2006</b> , 1769-1785	1
791	Modeling Wing Crack Extension: Implications for the Ingredients of Discrete Element Model. <b>2008</b> , 609-620	1
790	Assessment of the Seismic Capacity of Stone Masonry Walls with Block Models. <b>2011</b> , 221-235	6
789	DEM Analysis of Ballast Breakage Under Train Loads and Its Effect on Mechanical Behaviour of Railway Track. <b>2017</b> , 1323-1333	8
788	An Investigation of Single Particle Crushing Tests on Irregular-Shaped Quartz Sand with DEM. <b>2017</b> , 217-224	1
787	A 3D Mesoscopic Model for Simulating Failure Process of Concrete Based on Discrete Element Method. <b>2017</b> , 497-513	2
786	The Ball-Surface Normal Contact Experiment Research and Numerical Simulation of Coarse Grained Soil. <b>2018</b> , 856-872	3
785	Mechanical and Failure Characteristics of Rock-coal-rock Combined Body under Different Strain Rates: A Numerical Study from Micro Perspective. <b>2021</b> , 39, 185-191	3
784	Research on crack propagation and rock fragmentation efficiency under spherical tooth dynamic indentation. <b>2020</b> , 13, 1	2
783	Simulation of particle bed breakage by slow compression and impact using a DEM particle replacement model. <b>2020</b> , 31, 2749-2758	15

782	The role of particle morphology on concrete fracture behaviour: A meso-scale modelling approach. <b>2020</b> , 134, 106096	14
781	Fourier series-based discrete element method for computational mechanics of irregular-shaped particles. <b>2020</b> , 362, 112873	23
780	Influence of fracture roughness on shear strength, slip stability and permeability: A mechanistic analysis by three-dimensional digital rock modeling. <b>2020</b> , 12, 720-731	12
779	Stability Analysis of Shield Excavation Face Based on Particle Flow in Different Depths of Sandy Gravel Stratum. <b>2019</b> , 2019, 1-14	3
778	Numerical Study of Damage to Rock Surrounding an Underground Coal Roadway Excavation. <b>2020</b> , 2020, 1-16	3
777	Influence of the injected fluid viscosity on hydraulic fracturing in naturally fractured rock using discrete element method. <b>2014</b> ,	0
776	Evaluation of the Relationship between Geogrid Rib Size and Particle Size Distribution of Ballast Materials using Discrete Element Method. <b>2016</b> , 36, 143-149	1
775	Application of a mesh-free method to modelling brittle fracture and fragmentation of a concrete column during projectile impact. <b>2015</b> , 16, 933-961	3
774	Numerical simulation of tensile failure of concrete using Particle Flow Code (PFC). <b>2016</b> , 18, 39-51	23
773	A review of experimental and numerical investigations about crack propagation. <b>2016</b> , 18, 235-266	18
772	Impact of rock microstructures on failure processes - Numerical study based on DIP technique. <b>2014</b> , 7, 375-401	11
771	Relationship of box counting of fractured rock mass with Hoek-Brown parameters using particle flow simulation. <b>2015</b> , 9, 619-629	3
770	DEM analyses of the mechanical behavior of soil and soil-rock mixture via the 3D direct shear test. <b>2015</b> , 9, 815-827	14
769	Multiscale analysis using a coupled discrete/finite element model. <b>2008</b> , 1, 1-31	45
768	Aggregate shape influence on the fracture behaviour of concrete. <b>2006</b> , 24, 411-427	8
767	A discrete particle model for reinforced concrete fracture analysis. <b>2010</b> , 36, 343-361	4
766	Suggesting a new testing device for determination of tensile strength of concrete. <b>2016</b> , 60, 939-952	18
765	Experimental and numerical investigation of the interaction between blast wave and precrack in a defected material. <b>2019</b> , 58, 9718-9727	8

764	Mechanical Properties of Granular Materials and Their Impact on Load Distribution in Silo: A Review. <b>2015</b> , 45, 203-211	2
763	The Development of a Micromechanical Apparatus Applying Combined Normal Shear Bending Forces to Natural Sand Grains with Artificial Bonds. <b>2019</b> , 42, 20170453	3
762	Numerical investigation on cracking behavior of granite with intersecting two-flaws: A flat-joint modeling method. <b>2020</b> , 17,	5
761	A Bonded 3D LBM-DEM Approach for Sand Production Process. <b>2020</b> ,	2
760	Numerical simulation of hydraulic fracturing in transversely isotropic rock masses based on PFC-2D. <b>2019</b> , 21, 833-847	4
759	Coupled Thermo-Mechanical Simulations for HLW Disposal Tunnel Using Distinct Element Method. <b>2011</b> , 60, 470-476	1
758	Numerical Simulation of Crack Propagation in Rock by Particle Flow Code. <b>2008</b> , 124, 611-618	1
757	Estimation of Damage Induced by Single-Hole Rock Blasting: A Review on Analytical, Numerical, and Experimental Solutions. <b>2021</b> , 14, 29	7
756	DECM: A Discrete Element for Multiscale Modeling of Composite Materials Using the Cell Method. <b>2020</b> , 13,	5
755	Discrete Element Method (DEM) Simulation and Investigation of SiC on Pre-stressed Machining. <b>2011</b> , 25, 1286-1290	2
754	Effects of Inter-Particle Frictional Coefficients on Evolution of Contact Networks in Landslide Process. <b>2017</b> , 09, 917-936	3
753	Discrete-Element bonded particle Sea Ice model DESIgn, version 1.3 [model description and implementation.	2
752	Ejection mechanism of the Donghekou landslide triggered by the 2008 Wenchuan Earthquake revealed by discrete element modeling.	2
751	Modeling acoustic emissions in heterogeneous rocks during tensile fracture with the Discrete Element Method. 2, 1-None	2
750	Particle Based Discrete Element Modeling of Hydraulic Stimulation of Geothermal Reservoirs, Induced Seismicity and Fault Zone Deformation. <b>2013</b> , 23, 493-505	4
749	Numerical Simulation for Characteristics of Rock Strength and Deformation Using Grain-Based Distinct Element Model. <b>2014</b> , 24, 243-254	2
748	The effect of formation of spherical underground cavity on ground surface settlement : Numerical analysis using 3D DEM. <b>2016</b> , 18, 129-142	2
747	Discrete element simulation of dry snow using the developed analytic bond model. <b>2021</b> , 1190, 012015	

746	Effects of shear rates on the damaging behaviors of layered rocks subjected to direct shear: Insights from acoustic emission characteristics. <b>2021</b> , 258, 108046	0
745	A Micromechanical-Based Investigation on the Frictional Behaviour of Artificially Bonded Analogue Sedimentary Rock with Calcium Carbonate. 1	1
744	Discrete Element Modeling and Electron Microscopy Investigation of Fatigue-Induced Microstructural Changes in Ultra-High-Performance Concrete. <b>2021</b> , 14,	1
743	Study on the Meso-Energy Damage Evolution Mechanism of Single-Joint Sandstone under Uniaxial and Biaxial Compression. <b>2021</b> , 2021, 1-27	1
742	Extended finite element method simulation and experimental test on failure behavior of defects under uniaxial compression. 1-16	2
741	Study on a Damage Model and Uniaxial Compression Simulation Method of Frozen and Thawed Rock. <b>2022</b> , 55, 187	15
740	Effect of heterogeneity and injection borehole location on hydraulic fracture initiation and propagation in shale gas reservoirs. <b>2021</b> , 96, 104311	3
739	3D DEM method for compaction and breakage characteristics simulation of broken rock mass in goaf. 1	7
738	Simulation of Rock-Breaking Process by Drilling Machine and Dynamic Classification of Surrounding Rocks. 1	
737	A comprehensive investigation on the shear properties of interlayer shear weakness zones. <b>2021</b> , 80, 8765-8787	1
736	Strength of industrial sandstones modelled with the Discrete Element Method. <b>2021</b> ,	
735	Influence of Particle Shape on the Macroscopic and Mesolevel Mechanical Properties of Slip Zone Soil Based on 3D Scanning and 3D DEM. <b>2021</b> , 2021, 1-14	0
734	Microscopic acoustic emission simulation and fracture mechanism of cemented tailings backfill based on moment tensor theory. <b>2021</b> , 308, 125069	3
733	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
732	Influencing factors of scale effects in large-scale direct shear tests of soil-rock mixtures based on particle breakage. <b>2021</b> , 31, 100677	1
731	Formulation, calibration, and applications of disk-based discontinuous deformation analysis for rock failure simulation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2021</b> , 148, 104944 <sup>6</sup>	2
730	Reproducibility of micro-cracks at tensile failure of rock by meshless method.. <b>2007</b> , 60, 171-182	
729	Numerical simulation of elastic wave propagation and failure phenomena using MPS method. <b>2008</b> , 61, 169-179	



- 728 GEODYNAMICS. **2008**, 2008, 116-127 0
- 727 A Study for the Adaptation of Simulation of Uniaxial Compressive Strength Test for Concrete in 3-Dimensional Particle Bonded Model. **2008**, 20, 147-156
- 726 Numerical Simulations for Class II Behavior of Rocks under Uniaxial Compression using Distinct Element Method. **2009**, 126, 1-9 1
- 725 Distinct Element Analysis for Rock Failure under Uniaxial Compression. **2009**, 125, 91-97 4
- 724 Simulation of rock strength, dilatancy and damage under uniaxial compressive load using bonded particle model. **2010**, 155-160
- 723 Numerical investigation of the fracture characteristics of rock under normal wedge indentation tests. **2010**, 641-647 0
- 722 Meso-mechanical simulation of fracture grouting under fluid-solid coupling environment. **2010**, 677-681
- 721 Numerical simulation of micro-mechanism of saturated sand liquefaction. **2010**, 619-625
- 720 Mesoscopic numerical simulation of acoustic emission experiments in rock failure. **2010**, 655-658
- 719 Numerical investigation of time-lapse velocities during hydraulic fracturing. **2011**,
- 718 Modeling the deformation behavior of sandstone using a bonded-particle model. **2011**, 873-876
- 717 Introduction. **2013**, 1-11
- 716 Climate change and the impact on drinking water supply in the Meuse river basin. **2013**, 49-56
- 715 Study of Railway Ballast Compactness under Tamping Operation. **2013**, 13, 2072-2076 2
- 714 Interrelationship Between Sediment Fabric, Pore Volume Variations as Indicator for Pore Pressure Changes, and Sediment Shear Strength. **2014**, 85-94 1
- 713 Study on Hydraulic Fracturing in Transverse Isotropic Rock Using Bonded Particle Model. **2013**, 23, 470-479
- 712 Armatūros ir betono sankibos mechaninių elgsenos tempiant modeliavimas. **2014**,
- 711 Two-Dimensional Discrete Damage Models: Discrete Element Methods, Particle Models, and Fractal Theories. **2015**, 273-303 1

- 710 Bibliography. **2015**, 137-141
- 709 Discrete Element Modeling on Fracture Coalescence Behavior of Red Sandstone Containing Two Unparallel Fissures. **2015**, 125-156 ○
- 708 Numerical Investigation on the Failure Mechanical Behavior of Red Sandstone Containing Two Coplanar Fissures Under Conventional Triaxial Compression. **2015**, 217-246
- 707 Numerical Analysis of Stability and Failure Mechanism of Talus Slopes. **2015**, 05, 84-91
- 706 Optimization. **2016**, 29-47
- 705 Discrete Element Particle Modelling of Stone Masonry. **2016**, 146-170 ○
- 704 Liquefaction Modelling of Granular Soils using Discrete Element Method. **2016**, 381-441
- 703 Polygonal Grain-Based Distinct Element Modelling of Mechanical Characteristics and Transverse Isotropy of Rock. **2016**, 26, 235-252
- 702 Linear Cutting Simulation for Granite using Discrete Element Method. **2016**, 15, 1-7
- 701 Dimensions and Brittleness Effect on the Size of Process Zone in Rock-like Material Characterized by Bonded Particle Model. **2017**, 881-887
- 700 Calibration of Microscopic Mechanical Parameters of Granite Using Actual Distributions and Orthogonal Simulations. **2017**, 935-943 2
- 699 Influences of Stiffness Ratio, Friction Coefficient and Strength Ratio on the Macro Behavior of Cemented Sand Based on DEM. **2017**, 485-495
- 698 Preliminary DEM Analysis on Micro-Mechanical Behavior of the Composite Cemented Granules Under Complex Stress Conditions. **2017**, 525-534 2
- 697 Study on Micro-Mechanism of Concrete Hydraulic Fracturing Using DEM. **2017**, 343-350
- 696 DEM Modeling of Brittle Behavior of Rock Specimens with Two Infilled Flaws. **2017**, 907-915 ○
- 695 Evaluation of DEM and FEM/DEM in Modeling the Fracture Process of Glass Under Hard-Body Impact. **2017**, 377-388
- 694 Interaction Between Floater and Sea Ice Simulated with Dilated Polyhedral DEM. **2017**, 1065-1074 1
- 693 Numerical Simulation of Particle Breakage and Grinding. **2017**, 54, 105-112

692 CHARACTERISTICS OF COLLISION FORCE AND ITS SIMPLE EVALUATION FORMULA FOR BRITTLE MATERIALS SUCH AS SEA ICE BASE ON MEDIUM-SCALE EXPERIMENTS AND NUMERICAL CALCULATIONS. **2017**, 73, I\_973-I\_978 1

691 Modelling and Simulation for Ultra-Precision Machining. **2018**, 21-40

690 Testing DEM Approaches for Rockfall Impact Modeling. **2017**,

689 Effects of Local Spin on Overall Properties of Granule Materials. **2018**, 371-389

688 Hydraulic-fracturing simulation in different differential stresses and anisotropic media. **2017**,

687 Discrete Numerical Simulations of the Strength and Microstructure Evolution During Compaction of Layered Granular Solids. 123-141

686 Quantitative Determination Approach of Rock Micro Tensile Strength Based on Particle Flow Code. **2018**, 947-958

685 Research on the Effect of Micro Particle Shape of Marble Using Clump Parallel-Bond Models. **2018**, 124-135

684 Numerical Simulation on Acoustic Emission of Composite Stratum. **2018**, 91-98

683 Modélisation numérique des roches et fracturation : du continu au discontinu. **2018**, 2

682 Numerical investigation of dynamic and static properties of reservoir rocks. **2018**, 58, 769

681 Calibrating the Strength Ratio and the Failure Envelope for DEM Modeling of Quasi-Brittle Materials. **2018**, 199-202

680 Numerical Simulation of Pervious Concrete Using Discrete Element Modeling Technique. **2018**, 46, 20170141 1

679 Microcrack Growth Behavior and CWFS Criterion Parameters Optimization of Granite with PFC. **2018**, 46, 20160450 2

678 Particle-Based DEM Model for Simulating Brittle Cracks Evolution in Rock-like Materials During the Tensional Fracturing Process. **2019**, 215-220

677 A New Method Based on PFC3D and Hierarchical Modeling for Pile Foundation Analysis. **2019**, 98-114

676 Effect of Grain Content on the Sandstone Properties Using Biconcave Bond Model of DEM. **2019**, 38-50

675 Modeling Grain Size Heterogeneity Effects on Mechanical Behavior of Crystalline Rocks Under Compressive Loading. **2019**, 177-184

- 674 User Customized Realization of Virtual Earthquakes based on Visual Intelligence and Dynamic Simulation. **2018**, 55, 614-623
- 673 Challenges in modelling of hydraulic fracturing in low-permeability coal seams with complex cleat networks and stress regimes. **2019**, 59, 166 0
- 672 Modelling the Behavior of Complex Media by Jointly Using Discrete and Continuum Approaches. **2019**, 1311-1345 1
- 671 Modeling of Asphalt Concrete While Using Discrete Element Method. **2019**, 18, 171-180
- 670 Development of the formalism of the discrete element method for the study of the mechanical behavior of liquid-saturated porous materials on a pore scale. **2019**, 1391, 012023
- 669 On the Failure Mechanism of Brittle Granite in 2-D Rock Indentation. **2020**, 43, 20180413 2
- 668 Class of Damage-Healing Models for Cementitious Composites at Multi-scales. **2020**, 1-25
- 667 Development of Analytical Method of Predicting Fissures Formation for Carbonization Process of Coke. **2020**, 60, 1624-1632
- 666 Introduction. **2021**, 1-20
- 665 Numerical Study on Free Face-Assisted Rock Fragmentation Induced by a TBM Disk Cutter. **2021**, 861, 032082 0
- 664 A method for generating a block system of coarse granular materials that strictly meet gradation requirements. **2021**, 861, 032016
- 663 Investigation of the Influence of Snow Track Density on Tire Tread Block Traction by Experiments and Discrete Element Method Simulation. **2021**,
- 662 Dynamic properties and fracture damage characteristics of granite under impact load. **2021**, 861, 042073 0
- 661 On the role of joint roughness on the micromechanics of rock fracturing process: a numerical study. 1 1
- 660 The effect of geometric characteristics on mechanical properties of asperities. **2021**, 861, 042100
- 659 Slope stability analysis via Discrete Element Method and Monte Carlo Simulations. **2021**, 861, 032023 1
- 658 Effect of microcosmic contact stiffness heterogeneity on macroscopic mechanical parameters of rock. **2021**, 861, 022064
- 657 Coupled hydro-mechanical modelling on hydraulic fracturing using DDA. **2021**, 861, 032085

- 656 Simulating Crack Development and Failure Characteristic of Toppling Rock Slope under Seismic Loading on Lancang River in China. **2021**, 2021, 0
- 655 Numerical Study on Crushing Law of Iron Ore under Different Impact Velocity Using CDEM. **2021**, 861, 042069
- 654 Modeling and simulation of micro-hole fabrication on brittle material using abrasive air jet machining. **2021**, 72, 361-374 0
- 653 Constructions of Irregular Shaped Particles in the DEM. **2020**, 23-49
- 652 Coupled Fracture Modelling with RFPA. **2020**, 173-201
- 651 Numerical Investigation and Analysis of Intermediate Principal Stress Effects on Rock Failure Behaviors. **2020**, 2020, 1-11
- 650 How to Achieve Efficiency and Accuracy in Discrete Element Simulation of Asphalt Mixture: A DRF-Based Equivalent Model for Asphalt Sand Mortar. **2020**, 2020, 1-10 0
- 649 An improved grain-based numerical manifold method to simulate deformation, damage and fracturing of rocks at the grain size level. **2022**, 134, 107-116 9
- 648 Shear behaviors of natural rock fractures infilled with cemented calcite. **2022**, 141, 104493 1
- 647 Simulation of ductile grain deformation and the porosity loss predicted model of sandstone during compaction based on grain packing texture. **2022**, 208, 109583 0
- 646 Fatigue and micro-seismic behaviors of concrete disks exposed to cyclic Brazilian testing: A numerical investigation based on a 3D particle-based model. **2022**, 155, 106629 1
- 645 DEM Analysis of Mechanical Behaviors of Railway Ballast. **2020**, 311-358
- 644 Microscopic Aspects of Internal Erosion Processes in Gap-Graded Soils. **2020**, 267-273 0
- 643 Simulation on Compressive Property of Concrete with Large-Size Recycled Coarse Aggregate. **2020**, 0
- 642 Wear Mechanism of Curved-Surface Subsoiler Based on Discrete Element Method. **2020**, 495-503
- 641 Sliding and accumulation characteristics of loose materials and its influencing factors based on discrete element method. **2020**, 69, 164501 0
- 640 Review of Parameter Inversion Approaches in Meso Constitutive Models for Rock Brittle Materials. **2020**, 09, 61-69
- 639 Coupled Fracture Modelling with Distinct Element Methods. **2020**, 227-254 1

- 638 Investigating Earth Reaction to Pull-Out Process of Frictional Rock Bolts Using Distinct Element Method. **2020**, 10, 851-862
- 637 Contact Force Models for Granular Materials. **2020**, 51-96
- 636 Development of a new dem contact model for hygroscopic bulk solids. **2020**, 48, 432-438 0
- 635 Applications for Deep Geothermal Engineering. **2020**, 317-346
- 634 Experimental Study on Compressibility and Rebound Characteristics of Sand Reinforced with Polymer and Fiber. 1-17 0
- 633 Machine-learning-enabled discrete element method: Contact detection and resolution of irregular-shaped particles. 0
- 632 Micro-mechanical analysis of soil-structure interface behavior under constant normal stiffness condition with DEM. 1 6
- 631 Numerical and experimental research on the degradation mechanism in a dust-free crusher using DEM-CFD method. 1
- 630 Physical and numerical evaluation of effect of specimen size on dynamic tensile strength of rock. **2021**, 104538 0
- 629 The Continuum Voronoi Block Model for simulation of fracture process in hard rocks. 1
- 628 Mechanical and thermomechanical mesoscale analysis of multiple surface cracks in ceramic coatings based on the DEM-FEM coupling method. **2021**, 111336 0
- 627 Influence of stress conditions on shear behavior of slip zone soil in ring shear test: an experimental study and numerical simulation. 1 1
- 626 A grain texture model to investigate effects of grain shape and orientation on macro-mechanical behavior of crystalline rock. *International Journal of Rock Mechanics and Minings Sciences*, **2021**, 148, 104971 0
- 625 Discrete element method (DEM) simulation of single grouser shoe-soil interaction at varied moisture contents. **2021**, 191, 106538 4
- 624 Application of Discrete Element Method in the Field of Comminution: Current Status and Future. **2020**, 57, 495-505
- 623 Cohesion and Initial Porosity of Granular Fault Gouges control the Breakdown Energy and the Friction Law at the Onset of Sliding. 0
- 622 Study on the characterization of rock heterogeneity and simulation of fracture process based on the mesoscopic structure. **2020**, 570, 022028
- 621 Theoretical Study of Physico-mechanical Response of Permeable Fluid-Saturated Materials Under Complex Loading Based on the Hybrid Cellular Automaton Method. **2021**, 485-501

620	Stability evaluation and potential failure process of rock slopes characterized by non-persistent fractures. <b>2020</b> , 20, 2921-2935	2
619	PFC3D Modeling of Rock Fragmentation by Pressure Pulse. <b>2021</b> , 237-246	
618	Investigation of the effect of different injection schemes on fracture network patterns in hot dry rocks - A numerical case study of the FORGE EGS site in Utah. <b>2022</b> , 97, 104346	0
617	The effects of rock-infill interfacial properties on the compressive damage behaviour of flawed rocks: Results from a DEM study. <b>2022</b> , 117, 103166	0
616	Simulating the entire progressive failure process of rock slopes using the combined finite-discrete element method. <b>2022</b> , 141, 104557	2
615	Experimental and numerical studies of brittle rock-like specimens with unfilled cross fissures under uniaxial compression. <b>2022</b> , 117, 103167	6
614	Face stability of EPB shield tunnels in multilayered ground with soft sand lying on hard rock considering dynamic excavation process: A DEM study. <b>2022</b> , 120, 104268	0
613	Static and cyclic compressive mechanical characterization of polyurethane-reinforced ballast in a railway. <b>2022</b> , 153, 107093	1
612	Numerical modelling of the quasi-brittle behaviour of refractory ceramics by considering microcracks effect. <b>2022</b> , 42, 1149-1161	2
611	Experimental and numerical investigation on the mechanical responses and cracking mechanism of 3D confined single-flawed rocks under dynamic loading. <b>2021</b> ,	4
610	Ice loads and ice-induced vibrations of offshore wind turbine based on coupled DEM-FEM simulations. <b>2021</b> , 110197	1
609	Calibration and uniqueness analysis of microparameters for DEM cohesive granular material. <b>2021</b> , 32, 121-121	4
608	The Mechanism of Fracture and Damage Evolution of Granite in Thermal Environment. <b>2021</b> , 14,	0
607	A combined experimental and DEM approach to optimize the centrifugal maize breakage tester. <b>2021</b> ,	0
606	Discrete element modeling of planetary ice analogs: mechanical behavior upon sintering. <b>2022</b> , 24, 1	
605	Discrete element modeling and simulation study on cutting rock behavior under spring-mass-damper system loading. <b>2021</b> , 209, 109872	1
604	Effect of Heterogeneity in Micro-Structure and Micro-Strength on the Discrepancies Between Direct and Indirect Tensile Tests on Brittle Rock. 1	0
603	Mechanical behaviours of sandstone containing intersecting fissures under uniaxial compression. <b>2021</b> ,	2

602	Analysis of the Quasi-Static and Dynamic Fracture of the Silica Refractory Using the Mesoscale Discrete Element Modelling. <b>2021</b> , 14,	1
601	Role of pore attribute in the localized deformation of granular rocks: A numerical study. <b>2021</b> , 821, 229147	0
600	A random discrete element method for modeling rock heterogeneity. <b>2022</b> , 8, 1	1
599	Rock models. <b>2021</b> , 319-371	0
598	DEM Simulations of the Calendering Process: Parameterization of the Electrode Material of Lithium-Ion Batteries. <b>2021</b> , 104, 91-97	1
597	Characterization of CSA cemented-treated sands via discrete element method. <b>2021</b> ,	1
596	A state-of-the-art review on creep damage mechanics of rocks.	3
595	A review of methods, applications and limitations for incorporating fluid flow in the discrete element method. <b>2022</b> ,	0
594	DEM Analysis of the Effect of Lamination Properties on the Stability of an Underground Coal Mine Entry with Laminated Shale Roof. 1	2
593	Y-Mat: an improved hybrid finite-discrete element code for addressing geotechnical and geological engineering problems. <b>2022</b> , ahead-of-print,	1
592	Comparison of sphere-based and dilated-polyhedron-based discrete element methods for the analysis of ship-ice interactions in level ice. <b>2022</b> , 244, 110364	1
591	Crack path at bedding planes of cracked layered rocks. <b>2022</b> , 154, 104504	
590	An integrated parameter calibration method and sensitivity analysis of microparameters on mechanical behavior of transversely isotropic rocks. <b>2022</b> , 142, 104573	0
589	Evaluation of fracture behavior of high-strength hydraulic concrete damaged by freeze-thaw cycle test. <b>2022</b> , 321, 126346	5
588	Numerical study of hydraulic fracture propagation in inherently laminated rocks accounting for bedding plane properties. <b>2022</b> , 210, 109798	3
587	Microstructural origins of crushing strength for inherently anisotropic brittle materials. <b>2022</b> , 238, 111399	0
586	Hydraulic fracture height growth in layered rocks: Perspective from DEM simulation of different propagation regimes. <b>2022</b> , 238, 111395	1
585	Numerical Simulation of the Effect of Void Direction and Volume on the Strength of Cemented Soil. <b>2022</b> , 22,	0



584	Rupture of rock with discontinuities under blasting disturbance: Insights from discrete element method modeling. <b>2022</b> , 116, 102486	0
583	Response surface methodology calibration for DEM study of the impact of a spherical bit on a rock. <b>2022</b> , 116, 102466	1
582	A new discrete element model for rock-like materials. <b>2022</b> , 261-262, 106730	2
581	Macro and microscale Engineering Response of Rigid-Soft Gravel-Rubber Inclusions: Insights from Detailed Laboratory and DEM Numerical Investigations. <b>2022</b> , 11-27	2
580	Development of Rockburst Research: A Comprehensive Review. <b>2022</b> , 12, 974	3
579	A discrete element framework for the numerical analysis of particle bed-based additive manufacturing processes. 1	0
578	Numerical study on full-field stress evolution and acoustic emission characteristics of rocks containing three parallel pre-existing flaws under uniaxial compression. 1-21	2
577	Evaluation of safety and deformation characteristics of the secondary stope sandwiched between backfills in underground iron mines. <b>2022</b> , 81, 1	
576	Numerical Simulation of Rock Thermal Fracture Considering Friction Effect in the Framework of Smooth Particle Hydrodynamics Based on Total Lagrangian Formula. <b>2022</b> , 55, 1663	1
575	Peridynamic simulation of the mechanical responses and fracturing behaviors of granite subjected to uniaxial compression based on CT heterogeneous data. 1	0
574	Discrete Element Modeling of a fault reveals that viscous rolling relaxation controls friction weakening.	
573	Novel Mechanical Classification Method of Rock Based on the Uniaxial Compressive Strength and Brazilian Disc Strength. 1	0
572	Deformation and Failure Mechanism of Weakly Cemented Mudstone under Tri-Axial Compression: From Laboratory Tests to Numerical Simulation. <b>2022</b> , 12, 153	2
571	Experiment and discrete element modeling of particle breakage in coral sand under triaxial compression conditions. 1-10	0
570	Geometry evolution of mesoscopic mechanical structures during the rock fragmentation process induced by tunnel boring machine (TBM) cutters.. <b>2022</b> , 9, 211630	1
569	Optimized differential evolution algorithm for solving DEM material calibration problem. 1	1
568	Dynamic performance optimization of an arctic semi-submersible production system. <b>2022</b> , 244, 110353	2
567	Linking process-property relationships for multicomponent agglomerates using DEM-ANN-PBM coupling. <b>2022</b> , 398, 117156	0

566	Numerical Simulation of Mechanical Characteristics in Longwall Goaf Materials. <b>2022</b> , 39, 557	0
565	Numerical investigation of the landslide-debris flow transformation process considering topographic and entrainment effects: a case study. <b>2022</b> , 19, 773	7
564	Modeling of Drying-Induced Soil Curling Phenomenon. <b>2022</b> , 58,	1
563	Evaluation of the characterization of acoustic emission of brittle rocks from the experiment to numerical simulation.. <b>2022</b> , 12, 498	2
562	DEM Analyses of Cemented Granular Fault Gouges at the Onset of Seismic Sliding: Peak Strength, Development of Shear Zones and Kinematics. <b>2022</b> , 179, 679	2
561	Combined numerical investigation of the Gangda paleolandslide runout and associated dam breach flood propagation in the upper Jinsha River, SE Tibetan Plateau. <b>2022</b> , 19, 941	1
560	Precise grading of surrounding rock based on numerical calculation of jointed rock mass. 1-12	0
559	Superquadric DEM-SPH coupling method for interaction between non-spherical granular materials and fluids. <b>2022</b> , 71, 20-20	0
558	Stability evaluation and potential damage of a giant paleo-landslide deposit at the East Himalayan Tectonic Junction on the Southeastern margin of the Qinghai-Tibet Plateau. <b>2022</b> , 111, 2117	1
557	Meso-Mechanical Characteristics of Granite with Natural Cracks after Mud Acid Corrosion. <b>2022</b> , 15, 721	0
556	DEM study on threshing performance of "compression-oscillation"thresher. 1	0
555	Prediction of Crushed Numbers and Sizes of Ballast Particles after Breakage Using Machine Learning Techniques.	
554	Size effect on dynamic splitting tensile strength of concrete: Mesoscale modeling. <b>2022</b> , 128, 104435	2
553	Simulation analysis and experimental validation of conveying device in uniform crushed straw throwing and seed-sowing Machines using CFD-DEM coupled approach. <b>2022</b> , 193, 106720	1
552	Emerging anchored FRP systems bonded to steel subjected to monotonic and cyclic loading: A numerical study. <b>2022</b> , 261, 108250	
551	Physics-based estimates of drag coefficients for the impact pressure calculation of dense snow avalanches. <b>2022</b> , 254, 113478	0
550	Numerical simulation on the breakup of an ice sheet induced by regular incident waves. <b>2022</b> , 120, 103024	0
549	Rock grain-scale mechanical properties influencing hydraulic fracturing using Hydro-GBM approach. <b>2022</b> , 262, 108227	2

548	Bond calibration method for macroparameters using the discrete element method framework. <b>2022</b> , 262, 108223		1
547	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
546	Numerical investigation of the effects of the micro-parameters of the transgranular contact on the mechanical response of granite. <b>2022</b> , 118, 103259		0
545	Experimental and Numerical Investigations of Cerchar Scratching Rock Interaction. <b>2022</b> , 22,		
544	Numerical analysis of mechanical behavior of stratified rocks containing a single flaw by utilizing the particle flow code. <b>2022</b> , 137, 91-104		2
543	Study on Drilling Ground Collapse Induced by Groundwater Flow and Prevention Based on a Coupled CFD-DEM Method. 1		0
542	Failure Behavior of Room and Pillar with Different Room Configuration Under Uniaxial Loading Using Experimental Test and Numerical Simulation. 1		0
541	Numerical simulation and experimental studies of rock-breaking methods for pre-grooving-assisted disc cutter. <b>2022</b> , 81, 1		0
540	Study on Dynamic Response of Rock Slope With Inverse Non-Persistent Joints Under Earthquake. <b>2022</b> , 10,		1
539	A numerical model for river ice dynamics based on discrete element method. 1-14		
538	A numerical study on gas-fluidized beds of wet flexible fibers. <b>2022</b> , 399, 117094		0
537	The concept of the mobilized domain: how it can explain and predict the forces exerted by a cohesive granular avalanche on an obstacle.. <b>2022</b> , 24, 45		1
536	Micro-fracture simulation of rock under unloading condition by grain-based discretized virtual internal bond method.		0
535	Stability analysis of the composite support pillar in backfill-strip mining using particle flow simulation method. <b>2022</b> , 81, 1		1
534	Effect of meso-mechanical variables on the deformation properties of the multi-phase geomaterial. <b>2022</b> , 321, 126257		0
533	Comparative numerical study of pneumatic conveying of flexible elongated particles through a pipe bend by DEM-CFD. <b>2022</b> , 399, 117170		0
532	Study on Mechanical Properties of Cement-Improved Frozen Soil under Uniaxial Compression Based on Discrete Element Method. <b>2022</b> , 10, 324		2
531	Numerical simulation on cleaning of clogged pervious concrete pavement. <b>2022</b> , 341, 130878		2

530	Numerical evaluation of Failure Assessment Diagram (FAD) for hydraulic fracture propagation in sandstone. <b>2022</b> , 263, 108311	1
529	A damage bond model to investigate the damage and crack propagation for cemented materials and parametric analysis. <b>2021</b> , 54, 1	1
528	Packing of particles for DEM models of dry snow. <b>2022</b> ,	
527	Advances in geomechanical modeling. <b>2022</b> , 279-297	
526	Dynamic Deformation, Damage, and Fracture in Geomaterials. <b>2022</b> , 379-422	0
525	Class of Damage-Healing Models for Cementitious Composites at Multi-scales. <b>2022</b> , 933-957	
524	Three-Dimensional Numerical Simulation of Fold-and-Thrust Belts with Differential Compression.	
523	A 3d Feature Extraction-Based Method for Coal Cleat Characterization Using X-Ray $\mu$ CT and its Application to a Bowen Basin Coal Specimen.	
522	Mechanical and Fracture Behaviors of Brittle Material with a Circular Inclusion: Insight from Infilling Composition. 1	2
521	Multiscale effects caused by the fracturing and fragmentation of rock blocks during rock mass movement: implications for rock avalanche propagation. <b>2022</b> , 22, 639-657	0
520	Propagation and coalescence of two infilled parallel fractures in shale: laboratory testing and DEM simulations. <b>2022</b> , 24, 1	
519	Stability analysis of anhydrite mine-out as an underground gas storage based on DEM and similarity theory: a case study. <b>2022</b> , 81, 1	1
518	Numerical Study and Force Chain Network Analysis of Sand Production Process Using Coupled LBM-DEM. <b>2022</b> , 15, 1788	1
517	Numerical models of pressure-driven fluid percolation in rock salt: nucleation and propagation of flow pathways under variable stress conditions. <b>2022</b> , 81, 1	0
516	Effect of various inserts on flow behavior of Fe <sub>2</sub> O <sub>3</sub> beads in a three-dimensional silo subjected to cyclic discharge- Part II: Exploration of internal dynamic properties. <b>2022</b> , 399, 117221	0
515	Review on the research of contact parameters calibration of particle system. <b>2022</b> , 36, 1363-1378	0
514	Meso fracture characteristics of granite and instability evolution law of surrounding rock in deep cavern.. <b>2022</b> , 12, 2994	0
513	The Influence of Tensile Strength Difference with Variable Gravel Sizes on the Hydraulic Fracture Propagation in the Conglomerate Reservoir. <b>2022</b> , 2022, 1-9	

512	Formation Damage by Fines Breakage and Migration. <b>2022,</b>	0
511	Forensic analysis and numerical simulation of a catastrophic landslide of dissolved and fractured rock slope subject to underground mining. <b>2022, 19, 1045</b>	5
510	DEMSPH coupling method for the interaction between irregularly shaped granular materials and fluids. <b>2022, 400, 117249</b>	0
509	A new discrete element modelling approach to simulate the behaviour of dense assemblies of true polyhedra. <b>2022, 401, 117295</b>	
508	A semi-empirical re-evaluation of the influence of state on elastic stiffness in granular materials. <b>2022, 24, 1</b>	1
507	Investigation on the Tool-Rock Interaction Using an Extended Grain-Based Model. 1	0
506	A Multi-Objective Identification of DEM Microparameters for Brittle Materials. <b>2022, 12, 387</b>	
505	Cracking behavior and acoustic emission characteristics of heterogeneous granite with double pre-existing filled flaws and a circular hole under uniaxial compression: Insights from grain-based discrete element method modeling. <b>2022, 81, 1</b>	0
504	DEM analysis of the evolution of reflection cracks in old cement concrete pavement with an ATB layer. 1-10	1
503	An Efficient Parallel Framework for the Discrete Element Method Using GPU. <b>2022, 12, 3107</b>	
502	Numerical Investigation of Blast-Induced Rock Movement Characteristics in Open-Pit Bench Blasting Using Bonded-Particle Method. 1	0
501	Numerical simulation of the Rongcharong paleolandslide river-blocking event: implication for the longevity of the landslide dam. 1	2
500	Strength and Failure Properties of Preflawn Granite under Coupled Biaxial Loading and Unloading Conditions. <b>2022, 2021,</b>	1
499	An Introduction to the Geometrical Stability Index: A Fabric Quantity. <b>2022, 2, 297-316</b>	
498	Study on fracture failure mechanism and crack propagation law of granite-shotcrete composite structure. <b>2022, 15, 1</b>	
497	Evolutionary Analysis of Heterogeneous Granite Microcracks Based on Digital Image Processing in Grain-Block Model.. <b>2022, 15,</b>	0
496	Numerical investigation of the effect of grain size-to-particle size ratio on the dynamic fracture toughness of granite by using PFC3D-GBM. <b>2022, 8,</b>	0
495	Pulse injection simulation based on the coupling of transient flow in tubing and fracture propagation in reservoirs.	0

494	Aspects of size effect on discrete element modeling of concrete. <b>2022</b> , 17, 36-42		0
493	Study on the influence of hole defects with different shapes on the mechanical behavior and damage law of coal and rock.. <b>2022</b> , 17, e0265753		1
492	Failure properties and stability monitoring of strip and column cemented gangue backfill bodies under uniaxial compression in constructional backfill mining.. <b>2022</b> , 1		1
491	Assessment of permeability changes during rock deformation and failure of a sandstone sample using a stress-dependent pore network model. <b>2022</b> , 8, 1		0
490	Challenges associated with numerical back analysis in rock mechanics. <b>2022</b> ,		1
489	Slope with Predetermined Shear Plane Stability Predictions under Cyclic Loading with Innovative Time Series Analysis by Mechanical Learning Approach.. <b>2022</b> , 22,		
488	Numerical Simulation of Hydraulic Fracturing in Enhanced Geothermal Systems Considering Thermal Stress Cracks. 1		
487	Construction of Discrete Element Constitutive Relationship and Simulation of Fracture Performance of Quasi-Brittle Materials.. <b>2022</b> , 15,		1
486	Using DEM method to study graphite migration of copper-based graphite composites during friction. 135065012210885		
485	Perforation optimization of layer-penetration fracturing for commingling gas production in coal measure strata. <b>2022</b> ,		1
484	Modeling the devolatilization and fragmentation of biomass pellets with the bonded particle method for fluidized bed applications. 1		
483	Investigating the cutting force of disc cutter in multi-cutter rotary cutting of sandstone: Simulations and experiments. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2022</b> , 152, 105069	6	0
482	Research on the mechanism and performance of free-surface rock breakage by a disc cutter. <b>2022</b> , 264, 108336		0
481	Numerical Investigation of Effect of Drum Barrel on Coal-Loading Performance of Thin-Coal-Seam Shearer Machines. <b>2022</b> , 10, 253		
480	A coupled thermo-mechanical bond-based smoothed particle dynamics model for simulating thermal cracking in rocks. <b>2022</b> , 265, 108364		2
479	Effect of layered joints on rockburst in deep tunnels. <b>2022</b> , 9, 1		0
478	Fracture growth leading to mechanical spalling around deposition boreholes of an underground nuclear waste repository. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2022</b> , 152, 105038	6	1
477	Discrete element method to simulate interface delamination and fracture of plasma-sprayed thermal barrier coatings.		0

476	Discrete element simulation analysis of damage and failure of hydrate-bearing sediments. <b>2022</b> , 104557	0
475	Voronoi-Based Discrete Element Analyses to Assess the Influence of the Grain Size and Its Uniformity on the Apparent Fracture Toughness of Notched Rock Specimens. 1	
474	Titanium Prevailing Circulation Might Drive Highly Intermittent, Yet Significant Sediment Transport. <b>2022</b> , 49,	2
473	Three-dimensional mesoscale modelling of the compressive behaviors of coral sand. <b>2022</b> , 24, 1	1
472	Parameter Studies on Hydraulic Fracturing in Brittle Rocks Based on a Modified Hydromechanical Coupling Model. <b>2022</b> , 15, 2687	
471	A Comprehensive Correlation Study of Structured Soils in Coastal Area of South China about Structural Characteristics. <b>2022</b> , 10, 508	0
470	Discrete element modeling of rock-concrete bi-material discs under dynamic tensile loading. <b>2022</b> , 327, 126962	0
469	A combined numerical-experimental approach to analyzing fracture initiation and development in brittle rocks. <b>2022</b> , 145, 104663	
468	The Influence of Joint Inclination and Opening Width on Fracture Characteristics of Granite under Triaxial Compression. <b>2022</b> , 22,	4
467	Discontinuous Modeling of Roof Strata Caving in a Mechanized Longwall Mine in Tabas Coal Mine. <b>2022</b> , 22,	0
466	Fluidization of the spherocylindrical particles: Comparison of multi-sphere and bond-sphere models. <b>2022</b> , 253, 117540	0
465	Proposal of a chemical weathering model for mechanical analysis of cemented sandstone using DDA. <b>2022</b> , 145, 104661	0
464	Effects of fracture network distribution on excavation-induced coupled responses of pore pressure perturbation and rock mass deformation. <b>2022</b> , 145, 104670	2
463	Establishing an oblique impact breakage master curve using a DEM bonded contact model. <b>2022</b> , 145, 104668	1
462	Numerical study on spalling failure of rock surrounding deep buried tunnel based on DEM. <b>2022</b> , 145, 104653	2
461	Experimental and DEM studies on the normal coefficient of restitution of grain-block systems in the presence of thick and thin water layers under low-velocity impacts. <b>2022</b> , 146, 104711	
460	Investigation of the burial and mixing performance of a rotary tiller using discrete element method. <b>2022</b> , 220, 105349	2
459	Formation and evolution of a giant old deposit in the First Bend of the Yangtze River on the southeastern margin of the Qinghai-Tibet Plateau. <b>2022</b> , 213, 106138	0

458	Linking shear strength to granular skeleton state of continuously graded coarse-grained soils: Insights from discrete element modelling. <b>2022</b> , 146, 104750	0
457	Study on the Anisotropic Shear Strength of Rough Joint via 3D Scanning, 3D Printing, and 3D Discrete-Element Modeling. <b>2022</b> , 22,	0
456	A simple particle spring method for capturing the continuous-discontinuous processes of brittle materials. <b>2022</b> , 139, 221-231	0
455	Numerical simulation of expansion process of soundless cracking demolition agents by coupling finite difference and discrete element methods. <b>2022</b> , 146, 104699	1
454	Effects of bedding planes on progressive failure of shales under uniaxial compression: Insights from acoustic emission characteristics. <b>2022</b> , 119, 103343	0
453	Cracking and deformation of cuboidal sandstone with a single nonpenetrating flaw under uniaxial compression. <b>2022</b> , 119, 103284	6
452	Investigation of the cutting force response to a PDC cutter in rock using the discrete element method. <b>2022</b> , 213, 110330	1
451	In-depth field survey of a rockslide detachment surface to recognise the occurrence of gravity-induced cracking. <b>2022</b> , 302, 106636	1
450	Breakage effect of calcareous sand on pile tip resistance and the surrounding soil stress. <b>2022</b> , 8, 183-190	0
449	Meso-parameters Calibration of Rock Specimens Based on Flat-Joint Contact Model. <b>2021</b> ,	
448	A comparative assessment and unification of bond models in DEM simulations. <b>2022</b> , 24, 1	0
447	The evolution regularity and influence factor analysis of zonal disintegration around deep jointed rock mass: a numerical study based on DEM. <b>2022</b> , 81, 1	2
446	A three-dimensional DEM modelling of triaxial test on gas hydrate-bearing sediments considering flexible boundary condition. 1-20	
445	Effect of confining pressure during thermal treatment processes on rock properties. <b>2021</b> ,	
444	Study on the Effect of Bond Strength on the Failure Mode of Coarse-Grained Sandstone in Weakly Cemented Stratum. <b>2022</b> , 12, 55	0
443	Numerical Modeling on Dynamic Characteristics of Jointed Rock Masses Subjected to Repetitive Impact Loading. <b>2021</b> , 2021, 1-13	
442	Negative Pore Water Pressure in Aquitard Enhances Land Subsidence: Field, Laboratory, and Numerical Evidence. <b>2022</b> , 58,	2
441	Simulation of granular materials with the discrete element method to investigate their suitability as crash-absorber in ship collisions. <b>2021</b> , 21,	1



440	Dynamic Response of Rock-like Materials Based on SHPB Pulse Waveform Characteristics.. <b>2021</b> , 15,	0
439	Particle Flow Analysis of Mechanical Properties and Failure Behaviour in Composite Rock Strata with Holes. <b>2021</b> , 2021, 1-12	0
438	Experimental study on crack characteristics and acoustic emission characteristics in rock-like material with pre-existing cracks. <b>2021</b> , 11, 23790	1
437	Experimental investigation and discrete element method simulation on mechanical properties and failure mechanism of polymer-stabilized sand. <b>2022</b> , 81, 1	1
436	Experimental Study on the Calibration of Microparameters of Dolomite in the Barun Open-Pit Mine on the Basis of the Parallel Bond Model. <b>2021</b> , 2021, 1-11	
435	3D DEM analysis of analogue proppant fractured rock system interaction. <b>2022</b> , 81, 1	1
434	Cracking Behavior and Acoustic Emission Characteristics of Rock Containing a Single Preexisting Flaw. <b>2021</b> , 2021, 1-15	4
433	Discrete Element Bonded-Block Models for Detailed Analysis of Masonry. <b>2022</b> , 7, 31	0
432	Xerogel-based building material (XBM): potential for construction on Mars base and other resourceless sites. <b>2022</b> ,	0
431	Research on discrete element modeling and numerical simulation of cutting rock behavior under impact load.	
430	A study on pick cutting properties with full-scale rotary cutting experiments and numerical simulations.. <b>2022</b> , 17, e0266872	1
429	Recent developments on seismic safety evaluation of concrete dams.	
428	Modeling ice block failure within drift ice and ice rubble.. <b>2022</b> , 105, 045001	
427	The effect of grain interlocking in discrete element modelling of rock cutting. 1-24	
426	Mechanical Behaviour of Anchored Rock Containing Weak Interlayer under Uniaxial Compression: Laboratory Test and Coupled DEM-BEM Simulation. <b>2022</b> , 12, 492	0
425	Discrete element method (DEM) analysis of lithium ion battery electrode structures from X-ray tomography-the effect of calendaring conditions. <b>2022</b> , 117366	1
424	Effects of surface grooves on rock cutting performance and contact behavior of a TBM disc cutter. <b>2022</b> , 267, 108466	0
423	The shear behaviors of concrete-gypsum specimens containing double edge cracks under four-point loading conditions. <b>2022</b> , 119, 103361	0

- 422 An interacting wing-crack based semi-analytical meso-scale model for describing elasto-plastic damage behavior of brittle rocks. **2022**, 146, 104748 0
- 421 Numerical simulation of feed pellet breakage in pneumatic conveying. **2022**, 218, 31-42 1
- 420 Multiscale analysis of tunnel surrounding rock disturbance: A PFC3D-FLAC3D coupling algorithm with the overlapping domain method. **2022**, 147, 104752 0
- 419 Data\_Sheet\_1.pdf. **2020**,
- 418 Numerical investigation of the effect of cohesion and ground friction on snow avalanches flow regimes.. **2022**, 17, e0264033 0
- 417 A Numerical Study of Wave Propagation and Cracking Processes in Rock-Like Material under Seismic Loading Based on the Bonded-Particle Model Approach. **2022**,
- 416 Prediction of performance of a non-icebreaking ship in marginal ice zone. 1
- 415 Experiment and numerical simulation of overburden and surface damage law in shallow coal seam mining under the gully. **2022**, 81, 1 1
- 414 Numerical Insight Into Energy Partitioning During Stick-Slip Events Based on the Framework of Rate-and-State Friction Law. **2022**, 49, 0
- 413 Study of Instability Mechanism and Roof Caving Mode of Cementing Filling Stope: The Case Study of a Nonferrous Metal Mine in China. **2022**, 2022, 1-20
- 412 Experimental study on the macroscopic and microscopic mechanical properties of simulated cemented granular materials. 1-21
- 411 Numerical Study of the Optimum Fiber Content of Sealing Grease Using Discrete Element Method. **2022**, 15, 3485
- 410 Numerical simulation study on particle breakage behavior of granular materials in confined compression tests. **2022**,
- 409 The effect of particle size distribution and shape on the microscopic behaviour of loess via the DEM. **2022**, 81, 1
- 408 Prediction of the post-failure behavior of rocks: Combining artificial intelligence and acoustic emission sensing. 0
- 407 Analysis of vertical roller mill performance with changes in material properties and operating conditions using DEM. **2022**, 182, 107573
- 406 Numerical Modelling Challenges in Rock Engineering with Special Consideration of Open Pit to Underground Mine Interaction. **2022**, 12, 199 0
- 405 Investigating the Failure Behavior of Gypsum Specimens with Non-Persistent Vertical Notch Under Uniaxial Compression. 1

404	DEM investigations of failure mode of sands under oedometric loading. <b>2022</b> , 33, 103599	0
403	Mechanical behavior of non-persistent joints with different geometric configurations and roughness in solid rock and concrete material. <b>2022</b> , 337, 127564	0
402	Direct shear behavior of gravel-rubber mixtures: Discrete element modeling and microscopic investigations. <b>2022</b> , 62, 101156	0
401	Prediction of crushed numbers and sizes of ballast particles after breakage using machine learning techniques. <b>2022</b> , 337, 127469	0
400	Three-dimensional model reconstruction and numerical simulation of the jointed rock specimen under conventional triaxial compression.	
399	Experimental and numerical study of size effects on the crushing strength of rockfill particles.	
398	Multi-scale dispersive gradient elasticity model with rotation for the particulate composite. <b>2022</b> , 115757	
397	The tensile strength of hydrothermally altered volcanic rocks. <b>2022</b> , 107576	0
396	A Hybrid Particle/Finite Element Model with Surface Roughness for Stone Masonry Analysis. <b>2022</b> , 3, 608-627	1
395	DEM studies on the effect of particle breakage on the critical state behaviours of granular soils under undrained shear conditions.	0
394	Study on Mode I Fracture Toughness of Rocks Using Flat-Joint Model and Moment Tensor. <b>2022</b> , 103403	0
393	Usability Assessment of Different Contact Models for Modelling the Failure Behaviour of Sedimentary Rocks Under Unconfined Stress Conditions. <b>2022</b> , 43, 61-75	
392	The Feasibility of Hydroxypropyl Methylcellulose as an Admixture for Porous Vegetarian Concrete Using Coarse Recycled Aggregates. <b>2022</b> , 12, 676	0
391	Modeling Technology of Bonded Particle Model for Gold Ore and Its Validation Based on Drop Weight Test. <b>2022</b> , 12, 731	
390	DEM simulations of agglomerates impact breakage using Timoshenko beam bond model. <b>2022</b> , 24,	0
389	DEM simulation of geotextile-geomembrane interface direct shear test considering the interlocking and wearing processes. <b>2022</b> , 148, 104805	1
388	Numerical simulation study on the thermal stress evolution and thermal cracking law of granite under heat conduction. <b>2022</b> , 148, 104813	0
387	A Continuous Damage Statistical Constitutive Model for Sandstone and Mudstone Based on Triaxial Compression Tests.	2

- 386 Softer than soft: Diving into squishy granular matter. 14, 140009 0
- 385 Effect of joint microcharacteristics on macroshear behavior of single-bolted rock joints by the numerical modelling with PFC. **2022**, 81, 2
- 384 Crack propagation mechanism of single- and double-flawed rock specimens under tension-shear stress condition. **2022**, 15,
- 383 Study on Meso-Material Parameters of Submarine Weathered Granite Based on Parallel Bond Model. **2022**, 15, 3878 0
- 382 Stability analysis of varying height waste dump in open-pit mine under particle size gradation and reconstruction effect of waste materials. 1-18 1
- 381 Research on Mooring System Design for Kulluk Platform in Arctic Region. **2022**, 14, 1762 2
- 380 Microstructure-based discrete simulations of the compaction of refractory powder composites. **2022**, 117577
- 379 Dynamic Brazilian splitting experiment of bedding shale based on continuum-discrete coupled method. **2022**, 104289
- 378 Numerical study of rock-breaking performance of cutters in heterogeneous sand cobble ground.
- 377 Simulation of seismic velocity changes in brittle rocks subjected to triaxial stresses using 3D microstructural models.
- 376 Simulation and experimental research on extra-squeeze forming method during gradient sand molding.
- 375 Concrete Failure Simulation Method Based on Discrete Element Method. **2022**, 106505 0
- 374 Fracture mechanisms of intact rock-like materials under compression. **2022**, 148, 104845 0
- 373 Discrete element modelling of the yam root-boil complex and its verification. **2022**, 220, 55-72 0
- 372 Numerical insights into the effect of ITZ and aggregate strength on concrete properties. **2022**, 120, 103415 1
- 371 Numerical model for a failure process of an ice sheet. **2022**, 269, 106828 0
- 370 The Use of Simulation Software using the Discrete Element Method (DEM) for the Process of Materials Comminution. **2022**, 357, 07005
- 369 Multiscale Sensitivity Analysis of Hydraulic Fracturing Parameters Based on Dimensionless Analysis Method. **2022**, 2022, 0

- 368 Modelling the evolution of propagation and runout from a gravelly clay landslide to a debris flow in Shaziba, southwestern Hubei Province, China. 1
- 367 Bionic Design and Numerical Simulation of Rough-Breaking Tool for Attapulgitic Clay.
- 366 Numerical Analysis on the Joint Weakening Effect of Rock Mass Behaviors in Tension. **2022**, 2022,
- 365 Experimental and Numerical Investigation of the Load-Bearing Mechanisms of Piles Socketed in Soft Rocks.
- 364 Discrete element simulation model of pulsating hydraulic fracturing considering fatigue damage. **2022**, 8, 0
- 363 Experiment and DEM Simulation on Bending Fracture of Ultra-fine Grained Cemented Carbide. **2022**, 69, 249-256
- 362 Coupling the discrete element method and solid state diffusion equations for modeling of metallic powders sintering.
- 361 Adhesion and Cohesion of Silica Surfaces with Quartz Cement: A Molecular Simulations Study. 1
- 360 Quantitative relationships between the mineral composition and macro mechanical behaviors of granite under different temperatures: Insights from mesostructure-based DEM investigations. **2022**, 148, 104838 0
- 359 Modeling of machining process of EB-PVD ceramic coatings using discrete element method. **2022**, 38, 581-589
- 358 A novel peridynamic approach for fracture analysis of quasi-brittle materials. **2022**, 227, 107445 1
- 357 Brittle cataclastic process of fault rocks based on a large-displacement direct shear model realized with DEM. **2022**, 161, 104641
- 356 Damage Process of Roller-Compacted Concrete Based on Combined Action of Freeze-thaw and Triaxial Compression. **2022**, 34, 0
- 355 An experiment-based cohesive-frictional constitutive model for cemented materials. **2022**, 149, 104862
- 354 DEM-Based Study on the Mechanical Behaviors of Pore-Filling MHBS under Drained True Triaxial Conditions Varying the Intermediate Stress Ratio of Constant Mean Effective Stresses. **2022**, 22,
- 353 Microsimulation Study on Energy Release and Rock Block Ejection Force of Granite under Different Unloading Conditions. 10, 0
- 352 A Flexible Particle Model for Rock Fracture: Validation and Assessment of the Influence of Deformability on the Macroscopic Response. **2022**, 2, 523-549
- 351 Grain-scale analysis of proppant crushing and embedment using calibrated discrete element models.

- 350 How Flexible, Slit and Rigid Barriers Mitigate Two-Phase Geophysical Mass Flows: A Numerical Appraisal. **2022**, 127, ○
- 349 Analysis of PDC cutter cutting-broken conglomerate based on the discrete element method.
- 348 Using true-triaxial stress path to simulate excavation-induced rock damage: a case study. **2022**, 9, 1
- 347 Effect of Clay Minerals on Tensile Failure Characteristics of Shale. **2022**, 7, 24219-24230
- 346 Simulation of Brittle Failure Around Canada's Mine-By Experiment Tunnel Using 2D Continuum-Based Voronoi Tessellated Models. ○
- 345 Experimental test and numerical simulation of the effect of brittleness on the microfracturing of sandstone. **2022**, 81, 1
- 344 Stability Analysis of Jointed Rock Cutting Slope Based on Discrete Element Method. **2022**, 2022, 1-10
- 343 Examining the Effect of Natural Fractures on Stone Mine Pillar Strength Through Synthetic Rock Mass Approach. ○
- 342 Investigation into Rock Breakage with Expansive Cement Under Biaxial Confinement.
- 341 Effect of modeling parameters on the mechanical response of macroscopic crushing of agglomerate. **2022**, 117720 ○
- 340 Contact model and elastic deformation analysis of plate structure based on the discrete element method.
- 339 Research on the buffering measure of rock shed against the impact of dry granular flow with concern of structure damage. ○
- 338 A Numerical Study on the Influence of Coordination Number on the Crushing of Rockfill Materials.
- 337 Dynamic failure mechanism of tunnel under rapid unloading in jointed rockmass: A case study. **2022**, 106634 ○
- 336 Characteristics and particle flow simulation of failure mechanism of Ludaping landslide in Renhuai red bed area, China. **2022**, 15, ○
- 335 Fracture properties of tailings-based geopolymer incorporated with class F fly ash under mode I loading conditions. **2022**, 271, 108646 ○
- 334 DEM modelling of breakage behaviour of semi-brittle agglomerates subject to compaction and impaction. **2022**, 408, 117710
- 333 Numerical simulation of influence of coarse aggregate crushing on mechanical properties of concrete under uniaxial compression. **2022**, 342, 128081 1

332	Estimating size of finite fracture networks in layered reservoirs. <b>2022</b> , 15, 100089	1
331	Investigation of different discrete modeling strategies to mimic microstructural aspects that influence the fracture energy of refractory materials. <b>2022</b> , 11, 100288	
330	Grain-Scale Tensile and Shear Strengths of Glass Beads Cemented by MICP. <b>2022</b> , 148,	2
329	Experimental and numerical evaluation of the effects of interaction between multiple small holes and a single notch on the mechanical behavior of artificial gypsum specimens. <b>2022</b> , 121, 103462	0
328	Effects of concrete/gypsum bedding layers and their inclination angles on the tensile failure mechanism: Experimental and numerical studies. <b>2022</b> , 17, e01272	
327	Study on Axial Tensile Strain Rate Effect on Concrete Based on Experimental Investigation and Numerical Simulation. <b>2022</b> , 15, 5164	0
326	Numerical Study on Coal Burst Proneness Characteristics of Fissured Coal Mass. <b>2022</b> , 2022,	
325	Study of tensile crack growth in rock-like materials under punch shear test. <b>2022</b> , 103509	1
324	A cohesive viscoelastic-elastoplastic-damage model for DEM and its applications to predict the rate- and time-dependent behaviour of asphalt concretes. <b>2022</b> , 103391	0
323	Numerical Investigation of Brittleness Effect on Strength and Microcracking Behavior of Crystalline Rock. <b>2022</b> , 22,	6
322	Numerical Investigation of Granite Failure Mechanism Based on Finite Element Voronoi Grain-based Model. <b>2022</b> ,	
321	Study on the Characteristics of Acoustic Emission Quiet Period in Rocks with Different Elastic Modulus. <b>2022</b> , 12, 956	0
320	Numerical study of related factors affecting mechanical properties of fractured rock mass and its sensitivity analysis.	0
319	Discrete Element Simulation of the Macro-Meso Mechanical Behaviors of Gas-Hydrate-Bearing Sediments under Dynamic Loading. <b>2022</b> , 10, 1042	2
318	3D Discrete Element Modeling of Sands Treated by Microbially Induced Calcium Carbonate Precipitation. <b>2023</b> , 546-553	
317	Simulation of Triaxial Tests for Unsaturated Soils under a TensionShear State by the Discrete Element Method. <b>2022</b> , 14, 9122	1
316	The blocking efficiency of slag blocking wall of the waste slag yard based on PFC2D.	0
315	Two criteria for effective improvement depth of sand foundation under dynamic compaction using discrete element method.	1

- 314 A Case Study on Deformation Failure Characteristics of Overlying Strata and Critical Mining Upper Limit in Submarine Mining. **2022**, 14, 2465 0
- 313 Experimental and numerical studies of a three-dimensional bonded contact model of cemented granular soils.
- 312 Soil-Structure Interface Under Constant Normal Stiffness. **2023**, 79-109
- 311 Effects of inhomogeneity on mechanical properties of granites in Songliao Basin using the grain-based model. **2022**, 15,
- 310 Loading rate dependence of granular cushion under rockfall impact and proposal of an analytical model for impact force estimation.
- 309 Analysis of Rebound Rate of Wet Shotcrete Based on Experiment and Discrete Element Method. **2022**, 2022, 1-10
- 308 Effect of In-Situ Stress on Hydraulic Fracturing of Tight Sandstone Based on Discrete Element Method. **2022**, 15, 5620 0
- 307 Influence of grain size and basic element size on rock mechanical characteristics: insights from grain-based numerical analysis. **2022**, 81,
- 306 Laboratory Earthquakes Simulations - Typical Events, Fault Damage, and Gouge Production.
- 305 Assessing the impact of rockfall on the retaining structures of a mountain road: a case study in Taiwan. 0
- 304 Study on the correlation of macro-fine parameters of surrounding rock in sand and cobble tunnel based on discrete element.
- 303 A multiscale approach to modeling the frictional behavior of the materials produced by additive manufacturing technologies. 0
- 302 Design and Optimization of a Soil-Covering Device for a Corn No-Till Planter. **2022**, 12, 1218 1
- 301 Effects of width-height ratio and roof-floor strength on the mechanical characteristics of cemented gangue backfill pier-column.
- 300 Microscopic Response of Limestone Physical Deterioration under Water-Rock Alternation in the Acidic Environment. **2022**, 2022, 1-10
- 299 Weakening effect of various pore fluids on the tensile strength of granite. **2022**, 8,
- 298 Deformation and Failure Process of Slope Caused by Underground Mining: A Case Study of Pusa Collapse in Nayong County, Guizhou Province, China. **2022**, 2022, 1-19 1
- 297 New approaches to quantify progressive damage and associated dynamic rock mass blockiness. **2022**, 1



- 296 Using PFC2D to simulate the shear behaviour of joints in hard crystalline rock. **2022**, 81,
- 295 A strain energy-based elastic parameter calibration method for lattice/bonded particle modelling of solid materials. **2022**, 117860 ○
- 294 A generalized 3DLS-DEM scheme for grain breakage. **2022**, 399, 115383
- 293 Analysis of slope fracturing under transient earthquake loading by random discrete element method. **2022**, 157, 105171 ○
- 292 Reverse scaling of a bonded-sphere DEM model: Formulation and application to lignocellulosic biomass microstructures. **2022**, 409, 117797 ○
- 291 Investigation of the mechanism of secondary microcrack growth in rocks with native microdefects. **2022**, 217, 110898
- 290 Microcracking behaviors and acoustic emission characteristics of granite subjected to direct shear based on a novel grain-based model. **2022**, 151, 104955 ○
- 289 Rock-cutting and wear performance of a novel TBM disc cutter with spiral grooves. **2022**, 129, 104660 ○
- 288 Discrete element analysis of the influence of compaction quality on mechanical properties of rockfill materials. **2022**, 151, 104958 1
- 287 Influence of loading history on creep behavior of rock salt. **2022**, 55, 105434 ○
- 286 Discrete element method simulation of the fold-and-thrust belts along strike various compression in the southern margin of the Junggar Basin, China. **2022**, 145, 105849
- 285 Numerical simulation of anisotropic properties of shale under triaxial compression using 3D DEM. ○
- 284 Investigations on the macro-meso cumulative damage mechanism of the discontinuities in soft-hard interbedded rock mass under pre-peak cyclic shear loading. **2022**, 158, 105184 ○
- 283 Coupled FDM-DEM simulations of axial compression tests on FRP-confined concrete specimens. **2022**, 351, 128885 ○
- 282 Research on single-layer grid structures considering joint connection failure based on MDEM. **2022**, 198, 107566 ○
- 281 Prediction of the transitional normal stress of rock joints under shear. **2022**, 159, 105203 ○
- 280 A new method for measuring the adhesion strength of rock-concrete specimens based on the calibration interface of the modified flat-joint model. **2022**, 142, 106752 ○
- 279 DEM-continuum mechanics coupling simulation of cutting reinforced concrete pile by shield machine. **2022**, 152, 105036 ○

278	Predictions of macroscopic mechanical properties and microscopic cracks of unidirectional fibre-reinforced polymer composites using deep neural network (DNN). <b>2022</b> , 302, 116248	1
277	Contact Overlap Calculation Algorithms and Benchmarks Based on Blocky Discrete-Element Method. <b>2022</b> , 22,	0
276	Numerical simulation of mesomechanical properties of limestone containing dissolved hole and persistent joint. <b>2022</b> , 122, 103572	2
275	Strength estimation of granular rocks using a microstructure-based empirical model. <b>2022</b> , 142, 106761	0
274	Soil disturbance induced by EPB shield tunnelling in multilayered ground with soft sand lying on hard rock: A model test and DEM study. <b>2022</b> , 130, 104738	1
273	Meso-scale numerical simulation of the effect of aggregate strength on damage and fracture of high-strength concrete under dynamic tensile loading. <b>2022</b> , 122, 103551	1
272	Study on the stress field concentration at the tip of elliptical cracks. <b>2022</b> , 61, 611-621	0
271	A Discrete Element Analysis of the Indirect Tensile Failure in Hollow Brazilian Discs of Bedded Geo-Materials. <b>2022</b> , 54, 462-472	1
270	Rock Macro-Meso Parameter Calibration and Optimization Based on Improved BP Algorithm and Response Surface Method in PFC 3D. <b>2022</b> , 15, 6290	0
269	Roadmap on Li-ion battery manufacturing research.	0
268	Shear strength deterioration effect of rock mass joint surface under cyclic shear load. <b>2022</b> , 12,	0
267	Numerical study of fracture failure nature around the circular and horseshoe openings using the bonded-particle model. <b>2022</b> , 232, 725-737	0
266	Three-dimensional grain-based model study on triaxial mechanical behavior and fracturing mechanism of granite containing a single fissure. <b>2022</b> , 103602	0
265	Discrete Element Method Approach to Modeling Mechanical Properties of Three-Dimensional Ice Beams. <b>2022</b> , 10, 1359	1
264	Mesoparameter Calibration and Macro-Mesoparameter Correlation of Tailing Sand. <b>2022</b> , 2022, 1-12	0
263	Stability analysis and movement process determination of rock masses under open-pit to underground mining conditions. <b>2022</b> , 8,	0
262	A direct numerical verification of tidal locking mechanism using the discrete element method. <b>2022</b> , 134,	0
261	Upscaling the Mechanical Properties of a Fractured Rock Mass Using the Lattice-Spring-Based Synthetic Rock Mass (LS-SRM) Modeling Approach: Comparison of Discontinuum, Continuum and Empirical Approaches. <b>2022</b> , 12, 343	1

- 260 Triaxial compression behavior of large-scale jointed coal: a numerical study. **2022**, 9, ○
- 259 Rock Chip Properties of TBM Penetration in Jointed Rock Masses Based on an Improved DICE2D Simulation. ○
- 258 Relaxation dynamics of vibrated dense granular media: Hysteresis and nonlocal effects. **2022**, 410, 117847 ○
- 257 Discrete element models for understanding the biomechanics of fossorial animals. **2022**, 12, ○
- 256 Calibration of DEM macro and micro parameters via XGBoost method. **2022**, 24, ○
- 255 Study on Shear Mechanical Properties and Microscopic Failure Mechanism of Dentate Joints Based on DEM and Laboratory Tests. **2022**, 12, 1485 ○
- 254 Influence of Grain-Scale Properties on Localization Patterns and Slip Weakening within Dense Granular Fault gouges. ○
- 253 Mechanical behavior and reinforcement mechanism of nanoparticle cluster fillers in dental resin composites: Simulation and experimental study. **2022**, ○
- 252 Simulated Short- and Long-Term Deformation in Coastal Karst Caves. **2022**, 10, 1315 ○
- 251 Dynamic damage characteristics of rock under multiple loads during high-voltage pulse fragmentation. **2022**, 132, 104901 ○
- 250 Experimental and numerical studies on the effect of geogrid-reinforcement on the tensile failure of high strength self-compacted concrete. 1-46 ○
- 249 Temperature damage regularity of granite based on micro-inhomogeneity. 10, ○
- 248 A mesoscale bond model for discrete element modeling of irregular cemented granular materials. **2022**, 105051 ○
- 247 Effects of hydrate occurring mechanisms and saturation on the mechanical properties of hydrate-bearing sediments: Numerical study based on simplified DEM simulation. **2022**, 104804 ○
- 246 Strain rate effect of frozen ballast aggregates under compression: experiments and discrete element simulations. **2022**, 100872 ○
- 245 Machine Learning-Aided Prediction of the Mechanical Properties of Frozen Fractured Rocks. ○
- 244 Effects of Axial Loading Width and Immediate Roof Thickness on the Failure Mechanism of a Notched Roof in Room and Pillar Mining: Experimental Test and Numerical Simulation. ○
- 243 Modeling of hydraulic fracturing in polymineralic rock with a grain-based DEM coupled with a pore network model. **2022**, 275, 108801 ○

- 242 Research on the reasonable anchorage length and failure characteristics of resin anchorage system. **2022**, 356, 129309 ○
- 241 Application of discrete element method to estimation of strength properties of elastic media. **2022**, 2, 209-214 ○
- 240 A Quantitative Study of Micro and Macro Mechanical Parameters Based on the PFC3D Flat-Joint Model. **2022**, 15, 6790 ○
- 239 Study of Micro-Parameters of DEM Model on the Laboratory Experiment Results Obtained from Poorly Cemented Sandstone. **2022**, 12, 373 ○
- 238 Simulation Study on Crack Initiation and Energy Mechanisms of Rock-like Samples with Non-Parallel Overlapping Flaws under Uniaxial Compression. **2022**, 12, 10367 ○
- 237 Calibration and Testing of Discrete Element Simulation Parameters for Sandy Soils in Potato Growing Areas. **2022**, 12, 10125 ○
- 236 Advances in micro-mechanical modeling using a bonded-particle model and periodic homogenization within discrete element framework applied to heterogeneous ceramics. **2022**, ○
- 235 Comparison of DEM Models with Different Elemental Dimensions for TBM Disc Cutter Rock Fragmentation. **2022**, 14, 12909 ○
- 234 Parametric study and calibration of hysteretic spring and linear cohesion contact models for cohesive soils using definitive screening design. ○
- 233 Effect of rock anisotropy on initiation and propagation of fractures due to fluid pressurization. ○
- 232 A multilevel parallel bonded-grain based model (Multi Pb-GBM) accounting for microstructure failures of typical crystalline rocks. **2022**, 81, ○
- 231 Fines Migration and Production in CSG Reservoirs: Laboratory & Modelling Study. **2022**, ○
- 230 Numerical simulation research on impact mechanical properties of frozen soil based on discrete element method. 105678952211335 ○
- 229 Influence of Mesoscopic Parameters of Weakly Cemented Rocks on Macroscopic Mechanical Properties. **2022**, 14, 13308 ○
- 228 DEM simulation of sandy pebble soil based on polyhedral particles. **2022**, 15, ○
- 227 Investigation on the Propagation Mechanisms of a Hydraulic Fracture in Glutenite Reservoirs Using DEM. **2022**, 15, 7709 ○
- 226 Ocean currents break up a tabular iceberg. **2022**, 8, ○
- 225 Study on failure mechanism of room and pillar with different shapes and configurations under uniaxial compression using experimental test and numerical simulation. **2022**, ○

224	Study on toppling deformation of anti-dip slope in centrifuge test based on energy field.	0
223	Numerical simulation of the effect of internal hole defect size on the mechanical properties of limestone. <b>2022</b> , 17, e0275626	1
222	Seismic events miss important kinematically governed grain scale mechanisms during shear failure of porous rock. <b>2022</b> , 13,	0
221	Improved peridynamic model and its application to crack propagation in rocks. <b>2022</b> , 9,	1
220	Discrete Element Modelling of Cold Crushing Tests Considering Various Interface Property Distributions in Ordinary Refractory Ceramics. <b>2022</b> , 15, 7650	0
219	Numerical Simulation of Failure Behavior of Brittle Heterogeneous Rock under Uniaxial Compression Test. <b>2022</b> , 15, 7035	0
218	Hydromechanical state of soil fluidisation: a microscale perspective.	0
217	An analysis of digging anchor machine stability and track wear under digging conditions. <b>2022</b> , 12,	0
216	Overburden deformation induced by active diapirism: discrete element numerical simulations.	0
215	Grain-based modelling of dynamic shear rupture of heterogeneous rock using a coupled continuum-discrete model. <b>2022</b> , 104420	1
214	Fracture behavior analysis of brittle graphite sphere using a special bond model. <b>2022</b> , 108888	0
213	Investigation of Mechanical Characterization of Transversely Isotropic Rock Mass Based on Rigid Block Discrete Element Method. <b>2022</b> , 2022, 1-14	0
212	Stress levels of precursory strain localization subsequent to the crack damage threshold in brittle rock. <b>2022</b> , 17, e0276214	1
211	Experimental studies on shape and size effects on particle breakage of railway ballast. <b>2022</b> , 37, 100883	0
210	Strength criteria at anisotropic principal directions expressed in closed form by interparticle parameters for elliptical particle assembly. <b>2023</b> , 25,	0
209	Experimental investigation on the effect of preexisting orthogonal cross flaws on cracking behaviors and acoustic emission characteristics of red sandstone. <b>2022</b> , 122, 103634	0
208	Numerical studies on micro-cracking behavior of transversely isotropic argillaceous siltstone in Longyou Grottoes under three-point bending. <b>2022</b> , 122, 103638	0
207	A quantitative evaluation method for granular skeleton state of binary soils at arbitrary relative density. <b>2023</b> , 153, 105083	0

- 206 Interactive Role of Rolling Friction and Cohesion on the Angle of Repose through a Microscale Assessment. **2023**, 23, 0
- 205 Numerical simulation of the fluid-solid coupling mechanism of water and mud inrush in a water-rich fault tunnel. **2023**, 131, 104796 1
- 204 A new SDDA-based numerical approach for simulating rock cracking induced by temperature stresses. **2023**, 154, 105113 0
- 203 On deformation and fracture of PBX simulant employing modified three-body potential peridynamics model with deformation-based failure criteria. **2023**, 115, 100-126 0
- 202 Numerical characterization of sandstone's mechanical responses under multi-level compressive differential cyclic loading (DCL): A 3D particle-based numerical investigation. **2023**, 154, 105109 0
- 201 Experimental study and smoothed particle hydrodynamics simulation of synthetic diamond grit scratching on steel. **2022**, 112038 0
- 200 Particle Flow Analysis on Mechanical Characteristics of Rock with Two Pre-Existing Fissures. **2022**, 14, 14862 0
- 199 Bi-linear Laws Govern the Impacts of Debris Flows, Debris Avalanches and Rock Avalanches on Flexible Barrier. 0
- 198 Characteristics of the Fracture Process Zone for Reservoir Rock with Various Heterogeneity. **2022**, 15, 8332 0
- 197 Deformation and Volumetric Change in a Typical Retrogressive Thaw Slump in Permafrost Regions of the Central Tibetan Plateau, China. **2022**, 14, 5592 0
- 196 The Fracture and Energy of Coal Evolution under Thermo-Mechanical Coupling via a Particle Flow Simulation. **2022**, 10, 2370 0
- 195 Investigation on the Fracture Properties of Layered Carbonaceous Slate: Experiment and Numerical Simulation. **2022**, 2022, 1-15 0
- 194 Innovative Ground Improvement with Chemical Grouts: Potential and Limits of Partial Saturation with Polymers. 0
- 193 Influence of preexisting discontinuities on hydraulic fracture complexity in a naturally fractured reservoir. **2022**, 311, 106919 0
- 192 Effect of disturbance on the progressive failure process of Eastern Himalayan Gneiss. **2022**, 106936 0
- 191 3D DEM modeling on mechanical weakening of gas hydrate-bearing sandy sediments during hydrate dissociation. **2023**, 154, 105116 0
- 190 Study on rock mechanics characteristics of deep shale in Luzhou block and the influence on reservoir fracturing. 0
- 189 Fracture mechanics behaviors of fissured rock under dynamic loading: a review. **2022**, 81, 0

- 188 Application of the 3D DEM in the modelling of fractures in pre-flawed marble specimens during uniaxial compression. **2023**, 277, 108978 ○
- 187 A novel numerical approach for rock slide blocking river based on the CEFDEM model: A case study from the Samaoding paleolandslide blocking river event. **2023**, 312, 106949 6
- 186 Rock shear creep modelling: DEM [Rate process theory approach. **2023**, 161, 105295 2
- 185 Discrete element modeling and shear properties of the maize stubble-soil complex. **2023**, 204, 107519 ○
- 184 DEM simulation of geogrid-aggreate interface shear behavior: Optimization of the aperture ratio considering the initial interlocking states. **2023**, 154, 105182 ○
- 183 Rigid-Block DEM Modeling of Mesoscale Fracture Behavior of Concrete with Random Aggregates. **2023**, 149, 105182 1
- 182 Influence of Prefabricated Fissure Combinations on Strength and Failure Characteristics of Rock-Like Specimens under Uniaxial Compression. **2023**, 23, 105182 ○
- 181 A genetic evolved machine learning approach for 3D DEM modelling of anisotropic materials with full consideration of particulate interactions. **2023**, 250, 110432 ○
- 180 Simplifying the physico-chemical contacts in cohesive soils for efficient DEM simulations. **2023**, 154, 105155 ○
- 179 Relevance of displacement softening model in discrete element method to investigate structural and grain size scaling effect. **2023**, 123, 103706 ○
- 178 Shear fracture propagation in quasi-brittle materials by an element-free Galerkin method. **2023**, 123, 103713 ○
- 177 Aggregate effect on the mechanical and fracture behaviours of concrete. **2023**, 243, 108067 ○
- 176 Three-dimensional numerical study on failure mechanism of granite after thermal treatment based on moment tensor inversion. **2023**, 155, 105185 ○
- 175 Implementation of Discrete Element Method to the Simulation of Solid Materials Fracturing. **2022**, 152-166 ○
- 174 Numerical Investigation of the Influence of Circular Fillings on the Failure Mechanism in Samples Containing Nonpersistent Joints Under Shear Loading Conditions. **2022**, 54, 880-888 ○
- 173 Calibrating a New Compressive-to-Tensile Load-Transferring Device for Determining the Direct Tensile Strength of Granite. **2022**, 54, 959-966 ○
- 172 Modeling the mechanical behavior of cement stabilized macadam with defects based on particle flow theory. ○
- 171 Load deflection of flexible ring net barrier in resisting debris flows. 1-31 ○

170	Micromechanical behavior of jointed rock masses under uniaxial compression loading: a numerical study based on the discrete element method. 1-26	0
169	Load Characteristics and Optimal Layout of Center and Gage Cutters of Rock Formation Compound Tunnel Boring Machine.	0
168	An Experimental and Numerical Study on the Mechanism of High-Voltage Electro Pulse Rock-Breaking.	0
167	Modelling a granular bentonite system as a discrete set of continuum units. <b>2022</b> , 100422	0
166	A Novel Grain-Based DEM Model for Evaluating Surface Integrity in Scratching of RB-SiC Ceramics. <b>2022</b> , 15, 8486	4
165	An Evaluation Index of Fracability for Reservoir Rocks Based on Fracture Process Zone. <b>2022</b> , 15, 8485	0
164	The ductileBrittle transition of rock cutting: insight from the discrete element method. <b>2022</b> , 44,	0
163	Evaluation of the effect of low normal stresses on the joint shear behavior using numerical simulation. <b>2022</b> , 81,	0
162	Study on Strain Field Evolution of Uniaxial Compression Sandstone Based on Digital Image Correlation Technology. <b>2022</b> , 12, 11939	0
161	3D DEM modeling of biocemented sand with fines as cementing agents.	0
160	Study on Blasting Characteristics of Soft-Hard Rock Strata Based on Energy Fields and Particle Expansion Loading Algorithm. <b>2022</b> , 2022, 1-17	0
159	Optimization of mechanical and thermal expansion properties of resin mineral composites for ultra-precision machine tools. 073168442211413	0
158	Simulation Optimization and Experimental Study of the Working Performance of a Vertical Rotary Tiller Based on the Discrete Element Method. <b>2022</b> , 11, 342	1
157	Application of a Novel Local Dynamic Weakening Model Coupled with Smooth-joint Contact in the Simulation of Fault Ruptures and Laboratory Earthquakes.	0
156	Numerical Study on Hydraulic Fracture Propagation in a Layered Continental Shale Reservoir. <b>2022</b> , 15, 8840	0
155	Microstructure-Based Computational Analysis of Deformation Stages of Rock-like Sandy-Cement Samples in Uniaxial Compression. <b>2023</b> , 16, 24	0
154	Process Analysis and Parameters Optimization of Black Soldier Fly Sand Mixture with Two-Stage Sieve Surface Vibration Separating Machine. <b>2022</b> , 12, 2099	0
153	Failure characteristics of concrete pipes with pre-existing cracks.	0



152	Discrete Element Modeling of Hydraulic Fracturing. <b>2022</b> , 141-175	○
151	Effect of the Number and Distribution of Circular Holes on the Damage and Fracture of Limestone Using PFC2D. <b>2022</b> , 2022, 1-20	○
150	SubZero: A Sea Ice Model With an Explicit Representation of the Floe Life Cycle. <b>2022</b> , 14,	○
149	Dynamic compressive response and fracture mechanisms of ZrB <sub>2</sub> SiC ceramic based on discrete element method.	○
148	GPGPU-Based Parallel Computation Using Discrete Elements in Geotechnics: A State-of-Art Review.	○
147	Influence of Type of SleeperBallast Interface on the Shear Behaviour of Railway Ballast: An Experimental and Numerical Study. <b>2022</b> , 14, 16384	1
146	Relationship between acoustic emission and energy dissipation: a DEM study of soilstructure interaction.	○
145	Mesoscale Analysis of the Effect of Interfacial Transition Zone on the Compressive Damage of Concrete Based on Discrete Element Method. <b>2022</b> , 15, 8840	○
144	Hydrophilic dispersion polymer material for sand treatment: an investigation of mechanical improvement and microstructural characteristics.	○
143	Numerical study on sandstone strength and failure characteristics with heterogeneous structure. <b>2023</b> , 82,	○
142	An Investigation of Instability on Constant Shear Drained (CSD) Path under the CSSM Framework: A DEM Study. <b>2022</b> , 12, 449	○
141	Gas Permeability Evolution of Coal with Inclusions under Triaxial Compression-Lab Testing and Numerical Simulations. <b>2022</b> , 15, 8567	○
140	Shear mechanical properties and energy evolution of rock-like samples containing multiple combinations of non-persistent joints. <b>2022</b> ,	○
139	Simulation Analysis and Experiments for Blade-Soil-Straw Interaction under Deep Ploughing Based on the Discrete Element Method. <b>2023</b> , 13, 136	○
138	Evaluation of the mechanical properties of Inada granite under true triaxial conditions by discrete element method. <b>2023</b> , 16,	○
137	A Study of Strength Parameter Evolution and a Statistical Damage Constitutive Model of Cemented Sand and Gravel. <b>2023</b> , 16, 542	1
136	Discrete Element Methods with Special Focus on DEM. <b>2023</b> , 447-519	○
135	Preparative Knowledge of Classical Mechanics. <b>2023</b> , 149-225	○

134	Introduction. <b>2023</b> , 1-65	0
133	A novel obtaining method and mesoscopic mechanism of pseudo-shear strength parameter evolution of sandstone. <b>2023</b> , 82,	0
132	Clustering in Gas-Fluidized Riser Flows of Flexible Fibers.	0
131	Numerical study of the effect of infilling material in a hole-like flaw on acoustic emission characteristics and damage evolution in sandstone. 10,	0
130	Numerical investigation on the effect of intergranular contact bonding strength on the mechanical properties of granite using PFC3D-GBM.	0
129	Effect of pre-confining pressure on unloading-induced coalburst: Insights from distinct element modelling. 10,	0
128	Discrete Element Method Simulation of Borehole Breakout Based on the Strain Energy Concept. <b>2023</b> , 1124, 012123	0
127	Numerical Investigation into the Mechanical Behaviours and Energy Characteristics of Hard Coal Subjected to Coupled Static-Dynamic Loads. <b>2023</b> , 13, 892	0
126	Hydraulic fracture development in conglomerate reservoirs simulated using combined finite-discrete element method. <b>2023</b> , 109063	0
125	Meshfree simulation of progressive damage in composite laminates using discrete element analysis. 002199832211497	0
124	Numerical analysis of interaction between sea ice and propeller based on coupled DEM-FEM model. <b>2023</b> , 268, 113469	0
123	Layout timing of mining roadways considering goaf and roof stability. 10,	0
122	The exploration of force chains in bonded granular materials: A numerical study. <b>2023</b> , 1124, 012088	0
121	2D discrete element simulation on the marine natural gas hydrate reservoir stimulation by splitting grouting. <b>2023</b> , 204861	1
120	Study on powder particle behavior in powder spreading with discrete element method and its critical implications for binder jetting additive manufacturing processes. <b>2023</b> , 18,	0
119	Simulation of tensile behavior of tobacco leaf using the discrete element method (DEM). <b>2023</b> , 205, 107570	0
118	A novel machine learning framework for efficient calibration of complex DEM model: A case study of a conglomerate sample. <b>2023</b> , 279, 109044	1
117	Exploring hydraulic fracture behavior in glutenite formation with strong heterogeneity and variable lithology based on DEM simulation. <b>2023</b> , 278, 109020	2

- 116 Simulating passing ability of self-compacting concrete in the J-ring test using cohesive particle liquid bridge model. **2023**, 416, 118218 ○
- 115 Dynamic responses and failure behavior of jointed rock masses considering pre-existing joints using a hybrid BPM-DFN approach. **2023**, 155, 105237 ○
- 114 Cosserat ordinary state-based peridynamic model and numerical simulation of rock fracture. **2023**, 155, 105240 ○
- 113 Improved discontinuous deformation analysis method for modeling tensile cracking in quasi-brittle materials. **2023**, 124, 103748 ○
- 112 A Method for Selecting Optimum Microparameters Values in the Numerical Simulation of Rock Cutting. ○
- 111 Mechanical Properties and Energy Characteristics of Flawed Samples with Two Non-Parallel Flaws under Uniaxial Compression. **2023**, 15, 459 ○
- 110 Control mechanism of end-slope deformation in open pit mine based on discrete-continuous coupling method. 1
- 109 Movement Law of Overlying Strata and Abutment Pressure Redistribution Characteristic Based on Rigid Block. **2022**, 2022, ○
- 108 Numerical Analysis of V-Shaped Borehole Breakout Using Three-Dimensional Discrete-Element Method. ○
- 107 Examining the influence of the loading path on the cracking characteristics of a pre-fractured rock specimen with discrete element method simulation. ○
- 106 Analysis of the Fatigue Mechanism of Cement-Stabilized Macadam Mesoscopic Intrinsic Contact Based on the Damage Accumulation Energy Dissipation Method. ○
- 105 Investigation of Multiscale Failure Mechanism of Red Bed Soft Rock using Grain-Based Finite-Discrete Element Method Combined with X-Ray Micro-computerized Tomography. ○
- 104 Modelling and Simulation of Erosive Wear and Particle Breakage in Pneumatic Conveying. **2023**, 177-198 ○
- 103 DEM modeling of wood sawdust compaction and breakage strength of pellets determined in diametral compression test. **2023**, 37, 51-58 ○
- 102 Propagation Modeling of Rainfall-Induced Landslides: A Case Study of the Shaziba Landslide in Enshi, China. **2023**, 15, 424 ○
- 101 Micromechanics Digital Rock: Parameterization of Consolidation Level using a Grain Contact Model. **2023**, 366, 01015 ○
- 100 A method for characterizing the deformation localization in granular materials using the relative particle motion. **2023**, 156, 105262 ○
- 99 CFD-DEM simulation of distribution and agglomeration characteristics of bendable chain-like biomass particles in a fluidized bed reactor. **2023**, 340, 127570 ○

- 98 Granular stresses in granular flows subjected to different obstacles. **2023**, 247, 108190 ○
- 97 A Calibration Method of Meso-Parameters of Cement Mortar Based on the Discrete Element Method. **2022**, ○
- 96 Effect of fractal gangue on macroscopic and mesoscopic mechanical properties of cemented waste rock backfill. **2023**, 19-43 ○
- 95 Failure mechanism and control of the coal bursts triggered by mining-induced seismicity: a case study. **2023**, 82, ○
- 94 Numerical modeling and damage evolution research on the effect of joint geometrical parameters in nonpersistent jointed rock masses. **2023**, 82, ○
- 93 An improved SPH method for simulating crack propagation and coalescence in rocks with pre-existing cracks. **2023**, 282, 109148 ○
- 92 Improvement of size effect simulation based on an energy-balanced exponential softening bond model and fracture energy regularization. **2023**, 280, 107004 ○
- 91 Dynamic tensile strength of rock specimens with different defect lengths. **2023**, 284, 109245 ○
- 90 Effects of aggregate strength and mass fraction on mesoscopic fracture characteristics of cemented rockfill from gangue as recycled aggregate. **2023**, 311, 116851 1
- 89 Bonded particle modeling of grain size effect on tensile and compressive strengths of rock under static and dynamic loading. **2023**, 34, 104013 ○
- 88 Study on the reinforcement mechanism of grouted bolts with or without prestress via the hybrid DEM-FDM method. **2023**, 40, 100967 ○
- 87 Simulation experimental investigations on particle breakage mechanism and fractal characteristics of mixed size gangue backfill materials. **2023**, 24, 125-142 ○
- 86 A novel laboratory investigation to characterize the mechanical behaviors of polyurethane-ballast bonds under complex stress states. **2023**, 40, 100958 ○
- 85 Failure mechanism of circular tunnel supported by concrete layers under uniaxial compression: Numerical simulation and experimental test. **2023**, 125, 103839 ○
- 84 Experiments and discrete element simulations of crack initiation angle of mixed-mode I/II in PMMA material. **2023**, 125, 103862 ○
- 83 Micromechanical Analysis of Internal Instability during Shearing. **2023**, 23, ○
- 82 A pore-level multiscale method for the elastic deformation of fractured porous media. **2023**, 483, 112074 ○
- 81 A multiscale preconditioner for microscale deformation of fractured porous media. **2023**, 482, 112061 ○

80	Numerical simulation on fracture and acoustic emission behavior of sandstone with partial filling flaw in semi-circular three-point bending tests. <b>2023</b> , 125, 103841	0
79	Experimental and numerical study on peak strength, coalescence and failure of rock-like materials with two folded preexisting fissures. <b>2023</b> , 125, 103830	1
78	Discrete element method and electrochemical modelling of lithium ion cathode structures characterised by X-ray computed tomography. <b>2023</b> , 465, 142749	0
77	3-D coupled peridynamics and discrete element method for fracture and post-fracture behavior of soil-like materials. <b>2023</b> , 158, 105372	0
76	Failure of partially saturated frozen soils: A micromechanical analysis. <b>2023</b> , 210, 103842	0
75	A novel method for reducing the amount of dust produced by roadheaders based on the numerical simulation of coal breakage. <b>2023</b> , 343, 127978	0
74	A three-dimensional grain-based model for studying the microscopic fracture behaviour of granite. <b>2023</b> , 159, 105427	0
73	Research on the particle characteristics of manufactured sands affecting the flow ability of fresh mortar. <b>2023</b> , 382, 131287	0
72	Microcracking behavior and damage mechanism of granite subjected to high temperature based on CT-GBM numerical simulation. <b>2023</b> , 159, 105385	0
71	Quantifying coal rib stability and support requirements using bonded block modeling and reliability analysis based on the random set theory. <b>2023</b> , 163, 105332	0
70	Equivalent numerical method and sensitivity analysis of microparameters for micropore compression stage of cemented tailings backfill. <b>2023</b> , 369, 130490	0
69	Rock characteristics and dynamic fragmentation process of the 2018 Daanshan rockslide in Beijing, China. <b>2023</b> , 20, 448-465	0
68	Analysis of Cyperus esculentus Soil Dynamic Behavior during Rotary Tillage Based on Discrete Element Method. <b>2023</b> , 13, 358	0
67	Survival on land: A dark-grown seedling searching for path. 14,	0
66	Laboratory Earthquakes Simulations Typical Events, Fault Damage, and Gouge Production. <b>2023</b> , 128,	0
65	Study on the creep properties and crack propagation behavior of single-fissure sandstone based on the damage bond model. <b>2023</b> , 124, 103805	0
64	Mechanical and Microcrack Evolution Characteristics of Roof Rock of Coal Seam with Different Angle of Defects Based on Particle Flow Code. <b>2023</b> , 16, 1401	1
63	Experimental test and PFC3D simulation of the effect of a hole on the tensile behavior of concrete: A comparative analysis of four different hole shapes. 1-23	0

- 62 A novel prediction model for failure mechanism of foamed concrete. **2023**, 370, 130625 ○
- 61 Experimental and Simulation Study on the Hard Rock Breaking Characteristics of Disk Cutter under the Water Jet Precutting Kerf. **2023**, 23, ○
- 60 Investigations on the Stinger PDC cutter breaking granitoid under in-situ stress and hydrostatic pressure conditions. **2023**, 164, 105312 ○
- 59 Numerical study on failure mechanism and acoustic emission characteristics of granite after thermal treatment. ○
- 58 Effect of heterogeneity on mechanical and micro-seismic behaviors of sandstone subjected to multi-level cyclic loading: A discrete element method investigation. **2023**, ○
- 57 Modeling and Investigation of the Velocity-Dependent Cutting Process with PDC Cutters Using the Discrete Element Method. **2023**, 2023, 1-15 ○
- 56 Numerical Simulation and Field Test Research on Vibration Reduction of PDC Cutting of Pebbled Sandstone under Composite Impact Load. **2023**, 11, 671 ○
- 55 Effect of chemical corrosion on propagation of complex fracture networks under different hydraulic pressures in enhanced geothermal systems. **2023**, 9, ○
- 54 Tensile behavior of layered rock disks under diametral loading: experimental and numerical investigations. **2023**, 25, ○
- 53 Review of Discrete Element Method Simulations of Soil Tillage and Furrow Opening. **2023**, 13, 541 1
- 52 Fluid-driven cracking behavior of coal with prefabricated plane: A particle-based hydro-mechanical coupled numerical investigation. **2023**, 124, 103825 ○
- 51 Discrete element method modeling of processes important for biosystems engineering. **2023**, ○
- 50 Coupling effects of morphology and inner pore distribution on the mechanical response of calcareous sand particles. **2023**, ○
- 49 Dynamic Response Analysis and Positioning Performance Evaluation of an Arctic Floating Platform Based on the Mooring-Assisted Dynamic Positioning System. **2023**, 11, 486 ○
- 48 Uncertainty of concrete strength in shear and flexural behavior of beams using lattice modeling. **2023**, 17, 306-325 ○
- 47 Moment Tensor-Based Approach for Acoustic Emission Simulation in Brittle Rocks Using Combined Finite-Discrete Element Method (FDEM). ○
- 46 Computational Correlation Shearing Model of Rock Macro-Micro Parameters. ○
- 45 Experimental Study and 3-D Meso-Scale Discrete Element Modeling on the Compressive Behavior of Foamed Concrete. **2023**, 13, 674 ○

- 44 Rock fragmentation using the disc tool assisted by the prefabricated kerf: Numerical modelling based on discrete element method (DEM). **2023**, 282, 109159 ○
- 43 Temperature Variation of Rock during Deformation and Fracturing: Particle Flow Modeling Method and Mechanism Analyses. **2023**, 13, 3321 ○
- 42 A calibration method for ore bonded particle model based on deep learning neural network. **2023**, 420, 118417 ○
- 41 Experimental and numerical study on characteristics and mechanism of particles attrition in fluidized bed. **2023**, 118444 ○
- 40 Scale dependency and anisotropy of mechanical properties of jointed rock masses: insights from a numerical study. **2023**, 82, ○
- 39 The Effect of Particle Shape on the Compaction of Realistic Non-Spherical Particles: A Multi-Contact DEM Study. **2023**, 15, 909 ○
- 38 Field-enriched finite element method for simulating of three-dimensional crack propagation. ○
- 37 Influence of Grain-Scale Properties on Localization Patterns and Slip Weakening Within Dense Granular Fault Gouges. **2023**, 128, ○
- 36 Compression-Softening Bond Model for Non-Water Reactive Foaming Polyurethane Grouting Material. **2023**, 15, 1493 ○
- 35 Experimental and modelling investigation of vibration-induced fluidization in sheared granular soils. ○
- 34 Damage Evolution and Integrity Assessment of Jointed Rock Mass Based on Synthetic Rock Mass Approach. ○
- 33 Percolating contacts network and force chains during interface shear in granular media. **2023**, 25, ○
- 32 Analytical Model of Hydraulic Fracturing for Low Permeability Hot Dry Rock Reservoirs and DEM Simulation Base on Fluid-Solid Coupling. **2023**, 11, 976 ○
- 31 Estimating Seismically Induced Rock Slope Failure Volume in 2D Homogeneous Slopes Using a Sliding Block Correlation. **2023**, ○
- 30 Research on the Particle Breakage Mechanism in High-Speed Shear Wet Granulation. **2023**, 11, 989 ○
- 29 Bonded particle models for discrete element simulation of porous granules. **2023**, 22, ○
- 28 A soft particle model for investigating on mode I fracture behaviors of layered slate following the Voronoi tessellation construction. **2023**, 82, ○
- 27 Interaction between partial-worn TBM cutters and rocks: experimental and numerical investigation. **2023**, 82, ○

- 26 A novel physical modeling technique for slope failure caused by strength reduction: comparisons with DEM simulation. **2023**, 25, ○
- 25 Creep Behavior and Associated Acoustic Characteristics of Heterogeneous Granite Containing a Single Pre-existing Flaw Using a Grain-Based Parallel-Bonded Stress Corrosion Model. ○
- 24 Influence of arch shaped notch angle, length and opening on the failure mechanism of rock like material and acoustic emission properties: Experimental test and numerical simulation. **2023**, 125, 103879 ○
- 23 A Case Study of Cutting Performance by a Transverse Cutting Head Based on Three-Dimensional Particle Flow Model. ○
- 22 Modeling for strain-softening rocks with lateral damage based on statistical physics. **2023**, 18, e0283313 ○
- 21 A Meso/Macroscale Theoretical Model for Investigating the Large Deformation of Soft Rock Tunnels Considering Creep and Anisotropic Effects. ○
- 20 AN EFFICIENT CALIBRATION PROCESS FOR THE PREDICTION OF ROCK STRENGTH THROUGH MACHINE LEARNING ALGORITHMS. **2023**, 311-326 ○
- 19 FAILURE ANALYSIS AROUND ORIENTED BOREHOLES USING AN ANALYTICAL MODEL IN DIFFERENT FAULTING STRESS REGIMES. **2023**, 29, 360-371 ○
- 18 Macro and meso crack evolution of granite specimens with non-straight fissures: A comparison between two bond models. **2023**, 125, 103890 ○
- 17 Discrete Element Modeling of Thermally Damaged Sandstone Containing Two Pre-Existing Flaws at High Confining Pressure. **2023**, 15, 6318 ○
- 16 Coupled Thermo-hydro-mechanical Simulation of Hydraulic Fracturing in Deep Reservoirs Using Finite-Discrete Element Method. ○
- 15 A novel BEM-DEM coupling in the time domain for simulating dynamic problems in continuous and discontinuous media. **2023**, 410, 116040 ○
- 14 Failure and Fracture Process Characteristics of Layered Slate: Experimental Observation and Discrete Element Modeling. ○
- 13 ??????????????????????????. **2023**, 24, 350-365 ○
- 12 Dynamics and morphological evolution of a fiber conveyed in a three-dimensional rotor spinning unit: a numerical study. 1-11 ○
- 11 Peak strength, coalescence and failure processes of rock-like materials containing preexisting joints and circular holes under uniaxial compression: Experimental and numerical study. **2023**, 125, 103898 ○
- 10 The Transient Unloading Response of a Deep-Buried Single Fracture Tunnel Based on the Particle Flow Method. **2023**, 15, 6840 ○
- 9 CFD-DEM Investigation on Effects of Fiber Deformation during 3D Printing Process Based on Fused Deposition. ○



- 8 Lattice Boltzmann Numerical Study on Mesoscopic Seepage Characteristics of SoilRock Mixture Considering Size Effect. **2023**, 11, 1968
- 7 A mechanical model of single wheat straw with failure characteristics based on discrete element method. **2023**, 230, 1-15
- 6 DEM investigation on the size effect in the fragmentation of intact aggregates. **2023**, 425, 118585
- 5 The influence of sample generation and model resolution on mechanical properties obtained from DEM simulations.
- 4 Micro-macro fracture mechanism of heterogeneous granite in percussive drilling. **2023**,
- 3 Research on the hard rock cutting characteristics of disc cutter under front-mounted water jet precutting kerf conditions. **2023**, 287, 109330
- 2 Mechanical behaviour and fracture evolution of coal specimens containing an over-excavated hole: Experimental study and numerical modelling.
- 1 The Modelling of Rock Fragmentation Mechanisms by Carbide Buttons Using the 3D Discrete Element Method. **2023**, 13, 6090