mingjing Jiang

List of Publications by Year in descending order

70 papers	1,849 citations	218677 26 h-index	276875 41 g-index
70 all docs	70 docs citations	70 times ranked	1119 citing authors

#	Article	IF	Citations
1	A novel three-dimensional contact model for granulates incorporating rolling and twisting resistances. Computers and Geotechnics, 2015, 65, 147-163.	4.7	181
2	DEM simulation of bonded granular material. Part I: Contact model and application to cemented sand. Computers and Geotechnics, 2016, 75, 192-209.	4.7	104
3	A simple and efficient approach to capturing bonding effect in naturally microstructured sands by discrete element method. International Journal for Numerical Methods in Engineering, 2007, 69, 1158-1193.	2.8	98
4	Summary of collapsible behaviour of artificially structured loess in oedometer and triaxial wetting tests. Canadian Geotechnical Journal, 2012, 49, 1147-1157.	2.8	87
5	A bond contact model for methane hydrate-bearing sediments with interparticle cementation. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 1823-1854.	3.3	75
6	An investigation on loose cemented granular materials via DEM analyses. Granular Matter, 2013, 15, 65-84.	2.2	59
7	Unified soil behavior of interface shear test and direct shear test under the influence of lower moving boundaries. Granular Matter, 2011, 13, 631-641.	2.2	56
8	DEM simulation of bonded granular material. Part II: Extension to grain-coating type methane hydrate bearing sand. Computers and Geotechnics, 2016, 75, 225-243.	4.7	53
9	Yielding of Microstructured Geomaterial by Distinct Element Method Analysis. Journal of Engineering Mechanics - ASCE, 2005, 131, 1209-1213.	2.9	51
10	Investigating mechanism of inclined CPT in granular ground using DEM. Granular Matter, 2014, 16, 785-796.	2.2	50
11	Two-Dimensional Discrete Element Theory for Rough Particles. International Journal of Geomechanics, 2009, 9, 20-33.	2.7	47
12	Properties of TJ-1 Lunar Soil Simulant. Journal of Aerospace Engineering, 2012, 25, 463-469.	1.4	46
13	DEM-Aided Discovery of the Relationship between Energy Dissipation and Shear Band Formation Considering the Effects of Particle Rolling Resistance. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 1512-1527.	3.0	46
14	Study of mechanical behavior and strain localization of methane hydrate bearing sediments with different saturations by a new DEM model. Computers and Geotechnics, 2014, 57, 122-138.	4.7	46
15	Distinct element method analyses of idealized bonded-granulate cut slope. Granular Matter, 2012, 14, 393-410.	2.2	43
16	DEM investigation of mechanical behavior and strain localization of methane hydrate bearing sediments with different temperatures and water pressures. Engineering Geology, 2017, 223, 92-109.	6.3	42
17	Strain localization analyses of idealized sands in biaxial tests by distinct element method. Frontiers of Architecture and Civil Engineering in China, 2010, 4, 208-222.	0.4	39
18	Stress-induced anisotropy in sand under cyclic loading. Granular Matter, 2010, 12, 469-476.	2.2	37

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19	Distinct element analysis of the microstructure evolution in granular soils under cyclic loading. Granular Matter, 2019, 21, 1.	2.2	36
20	An evaluation on the degradation evolutions in three constitutive models for bonded geomaterials by DEM analyses. Computers and Geotechnics, 2014, 57, 1-16.	4.7	34
21	Distinct simulation of earth pressure against a rigid retaining wall considering inter-particle rolling resistance in sandy backfill. Granular Matter, 2014, 16, 797-814.	2.2	33
22	3-D DEM simulations of drained triaxial tests on inherently anisotropic granulates. European Journal of Environmental and Civil Engineering, 2018, 22, s37-s56.	2.1	30
23	Investigation into the effect of backpressure on the mechanical behavior of methane-hydrate-bearing sediments via DEM analyses. Computers and Geotechnics, 2015, 69, 551-563.	4.7	29
24	DEM Analysis of Geomechanical Properties of Cemented Methane Hydrateâ€“Bearing Soils at Different Temperatures and Pressures. International Journal of Geomechanics, 2016, 16, .	2.7	29
25	Effect of Polyacrylamide on Improvement of Dredger Fill with Vacuum Preloading Method. Journal of Materials in Civil Engineering, 2019, 31, .	2.9	29
26	Salinity effects on the mechanical behaviour of methane hydrate bearing sediments: A DEM investigation. Computers and Geotechnics, 2021, 133, 104067.	4.7	27
27	Shear band formation in lunar regolith by discrete element analyses. Granular Matter, 2016, 18, 1.	2.2	26
28	Micro origins for macro behavior in granular media. Granular Matter, 2016, 18, 1.	2.2	24
29	Shear strength of unsaturated granular soils: three-dimensional discrete element analyses. Granular Matter, 2016, 18, 1.	2.2	24
30	Numerical study of interâ€particle bond failure by 3D discrete element method. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 523-545.	3.3	23
31	A coupled CFD-DEM method with moving mesh for simulating undrained triaxial tests on granular soils. Granular Matter, 2020, 22, 1.	2.2	22
32	A bond failure criterion for DEM simulations of cemented geomaterials considering variable bond thickness. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 1871-1897.	3.3	21
33	Wetting-Induced Collapse Behavior of Unsaturated and Structural Loess under Biaxial Tests Using Distinct Element Method. International Journal of Geomechanics, 2017, 17, .	2.7	19
34	Granular soils: from DEM simulation to constitutive modeling. Acta Geotechnica, 2020, 15, 1723-1744.	5.7	19
35	Distinct element method analysis of jointed rock fragmentation induced by TBM cutting. European Journal of Environmental and Civil Engineering, 2018, 22, s79-s98.	2.1	18
36	Numerical analyses of braced excavation in granular grounds: continuum and discrete element approaches. Granular Matter, 2013, 15, 195-208.	2.2	17

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37	Experimental study of two saturated natural soils and their saturated remoulded soils under three consolidated undrained stress paths. Frontiers of Architecture and Civil Engineering in China, 2011, 5, 225-238.	0.4	16
38	A simple threeâ€dimensional distinct element modeling of the mechanical behavior of bonded sands. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 1791-1820.	3.3	15
39	A size-dependent bond failure criterion for cemented granules based on experimental studies. Computers and Geotechnics, 2015, 69, 182-198.	4.7	14
40	A numerical investigation on the mechanical properties of hydrate-bearing sand using Distinct Element Method. Journal of Natural Gas Science and Engineering, 2021, 96, 104328.	4.4	14
41	Analytical study of ground responses induced by the excavation of quasirectangular tunnels at shallow depths. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 2200-2223.	3.3	13
42	Stabilization Effect of Anionic Polyacrylamide on Marine Clay Treated with Lime. International Journal of Geomechanics, 2020, 20, .	2.7	13
43	Fabric rates of elliptical particle assembly in monotonic and cyclic simple shear tests: a numerical study. Granular Matter, 2016, 18, 1.	2.2	12
44	DEM Analyses of an Uplift Failure Mechanism with Pipe Buried in Cemented Granular Ground. International Journal of Geomechanics, 2015, 15, .	2.7	10
45	Effects of frequency and cyclic stress ratio on creep behavior of clay under cyclic loading. Marine Georesources and Geotechnology, 2017, 35, 281-291.	2.1	10
46	Solutions for lined circular tunnels sequentially constructed in rheological rock subjected to non-hydrostatic initial stresses. European Journal of Environmental and Civil Engineering, 2022, 26, 1834-1866.	2.1	10
47	DEM Modeling Mechanical Behavior of Unsaturated Structural Loess under Constant Stress Increment Ratio Compression Tests. International Journal of Geomechanics, 2017, 17, .	2.7	9
48	Investigation of influence of particle characteristics on the nonâ€coaxiality of anisotropic granular materials using DEM. International Journal for Numerical and Analytical Methods in Geomechanics, 2017, 41, 198-222.	3.3	9
49	Viscoelastic ground responses around shallow tunnels considering surcharge loadings and effect of supporting. European Journal of Environmental and Civil Engineering, 2020, 24, 2306-2328.	2.1	9
50	Efficient Iterative Analytical Model for Underground Seepage around Multiple Tunnels in Semi-Infinite Saturated Media. Journal of Engineering Mechanics - ASCE, 2021, 147, .	2.9	9
51	Investigating the shear band of methane hydrate-bearing sediments by FEM with an elasto-plastic constitutive model. Bulletin of Engineering Geology and the Environment, 2018, 77, 1015-1025.	3.5	8
52	Evolution of mesoscale bonded particle clusters in cemented granular material. Acta Geotechnica, 2019, 14, 1653-1667.	5.7	8
53	Distinct element modeling of rock fragmentation by TBM cutter. European Journal of Environmental and Civil Engineering, 2020, 24, 2010-2031.	2.1	8
54	Fabric rates applied to kinematic models: evaluating elliptical granular materials under simple shear tests via discrete element method. Granular Matter, 2016, 18, 1.	2.2	6

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55	Discrete element analysis of chemical weathering on rock. European Journal of Environmental and Civil Engineering, 2015, 19, s15-s28.	2.1	5
56	Influence of time-dependence on failure of echelon rock joints through a novel DEM model. European Journal of Environmental and Civil Engineering, 2015, 19, s108-s118.	2.1	5
57	CPT-based estimation of bearing and deformation indexes for TJ-1 lunar soil simulant ground. , 2013, , .		4
58	Three-dimensional DEM investigation of the stress-dilatancy relation of grain-cementing type methane hydrate-bearing sediment. Petroleum, 2021, , .	2.8	4
59	Simulation of runout behavior of submarine debris flows over regional natural terrain considering material softening. Marine Georesources and Geotechnology, 2023, 41, 175-194.	2.1	3
60	Strength and fabric evolution of unsaturated granular materials by 3D DEM analyses. , 2013, , .		2
61	A damage evolution law enriched by microscopic mechanisms for structured sand in mechanical loading. Acta Geotechnica, 2019, 14, 1905-1924.	5.7	2
62	Do the normal compression lines of cemented and uncemented geomaterials run parallel or converge to each other after yielding?. European Journal of Environmental and Civil Engineering, 2021, 25, 368-386.	2.1	2
63	Instability analysis of jointed rock slope subject to rainfall using DEM strength reduction technique. European Journal of Environmental and Civil Engineering, 2022, 26, 4664-4686.	2.1	2
64	DEM Analysis of Mechanical Behavior of Unsaturated Silt under Strain-Controlled Constant Stress Ratio Compression Tests. International Journal of Geomechanics, 2021, 21, .	2.7	2
65	Elasto-plastic analysis of circular tunnel in rock mass with confining stress-dependent strain-softening behavior considering intermediate principal stress. Arabian Journal of Geosciences, 2021, 14, 1.	1.3	2
66	Characterizing inclined loading capacity of a pile embedded in methane-hydrate-bearing marine sediments. , 2013, , .		1
67	Investigating the shear behaviors of unsaturated structured loess in direct shear test by the discrete element method. Japanese Geotechnical Society Special Publication, 2020, 8, 294-298.	0.2	1
68	DEM analysis of passive failure in structured sand ground behind a retaining wall. Granular Matter, 2022, 24, 1.	2.2	1
69	Geomechanics: from micro to macro editorial. Granular Matter, 2010, 12, 457-458.	2.2	0
70	Dynamic Response of Lunar Soil Caused by Landing Impact. KSCE Journal of Civil Engineering, 2018, 22, 4282-4292.	1.9	0