Zhou Lei

List of Publications by Year
in descending order

36 papers	1,330 citations	361296 20 h-index	395590 33 g-index
49 all docs	49 docs citations	49 times ranked	966 citing authors

#	ARTICLE	IF	CITATIONS
1	Fracture-permeability behavior of shale. Journal of Unconventional Oil and Gas Resources, 2015, 11, 27-43.	3.5	117
2	Dynamics, Radiation, and Overall Energy Budget of Earthquake Rupture With Coseismic Off‐Fault Damage. Journal of Geophysical Research: Solid Earth, 2019, 124, 11771-11801.	1.4	93
3	Understanding hydraulic fracturing: a multi-scale problem. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150426.	1.6	92
4	Investigation of impact fracture behavior of automobile laminated glass by 3D discrete element method. Computational Mechanics, 2007, 41, 73-83.	2.2	78
5	HOSS: an implementation of the combined finite-discrete element method. Computational Particle Mechanics, 2020, 7, 765-787.	1.5	77
6	Earthquake Damage Patterns Resolve Complex Rupture Processes. Geophysical Research Letters, 2018, 45, 10,279.	1.5	74
7	An approach to combining 3D discrete and finite element methods based on penalty function method. Computational Mechanics, 2010, 46, 609-619.	2.2	66
8	A framework for grand scale parallelization of the combined finite discrete element method in 2d. Computational Particle Mechanics, 2014, 1, 307-319.	1.5	64
9	A contact algorithm for 3D discrete and finite element contact problems based on penalty function method. Computational Mechanics, 2011, 48, 541-550.	2.2	57
10	Modeling of Stick‐Slip Behavior in Sheared Granular Fault Gouge Using the Combined Finite‐Discrete Element Method. Journal of Geophysical Research: Solid Earth, 2018, 123, 5774-5792.	1.4	56
11	Simulation of Fracture Coalescence in Granite via the Combined Finite–Discrete Element Method. Rock Mechanics and Rock Engineering, 2019, 52, 3213-3227.	2.6	53
12	Fracture and fragmentation of thin shells using the combined finite–discrete element method. International Journal for Numerical Methods in Engineering, 2013, 95, 478-498.	1.5	51
13	High‐stress triaxial direct‐shear fracturing of Utica shale and in situ X‐ray microtomography with permeability measurement. Journal of Geophysical Research: Solid Earth, 2016, 121, 5493-5508.	1.4	51
14	FSIS: a novel fluid–solid interaction solver for fracturing and fragmenting solids. Computational Particle Mechanics, 2020, 7, 789-805.	1.5	44
15	A generalized anisotropic deformation formulation for geomaterials. Computational Particle Mechanics, 2016, 3, 215-228.	1.5	43
16	A smooth contact algorithm for the combined finite discrete element method. Computational Particle Mechanics, 2020, 7, 807-821.	1.5	40
17	Simulation of discrete cracks driven by nearly incompressible fluid via 2D combined finite‐discrete element method. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 1724-1743.	1.7	36
18	LC-Grid: a linear global contact search algorithm for finite element analysis. Computational Mechanics, 2014, 54, 1285-1301.	2.2	34

#	Article	IF	Citations
19	The combined plastic and discrete fracture deformation framework for finite‐discrete element methods. International Journal for Numerical Methods in Engineering, 2020, 121, 1020-1035.	1.5	29
20	A non-locking composite tetrahedron element for the combined finite discrete element method. Engineering Computations, 2016, 33, 1929-1956.	0.7	24
21	Modeling earthquakes with off-fault damage using the combined finite-discrete element method. Computational Particle Mechanics, 2020, 7, 1057-1072.	1.5	19
22	Simulation of crack induced nonlinear elasticity using the combined finite-discrete element method. Ultrasonics, 2019, 98, 51-61.	2.1	18
23	Impact Fracture and Fragmentation of Glass via the 3D Combined Finite-Discrete Element Method. Applied Sciences (Switzerland), 2021, 11, 2484.	1.3	17
24	A novel framework for elastoplastic behaviour of anisotropic solids. Computational Particle Mechanics, 2020, 7, 823-838.	1.5	16
25	Numerical analysis of flyer plate experiments in granite via the combined finite–discrete element method. Computational Particle Mechanics, 2020, 7, 1005-1016.	1.5	14
26	Fourier amplitude sensitivity test applied to dynamic combined finite‐discrete element methods–based simulations. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 30-44.	1.7	12
27	Discontinuities in effective permeability due to fracture percolation. Mechanics of Materials, 2018, 119, 25-33.	1.7	11
28	Simulation of mixed-mode fracture using the combined finite–discrete element method. Computational Particle Mechanics, 2020, 7, 1047-1055.	1.5	10
29	Benchmarking Numerical Methods for Impact and Cratering Applications. Applied Sciences (Switzerland), 2021, 11, 2504.	1.3	8
30	Lagrangian‐based Simulations of Hypervelocity Impact Experiments on Mars Regolith Proxy. Geophysical Research Letters, 2020, 47, e2020GL087393.	1.5	7
31	HOSS. , 2013, , 97-104.		6
32	Simulation on High Velocity Impact Process of Windshield by SPH/FEM Coupling Method. , 2010, , .		4
33	Injection Parameters That Promote Branching of Hydraulic Cracks. Geophysical Research Letters, 2021, 48, e2021GL093321.	1.5	4
34	Discrete Element and Particle Methods. , 2020, , 659-671.		2
35	Discrete Element and Particle Methods. , 2018, , 1-14.		1
36	From force chains to nonclassical nonlinear dynamics in cemented granular materials. Physical Review E, 2022, 105, L022901.	0.8	1