Ehsan Haghighat

List of Publications by Year in descending order

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Version: 2024-02-01

24 papers 1,104 citations

687363 13 h-index 677142 22 g-index

24 all docs

24 docs citations

24 times ranked 524 citing authors

#	Article	IF	CITATIONS
1	A physics-informed deep learning framework for inversion and surrogate modeling in solid mechanics. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113741.	6.6	340
2	SciANN: A Keras/TensorFlow wrapper for scientific computations and physics-informed deep learning using artificial neural networks. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113552.	6.6	182
3	A mesh-independent finite element formulation for modeling crack growth in saturated porous media based on an enriched-FEM technique. International Journal of Fracture, 2014, 188, 79-108.	2.2	84
4	Physics-informed neural network for modelling the thermochemical curing process of composite-tool systems during manufacture. Computer Methods in Applied Mechanics and Engineering, 2021, 384, 113959.	6.6	70
5	PINNeik: Eikonal solution using physics-informed neural networks. Computers and Geosciences, 2021, 155, 104833.	4.2	68
6	A nonlocal physics-informed deep learning framework using the peridynamic differential operator. Computer Methods in Applied Mechanics and Engineering, 2021, 385, 114012.	6.6	58
7	Thermo-hydro-mechanical modeling of impermeable discontinuity in saturated porous media with X-FEM technique. Engineering Fracture Mechanics, 2012, 96, 701-723.	4.3	55
8	Physics-informed neural network simulation of multiphase poroelasticity using stress-split sequential training. Computer Methods in Applied Mechanics and Engineering, 2022, 397, 115141.	6.6	40
9	Extended finite element modeling of deformable porous media with arbitrary interfaces. Applied Mathematical Modelling, 2011, 35, 5426-5441.	4.2	38
10	On modeling of discrete propagation of localized damage in cohesiveâ€frictional materials. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 1774-1790.	3.3	33
11	Modeling of deformation and localized failure in anisotropic rocks. International Journal of Solids and Structures, 2015, 67-68, 93-101.	2.7	26
12	A Physics-Informed Neural Network Approach to Solution and Identification of Biharmonic Equations of Elasticity. Journal of Engineering Mechanics - ASCE, 2022, 148, .	2.9	23
13	A viscoplastic model of creep in shale. Geophysics, 2020, 85, MR155-MR166.	2.6	15
14	On modeling of fractured media using an enhanced embedded discontinuity approach. Extreme Mechanics Letters, 2016, 6, 10-22.	4.1	13
15	On the solution of hyperbolic equations using the peridynamic differential operator. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114574.	6.6	13
16	Machine learning for accelerating <scp>2D</scp> flood models: Potential and challenges. Hydrological Processes, 2021, 35, e14064.	2.6	12
17	Fracture characterization from noisy displacement data using artificial neural networks. Engineering Fracture Mechanics, 2022, 271, 108649.	4.3	9
18	Characterizing the mechanical behaviour of the Tournemire argillite. Geological Society Special Publication, 2017, 443, 97-113.	1.3	7

#	Article	IF	CITATION
19	Solving the eikonal equation for compressional and shear waves in anisotropic media using peridynamic differential operator. Geophysical Journal International, 2022, 229, 1942-1963.	2.4	6
20	Modeling of Fracture Propagation in Concrete Structures Using a Constitutive Relation with Embedded Discontinuity. Studia Geotechnica Et Mechanica, 2015, 36, 27-33.	0.5	4
21	On the mechanical and hydraulic response of sedimentary rocks in the presence of discontinuities. Geomechanics for Energy and the Environment, 2015, 4, 61-72.	2.5	3
22	Assessment of slope stability in cohesive soils due to a rainfall. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 3278-3292.	3.3	2
23	A holistic approach to computing first-arrival traveltimes using neural networks., 2022,, 251-278.		2
24	A computational framework for meso and macroscale analysis of structural masonry. International Journal of Solids and Structures, 2022, 236-237, 111342.	2.7	1