Mohammad Vahab

List of Publications by Year
in descending order

26	688	623574	677027
papers	citations	14 h-index	22 g-index

26	26	26	366
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Physics-Informed Neural Network Approach to Solution and Identification of Biharmonic Equations of Elasticity. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	23
2	An eXtended Finite Element Method implementation in COMSOL Multiphysics: Solid Mechanics. Finite Elements in Analysis and Design, 2022, 202, 103707.	1.7	29
3	Fracture characterization from noisy displacement data using artificial neural networks. Engineering Fracture Mechanics, 2022, 271, 108649.	2.0	9
4	Fully coupled XFEM formulation for hydraulic fracturing simulation based on a generalized fluid leak-off model. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113447.	3.4	18
5	Numerical analysis of multiple hydro-fracture growth in layered media based on a non-differentiable energy minimization approach. Engineering Fracture Mechanics, 2021, 241, 107361.	2.0	8
6	A Robust Implementation of Dynamic Evolution of Fluid-Driven Fractures. Lecture Notes in Civil Engineering, 2021, , 656-662.	0.3	0
7	Energy minimization versus criteria-based methods in discrete cohesive fracture simulations. Computational Mechanics, 2021, 68, 845-860.	2.2	4
8	Empirical and Conceptual Challenges in Hydraulic Fracturing with Special Reference to the Inflow. International Journal of Geomechanics, 2020, 20, .	1.3	6
9	Robust simulation of dynamic fluid-driven fracture in naturally fractured impermeable media. Computer Methods in Applied Mechanics and Engineering, 2019, 357, 112574.	3.4	24
10	A super-convergent staggered algorithm for the simulation of hydraulic fracturing treatments. International Journal of Fracture, 2019, 217, 49-64.	1.1	4
11	An X-FEM technique in modeling hydro-fracture interaction with naturally-cemented faults. Engineering Fracture Mechanics, 2019, 212, 269-290.	2.0	33
12	A NUMERICAL INVESTIGATION OF PULSE HYDRAULIC FRACTURING TREATMENTS USING THE X-FEM TECHNIQUE. Journal of Porous Media, 2019, 22, 923-938.	1.0	0
13	X-FEM Modeling of Multizone Hydraulic Fracturing Treatments Within Saturated Porous Media. Rock Mechanics and Rock Engineering, 2018, 51, 3219-3239.	2.6	30
14	An X-FEM investigation of hydro-fracture evolution in naturally-layered domains. Engineering Fracture Mechanics, 2018, 191, 187-204.	2.0	35
15	An enrichedâ€“FEM technique for numerical simulation of interacting discontinuities in naturally fractured porous media. Computer Methods in Applied Mechanics and Engineering, 2018, 331, 197-231.	3.4	81
16	An X-FEM Formulation for the Optimized Graded Proppant Injection into Hydro-fractures Within Saturated Porous Media. Transport in Porous Media, 2018, 121, 289-314.	1.2	12
17	Computational Algorithm for the Anticipation of the Fluid-Lag Zone in Hydraulic Fracturing Treatments. International Journal of Geomechanics, 2018, 18, .	1.3	11
18	An X-FEM Algorithm for Modeling of Multi-zone Hydraulic Fracturing in Saturated Porous Media. Springer Series in Geomechanics and Geoengineering, 2017, , 277-290.	0.0	0

#	Article	IF	Citations
19	An X-FEM Implementation of Hydro-Fracture Growth in Naturally Fractured Saturated Porous Media. , 2017, , .		0
20	Numerical investigation of the flow regimes through hydraulic fractures using the X-FEM technique. Engineering Fracture Mechanics, 2017, 169, 146-162.	2.0	32
21	Modeling the interaction between fluid-driven fracture and natural fault using an enriched-FEM technique. International Journal of Fracture, 2016, 197, 1-24.	1.1	66
22	An enriched FEM technique for modeling hydraulically driven cohesive fracture propagation in impermeable media with frictional natural faults: Numerical and experimental investigations. International Journal for Numerical Methods in Engineering, 2015, 104, 439-468.	1.5	78
23	X-FEM modeling of large plasticity deformation; a convergence study on various blending strategies for weak discontinuities. European Journal of Computational Mechanics, 2015, 24, 79-106.	0.6	14
24	An augmented Lagrangian contact formulation for frictional discontinuities with the extended finite element method. Finite Elements in Analysis and Design, 2015, 107, 28-43.	1.7	65
25	A numerical contact algorithm in saturated porous media with the extended finite element method. Computational Mechanics, 2014, 54, 1089-1110.	2.2	22
26	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.	1.1	84