List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Exploring the mechanical properties of two-dimensional carbon-nitride polymer nanocomposites by molecular dynamics simulations. Composite Structures, 2022, 281, 115004.	5.8	9
2	Influence of Moisture Content and Wet Environment on the Fatigue Behaviour of High-Strength Concrete. Materials, 2022, 15, 1025.	2.9	13
3	Recent developments in tensile properties of friction welding of carbon fiber-reinforced composite: A review. Nanotechnology Reviews, 2022, 11, 1408-1436.	5.8	6
4	Multiphysics Computation of Thermomechanical Fatigue in Electronics Under Electrical Loading. , 2022, , 1-14.		0
5	Computational Homogenization Using Convolutional Neural Networks. , 2022, , 569-579.		2
6	Phase-Field Modeling of Fatigue Crack Propagation in Brittle Materials. , 2022, , 15-22.		2
7	Adaptive Virtual Element Method for Large-Strain Phase-Field Fracture. , 2022, , 195-206.		0
8	Bayesian Inversion with Open-Source Codes for Various One-Dimensional Model Problems in Computational Mechanics. Archives of Computational Methods in Engineering, 2022, 29, 4285-4318.	10.2	14
9	Variational modeling of hydromechanical fracture in saturated porous media: A micromechanics-based phase-field approach. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 115084.	6.6	16
10	A global–local approach for hydraulic phase-field fracture in poroelastic media. Computers and Mathematics With Applications, 2021, 91, 99-121.	2.7	49
11	3D Virtual Elements for Elastodynamic Problems. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000175.	0.2	1
12	Modeling of Singleâ€Slip Finite Strain Crystal Plasticity via the Virtual Element Method. Proceedings in Applied Mathematics and Mechanics, 2021, 20, .	0.2	0
13	A design concept of active cooling for tailored forming workpieces during induction heating. Production Engineering, 2021, 15, 177-186.	2.3	2
14	A general phase-field model for fatigue failure in brittle and ductile solids. Computational Mechanics, 2021, 67, 1431-1452.	4.0	62
15	3D mixed virtual element formulation for dynamic elasto-plastic analysis. Computational Mechanics, 2021, 68, 1-18.	4.0	10
16	NURBS-based geometries: A mapping approach for virtual serendipity elements. Computer Methods in Applied Mechanics and Engineering, 2021, 378, 113732.	6.6	13
17	Surface elastic-based nonlinear bending analysis of functionally graded nanoplates with variable thickness. European Physical Journal Plus, 2021, 136, 1.	2.6	21
18	Feed-Forward Neural Networks for Failure Mechanics Problems. Applied Sciences (Switzerland), 2021, 11, 6483.	2.5	31

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19	Bayesian inversion for unified ductile phase-field fracture. Computational Mechanics, 2021, 68, 943-980.	4.0	23
20	Molecular Dynamics Modeling of Mechanical Properties of Polymer Nanocomposites Reinforced by C7N6 Nanosheet. Surfaces, 2021, 4, 240-254.	2.3	3
21	Multilevel global–local techniques for adaptive ductile phase-field fracture. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114175.	6.6	27
22	Porous-ductile fracture in thermo-elasto-plastic solids with contact applications. Computational Mechanics, 2020, 65, 941-966.	4.0	14
23	Phase-field modeling of porous-ductile fracture in non-linear thermo-elasto-plastic solids. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112730.	6.6	67
24	An adaptive global–local approach for phase-field modeling of anisotropic brittle fracture. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112744.	6.6	66
25	A Review on Cementitious Self-Healing and the Potential of Phase-Field Methods for Modeling Crack-Closing and Fracture Recovery. Materials, 2020, 13, 5265.	2.9	22
26	A virtual element formulation for general element shapes. Computational Mechanics, 2020, 66, 963-977.	4.0	17
27	Curvilinear virtual elements for contact mechanics. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113394.	6.6	31
28	Virtual Element Method for Cross-Wedge Rolling during Tailored Forming Processes. Procedia Manufacturing, 2020, 47, 713-718.	1.9	5
29	A microscale model for concrete failure in poro-elasto-plastic media. Theoretical and Applied Fracture Mechanics, 2020, 107, 102517.	4.7	39
30	Wasserinduzierte SchÃ d igungsmechanismen zyklisch beanspruchter Hochleistungsbetone/Water-induced damage mechanisms of cyclically loaded High-performance concretes. Bauingenieur, 2020, 95, 126-132.	0.1	11
31	A low order 3D virtual element formulation for finite elasto–plastic deformations. Computational Mechanics, 2019, 63, 253-269.	4.0	47
32	A micro-thermo-mechanical model for a tailored formed joining zone deformed by die forging. AIP Conference Proceedings, 2019, , .	0.4	1
33	VIRTUAL ELEMENT FORMULATION FOR PHASE-FIELD MODELING OF DUCTILE FRACTURE. International Journal for Multiscale Computational Engineering, 2019, 17, 181-200.	1.2	54
34	Virtual elements for finite thermo-plasticity problems. Computational Mechanics, 2019, 64, 1347-1360.	4.0	27
35	A computational framework for brittle crack-propagation based on efficient virtual element method. Finite Elements in Analysis and Design, 2019, 159, 15-32.	3.2	48
36	A finite-strain phase-field approach to ductile failure of frictional materials. International Journal of Solids and Structures, 2019, 172-173, 147-162.	2.7	36

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37	Waterâ€induced failure mechanics for concrete. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900140.	0.2	7
38	A modified Gurson-type plasticity model at finite strains: formulation, numerical analysis and phase-field coupling. Computational Mechanics, 2018, 62, 815-833.	4.0	92
39	A Virtual Element Method for Crack Propagation. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800104.	0.2	9
40	Multiâ€field formulation of large deformation ductile fracture. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800349.	0.2	1
41	Variational phase-field formulation of non-linear ductile fracture. Computer Methods in Applied Mechanics and Engineering, 2018, 342, 71-94.	6.6	90
42	Phase-field modeling of brittle fracture using an efficient virtual element scheme. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 443-466.	6.6	98
43	Coupled thermomechanical response of gradient plasticity. International Journal of Plasticity, 2017, 91, 1-24.	8.8	38
44	Micromorphic approach for gradient-extended thermo-elastic–plastic solids in the logarithmic strain space. Continuum Mechanics and Thermodynamics, 2017, 29, 1207-1217.	2.2	33
45	Phaseâ€field modeling of ductile fracture at finite strains: A robust variationalâ€based numerical implementation of a gradientâ€extended theory by micromorphic regularization. International Journal for Numerical Methods in Engineering, 2017, 111, 816-863.	2.8	68
46	Phase field modeling of fracture in anisotropic brittle solids. International Journal of Non-Linear Mechanics, 2017, 97, 1-21.	2.6	205
47	Phase Field Modeling of Ductile Fracture in Soil Mechanics. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 383-384.	0.2	6
48	Variational framework for phase field modeling of ductile fracture in porous solids at finite strains. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 279-280.	0.2	1
49	Phase field modeling of ductile fracture at finite strains: A variational gradient-extended plasticity-damage theory. International Journal of Plasticity, 2016, 84, 1-32.	8.8	258
50	Phase field modeling of fracture in porous plasticity: A variational gradient-extended Eulerian framework for the macroscopic analysis of ductile failure. Computer Methods in Applied Mechanics and Engineering, 2016, 312, 3-50.	6.6	66
51	A Phaseâ€Field Model of Ductile Fracture at Finite Strains. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 181-182.	0.2	1
52	Phase-field modelling of ductile fracture: a variational gradient-extended plasticity-damage theory and its micromorphic regularization. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150170.	3.4	83
53	Ductile failure with gradient plasticity coupled to the phase-field fracture at finite strains. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 271-272.	0.2	0
54	Phase field modeling of fracture in multi-physics problems. Part II. Coupled brittle-to-ductile failure criteria and crack propagation in thermo-elastic–plastic solids. Computer Methods in Applied Mechanics and Engineering, 2015, 294, 486-522.	6.6	427

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55	Variational gradient plasticity at finite strains. Part II: Local–global updates and mixed finite elements for additive plasticity in the logarithmic strain space. Computer Methods in Applied Mechanics and Engineering, 2014, 268, 704-734.	6.6	37
56	Towards Phase Field Modeling of Ductile Fracture in Gradientâ€Extended Elasticâ€Plastic Solids. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 411-412.	0.2	28
57	Mixed variational principles and robust finite element implementations of gradient plasticity at small strains. International Journal for Numerical Methods in Engineering, 2013, 94, 1037-1074.	2.8	37
58	Mixed Variational Principles and Robust Finite Element Design of Gradient Plasticity at Finite Strains. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 173-174.	0.2	0