Zhi-Qian Zhang

List of Publications by Year
in descending order

52	1,385	304743	345221
papers	citations	22	36
		h-index	g-index

53	53	53	1069
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prediction of Microstructure Evolution of Cold Sprayed Coatings Using a Dislocation Density Based Constitutive Model. Lecture Notes in Mechanical Engineering, 2022, , 125-128.	0.4	0
2	Impact velocity-dependent bonding mechanisms in metal cold spray. Surface and Coatings Technology, 2022, 433, 128085.	4.8	13
3	Cold spray deposition of Inconel 718 in comparison with atmospheric plasma spray deposition. Applied Surface Science, 2021, 535, 147704.	6.1	29
4	Conservational integrals of the fourth-order phase field model for brittle fracture via Noether theorem. Engineering Fracture Mechanics, 2021, 245, 107590.	4.3	6
5	Impact induced metallurgical and mechanical interlocking in metals. Computational Materials Science, 2021, 192, 110363.	3.0	11
6	Fourthâ€order phase field model with spectral decomposition for simulating fracture in hyperelastic material. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 2372-2388.	3.4	7
7	An experimentally validated dislocation density based computational framework for predicting microstructural evolution in cold spray process. International Journal of Solids and Structures, 2021, 225, 111065.	2.7	12
8	Phase field simulation for fracture behavior of hyperelastic material at large deformation based on edge-based smoothed finite element method. Engineering Fracture Mechanics, 2020, 238, 107233.	4.3	27
9	Multiscale Modeling to Predict the Hydrophobicity of an Experimentally Designed Coating. Journal of Physical Chemistry C, 2020, 124, 9866-9875.	3.1	2
10	An Automated Deposition Procedure for Cold Spray Additive Manufacturing Process Modeling Based on Finite Element Simulation. Lecture Notes in Mechanical Engineering, 2020, , 133-143.	0.4	1
11	A modified immersed smoothed FEM with local field reconstruction for fluidâ€"structure interactions. Engineering Analysis With Boundary Elements, 2019, 107, 218-232.	3.7	12
12	Instabilities in dielectric elastomers: buckling, wrinkling, and crumpling. Soft Matter, 2019, 15, 7137-7144.	2.7	23
13	Coupling of SPH with smoothed point interpolation method for violent fluid-structure interaction problems. Engineering Analysis With Boundary Elements, 2019, 103, 1-10.	3.7	35
14	Self-Healing Four-Dimensional Printing with an Ultraviolet Curable Double-Network Shape Memory Polymer System. ACS Applied Materials & Interfaces, 2019, 11, 10328-10336.	8.0	126
15	An Effective Multiscale Methodology for the Analysis of Marine Flexible Risers. Journal of Marine Science and Engineering, 2019, 7, 340.	2.6	5
16	Coupling immersed method with node-based partly smoothed point interpolation method (NPS-PIM) for large-displacement fluid-structure interaction problems. Ocean Engineering, 2018, 157, 180-201.	4.3	17
17	A cellâ€based smoothed finite element method with semiâ€implicit <scp>CBS</scp> procedures for incompressible laminar viscous flows. International Journal for Numerical Methods in Fluids, 2018, 86, 20-45.	1.6	45
18	A quasiâ€implicit characteristicâ€"based penalty finiteâ€element method for incompressible laminar viscous flows. International Journal for Numerical Methods in Engineering, 2018, 114, 147-171.	2.8	11

#	Article	IF	Citations
19	A Locking-Free Face-Based S-FEM via Averaging Nodal Pressure using 4-Nodes Tetrahedrons for 3D Explicit Dynamics and Quasi-statics. International Journal of Computational Methods, 2018, 15, 1850043.	1.3	10
20	A Finite Element Method for Dielectric Elastomers Affected by Viscoelasticity and Current Leakage. International Journal of Applied Mechanics, 2018, 10, 1850102.	2.2	6
21	A soft active origami robot. Extreme Mechanics Letters, 2018, 24, 30-37.	4.1	38
22	A sharp-interface immersed smoothed finite element method for interactions between incompressible flows and large deformation solids. Computer Methods in Applied Mechanics and Engineering, 2018, 340, 24-53.	6.6	35
23	Wearable Mechanotransduced Tactile Sensor for Haptic Perception. Advanced Materials Technologies, 2017, 2, 1700006.	5.8	45
24	An immersed smoothed point interpolation method (ISâ€PIM) for fluidâ€structure interaction problems. International Journal for Numerical Methods in Fluids, 2017, 85, 213-234.	1.6	17
25	Dynamic pattern of wrinkles in a dielectric elastomer. Soft Matter, 2017, 13, 2942-2951.	2.7	31
26	Smoothed finite element methods (S-FEMs) with polynomial pressure projection (P3) for incompressible solids. Engineering Analysis With Boundary Elements, 2017, 84, 253-269.	3.7	19
27	A 3D multi-field element for simulating the electromechanical coupling behavior of dielectric elastomers. Acta Mechanica Solida Sinica, 2017, 30, 374-389.	1.9	13
28	Multiscale Modelling Approaches for Flexible Risers: Procedures, Capabilities and Demonstrations. , 2016, , .		0
29	Numerical and Experimental Study on the Residual Stresses in the Nitrided Steel. Journal of Materials Engineering and Performance, 2016, 25, 4036-4045.	2.5	1
30	An edge-based/node-based selective smoothed finite element method using tetrahedrons for cardiovascular tissues. Engineering Analysis With Boundary Elements, 2015, 59, 62-77.	3.7	46
31	A smoothed finite element method for analysis of anisotropic large deformation of passive rabbit ventricles in diastole. International Journal for Numerical Methods in Biomedical Engineering, 2015, 31, e02697.	2.1	29
32	A dielectric elastomer actuator coupled with water: snap-through instability and giant deformation. Proceedings of SPIE, 2015, , .	0.8	2
33	A Semi-Explicit Finite Element Method for Dynamic Analysis of Dielectric Elastomers. International Journal of Computational Methods, 2015, 12, 1350108.	1.3	11
34	A Smoothed Finite Element Method (S-FEM) for Large-Deformation Elastoplastic Analysis. International Journal of Computational Methods, 2015, 12, 1540011.	1.3	10
35	A Finite Element Method for Inhomogeneous Deformation of Viscoelastic Dielectric Elastomers. International Journal of Applied Mechanics, 2015, 07, 1550069.	2.2	28
36	Giant voltage-induced deformation of a dielectric elastomer under a constant pressure. Applied Physics Letters, 2014, 105, 112901.	3.3	55

#	Article	IF	Citations
37	Solution bound and nearly exact solution to nonlinear solid mechanics problems based on the smoothed FEM concept. Engineering Analysis With Boundary Elements, 2014, 42, 99-114.	3.7	24
38	Selective smoothed finite element methods for extremely large deformation of anisotropic incompressible bio-tissues. International Journal for Numerical Methods in Engineering, 2014, 99, 587-610.	2.8	38
39	Multiscale Finite Element Analysis of Unbonded Flexible Risers. , 2014, , .		3
40	A three dimensional immersed smoothed finite element method (3D IS-FEM) for fluid–structure interaction problems. Computational Mechanics, 2013, 51, 129-150.	4.0	62
41	A stabilized finite element method for certified solution with bounds in static and frequency analyses of piezoelectric structures. Computer Methods in Applied Mechanics and Engineering, 2012, 241-244, 65-81.	6.6	15
42	Immersed smoothed finite element method for fluid–structure interaction simulation of aortic valves. Computational Mechanics, 2012, 50, 789-804.	4.0	71
43	Immersed smoothed finite element method for two dimensional fluid–structure interaction problems. International Journal for Numerical Methods in Engineering, 2012, 90, 1292-1320.	2.8	68
44	AN IMMERSED SMOOTHED FINITE ELEMENT METHOD FOR FLUID–STRUCTURE INTERACTION PROBLEMS. International Journal of Computational Methods, 2011, 08, 747-757.	1.3	34
45	An edge-based smoothed finite element method (ES-FEM) using 3-node triangular elements for 3D non-linear analysis of spatial membrane structures. International Journal for Numerical Methods in Engineering, 2011, 86, 135-154.	2.8	27
46	Nonlinear 3D numerical computations for the square membrane versus experimental data. Engineering Structures, 2011, 33, 1828-1837.	5.3	9
47	Temporal stabilization of the node-based smoothed finite element method and solution bound of linear elastostatics and vibration problems. Computational Mechanics, 2010, 46, 229-246.	4.0	89
48	Upper and lower bounds for natural frequencies: A property of the smoothed finite element methods. International Journal for Numerical Methods in Engineering, 2010, 84, 149-178.	2.8	13
49	Removing Void Elements for Structural Level Set Topology Optimizaiton. Journal of Computational Science and Technology, 2009, 3, 385-395.	0.4	0
50	Moving least-squares approximation with discontinuous derivative basis functions for shell structures with slope discontinuities. International Journal for Numerical Methods in Engineering, 2008, 76, 1202-1230.	2.8	11
51	Propagation of instability in dielectric elastomers. International Journal of Solids and Structures, 2008, 45, 3739-3750.	2.7	143
52	Interface Tracking in Meshfree Methods and its Applications. Lecture Notes in Computational Science and Engineering, 2008, , 173-188.	0.3	0