Jinhui Yan

List of Publications by Year
in descending order

20 papers	972 citations	516710 16 h-index	794594 19 g-index
20 all docs	20 docs citations	20 times ranked	1006 citing authors

#	Article	IF	Citations
1	Machine learning for metal additive manufacturing: predicting temperature and melt pool fluid dynamics using physics-informed neural networks. Computational Mechanics, 2021, 67, 619-635.	4.0	176
2	Data-driven multi-scale multi-physics models to derive process–structure–property relationships for additive manufacturing. Computational Mechanics, 2018, 61, 521-541.	4.0	162
3	Ion-Transport Design for High-Performance Na^+-Based Electrochromics. ACS Nano, 2018, 12, 3759-3768.	14.6	136
4	Lattice-contraction triggered synchronous electrochromic actuator. Nature Communications, 2018, 9, 4798.	12.8	80
5	A contact formulation based on a volumetric potential: Application to isogeometric simulations of atrioventricular valves. Computer Methods in Applied Mechanics and Engineering, 2018, 330, 522-546.	6.6	61
6	An immersogeometric formulation for free-surface flows with application to marine engineering problems. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112748.	6.6	49
7	A moving-domain CFD solver in FEniCS with applications to tidal turbine simulations in turbulent flows. Computers and Mathematics With Applications, 2021, 81, 532-546.	2.7	40
8	A conservative level set method on unstructured meshes for modeling multiphase thermo-fluid flow in additive manufacturing processes. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113348.	6.6	34
9	Numerical Simulations of Two Back-To-Back Horizontal Axis Tidal Stream Turbines in Free-Surface Flows. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	29
10	Topology Optimization of Total Femur Structure: Application of Parameterized Level Set Method Under Geometric Constraints. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	2.9	25
11	Variational multiscale modeling of Langmuir turbulent boundary layers in shallow water using Isogeometric Analysis. Mechanics Research Communications, 2020, 108, 103570.	1.8	24
12	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17551-17557.	7.1	24
13	A thermal multi-phase flow model for directed energy deposition processes via a moving signed distance function. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113518.	6.6	24
14	Graphics processing unit (GPU) accelerated fast multipole BEM with level-skip M2L for 3D elasticity problems. Advances in Engineering Software, 2015, 82, 105-118.	3.8	23
15	A mixed interface-capturing/interface-tracking formulation for thermal multi-phase flows with emphasis on metal additive manufacturing processes. Computer Methods in Applied Mechanics and Engineering, 2021, 383, 113910.	6.6	23
16	Modeling and simulation of bridge-section buffeting response in turbulent flow. Mathematical Models and Methods in Applied Sciences, 2019, 29, 939-966.	3.3	21
17	Computer Modeling of Wind Turbines: 2. Free-Surface FSI and Fatigue-Damage. Archives of Computational Methods in Engineering, 2019, 26, 1101-1115.	10.2	17
18	Variational multi-scale modeling of interfacial flows with a balanced-force surface tension model. Mechanics Research Communications, 2021, 112, 103608.	1.8	13

#	Article	IF	Citations
19	A volume-conserving balanced-force level set method on unstructured meshes using a control volume finite element formulation. Journal of Computational Physics, 2019, 380, 119-142.	3.8	11
20	Reprint of: Variational multiscale modeling of Langmuir turbulent boundary layers in shallow water using Isogeometric Analysis. Mechanics Research Communications, 2021, 112, 103703.	1.8	0