Ramin Bostanabad

List of Publications by Year
in descending order

19 papers	1,239 citations	623734 14 h-index	888059 17 g-index
19 all docs	19 docs citations	19 times ranked	977 citing authors

#	Article	IF	Citations
1	A framework for data-driven analysis of materials under uncertainty: Countering the curse of dimensionality. Computer Methods in Applied Mechanics and Engineering, 2017, 320, 633-667.	6.6	350
2	Computational microstructure characterization and reconstruction: Review of the state-of-the-art techniques. Progress in Materials Science, 2018, 95, 1-41.	32.8	252
3	Stochastic microstructure characterization and reconstruction via supervised learning. Acta Materialia, 2016, 103, 89-102.	7.9	166
4	Uncertainty quantification in multiscale simulation of woven fiber composites. Computer Methods in Applied Mechanics and Engineering, 2018, 338, 506-532.	6.6	90
5	Characterization and reconstruction of 3D stochastic microstructures via supervised learning. Journal of Microscopy, 2016, 264, 282-297.	1.8	58
6	Reconstruction of 3D Microstructures from 2D Images via Transfer Learning. CAD Computer Aided Design, 2020, 128, 102906.	2.7	52
7	Leveraging the nugget parameter for efficient Gaussian process modeling. International Journal for Numerical Methods in Engineering, 2018, 114, 501-516.	2.8	48
8	Globally Approximate Gaussian Processes for Big Data With Application to Data-Driven Metamaterials Design. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	2.9	42
9	A numerical Bayesian-calibrated characterization method for multiscale prepreg preforming simulations with tension-shear coupling. Composites Science and Technology, 2019, 170, 15-24.	7.8	36
10	Deep learning predicts boiling heat transfer. Scientific Reports, 2021, 11, 5622.	3.3	36
11	Mosaic flows: A transferable deep learning framework for solving PDEs on unseen domains. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114424.	6.6	19
12	Data Centric Design: A New Approach to Design of Microstructural Material Systems. Engineering, 2022, 10, 89-98.	6.7	18
13	Characterization of the Optical Properties of Turbid Media by Supervised Learning of Scattering Patterns. Scientific Reports, 2017, 7, 15259.	3.3	17
14	Data Fusion With Latent Map Gaussian Processes. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	2.9	14
15	Latent map Gaussian processes for mixed variable metamodeling. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114128.	6.6	12
16	Enhanced Gaussian Process Metamodeling and Collaborative Optimization for Vehicle Suspension Design Optimization. , 2017, , .		11
17	Evolutionary Gaussian Processes. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	2.9	8
18	Reduced-order multiscale modeling of plastic deformations in 3D alloys with spatially varying porosity by deflated clustering analysis. Computational Mechanics, 2022, 70, 517-548.	4.0	7

#	Article	IF	Citations
19	Multiscale simulation of fiber composites with spatially varying uncertainties. , 2020, , 355-384.		3