David Montes de Oca Zapiain

List of Publications by Year
in descending order

10 papers	150 citations	1478505 6 h-index	1372567 10 g-index
11 all docs	11 docs citations	11 times ranked	91 citing authors

#	Article	IF	Citations
1	Accelerating phase-field-based microstructure evolution predictions via surrogate models trained by machine learning methods. Npj Computational Materials, 2021, 7, .	8.7	69
2	Reduced-Order Microstructure-Sensitive Models for Damage Initiation in Two-Phase Composites. Integrating Materials and Manufacturing Innovation, 2018, 7, 97-115.	2.6	18
3	Prediction of microscale plastic strain rate fields in two-phase composites subjected to an arbitrary macroscale strain rate using the materials knowledge system framework. Acta Materialia, 2017, 141, 230-240.	7.9	15
4	Microscopic and Macroscopic Characterization of Grain Boundary Energy and Strength in Silicon Carbide via Machine-Learning Techniques. ACS Applied Materials & Interfaces, 2021, 13, 3311-3324.	8.0	12
5	Characterizing the Tensile Strength of Metastable Grain Boundaries in Silicon Carbide Using Machine Learning. Journal of Physical Chemistry C, 2020, 124, 24809-24821.	3.1	9
6	Localization models for the plastic response of polycrystalline materials using the material knowledge systems framework. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 074008.	2.0	8
7	Texture-sensitive prediction of micro-spring performance using Gaussian process models calibrated to finite element simulations. Materials and Design, 2021, 197, 109198.	7.0	7
8	Predicting plastic anisotropy using crystal plasticity and Bayesian neural network surrogate models. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142472.	5.6	6
9	Reduced-Order Models for Ranking Damage Initiation in Dual-Phase Composites Using Bayesian Neural Networks. Jom, 2020, 72, 4359-4369.	1.9	4
10	Convolutional Neural Networks for the Localization of Plastic Velocity Gradient Tensor in Polycrystalline Microstructures. Journal of Engineering Materials and Technology, Transactions of the ASME, 2022, 144, .	1.4	2