

# David Montes de Oca Zapiain

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1384411/publications.pdf>

Version: 2024-02-01

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