Yuksel C Yabansu

List of Publications by Year
in descending order

22 papers	1,365 citations	16 h-index (516710)	20 g-index (752698)
23 all docs	23 docs citations	23 times ranked	913 citing authors

#	ARTICLE	IF	CITATIONS
1	Deep learning approaches for mining structure-property linkages in high contrast composites from simulation datasets. Computational Materials Science, 2018, 151, 278-287.	3.0	219
2	Material structure-property linkages using three-dimensional convolutional neural networks. Acta Materialia, 2018, 146, 76-84.	7.9	214
3	Establishing structure-property localization linkages for elastic deformation of three-dimensional high contrast composites using deep learning approaches. Acta Materialia, 2019, 166, 335-345.	7.9	125
4	Understanding and visualizing microstructure and microstructure variance as a stochastic process. Acta Materialia, 2011, 59, 6387-6400.	7.9	122
5	Extraction of reduced-order process-structure linkages from phase-field simulations. Acta Materialia, 2017, 124, 182-194.	7.9	83
6	Analytics for microstructure datasets produced by phase-field simulations. Acta Materialia, 2016, 103, 192-203.	7.9	75
7	Calibrated localization relationships for elastic response of polycrystalline aggregates. Acta Materialia, 2014, 81, 151-160.	7.9	71
8	Quantification and classification of microstructures in ternary eutectic alloys using 2-point spatial correlations and principal component analyses. Acta Materialia, 2016, 110, 131-141.	7.9	69
9	Application of Gaussian process regression models for capturing the evolution of microstructure statistics in aging of nickel-based superalloys. Acta Materialia, 2019, 178, 45-58.	7.9	58
10	Machine learning approaches for elastic localization linkages in high-contrast composite materials. Integrating Materials and Manufacturing Innovation, 2015, 4, 192-208.	2.6	56
11	Representation and calibration of elastic localization kernels for a broad class of cubic polycrystals. Acta Materialia, 2015, 94, 26-35.	7.9	50
12	Application of spherical indentation and the materials knowledge system framework to establishing microstructure-yield strength linkages from carbon steel scoops excised from high-temperature exposed components. Acta Materialia, 2018, 144, 758-767.	7.9	45
13	Data science approaches for microstructure quantification and feature identification in porous membranes. Journal of Membrane Science, 2017, 540, 88-97.	8.2	39
14	A new framework for rotationally invariant two-point spatial correlations in microstructure datasets. Acta Materialia, 2018, 158, 53-64.	7.9	36
15	Context Aware Machine Learning Approaches for Modeling Elastic Localization in Three-Dimensional Composite Microstructures. Integrating Materials and Manufacturing Innovation, 2017, 6, 160-171.	2.6	28
16	Application of Gaussian process autoregressive models for capturing the time evolution of microstructure statistics from phase-field simulations for sintering of polycrystalline ceramics. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 084006.	2.0	22
17	A digital workflow for learning the reduced-order structure-property linkages for permeability of porous membranes. Acta Materialia, 2020, 195, 668-680.	7.9	16
18	A Comparative Study of the Efficacy of Local/Global and Parametric/Nonparametric Machine Learning Methods for Establishing Structure–Property Linkages in High-Contrast 3D Elastic Composites. Integrating Materials and Manufacturing Innovation, 2019, 8, 67-81.	2.6	15

#	Article	IF	Citations
19	Evaluation of Ti–Mn Alloys for Additive Manufacturing Using High-Throughput Experimental Assays and Gaussian Process Regression. Materials, 2020, 13, 4641.	2.9	12
20	High-Throughput Exploration of the Process Space in 18% Ni (350) Maraging Steels via Spherical Indentation Stress–Strain Protocols and Gaussian Process Models. Integrating Materials and Manufacturing Innovation, 2020, 9, 199-212.	2.6	10
21	Calibrated Localization Relationships for Polycrystalline Aggregates by Using Materials Knowledge System. , 2015, , 221-228.		0
22	Data Analytics on Phase-Field Simulation Datasets. , 2020, , 177-204.		0