Philipp Metsch

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8447649/publications.pdf

Version: 2024-02-01

19	428	1040056	888059
papers	citations	9	17
		h-index	g-index

19	19	19	260
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A numerical study on magnetostrictive phenomena in magnetorheological elastomers. Computational Materials Science, 2016, 124, 364-374.	3.0	105
2	Modeling of magnetic hystereses in soft MREs filled with NdFeB particles. Smart Materials and Structures, 2017, 26, 105019.	3.5	56
3	Microscale modeling and simulation of magnetorheological elastomers at finite strains: A study on the influence of mechanical preloads. International Journal of Solids and Structures, 2016, 102-103, 286-296.	2.7	55
4	Isogeometric analysis of the Cahnâ€“Hilliard equation â€“ a convergence study. Journal of Computational Physics, 2016, 305, 360-371.	3.8	48
5	Theoretical models for magneto-sensitive elastomers: A comparison between continuum and dipole approaches. Physical Review E, 2017, 95, 042501.	2.1	46
6	A macroscopic model for magnetorheological elastomers based on microscopic simulations. International Journal of Solids and Structures, 2020, 193-194, 200-212.	2.7	33
7	Two- and three-dimensional modeling approaches in magneto-mechanics: a quantitative comparison. Archive of Applied Mechanics, 2019, 89, 47-62.	2.2	26
8	Automated constitutive modeling of isotropic hyperelasticity based on artificial neural networks. Computational Mechanics, 2022, 69, 213-232.	4.0	25
9	Magneto-Mechanical Coupling in Magneto-Active Elastomers. Materials, 2021, 14, 434.	2.9	16
10	Multiscale modeling and simulation of magneto-active elastomers based on experimental data. ChemistrySelect, 2023, 8, 1-31.	1.5	4
11	Modeling and Simulation of Hysteresis Effects in Magnetorheological Elastomers. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800319.	0.2	3
12	Thermodynamically consistent constitutive modeling of isotropic hyperelasticity based on artificial neural networks. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	3
13	Microscale Modeling and Simulation of Magnetorheological Elastomers. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 27-30.	0.2	2
14	A quantitative comparison of twoâ€•and threeâ€•dimensional modeling approaches for magnetorheological elastomers. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800179.	0.2	2
15	Development of a Macroâ€•Model for Magnetorheological Elastomers based on Microscopic Simulations. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900288.	0.2	2
16	Modeling and simulation of magnetorheological elastomers: A comparison of continuum and dipole approaches. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 527-528.	0.2	1
17	Benchmark for the Coupled Magneto-Mechanical Boundary Value Problem in Magneto-Active Elastomers. Materials, 2021, 14, 2380.	2.9	1
18	A macroscopic model for magnetoâ€•active elastomers based on microscopic simulations. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000208.	0.2	0

#	Article	IF	Citations
19	Particle Interactions in Magnetoâ€Active Elastomers: Experiments and Simulations. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000277.	0.2	0