

Philipp Metsch

List of Publications by Year in descending order

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19
papers

428
citations

1040056

9
h-index

888059

17
g-index

19
all docs

19
docs citations

19
times ranked

260
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiscale modeling and simulation of magneto-active elastomers based on experimental data. <i>ChemistrySelect</i> , 2023, 8, 1-31.	1.5	4
2	Automated constitutive modeling of isotropic hyperelasticity based on artificial neural networks. <i>Computational Mechanics</i> , 2022, 69, 213-232.	4.0	25
3	A macroscopic model for magneto-active elastomers based on microscopic simulations. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 20, e202000208.	0.2	0
4	Particle Interactions in Magneto-Active Elastomers: Experiments and Simulations. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 20, e202000277.	0.2	0
5	Benchmark for the Coupled Magneto-Mechanical Boundary Value Problem in Magneto-Active Elastomers. <i>Materials</i> , 2021, 14, 2380.	2.9	1
6	Magneto-Mechanical Coupling in Magneto-Active Elastomers. <i>Materials</i> , 2021, 14, 434.	2.9	16
7	Thermodynamically consistent constitutive modeling of isotropic hyperelasticity based on artificial neural networks. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 21, .	0.2	3
8	A macroscopic model for magnetorheological elastomers based on microscopic simulations. <i>International Journal of Solids and Structures</i> , 2020, 193-194, 200-212.	2.7	33
9	Two- and three-dimensional modeling approaches in magneto-mechanics: a quantitative comparison. <i>Archive of Applied Mechanics</i> , 2019, 89, 47-62.	2.2	26
10	Development of a Macro-Model for Magnetorheological Elastomers based on Microscopic Simulations. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019, 19, e201900288.	0.2	2
11	A quantitative comparison of two- and three-dimensional modeling approaches for magnetorheological elastomers. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800179.	0.2	2
12	Modeling and Simulation of Hysteresis Effects in Magnetorheological Elastomers. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800319.	0.2	3
13	Theoretical models for magneto-sensitive elastomers: A comparison between continuum and dipole approaches. <i>Physical Review E</i> , 2017, 95, 042501.	2.1	46
14	Modeling of magnetic hystereses in soft MREs filled with NdFeB particles. <i>Smart Materials and Structures</i> , 2017, 26, 105019.	3.5	56
15	Microscale Modeling and Simulation of Magnetorheological Elastomers. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2017, 17, 27-30.	0.2	2
16	Modeling and simulation of magnetorheological elastomers: A comparison of continuum and dipole approaches. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2017, 17, 527-528.	0.2	1
17	A numerical study on magnetostrictive phenomena in magnetorheological elastomers. <i>Computational Materials Science</i> , 2016, 124, 364-374.	3.0	105
18	Microscale modeling and simulation of magnetorheological elastomers at finite strains: A study on the influence of mechanical preloads. <i>International Journal of Solids and Structures</i> , 2016, 102-103, 286-296.	2.7	55

#	ARTICLE	IF	CITATIONS
19	Isogeometric analysis of the Cahn–Hilliard equation – a convergence study. Journal of Computational Physics, 2016, 305, 360-371.	3.8	48