Kostas Danas

List of Publications by Year in descending order

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Version: 2024-02-01

50	1,992	236612	233125
papers	citations	25 h-index	45 g-index

51	51	51	1086
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experiments and modeling of iron-particle-filled magnetorheological elastomers. Journal of the Mechanics and Physics of Solids, 2012, 60, 120-138.	2.3	345
2	Influence of the Lode parameter and the stress triaxiality on the failure of elasto-plastic porous materials. International Journal of Solids and Structures, 2012, 49, 1325-1342.	1.3	165
3	A finite-strain model for anisotropic viscoplastic porous media: I â€“ Theory. European Journal of Mechanics, A/Solids, 2009, 28, 387-401.	2.1	106
4	The nonlinear elastic response of suspensions of rigid inclusions in rubber: IIâ€”A simple explicit approximation for finite-concentration suspensions. Journal of the Mechanics and Physics of Solids, 2013, 61, 19-37.	2.3	84
5	An analytical model for porous single crystals with ellipsoidal voids. Journal of the Mechanics and Physics of Solids, 2015, 84, 436-467.	2.3	71
6	An explicit dissipative model for isotropic hard magnetorheological elastomers. Journal of the Mechanics and Physics of Solids, 2021, 151, 104361.	2.3	66
7	A model for ductile damage prediction at low stress triaxialities incorporating void shape change and void rotation. International Journal of Solids and Structures, 2015, 63, 240-263.	1.3	63
8	Numerical modeling of elasto-plastic porous materials with void shape effects at finite deformations. Composites Part B: Engineering, 2012, 43, 2544-2559.	5.9	62
9	Effective response of classical, auxetic and chiral magnetoelastic materials by use of a new variational principle. Journal of the Mechanics and Physics of Solids, 2017, 105, 25-53.	2.3	60
10	A homogenization-based constitutive model for isotropic viscoplastic porous media. International Journal of Solids and Structures, 2008, 45, 3392-3409.	1.3	59
11	A general result for the magnetoelastic response of isotropic suspensions of iron and ferrofluid particles in rubber, with applications to spherical and cylindrical specimens. Journal of the Mechanics and Physics of Solids, 2017, 107, 343-364.	2.3	57
12	A finite-strain model for anisotropic viscoplastic porous media: II â€“ Applications. European Journal of Mechanics, A/Solids, 2009, 28, 402-416.	2.1	56
13	Plane-strain discrete dislocation plasticity with climb-assisted glide motion of dislocations. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 045008.	0.8	56
14	Two-field surface pattern control via marginally stable magnetorheological elastomers. Soft Matter, 2017, 13, 6576-6584.	1.2	51
15	Microstructurally-guided explicit continuum models for isotropic magnetorheological elastomers with iron particles. International Journal of Non-Linear Mechanics, 2020, 120, 103380.	1.4	43
16	Size effects in the conical indentation of an elasto-plastic solid. Journal of the Mechanics and Physics of Solids, 2012, 60, 1605-1625.	2.3	42
17	Numerically-aided 3D printed random isotropic porous materials approaching the Hashin-Shtrikman bounds. Composites Part B: Engineering, 2019, 156, 344-354.	5.9	40
18	Instability of a magnetoelastic layer resting on a non-magnetic substrate. Journal of the Mechanics and Physics of Solids, 2014, 69, 67-83.	2.3	38

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19	Random 3D-printed isotropic composites with high volume fraction of pore-like polydisperse inclusions and near-optimal elastic stiffness. Acta Materialia, 2019, 175, 331-340.	3.8	36
20	On void shape effects of periodic elasto-plastic materials subjected to cyclic loading. European Journal of Mechanics, A/Solids, 2015, 49, 481-499.	2.1	35
21	Wrinkling to crinkling transitions and curvature localization in a magnetoelastic film bonded to a non-magnetic substrate. Journal of the Mechanics and Physics of Solids, 2019, 133, 103734.	2.3	35
22	Multiscale modeling of skeletal muscle tissues based on analytical and numerical homogenization. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 92, 97-117.	1.5	32
23	A computational framework for magnetically hard and soft viscoelastic magnetorheological elastomers. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114500.	3.4	30
24	A homogenization model of the Voigt type for skeletal muscle. Journal of Theoretical Biology, 2017, 414, 50-61.	0.8	27
25	Compliant interfaces: A mechanism for relaxation of dislocation pile-ups in a sheared single crystal. International Journal of Plasticity, 2010, 26, 1792-1805.	4.1	26
26	Two families of explicit models constructed from a homogenization solution for the magnetoelastic response of MREs containing iron and ferrofluid particles. International Journal of Non-Linear Mechanics, 2020, 119, 103362.	1.4	25
27	Random distribution of polydisperse ellipsoidal inclusions and homogenization estimates for porous elastic materials. Computers and Structures, 2018, 210, 87-101.	2.4	24
28	A model for porous single crystals with cylindrical voids of elliptical cross-section. International Journal of Solids and Structures, 2015, 64-65, 100-119.	1.3	22
29	A unified dual modeling framework for soft and hard magnetorheological elastomers. International Journal of Solids and Structures, 2022, 257, 111513.	1.3	22
30	Enhanced local maximum-entropy approximation for stable meshfree simulations. Computer Methods in Applied Mechanics and Engineering, 2019, 344, 858-886.	3.4	21
31	Second-order theory for nonlinear composites and application to isotropic constituents. Comptes Rendus - Mecanique, 2006, 334, 575-581.	2.1	20
32	A homogenization-based constitutive model for two-dimensional viscoplastic porous media. Comptes Rendus - Mecanique, 2008, 336, 79-90.	2.1	20
33	Programmable higher-order Euler buckling modes in hierarchical beams. International Journal of Solids and Structures, 2019, 167, 170-183.	1.3	20
34	Bifurcation of magnetorheological filmâ€“substrate elastomers subjected to biaxial pre-compression and transverse magnetic fields. International Journal of Non-Linear Mechanics, 2021, 128, 103608.	1.4	18
35	A methodology for the estimation of the effective yield function of isotropic composites. International Journal of Solids and Structures, 2016, 87, 120-138.	1.3	17
36	Experiments and Numerical Implementation of a Boundary Value Problem Involving a Magnetorheological Elastomer Layer Subjected to a Nonuniform Magnetic Field. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	1.1	16

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37	Quantifying the effect of two-point correlations on the effective elasticity of specific classes of random porous materials with and without connectivity. International Journal of Engineering Science, 2021, 166, 103520.	2.7	16
38	Deformation mechanisms of idealised cermets under multi-axial loading. Journal of the Mechanics and Physics of Solids, 2017, 102, 80-100.	2.3	12
39	A homogenization model for porous ductile solids under cyclic loads comprising a matrix with isotropic and linear kinematic hardening. International Journal of Solids and Structures, 2017, 121, 174-190.	1.3	12
40	An evolving switching surface model for ferromagnetic hysteresis. Journal of Applied Physics, 2019, 125, .	1.1	11
41	A homogenization based yield criterion for a porous Tresca material with ellipsoidal voids. International Journal of Fracture, 2016, 200, 209-225.	1.1	7
42	Towards 4D Printing of Very Soft Heterogeneous Magnetoactive Layers for Morphing Surface Applications via Liquid Additive Manufacturing. Polymers, 2022, 14, 1684.	2.0	7
43	Influence of the internal geometry on the elastic properties of materials using 3D printing of computer-generated random microstructures. , 2018, , .		5
44	Freedericksz instability for the twisted nematic device: A three-dimensional analysis. Physical Review E, 2016, 94, 012704.	0.8	4
45	Bifurcation analysis of twisted liquid crystal bilayers. Journal of the Mechanics and Physics of Solids, 2019, 123, 61-79.	2.3	3
46	Model reduction techniques for quantitative nano-mechanical AFM mode. Measurement Science and Technology, 2021, 32, 075406.	1.4	3
47	Magnetorheological Elastomers: Experimental and Modeling Aspects. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 251-256.	0.3	2
48	Response to the comments by Hucthinson and Tvergaard. International Journal of Solids and Structures, 2012, 49, 3486.	1.3	0
49	Effects of multiaxial cyclic loading conditions on the evolution of porous defects. MATEC Web of Conferences, 2014, 12, 08005.	0.1	0
50	Acoustic Properties of Continental Carbonate Rocks - Controlling Factors, Analytical and Numerical Simulations. , 2016, , .		0