

# Kostas Danas

## List of Publications by Year in descending order

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50  
papers

1,992  
citations

236925

25  
h-index

233421

45  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1086  
citing authors

#	ARTICLE	IF	CITATIONS
1	A computational framework for magnetically hard and soft viscoelastic magnetorheological elastomers. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114500.	6.6	30
2	A unified dual modeling framework for soft and hard magnetorheological elastomers. International Journal of Solids and Structures, 2022, 257, 111513.	2.7	22
3	Towards 4D Printing of Very Soft Heterogeneous Magnetoactive Layers for Morphing Surface Applications via Liquid Additive Manufacturing. Polymers, 2022, 14, 1684.	4.5	7
4	Bifurcation of magnetorheological film–substrate elastomers subjected to biaxial pre-compression and transverse magnetic fields. International Journal of Non-Linear Mechanics, 2021, 128, 103608.	2.6	18
5	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, .	2.2	16
6	Model reduction techniques for quantitative nano-mechanical AFM mode. Measurement Science and Technology, 2021, 32, 075406.	2.6	3
7	An explicit dissipative model for isotropic hard magnetorheological elastomers. Journal of the Mechanics and Physics of Solids, 2021, 151, 104361.	4.8	66
8	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.	5.0	16
9	Microstructurally-guided explicit continuum models for isotropic magnetorheological elastomers with iron particles. International Journal of Non-Linear Mechanics, 2020, 120, 103380.	2.6	43
10	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.	2.6	25
11	Numerically-aided 3D printed random isotropic porous materials approaching the Hashin-Shtrikman bounds. Composites Part B: Engineering, 2019, 156, 344-354.	12.0	40
12	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.	4.8	35
13	An evolving switching surface model for ferromagnetic hysteresis. Journal of Applied Physics, 2019, 125, .	2.5	11
14	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.	7.9	36
15	Programmable higher-order Euler buckling modes in hierarchical beams. International Journal of Solids and Structures, 2019, 167, 170-183.	2.7	20
16	Bifurcation analysis of twisted liquid crystal bilayers. Journal of the Mechanics and Physics of Solids, 2019, 123, 61-79.	4.8	3
17	Multiscale modeling of skeletal muscle tissues based on analytical and numerical homogenization. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 92, 97-117.	3.1	32
18	Enhanced local maximum-entropy approximation for stable meshfree simulations. Computer Methods in Applied Mechanics and Engineering, 2019, 344, 858-886.	6.6	21

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19	Random distribution of polydisperse ellipsoidal inclusions and homogenization estimates for porous elastic materials. Computers and Structures, 2018, 210, 87-101.	4.4	24
20	Influence of the internal geometry on the elastic properties of materials using 3D printing of computer-generated random microstructures. , 2018, , .		5
21	Deformation mechanisms of idealised cermets under multi-axial loading. Journal of the Mechanics and Physics of Solids, 2017, 102, 80-100.	4.8	12
22	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.	4.8	60
23	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.	2.7	12
24	Two-field surface pattern control via marginally stable magnetorheological elastomers. Soft Matter, 2017, 13, 6576-6584.	2.7	51
25	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.	4.8	57
26	A homogenization model of the Voigt type for skeletal muscle. Journal of Theoretical Biology, 2017, 414, 50-61.	1.7	27
27	Freedericksz instability for the twisted nematic device: A three-dimensional analysis. Physical Review E, 2016, 94, 012704.	2.1	4
28	A methodology for the estimation of the effective yield function of isotropic composites. International Journal of Solids and Structures, 2016, 87, 120-138.	2.7	17
29	A homogenization based yield criterion for a porous Tresca material with ellipsoidal voids. International Journal of Fracture, 2016, 200, 209-225.	2.2	7
30	Magnetorheological Elastomers: Experimental and Modeling Aspects. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 251-256.	0.5	2
31	Acoustic Properties of Continental Carbonate Rocks - Controlling Factors, Analytical and Numerical Simulations. , 2016, , .		0
32	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.	2.7	63
33	An analytical model for porous single crystals with ellipsoidal voids. Journal of the Mechanics and Physics of Solids, 2015, 84, 436-467.	4.8	71
34	A model for porous single crystals with cylindrical voids of elliptical cross-section. International Journal of Solids and Structures, 2015, 64-65, 100-119.	2.7	22
35	On void shape effects of periodic elasto-plastic materials subjected to cyclic loading. European Journal of Mechanics, A/Solids, 2015, 49, 481-499.	3.7	35
36	Effects of multiaxial cyclic loading conditions on the evolution of porous defects. MATEC Web of Conferences, 2014, 12, 08005.	0.2	0

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37	Instability of a magnetoelastic layer resting on a non-magnetic substrate. Journal of the Mechanics and Physics of Solids, 2014, 69, 67-83.	4.8	38
38	The nonlinear elastic response of suspensions of rigid inclusions in rubber: A simple explicit approximation for finite-concentration suspensions. Journal of the Mechanics and Physics of Solids, 2013, 61, 19-37.	4.8	84
39	Plane-strain discrete dislocation plasticity with climb-assisted glide motion of dislocations. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 045008.	2.0	56
40	Response to the comments by Hutchinson and Tvergaard. International Journal of Solids and Structures, 2012, 49, 3486.	2.7	0
41	Size effects in the conical indentation of an elasto-plastic solid. Journal of the Mechanics and Physics of Solids, 2012, 60, 1605-1625.	4.8	42
42	Numerical modeling of elasto-plastic porous materials with void shape effects at finite deformations. Composites Part B: Engineering, 2012, 43, 2544-2559.	12.0	62
43	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.	2.7	165
44	Experiments and modeling of iron-particle-filled magnetorheological elastomers. Journal of the Mechanics and Physics of Solids, 2012, 60, 120-138.	4.8	345
45	Compliant interfaces: A mechanism for relaxation of dislocation pile-ups in a sheared single crystal. International Journal of Plasticity, 2010, 26, 1792-1805.	8.8	26
46	A finite-strain model for anisotropic viscoplastic porous media: I Theory. European Journal of Mechanics, A/Solids, 2009, 28, 387-401.	3.7	106
47	A finite-strain model for anisotropic viscoplastic porous media: II Applications. European Journal of Mechanics, A/Solids, 2009, 28, 402-416.	3.7	56
48	A homogenization-based constitutive model for two-dimensional viscoplastic porous media. Comptes Rendus - Mecanique, 2008, 336, 79-90.	2.1	20
49	A homogenization-based constitutive model for isotropic viscoplastic porous media. International Journal of Solids and Structures, 2008, 45, 3392-3409.	2.7	59
50	Second-order theory for nonlinear composites and application to isotropic constituents. Comptes Rendus - Mecanique, 2006, 334, 575-581.	2.1	20