

# Ioannis Mastorakos

## List of Publications by Citations

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26

papers

273

citations

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ext. papers

310

ext. citations

2.6

avg, IF

3.14

L-index

#	Paper	IF	Citations
26	Deformation mechanisms and strength in nanoscale multilayer metallic composites with coherent and incoherent interfaces. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 173114	3.4	68
25	A dislocation-density-based 3D crystal plasticity model for pure aluminum. <i>Acta Materialia</i> , <b>2009</b> , 57, 5936-5946	8.4	47
24	Size-dependent strength in nanolaminate metallic systems. <i>Journal of Materials Research</i> , <b>2011</b> , 26, 1179-1187	2.1	31
23	Effect of Interfaces in the Work Hardening of Nanoscale Multilayer Metallic Composites During Nanoindentation: A Molecular Dynamics Investigation. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , <b>2013</b> , 135,	1.8	18
22	The void nucleation strengths of the CuNiNb- based nanoscale metallic multilayers under high strain rate tensile loadings. <i>Computational Materials Science</i> , <b>2014</b> , 82, 435-441	3.2	17
21	Precipitate strengthening in nanostructured metallic material composites. <i>Philosophical Magazine Letters</i> , <b>2012</b> , 92, 597-607	1	15
20	A mechanistic-based healing model for self-healing glass seals used in solid oxide fuel cells. <i>Journal of Power Sources</i> , <b>2012</b> , 218, 445-454	8.9	12
19	Numerical simulation of interface crack in thin films. <i>International Journal of Fracture</i> , <b>1999</b> , 98, 195-207	2.3	12
18	The effect of interfacial imperfections on plastic deformation in nanoscale metallic multilayer composites. <i>Computational Materials Science</i> , <b>2014</b> , 86, 118-123	3.2	9
17	Strength and plastic deformation behavior of nanolaminate composites with pre-existing dislocations. <i>Computational Materials Science</i> , <b>2017</b> , 138, 42-48	3.2	9
16	A multiscale approach to study the effect of chromium and nickel concentration in the hardening of iron alloys. <i>Journal of Nuclear Materials</i> , <b>2014</b> , 449, 101-110	3.3	8
15	Multiscale modeling of copper and copper/nickel nanofoams under compression. <i>Computational Materials Science</i> , <b>2020</b> , 172, 109290	3.2	5
14	Effects of Defects on Hydrogen Diffusion in NbC. <i>Applied Surface Science</i> , <b>2017</b> , 401, 198-205	6.7	3
13	Deformation behavior of core-shell nanowire structures with coherent and semi-coherent interfaces. <i>Journal of Materials Research</i> , <b>2019</b> , 34, 1093-1102	2.5	3
12	Investigation of dislocation patterning by stochastic integration of dislocation trajectories. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2005</b> , 13, 671-681	2	3
11	Synthesis, microstructure, and mechanical properties of polycrystalline Cu nano-foam. <i>MRS Advances</i> , <b>2018</b> , 3, 469-475	0.7	3
10	The effect of size and composition on the strength and hardening of CuNi/Nb nanoscale metallic composites. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 2542-2550	2.5	2

9	Phase Field Crystal Simulation of Grain Growth in BCC Metals during Additive Manufacturing. <i>MRS Advances</i> , <b>2017</b> , 2, 887-896	0.7	2
8	Two- and Three-Dimensional EBSD Measurement of Dislocation Density in Deformed Structures. <i>Solid State Phenomena</i> , <b>2010</b> , 160, 17-22	0.4	2
7	Computer Simulation of Discrete Crack Propagation. <i>Journal of the Mechanical Behavior of Materials</i> , <b>2003</b> , 14, 9-22	1.9	2
6	Plastic Behavior of Aluminum and Dislocation Patterning Based on Continuum Dislocation Dynamic (CDD). <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 400-409	2.3	2
5	A Multiscale Approach to Predict the Mechanical Properties of Copper Nanofoams. <i>MRS Advances</i> , <b>2019</b> , 4, 293-298	0.7	0
4	Modelling crushing crab predation on bivalve prey using finite element analysis. <i>Historical Biology</i> , <b>2019</b> , 1-10	1.1	0
3	Development of a 3D Crystal Plasticity Model that Tracks Dislocation Density Evolution. <i>Solid State Phenomena</i> , <b>2010</b> , 160, 57-62	0.4	
2	Correlation between complexity and mechanical recovery of metallic nanoarchitecture structures. <i>MRS Communications</i> , <b>2021</b> , 11, 510-516	2.7	
1	Composition influence on edge dislocation mobility in an FCC high-entropy alloy. <i>MRS Advances</i> , <b>2021</b> , 6, 1000-1005	0.7	