Dan Mordehai

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1688379/publications.pdf

Version: 2024-02-01

34	867	471509 17	477307 29
papers	citations	h-index	g-index

34	34	34	875
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Size effect in compression of single-crystal gold microparticles. Acta Materialia, 2011, 59, 5202-5215.	7.9	136
2	Introducing dislocation climb by bulk diffusion in discrete dislocation dynamics. Philosophical Magazine, 2008, 88, 899-925.	1.6	128
3	Nanoindentation size effect in single-crystal nanoparticles and thin films: A comparative experimental and simulation study. Acta Materialia, 2011, 59, 2309-2321.	7.9	92
4	Solidâ€“solid interface reconstruction at equilibrated Niâ€“Al2O3 interfaces. Acta Materialia, 2012, 60, 4359-4369.	7.9	58
5	Signature of dislocations and stacking faults of face-centred cubic nanocrystals in coherent X-ray diffraction patterns: a numerical study. Journal of Applied Crystallography, 2015, 48, 621-644.	4.5	38
6	Towards a universal size-dependent strength of face-centered cubic nanoparticles. Acta Materialia, 2016, 103, 433-441.	7.9	35
7	Effects of focused-ion-beam irradiation and prestraining on the mechanical properties of FCC Au microparticles on a sapphire substrate. Journal of Materials Research, 2011, 26, 1653-1661.	2.6	29
8	Pseudoelastic Deformation during Nanoscale Adhesive Contact Formation. Physical Review Letters, 2011, 107, 096101.	7.8	28
9	Nucleationâ€Controlled Plasticity of Metallic Nanowires and Nanoparticles. Advanced Materials, 2018, 30, e1706710.	21.0	27
10	Employing molecular dynamics to shed light on the microstructural origins of the Taylor-Quinney coefficient. Acta Materialia, 2021, 205, 116511.	7.9	27
11	Annihilation of edge dislocation loops via climb during nanoindentation. Acta Materialia, 2017, 127, 351-358.	7.9	22
12	Role of dislocation pile-ups in nucleation-controlled size-dependent strength of Fe nanowires. Acta Materialia, 2017, 136, 190-201.	7.9	22
13	Depinning-controlled plastic deformation during nanoindentation of BCC iron thin films and nanoparticles. Acta Materialia, 2015, 90, 370-379.	7.9	20
14	Cross-slip in face-centered cubic metals: a general Escaig stress-dependent activation energy line tension model. Philosophical Magazine, 2018, 98, 347-370.	1.6	20
15	Dislocation-nucleation-controlled deformation of Ni₃Al nanocubes in molecular dynamics simulations. Modelling and Simulation in Materials Science and Engineering, 2015, 23, 085004.	2.0	19
16	Cross-Split of Dislocations: An Athermal and Rapid Plasticity Mechanism. Scientific Reports, 2016, 6, 25966.	3.3	19
17	The Stress-Dependent Activation Parameters for Dislocation Nucleation in Molybdenum Nanoparticles. Scientific Reports, 2018, 8, 3915.	3.3	19
18	Enhanced annealing of the dislocation network under irradiation. Physical Review B, 2011, 84, .	3.2	17

#	Article	IF	Citations
19	Size-dependent elastic modulus of nanoporous Au nanopillars. Acta Materialia, 2020, 185, 441-452.	7.9	17
20	Shear relaxation behind the shock front in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mfenced open="ã€ˆ" close="ã€‰"><mml:mrow><mml:mn>1</mml:mn><mml:mspace width="0.25em" /><mml:mn>1</mml:mn><mml:mspace width="0.25em" /><mml:mn>0</mml:mn></mml:mrow></mml:mfenced></mml:mrow></mml:math> molybdenum â€“ From t…	3.0	14
21	Annealing of dislocation loops in dislocation dynamics simulations. IOP Conference Series: Materials Science and Engineering, 2009, 3, 012001.	0.6	13
22	A multiscale study of the size-effect in nanoindentation of Au nanoparticles. Computational Materials Science, 2019, 162, 47-59.	3.0	13
23	On the origin of the stress spike decay in the elastic precursor in shocked metals. Journal of Applied Physics, 2019, 126, .	2.5	11
24	Cross-slip in face centred cubic metals: a general full stress-field dependent activation energy line-tension model. Philosophical Magazine, 2019, 99, 1460-1480.	1.6	9
25	A dislocation-based dynamic strength model for tantalum across a large range of strain rates. Journal of Applied Physics, 2021, 129, .	2.5	9
26	A molecular dynamics-informed probabilistic cross-slip model in discrete dislocation dynamics. Scripta Materialia, 2021, 190, 7-11.	5.2	7
27	On the yielding and densification of nanoporous Au nanopillars in molecular dynamics simulations. Computational Materials Science, 2021, 191, 110307.	3.0	4
28	A Percolative Deformation Process Between Nanograins Promotes Dynamic Shear Localization. Materials Research Letters, 2015, 3, 76-81.	8.7	3
29	Climb via vacancy diffusion of edge dislocations in 2D dislocation microstructures. Philosophical Magazine, 2016, 96, 2779-2799.	1.6	3
30	A Multiple Site Type Nucleation Model and Its Application to the Probabilistic Strength of Pd Nanowires. Metals, 2022, 12, 280.	2.3	3
31	Atomically Informed Continuum Models for the Elastic Contact Properties of Hollow and Coated Rigid Cylinders at the Nanoscale. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	2
32	Size-dependent coupled longitudinalâ€“transverse vibration of five-fold twinned nanowires. Extreme Mechanics Letters, 2018, 23, 49-54.	4.1	2
33	Investigating Nanoscale Contact Using AFM-Based Indentation and Molecular Dynamics Simulations. Metals, 2022, 12, 489.	2.3	1
34	Relations between material properties and barriers for twin boundary motion in ferroic materials. Acta Materialia, 2019, 180, 24-34.	7.9	0