

Mao Liu

List of Publications by Year in descending order

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33
papers

561
citations

623188

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642321

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docs citations

34
times ranked

666
citing authors

#	ARTICLE	IF	CITATIONS
1	A combined experimental-numerical approach for determining mechanical properties of aluminum subjects to nanoindentation. <i>Scientific Reports</i> , 2015, 5, 15072.	1.6	43
2	Grain boundary induced deformation mechanisms in nanocrystalline Al by molecular dynamics simulation: From interatomic potential perspective. <i>Computational Materials Science</i> , 2019, 156, 421-433.	1.4	42
3	Microstructures and mechanical properties of Al-Li 2198-T8 alloys processed by two different severe plastic deformation methods: A comparative study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 681, 65-73.	2.6	41
4	Fabrication of ultra-thin nanostructured bimetallic foils by Accumulative Roll Bonding and Asymmetric Rolling. <i>Scientific Reports</i> , 2013, 3, 2373.	1.6	40
5	Controlled size and morphology, and phase transition of YF_3 : Yb^{3+} , Er^{3+} and YOF : Yb^{3+} , Er^{3+} nanocrystals for fine color tuning. <i>Journal of Materials Chemistry C</i> , 2016, 4, 331-339.	2.7	37
6	Molecular dynamics simulation and machine learning of mechanical response in non-equiatomic FeCrNiCoMn high-entropy alloy. <i>Journal of Materials Research and Technology</i> , 2021, 13, 2043-2054.	2.6	32
7	Crystal plasticity finite element method modelling of indentation size effect. <i>International Journal of Solids and Structures</i> , 2015, 54, 42-49.	1.3	31
8	Influence of cold rolling reduction on the deformation behaviour and crystallographic orientation development. <i>Computational Materials Science</i> , 2014, 81, 2-9.	1.4	30
9	Progress in Indentation Study of Materials via Both Experimental and Numerical Methods. <i>Crystals</i> , 2017, 7, 258.	1.0	30
10	Numerical comparison between Berkovich and conical nano-indentations: Mechanical behaviour and micro-texture evolution. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 619, 57-65.	2.6	26
11	A new insight into ductile fracture of ultrafine-grained Al-Mg alloys. <i>Scientific Reports</i> , 2015, 5, 9568.	1.6	24
12	Observation of upconversion white light and ultrabroad infrared emission in YbAG:Ln^{3+} ($\text{Ln} = \text{Nd, Sm, Tb, Er}$). <i>Applied Physics Express</i> , 2015, 8, 072602.	1.1	21
13	Influence of outer corner angle (OCA) on the plastic deformation and texture evolution in equal channel angular pressing. <i>Computational Materials Science</i> , 2014, 81, 79-88.	1.4	20
14	A crystal plasticity study of the effect of friction on the evolution of texture and mechanical behaviour in the nano-indentation of an aluminium single crystal. <i>Computational Materials Science</i> , 2014, 81, 30-38.	1.4	19
15	Crystal plasticity FEM study of nanoindentation behaviors of Cu bicrystals and Cu-Al bicrystals. <i>Journal of Materials Research</i> , 2015, 30, 2485-2499.	1.2	14
16	Effect of Cd-phosphonate complex on the self-assembly structure of colloidal nanorods. <i>Materials Letters</i> , 2016, 180, 85-88.	1.3	14
17	Explore the anisotropic indentation pile-up patterns of single-crystal coppers by crystal plasticity finite element modelling. <i>Materials Letters</i> , 2015, 161, 227-230.	1.3	13
18	Mechanical response and plastic deformation of coherent twin boundary with perfect and defective structures. <i>Mechanics of Materials</i> , 2020, 141, 103266.	1.7	10

#	ARTICLE	IF	CITATIONS
19	Indentation damage evaluation on metal-coated thin-films stacked structure. Journal of Materials Research, 2015, 30, 3071-3083.	1.2	9
20	Enhanced rare earth photoluminescence in inverse opal photonic crystals and its application for pH sensing. Nanotechnology, 2016, 27, 405202.	1.3	9
21	A combined experimental and modelling study of indentation damage test on thin-film stacked structures. Thin Solid Films, 2016, 615, 74-83.	0.8	8
22	Investigation of the size effect for photonic crystals. Nanotechnology, 2016, 27, 405703.	1.3	7
23	Indentation analysis of mechanical behaviour of torsion-processed single-crystal copper by crystal plasticity finite-element method modelling. Philosophical Magazine, 2016, 96, 261-273.	0.7	7
24	Investigation of the Anisotropic Mechanical Behaviors of Copper Single Crystals Through Nanoindentation Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2717-2725.	1.1	6
25	Three-dimensional quantification of texture heterogeneity in single-crystal aluminium subjected to equal channel angular pressing. Philosophical Magazine, 2017, 97, 799-819.	0.7	5
26	On the Influence of Grain Boundary Misorientation on the Severe Plastic Deformation of Aluminum Bicrystals: A Three-Dimensional Crystal Plasticity Finite Element Method Study. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2399-2412.	1.1	4
27	Crystal Plasticity Study of the Effect of the Initial Orientation on the Indentation Surface Profile Patterns and Microstructures of Aluminum Single Crystal. Steel Research International, 2013, 84, 1196-1202.	1.0	3
28	Modification of the contact surfaces for improving the puncture resistance of laminar structures. Scientific Reports, 2017, 7, 6615.	1.6	3
29	Investigation of work hardening behavior in multilayered steels architected by twinning induced plasticity steel and martensitic steel during uniaxial tension. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 811, 140996.	2.6	3
30	The Determination of Self Hardening Parameters of Twinning Induced Plasticity Steel via Crystal Plasticity Modeling. Journal of Computational and Theoretical Nanoscience, 2015, 12, 2523-2530.	0.4	2
31	Study of deformation behaviors of martensitic steel quenched at ultralow temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 785, 139399.	2.6	2
32	Deformation-activated recrystallization twin: New twinning path in pure aluminum enabled by cryogenic and rapid compression. IScience, 2022, 25, 104248.	1.9	1
33	On the Influence of Mesh Size during Finite Element Simulation of Equal Channel Angular Pressing. Materials Science Forum, 0, 773-774, 160-165.	0.3	0