Liang Zhang

List of Publications by Year
in descending order

33 papers	859 citations	394421 19 h-index	477307 29 g-index
33 all docs	33 docs citations	33 times ranked	629 citing authors

#	Article	IF	Citations
1	Study on the Hydrogen Embrittlement of Nanograined Materials with Different Grain Sizes by Atomistic Simulation. Materials, 2022, 15, 4589.	2.9	1
2	Prediction on Mechanical Properties of Non-Equiatomic High-Entropy Alloy by Atomistic Simulation and Machine Learning. Metals, 2021, 11, 922.	2.3	24
3	Molecular dynamics simulation and machine learning of mechanical response in non-equiatomic FeCrNiCoMn high-entropy alloy. Journal of Materials Research and Technology, 2021, 13, 2043-2054.	5.8	32
4	Understanding the Radiation Resistance Mechanisms of Nanocrystalline Metals from Atomistic Simulation. Metals, 2021, 11, 1875.	2.3	3
5	Mechanical response and plastic deformation of coherent twin boundary with perfect and defective structures. Mechanics of Materials, 2020, 141, 103266.	3.2	10
6	Inverse Hall-Petch relationship of high-entropy alloy by atomistic simulation. Materials Letters, 2020, 274, 128024.	2.6	60
7	Membrane-less Direct Formate Fuel Cell Using an Feâ€“N-Doped Bamboo Internode as the Binder-Free and Monolithic Air-Breathing Cathode. ACS Applied Materials & Interfaces, 2020, 12, 27095-27103.	8.0	13
8	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. Acta Materialia, 2019, 173, 206-224.	7.9	52
9	Grain boundary induced deformation mechanisms in nanocrystalline Al by molecular dynamics simulation: From interatomic potential perspective. Computational Materials Science, 2019, 156, 421-433.	3.0	42
10	Shear response of grain boundaries with metastable structures by molecular dynamics simulations. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 035008.	2.0	19
11	Deformation twinning and dislocation processes in nanotwinned copper by molecular dynamics simulations. Computational Materials Science, 2018, 142, 59-71.	3.0	21
12	Dynamic interaction between grain boundary and stacking fault tetrahedron. Scripta Materialia, 2018, 144, 78-83.	5.2	41
13	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary (Phys. Status Solidi) Tj ETQq1 1 0.784314 rgBT /Ov	1.5	0
14	Nonlinear elastic response of single crystal Cu under uniaxial loading by molecular dynamics study. Materials Letters, 2018, 227, 236-239.	2.6	24
15	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary. Physica Status Solidi (B): Basic Research, 2018, 255, 1800228.	1.5	3
16	The formation and destruction of stacking fault tetrahedron in fcc metals: A molecular dynamics study. Scripta Materialia, 2017, 136, 78-82.	5.2	38
17	Deformation mechanisms in nanotwinned copper by molecular dynamics simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 687, 343-351.	5.6	51
18	Influence of temperature and local structure on the shear-coupled grain boundary migration. Physica Status Solidi (B): Basic Research, 2017, 254, 1600477.	1.5	17

#	Article	IF	Citations
19	Stacking fault tetrahedron induced plasticity in copper single crystal. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 680, 27-38.	5.6	41
20	Evaluation of Mechanical Properties of Î£5(210)/[001] Tilt Grain Boundary with Self-Interstitial Atoms by Molecular Dynamics Simulation. Journal of Nanomaterials, 2017, 2017, 1-11.	2.7	6
21	Strengthening mechanisms and dislocation processes in <111> textured nanotwinned copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 676, 474-486.	5.6	20
22	Tension/compression asymmetry of grain boundaries with non-planar structure. Materials Research Express, 2016, 3, 085025.	1.6	4
23	Coupled grain boundary motion in aluminium: the effect of structural multiplicity. Scientific Reports, 2016, 6, 25427.	3.3	29
24	A review on atomistic simulation of grain boundary behaviors in face-centered cubic metals. Computational Materials Science, 2016, 118, 180-191.	3.0	78
25	A dual deformation mechanism of grain boundary at different stress stages. Materials Letters, 2016, 167, 278-283.	2.6	9
26	The shear response of copper bicrystals with Î£11 symmetric and asymmetric tilt grain boundaries by molecular dynamics simulation. Nanoscale, 2015, 7, 7224-7233.	5.6	50
27	Molecular dynamics simulation on generalized stacking fault energies of FCC metals under preloading stress. Chinese Physics B, 2015, 24, 088106.	1.4	10
28	Brittle versus ductile behaviour of nanotwinned copper: A molecular dynamics study. Acta Materialia, 2015, 89, 1-13.	7.9	42
29	Brittle versus ductile fracture behaviour in nanotwinned FCC crystals. Materials Letters, 2015, 152, 65-67.	2.6	13
30	Molecular dynamics study on the grain boundary dislocation source in nanocrystalline copper under tensile loading. Materials Research Express, 2015, 2, 035009.	1.6	26
31	Molecular dynamics study on the atomic mechanisms of coupling motion of [0 0 1] symmetric tilt grain boundaries in copper bicrystal. Materials Research Express, 2014, 1, 015019.	1.6	19
32	Molecular Dynamics Simulation on Î£5 Grain Boundaries of Copper Bicrystal under Tensile and Shear Deformation. Materials Research Society Symposia Proceedings, 2014, 1651, 1.	0.1	2
33	Atomistic Simulation of Tensile Deformation Behavior of â˜5 Tilt Grain Boundaries in Copper Bicrystal. Scientific Reports, 2014, 4, 5919.	3.3	59