

# Liang Zhang

## List of Publications by Year in descending order

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33  
papers

859  
citations

394286  
19  
h-index

477173  
29  
g-index

33  
all docs

33  
docs citations

33  
times ranked

629  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on atomistic simulation of grain boundary behaviors in face-centered cubic metals. <i>Computational Materials Science</i> , 2016, 118, 180-191.	1.4	78
2	Inverse Hall-Petch relationship of high-entropy alloy by atomistic simulation. <i>Materials Letters</i> , 2020, 274, 128024.	1.3	60
3	Atomistic Simulation of Tensile Deformation Behavior of $\sim 5^\circ$ Tilt Grain Boundaries in Copper Bicrystal. <i>Scientific Reports</i> , 2014, 4, 5919.	1.6	59
4	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. <i>Acta Materialia</i> , 2019, 173, 206-224.	3.8	52
5	Deformation mechanisms in nanotwinned copper by molecular dynamics simulation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 687, 343-351.	2.6	51
6	The shear response of copper bicrystals with $\{111\}$ symmetric and asymmetric tilt grain boundaries by molecular dynamics simulation. <i>Nanoscale</i> , 2015, 7, 7224-7233.	2.8	50
7	Brittle versus ductile behaviour of nanotwinned copper: A molecular dynamics study. <i>Acta Materialia</i> , 2015, 89, 1-13.	3.8	42
8	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
9	Stacking fault tetrahedron induced plasticity in copper single crystal. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 680, 27-38.	2.6	41
10	Dynamic interaction between grain boundary and stacking fault tetrahedron. <i>Scripta Materialia</i> , 2018, 144, 78-83.	2.6	41
11	The formation and destruction of stacking fault tetrahedron in fcc metals: A molecular dynamics study. <i>Scripta Materialia</i> , 2017, 136, 78-82.	2.6	38
12	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
13	Coupled grain boundary motion in aluminium: the effect of structural multiplicity. <i>Scientific Reports</i> , 2016, 6, 25427.	1.6	29
14	Molecular dynamics study on the grain boundary dislocation source in nanocrystalline copper under tensile loading. <i>Materials Research Express</i> , 2015, 2, 035009.	0.8	26
15	Nonlinear elastic response of single crystal Cu under uniaxial loading by molecular dynamics study. <i>Materials Letters</i> , 2018, 227, 236-239.	1.3	24
16	Prediction on Mechanical Properties of Non-Equiatomic High-Entropy Alloy by Atomistic Simulation and Machine Learning. <i>Metals</i> , 2021, 11, 922.	1.0	24
17	Deformation twinning and dislocation processes in nanotwinned copper by molecular dynamics simulations. <i>Computational Materials Science</i> , 2018, 142, 59-71.	1.4	21
18	Strengthening mechanisms and dislocation processes in $\{111\}$ textured nanotwinned copper. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 676, 474-486.	2.6	20

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19	Molecular dynamics study on the atomic mechanisms of coupling motion of [0 0 1] symmetric tilt grain boundaries in copper bicrystal. <i>Materials Research Express</i> , 2014, 1, 015019.	0.8	19
20	Shear response of grain boundaries with metastable structures by molecular dynamics simulations. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2018, 26, 035008.	0.8	19
21	Influence of temperature and local structure on the shear-coupled grain boundary migration. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600477.	0.7	17
22	Brittle versus ductile fracture behaviour in nanotwinned FCC crystals. <i>Materials Letters</i> , 2015, 152, 65-67.	1.3	13
23	Membrane-less Direct Formate Fuel Cell Using an Fe-N-Doped Bamboo Internode as the Binder-Free and Monolithic Air-Breathing Cathode. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 27095-27103.	4.0	13
24	Molecular dynamics simulation on generalized stacking fault energies of FCC metals under preloading stress. <i>Chinese Physics B</i> , 2015, 24, 088106.	0.7	10
25	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
26	A dual deformation mechanism of grain boundary at different stress stages. <i>Materials Letters</i> , 2016, 167, 278-283.	1.3	9
27	Evaluation of Mechanical Properties of $\{111\}$ Tilt Grain Boundary with Self-Interstitial Atoms by Molecular Dynamics Simulation. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-11.	1.5	6
28	Tension/compression asymmetry of grain boundaries with non-planar structure. <i>Materials Research Express</i> , 2016, 3, 085025.	0.8	4
29	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1800228.	0.7	3
30	Understanding the Radiation Resistance Mechanisms of Nanocrystalline Metals from Atomistic Simulation. <i>Metals</i> , 2021, 11, 1875.	1.0	3
31	Molecular Dynamics Simulation on $\{111\}$ Grain Boundaries of Copper Bicrystal under Tensile and Shear Deformation. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1651, 1.	0.1	2
32	Study on the Hydrogen Embrittlement of Nanograined Materials with Different Grain Sizes by Atomistic Simulation. <i>Materials</i> , 2022, 15, 4589.	1.3	1
33	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary (Phys. Status Solidi) Tj ETQq1 1 0.784314rgBT /Over	0.7	0