Mo Li

List of Publications by Year
in descending order

50 papers	1,531 citations	430874 18 h-index	302126 39 g-index
50 all docs	50 docs citations	50 times ranked	1761 citing authors

#	Article	IF	Citations
1	High Dielectric Performance of Polymer Composite Films Induced by a Percolating Interparticle Barrier Layer. Advanced Materials, 2007, 19, 1418-1422.	21.0	373
2	Calculation of solid-liquid interfacial free energy: A classical nucleation theory based approach. Journal of Chemical Physics, 2006, 124, 124707.	3.0	158
3	<i>Ab initio</i>calculations of second-, third-, and fourth-order elastic constants for single crystals. Physical Review B, 2009, 79, .	3.2	117
4	Instability of metastable solid solutions and the crystal to glass transition. Physical Review Letters, 1993, 70, 1120-1123.	7.8	78
5	Enhanced Initial Permeability and Dielectric Constant in a Double- Percolating Ni0.3Zn0.7Fe1.95O4-Ni-Polymer Composite. Advanced Functional Materials, 2005, 15, 1100-1103.	14.9	68
6	Topological and statistical properties of a constrained Voronoi tessellation. Philosophical Magazine, 2009, 89, 349-374.	1.6	62
7	Assessing the critical sizes for shear band formation in metallic glasses from molecular dynamics simulation. Applied Physics Letters, 2007, 91, .	3.3	61
8	Ring-diffusion mediated homogeneous melting in the superheating regime. Physical Review B, 2008, 77, .	3.2	57
9	Free Volume Evolution in Metallic Glasses Subjected to Mechanical Deformation. Materials Transactions, 2007, 48, 1816-1821.	1.2	54
10	Toughen and harden metallic glass through designing statistical heterogeneity. Scripta Materialia, 2016, 113, 10-13.	5.2	45
11	Two-zone heterogeneous structure within shear bands of a bulk metallic glass. Applied Physics Letters, 2013, 103, .	3.3	43
12	Correlation between corrosion performance and surface wettability in ZrTiCuNiBe bulk metallic glasses. Applied Physics Letters, 2010, 96, .	3.3	33
13	Understanding colossal barocaloric effects in plastic crystals. Nature Communications, 2020, 11, 4190.	12.8	30
14	A constitutive theory and modeling on deviation of shear band inclination angles in bulk metallic glasses. Journal of Materials Research, 2009, 24, 2688-2696.	2.6	27
15	Mesoscopic theory of shear banding and crack propagation in metallic glasses. Physical Review B, 2009, 80, .	3.2	25
16	Rethinking Lindemann criterion: A molecular dynamics simulation of surface mediated melting. Acta Materialia, 2020, 193, 280-290.	7.9	24
17	Anisotropic crystalâ€“melt interfacial energy and stiffness of aluminum. Journal of Materials Research, 2015, 30, 1827-1835.	2.6	21
18	Interdiffusion cross crystal-amorphous interface: An atomistic simulation. Acta Materialia, 2016, 112, 378-389.	7.9	21

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19	Chemical segregation in metallic glass nanowires. Journal of Chemical Physics, 2014, 141, 194701.	3.0	16
20	Key factors affecting mechanical behavior of metallic glass nanowires. Scientific Reports, 2017, 7, 41365.	3.3	16
21	Changes in short- and medium-range order in metallic liquids during undercooling. MRS Bulletin, 2020, 45, 943-950.	3.5	14
22	Assessing the shear band velocity in metallic glasses using a coupled thermo-mechanical model. Philosophical Magazine Letters, 2011, 91, 705-712.	1.2	13
23	Highly choreographed atomic motion and mechanism of interface amorphization. Acta Materialia, 2017, 125, 69-80.	7.9	13
24	Atomistic simulation of a NiZr model metallic glass under hydrostatic pressure. Applied Physics Letters, 2009, 94, 051901.	3.3	12
25	Equation of state and topological transitions in amorphous solids under hydrostatic compression. Journal of Applied Physics, 2010, 108, 113510.	2.5	11
26	Symmetry breaking and other nonlinear elastic responses of metallic glasses subject to uniaxial loading. Journal of Applied Physics, 2013, 113, 213515.	2.5	11
27	Processing dependence of mechanical properties of metallic glass nanowires. Applied Physics Letters, 2015, 106, .	3.3	11
28	Melting of bcc crystal Ta without the Lindemann criterion. Journal of Physics Condensed Matter, 2019, 31, 095402.	1.8	11
29	From brittle to ductile transition: The influence of oxygen on mechanical properties of metallic glasses. Journal of Alloys and Compounds, 2021, 876, 160023.	5.5	11
30	Crystalâ€“melt coexistence in fcc and bcc metals: a molecular-dynamics study of kinetic coefficients. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 065016.	2.0	10
31	Equation of state of liquid Indium under high pressure. AIP Advances, 2015, 5, .	1.3	8
32	Thermodynamic properties of liquid sodium under high pressure. AIP Advances, 2017, 7, .	1.3	7
33	Electronic and transport properties of zigzag phosphorene nanoribbons with nonmetallic atom terminations. RSC Advances, 2020, 10, 1400-1409.	3.6	7
34	Crystal-melt coexistence in FCC and BCC metals: A molecular-dynamics study of crystal-melt interface free energies. Materialia, 2021, 15, 100962.	2.7	7
35	A theory for polymorphic melting in binary solid solutions. Journal of Materials Research, 2011, 26, 997-1005.	2.6	6
36	Local structural mechanism for frozen-in dynamics in metallic glasses. Physical Review B, 2018, 97, .	3.2	6

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37	Regularities of liquid potassium at different temperatures. AIP Advances, 2019, 9, .	1.3	6
38	Development of one-dimensional periodic packing in metallic glass spheres. Scripta Materialia, 2020, 177, 132-136.	5.2	6
39	Hydrostatic pressure effect on metallic glasses: A theoretical prediction. Journal of Applied Physics, 2019, 126, 145901.	2.5	5
40	Effects of oxygen on local atomic order and diffusion properties in Al-Ni glass-forming liquids. Journal of Alloys and Compounds, 2021, 881, 160521.	5.5	5
41	Localization and delocationzation of surface disordering in surface mediated melting. Physical Review B, 2021, 104, .	3.2	5
42	Configurationally Frozen Defects, Random Strains and Landau Theory of Crystals to Glass Transition. Materials Science Forum, 1995, 179-181, 855-0.	0.3	4
43	Crystalâ€“melt interface kinetic behaviors of iron. AIP Advances, 2021, 11, 035241.	1.3	4
44	Nonlinearity acoustic parameters from equation of state of liquid sodium under pressure. AIP Advances, 2017, 7, 095322.	1.3	3
45	A mean-field model for amorphization in crystalline solid solutions. Journal of Applied Physics, 2011, 109, 103507.	2.5	2
46	Structural characteristics in deformation mechanism transformation in nanoscale metallic glasses. Journal of Physics Condensed Matter, 2019, 31, 455401.	1.8	1
47	Spontaneous solid-solid interface melting driven by concentration gradient. Journal of Chemical Physics, 2019, 151, 074501.	3.0	1
48	Pure shear deformation and its induced mechanical responses in metallic glasses. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190486.	2.1	1
49	Linear isotherm regularities of liquid gallium under pressure. AIP Advances, 2021, 11, 125204.	1.3	1
50	From deformation localization to melting and chemical segregation in metallic glass nanoparticles under high strain rate. Journal of Applied Physics, 2020, 128, 115105.	2.5	0