Xuyang Zhou

List of Publications by Year
in descending order

38 papers	841 citations	567144 15 h-index	501076 28 g-index
41 all docs	41 docs citations	41 times ranked	741 citing authors

#	Article	IF	Citations
1	Mechanisms, models and methods of vapor deposition. Progress in Materials Science, 2001, 46, 329-377.	16.0	226
2	Ultrastrong and Ductile Soft Magnetic Highâ€Entropy Alloys via Coherent Ordered Nanoprecipitates. Advanced Materials, 2021, 33, e2102139.	11.1	69
3	Grain Boundary Specific Segregation in Nanocrystalline Fe(Cr). Scientific Reports, 2016, 6, 34642.	1.6	56
4	Beyond Solid Solution Highâ€Entropy Alloys: Tailoring Magnetic Properties via Spinodal Decomposition. Advanced Functional Materials, 2021, 31, 2007668.	7.8	51
5	A Novel Softâ€Magnetic B2â€Based Multiprincipalâ€Element Alloy with a Uniform Distribution of Coherent Bodyâ€Centeredâ€Cubic Nanoprecipitates. Advanced Materials, 2021, 33, e2006723.	11.1	46
6	On the atomic solute diffusional mechanisms during compressive creep deformation of a Co-Al-W-Ta single crystal superalloy. Acta Materialia, 2020, 184, 86-99.	3.8	45
7	Role of grain boundary character and its evolution on interfacial solute segregation behavior in nanocrystalline Ni-P. Acta Materialia, 2020, 190, 113-123.	3.8	40
8	A molecular dynamics study on stress generation during thin film growth. Applied Surface Science, 2019, 469, 537-552.	3.1	30
9	Spinodal Decomposition in Nanocrystalline Alloys. Acta Materialia, 2021, 215, 117054.	3.8	29
10	Composition-dependent apparent activation-energy and sluggish grain-growth in high entropy alloys. Materials Research Letters, 2019, 7, 267-274.	4.1	25
11	The hidden structure dependence of the chemical life of dislocations. Science Advances, 2021, 7, .	4.7	24
12	Aluminum depletion induced by co-segregation of carbon and boron in a bcc-iron grain boundary. Nature Communications, 2021, 12, 6008.	5.8	24
13	Under-stoichiometric cementite in decomposing binary Fe-C pearlite exposed to rolling contact fatigue. Acta Materialia, 2021, 216, 117144.	3.8	21
14	Enhanced mechanical properties of pure copper with a mixture microstructure of nanocrystalline and ultrafine grains. Materials Letters, 2016, 185, 546-549.	1.3	17
15	Influence of Fe(Cr) miscibility on thin film grain size and stress. Thin Solid Films, 2016, 612, 29-35.	0.8	16
16	Manipulation of solute partitioning mechanisms for nanocrystalline stability. Acta Materialia, 2021, 208, 116662.	3.8	13
17	Understanding Alkali Contamination in Colloidal Nanomaterials to Unlock Grain Boundary Impurity Engineering. Journal of the American Chemical Society, 2022, 144, 987-994.	6.6	12
18	Influence and comparison of contaminate partitioning on nanocrystalline stability in sputter-deposited and ball-milled Cuâ€"Zr alloys. Journal of Materials Science, 2020, 55, 16758-16779.	1.7	11

#	Article	IF	Citations
19	Convolutional neural network-assisted recognition of nanoscale L12 ordered structures in face-centred cubic alloys. Npj Computational Materials, 2021, 7, .	3.5	11
20	Interrelationship of <i>in situ</i> growth stress evolution and phase transformations in Ti/W multilayered thin films. Journal of Applied Physics, 2016, 119, .	1.1	9
21	Laser shocking of nanocrystalline materials: Revealing the extreme pressure effects on the microstructural stability and deformation response. Applied Physics Letters, 2020, 116, .	1.5	9
22	Revealing in-plane grain boundary composition features through machine learning from atom probe tomography data. Acta Materialia, 2022, 226, 117633.	3.8	9
23	In situ TEM observations of initial oxidation behavior in Fe-rich Fe-Cr alloys. Surface and Coatings Technology, 2019, 357, 332-338.	2.2	7
24	Fabrication and its characteristics of hard coating Ti-Al-N system prepared by DC magnetron sputtering. Rare Metals, 2012, 31, 178-182.	3.6	5
25	Influence of solute partitioning on the microstructure and growth stresses in nanocrystalline Fe(Cr) thin films. Thin Solid Films, 2018, 648, 83-93.	0.8	5
26	Hierarchical phase separation behavior in a Ni-Si-Fe alloy. Acta Materialia, 2020, 195, 327-340.	3.8	5
27	Amorphous-based Bâ€“Câ€“Mg thin films obtained through a composition design using cluster-plus-glue-atom model. Surface and Coatings Technology, 2014, 242, 14-19.	2.2	4
28	Charge-State Field Evaporation Behavior in Cu(V) Nanocrystalline Alloys. Microscopy and Microanalysis, 2019, 25, 501-510.	0.2	4
29	The influence of alloying interactions on thin film growth stresses. Applied Surface Science, 2019, 463, 545-555.	3.1	3
30	Stable microstructure in a nanocrystalline copperâ€“tantalum alloy during shock loading. Communications Materials, 2020, 1, .	2.9	3
31	Reconstructing dual-phase nanometer scale grains within a pearlitic steel tip in 3D through 4D-scanning precession electron diffraction tomography and automated crystal orientation mapping. Ultramicroscopy, 2022, 238, 113536.	0.8	3
32	Phase and microstructures in sputter deposited nanocrystalline Feâ€“Cr thin films. Materialia, 2018, 3, 295-303.	1.3	2
33	High permittivity behavior and microstructure in a two-phase barium-silicon titanate. Materialia, 2018, 1, 46-51.	1.3	2
34	Reconstructing grains in 3D through 4D Scanning Precession Electron Diffraction. Microscopy and Microanalysis, 2021, 27, 2494-2495.	0.2	2
35	A Comparative Investigation Between Transmission Kikuchi Diffraction (TKD) and Precession Electron Diffraction (PED). Microscopy and Microanalysis, 2020, 26, 270-271.	0.2	1
36	Linking Experimental Solute Segregation Specificity in Nanocrystalline Alloys to Computational Predictions. Microscopy and Microanalysis, 2017, 23, 704-705.	0.2	0

#	Article	IF	Citations
37	Complications of using thin film geometries for nanocrystalline thermal stability investigations. Journal of Materials Research, 2020, 35, 2087-2097.	1.2	0
38	Comparison of Solute Partitioning between Nanocrystalline Sputtered Thin Films and Ball Milled Cu-Zr. SSRN Electronic Journal, 0, , .	0.4	0