Fei Wang

List of Publications by Year
in descending order

82 papers	1,557 citations	236925 25 h-index	345221 36 g-index
82 all docs	82 docs citations	82 times ranked	1509 citing authors

#	Article	IF	Citations
1	Mechanical properties of titania prepared by plasma electrolytic oxidation at different voltages. Surface and Coatings Technology, 2007, 201, 5168-5171.	4.8	73
2	Aligned-graphene composites: a review. Journal of Materials Science, 2019, 54, 36-61.	3.7	67
3	Dependence of strain rate sensitivity upon deformed microstructures in nanocrystalline Cu. Acta Materialia, 2010, 58, 5196-5205.	7.9	66
4	Investigation into nanoscratching mechanical performance of metallic glass multilayers with improved nano-tribological properties. Journal of Alloys and Compounds, 2019, 776, 447-459.	5.5	57
5	Identifying the significance of Sn addition on the tribological performance of Ti-based bulk metallic glass composites. Journal of Alloys and Compounds, 2019, 780, 671-679.	5.5	55
6	Ultra-strong nanostructured CrMnFeCoNi high entropy alloys. Materials and Design, 2020, 194, 108895.	7.0	55
7	The mechanical behavior of nanoscale metallic multilayers: A survey. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 319-337.	3.4	51
8	Nanoscale creep deformation in Zr-based metallic glass. Intermetallics, 2013, 38, 156-160.	3.9	45
9	Grain size dependent strain rate sensitivity in nanocrystalline body-centered cubic metal thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 608, 184-189.	5.6	45
10	Plastic deformation behaviors of amorphous-Cu50Zr50/crystalline-Cu nanolaminated structures by molecular dynamics simulations. Journal of Alloys and Compounds, 2017, 693, 285-290.	5.5	44
11	Graphene-boundary strengthening mechanism in Cu/graphene nanocomposites: A molecular dynamics simulation. Materials and Design, 2020, 190, 108555.	7.0	41
12	Plastic Deformation Modes of CuZr/Cu Multilayers. Scientific Reports, 2016, 6, 23306.	3.3	38
13	Time dependent plasticity at real nanoscale deformation. Applied Physics Letters, 2007, 90, 161921.	3.3	37
14	Atomistic study of fundamental character and motion of dislocations in intermetallic Al2Cu. International Journal of Plasticity, 2016, 87, 100-113.	8.8	37
15	An investigation of nanoindentation creep in polycrystalline Cu thin film. Materials Letters, 2004, 58, 2345-2349.	2.6	36
16	The hardness and related deformation mechanisms in nanoscale crystallineâ€“amorphous multilayers. Thin Solid Films, 2015, 584, 270-276.	1.8	36
17	Grain and interface boundaries governed strengthening mechanisms in metallic multilayers. Journal of Alloys and Compounds, 2017, 698, 906-912.	5.5	34
18	Fivefold annealing twin in nanocrystalline Cu. Applied Physics Letters, 2009, 95, 203101.	3.3	32

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19	Shear banding deformation in Cu/Ta nano-multilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7290-7294.	5.6	31
20	Strain rate sensitivity of Cu/Ta multilayered films: Comparison between grain boundary and heterophase interface. Scripta Materialia, 2016, 111, 123-126.	5.2	31
21	Strain rate sensitivity of nanoindentation creep in polycrystalline Al film on Silicon substrate. Surface and Coatings Technology, 2007, 201, 5216-5218.	4.8	30
22	Structure-dependent size effects in CuTa/Cu nanolaminates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 658, 381-388.	5.6	30
23	Effects of interfacial properties on the ductility of polymer-supported metal films for flexible electronics. International Journal of Solids and Structures, 2010, 47, 1830-1837.	2.7	29
24	Activation volume and strain rate sensitivity in plastic deformation of nanocrystalline Ti. Surface and Coatings Technology, 2013, 228, S254-S256.	4.8	29
25	On the role of weak interface in crack blunting process in nanoscale layered composites. Applied Surface Science, 2018, 433, 957-962.	6.1	26
26	Depth dependent strain rate sensitivity and inverse indentation size effect of hardness in body-centered cubic nanocrystalline metals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 615, 87-91.	5.6	25
27	Clarification on shear transformation zone size and its correlation with plasticity for Zr-based bulk metallic glass in different structural states. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 349-355.	5.6	25
28	Improving the crack resistance and fracture toughness of Cu/Ru multilayer thin films via tailoring the individual layer thickness. Journal of Alloys and Compounds, 2018, 742, 45-53.	5.5	25
29	Structural inhomogeneity and strain rate dependent indentation size effect in Zr-based metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 373-378.	5.6	24
30	Suppression of annealing-induced embrittlement in bulk metallic glass by surface crystalline coating. Materials and Design, 2016, 109, 179-185.	7.0	23
31	Indentation size and loading strain rate dependent creep deformation of nanocrystalline Mo. Thin Solid Films, 2018, 653, 365-370.	1.8	23
32	Rejuvenation saturation upon cyclic elastic loading in metallic glass. Computational Materials Science, 2019, 166, 318-325.	3.0	23
33	Solid solution effects on hardness and strain rate sensitivity of nanocrystalline NiFe alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 676, 501-505.	5.6	21
34	Enhanced hardness via interface alloying in nanoscale Cu/AlÂmultilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 726, 274-281.	5.6	20
35	Enhanced irradiation resistance of amorphous alloys by introducing amorphous/amorphous interfaces. Intermetallics, 2019, 107, 39-46.	3.9	19
36	Dislocations interaction induced structural instability in intermetallic Al2Cu. Npj Computational Materials, 2017, 3, .	8.7	18

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37	Surface-effect territory in small volume creep deformation. Journal of Materials Research, 2009, 24, 3277-3285.	2.6	17
38	Strain rate sensitivity of unequal grained nano-multilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5908-5913.	5.6	16
39	Length-scale-dependent deformation mechanism of Cu/X (X=Ru, W) multilayer thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 206-214.	5.6	16
40	Intrinsic size effect of CuTa/Cu nanolaminates with unequal modulation ratios. Scripta Materialia, 2017, 130, 100-104.	5.2	13
41	Strain rate sensitivity and related plastic deformation mechanism transition in nanoscale Ag/W multilayers. Thin Solid Films, 2014, 571, 253-259.	1.8	12
42	Strengthening mechanism of super-hard nanoscale Cu/Al multilayers with negative enthalpy of mixing. APL Materials, 2016, 4, .	5.1	12
43	Effects of Cu layers on the deformation behavior of CuTa/Cu multilayer thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 649, 9-17.	5.6	11
44	Unusual strain rate sensitivity of nanoscale amorphous CuZr/crystalline Cu multilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 84-89.	5.6	11
45	Superior anticorrosion performance of crystal-amorphous FeMnCoCrNi high-entropy alloy. Scripta Materialia, 2022, 210, 114454.	5.2	11
46	Size dependent hidden serration behaviors of shear banding in metallic glass thin films. Journal of Non-Crystalline Solids, 2020, 534, 119953.	3.1	10
47	Effects of size and amorphous layer structure on the strength and plasticity of Cu/CuZr nanolaminates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 738, 219-228.	5.6	9
48	Free volume gradient effect on shear banding behavior in CuZr/CuZr multilayers. Thin Solid Films, 2018, 666, 48-53.	1.8	7
49	Irradiation-induced homogeneous plasticity in amorphous/amorphous nanolaminates. Journal of Materials Science and Technology, 2020, 57, 70-77.	10.7	7
50	The correlation between Î² relaxation and shear transformation zone in LaNiAl bulk metallic glasses: The effect of cryogenic thermal cycling treatment. Journal of Alloys and Compounds, 2021, 865, 158993.	5.5	7
51	Length scale dependent plasticity of amorphous/amorphous NiNb/ZrCuNiALSI nanolaminates. Journal of Non-Crystalline Solids, 2020, 535, 119996.	3.1	7
52	Shear banding behavior in nanoscale Al/W multilayers. Surface and Coatings Technology, 2013, 228, S593-S596.	4.8	6
53	Unusual annealing effects on hardness and strain rate sensitivity of nanocrystalline Nb. Thin Solid Films, 2018, 645, 146-153.	1.8	6
54	Crystalline organization of nacre and crossed lamellar architecture of seashells and their influences in mechanical properties. Materialia, 2019, 8, 100476.	2.7	6

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55	Extracting yield strength and strain-hardening exponent of metals with a double-angle indenter. Journal of Materials Research, 2009, 24, 1674-1682.	2.6	5
56	Altering strength and plastic deformation behavior via alloying and laminated structure in nanocrystalline metals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 640, 24-32.	5.6	5
57	Hillock growth in CuZr metallic glass. Thin Solid Films, 2015, 589, 681-685.	1.8	5
58	A new deformation mechanism of amorphous/amorphous laminates at deep nanoscale. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 809, 140923.	5.6	5
59	The correlation between structural characteristics and plasticity mediated by shear transformation zone size in amorphous alloys. Intermetallics, 2022, 143, 107496.	3.9	5
60	Strain Rate Dependent Shear Banding Deformation in Al/W Nanomultilayers. Integrated Ferroelectrics, 2013, 146, 168-176.	0.7	4
61	The effects of thin coatings on the mechanical properties and resistance to annealing-induced embrittlement of bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 692, 67-74.	5.6	4
62	Excellent work-hardening in ZrCu/NiNb amorphous/amorphous nanolaminates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142277.	5.6	4
63	Hardening and toughening effects of intermediate nanosized structures in a confined amorphous alloy film. Journal of Materials Science and Technology, 2022, 118, 44-53.	10.7	4
64	Measurement of yield strength of thin metal film. Journal of Materials Science, 2004, 39, 3089-3094.	3.7	3
65	Microstructure and Flow Stress of Nanoscale Cu/Nb Multilayers. Journal of Nanomaterials, 2013, 2013, 1-8.	2.7	3
66	Effects of Free Surface and Heterogeneous Residual Internal Stress on Stress-Driven Grain Growth in Nanocrystalline Metals. Journal of Nanomaterials, 2013, 2013, 1-5.	2.7	3
67	Î²-relaxation related bright bands in thin film metallic glasses: Localized percolation of flow units captured via transmission electron microscope. Applied Physics Letters, 2016, 109, 261903.	3.3	3
68	Size-dependent hardness and tensile plasticity ofÂTa-Zr 61 Cu 17.5 Ni 10 Al l7.5 Si 4 nanolaminates. Journal of Alloys and Compounds, 2017, 707, 321-326.	5.5	3
69	Unusual high strain rate sensitivity of amorphous/crystalline NiW composites. Materials Letters, 2019, 248, 189-192.	2.6	3
70	Phase transformation-induced strengthening and multistage strain hardening in double-gradient-structured high-entropy alloys. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	3
71	Interface-Related Shear Banding Deformation of Amorphous/Crystalline CuZr/Cu Nanolaminates by Molecular Dynamics Simulations. Materials Transactions, 2018, 59, 230-236.	1.2	2
72	Reversible switching of wettability based on shape memory effect. Materials Letters, 2021, 301, 130270.	2.6	2

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73	Ductility of copper films on sandblasting polyimide substrates. Science China Technological Sciences, 2010, 53, 2215-2221.	4.0	1
74	Low-Temperature Annealing Induced Amorphization in Nanocrystalline NiW Alloy Films. Journal of Nanomaterials, 2013, 2013, 1-6.	2.7	1
75	Structure Transformation and Coherent Interface in Large Lattice-Mismatched Nanoscale Multilayers. Journal of Nanomaterials, 2013, 2013, 1-6.	2.7	1
76	Indentation depth dependence of nanoscale Al/W multilayers on strain rate sensitivity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 767, 138438.	5.6	1
77	Achieving pronounced Î²-relaxations and improved plasticity in CuZr metallic glass. Journal of Alloys and Compounds, 2021, 850, 156774.	5.5	1
78	Dislocation re-emission induced staged work hardening in graphene-nanotwin reinforced Cu: A molecular dynamics simulation study. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2022, 236, 989-998.	1.1	1
79	A New Method for Measuring Residual Stress Relaxation during Nanoindentation. Materials Science Forum, 2005, 490-491, 213-217.	0.3	0
80	Size effects of superelasticity in nanocrystalline NiTi shape memory alloy. , 2010, , .		0
81	Corrigendum to â€œLength-scale-dependent deformation behavior of fcc/hcp Cu/Ru multilayer thin filmsâ€•[Mater. Sci. Eng. A 664 (2016) 206â€“214]. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 667, 232.	5.6	0
82	The relationship between grain size and creep deformation of nanocrystalline body-centered cubic metals. Thin Solid Films, 2020, 704, 137990.	1.8	0