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List of Publications by Citations

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74
papers

3,363
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30
h-index

57
g-index

75
ext. papers

3,795
ext. citations

7.8
avg, IF

5.22
L-index

#	Paper	IF	Citations
74	The role of surface oxygen in the growth of large single-crystal graphene on copper. <i>Science</i> , 2013 , 342, 720-3	33.3	868
73	Mechanical properties of highly textured Cu/Ni multilayers. <i>Acta Materialia</i> , 2011 , 59, 1924-1933	8.4	172
72	Removal of stacking-fault tetrahedra by twin boundaries in nanotwinned metals. <i>Nature Communications</i> , 2013 , 4, 1377	17.4	136
71	Radiation damage in helium ion irradiated nanocrystalline Fe. <i>Journal of Nuclear Materials</i> , 2012 , 425, 140-146	3.3	129
70	Length scale-dependent deformation behavior of nanolayered Cu/Zr micropillars. <i>Acta Materialia</i> , 2012 , 60, 1610-1622	8.4	99
69	Stacking fault and partial dislocation dominated strengthening mechanisms in highly textured Cu/Co multilayers. <i>International Journal of Plasticity</i> , 2013 , 49, 152-163	7.6	91
68	Microstructure and strengthening mechanisms in Cu/Fe multilayers. <i>Acta Materialia</i> , 2012 , 60, 6312-6328	8.4	89
67	In situ nanoindentation study on plasticity and work hardening in aluminium with incoherent twin boundaries. <i>Nature Communications</i> , 2014 , 5, 4864	17.4	81
66	Damage-tolerant nanotwinned metals with nanovoids under radiation environments. <i>Nature Communications</i> , 2015 , 6, 7036	17.4	79
65	Mechanical properties of crystalline Cu/Zr and crystal/amorphous Cu/Cu ₂ Zr multilayers. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 552, 392-398	5.3	77
64	Enhanced radiation tolerance of ultrafine grained Fe ₈₀ Cr ₂₀ Ni alloy. <i>Journal of Nuclear Materials</i> , 2012 , 420, 235-240	3.3	68
63	Formation Mechanisms of High-density Growth Twins in Aluminum with High Stacking-Fault Energy. <i>Materials Research Letters</i> , 2013 , 1, 51-60	7.4	67
62	Metal-graphene interfaces in epitaxial and bulk systems: A review. <i>Progress in Materials Science</i> , 2020 , 110, 100652	42.2	62
61	Unusual size-dependent strengthening mechanisms in helium ion-irradiated immiscible coherent Cu/Co nanolayers. <i>Acta Materialia</i> , 2015 , 84, 393-404	8.4	61
60	Giant linear strain gradient with extremely low elastic energy in a perovskite nanostructure array. <i>Nature Communications</i> , 2017 , 8, 15994	17.4	61
59	High-Strength Nanotwinned Al Alloys with 9R Phase. <i>Advanced Materials</i> , 2018 , 30, 1704629	24	60
58	Experimentally quantifying critical stresses associated with basal slip and twinning in magnesium using micropillars. <i>Acta Materialia</i> , 2017 , 135, 411-421	8.4	59

57	Comparisons of radiation damage in He ion and proton irradiated immiscible Ag/Ni nanolayers. <i>Journal of Nuclear Materials</i> , 2013 , 440, 310-318	3.3	58
56	Interface structures and twinning mechanisms of twins in hexagonal metals. <i>Materials Research Letters</i> , 2017 , 5, 449-464	7.4	56
55	Intrinsic and extrinsic size effects on deformation in nanolayered Cu/Zr micropillars: From bulk-like to small-volume materials behavior. <i>Acta Materialia</i> , 2012 , 60, 4054-4064	8.4	54
54	Effect of martensitic phase transformation on the behavior of 304 austenitic stainless steel under tension. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 649, 174-183	5.3	52
53	Characterizing the boundary lateral to the shear direction of deformation twins in magnesium. <i>Nature Communications</i> , 2016 , 7, 11577	17.4	47
52	Indentation of nanotwinned fcc metals: Implications for nanotwin stability. <i>Acta Materialia</i> , 2012 , 60, 4623-4635	8.4	44
51	Synthesis and microstructure of electrodeposited and sputtered nanotwinned face-centered-cubic metals. <i>MRS Bulletin</i> , 2016 , 41, 286-291	3.2	44
50	Plasticity and ultra-low stress induced twin boundary migration in nanotwinned Cu by in situ nanoindentation studies. <i>Applied Physics Letters</i> , 2014 , 104, 231910	3.4	42
49	Superior tolerance of Ag/Ni multilayers against Kr ion irradiation: an in situ study. <i>Philosophical Magazine</i> , 2013 , 93, 3547-3562	1.6	41
48	A new method for reliable determination of strain-rate sensitivity of low-dimensional metallic materials by using nanoindentation. <i>Scripta Materialia</i> , 2014 , 77, 5-8	5.6	36
47	Understanding nanoscale damage at a crack tip of multilayered metallic composites. <i>Applied Physics Letters</i> , 2008 , 92, 161905	3.4	35
46	A formation mechanism for ultra-thin nanotwins in highly textured Cu/Ni multilayers. <i>Journal of Applied Physics</i> , 2012 , 111, 073526	2.5	32
45	Structural characteristics of {100} non-cozone twin-twin interactions in magnesium. <i>Acta Materialia</i> , 2018 , 159, 65-76	8.4	31
44	Thermal stability of ultrafine grained Fe ₁₀ Cr ₁₀ Ni alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 542, 64-70	5.3	28
43	High-velocity projectile impact induced 9R phase in ultrafine-grained aluminium. <i>Nature Communications</i> , 2017 , 8, 1653	17.4	28
42	Three-dimensional character of the deformation twin in magnesium. <i>Nature Communications</i> , 2019 , 10, 3308	17.4	27
41	Two types of martensitic phase transformations in magnetic shape memory alloys by in-situ nanoindentation studies. <i>Advanced Materials</i> , 2014 , 26, 3893-8	24	27
40	Strengthening mechanisms of Ag/Ni immiscible multilayers with fcc/fcc interface. <i>Surface and Coatings Technology</i> , 2013 , 237, 269-275	4.4	27

39	Quantitative damage and detwinning analysis of nanotwinned copper foil under cyclic loading. <i>Acta Materialia</i> , 2014 , 81, 184-193	8.4	26
38	Enhanced radiation tolerance in immiscible Cu/Fe multilayers with coherent and incoherent layer interfaces. <i>Journal of Materials Research</i> , 2015 , 30, 1300-1309	2.5	25
37	In situ studies of radiation induced crystallization in Fe/a-Y2O3 nanolayers. <i>Journal of Nuclear Materials</i> , 2014 , 452, 321-327	3.3	25
36	Alternative misfit dislocations pattern in semi-coherent FCC {100} interfaces. <i>Acta Materialia</i> , 2018 , 144, 177-186	8.4	25
35	A phase field study focuses on the transverse propagation of deformation twinning for hexagonal-closed packed crystals. <i>International Journal of Plasticity</i> , 2016 , 76, 130-146	7.6	23
34	Thickness-dependent a1/a2 domain evolution in ferroelectric PbTiO3 films. <i>Acta Materialia</i> , 2017 , 131, 123-130	8.4	23
33	Layer thickness dependent strain rate sensitivity of Cu/amorphous CuNb multilayer. <i>Applied Physics Letters</i> , 2017 , 110, 161905	3.4	20
32	Basic criteria for formation of growth twins in high stacking fault energy metals. <i>Applied Physics Letters</i> , 2013 , 103, 181903	3.4	20
31	In situ Observation of Defect Annihilation in Kr Ion-Irradiated Bulk Fe/Amorphous-Fe2Zr Nanocomposite Alloy. <i>Materials Research Letters</i> , 2015 , 3, 35-42	7.4	18
30	The effect of coherent interface on strain-rate sensitivity of highly textured Cu/Ni and Cu/V multilayers. <i>Scripta Materialia</i> , 2019 , 162, 33-37	5.6	18
29	Deformation mechanisms in FCC Co dominated by high-density stacking faults. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 736, 12-21	5.3	17
28	Anisotropic thermal conductivity and associated heat transport mechanism in roll-to-roll graphene reinforced copper matrix composites. <i>Acta Materialia</i> , 2020 , 197, 342-354	8.4	15
27	Revealing extreme twin-boundary shear deformability in metallic nanocrystals. <i>Science Advances</i> , 2021 , 7, eabe4758	14.3	14
26	Measurement of Heavy Ion Irradiation Induced In-Plane Strain in Patterned Face-Centered-Cubic Metal Films: An in Situ Study. <i>Nano Letters</i> , 2016 , 16, 7481-7489	11.5	13
25	Plastic deformation in nanocrystalline TiN at ultra-low stress: An in situ nanoindentation study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 650, 445-453	5.3	12
24	In situ studies on superior thermal stability of bulk FeZr nanocomposites. <i>Acta Materialia</i> , 2015 , 101, 125-135	8.4	11
23	In Situ Nanoindentation Studies on Detwinning and Work Hardening in Nanotwinned Monolithic Metals. <i>Jom</i> , 2016 , 68, 127-135	2.1	10
22	Significant enhancement in the thermal stability of nanocrystalline metals via immiscible tri-phases. <i>Scripta Materialia</i> , 2012 , 67, 177-180	5.6	10

21	Repetitive Ultra-low Stress Induced Nanocrystallization in Amorphous Cu-Zr-Al Alloy Evidenced by in situ Nanoindentation. <i>Materials Research Letters</i> , 2014 , 2, 209-216	7.4	10
20	Size dependent alloying and plastic deformation behaviors of Ti/Ni nano-multilayers. <i>Journal of Alloys and Compounds</i> , 2017 , 727, 691-695	5.7	8
19	Quantifying elastic strain near coherent twin interface in magnesium with nanometric resolution. <i>Materials Characterization</i> , 2020 , 160, 110082	3.9	7
18	Migration kinetics of twinning disconnections in nanotwinned Cu: An in situ HRTEM deformation study. <i>Scripta Materialia</i> , 2021 , 194, 113621	5.6	6
17	In Situ TEM Nanoindentation Studies on Stress-Induced Phase Transformations in Metallic Materials. <i>Jom</i> , 2016 , 68, 226-234	2.1	5
16	Tensile Failure Modes in Nanograined Metals with Nanotwinned Regions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 5001-5014	2.3	5
15	Enhanced defect annihilation capability of the graphene/copper interface: An in situ study. <i>Scripta Materialia</i> , 2021 , 203, 114001	5.6	5
14	Synthesis, Microstructure and Properties of Magnetron Sputtered Lead Zirconate Titanate (PZT) Thin Film Coatings. <i>Coatings</i> , 2021 , 11, 944	2.9	4
13	A crystal plasticity model for metal matrix composites considering thermal mismatch stress induced dislocations and twins. <i>Scientific Reports</i> , 2021 , 11, 16053	4.9	4
12	Beyond Indentation Hardness and Modulus: Recent Advances in Nanoindentation Techniques: Part II. <i>Jom</i> , 2018 , 70, 485-486	2.1	2
11	Hot Deformation Behavior and Processing Maps of Diamond/Cu Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 2202-2212	2.3	2
10	Insights into the interfacial bonding strength of TiB/Ti: A first principles study. <i>Journal of Applied Physics</i> , 2019 , 126, 035304	2.5	2
9	Beyond Indentation Hardness and Modulus: Recent Advances in Nanoindentation Techniques: Part I. <i>Jom</i> , 2017 , 69, 2227-2228	2.1	2
8	Thickness-Dependent Strain Rate Sensitivity of Nanolayers via the Nanoindentation Technique. <i>Crystals</i> , 2018 , 8, 128	2.3	2
7	High Strength and Low Coercivity of Cobalt with Three-Dimensional Nanoscale Stacking Faults. <i>Nano Letters</i> , 2021 , 21, 6480-6486	11.5	2
6	Synergistically enhanced interface stability by graphene assisted copper surface reconstruction. <i>Acta Materialia</i> , 2022 , 226, 117638	8.4	1
5	A new method to reliably determine elastic strain of various crystal structures from atomic-resolution images. <i>Scientific Reports</i> , 2019 , 9, 16399	4.9	1
4	Characterization of the terrace-defect interfaces using in situ straining techniques. <i>Journal of Materials Research</i> , 2021 , 36, 2674-2686	2.5	1

3	Influences of Interfaces on Dynamic Recrystallization and Texture Evolution During Hot Rolling of Graphene Nanoribbon/Cu Composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 6401-6415	2.3	1
2	Ferroelectric and Ferroelastic Domain Related Formation and Influential Mechanisms of Vapor Deposited Piezoelectric Thin Films. <i>Coatings</i> , 2021 , 11, 1437	2.9	0
1	Twin Transmission Across Grain Boundaries in Mg. <i>Minerals, Metals and Materials Series</i> , 2020 , 3-5	0.3	