

# Xiaolong

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

3,322  
citations

236833

25  
h-index

289141

40  
g-index

40  
all docs

40  
docs citations

40  
times ranked

1988  
citing authors

#	ARTICLE	IF	CITATIONS
1	Processing and properties of magnesium containing a dense uniform dispersion of nanoparticles. <i>Nature</i> , 2015, 528, 539-543.	13.7	582
2	Mechanical properties of copper/bronze laminates: Role of interfaces. <i>Acta Materialia</i> , 2016, 116, 43-52.	3.8	507
3	Interface affected zone for optimal strength and ductility in heterogeneous laminate. <i>Materials Today</i> , 2018, 21, 713-719.	8.3	357
4	Strain hardening and ductility in a coarse-grain/nanostructure laminate material. <i>Scripta Materialia</i> , 2015, 103, 57-60.	2.6	195
5	Effect of heterostructure and hetero-deformation induced hardening on the strength and ductility of brass. <i>Acta Materialia</i> , 2020, 186, 644-655.	3.8	146
6	Influence of gradient structure volume fraction on the mechanical properties of pure copper. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 645, 280-285.	2.6	128
7	Improved back stress and synergetic strain hardening in coarse-grain/nanostructure laminates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 727, 113-118.	2.6	125
8	<i>In-situ</i> observation of dislocation dynamics near heterostructured interfaces. <i>Materials Research Letters</i> , 2019, 7, 376-382.	4.1	100
9	Dynamic precipitation and recrystallization in Mg-9wt.%Al during equal-channel angular extrusion: A comparative study to conventional aging. <i>Acta Materialia</i> , 2019, 172, 185-199.	3.8	99
10	Strength and ductility of gradient structured copper obtained by surface mechanical attrition treatment. <i>Materials and Design</i> , 2016, 105, 89-95.	3.3	97
11	Simultaneously improving corrosion resistance and mechanical properties of a magnesium alloy via equal-channel angular pressing and post water annealing. <i>Materials and Design</i> , 2019, 166, 107621.	3.3	97
12	Effect of Ag on interfacial segregation in Mg-Gd-Y-(Ag)-Zr alloy. <i>Acta Materialia</i> , 2015, 95, 20-29.	3.8	95
13	Synergetic strengthening far beyond rule of mixtures in gradient structured aluminum rod. <i>Scripta Materialia</i> , 2016, 122, 106-109.	2.6	89
14	The formation mechanism of a novel interfacial phase with high thermal stability in a Mg-Gd-Y-Ag-Zr alloy. <i>Acta Materialia</i> , 2019, 162, 214-225.	3.8	74
15	The role of shear strain on texture and microstructural gradients in low carbon steel processed by Surface Mechanical Attrition Treatment. <i>Scripta Materialia</i> , 2015, 108, 100-103.	2.6	60
16	Solute segregation assisted nanocrystallization of a cold-rolled Mg-Ag alloy during annealing. <i>Scripta Materialia</i> , 2020, 177, 69-73.	2.6	43
17	Microstructural evolution and mechanical properties of Mg-9.8Gd-2.7Y-0.4Zr alloy produced by repetitive upsetting. <i>Journal of Materials Science and Technology</i> , 2018, 34, 1067-1075.	5.6	42
18	Significant disparity of non-basal dislocation activities in hot-rolled highly-textured Mg and Mg-3Al-1Zn alloy under tension. <i>Acta Materialia</i> , 2021, 207, 116691.	3.8	41

#	ARTICLE	IF	CITATIONS
19	A new metastable precipitate phase in Mg-Gd-Y-Zr alloy. Philosophical Magazine, 2014, 94, 2403-2409.	0.7	38
20	Achieving high hetero-deformation induced (HDI) strengthening and hardening in brass by dual heterostructures. Journal of Materials Science and Technology, 2022, 98, 244-247.	5.6	38
21	Enhanced mechanical properties in Cu-Zn alloys with a gradient structure by surface mechanical attrition treatment at cryogenic temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 626, 144-149.	2.6	36
22	Effect of basal precipitates on extension twinning and pyramidal slip: A micro-mechanical and electron microscopy study of a Mg-Al binary alloy. Acta Materialia, 2020, 189, 35-46.	3.8	36
23	Developing a high-strength Al-11Si alloy with improved ductility by combining ECAP and cryorolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138880.	2.6	29
24	Exploring the origins of the indentation size effect at submicron scales. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
25	Hydrothermal synthesis and corrosion behavior of the protective coating on Mg-2Zn-Mn-Ca-Ce alloy. Progress in Natural Science: Materials International, 2016, 26, 590-599.	1.8	27
26	Stacking-fault energy effect on zero-strain deformation twinning in nanocrystalline Cu-Zn alloys. Scripta Materialia, 2015, 109, 89-93.	2.6	26
27	Alloying effect on grain-size dependent deformation twinning in nanocrystalline Cu-Zn alloys. Philosophical Magazine, 2015, 95, 301-310.	0.7	22
28	Activation and suppression of $\epsilon$ -dislocations in a textured Mg-3Al-1Zn alloy. Scripta Materialia, 2020, 179, 49-54.	2.6	22
29	Microstructure and deformation behavior of a novel steel rebar: Effect of the heterogeneous microstructure of soft ferrite and Hard bainite. Journal of Materials Research and Technology, 2020, 9, 12281-12292.	2.6	20
30	Developing super-hydrophobic and corrosion-resistant coating on magnesium-lithium alloy via one-step hydrothermal processing. Journal of Magnesium and Alloys, 2023, 11, 1422-1439.	5.5	20
31	The effect of strain rate on the mechanisms of plastic flow and failure of an ECAE AZ31B magnesium alloy. Journal of Materials Science, 2019, 54, 13394-13419.	1.7	16
32	Understanding the interaction of extension twinning and basal-plate precipitates in Mg-9Al using precession electron diffraction. Materialia, 2021, 15, 101044.	1.3	15
33	Grain-subdivision-dominated microstructure evolution in shear bands at high rates. Materials Research Letters, 2020, 8, 328-334.	4.1	13
34	Finite element simulation and experimental investigation on homogeneity of Mg-9.8Gd-2.7Y-0.4Zr magnesium alloy processed by repeated-upsetting. Journal of Materials Processing Technology, 2015, 225, 310-317.	3.1	12
35	Shear strain gradient in Cu/Nb nanolaminates: Strain accommodation and chemical mixing. Acta Materialia, 2022, 234, 117986.	3.8	12
36	Microstructure Characteristic and Electrochemical Corrosion Behavior of Surface Nano-crystallization Modified Carbon Steel. Journal of Iron and Steel Research International, 2016, 23, 1281-1289.	1.4	11

#	ARTICLE	IF	CITATIONS
37	Microstructure evolution, enhanced aging kinetics, and mechanical properties of AA7075 alloy after friction extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 833, 142575.	2.6	10
38	Decreasing Bio-Degradation Rate of the Hydrothermal-Synthesizing Coated Mg Alloy via Pre-Solid-Solution Treatment. <i>Materials</i> , 2017, 10, 858.	1.3	8
39	Nucleation of deformation twins in nanocrystalline fcc alloys. <i>Philosophical Magazine</i> , 2016, 96, 3790-3802.	0.7	4
40	Effect of triple junctions on deformation twinning in a nanostructured Cu-Zn alloy: A statistical study using transmission Kikuchi diffraction. <i>Beilstein Journal of Nanotechnology</i> , 2016, 7, 1501-1506.	1.5	1