

# Xinkai

## List of Publications by Year in descending order

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34  
papers

533  
citations

567144

15  
h-index

677027

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34  
docs citations

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times ranked

409  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of grain boundary characteristic on intergranular corrosion and mechanical properties of severely sheared Al-Zn-Mg-Cu alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 732, 53-62.	2.6	54
2	A strain-dependent ductile damage model and its application in the derivation of fracture toughness by micro-indentation. <i>Materials &amp; Design</i> , 2015, 67, 623-630.	5.1	50
3	Experimental study on pure copper subjected to different severe plastic deformation modes. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 656, 142-150.	2.6	38
4	Indenter load effects on creep deformation behavior for Ti-10V-2Fe-3Al alloy at room temperature. <i>Journal of Alloys and Compounds</i> , 2017, 709, 322-328.	2.8	25
5	Achieving Gradient Martensite Structure and Enhanced Mechanical Properties in a Metastable $\beta^2$ Titanium Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 2126-2138.	1.1	25
6	Study of fracture behavior for anisotropic 7050-T7451 high-strength aluminum alloy plate. <i>International Journal of Mechanical Sciences</i> , 2017, 128-129, 445-458.	3.6	22
7	Effect of strain reversal on the stress-induced martensitic transformation and tensile properties of a metastable $\beta^2$ titanium alloy. <i>Journal of Alloys and Compounds</i> , 2019, 784, 111-116.	2.8	22
8	Analysis of forming limits based on a new ductile damage criterion in St14 steel sheets. <i>Materials &amp; Design</i> , 2015, 68, 134-145.	5.1	21
9	Hardening and softening analysis of pure titanium based on the dislocation density during torsion deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 671, 17-31.	2.6	20
10	A superior strength-ductility synergy of Al <sub>0.1</sub> CrFeCoNi high-entropy alloy with fully recrystallized ultrafine grains and annealing twins. <i>Journal of Materials Science and Technology</i> , 2022, 131, 185-194.	5.6	20
11	Analysis of ductile-brittle competitive fracture criteria for tension process of 7050 aluminum alloy based on elastic strain energy density. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 637, 201-214.	2.6	19
12	Tensile stress-strain behavior of metallic alloys. <i>Transactions of Nonferrous Metals Society of China</i> , 2017, 27, 2443-2453.	1.7	19
13	Texture, microstructure and mechanical properties of an extruded Mg-10Gd-1Zn-0.4Zr alloy: Role of microstructure prior to extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 849, 143476.	2.6	18
14	A modified elliptical fracture criterion to predict fracture forming limit diagrams for sheet metals. <i>Journal of Materials Processing Technology</i> , 2018, 252, 116-127.	3.1	17
15	Vickers microhardness and microstructure relationship of Ti-6Al-4V alloy under cyclic forward-reverse torsion and monotonic torsion loading. <i>Materials and Design</i> , 2017, 114, 271-281.	3.3	16
16	Study on the deformation behavior of $\beta^2$ phase in Ti-10V-2Fe-3Al alloy by micro-indentation. <i>Journal of Alloys and Compounds</i> , 2017, 703, 298-308.	2.8	15
17	Effect of $\beta^2$ phase fraction on the dynamic mechanical behavior of a dual-phase metastable $\beta^2$ titanium alloy Ti-10V-2Fe-3Al. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 816, 141322.	2.6	15
18	Improvement of strength and ductility in a gradient structured Ni fabricated by severe torsion deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 826, 141980.	2.6	14

#	ARTICLE	IF	CITATIONS
19	Strain rate dependence of the indentation size effect in Ti-10V-2Fe-3Al alloy. <i>Materials Science and Technology</i> , 2019, 35, 1107-1113.	0.8	13
20	Constitutive equations of 1060 pure aluminum based on modified double multiple nonlinear regression model. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 1079-1095.	1.7	12
21	Effect of Heat Treatment on the Microstructure and Micro-mechanical Behavior of Quenched Ti-6Al-4V Alloy. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 3761-3772.	1.2	10
22	Abnormal work hardening in a TRIP-assisted metastable $\beta^2$ titanium alloy under high strain rate loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 838, 142813.	2.6	10
23	Microhardness Distribution and Microstructural Evolution in Pure Aluminum Subjected to Severe Plastic Deformation: Elliptical Cross-Sectioned Spiral Equal-Channel Extrusion (ECSEE). <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 4543-4550.	1.2	9
24	Effects of Heat Treatment on Microstructure and Mechanical Properties of an ECAPed Al-Zn-Mg-Cu Alloy. <i>Advanced Engineering Materials</i> , 2018, 20, 1701155.	1.6	8
25	Microstructure and Microtexture Evolution of Pure Titanium during Single Direction Torsion and Alternating Cyclic Torsion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 2396-2409.	1.1	6
26	A method for determination of intrinsic material length base on strain gradient study in spherical indentation. <i>International Journal of Mechanical Sciences</i> , 2017, 134, 253-262.	3.6	6
27	Study of anisotropic crack growth behavior for aluminum alloy 7050-T7451. <i>Engineering Fracture Mechanics</i> , 2018, 196, 98-112.	2.0	6
28	Microstructure and microhardness evolution of Ti-10V-2Fe-3Al alloy under tensile/torsional deformation modes. <i>Journal of Alloys and Compounds</i> , 2021, 881, 160484.	2.8	6
29	Study on concavity-convexity transition of loading curve for spherical indentation. <i>Mechanics of Materials</i> , 2017, 114, 107-118.	1.7	5
30	Influence of Deformation Stress Triaxiality on Microstructure and Microhardness of Pure Copper Processed by Simultaneous Torsion and Tension. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 4104-4111.	1.2	4
31	In-situ investigation of the deformation behavior of heterogeneous-cell-structured Ni with a good strength-ductility balance. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 841, 143010.	2.6	3
32	Achieving Grain Refinement and Related Mechanical Property Improvement of an Al-Zn-Mg-Cu Alloy Through Severe Plastic Deformation. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 6690-6700.	1.2	2
33	Damage controlled by brittle particles crush in AA7075-T6 beneath spherical indenter. <i>Engineering Fracture Mechanics</i> , 2019, 212, 28-40.	2.0	2
34	Prediction of fracture loci for Cu47.5Zr47.5Al5. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 96, 795-802.	2.1	1