

# Qing Liu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3695586/publications.pdf>

Version: 2024-02-01

76  
papers

1,514  
citations

430754

18  
h-index

345118

36  
g-index

78  
all docs

78  
docs citations

78  
times ranked

1967  
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-Assembly of Mesoporous Nanotubes Assembled from Interwoven Ultrathin Birnessite-type MnO <sub>2</sub> Nanosheets for Asymmetric Supercapacitors. <i>Scientific Reports</i> , 2014, 4, 3878.	1.6	285
2	Merging of Kirkendall Growth and Ostwald Ripening: CuO@MnO <sub>2</sub> Core-shell Architectures for Asymmetric Supercapacitors. <i>Scientific Reports</i> , 2014, 4, 4518.	1.6	219
3	Direct observation and impact of co-segregated atoms in magnesium having multiple alloying elements. <i>Nature Communications</i> , 2019, 10, 3243.	5.8	78
4	Correlation Between Texture Variation and Transverse Tensile Behavior of Friction-Stir-Processed AZ31 Mg Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 2500-2508.	1.1	73
5	The Influence of Composition on the Clustering and Precipitation Behavior of Al-Mg-Si-Cu Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 459-473.	1.1	60
6	The different effects of twin boundary and grain boundary on reducing tension-compression yield asymmetry of Mg alloys. <i>Scientific Reports</i> , 2016, 6, 29283.	1.6	36
7	Joining different metallic sheets without protrusion by flat hole clinching process. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 85, 217-225.	1.5	33
8	The activation of twinning and texture evolution during bending of friction stir welded magnesium alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 646, 145-153.	2.6	30
9	Effect of cooling rate on $\beta$ phase transformation during quenching of a Zr-0.85Sn-0.4Nb-0.4Fe-0.1Cr-0.05Cu alloy. <i>Science China Technological Sciences</i> , 2012, 55, 2960-2964.	2.0	26
10	Dynamic behavior and modified artificial neural network model for predicting flow stress during hot deformation of Alloy 925. <i>Materials Today Communications</i> , 2020, 25, 101329.	0.9	26
11	Effect of Heat Treatment Condition on the Flow Behavior and Recrystallization Mechanisms of Aluminum Alloy 7055. <i>Materials</i> , 2019, 12, 311.	1.3	25
12	Investigation of twin-twin interaction in deformed magnesium alloy. <i>Philosophical Magazine</i> , 2018, 98, 741-751.	0.7	24
13	Hot deformation and processing maps of Al <sub>2</sub> O <sub>3</sub> /Al composites fabricated by flake powder metallurgy. <i>Transactions of Nonferrous Metals Society of China</i> , 2015, 25, 1056-1063.	1.7	23
14	Hafnium in Aluminum Alloys: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016, 29, 105-119.	1.5	23
15	Direct observation of nucleation in the bulk of an opaque sample. <i>Scientific Reports</i> , 2017, 7, 42508.	1.6	23
16	Strain-Path Dependence of $\{10\bar{1}2\}$ Twinning in a Rolled Mg-3Al-1Zn Alloy: Influence of Twinning Model. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 118-131.	1.1	22
17	Influence of dynamic strain aging on the mechanical properties and microstructural evolution for Alloy 800H during hot deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 724, 37-44.	2.6	21
18	Microstructure Evolution and Recrystallization Resistance of a 7055 Alloy Fabricated by Spray Forming Technology and by Conventional Ingot Metallurgy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 5378-5388.	1.1	21

#	ARTICLE	IF	CITATIONS
19	The mechanism for the different effects of texture on yield strength and hardness of Mg alloys. Scientific Reports, 2017, 7, 8647.	1.6	19
20	Microstructural Evolution of Cold-Rolled AA7075 Sheet during Solution Treatment. Materials, 2020, 13, 2734.	1.3	19
21	Dislocation Boundary Structure from Low to Medium Strain of Cold Rolling AA3104 Aluminum Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1487-1497.	1.1	18
22	Evaluation of the reliability of twin variant analysis in Mg alloys by in situ EBSD technique. Journal of Magnesium and Alloys, 2019, 7, 258-263.	5.5	17
23	Study of the Q <sup>2</sup> (Q)-phase precipitation in Al-Mg-Si-Cu alloys by quantification of atomic-resolution transmission electron microscopy images and atom probe tomography. Journal of Materials Science, 2019, 54, 7943-7952.	1.7	17
24	Optimization of Tensile and Corrosion Properties of Dissimilar Friction Stir Welded AA2024-7075 Joints. Journal of Materials Engineering and Performance, 2019, 28, 183-199.	1.2	16
25	Comparing the Through-Thickness Gradient of the Deformed and Recrystallized Microstructure in Tantalum with Unidirectional and Clock Rolling. Materials, 2019, 12, 169.	1.3	15
26	Cold rolled nanostructured super-pure Al (99.9996%) containing 1% Si particles: structure and strength. Journal of Materials Science, 2012, 47, 7914-7920.	1.7	14
27	Electron backscatter diffraction investigation of duplex-phase microstructure in a forged Zr-2.5Nb alloy. Science China Technological Sciences, 2016, 59, 673-679.	2.0	14
28	Effect of cross cold rolling and annealing on microstructure and texture in pure nickel. Reviews on Advanced Materials Science, 2020, 59, 252-263.	1.4	14
29	Comparative study on twinning characteristics during two post-weld compression paths and their effects on joint enhancement. Scientific Reports, 2016, 6, 39779.	1.6	13
30	Effects of Sn/In additions on natural and artificial ageing of Al-Mg-Si alloys. Materials Science and Technology, 2018, 34, 2136-2144.	0.8	13
31	Strain accommodation of <math>\langle 110 \rangle</math>-normal direction-oriented grains in micro-shear bands of high-purity tantalum. Journal of Materials Science, 2018, 53, 12543-12552.	1.7	13
32	Enhancing the Mechanical Properties of Hot Roll Bonded Al/Ti Laminated Metal Composites (LMCs) by Pre-Rolling Diffusion Process. Metals, 2019, 9, 795.	1.0	13
33	The Effects of Annealing at Different Temperatures on Microstructure and Mechanical Properties of Cold-Rolled Al <sub>0.3</sub> CoCrFeNi High-Entropy Alloy. Metals, 2021, 11, 940.	1.0	13
34	Effect of Wavy Profile on the Fabrication and Mechanical Properties of Al/Ti/Al Composites Prepared by Rolling Bonding: Experiments and Finite Element Simulations. Advanced Engineering Materials, 2019, 21, 1900637.	1.6	12
35	Effect of dynamic strain aging and precipitation on the hot deformation behavior of 253MA heat-resistant alloy. Journal of Materials Science, 2019, 54, 1716-1727.	1.7	12
36	Characteristics of different {10-12} twin variants in magnesium alloy during room temperature dynamic plastic deformation. Journal of Materials Research, 2013, 28, 1885-1890.	1.2	10

#	ARTICLE	IF	CITATIONS
37	Deformation bands in fully pearlitic steel during wire drawing. <i>Science China Technological Sciences</i> , 2014, 57, 796-803.	2.0	10
38	Tailoring the Microstructure and Mechanical Property of AZ80 Alloys by Multiple Twinning and Aging Precipitation. <i>Advanced Engineering Materials</i> , 2017, 19, 1700332.	1.6	10
39	Simulation of texture evolution and deformation mechanism in Mg-3Al-1Zn alloy during uniaxial compression. <i>Science China Technological Sciences</i> , 2015, 58, 2052-2059.	2.0	9
40	Concurrent inheritance of microstructure and texture after slow cooling of commercially pure Zr. <i>Science China Technological Sciences</i> , 2016, 59, 1771-1776.	2.0	9
41	Microstructure of Al-Mg alloy with Zr/Hf additions during solidification and solution treatment. <i>Rare Metals</i> , 2019, 38, 1033-1042.	3.6	9
42	Effect of Individual Layer Shape on the Mechanical Properties of Dissimilar Al Alloys Laminated Metal Composite Sheets. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 990-1001.	1.2	8
43	Growth Directions of Precipitates in the Al-Mg-Hf Alloy Using Combined EBSD and FIB 3D-Reconstruction Techniques. <i>Microscopy and Microanalysis</i> , 2015, 21, 588-593.	0.2	8
44	The Phase Stability, Ductility and Hardness of MoN and NbN: First-Principles Study. <i>Journal of Electronic Materials</i> , 2017, 46, 1914-1925.	1.0	8
45	Microstructure Evolution During Roll Bonding and Growth of Interfacial Intermetallic Compounds in Al/Ti/Al Laminated Metal Composites. <i>Jom</i> , 2019, 71, 4769-4777.	0.9	8
46	In situ observation of transmission and reflection of dislocations at twin boundary in CoCrNi alloys. <i>Science China Technological Sciences</i> , 2021, 64, 407-413.	2.0	8
47	Precise determination of the $\beta_1+\beta_2$ phase transformation temperature of Zr-1.0Sn-0.3Nb-0.3Fe alloy. <i>Science China Technological Sciences</i> , 2013, 56, 60-65.	2.0	7
48	Mechanical behavior and microstructural characteristics of magnesium alloy containing {10-12} twin lamellar structure. <i>Journal of Materials Research</i> , 2013, 28, 733-739.	1.2	7
49	The Adhesive Properties of Coherent and Semicoherent NiAl/V Interfaces Within the Peierls-Nabarro Model. <i>Crystals</i> , 2016, 6, 32.	1.0	7
50	Crystallographic Analysis of Nucleation at Hardness Indentations in High-Purity Aluminum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 5863-5870.	1.1	7
51	Influence of Aging Prior to Extrusion on the Microstructure and Mechanical Properties of an Extruded AZ91 Alloy. <i>Advanced Engineering Materials</i> , 2020, 22, 2000201.	1.6	7
52	Through-thickness texture gradient of tantalum sputtering target. <i>Rare Metals</i> , 2017, 36, 523-526.	3.6	6
53	Observation of Twin Transmission Process in Mg Alloys by In Situ EBSD. <i>Advanced Engineering Materials</i> , 2019, 21, 1801340.	1.6	6
54	Fracture morphology and crack mechanism in pure polycrystalline magnesium under tension-compression fatigue testing. <i>Rare Metals</i> , 2020, 39, 162-168.	3.6	6

#	ARTICLE	IF	CITATIONS
55	Effect of Modified Water Bath Method on Microstructure and Mechanical Properties of Wire Arc Additive Manufactured Low Carbon Low Alloy Steel. <i>Steel Research International</i> , 2021, 92, 2000523.	1.0	6
56	Particle stabilization of plastic flow in nanostructured Al-1%Si Alloy. <i>Journal of Materials Science</i> , 2014, 49, 6667-6673.	1.7	5
57	Effect of grain size on $\epsilon$ -variant selection in a ZrTiAlV alloy. <i>Science China Technological Sciences</i> , 2019, 62, 982-988.	2.0	5
58	Fabrication and mechanical properties of ultrafine structured dissimilar laminated metal composite sheets (LMCS). <i>Science and Engineering of Composite Materials</i> , 2015, 22, 71-79.	0.6	4
59	Developing a Basal Texture with Two Peaks Tilting Towards the Transverse Direction in Hot Rolled Mg-5.7Zn-0.5Zr Plates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 4276-4286.	1.1	4
60	Evolution of microstructure and second-phase particles in Zr-Sn-Nb-Fe alloy tube during Pilger processing. <i>Journal of Nuclear Science and Technology</i> , 2017, 54, 1321-1329.	0.7	4
61	Crystallographic analysis of nucleation for random orientations in high-purity tantalum. <i>Journal of Materials Research</i> , 2018, 33, 1755-1763.	1.2	4
62	Quasi-In-Situ EBSD Observation of the Orientation Evolution in Polycrystalline Tantalum During Rolling Deformation. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 1015-1020.	1.5	4
63	Effect of Hot Rolling and Annealing on Phase Component, Recrystallization, and Mechanical Properties of TC21 Titanium Alloy. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 2496-2508.	1.2	4
64	Microstructure and Mechanical Properties of Inertia Friction Welded Fe-Cr-Ni-Mo High Strength Steel. <i>Steel Research International</i> , 2020, 91, 2000145.	1.0	3
65	Study on Microstructures and Mechanical Properties of Layered and Layered Gradient Zr/Ti Materials. <i>Advanced Engineering Materials</i> , 0, , 2100805.	1.6	3
66	Predication and analysis of positioning status of large-scale billets on forging dies using multi-body dynamics simulation. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 80, 447-453.	1.5	2
67	Revealing substructure in clock-rolled Ta aided with triple focused ion beam. <i>Rare Metals</i> , 2017, 36, 284-288.	3.6	2
68	Evaluation of Textural Effect on the Rollability of AZ31 Alloys by Wedge Shaped Sample Design. <i>Advanced Engineering Materials</i> , 2017, 19, 1700035.	1.6	2
69	Precipitation of $(\text{Si}_2\text{~}^x\text{Al}_x)\text{Hf}$ in an Al-Si-Mg-Hf Alloy. <i>Microscopy and Microanalysis</i> , 2017, 23, 724-729.	0.2	2
70	Study on the Fine Grain Size and Microhardness at the Interface of AZ31/Mg Composites. <i>Advanced Engineering Materials</i> , 2021, 23, 2100214.	1.6	2
71	Effect of Precipitates in Mg-Sm Alloys on Their Deformation Behavior and Yield Asymmetry. <i>Advanced Engineering Materials</i> , 2022, 24, .	1.6	2
72	Computation model for corrosion resistance of nanocrystalline zircaloy-4. <i>Frontiers of Energy and Power Engineering in China</i> , 2008, 2, 386-389.	0.4	1

#	ARTICLE	IF	CITATIONS
73	Microstructures and Mechanical Properties of a Commercial Pure Zirconium during Rolling and Annealing at Different Temperatures. <i>Advanced Engineering Materials</i> , 2021, 23, 2001039.	1.6	1
74	Interactive transformation mechanisms of multiple metastable precipitates in a Si-rich Al-Mg-Si alloy. <i>Philosophical Magazine</i> , 0, , 1-26.	0.7	1
75	Nanoscale face-centered-cubic zirconium dispersed in omega zirconium. <i>Philosophical Magazine Letters</i> , 0, , 1-9.	0.5	1
76	An Effective Method to Homogenize the Microstructure of High Purity Tantalum in Sputtering Targets. , 0, , 303-308.		0