

Qian Yu

List of Publications by Year in descending order

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48
papers

5,534
citations

186265
28
h-index

214800
47
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52
all docs

52
docs citations

52
times ranked

5349
citing authors

#	ARTICLE	IF	CITATIONS
1	High strength and deformation stability achieved in CrCoNi alloy containing deformable oxides. Journal of Materials Science and Technology, 2023, 134, 89-94.	10.7	3
2	Atomic-scale observation of non-classical nucleation-mediated phase transformation in a titanium alloy. Nature Materials, 2022, 21, 290-296.	27.5	38
3	Topologically protected oxygen redox in a layered manganese oxide cathode for sustainable batteries. Nature Sustainability, 2022, 5, 214-224.	23.7	44
4	Characterization of chemical local ordering and heterogeneity in high-entropy alloys. MRS Bulletin, 2022, 47, 186-193.	3.5	9
5	Tuning the near room temperature oxidation behavior of high-entropy alloy nanoparticles. Nano Research, 2022, 15, 3569-3574.	10.4	6
6	Anomalous size effect on yield strength enabled by compositional heterogeneity in high-entropy alloy nanoparticles. Nature Communications, 2022, 13, 2789.	12.8	26
7	Origin of strong solid solution strengthening in the CrCoNi-W medium entropy alloy. Journal of Materials Science and Technology, 2021, 73, 101-107.	10.7	39
8	Structures and Functional Properties of Amorphous Alloys. Small Structures, 2021, 2, 2000057.	12.0	28
9	Nanoburl Graphites. Advanced Materials, 2021, 33, e2007513.	21.0	19
10	A new transition metal trichalcogenide TaNbSe6 with high yield strength. Materials Characterization, 2021, 175, 111051.	4.4	0
11	Enhanced strengthening and hardening via self-stabilized dislocation network in additively manufactured metals. Materials Today, 2021, 50, 79-88.	14.2	82
12	Brittle-to-ductile transition in Ti-Pt intermetallic compounds. Science Bulletin, 2021, 66, 2281-2287.	9.0	1
13	An <i>in situ</i> ambient and cryogenic transmission electron microscopy study of the effects of temperature on dislocation behavior in CrCoNi-based high-entropy alloys with low stacking-fault energy. Applied Physics Letters, 2021, 119, .	3.3	8
14	In situ observation of temperature-dependent atomistic and mesoscale oxidation mechanisms of aluminum nanoparticles. Nano Research, 2020, 13, 183-187.	10.4	17
15	Interface-Induced Pseudocapacitance in Nonporous Heterogeneous Particles for High Volumetric Sodium Storage. Advanced Functional Materials, 2020, 30, 2002019.	14.9	74
16	Temperature Effect on Stacking Fault Energy and Deformation Mechanisms in Titanium and Titanium-aluminium Alloy. Scientific Reports, 2020, 10, 3086.	3.3	29
17	Real-time observations of TRIP-induced ultrahigh strain hardening in a dual-phase CrMnFeCoNi high-entropy alloy. Nature Communications, 2020, 11, 826.	12.8	165
18	The role of low angle grain boundary in deformation of titanium and its size effect. Scripta Materialia, 2019, 163, 148-151.	5.2	89

#	ARTICLE	IF	CITATIONS
19	Real-time nanoscale observation of deformation mechanisms in CrCoNi-based medium- to high-entropy alloys at cryogenic temperatures. <i>Materials Today</i> , 2019, 25, 21-27.	14.2	167
20	Super plasticity in a cold-welded Al-Cu joint. <i>Applied Physics Letters</i> , 2019, 114, 063101.	3.3	8
21	Tuning element distribution, structure and properties by composition in high-entropy alloys. <i>Nature</i> , 2019, 574, 223-227.	27.8	874
22	Plasmonic-enhanced targeted nanohealing of metallic nanostructures. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	14
23	Dislocation network in additive manufactured steel breaks strengthâ€“ductility trade-off. <i>Materials Today</i> , 2018, 21, 354-361.	14.2	640
24	Dislocation plasticity reigns in a traditional twinning-induced plasticity steel by in situ observation. <i>Materials Today Nano</i> , 2018, 3, 48-53.	4.6	43
25	The Exceptional Strong Face-centered Cubic Phase and Semi-coherent Phase Boundary in a Eutectic Dual-phase High Entropy Alloy AlCoCrFeNi. <i>Scientific Reports</i> , 2018, 8, 14910.	3.3	39
26	Oxygen Vacancy Engineering Promoted Photocatalytic Ammonia Synthesis on Ultrathin Two-Dimensional Bismuth Oxybromide Nanosheets. <i>Nano Letters</i> , 2018, 18, 7372-7377.	9.1	308
27	Re segregation at interfacial dislocation network in a nickel-based superalloy. <i>Acta Materialia</i> , 2018, 154, 137-146.	7.9	119
28	Three-dimensional atomic-scale observation of structural evolution of cathode material in a working all-solid-state battery. <i>Nature Communications</i> , 2018, 9, 3341.	12.8	60
29	Dislocation mechanisms and 3D twin architectures generate exceptional strength-ductility-toughness combination in CrCoNi medium-entropy alloy. <i>Nature Communications</i> , 2017, 8, 14390.	12.8	344
30	Scalable Production of the Siliconâ€“Tin Yin-Yang Hybrid Structure with Graphene Coating for High Performance Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15388-15393.	8.0	36
31	Improving deformability of Sb ₂ Te ₃ layered material by dislocation climb at anti-phase boundary. <i>Scripta Materialia</i> , 2017, 135, 10-14.	5.2	16
32	Investigation of Interfacial Layer for Ultrasonic Spot Welded Aluminum to Copper Joints. <i>Scientific Reports</i> , 2017, 7, 12505.	3.3	33
33	Atomic-resolution imaging of electrically induced oxygen vacancy migration and phase transformation in SrCoO _{2.5} - δ . <i>Nature Communications</i> , 2017, 8, 104.	12.8	66
34	Dislocation Multiplications in Extremely Small Hexagonal-structured Titanium Nanopillars Without Dislocation Starvation. <i>Scientific Reports</i> , 2017, 7, 15890.	3.3	5
35	In situ TEM observation of FCC Ti formation at elevated temperatures. <i>Scripta Materialia</i> , 2017, 140, 9-12.	5.2	77
36	Formation mechanism for the nanoscale amorphous interface in pulse-welded Al/Fe bimetallic systems. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	24

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37	In situ observation of sublimation-enhanced magnesium oxidation at elevated temperature. Nano Research, 2016, 9, 2796-2802.	10.4	14
38	In Situ Observation on Dislocation-Controlled Sublimation of Mg Nanoparticles. Nano Letters, 2016, 16, 1156-1160.	9.1	26
39	Rational Design of Graphene-Reinforced MnO Nanowires with Enhanced Electrochemical Performance for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 6303-6308.	8.0	94
40	Nanoscale origins of the damage tolerance of the high-entropy alloy CrMnFeCoNi. Nature Communications, 2015, 6, 10143.	12.8	608
41	Origin of dramatic oxygen solute strengthening effect in titanium. Science, 2015, 347, 635-639.	12.6	255
42	The effect of size on dislocation cell formation and strain hardening in aluminium. Philosophical Magazine, 2014, 94, 2062-2071.	1.6	23
43	Reducing deformation anisotropy to achieve ultrahigh strength and ductility in Mg at the nanoscale. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13289-13293.	7.1	111
44	High-strength titanium alloy nanopillars with stacking faults and enhanced plastic flow. Applied Physics Letters, 2012, 100, 063109.	3.3	29
45	The Nanostructured Origin of Deformation Twinning. Nano Letters, 2012, 12, 887-892.	9.1	218
46	The Effect of Size on the Deformation Twinning Behavior in Hexagonal Close-Packed Ti and Mg. Jom, 2012, 64, 1235-1240.	1.9	49
47	Strong crystal size effect on deformation twinning. Nature, 2010, 463, 335-338.	27.8	553
48	SIZE EFFECT ON DEFORMATION MODE IN MICRON-SIZED Ti-5Al SINGLE CRYSTAL LOADED ALONG $[2, \overline{1}, \overline{1}, 0]$ AND $[0001]$. International Journal of Modern Physics B, 2010, 24, 2466-2471.	2.0	3