Qing-Long Zhao

List of Publications by Year
in descending order

59 papers	1,654 citations	304743 22 h-index	302126 39 g-index
60 all docs	60 docs citations	60 times ranked	1042 citing authors

#	Article	IF	Citations
1	The double-edge effect of second-phase particles on the recrystallization behaviour and associated mechanical properties of metallic materials. Progress in Materials Science, 2018, 92, 284-359.	32.8	414
2	Fabrication, microstructure refinement and strengthening mechanisms of nanosized SiCP/Al composites assisted ultrasonic vibration. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 310-317.	5.6	60
3	Superior creep resistance of 0.3 wt% nano-sized TiCp/Al-Cu composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 700, 42-48.	5.6	59
4	Simultaneously increasing the high-temperature tensile strength and ductility of nano-sized TiCp reinforced Al-Cu matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 717, 105-112.	5.6	55
5	Graphene reinforced nickel-based superalloy composites fabricated by additive manufacturing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 769, 138484.	5.6	52
6	Simultaneously increasing the elevated-temperature tensile strength and plasticity of in situ nano-sized TiCx/Al-Cu-Mg composites. Materials Characterization, 2017, 125, 7-12.	4.4	48
7	Enhanced strength and ductility at room and elevated temperatures of Al-Cu alloy matrix composites reinforced with bimodal-sized TiCp compared with monomodalâ€“sized TiCp. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 724, 368-375.	5.6	45
8	Effects of nanosized TiCp on the microstructure evolution and tensile properties of an Al-Mg-Si alloy during cold rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 743, 98-105.	5.6	45
9	Superior high creep resistance of in situ nano-sized TiCx/Al-Cu-Mg composite. Scientific Reports, 2017, 7, 4540.	3.3	43
10	Effects of nanosized TiC and TiB2 particles on the corrosion behavior of Al-Mg-Si alloy. Corrosion Science, 2020, 167, 108479.	6.6	42
11	The superior elevated-temperature mechanical properties of Al-Cu-Mg-Si composites reinforced with in situ hybrid-sized TiCx-TiB2 particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 728, 157-164.	5.6	40
12	Two-stage annealing of a cold-rolled Alâ€“Mnâ€“Feâ€“Si alloy with different microchemistry states. Journal of Materials Processing Technology, 2015, 221, 87-99.	6.3	39
13	A new approach for improving the elevated-temperature strength and ductility of Alâ€“Cuâ€“Mgâ€“Si alloys with minor amounts of dual-phased submicron/nanosized TiB2â€“TiC particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138266.	5.6	36
14	Influence of dispersoids on microstructure evolution and work hardening of aluminium alloys during tension and cold rolling. Philosophical Magazine, 2013, 93, 2995-3011.	1.6	35
15	Microstructure refinement and strengthening mechanisms of bimodal-sized and dual-phased (TiCn-Al3Tim)/Al hybrid composites assisted ultrasonic vibration. Journal of Alloys and Compounds, 2019, 788, 1309-1321.	5.5	34
16	The effect of silicon on the strengthening and work hardening of aluminum at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 563, 147-151.	5.6	30
17	Cluster strengthening in aluminium alloys. Scripta Materialia, 2014, 84-85, 43-46.	5.2	30
18	Improved creep resistance of Al-Cu alloy matrix composite reinforced with bimodal-sized TiCp. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 713, 190-194.	5.6	30

#	Article	IF	Citations
19	Effects of cooling rate and TiC nanoparticles on the microstructure and tensile properties of an Alâ€“Cu cast alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 790, 139737.	5.6	29
20	Dry sliding friction and wear characterization of in situ TiC/Al-Cu3.7-Mg1.3 nanocomposites with nacre-like structures. Journal of Materials Research and Technology, 2020, 9, 641-653.	5.8	28
21	Effects of nanosized TiCp dispersion on the high-temperature tensile strength and ductility of in situ TiCp/Al-Cu-Mg-Si nanocomposites. Journal of Alloys and Compounds, 2019, 774, 425-433.	5.5	26
22	Modelling work hardening of aluminium alloys containing dispersoids. Philosophical Magazine, 2013, 93, 3142-3153.	1.6	25
23	Application of nanoparticles in cast steel: An overview. China Foundry, 2020, 17, 111-126.	1.4	23
24	Orientation Preference of Recrystallization in Supersaturated Aluminum Alloys Influenced by Concurrent Precipitation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1378-1388.	2.2	22
25	A Novel Approach of Using Ground CNTs as the Carbon Source to Fabricate Uniformly Distributed Nano-Sized TiCx/2009Al Composites. Materials, 2015, 8, 8839-8849.	2.9	21
26	The interfacial structure and mechanical properties of Ti5Si3-coated SiCP/Al2014 composites fabricated by powder metallurgy with hot pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 661, 217-221.	5.6	21
27	The Dry Sliding Wear Properties of Nano-Sized TiCp/Al-Cu Composites at Elevated Temperatures. Materials, 2017, 10, 939.	2.9	21
28	Simultaneously increased strength and ductility via the hierarchically heterogeneous structure of Al-Mg-Si alloys/nanocomposite. Materials Research Letters, 2020, 8, 225-231.	8.7	20
29	Multi-component solid solution and cluster hardening of Alâ€“Mnâ€“Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 625, 153-157.	5.6	19
30	Enhanced elevated-temperature mechanical properties of Al-Mn-Mg containing TiC nano-particles by pre-strain and concurrent precipitation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 305-310.	5.6	19
31	Effects of Carbon Source on TiC Particlesâ€™ Distribution, Tensile, and Abrasive Wear Properties of In Situ TiC/Al-Cu Nanocomposites Prepared in the Al-Ti-C System. Nanomaterials, 2018, 8, 610.	4.1	18
32	Comparison of the influence of Si and Fe in 99.999% purity aluminum and in commercial-purity aluminum. Scripta Materialia, 2012, 67, 217-220.	5.2	17
33	The microstructure and tensile property for Al2014 composites reinforced with Ti5Si3-coated SiCP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 688, 459-463.	5.6	17
34	Nanoparticle additions promote outstanding fracture toughness and fatigue strength in a cast Alâ€“Cu alloy. Materials and Design, 2020, 186, 108221.	7.0	17
35	Simultaneously Enhanced Strength, Toughness and Ductility of Cast 40Cr Steels Strengthened by Trace Biphase TiCx-TiB2 Nanoparticles. Metals, 2018, 8, 707.	2.3	16
36	The abrasive wear behavior of Al2014 composites reinforced with Ti5Si3-coated SiCP. Tribology International, 2017, 112, 33-41.	5.9	14

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37	The Relationship Between Oxidation and Thermal Fatigue of Martensitic Hot-Work Die Steels. Acta Metallurgica Sinica (English Letters), 2018, 31, 692-698.	2.9	14
38	A novel approach to the rapid synthesis of highâ€entropy carbide nanoparticles. Journal of the American Ceramic Society, 2020, 103, 4733-4737.	3.8	14
39	Effectively mitigated macro-segregation and improved tensile properties of twin-roll casting Al-Cu strips via the addition of TiC nanoparticles. Journal of Materials Processing Technology, 2021, 296, 117200.	6.3	14
40	Strain-induced precipitation kinetics during non-isothermal annealing of Al-Mn alloys. Journal of Alloys and Compounds, 2018, 735, 2275-2280.	5.5	13
41	Superior Cryogenic Tensile Strength and Ductility of In Situ Alâ€“Cu Matrix Composite Reinforced with 0.3â€‰wt% Nanoâ€Sized TiCp. Advanced Engineering Materials, 2018, 20, 1701137.	3.5	11
42	Synergistic effects of the TiC nanoparticles and cold rolling on the microstructure and mechanical properties of Alâ€“Cu strips fabricated by twin-roll casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 812, 141110.	5.6	11
43	Avoiding Sabatierâ€™s conflict in bifunctional heterogeneous catalysts for the WGS reaction. CheM, 2021, 7, 1271-1283.	11.7	11
44	Influence of dispersoids on grain subdivision and texture evolution in aluminium alloys during cold rolling. Transactions of Nonferrous Metals Society of China, 2014, 24, 2072-2078.	4.2	9
45	Correlating oriented grain number density of recrystallisation in particle-containing aluminium alloys. Transactions of Nonferrous Metals Society of China, 2018, 28, 220-225.	4.2	9
46	Effect of Preheating Temperature on the Microstructure and Tensile Properties of 6061 Aluminum Alloy Processed by Hot Rolling-Quenching. Metals, 2019, 9, 182.	2.3	8
47	Effects of different carbon sources on the compressive properties of <i>in situ</i> high-volume-fraction TiC<i>_x</i>/2009Al composites. Powder Metallurgy, 2016, 59, 370-375.	1.7	6
48	Increased tensile strength and elongation of the Niâ€“Fe based polycrystalline cast superalloy via the trace addition of TiC nanoparticles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 827, 141988.	5.6	6
49	Excellent compressive strength and ductility of Ti 5 Si 3 â€“coated SiC P /Al2014 composites. Journal of Alloys and Compounds, 2017, 698, 1086-1093.	5.5	5
50	Improving Elevated-Temperature Strength of an Alâ€“Mnâ€“Si Alloy by Strain-Induced Precipitation. Metals, 2018, 8, 446.	2.3	5
51	Improved ductility and toughness of an Al-Cu casting alloy by changing the geometrical morphology of dendritic grains. Materials Letters, 2018, 214, 276-279.	2.6	2
52	Effect of TiC nano-particles on the mechanical properties of an Al-5Cu alloy after various heat treatments. IOP Conference Series: Earth and Environmental Science, 2017, 100, 012084.	0.3	1
53	The lamella structure of Al-Mg-Si matrix nanocomposites with isotropically high strength. Materialia, 2020, 13, 100842.	2.7	1
54	Improved Strength-Ductility of Ti-6Al-4V Casting Alloys with Trace Addition of TiC-TiB2 Nanoparticles. Nanomaterials, 2020, 10, 2330.	4.1	1

#	ARTICLE	IF	CITATIONS
55	Effect of TiC Nanoparticles on the Mechanical Properties of a K465 Superalloy. Journal of Physics: Conference Series, 2021, 1838, 012015.	0.4	1
56	Effect of Nano-Sized TiC-TiB2 on Microstructure and Properties of Twin-Roll Cast Al-Cu-Mn-Zr Alloy. Metals, 2022, 12, 563.	2.3	1
57	Crystal Plasticity Calculations of Mechanical Anisotropy of Aluminium Compared to Experiments and to Yield Criterion Fittings. , 2012, , 915-920.		0
58	Effect of Si Addition on Solid Solution Hardening of Al-Mn Alloys. , 2012, , 1825-1829.		0
59	Effect of Hot-Plate Rolling on the Microstructure Evolution and Mechanical Properties of In-Situ Nano-TiCP/Al-Mg-Si Composites. Journal Wuhan University of Technology, Materials Science Edition, 2022, 37, 513-517.	1.0	0