Qiyang Tan

List of Publications by Year
in descending order

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45 papers	1,816 citations	257357 24 h-index	276775 41 g-index
46 all docs	46 docs citations	46 times ranked	1031 citing authors

#	Article	IF	Citations
1	Inoculation treatment of an additively manufactured 2024 aluminium alloy with titanium nanoparticles. Acta Materialia, 2020, 196, 1-16.	3.8	247
2	Current development of creep-resistant magnesium cast alloys: A review. Materials and Design, 2018, 155, 422-442.	3.3	151
3	Oxidation of magnesium alloys at elevated temperatures in air: A review. Corrosion Science, 2016, 112, 734-759.	3.0	141
4	Effect of processing parameters on the densification of an additively manufactured 2024 Al alloy. Journal of Materials Science and Technology, 2020, 58, 34-45.	5.6	104
5	Nanostructured Al2O3-YAG-ZrO2 ternary eutectic components prepared by laser engineered net shaping. Acta Materialia, 2019, 170, 24-37.	3.8	82
6	Understanding solid solution strengthening at elevated temperatures in a creep-resistant Mgâ€“Gdâ€“Ca alloy. Acta Materialia, 2019, 181, 185-199.	3.8	71
7	Achieving high ductility in a selectively laser melted commercial pure-titanium via in-situ grain refinement. Scripta Materialia, 2021, 191, 155-160.	2.6	65
8	A novel strategy to additively manufacture 7075 aluminium alloy with selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 821, 141638.	2.6	64
9	Novel cost-effective Fe-based high entropy alloys with balanced strength and ductility. Materials and Design, 2019, 162, 24-33.	3.3	58
10	Effect of Micro-Arc Oxidation Coatings Formed at Different Voltages on the In Situ Growth of Layered Double Hydroxides and Their Corrosion Protection. Journal of the Electrochemical Society, 2018, 165, C317-C327.	1.3	56
11	Investigation into the effect of energy density on densification, surface roughness and loss of alloying elements of 7075 aluminium alloy processed by laser powder bed fusion. Optics and Laser Technology, 2022, 147, 107621.	2.2	49
12	Laser additive manufacturing of steels. International Materials Reviews, 2022, 67, 487-573.	9.4	45
13	Combined influence of Be and Ca on improving the high-temperature oxidation resistance of the magnesium alloy Mg-9Al-1Zn. Corrosion Science, 2017, 122, 1-11.	3.0	42
14	A novel method to 3D-print fine-grained AlSi10Mg alloy with isotropic properties via inoculation with LaB6 nanoparticles. Additive Manufacturing, 2020, 32, 101034.	1.7	41
15	Oxidation resistance of Mgâ€“9Alâ€“1Zn alloys micro-alloyed with Be. Scripta Materialia, 2016, 115, 38-41.	2.6	38
16	Additive manufacturing of high strength copper alloy with heterogeneous grain structure through laser powder bed fusion. Acta Materialia, 2021, 220, 117311.	3.8	36
17	Microstructures and mechanical properties of wear-resistant titanium oxide coatings deposited on Ti-6Al-4V alloy using laser cladding. Journal of the European Ceramic Society, 2020, 40, 798-810.	2.8	34
18	Recent understanding of the oxidation and burning of magnesium alloys. Surface Innovations, 2019, 7, 71-92.	1.4	33

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19	Improved oxidation resistance of Mg-9Al-1Zn alloy microalloyed with 60â€¯wtâ€¯ppm Be attributed to the formation of a more protective (Mg,Be)O surface oxide. Corrosion Science, 2018, 132, 272-283.	3.0	31
20	Generalisation of the oxide reinforcement model for the high oxidation resistance of some Mg alloys micro-alloyed with Be. Corrosion Science, 2019, 147, 357-371.	3.0	30
21	Mechanical performance of a node reinforced body-centred cubic lattice structure manufactured via selective laser melting. Scripta Materialia, 2020, 189, 95-100.	2.6	29
22	Uncovering the roles of LaB6-nanoparticle inoculant in the AlSi10Mg alloy fabricated via selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140365.	2.6	28
23	A cost-effective Fe-rich compositionally complicated alloy with superior high-temperature oxidation resistance. Corrosion Science, 2021, 180, 109190.	3.0	28
24	Spheroidization behaviour of a Fe-enriched eutectic high-entropy alloy. Journal of Materials Science and Technology, 2020, 51, 173-179.	5.6	26
25	Roles of Nd and Mn in a new creep-resistant magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 779, 139152.	2.6	25
26	New insights into the growth mechanism of 3D-printed Al2O3â€“Y3Al5O12 binary eutectic composites. Scripta Materialia, 2020, 178, 274-280.	2.6	22
27	Prediction of Mechanical Properties of Wrought Aluminium Alloys Using Feature Engineering Assisted Machine Learning Approach. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 2873-2884.	1.1	22
28	Effect of cooling rate on microstructure and mechanical properties of a low-carbon low-alloy steel. Journal of Materials Science, 2021, 56, 3995-4005.	1.7	21
29	Recent progress in additive manufacturing of bulk MAX phase components: A review. Journal of Materials Science and Technology, 2022, 131, 30-47.	5.6	21
30	Heterogeneous lamella design to tune the mechanical behaviour of a new cost-effective compositionally complicated alloy. Journal of Materials Science and Technology, 2022, 96, 113-125.	5.6	19
31	In-situ synthesized age-hardenable high-entropy composites with superior wear resistance. Composites Part B: Engineering, 2022, 235, 109795.	5.9	19
32	High-temperature age-hardening of a novel cost-effective Fe45Ni25Cr25Mo5 high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139580.	2.6	17
33	Mechanical performance of simple cubic architected titanium alloys fabricated via selective laser melting. Optics and Laser Technology, 2021, 134, 106649.	2.2	17
34	Interfacial and tribological properties of laser deposited TiOxNy/Ti composite coating on Ti alloy. Tribology International, 2021, 155, 106758.	3.0	17
35	Eutectic modification of Fe-enriched high-entropy alloys through minor addition of boron. Journal of Materials Science, 2020, 55, 14571-14587.	1.7	14
36	Rationalization of brittleness and anisotropic mechanical properties of H13 steel fabricated by selective laser melting. Scripta Materialia, 2022, 214, 114645.	2.6	14

#	Article	IF	Citations
37	Simultaneous enhancements of strength and ductility of a selective laser melted H13 steel through inoculation treatment. Scripta Materialia, 2022, 219, 114874.	2.6	14
38	Unveiling solidification mode transition and crystallographic characteristics in laser 3D-printed Al2O3-ZrO2 eutectic ceramics. Scripta Materialia, 2022, 210, 114433.	2.6	12
39	Effect of deep surface rolling on microstructure and properties of AZ91 magnesium alloy. Transactions of Nonferrous Metals Society of China, 2019, 29, 1424-1429.	1.7	11
40	Stress-Relaxation Behavior of Magnesium-3Gadolinium-2Calcium-Based Alloys at Elevated Temperatures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 5710-5716.	1.1	10
41	Demonstrating the roles of solute and nucleant in grain refinement of additively manufactured aluminium alloys. Additive Manufacturing, 2022, 49, 102516.	1.7	7
42	The significant impact of grain refiner on Î³-TiAl intermetallic fabricated by laser-based additive manufacturing. Additive Manufacturing, 2021, 46, 102172.	1.7	5
43	Uncovering the Role of Solute in Grain Refinement of Additively Manufactured Aluminium Alloys. SSRN Electronic Journal, 0, , .	0.4	0
44	A Novel Strategy to Additively Manufacture 7075 Aluminium Alloy With Selective Laser Melting. SSRN Electronic Journal, 0, , .	0.4	0
45	Laser Cladding of Hard TiO _xN _y/Ti Composite Coating on Ti Alloy. SSRN Electronic Journal, 0, , .	0.4	0