Lai Chang Zhang

List of Publications by Year
in descending order

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325	20,391	8732	14702
papers	citations	75 h-index	127 g-index

327	327	327	10201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Review on Biomedical Titanium Alloys: Recent Progress and Prospect. Advanced Engineering Materials, 2019, 21, 1801215.	1.6	659
2	Manufacture by selective laser melting and mechanical behavior of commercially pure titanium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 593, 170-177.	2.6	566
3	Selective Laser Melting of Titanium Alloys and Titanium Matrix Composites for Biomedical Applications: A Review. Advanced Engineering Materials, 2016, 18, 463-475.	1.6	564
4	A selective laser melting and solution heat treatment refined Alâ€“12Si alloy with a controllable ultrafine eutectic microstructure and 25% tensile ductility. Acta Materialia, 2015, 95, 74-82.	3.8	518
5	Selective laser melting of in situ titaniumâ€“titanium boride composites: Processing, microstructure and mechanical properties. Acta Materialia, 2014, 76, 13-22.	3.8	483
6	Manufacture by selective laser melting and mechanical behavior of a biomedical Tiâ€“24Nbâ€“4Zrâ€“8Sn alloy. Scripta Materialia, 2011, 65, 21-24.	2.6	482
7	Microstructure, defects and mechanical behavior of beta-type titanium porous structures manufactured by electron beam melting and selective laser melting. Acta Materialia, 2016, 113, 56-67.	3.8	441
8	Corrosion behavior of selective laser melted Ti-6Al-4 V alloy in NaCl solution. Corrosion Science, 2016, 102, 484-489.	3.0	401
9	Distinction in corrosion resistance of selective laser melted Ti-6Al-4V alloy on different planes. Corrosion Science, 2016, 111, 703-710.	3.0	325
10	Additive Manufacturing of Titanium Alloys by Electron Beam Melting: A Review. Advanced Engineering Materials, 2018, 20, 1700842.	1.6	315
11	Compressive and fatigue behavior of beta-type titanium porous structures fabricated by electron beam melting. Acta Materialia, 2017, 126, 58-66.	3.8	278
12	Gradient in microstructure and mechanical property of selective laser melted AlSi10Mg. Journal of Alloys and Compounds, 2018, 735, 1414-1421.	2.8	267
13	Surface Modification of Titanium and Titanium Alloys: Technologies, Developments, and Future Interests. Advanced Engineering Materials, 2020, 22, 1901258.	1.6	243
14	Mechanical behavior of porous commercially pure Ti and Tiâ€“TiB composite materials manufactured by selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 625, 350-356.	2.6	235
15	Comparison of wear properties of commercially pure titanium prepared by selective laser melting and casting processes. Materials Letters, 2015, 142, 38-41.	1.3	222
16	The effect of atmosphere on the structure and properties of a selective laser melted Alâ€“12Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 370-375.	2.6	209
17	A review of catalytic performance of metallic glasses in wastewater treatment: Recent progress and prospects. Progress in Materials Science, 2019, 105, 100576.	16.0	209
18	Additive manufacturing of metallic lattice structures: Unconstrained design, accurate fabrication, fascinated performances, and challenges. Materials Science and Engineering Reports, 2021, 146, 100648.	14.8	209

#	Article	IF	Citations
19	Effect of Powder Particle Shape on the Properties of In Situ Tiâ€“TiB Composite Materials Produced by Selective Laser Melting. Journal of Materials Science and Technology, 2015, 31, 1001-1005.	5.6	201
20	Improved corrosion behaviour of electron beam melted Ti-6Alâ€“4V alloy in phosphate buffered saline. Corrosion Science, 2017, 123, 289-296.	3.0	188
21	Surface aging behaviour of Fe-based amorphous alloys as catalysts during heterogeneous photo Fenton-like process for water treatment. Applied Catalysis B: Environmental, 2017, 204, 537-547.	10.8	173
22	Enhanced corrosion and wear resistance properties of carbon fiber reinforced Ni-based composite coating by laser cladding. Surface and Coatings Technology, 2018, 334, 274-285.	2.2	172
23	A Novel Multinary Intermetallic as an Active Electrocatalyst for Hydrogen Evolution. Advanced Materials, 2020, 32, e2000385.	11.1	169
24	Evaluation of mechanical and wear properties of Ti xNb 7Fe alloys designed for biomedical applications. Materials and Design, 2016, 111, 592-599.	3.3	166
25	Corrosion Behaviour of Selective Laser Melted Ti-TiB Biocomposite in Simulated Body Fluid. Electrochimica Acta, 2017, 232, 89-97.	2.6	166
26	Compressive and fatigue behavior of functionally graded Ti-6Al-4V meshes fabricated by electron beam melting. Acta Materialia, 2018, 150, 1-15.	3.8	166
27	Manganese oxide integrated catalytic ceramic membrane for degradation of organic pollutants using sulfate radicals. Water Research, 2019, 167, 115110.	5.3	165
28	Processing and properties of topologically optimised biomedical Tiâ€“24Nbâ€“4Zrâ€“8Sn scaffolds manufactured by selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 268-278.	2.6	164
29	Amorphous Fe78Si9B13 alloy: An efficient and reusable photo-enhanced Fenton-like catalyst in degradation of cibacron brilliant red 3B-A dye under UVâ€“vis light. Applied Catalysis B: Environmental, 2016, 192, 46-56.	10.8	161
30	Disordered Atomic Packing Structure of Metallic Glass: Toward Ultrafast Hydroxyl Radicals Production Rate and Strong Electron Transfer Ability in Catalytic Performance. Advanced Functional Materials, 2017, 27, 1702258.	7.8	160
31	Microstructure evolution and superelastic behavior in Ti-35Nb-2Ta-3Zr alloy processed by friction stir processing. Acta Materialia, 2017, 131, 499-510.	3.8	158
32	Nanoindentation study of mechanical properties of Ti based alloys with Fe and Ta additions. Journal of Alloys and Compounds, 2017, 692, 892-897.	2.8	152
33	A high-efficiency solar desalination evaporator composite of corn stalk, Mcnts and TiO₂: ultra-fast capillary water moisture transportation and porous bio-tissue multi-layer filtration. Journal of Materials Chemistry A, 2020, 8, 349-357.	5.2	151
34	Recent Development in Beta Titanium Alloys for Biomedical Applications. Metals, 2020, 10, 1139.	1.0	151
35	Effect of Î±â€³ martensite on the microstructure and mechanical properties of beta-type Tiâ€“Feâ€“Ta alloys. Materials & Design, 2015, 76, 47-54.	5.1	149
36	Influence of Nb on the Î² â†’ Î±â€³ martensitic phase transformation and properties of the newly designed Tiâ€“Feâ€“Nb alloys. Materials Science and Engineering C, 2016, 60, 503-510.	3.8	144

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37	Design and engineering heterojunctions for the photoelectrochemical monitoring of environmental pollutants: A review. Applied Catalysis B: Environmental, 2019, 248, 405-422.	10.8	141
38	Selective laser melting of an Al86Ni6Y4.5Co2La1.5 metallic glass: Processing, microstructure evolution and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 606, 370-379.	2.6	134
39	High strength Tiâ€“Feâ€“Sn ultrafine composites with large plasticity. Scripta Materialia, 2007, 57, 101-104.	2.6	133
40	Selective laser melting of Tiâ€“35Nb composite from elemental powder mixture: Microstructure, mechanical behavior and corrosion behavior. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 214-224.	2.6	131
41	Phase transition, microstructural evolution and mechanical properties of Ti-Nb-Fe alloys induced by Fe addition. Materials and Design, 2016, 97, 279-286.	3.3	130
42	Interface formation and bonding control in high-volume-fraction (TiC+TiB2)/Al composites and their roles in enhancing properties. Composites Part B: Engineering, 2021, 209, 108605.	5.9	130
43	High specific strength and stiffness structures produced using selective laser melting. Materials & Design, 2014, 63, 783-788.	5.1	127
44	Electron Beam Melted Beta-type Tiâ€“24Nbâ€“4Zrâ€“8Sn Porous Structures With High Strength-to-Modulus Ratio. Journal of Materials Science and Technology, 2016, 32, 505-508.	5.6	125
45	Ultrahigh-performance TiNi shape memory alloy by 4D printing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 763, 138166.	2.6	122
46	Nanocrystalline Co_{0.85}Se Anchored on Graphene Nanosheets as a Highly Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 30703-30710.	4.0	118
47	Early plastic deformation behaviour and energy absorption in porous Î²-type biomedical titanium produced by selective laser melting. Scripta Materialia, 2018, 153, 99-103.	2.6	118
48	Bimodal titanium alloys with ultrafine lamellar eutectic structure fabricated by semi-solid sintering. Acta Materialia, 2017, 132, 491-502.	3.8	117
49	Enhancing strength-ductility synergy and mechanisms of Al-based composites by size-tunable in-situ TiB2 particles with specific spatial distribution. Composites Part B: Engineering, 2021, 217, 108912.	5.9	117
50	Comparative study of microstructures and mechanical properties of in situ Tiâ€“TiB composites produced by selective laser melting, powder metallurgy, and casting technologies. Journal of Materials Research, 2014, 29, 1941-1950.	1.2	116
51	Compelling Rejuvenated Catalytic Performance in Metallic Glasses. Advanced Materials, 2018, 30, e1802764.	11.1	115
52	Heat Treatment Degrading the Corrosion Resistance of Selective Laser Melted Ti-6Al-4V Alloy. Journal of the Electrochemical Society, 2017, 164, C428-C434.	1.3	112
53	Ultrafast activation efficiency of three peroxides by Fe78Si9B13 metallic glass under photo-enhanced catalytic oxidation: A comparative study. Applied Catalysis B: Environmental, 2018, 221, 108-118.	10.8	110
54	Laves phase precipitation in Ti-Zr-Fe-Cr alloys with high strength and large plasticity. Materials and Design, 2018, 154, 228-238.	3.3	110

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55	Role of alloying elements in microstructure evolution and alloying elements behaviour during sintering of a near-Î² titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1686-1693.	2.6	105
56	Prototypes for Bone Implant Scaffolds Designed via Topology Optimization and Manufactured by Solid Freeform Fabrication. Advanced Engineering Materials, 2010, 12, 1106-1110.	1.6	103
57	Improved corrosion behavior of ultrafine-grained eutectic Al-12Si alloy produced by selective laser melting. Materials and Design, 2018, 146, 239-248.	3.3	101
58	Review on manufacture by selective laser melting and properties of titanium based materials for biomedical applications. Materials Technology, 2016, 31, 66-76.	1.5	97
59	Transformation-induced plasticity and high strength in beta titanium alloy manufactured by selective laser melting. Materialia, 2019, 6, 100299.	1.3	91
60	Corrosion behavior and characteristics of passive films of laser powder bed fusion produced Tiâ€“6Alâ€“4V in dynamic Hankâ€™s solution. Materials and Design, 2021, 208, 109907.	3.3	90
61	Ultrafine grained Ti-based composites with ultrahigh strength and ductility achieved by equiaxing microstructure. Materials & Design, 2015, 79, 1-5.	5.1	89
62	A Selfâ€Supported Highâ€Entropy Metallic Glass with a Nanosponge Architecture for Efficient Hydrogen Evolution under Alkaline and Acidic Conditions. Advanced Functional Materials, 2021, 31, 2101586.	7.8	89
63	Simultaneous enhancement of mechanical and shape memory properties by heat-treatment homogenization of Ti2Ni precipitates in TiNi shape memory alloy fabricated by selective laser melting. Journal of Materials Science and Technology, 2022, 101, 205-216.	5.6	89
64	High-strength Î² stabilized Ti-Nb-Fe-Cr alloys with large plasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 368-377.	2.6	87
65	Overcoming the strengthâ€“ductility trade-off by tailoring grain-boundary metastable Si-containing phase in Î²-type titanium alloy. Journal of Materials Science and Technology, 2021, 68, 112-123.	5.6	87
66	Improved hardness and wear resistance of plasma sprayed nanostructured NiCrBSi coating via short-time heat treatment. Surface and Coatings Technology, 2018, 350, 436-444.	2.2	86
67	Glass formation in a (Ti, Zr, Hf)â€“(Cu, Ni, Ag)â€“Al high-order alloy system by mechanical alloying. Journal of Materials Research, 2003, 18, 2141-2149.	1.2	85
68	Rapid malachite green degradation using Fe73.5Si13.5B9Cu1Nb3 metallic glass for activation of persulfate under UVâ€“Vis light. Materials and Design, 2017, 119, 244-253.	3.3	85
69	Improved Corrosion Resistance on Selective Laser Melting Produced Ti-5Cu Alloy after Heat Treatment. ACS Biomaterials Science and Engineering, 2018, 4, 2633-2642.	2.6	85
70	Ultra-sustainable Fe78Si9B13 metallic glass as a catalyst for activation of persulfate on methylene blue degradation under UV-Vis light. Scientific Reports, 2016, 6, 38520.	1.6	84
71	Mechanical behavior and phase transformation of Î²-type Ti-35Nb-2Ta-3Zr alloy fabricated by 3D-Printing. Journal of Alloys and Compounds, 2019, 790, 117-126.	2.8	83
72	Pitting corrosion of Cuâ€“Zr metallic glasses in hydrochloric acid solutions. Journal of Alloys and Compounds, 2008, 462, 60-67.	2.8	81

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73	Distinction of corrosion resistance of selective laser melted Al-12Si alloy on different planes. Journal of Alloys and Compounds, 2018, 747, 648-658.	2.8	80
74	Tailoring of microstructure and mechanical properties of a Ti-based bulk metallic glass-forming alloy. Scripta Materialia, 2007, 57, 1101-1104.	2.6	78
75	A novel kind of thin film composite nanofiltration membrane with sulfated chitosan as the active layer material. Chemical Engineering Science, 2013, 87, 152-159.	1.9	76
76	Resemblance in Corrosion Behavior of Selective Laser Melted and Traditional Monolithic Î² Ti-24Nb-4Zr-8Sn Alloy. ACS Biomaterials Science and Engineering, 2019, 5, 1141-1149.	2.6	75
77	Metastable pitting corrosion behavior of laser powder bed fusion produced Ti-6Al-4V in Hankâ€™s solution. Corrosion Science, 2022, 203, 110333.	3.0	75
78	Glass-forming ability of melt-spun multicomponent (Ti, Zr, Hf)â€“(Cu, Ni, Co)â€“Al alloys with equiatomic substitution. Journal of Non-Crystalline Solids, 2004, 347, 166-172.	1.5	74
79	Interfacial reaction during the fabrication of Ni60Nb40 metallic glass particles-reinforced Al based MMCs. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 444, 206-213.	2.6	74
80	Attractive In Situ Selfâ€Reconstructed Hierarchical Gradient Structure of Metallic Glass for High Efficiency and Remarkable Stability in Catalytic Performance. Advanced Functional Materials, 2019, 29, 1807857.	7.8	74
81	Microstructure evolution and superelasticity of layer-like NiTiNb porous metal prepared by eutectic reaction. Acta Materialia, 2018, 143, 214-226.	3.8	73
82	Influence of powder properties on densification mechanism during spark plasma sintering. Scripta Materialia, 2017, 139, 96-99.	2.6	72
83	Consolidation and properties of ball-milled Ti50Cu18Ni22Al4Sn6 glassy alloy by equal channel angular extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 280-288.	2.6	70
84	Amorphization in mechanically alloyed (Ti, Zr, Nb)â€“(Cu, Ni)â€“Al equiatomic alloys. Journal of Alloys and Compounds, 2007, 428, 157-163.	2.8	70
85	Electrochemical and in vitro behavior of the nanosized composites of Ti-6Al-4V and TiO2 fabricated by friction stir process. Applied Surface Science, 2017, 423, 331-339.	3.1	68
86	Selective laser melting manufactured porous Fe-based metallic glass matrix composite with remarkable catalytic activity and reusability. Applied Materials Today, 2020, 19, 100543.	2.3	68
87	Microstructural homogeneity and mechanical behavior of a selective laser melted Ti-35Nb alloy produced from an elemental powder mixture. Journal of Materials Science and Technology, 2021, 61, 221-233.	5.6	67
88	Mechanically Alloyed Amorphous Ti₅₀(Cu_{0.45}Ni_{0.55})_{44â€“x}Al_xSi_{2.4}B₂ Alloys with Supercooled Liquid Region. Journal of Materials Research, 2002, 17, 1743-1749.	2.6	66
89	Mechanically milling-induced amorphization in Sn-containing Ti-based multicomponent alloy systems. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 394, 204-209.	2.6	66
90	Heterogeneous photocatalytic degradation of mordant black 11 with ZnO nanoparticles under UVâ€“Vis light. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 1636-1641.	2.7	66

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91	Automatic remelting and enhanced mechanical performance of a plasma sprayed NiCrBSi coating. Surface and Coatings Technology, 2019, 369, 31-43.	2.2	66
92	Thermal stability and crystallization kinetics of mechanically alloyed TiCâ•Ti-based metallic glass matrix composite. Journal of Applied Physics, 2006, 100, 033514.	1.1	65
93	Improved deformation behavior in Ti-Zr-Fe-Mn alloys comprising the C14 type Laves and Î² phases. Materials and Design, 2018, 160, 1059-1070.	3.3	65
94	Ductile ultrafine-grained Ti-based alloys with high yield strength. Applied Physics Letters, 2007, 91, .	1.5	64
95	Strengthening mechanism and corrosion resistance of beta-type Ti-Nb-Zr-Mn alloys. Materials Science and Engineering C, 2020, 110, 110728.	3.8	64
96	Corrosion and passivation behavior of laser powder bed fusion produced Ti-6Al-4V in static/dynamic NaCl solutions with different concentrations. Corrosion Science, 2021, 191, 109728.	3.0	64
97	High-strength silicon brass manufactured by selective laser melting. Materials Letters, 2018, 210, 169-172.	1.3	63
98	Deformation and strength characteristics of Laves phases in titanium alloys. Materials and Design, 2019, 179, 107891.	3.3	61
99	Pt nanoparticles decorated heterostructured g-C3N4/Bi2MoO6 microplates with highly enhanced photocatalytic activities under visible light. Scientific Reports, 2019, 9, 7636.	1.6	60
100	Corrosion behavior and mechanism of selective laser melted Ti35Nb alloy produced using pre-alloyed and mixed powder in Hankâ€™s solution. Corrosion Science, 2021, 189, 109609.	3.0	60
101	Study of vacancy-type defects by positron annihilation in ultrafine-grained aluminum severely deformed at room and cryogenic temperatures. Acta Materialia, 2012, 60, 4218-4228.	3.8	58
102	Photocatalytic degradation and absorption kinetics of cibacron brilliant yellow 3G-P by nanosized ZnO catalyst under simulated solar light. Journal of the Taiwan Institute of Chemical Engineers, 2016, 60, 267-274.	2.7	58
103	Heterogeneous photo Fenton-like degradation of cibacron brilliant red 3B-A dye using amorphous Fe 78 Si 9 B 13 and Fe 73.5 Si 13.5 B 9 Cu 1 Nb 3 alloys: The influence of adsorption. Journal of the Taiwan Institute of Chemical Engineers, 2017, 71, 128-136.	2.7	57
104	Superelastic behavior of in-situ eutectic-reaction manufactured high strength 3D porous NiTi-Nb scaffold. Scripta Materialia, 2020, 181, 121-126.	2.6	57
105	In-situ investigation of oxidation behaviour in high-speed steel roll material under dry and humid atmospheres. Corrosion Science, 2010, 52, 2707-2715.	3.0	55
106	Evolution of functional properties realized by increasing laser scanning speed for the selective laser melting fabricated NiTi alloy. Journal of Alloys and Compounds, 2019, 804, 220-229.	2.8	55
107	Nucleation of stress-induced martensites in a Ti/Mo-based alloy. Journal of Materials Science, 2005, 40, 2833-2836.	1.7	53
108	Dehydrogenation characteristics of Ti- and Ni/Ti-catalyzed Mg hydrides. Journal of Alloys and Compounds, 2009, 481, 152-155.	2.8	53

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109	Surface microstructure and mechanical properties of Ti-6Al-4V/Ag nanocomposite prepared by FSP. Materials Characterization, 2019, 153, 175-183.	1.9	52
110	Design and perspective of amorphous metal nanoparticles from laser synthesis and processing. Physical Chemistry Chemical Physics, 2021, 23, 11121-11154.	1.3	52
111	Mechanical characterization and deformation behavior of Î²-stabilized Ti-Nb-Sn-Cr alloys. Journal of Alloys and Compounds, 2019, 792, 684-693.	2.8	51
112	Investigation of Deformation Mechanisms in Î²-Type Ti-35Nb-2Ta-3Zr Alloy via FSP Leading to Surface Strengthening. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4813-4818.	1.1	50
113	Strong enhancement on dye photocatalytic degradation by ball-milled TiO2: A study of cationic and anionic dyes. Journal of Materials Science and Technology, 2017, 33, 856-863.	5.6	50
114	Microstructure and mechanical properties of carbon fibers strengthened Ni-based coatings by laser cladding: The effect of carbon fiber contents. Journal of Alloys and Compounds, 2018, 744, 146-155.	2.8	50
115	Improved trade-off between strength and plasticity in titanium based metastable beta type Ti-Zr-Fe-Sn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138340.	2.6	49
116	Particle Size-Dependent Microstructure, Hardness and Electrochemical Corrosion Behavior of Atmospheric Plasma Sprayed NiCrBSi Coatings. Metals, 2019, 9, 1342.	1.0	49
117	Understanding the friction and wear mechanisms of bulk metallic glass under contact sliding. Wear, 2013, 304, 43-48.	1.5	48
118	Equiaxed Ti-based composites with high strength and large plasticity prepared by sintering and crystallizing amorphous powder. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 171-182.	2.6	48
119	Effects of Friction Stir Processing on the Phase Transformation and Microstructure of TiO2-Compounded Ti-6Al-4V Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5675-5679.	1.1	47
120	Strengthening mechanism of friction stir processed and post heat treated NiAl bronze alloy: Effect of rotation rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 685, 439-446.	2.6	47
121	Spontaneous Formation of Nobleâ€•and Heavyâ€Metalâ€Free Alloyed Semiconductor Quantum Rods for Efficient Photocatalysis. Advanced Materials, 2018, 30, e1803351.	11.1	47
122	Nanosecond pulsed fiber laser cleaning of natural marine micro-biofoulings from the surface of aluminum alloy. Journal of Cleaner Production, 2020, 244, 118724.	4.6	47
123	Feâ€based Metallic Glasses in Functional Catalytic Applications. Chemistry - an Asian Journal, 2018, 13, 3575-3592.	1.7	46
124	Abnormal corrosion behavior of selective laser melted AlSi10Mg alloy induced by heat treatment at 300â€¯Â°C. Journal of Alloys and Compounds, 2019, 803, 314-324.	2.8	46
125	Phase interaction induced texture in a plasma sprayed-remelted NiCrBSi coating during solidification: An electron backscatter diffraction study. Surface and Coatings Technology, 2019, 358, 467-480.	2.2	46
126	Improved Wear and Corrosion Resistance of Microarc Oxidation Coatings on Tiâ€“6Alâ€“4V Alloy with Ultrasonic Assistance for Potential Biomedical Applications. Advanced Engineering Materials, 2021, 23, 2001433.	1.6	46

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127	Topological design of pentamode lattice metamaterials using a ground structure method. Materials and Design, 2021, 202, 109523.	3.3	46
128	Effects of alloyed Si on the autoclave corrosion performance and periodic corrosion kinetics in Zrâ€“Snâ€“Nbâ€“Feâ€“O alloys. Corrosion Science, 2015, 100, 651-662.	3.0	44
129	Effect of microstructure on corrosion behavior of a Zrâ€“Snâ€“Nbâ€“Feâ€“Cuâ€“O alloy. Materials and Design, 2016, 92, 888-896.	3.3	44
130	Beta-type Ti-Nb-Zr-Cr alloys with large plasticity and significant strain hardening. Materials and Design, 2019, 181, 108064.	3.3	44
131	Highly Stable Na₃Fe₂(PO₄)₃@Hard Carbon Sodium-Ion Full Cell for Low-Cost Energy Storage. ACS Sustainable Chemistry and Engineering, 2020, 8, 1380-1387.	3.2	44
132	Strengthening mechanism and micropillar analysis of high-strength NiTiâ€“Nb eutectic-type alloy prepared by laser powder bed fusion. Composites Part B: Engineering, 2020, 200, 108358.	5.9	44
133	Selective Laser Melting of Low-Modulus Biomedical Ti-24Nb-4Zr-8Sn Alloy: Effect of Laser Point Distance. Key Engineering Materials, 0, 520, 226-233.	0.4	43
134	Activation of peroxymonosulfate by Fe78Si9B13 metallic glass: The influence of crystallization. Journal of Alloys and Compounds, 2017, 728, 525-533.	2.8	43
135	Fe73.5Si13.5B9Cu1Nb3 metallic glass: Rapid activation of peroxymonosulfate towards ultrafast Eosin Y degradation. Materials and Design, 2018, 140, 73-84.	3.3	43
136	Microstructure evolution and electrochemical properties of TiO2/Ti-35Nb-2Ta-3Zr micro/nano-composites fabricated by friction stir processing. Materials and Design, 2019, 169, 107680.	3.3	43
137	Formation of zigzag-shaped {1 1 2}ãˆ1 1 1ã€‰ Î² mechanical twins in Tiâ€“24.5 Nbâ€“0.7 Taâ€“2 Zrâ€“1.4 O alloy. Scripta Materialia, 2012, 66, 211-214.	2.6	42
138	Reaction diffusion rate coefficient derivation by isothermal heat treatment in spark plasma sintering system. Scripta Materialia, 2017, 134, 91-94.	2.6	42
139	Flow Consistency Between Non-Darcy Flow in Fracture Network and Nonlinear Diffusion in Matrix to Gas Production Rate in Fractured Shale Gas Reservoirs. Transport in Porous Media, 2016, 111, 97-121.	1.2	41
140	Corrosion behavior of non-equilibrium Zr-Sn-Nb-Fe-Cu-O alloys in high-temperature 0.01â€¯M LiOH aqueous solution and degradation of the surface oxide films. Corrosion Science, 2018, 136, 221-230.	3.0	41
141	A Hydrogen-Initiated Chemical Epitaxial Growth Strategy for In-Plane Heterostructured Photocatalyst. ACS Nano, 2020, 14, 17505-17514.	7.3	41
142	Unprecedented enhancement in strength-plasticity synergy of (TiC+Al6MoTi+Mo)/Al cermet by multiple length-scale microstructure stimulated synergistic deformation. Composites Part B: Engineering, 2021, 225, 109265.	5.9	41
143	Aligning potential differences within carbon nitride based photocatalysis for efficient solar energy harvesting. Nano Energy, 2021, 89, 106357.	8.2	41
144	Zrâ€“Snâ€“Nbâ€“Feâ€“Siâ€“O alloy for fuel cladding candidate: Processing, microstructure, corrosion resistance and tensile behavior. Corrosion Science, 2015, 100, 332-340.	3.0	39

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145	Near-Net Forming Complex Shaped Zr-Based Bulk Metallic Glasses by High Pressure Die Casting. Materials, 2018, 11, 2338.	1.3	39
146	Refined microstructure and enhanced wear resistance of titanium matrix composites produced by selective laser melting. Optics and Laser Technology, 2021, 134, 106644.	2.2	39
147	Phase transformation and deformation behavior of NiTi-Nb eutectic joined NiTi wires. Scientific Reports, 2016, 6, 23905.	1.6	38
148	Effect of low-temperature pre-deformation on precipitation behavior and microstructure of a Zr-Sn-Nb-Fe-Cu-O alloy during fabrication. Journal of Nuclear Science and Technology, 2016, 53, 496-507.	0.7	38
149	Regulation of energetic hot carriers on Pt/TiO2 with thermal energy for photothermal catalysis. Applied Catalysis B: Environmental, 2022, 309, 121263.	10.8	38
150	Understanding the Behavior of Advanced High-Strength Steels Using Atom Probe Tomography. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3958-3971.	1.1	37
151	K-doped Na3Fe2(PO4)3 cathode materials with high-stable structure for sodium-ion stored energy battery. Journal of Alloys and Compounds, 2019, 784, 939-946.	2.8	37
152	Microstructure and properties of equiatomic Tiâ€“Ni alloy fabricated by selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138586.	2.6	37
153	pH dependent passivation behavior of niobium in acid fluoride-containing solutions. Electrochimica Acta, 2018, 285, 172-184.	2.6	36
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