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List of Publications by Year
in descending order

326 papers	17,386 citations	20817 60 h-index	18647 119 g-index
331 all docs	331 docs citations	331 times ranked	10628 citing authors

#	Article	IF	Citations
1	Topological design and additive manufacturing of porous metals for bone scaffolds and orthopaedic implants: A review. Biomaterials, 2016, 83, 127-141.	11.4	1,492
2	Additive manufacturing of strong and ductile Tiâ€“6Alâ€“4V by selective laser melting via in situ martensite decomposition. Acta Materialia, 2015, 85, 74-84.	7.9	897
3	SLM lattice structures: Properties, performance, applications and challenges. Materials and Design, 2019, 183, 108137.	7.0	689
4	Grain refinement of magnesium alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1669-1679.	2.2	580
5	The Interdependence Theory: The relationship between grain formation and nucleant selection. Acta Materialia, 2011, 59, 4907-4921.	7.9	494
6	In situ tailoring microstructure in additively manufactured Ti-6Al-4V for superior mechanical performance. Acta Materialia, 2017, 125, 390-400.	7.9	450
7	Grain structure control during metal 3D printing by high-intensity ultrasound. Nature Communications, 2020, 11, 142.	12.8	416
8	Selective laser melting (SLM) of AlSi12Mg lattice structures. Materials and Design, 2016, 98, 344-357.	7.0	355
9	Effect of Powder Reuse Times on Additive Manufacturing of Ti-6Al-4V by Selective Electron Beam Melting. Jom, 2015, 67, 555-563.	1.9	338
10	Inconel 625 lattice structures manufactured by selective laser melting (SLM): Mechanical properties, deformation and failure modes. Materials and Design, 2018, 157, 179-199.	7.0	285
11	Enzyme Mimics: Advances and Applications. Chemistry - A European Journal, 2016, 22, 8404-8430.	3.3	253
12	Crystallography of grain refinement in Mgâ€“Al based alloys. Acta Materialia, 2005, 53, 3261-3270.	7.9	222
13	Recent advances in grain refinement of light metals and alloys. Current Opinion in Solid State and Materials Science, 2016, 20, 13-24.	11.5	222
14	Potency of high-intensity ultrasonic treatment for grain refinement of magnesium alloys. Scripta Materialia, 2008, 59, 19-22.	5.2	215
15	Grain Refinement of Magnesium Alloys: A Review of Recent Research, Theoretical Developments, and Their Application. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2935-2949.	2.2	201
16	Review of effect of oxygen on room temperature ductility of titanium and titanium alloys. Powder Metallurgy, 2014, 57, 251-257.	1.7	197
17	Additive manufacturing and postprocessing of Ti-6Al-4V for superior mechanical properties. MRS Bulletin, 2016, 41, 775-784.	3.5	197
18	An analytical model for constitutional supercooling-driven grain formation and grain size prediction. Acta Materialia, 2010, 58, 3262-3270.	7.9	180

#	Article	IF	Citations
19	Ti-6Al-4V Additively Manufactured by Selective Laser Melting with Superior Mechanical Properties. Jom, 2015, 67, 668-673.	1.9	168
20	Selective electron beam manufactured Ti-6Al-4V lattice structures for orthopedic implant applications: Current status and outstanding challenges. Current Opinion in Solid State and Materials Science, 2018, 22, 75-99.	11.5	165
21	Computational modelling of strut defects in SLM manufactured lattice structures. Materials and Design, 2019, 171, 107671.	7.0	163
22	Grain refinement of magnesium alloys by zirconium: Formation of equiaxed grains. Scripta Materialia, 2006, 54, 881-886.	5.2	158
23	Massive transformation in Tiâ€“6Alâ€“4V additively manufactured by selective electron beam melting. Acta Materialia, 2016, 104, 303-311.	7.9	155
24	Heterogeneous nucleation on potent spherical substrates during solidification. Acta Materialia, 2007, 55, 943-953.	7.9	144
25	Effect of geometry on the mechanical properties of Ti-6Al-4V Gyroid structures fabricated via SLM: A numerical study. Materials and Design, 2019, 184, 108165.	7.0	134
26	Characteristic zirconium-rich coring structures in Mgâ€“Zr alloys. Scripta Materialia, 2002, 46, 649-654.	5.2	129
27	A transmission electron microscopy and three-dimensional atom probe study of the oxygen-induced fine microstructural features in as-sintered Tiâ€“6Alâ€“4V and their impacts on ductility. Acta Materialia, 2014, 68, 196-206.	7.9	129
28	Selective laser melting of H13: microstructure and residual stress. Journal of Materials Science, 2017, 52, 12476-12485.	3.7	127
29	Ultrasonic refinement of magnesium by cavitation: Clarifying the role of wall crystals. Journal of Crystal Growth, 2009, 311, 3708-3715.	1.5	126
30	Metal Alloys for Fusionâ€Based Additive Manufacturing. Advanced Engineering Materials, 2018, 20, 1700952.	3.5	126
31	Discussions on grain refinement of magnesium alloys by carbon inoculation. Scripta Materialia, 2005, 52, 415-419.	5.2	125
32	The Contribution of Constitutional Supercooling to Nucleation and Grain Formation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4868-4885.	2.2	123
33	Additive manufacturing of a high niobium-containing titanium aluminide alloy by selective electron beam melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 103-107.	5.6	123
34	High tensile-strength and ductile titanium matrix composites strengthened by TiB nanowires. Scripta Materialia, 2017, 141, 133-137.	5.2	120
35	Microstructure and mechanical behavior of metal injection molded Tiâ€“Nb binary alloys as biomedical material. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 28, 171-182.	3.1	118
36	Native grain refinement of magnesium alloys. Scripta Materialia, 2005, 53, 841-844.	5.2	116

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37	Effect of manganese on grain refinement of Mgâ€"Al based alloys. Scripta Materialia, 2006, 54, 1853-1858.	5.2	116
38	Metal injection moulding of titanium and titanium alloys: Challenges and recent development. Powder Technology, 2017, 319, 289-301.	4.2	115
39	Grain Refinement of Alloys in Fusion-Based Additive Manufacturing Processes. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4341-4359.	2.2	115
40	The effect of annealing twin-generated special grain boundaries on HAZ liquation cracking of nickel-base superalloys. Acta Materialia, 2003, 51, 3351-3361.	7.9	111
41	The role of ultrasonic treatment in refining the as-cast grain structure during the solidification of an Alâ€"2Cu alloy. Journal of Crystal Growth, 2014, 408, 119-124.	1.5	108
42	Microstructure and Mechanical Properties of Long Ti-6Al-4V Rods Additively Manufactured by Selective Electron Beam Melting Out of a Deep Powder Bed and the Effect of Subsequent Hot Isostatic Pressing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 3824-3834.	2.2	99
43	The Influence of As-Built Surface Conditions on Mechanical Properties of Ti-6Al-4V Additively Manufactured by Selective Electron Beam Melting. Jom, 2016, 68, 791-798.	1.9	99
44	The enabling role of dealloying in the creation of specific hierarchical porous metal structuresâ€"A review. Corrosion Science, 2018, 134, 78-98.	6.6	97
45	Cellular automata simulation of microstructural evolution during dynamic recrystallization of an HY-100 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 365, 180-185.	5.6	95
46	Effect of iron on grain refinement of high-purity Mgâ€"Al alloys. Scripta Materialia, 2004, 51, 125-129.	5.2	93
47	Extraordinary reinforcing effect of carbon nanotubes in aluminium matrix composites assisted by in-situ alumina nanoparticles. Composites Part B: Engineering, 2020, 183, 107691.	12.0	93
48	Mechanism for grain refinement of magnesium alloys by superheating. Scripta Materialia, 2007, 56, 633-636.	5.2	92
49	Heterogeneous nuclei size in magnesiumâ€"zirconium alloys. Scripta Materialia, 2004, 50, 1115-1119.	5.2	90
50	The effect of ordered and partially ordered surface topography on bone cell responses: a review. Biomaterials Science, 2018, 6, 250-264.	5.4	86
51	A novel quaternary equiatomic Ti-Zr-Nb-Ta medium entropy alloy (MEA). Intermetallics, 2018, 101, 39-43.	3.9	86
52	Integrating data mining and machine learning to discover high-strength ductile titanium alloys. Acta Materialia, 2021, 202, 211-221.	7.9	85
53	The effect of solute on ultrasonic grain refinement of magnesium alloys. Journal of Crystal Growth, 2010, 312, 2267-2272.	1.5	83
54	Settling of undissolved zirconium particles in pure magnesium melts. Journal of Light Metals, 2001, 1, 157-165.	0.8	78

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55	Quantitative Analyses of MWCNTâ€‘Ti Powder Mixtures using Raman Spectroscopy: The Influence of Milling Parameters on Nanostructural Evolution. Advanced Engineering Materials, 2015, 17, 1660-1669.	3.5	78
56	Identifying and understanding the effect of milling energy on the synthesis of carbon nanotubes reinforced titanium metal matrix composites. Carbon, 2016, 99, 384-397.	10.3	77
57	Effect of dispersion method on the deterioration, interfacial interactions and re-agglomeration of carbon nanotubes in titanium metal matrix composites. Materials and Design, 2015, 88, 138-148.	7.0	73
58	Zirconium Alloys for Orthopaedic and Dental Applications. Advanced Engineering Materials, 2018, 20, 1800207.	3.5	71
59	A New Analytical Approach to Reveal the Mechanisms of Grain Refinement. Advanced Engineering Materials, 2007, 9, 739-746.	3.5	63
60	Mechanical properties, in vitro corrosion resistance and biocompatibility of metal injection molded Ti-12Mo alloy for dental applications. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 534-547.	3.1	63
61	3D printed sandwich beams with bioinspired cores: Mechanical performance and modelling. Thin-Walled Structures, 2021, 161, 107471.	5.3	63
62	Heterogeneous nucleation on convex spherical substrate surfaces: A rigorous thermodynamic formulation of Fletcherâ€™s classical model and the new perspectives derived. Journal of Chemical Physics, 2009, 130, 214709.	3.0	62
63	Manipulation and Characterization of a Novel Titanium Powder Precursor for Additive Manufacturing Applications. Jom, 2015, 67, 564-572.	1.9	62
64	Simultaneous gettering of oxygen and chlorine and homogenization of the Î² phase by rare earth hydride additions to a powder metallurgy Tiâ€“2.25Moâ€“1.5Fe alloy. Scripta Materialia, 2012, 67, 491-494.	5.2	56
65	Self-assembled, aligned TiC nanoplatelet-reinforced titanium composites with outstanding compressive properties. Scripta Materialia, 2013, 69, 29-32.	5.2	56
66	Neodymium(III) in alumino-borosilicate glasses. Journal of Non-Crystalline Solids, 2000, 278, 35-57.	3.1	55
67	Compositional design of strong and ductile (tensile) Ti-Zr-Nb-Ta medium entropy alloys (MEAs) using the atomic mismatch approach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 762-772.	5.6	55
68	Metal injection moulding of surgical tools, biomaterials and medical devices: A review. Powder Technology, 2020, 364, 189-204.	4.2	55
69	On the microstructural refinement in commercial purity Al and Al-10 wt% Cu alloy under ultrasonication during solidification. Materials and Design, 2017, 132, 266-274.	7.0	54
70	Impacts of trace carbon on the microstructure of as-sintered biomedical Tiâ€“15Mo alloy and reassessment of the maximum carbon limit. Acta Biomaterialia, 2014, 10, 1014-1023.	8.3	53
71	Sintering of Tiâ€“10Vâ€“2Feâ€“3Al and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6719-6726.	5.6	52
72	In situ synchrotron radiation to understand the pathways for the scavenging of oxygen in commercially pure Ti and Tiâ€“6Alâ€“4V by yttrium hydride. Scripta Materialia, 2013, 68, 63-66.	5.2	52

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73	The Loss of Dissolved Zirconium in Zirconium-Refined Magnesium Alloys after Remelting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 2470-2479.	2.2	51
74	The characteristics of heterogeneous nucleation on concave surfaces and implications for directed nucleation or surface activity by surface nanopatterning. Journal of Crystal Growth, 2012, 355, 73-77.	1.5	50
75	In situ preparation of TiB nanowires for high-performance Ti metal matrix nanocomposites. Journal of Alloys and Compounds, 2018, 735, 2640-2645.	5.5	50
76	Creation of bimodal porous copper materials by an annealing-electrochemical dealloying approach. Electrochimica Acta, 2015, 164, 288-296.	5.2	49
77	Fabrication of 10mm diameter fully dense Al86Ni6Y4.5Co2La1.5 bulk metallic glass with high fracturestrength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 568, 155-159.	5.6	48
78	Alloying of pure magnesium with Mg 33.3 wt-%Zr master alloy. Materials Science and Technology, 2003, 19, 156-162.	1.6	47
79	Grain refinement of binary Al-Si, Al-Cu and Al-Ni alloys by ultrasonication. Journal of Materials Processing Technology, 2017, 249, 367-378.	6.3	47
80	Influence of deposition strategy on the microstructure and fatigue properties of laser metal deposited Ti-6Al-4V powder on Ti-6Al-4V substrate. International Journal of Fatigue, 2020, 130, 105236.	5.7	47
81	Nanoscaled Alâ€"AlN composites consolidated by equal channel angular pressing (ECAP) of partially in situ nitrided Al powder. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 562, 190-195.	5.6	46
82	The effect of lanthanum boride on the sintering, sintered microstructure and mechanical properties of titanium and titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 447-455.	5.6	46
83	Metal Powder for Additive Manufacturing. Jom, 2015, 67, 536-537.	1.9	46
84	Role of ultrasonic treatment, inoculation and solute in the grain refinement of commercial purity aluminium. Scientific Reports, 2017, 7, 9729.	3.3	46
85	An approach to assessing ultrasonic attenuation in molten magnesium alloys. Journal of Applied Physics, 2009, 105, .	2.5	45
86	Creation of semisolid slurries containing fine and spherical particles by grain refinement based on the Mullinsâ€"Sekerka stability criterion. Acta Materialia, 2006, 54, 2241-2252.	7.9	43
87	Optical Aptasensors for Adenosine Triphosphate. Theranostics, 2016, 6, 1683-1702.	10.0	43
88	Sintering of Titanium in Vacuum by Microwave Radiation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 2466-2474.	2.2	42
89	Microstructure, tensile properties and deformation behaviors of aluminium metal matrix composites co-reinforced by ex-situ carbon nanotubes and in-situ alumina nanoparticles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 795, 139930.	5.6	42
90	The effect of Si additions on the sintering and sintered microstructure and mechanical properties of Tiâ€"3Ni alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7381-7387.	5.6	41

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91	The sintering densification, microstructure and mechanical properties of gamma Tiâ€“48Alâ€“2Crâ€“2Nb alloy with a small addition of copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 293-300.	5.6	41
92	Effect of additive manufactured lattice defects on mechanical properties: an automated method for the enhancement of lattice geometry. International Journal of Advanced Manufacturing Technology, 2020, 108, 957-971.	3.0	41
93	Effect of Soluble and Insoluble Zirconium on the Grain Refinement of Magnesium Alloys. Materials Science Forum, 2003, 419-422, 593-598.	0.3	40
94	Grain nucleation and formation in Mgâ€“Zr alloys. International Journal of Cast Metals Research, 2009, 22, 256-259.	1.0	40
95	Impurity scavenging, microstructural refinement and mechanical properties of powder metallurgy titanium and titanium alloys by a small addition of cerium silicide. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 573, 166-174.	5.6	40
96	Modification of the Î±-Ti laths to near equiaxed Î±-Ti grains in as-sintered titanium and titanium alloys by a small addition of boron. Journal of Alloys and Compounds, 2013, 579, 553-557.	5.5	40
97	3D characterization of defects in deep-powder-bed manufactured Tiâ€“6Alâ€“4V and their influence on tensile properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138031.	5.6	40
98	Microstructure and elevated temperature mechanical and creep properties of Mgâ€“4Yâ€“3Ndâ€“0.5Zr alloy in the product form of a large structural casting. Materials & Design, 2014, 60, 218-225.	5.1	39
99	New Development in Selective Laser Melting of Tiâ€“6Alâ€“4V: A Wider Processing Window for the Achievement of Fully Lamellar Î±Â+Â² Microstructures. Jom, 2017, 69, 2679-2683.	1.9	38
100	Effect of building direction on porosity and fatigue life of selective laser melted AlSi12Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 729, 76-85.	5.6	38
101	New insights into nickel-free superelastic titanium alloys for biomedical applications. Current Opinion in Solid State and Materials Science, 2019, 23, 100783.	11.5	36
102	The effect of rejuvenation heat treatments on the repair weldability of wrought Alloy 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 340, 225-231.	5.6	34
103	SAP-like ultrafine-grained Al composites dispersion strengthened with nanometric AlN. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 588, 181-187.	5.6	34
104	Metal injection moulding of non-spherical titanium powders: Processing, microstructure and mechanical properties. Journal of Manufacturing Processes, 2018, 31, 416-423.	5.9	34
105	Experimental and numerical assessment of surface roughness for Ti6Al4V lattice elements in selective laser melting. International Journal of Advanced Manufacturing Technology, 2019, 105, 1275-1293.	3.0	34
106	Uptake of iron and its effect on grain refinement of pure magnesium by zirconium. Materials Science and Technology, 2004, 20, 585-592.	1.6	33
107	Semisolid processing characteristics of AM series Mg alloys by rheo-diecasting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 779-787.	2.2	33
108	The surface structure of gas-atomized metallic glass powders. Scripta Materialia, 2010, 62, 266-269.	5.2	33

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109	High oxygen-content titanium and titanium alloys made from powder. Journal of Alloys and Compounds, 2020, 836, 155526.	5.5	33
110	In situ fabrication and mechanical properties of Alâ€"AlN composite by hot extrusion of partially nitrided AA6061 powder. Journal of Materials Research, 2011, 26, 1719-1725.	2.6	32
111	Comparison of electromagnetic and piezoelectric vibration energy harvesters with different interface circuits. Mechanical Systems and Signal Processing, 2016, 72-73, 906-924.	8.0	32
112	Cuboid-like nanostructure strengthened equiatomic Tiâ€"Zrâ€"Nbâ€"Ta medium entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140169.	5.6	32
113	A Monte Carlo simulation-based approach to realistic modelling of additively manufactured lattice structures. Additive Manufacturing, 2020, 32, 101092.	3.0	32
114	The Effect of Ultrasonic Melt Treatment on Macro-Segregation and Peritectic Transformation in an Al-19Si-4Fe Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 5579-5590.	2.2	31
115	Hollow-walled lattice materials by additive manufacturing: Design, manufacture, properties, applications and challenges. Current Opinion in Solid State and Materials Science, 2021, 25, 100940.	11.5	31
116	Aluminium powder metallurgy. , 2011, , 655-701.		30
117	Microwave Heating, Isothermal Sintering, and Mechanical Properties of Powder Metallurgy Titanium and Titanium Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1842-1851.	2.2	30
118	The effect of a small addition of boron on the sintering densification, microstructure and mechanical properties of powder metallurgy Tiâ€"7Ni alloy. Journal of Alloys and Compounds, 2013, 555, 339-346.	5.5	30
119	Cobalt-doped Tiâ€"48Alâ€"2Crâ€"2Nb alloy fabricated by cold compaction and pressureless sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 574, 176-185.	5.6	30
120	The critical role of heating rate in enabling the removal of surface oxide films during spark plasma sintering of Al-based bulk metallic glass powder. Journal of Non-Crystalline Solids, 2013, 375, 95-98.	3.1	30
121	Selective laser melting-fabricated Ti-6Al-4V alloy: Microstructural inhomogeneity, consequent variations in elastic modulus and implications. Optics and Laser Technology, 2019, 111, 664-670.	4.6	30
122	Characteristics of oxide films on Ti-(10â€"75)Ta alloys and their corrosion performance in an aerated Hankâ€™s balanced salt solution. Applied Surface Science, 2020, 506, 145013.	6.1	30
123	Novel fabrication of titanium by pure microwave radiation of titanium hydride powder. Scripta Materialia, 2013, 69, 69-72.	5.2	29
124	The effect of grain size on the tensile and creep properties of Mgâ€"2.6Ndâ€"0.35Znâ€"xZr alloys at 250Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 163-169.	5.6	29
125	Strength-ductility improvement of extruded Ti-(N) materials using pure Ti powder with high nitrogen solution. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 779, 139136.	5.6	29
126	Grain refinement of stainless steel in ultrasound-assisted additive manufacturing. Additive Manufacturing, 2021, 37, 101632.	3.0	29

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127	Variant selection in additively manufactured alpha-beta titanium alloys. Journal of Materials Science and Technology, 2022, 113, 14-21.	10.7	29
128	On the solidification microstructure of Mgâ€“30Znâ€“2.5Y metalâ€“intermetallic alloy. Intermetallics, 2006, 14, 596-602.	3.9	28
129	Impurity (Fe, Cl, and P)-Induced Grain Boundary and Secondary Phases in Commercially Pure Titanium (CP-Ti). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3961-3969.	2.2	27
130	Combinatorial Influence of Bimodal Size of B2 TiCu Compounds on Plasticity of Ti-Cu-Ni-Zr-Sn-Si Bulk Metallic Glass Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2376-2381.	2.2	27
131	Microstructure, Mechanical Properties, and Flatness of SEBM Ti-6Al-4V Sheet in As-Built and Hot Isostatically Pressed Conditions. Jom, 2017, 69, 466-471.	1.9	27
132	Grain coarsening of magnesium alloys by beryllium. Scripta Materialia, 2004, 51, 647-651.	5.2	26
133	The effects of rheo-diecasting on the integrity and mechanical properties of Mgâ€“6Alâ€“1Zn. Scripta Materialia, 2006, 54, 207-211.	5.2	26
134	Characterization and decompositional crystallography of the massive phase grains in an additively-manufactured Ti-6Al-4V alloy. Materials Characterization, 2017, 127, 146-152.	4.4	26
135	Toward Manufacturing Quality Ti-6Al-4V Lattice Struts by Selective Electron Beam Melting (SEBM) for Lattice Design. Jom, 2018, 70, 1870-1876.	1.9	26
136	Adaptive Concurrent Topology Optimization of Cellular Composites for Additive Manufacturing. Jom, 2020, 72, 2378-2390.	1.9	26
137	Formation of spheroidal carbide in vanadium white cast iron by rare earth modification. Materials Science and Technology, 1990, 6, 905-910.	1.6	25
138	In-situ observations of the dissolution of carbides in an Fe-Cr-C alloy. Scripta Materialia, 1999, 41, 1301-1303.	5.2	25
139	The Sintering, Sintered Microstructure and Mechanical Properties of Ti-Fe-Si Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4896-4906.	2.2	25
140	Abnormal crystallization in Al86Ni6Y4.5Co2La1.5 metallic glass induced by spark plasma sintering. Intermetallics, 2013, 39, 69-73.	3.9	25
141	Crystallization behaviour and thermal stability of two aluminium-based metallic glass powder materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 432-439.	5.6	24
142	Warm die compaction and sintering of titanium and titanium alloy powders. Journal of Materials Processing Technology, 2014, 214, 660-666.	6.3	24
143	Spark plasma sintering and hot pressing of titanium and titanium alloys. , 2015, , 219-235.		24
144	Boron nitride nanotube reinforced titanium metal matrix composites with excellent high-temperature performance. Journal of Materials Research, 2017, 32, 3744-3752.	2.6	24

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145	Recent Advances in the Design and Fabrication of Strong and Ductile (Tensile) Titanium Metal Matrix Composites. Advanced Engineering Materials, 2019, 21, 1801331.	3.5	24
146	Mechanism of post-weld heat treatment cracking in Rene 80 nickel based superalloy. Materials Science and Technology, 2002, 18, 407-412.	1.6	23
147	The influence of topological structure on bulk glass formation in Al-based metallic glasses. Scripta Materialia, 2011, 65, 755-758.	5.2	23
148	Chemical heterogeneity-induced plasticity in Tiâ€“Feâ€“Bi ultrafine eutectic alloys. Materials & Design, 2014, 60, 363-367.	5.1	23
149	Titanium carbide precipitation in Tiâ€"22Nb alloy fabricated by metal injection moulding. Powder Metallurgy, 2014, 57, 2-4.	1.7	23
150	Trace Carbon in Biomedical Beta-Titanium Alloys: Recent Progress. Jom, 2015, 67, 2236-2243.	1.9	23
151	Redefining the Î²-Phase Stability in Ti-Nb-Zr Alloys for Alloy Design and Microstructural Prediction. Jom, 2018, 70, 2254-2259.	1.9	23
152	Laser powder bed fusion additive manufacturing (LPBF-AM): the influence of design features and LPBF variables on surface topography and effect on fatigue properties. Critical Reviews in Solid State and Materials Sciences, 2023, 48, 132-168.	12.3	23
153	Enabling the development of ductile powder metallurgy titanium alloys by a unique scavenger of oxygen and chlorine. Journal of Alloys and Compounds, 2018, 764, 467-475.	5.5	22
154	Tensile properties improvement by homogenized nitrogen solid solution strengthening of commercially pure titanium through powder metallurgy process. Materials Characterization, 2020, 170, 110700.	4.4	22
155	Fatigue Performance of Additively Manufactured Ti-6Al-4V: Surface Condition vs. Internal Defects. Jom, 2020, 72, 1022-1030.	1.9	22
156	Microstructural modification of recycled aluminium alloys by high-intensity ultrasonication: Observations from custom Alâ€"2Siâ€"2Mgâ€"1.2Feâ€"(0.5,1.0)Mn alloys. Journal of Alloys and Compounds, 2020, 823, 153833.	5.5	22
157	Fundamental Understanding of the Dissolution of Oxide Film on Ti Powder and the Unique Scavenging Feature by LaB6. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 1-6.	2.2	22
158	Modification of hypoeutectic low alloy white cast irons. Journal of Materials Science, 1996, 31, 1865-1871.	3.7	21
159	Fatigue Performance and Equations of Roller Compacted Concrete with Fly Ash. Cement and Concrete Research, 1998, 28, 309-315.	11.0	21
160	Non-isothermal crystallization kinetics and mechanical properties of Al 86 Ni 6 Y 4.5 Co 2 La 1.5 metallic glass powder. Journal of Alloys and Compounds, 2012, 530, 127-131.	5.5	21
161	Graphene-strengthened Inconel 625 Alloy Fabricated by Selective Laser Melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140099.	5.6	21
162	Microwave-assisted fabrication of titanium hollow spheres with tailored shell structures for various potential applications. Materials Letters, 2012, 86, 84-87.	2.6	20

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