Konda Gokuldoss Prashanth

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/308166/publications.pdf

Version: 2024-02-01

189 papers	10,371 citations	41323 49 h-index	39638 94 g-index
190 all docs	190 docs citations	190 times ranked	5717 citing authors

#	Article	IF	Citations
1	Microstructure and mechanical properties of Alâ€“12Si produced by selective laser melting: Effect of heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 153-160.	2.6	649
2	Additive Manufacturing Processes: Selective Laser Melting, Electron Beam Melting and Binder Jettingâ€”Selection Guidelines. Materials, 2017, 10, 672.	1.3	513
3	Mechanical behavior of selective laser melted 316L stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 696, 113-121.	2.6	457
4	Simultaneous enhancements of strength and toughness in an Al-12Si alloy synthesized using selective laser melting. Acta Materialia, 2016, 115, 285-294.	3.8	408
5	Formation of metastable cellular microstructures in selective laser melted alloys. Journal of Alloys and Compounds, 2017, 707, 27-34.	2.8	387
6	Defining the tensile properties of Al-12Si parts produced by selective laser melting. Acta Materialia, 2017, 126, 25-35.	3.8	304
7	Is the energy density a reliable parameter for materials synthesis by selective laser melting?. Materials Research Letters, 2017, 5, 386-390.	4.1	294
8	Fabrication of Fe-based bulk metallic glass by selective laser melting: A parameter study. Materials and Design, 2015, 86, 703-708.	3.3	261
9	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
10	Mechanical properties of Al-based metal matrix composites reinforced with Zr-based glassy particles produced by powder metallurgy. Acta Materialia, 2009, 57, 2029-2039.	3.8	229
11	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
12	Additive manufacturing of Cuâ€“10Sn bronze. Materials Letters, 2015, 156, 202-204.	1.3	208
13	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
14	Tensile, fracture, and fatigue crack growth properties of a 3D printed maraging steel through selective laser melting. Journal of Alloys and Compounds, 2017, 725, 355-364.	2.8	201
15	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
16	Selective laser melting of Al-Zn-Mg-Cu: Heat treatment, microstructure and mechanical properties. Journal of Alloys and Compounds, 2017, 707, 287-290.	2.8	147
17	Influence of Annealing on Mechanical Properties of Al-20Si Processed by Selective Laser Melting. Metals, 2014, 4, 28-36.	1.0	144
18	Tribological and corrosion properties of Alâ€“12Si produced by selective laser melting. Journal of Materials Research, 2014, 29, 2044-2054.	1.2	138

#	Article	IF	Citations
19	Microstructure and mechanical properties of a heat-treatable Al-3.5Cu-1.5Mg-1Si alloy produced by selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 562-570.	2.6	121
20	Production of high strength Al85Nd8Ni5Co2 alloy by selective laser melting. Additive Manufacturing, 2015, 6, 1-5.	1.7	120
21	Friction welding of Alâ€“12Si parts produced by selective laser melting. Materials & Design, 2014, 57, 632-637.	5.1	113
22	A review of particulate-reinforced aluminum matrix composites fabricated by selective laser melting. Transactions of Nonferrous Metals Society of China, 2020, 30, 2001-2034.	1.7	106
23	Processing of Alâ€“12Siâ€“TNM composites by selective laser melting and evaluation of compressive and wear properties. Journal of Materials Research, 2016, 31, 55-65.	1.2	103
24	Influence of Powder Characteristics on Processability of AlSi12 Alloy Fabricated by Selective Laser Melting. Materials, 2018, 11, 742.	1.3	102
25	Impact of the scanning strategy on the mechanical behavior of 316L steel synthesized by selective laser melting. Journal of Manufacturing Processes, 2019, 45, 255-261.	2.8	87
26	Effect of TiB2 particles on microstructure and crystallographic texture of Al-12Si fabricated by selective laser melting. Journal of Alloys and Compounds, 2019, 786, 551-556.	2.8	87
27	Microstructure and mechanical properties of Al-Cu alloys fabricated by selective laser melting of powder mixtures. Journal of Alloys and Compounds, 2018, 735, 2263-2266.	2.8	84
28	Fabrication and mechanical properties of Al-based metal matrix composites reinforced with Mg65Cu20Zn5Y10 metallic glass particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 600, 53-58.	2.6	82
29	Hybrid nanostructured aluminum alloy with super-high strength. NPG Asia Materials, 2015, 7, e229-e229.	3.8	82
30	Premature failure of an additively manufactured material. NPG Asia Materials, 2020, 12, .	3.8	81
31	Selective laser melting of Cuâ€“Niâ€“Sn: A comprehensive study on the microstructure, mechanical properties, and deformation behavior. International Journal of Plasticity, 2021, 138, 102926.	4.1	80
32	Production of Porous Î²-Type Tiâ€“40Nb Alloy for Biomedical Applications: Comparison of Selective Laser Melting and Hot Pressing. Materials, 2013, 6, 5700-5712.	1.3	77
33	Selective Laser Melting of Ti-45Nb Alloy. Metals, 2015, 5, 686-694.	1.0	75
34	Selective laser manufacturing of Ti-based alloys and composites: impact of process parameters, application trends, and future prospects. Materials Today Advances, 2020, 8, 100097.	2.5	71
35	Microstructure and phase formation in Alâ€“20Siâ€“5Feâ€“3Cuâ€“1Mg synthesized by selective laser melting. Journal of Alloys and Compounds, 2016, 657, 430-435.	2.8	68
36	Selective laser melting of Ti6Al4V: Effect of laser re-melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 805, 140558.	2.6	68

#	Article	IF	Citations
37	Comparative investigation of microstructure, mechanical properties and strengthening mechanisms of Al-12Si/TiB2 fabricated by selective laser melting and hot pressing. Ceramics International, 2018, 44, 17635-17642.	2.3	66
38	Microstructure and thermal expansion behavior of Al-50Si synthesized by selective laser melting. Journal of Alloys and Compounds, 2017, 699, 548-553.	2.8	65
39	Microstructure evolution and mechanical properties of carbon nanotubes reinforced Al matrix composites. Materials Characterization, 2017, 133, 122-132.	1.9	62
40	The thermal expansion behaviour of SiCp/Alâ€“20Si composites solidified under high pressures. Materials & Design, 2015, 65, 387-394.	5.1	60
41	Tensile properties of Al matrix composites reinforced with in situ devitrified Al84Gd6Ni7Co3 glassy particles. Journal of Alloys and Compounds, 2014, 586, S419-S422.	2.8	59
42	Grain refinement in laser manufactured Al-based composites with TiB2 ceramic. Journal of Materials Research and Technology, 2020, 9, 2611-2622.	2.6	59
43	Modeling the strengthening effect of Alâ€“Cuâ€“Fe quasicrystalline particles in Al-based metal matrix composites. Journal of Alloys and Compounds, 2012, 536, S130-S133.	2.8	57
44	Characterization of 316L Steel Cellular Dodecahedron Structures Produced by Selective Laser Melting. Technologies, 2016, 4, 34.	3.0	56
45	A novel high-strength Al-based nanocomposite reinforced with Ti-based metallic glass nanoparticles produced by powder metallurgy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 34-41.	2.6	56
46	Anisotropy in local microstructure â€“ Does it affect the tensile properties of the SLM samples?. Manufacturing Letters, 2018, 15, 33-37.	1.1	55
47	Selective Laser Melting of Aluminum and Its Alloys. Materials, 2020, 13, 4564.	1.3	55
48	Cu-Ni-Sn alloy fabricated by melt spinning and selective laser melting: a comparative study on the microstructure and formation kinetics. Journal of Materials Research and Technology, 2020, 9, 13097-13105.	2.6	54
49	Al-based metal matrix composites reinforced with Fe49.9Co35.1Nb7.7B4.5Si2.8 glassy powder: Mechanical behavior under tensile loading. Journal of Alloys and Compounds, 2014, 615, S382-S385.	2.8	52
50	Evolution of microstructure and mechanical properties of as-cast Al-50Si alloy due to heat treatment and P modifier content. Materials & Design, 2015, 74, 150-156.	5.1	52
51	Influence of severe straining and strain rate on the evolution of dislocation structures during micro-/nanoindentation in high entropy lamellar eutectics. International Journal of Plasticity, 2018, 109, 121-136.	4.1	51
52	Dissimilar welding of Al_{0.1}CoCrFeNi high-entropy alloy and AISI304 stainless steel. Journal of Materials Research, 2019, 34, 2683-2694.	1.2	51
53	Crystallization behavior and consolidation of gas-atomized Al84Gd6Ni7Co3 glassy powder. Journal of Alloys and Compounds, 2010, 491, 137-142.	2.8	50
54	Tribological properties of selective laser melted Al 12Si alloy. Tribology International, 2019, 137, 94-101.	3.0	48

#	Article	IF	Citations
55	Selective laser melting of high-strength, low-modulus Tiâ€“35Nbâ€“7Zrâ€“5Ta alloy. Materialia, 2020, 14, 100941.	1.3	48
56	Crystallization kinetics and consolidation of mechanically alloyed Al70Y16Ni10Co4 glassy powders. Journal of Alloys and Compounds, 2009, 477, 171-177.	2.8	47
57	Laser additive manufacturing of nano-TiC particles reinforced CoCrFeMnNi high-entropy alloy matrix composites with high strength and ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142512.	2.6	46
58	Tensile properties of Alâ€“12Si matrix composites reinforced with Tiâ€“Al-based particles. Journal of Alloys and Compounds, 2015, 630, 256-259.	2.8	45
59	Friction welding of selective laser melted Ti6Al4V parts. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 66-71.	2.6	44
60	Additive Manufacturing of Aluminumâ€Based Metal Matrix Compositesâ€”A Review. Advanced Engineering Materials, 2021, 23, 2100053.	1.6	42
61	Mechanical behavior of Al-based matrix composites reinforced with Mg58Cu28.5Gd11Ag2.5 metallic glasses. Advanced Powder Technology, 2014, 25, 635-639.	2.0	41
62	Mechanical Behavior of Ti6Al4V Scaffolds Filled with CaSiO3 for Implant Applications. Applied Sciences (Switzerland), 2019, 9, 3844.	1.3	41
63	Perspectives of metal-diamond composites additive manufacturing using SLM-SPS and other techniques for increased wear-impact resistance. International Journal of Refractory Metals and Hard Materials, 2020, 88, 105192.	1.7	40
64	Effect of high pressure solidification on tensile properties and strengthening mechanisms of Al-20Si. Journal of Alloys and Compounds, 2016, 688, 88-93.	2.8	39
65	Effect of Si content on the microstructure and properties of Alâ€“Si alloys fabricated using hot extrusion. Journal of Materials Research, 2017, 32, 2210-2217.	1.2	39
66	Effect of Al2O3 Nanoparticles as Reinforcement on the Tensile Behavior of Al-12Si Composites. Metals, 2017, 7, 359.	1.0	39
67	Frictional Wear and Corrosion Behavior of AlCoCrFeNi High-Entropy Alloy Coatings Synthesized by Atmospheric Plasma Spraying. Entropy, 2020, 22, 740.	1.1	39
68	Linear patterning of high entropy alloy by additive manufacturing. Manufacturing Letters, 2020, 24, 9-13.	1.1	39
69	Additive Manufacturing: Reproducibility of Metallic Parts. Technologies, 2017, 5, 8.	3.0	38
70	Plastic deformation mechanisms in severely strained eutectic high entropy composites explained via strain rate sensitivity and activation volume. Composites Part B: Engineering, 2018, 150, 7-13.	5.9	38
71	Enhancing the interface bonding in carbon nanotubes reinforced Al matrix composites by the in situ formation of TiAl3 and TiC. Journal of Alloys and Compounds, 2018, 765, 98-105.	2.8	38
72	A Review on Development of Bio-Inspired Implants Using 3D Printing. Biomimetics, 2021, 6, 65.	1.5	38

#	Article	IF	Citations
73	Role of impinging powder particles on melt pool hydrodynamics, thermal behaviour and microstructure in laser-assisted DED process: A particle-scale DEM â€“ CFD â€“ CA approach. International Journal of Heat and Mass Transfer, 2020, 158, 119989.	2.5	37
74	Tensile Properties of Al-12Si Fabricated via Selective Laser Melting (SLM) at Different Temperatures. Technologies, 2016, 4, 38.	3.0	36
75	Novel welding of Al0.5CoCrFeNi high-entropy alloy: Corrosion behavior. Journal of Alloys and Compounds, 2020, 817, 153163.	2.8	35
76	Creep and high temperature fatigue performance of as build selective laser melted Ti-based 6Al-4V titanium alloy. Engineering Failure Analysis, 2020, 111, 104477.	1.8	35
77	Interfacial structure and wear properties of selective laser melted Ti/(TiC+TiN) composites with high content of reinforcements. Journal of Alloys and Compounds, 2021, 870, 159436.	2.8	35
78	Role of laser remelting and heat treatment in mechanical and tribological properties of selective laser melted Ti6Al4V alloy. Journal of Alloys and Compounds, 2022, 897, 163207.	2.8	35
79	Aluminum matrix composites reinforced with metallic glass particles with core-shell structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138630.	2.6	34
80	Influence of Mechanical Activation on Decomposition of Titanium Hydride. Materials and Manufacturing Processes, 2010, 25, 974-977.	2.7	33
81	Microstructure and mechanical properties of Mgâ€“Al-based alloy modified with cerium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 625, 46-49.	2.6	33
82	In situ fabrication of TiC-NiCr cermets by selective laser melting. International Journal of Refractory Metals and Hard Materials, 2020, 87, 105171.	1.7	33
83	Spark plasma sintering of Ti6Al4V metal matrix composites: Microstructure, mechanical and corrosion properties. Journal of Alloys and Compounds, 2021, 865, 158875.	2.8	33
84	Fabrication and characterization of bulk glassy Co40Fe22Ta8B30 alloy with high thermal stability and excellent soft magnetic properties. Acta Materialia, 2013, 61, 6609-6621.	3.8	32
85	Phase formation, microstructure and deformation behavior of heavily alloyed TiNb- and TiV-based titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 733, 80-86.	2.6	32
86	Bioceramic scaffolds by additive manufacturing for controlled delivery of the antibiotic vancomycin. Proceedings of the Estonian Academy of Sciences, 2019, 68, 185.	0.9	32
87	Kinetic analysis of the non-isothermal crystallization process, magnetic and mechanical properties of FeCoBSiNb and FeCoBSiNbCu bulk metallic glasses. Journal of Applied Physics, 2016, 119, .	1.1	31
88	Microstructure and strength of nano-/ultrafine-grained carbon nanotube-reinforced titanium composites processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 722, 122-128.	2.6	31
89	Solidification of Al-xCu alloy under high pressures. Journal of Materials Research and Technology, 2020, 9, 2983-2991.	2.6	31
90	High-strength ultrafine grain Mgâ€“7.4%Al alloy synthesized by consolidation of mechanically alloyed powders. Journal of Alloys and Compounds, 2014, 610, 456-461.	2.8	30

#	Article	IF	Citations
91	Mechanism of formation of fibrous eutectic Si and thermal conductivity of SiC p /Al-20Si composites solidified under high pressure. Journal of Alloys and Compounds, 2017, 709, 329-336.	2.8	30
92	Comparison of additively manufacturing samples fabricated from pre-alloyed and mechanically mixed powders. Journal of Alloys and Compounds, 2020, 830, 154603.	2.8	30
93	Effect of Particle Size on Microstructure and Mechanical Properties of Al-Based Composite Reinforced with 10 Vol.% Mechanically Alloyed Mg-7.4%Al Particles. Technologies, 2016, 4, 37.	3.0	29
94	Texture dependent strain hardening in additively manufactured stainless steel 316L. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141483.	2.6	29
95	Microstructure and Mechanical Properties of Alâ€“(12-20)Si Bi-Material Fabricated by Selective Laser Melting. Materials, 2019, 12, 2126.	1.3	27
96	Selective laser melting of 316L stainless steel: Influence of TiB2 addition on microstructure and mechanical properties. Materials Today Communications, 2019, 21, 100615.	0.9	27
97	Additive manufacturing of a martensitic Coâ€“Crâ€“Mo alloy: Towards circumventing the strengthâ€“ductility trade-off. Additive Manufacturing, 2021, 37, 101725.	1.7	27
98	Fabrication and Response of Al₇₀Y₁₆Ni₁₀Co₄Glass Reinforced Metal Matrix Composites. Materials and Manufacturing Processes, 2011, 26, 1242-1247.	2.7	26
99	High pressure torsion induced lowering of Young's modulus in high strength TNZT alloy for bio-implant applications. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 108, 103839.	1.5	26
100	Effect of Milling Time and the Consolidation Process on the Properties of Al Matrix Composites Reinforced with Fe-Based Glassy Particles. Metals, 2015, 5, 669-685.	1.0	25
101	Effect of boron addition on thermal and mechanical properties of Co-Cr-Mo-C-(B) glass-forming alloys. Intermetallics, 2018, 99, 1-7.	1.8	25
102	Electron-beam welding of high-entropy alloy and stainless steel: microstructure and mechanical properties. Materials and Manufacturing Processes, 2020, 35, 1885-1894.	2.7	25
103	Influence of substructures on the selective laser melted Ti-6Al-4V alloy as a function of laser re-melting. Journal of Manufacturing Processes, 2021, 68, 1387-1394.	2.8	25
104	Tungsten Matrix Composite Reinforced with CoCrFeMnNi High-Entropy Alloy: Impact of Processing Routes on Microstructure and Mechanical Properties. Metals, 2019, 9, 992.	1.0	24
105	Microstructure and mechanical property of bimodal-size metallic glass particle-reinforced Al alloy matrix composites. Journal of Alloys and Compounds, 2020, 814, 152317.	2.8	24
106	Length scale-dependent structural relaxation in Zr57.5Ti7.5Nb5Cu12.5Ni10Al7.5 metallic glass. Journal of Alloys and Compounds, 2015, 639, 465-469.	2.8	23
107	Superior Wear Resistance in EBM-Processed TC4 Alloy Compared with SLM and Forged Samples. Materials, 2019, 12, 782.	1.3	23
108	Synthesis and Characterization of NanocrystallineMg-7.4%Al Powders Produced by Mechanical Alloying. Metals, 2013, 3, 58-68.	1.0	22

#	Article	IF	Citations
109	Mechanical and Corrosion Behavior of New Generation Ti-45Nb Porous Alloys Implant Devices. Technologies, 2016, 4, 33.	3.0	22
110	Crystallization kinetics of Zr65Ag5Cu12.5Ni10Al7.5 glassy powders produced by ball milling of pre-alloyed ingots. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 513-514, 279-285.	2.6	21
111	Effect of ball milling on structure and thermal stability of Al84Gd6Ni7Co3 glassy powders. Intermetallics, 2014, 46, 97-102.	1.8	21
112	Mechanical and Tribological Properties of Al2O3-TiC Composite Fabricated by Spark Plasma Sintering Process with Metallic (Ni, Nb) Binders. Metals, 2018, 8, 50.	1.0	21
113	Cooperative deformation behavior between the shear band and boundary sliding of an Al-based nanostructure-dendrite composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 81-88.	2.6	21
114	Microstructure and mechanical properties of NiTi-SS bimetallic structures built using Wire Arc Additive Manufacturing. Materials Letters, 2021, 303, 130499.	1.3	21
115	Production, Kinetic Study and Properties of Fe-Based Glass and Its Composites. Materials and Manufacturing Processes, 2010, 25, 592-597.	2.7	19
116	Friction welding of electron beam melted Ti-6Al-4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138045.	2.6	19
117	Microstructural evolution and mechanical properties of selective laser melted Ti-6Al-4V induced by annealing treatment. Journal of Central South University, 2021, 28, 1068-1077.	1.2	19
118	Biomorphic porous Ti6Al4V gyroid scaffolds for bone implant applications fabricated by selective laser melting. Progress in Additive Manufacturing, 2021, 6, 455-469.	2.5	19
119	High strength nanostructured Al-based alloys through optimized processing of rapidly quenched amorphous precursors. Scientific Reports, 2018, 8, 1090.	1.6	18
120	Effect of lattice surface treatment on performance of hardmetal - titanium interpenetrating phase composites. International Journal of Refractory Metals and Hard Materials, 2020, 86, 105087.	1.7	18
121	Effect of selective laser melting process parameters on microstructural and mechanical properties of TiCâ€“NiCr cermet. Ceramics International, 2020, 46, 28749-28757.	2.3	18
122	Effect of Interlayer Delay on the Microstructure and Mechanical Properties of Wire Arc Additive Manufactured Wall Structures. Materials, 2021, 14, 4187.	1.3	18
123	Mechanisms controlling fracture toughness of additively manufactured stainless steel 316L. International Journal of Fracture, 2022, 235, 61-78.	1.1	17
124	Maximizing the degree of rejuvenation in metallic glasses. Scripta Materialia, 2022, 212, 114575.	2.6	17
125	Effect of preheating and cooling of the powder bed by laser pulse shaping on the microstructure of the TiC based cermets. Ceramics International, 2022, 48, 20612-20618.	2.3	17
126	Rapid fabrication of function-structure-integrated NiTi alloys: Towards a combination of excellent superelasticity and favorable bioactivity. Intermetallics, 2017, 82, 1-13.	1.8	16

#	Article	IF	Citations
127	Powder metallurgy of Al_{0.1}CoCrFeNi high-entropy alloy. Journal of Materials Research, 2020, 35, 2835-2847.	1.2	16
128	Reciprocating sliding wear behavior of high-strength nanocrystalline Al 84 Ni 7 Gd 6 Co 3 alloys. Wear, 2017, 382-383, 78-84.	1.5	14
129	Powder metallurgy of Al-based composites reinforced with Fe-based glassy particles: Effect of microstructural modification. Particulate Science and Technology, 2019, 37, 286-291.	1.1	14
130	Influence of milling time on microstructure and magnetic properties of Fe80P11C9 alloy produced by mechanical alloying. Journal of Magnetism and Magnetic Materials, 2015, 395, 354-360.	1.0	13
131	Designing a novel functional-structural NiTi/hydroxyapatite composite with enhanced mechanical properties and high bioactivity. Intermetallics, 2017, 84, 35-41.	1.8	13
132	Pressure-assisted sintering of Alâ€“Gdâ€“Niâ€“Co amorphous alloy powders. Materialia, 2018, 2, 157-166.	1.3	13
133	Selective Laser Melting: Materials and Applications. Journal of Manufacturing and Materials Processing, 2020, 4, 13.	1.0	13
134	The Impact Resistance of Highly Densified Metal Alloys Manufactured from Gas-Atomized Pre-Alloyed Powders. Coatings, 2021, 11, 216.	1.2	13
135	Microstructure and magnetic properties of soft magnetic composites based on silicon resin coated Co40Fe22Ta8B30 glassy powders. Intermetallics, 2013, 43, 1-7.	1.8	12
136	Thermal expansion behavior of Alâ€“xSi alloys fabricated using selective laser melting. Progress in Additive Manufacturing, 2020, 5, 247-257.	2.5	12
137	Selective Laser Melting of TiC-Fe via Laser Pulse Shaping: Microstructure and Mechanical Properties. 3D Printing and Additive Manufacturing, 2023, 10, 640-649.	1.4	12
138	Additive manufacturing of TiC-based cermet with stainless steel as a binder material. Materials Today: Proceedings, 2022, 57, 824-828.	0.9	12
139	A novel crack-free Ti-modified Mo alloy designed for laser powder bed fusion. Journal of Alloys and Compounds, 2022, 910, 164802.	2.8	12
140	Design of nextâ€generation alloys for additive manufacturing. Material Design and Processing Communications, 2019, 1, e50.	0.5	11
141	Selective laser melting of nanostructured Al-Y-Ni-Co alloy. Manufacturing Letters, 2020, 25, 21-25.	1.1	11
142	Structural and Mechanical Characterization of Zr58.5Ti8.2Cu14.2Ni11.4Al7.7 Bulk Metallic Glass. Materials, 2012, 5, 1-11.	1.3	10
143	Influence of Nb on the Microstructure and Fracture Toughness of (Zr0.76Fe0.24)100â^'xNbx Nano-Eutectic Composites. Materials, 2018, 11, 113.	1.3	10
144	Strengthening Effects in Nano-/Ultrafine-Grained Carbon Nanotube Reinforced-Titanium Composites Investigated by Finite Element Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 6469-6478.	1.1	10

#	Article	IF	Citations
145	Work hardening in selective laser melted Alâ€12Si alloy. Material Design and Processing Communications, 2019, 1, e46.	0.5	10
146	Evolution of Microstructure and Mechanical Properties of LM25â€“HEA Composite Processed through Stir Casting with a Bottom Pouring System. Materials, 2022, 15, 230.	1.3	10
147	Selective Laser Melting of Al-7Si-0.5ÂMg-0.5Cu: Effect of Heat Treatment on Microstructure Evolution, Mechanical Properties and Wear Resistance. Acta Metallurgica Sinica (English Letters), 2022, 35, 389-396.	1.5	9
148	Effect of nanoparticles on morphology and size of primary silicon and property of selective laser melted Al-high Si content alloys. Vacuum, 2021, 191, 110405.	1.6	9
149	Additive Manufacturing: Alloy Design and Process Innovations. Materials, 2020, 13, 542.	1.3	9
150	Processing of Al-based composite material by selective laser melting: A perspective. Materials Today: Proceedings, 2022, 57, 498-504.	0.9	9
151	Al-based metal matrix composites reinforced with nanocrystalline Al-Ti-Ni particles. Journal of Physics: Conference Series, 2010, 240, 012154.	0.3	8
152	Designing a multifunctional Ti-2Cu-4Ca porous biomaterial with favorable mechanical properties and high bioactivity. Journal of Alloys and Compounds, 2017, 727, 338-345.	2.8	8
153	Effect of Substrate Plate Heating on the Microstructure and Properties of Selective Laser Melted Al-20Si-5Fe-3Cu-1Mg Alloy. Materials, 2021, 14, 330.	1.3	8
154	Dissimilar welding of high-entropy alloy to Inconel 718 superalloy for structural applications. Journal of Materials Research, 2022, 37, 272-283.	1.2	8
155	Investigating the Structure, Microstructure, and Texture in Selective Laser-Melted Sterling Silver 925. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 5329-5341.	1.1	8
156	Subtle change in the work hardening behavior of fcc materials processed by selective laser melting. Progress in Additive Manufacturing, 0, , .	2.5	8
157	Compression behavior of inter-particle regions in high-strength Al84Ni7Gd6Co3 alloy. Materials Letters, 2016, 185, 25-28.	1.3	7
158	Corrosion properties of high-strength nanocrystalline Al 84 Ni 7 Gd 6 Co 3 alloy produced by hot pressing of metallic glass. Journal of Alloys and Compounds, 2017, 707, 63-67.	2.8	7
159	Ti6Al7Nb-based TiB-reinforced composites by selective laser melting. Journal of Materials Research, 2021, 36, 3691-3700.	1.2	7
160	Mechanism of high-pressure torsion-induced shear banding and lamellar thickness saturation in Coâ€“Crâ€“Feâ€“Niâ€“Nb high-entropy composites. Journal of Materials Research, 2019, 34, 2672-2682.	1.2	6
161	Co-Cr-Mo-C-B metallic glasses with wide supercooled liquid region obtained by systematic adjustment of the metalloid ratio. Journal of Non-Crystalline Solids, 2019, 505, 310-319.	1.5	6
162	Annealing of Al-Zn-Mg-Cu Alloy at High Pressures: Evolution of Microstructure and the Corrosion Behavior. Materials, 2021, 14, 2076.	1.3	6

#	Article	IF	Citations
163	Selective Laser Melting of Commercially Pure Molybdenum by Laser Rescanning. 3D Printing and Additive Manufacturing, 2023, 10, 785-791.	1.4	6
164	Effect of powder bed preheating on the crack formation and microstructure in ceramic matrix composites fabricated by laser powder-bed fusion process. Additive Manufacturing, 2022, 58, 103013.	1.7	6
165	Comment on the paper â€˜Thermal stability of the Al70Ni10Ti10Zr5Ta5 amorphous alloy powder fabricated by mechanical alloyingâ€™ by Xiu Wei, Xinfu Wang, Fusheng Han, Haowen Xie, Cuiâ€™e Wen, J. Alloys Compd. 496 (2010) 313â€“316. Journal of Alloys and Compounds, 2010, 507, L32-L34.	2.8	5
166	Vacuum Hot Pressing of Oxide Dispersion Strengthened Ferritic Stainless Steels: Effect of Al Addition on the Microstructure and Properties. Journal of Manufacturing and Materials Processing, 2020, 4, 93.	1.0	5
167	In Vitro Corrosion Behavior of Selective Laser Melted Ti-35Nb-7Zr-5Ta. Journal of Materials Engineering and Performance, 2021, 30, 7967-7978.	1.2	5
168	Laser Hybrid Wire Arc Additive Manufacturing for Fabricating Thin Sections. , 2022, 7, 175-183.		5
169	Effect of the Laser Processing Parameters on the Selective Laser Melting of TiCâ€“Fe-Based Cermets. Journal of Manufacturing and Materials Processing, 2022, 6, 35.	1.0	5
170	Phase transitions in Al3Ca8 and Al14Ca13 intermetallic compounds induced by milling and annealing. Materials Letters, 2012, 79, 145-147.	1.3	4
171	Production of customized hybrid porous structures by powder metallurgy of Ni59Zr20Ti16Si2Sn3 glassy powders. Journal of Materials Research, 2013, 28, 2490-2498.	1.2	4
172	Competition between densification and microstructure of functionalmaterials by Selective Laser Melting. Material Design and Processing Communications, 2020, 2, e146.	0.5	4
173	Spark plasma sintering of molybdenum silicides synthesized from oxide precursors. Ceramics International, 2021, 47, 13827-13836.	2.3	4
174	Mechanical and Tribological Behavior of Gravity and Squeeze Cast Novel Al-Si Alloy. Metals, 2022, 12, 194.	1.0	4
175	Additive Manufacturing of CoCrFeMnNi Highâ€Entropy Alloy/AISI 316L Stainless Steel Bimetallic Structures. Advanced Engineering Materials, 2023, 25, .	1.6	4
176	Face centered cubic titanium in high pressure torsion processed carbon nanotubes reinforced titanium composites. Journal of Alloys and Compounds, 2019, 806, 939-945.	2.8	3
177	CoB-TiB2 crystalline powders: Synthesis, microstructural analysis and their utilization as reinforcement agent. Advanced Powder Technology, 2020, 31, 2964-2972.	2.0	3
178	Mechanical behavior of the cold-rolled Zr57Ti8Nb2.5Cu13.9Ni11.1Al7.5 metallic glassâ€“quasicrystalline composite. International Journal of Materials Research, 2012, 103, 1113-1116.	0.1	2
179	Al2O3-TiC Composite Prepared by Spark Plasma Sintering Process: Evaluation of Mechanical and Tribological Properties. Journal of Materials Engineering and Performance, 2018, 27, 997-1004.	1.2	2
180	Microstructure evolution and hot deformation behavior of spray-deposited TiAl alloys. Journal of Materials Research, 2018, 33, 2844-2852.	1.2	2

#	Article	IF	Citations
181	Ti6Al7Nbâ€“TiB nanocomposites for ortho-implant applications. Journal of Materials Research, 2022, 37, 2525-2535.	1.2	2
182	Mechanical Properties, Microstructure, and Actuation Behavior of Wire Arc Additive Manufactured Nitinol: Titanium Bimetallic Structures. 3D Printing and Additive Manufacturing, 2024, 11, 143-151.	1.4	2
183	Removing the oxide layer in a nanostructured aluminum alloy by local shear deformation between nanoscale phases. Powder Technology, 2019, 343, 733-737.	2.1	1
184	Highâ€entropy eutectic composites with high strength and low Young's modulus. Material Design and Processing Communications, 2020, 3, e211.	0.5	1
185	Microstructure and properties of inâ€situ high entropy alloy/tungsten carbide composites by mechanical alloying.. Material Design and Processing Communications, 2021, 3, .	0.5	1
186	Crystallization and growth kinetics of Zr 65 Cu 25 Ni 5 Ag 2.5 Al 2.5 glass. Material Design and Processing Communications, 2020, 2, e137.	0.5	0
187	Phase Formation, Microstructure and Mechanical Properties of Mg67Ag33 as Potential Biomaterial. Metals, 2021, 11, 461.	1.0	0
188	Influence of substrate plate heating on the fabrication of Al-12Si produced by selective laser melting. , 2021, 6, 1027-1036.		0
189	Powder metallurgy of high-strength Al90.4Y4.4Ni4.3Co0.9 gas-atomized powder. , 2012, , 1017-1022.		0