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List of Publications by Citations

320 papers	12,110 citations	54 h-index	100 g-index
331 ext. papers	14,692 ext. citations	4.3 avg, IF	6.89 L-index

#	Paper	IF	Citations
320	Topological design and additive manufacturing of porous metals for bone scaffolds and orthopaedic implants: A review. *Biomaterials*, **2016**, 83, 127-41	15.6	1008
319	Additive manufacturing of strong and ductile Ti–6Al–4V by selective laser melting via in situ martensite decomposition. *Acta Materialia*, **2015**, 85, 74-84	8.4	620
318	Grain refinement of magnesium alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2005**, 36, 1669-1679	2.3	503
317	The Interdependence Theory: The relationship between grain formation and nucleant selection. *Acta Materialia*, **2011**, 59, 4907-4921	8.4	327
316	In situ tailoring microstructure in additively manufactured Ti-6Al-4V for superior mechanical performance. *Acta Materialia*, **2017**, 125, 390-400	8.4	311
315	SLM lattice structures: Properties, performance, applications and challenges. *Materials and Design*, **2019**, 183, 108137	8.1	299
314	Effect of Powder Reuse Times on Additive Manufacturing of Ti-6Al-4V by Selective Electron Beam Melting. *Jom*, **2015**, 67, 555-563	2.1	246
313	Selective laser melting (SLM) of AlSi12Mg lattice structures. *Materials and Design*, **2016**, 98, 344-357	8.1	234
312	Enzyme Mimics: Advances and Applications. *Chemistry - A European Journal*, **2016**, 22, 8404-30	4.8	201
311	Potency of high-intensity ultrasonic treatment for grain refinement of magnesium alloys. *Scripta Materialia*, **2008**, 59, 19-22	5.6	190
310	Crystallography of grain refinement in Mg–Al based alloys. *Acta Materialia*, **2005**, 53, 3261-3270	8.4	190
309	Grain structure control during metal 3D printing by high-intensity ultrasound. *Nature Communications*, **2020**, 11, 142	17.4	185
308	Recent advances in grain refinement of light metals and alloys. *Current Opinion in Solid State and Materials Science*, **2016**, 20, 13-24	12	160
307	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	2.3	148
306	Additive manufacturing and postprocessing of Ti-6Al-4V for superior mechanical properties. *MRS Bulletin*, **2016**, 41, 775-784	3.2	148
305	Inconel 625 lattice structures manufactured by selective laser melting (SLM): Mechanical properties, deformation and failure modes. *Materials and Design*, **2018**, 157, 179-199	8.1	147
304	An analytical model for constitutional supercooling-driven grain formation and grain size prediction. *Acta Materialia*, **2010**, 58, 3262-3270	8.4	144

303	Review of effect of oxygen on room temperature ductility of titanium and titanium alloys. *Powder Metallurgy*, **2014**, 57, 251-257	1.9	139
302	Grain refinement of magnesium alloys by zirconium: Formation of equiaxed grains. *Scripta Materialia*, **2006**, 54, 881-886	5.6	128
301	Heterogeneous nucleation on potent spherical substrates during solidification. *Acta Materialia*, **2007**, 55, 943-953	8.4	122
300	Ti-6Al-4V Additively Manufactured by Selective Laser Melting with Superior Mechanical Properties. *Jom*, **2015**, 67, 668-673	2.1	118
299	Massive transformation in Ti□6Al□4V additively manufactured by selective electron beam melting. *Acta Materialia*, **2016**, 104, 303-311	8.4	115
298	Discussions on grain refinement of magnesium alloys by carbon inoculation. *Scripta Materialia*, **2005**, 52, 415-419	5.6	113
297	Ultrasonic refinement of magnesium by cavitation: Clarifying the role of wall crystals. *Journal of Crystal Growth*, **2009**, 311, 3708-3715	1.6	112
296	Characteristic zirconium-rich coring structures in Mg□r alloys. *Scripta Materialia*, **2002**, 46, 649-654	5.6	105
295	The effect of annealing twin-generated special grain boundaries on HAZ liquation cracking of nickel-base superalloys. *Acta Materialia*, **2003**, 51, 3351-3361	8.4	105
294	Native grain refinement of magnesium alloys. *Scripta Materialia*, **2005**, 53, 841-844	5.6	103
293	Effect of manganese on grain refinement of Mg□l based alloys. *Scripta Materialia*, **2006**, 54, 1853-1858	5.6	102
292	The role of ultrasonic treatment in refining the as-cast grain structure during the solidification of an Al□Cu alloy. *Journal of Crystal Growth*, **2014**, 408, 119-124	1.6	97
291	A transmission electron microscopy and three-dimensional atom probe study of the oxygen-induced fine microstructural features in as-sintered Ti□6Al□4V and their impacts on ductility. *Acta Materialia*, **2014**, 68, 196-206	8.4	95
290	Computational modelling of strut defects in SLM manufactured lattice structures. *Materials and Design*, **2019**, 171, 107671	8.1	95
289	The Contribution of Constitutional Supercooling to Nucleation and Grain Formation. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 4868-4885	2.3	94
288	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	12	93
287	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	5.3	92
286	Selective laser melting of H13: microstructure and residual stress. *Journal of Materials Science*, **2017**, 52, 12476-12485	4.3	91

285	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	2.3	84
284	Effect of iron on grain refinement of high-purity Mg–Al alloys. *Scripta Materialia*, **2004**, 51, 125-129	5.6	84
283	High tensile-strength and ductile titanium matrix composites strengthened by TiB nanowires. *Scripta Materialia*, **2017**, 141, 133-137	5.6	83
282	Mechanism for grain refinement of magnesium alloys by superheating. *Scripta Materialia*, **2007**, 56, 633-636	5.6	83
281	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	5.3	83
280	Microstructure and mechanical behavior of metal injection molded Ti-Nb binary alloys as biomedical material. *Journal of the Mechanical Behavior of Biomedical Materials*, **2013**, 28, 171-82	4.1	82
279	Metal injection moulding of titanium and titanium alloys: Challenges and recent development. *Powder Technology*, **2017**, 319, 289-301	5.2	81
278	Metal Alloys for Fusion-Based Additive Manufacturing. *Advanced Engineering Materials*, **2018**, 20, 1700952	3.5	80
277	Heterogeneous nuclei size in magnesium–zirconium alloys. *Scripta Materialia*, **2004**, 50, 1115-1119	5.6	79
276	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	2.1	73
275	The effect of solute on ultrasonic grain refinement of magnesium alloys. *Journal of Crystal Growth*, **2010**, 312, 2267-2272	1.6	73
274	The enabling role of dealloying in the creation of specific hierarchical porous metal structures—A review. *Corrosion Science*, **2018**, 134, 78-98	6.8	68
273	Settling of undissolved zirconium particles in pure magnesium melts. *Journal of Light Metals*, **2001**, 1, 157-165		65
272	Quantitative Analyses of MWCNT-Ti Powder Mixtures using Raman Spectroscopy: The Influence of Milling Parameters on Nanostructural Evolution. *Advanced Engineering Materials*, **2015**, 17, 1660-1669	3.5	64
271	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	8.1	60
270	The effect of ordered and partially ordered surface topography on bone cell responses: a review. *Biomaterials Science*, **2018**, 6, 250-264	7.4	58
269	Identifying and understanding the effect of milling energy on the synthesis of carbon nanotubes reinforced titanium metal matrix composites. *Carbon*, **2016**, 99, 384-397	10.4	58
268	Extraordinary reinforcing effect of carbon nanotubes in aluminium matrix composites assisted by in-situ alumina nanoparticles. *Composites Part B: Engineering*, **2020**, 183, 107691	10	58

267	A New Analytical Approach to Reveal the Mechanisms of Grain Refinement. *Advanced Engineering Materials*, **2007**, 9, 739-746	3.5	57
266	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	8.1	54
265	Neodymium(III) in alumino-borosilicate glasses. *Journal of Non-Crystalline Solids*, **2000**, 278, 35-57	3.9	51
264	Self-assembled, aligned TiC nanoplatelet-reinforced titanium composites with outstanding compressive properties. *Scripta Materialia*, **2013**, 69, 29-32	5.6	50
263	Heterogeneous nucleation on convex spherical substrate surfaces: A rigorous thermodynamic formulation of Fletcher's classical model and the new perspectives derived. *Journal of Chemical Physics*, **2009**, 130, 214709	3.9	50
262	A novel quaternary equiatomic Ti-Zr-Nb-Ta medium entropy alloy (MEA). *Intermetallics*, **2018**, 101, 39-43	3.5	49
261	Simultaneous gettering of oxygen and chlorine and homogenization of the β phase by rare earth hydride additions to a powder metallurgy Ti–2.25Mo–1.5Fe alloy. *Scripta Materialia*, **2012**, 67, 491-494	5.6	48
260	Manipulation and Characterization of a Novel Titanium Powder Precursor for Additive Manufacturing Applications. *Jom*, **2015**, 67, 564-572	2.1	44
259	Grain Refinement of Alloys in Fusion-Based Additive Manufacturing Processes. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 4341-4359	2.3	44
258	Sintering of Ti–10V–2Fe–3Al and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 6719-6726	5.3	44
257	Impacts of trace carbon on the microstructure of as-sintered biomedical Ti-15Mo alloy and reassessment of the maximum carbon limit. *Acta Biomaterialia*, **2014**, 10, 1014-23	10.8	43
256	Creation of bimodal porous copper materials by an annealing-electrochemical dealloying approach. *Electrochimica Acta*, **2015**, 164, 288-296	6.7	42
255	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	1.6	42
254	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	5.3	41
253	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	8.1	41
252	Grain refinement of binary Al-Si, Al-Cu and Al-Ni alloys by ultrasonication. *Journal of Materials Processing Technology*, **2017**, 249, 367-378	5.3	40
251	In situ synchrotron radiation to understand the pathways for the scavenging of oxygen in commercially pure Ti and Ti–6Al–4V by yttrium hydride. *Scripta Materialia*, **2013**, 68, 63-66	5.6	40
250	Creation of semisolid slurries containing fine and spherical particles by grain refinement based on the Mullins–Sekerka stability criterion. *Acta Materialia*, **2006**, 54, 2241-2252	8.4	40

249	Alloying of pure magnesium with Mg 33.3 wt-%Zr master alloy. *Materials Science and Technology*, **2003**, 19, 156-162	1.5	40
248	Sintering of Titanium in Vacuum by Microwave Radiation. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2011**, 42, 2466-2474	2.3	39
247	An approach to assessing ultrasonic attenuation in molten magnesium alloys. *Journal of Applied Physics*, **2009**, 105, 013538	2.5	39
246	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	2.3	38
245	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	4.1	38
244	Role of ultrasonic treatment, inoculation and solute in the grain refinement of commercial purity aluminium. *Scientific Reports*, **2017**, 7, 9729	4.9	37
243	Nanoscaled Al□/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	5.3	36
242	Zirconium Alloys for Orthopaedic and Dental Applications. *Advanced Engineering Materials*, **2018**, 20, 1800207	3.5	35
241	Optical Aptasensors for Adenosine Triphosphate. *Theranostics*, **2016**, 6, 1683-702	12.1	34
240	Effect of Soluble and Insoluble Zirconium on the Grain Refinement of Magnesium Alloys. *Materials Science Forum*, **2003**, 419-422, 593-598	0.4	33
239	Metal Powder for Additive Manufacturing. *Jom*, **2015**, 67, 536-537	2.1	32
238	The effect of Si additions on the sintering and sintered microstructure and mechanical properties of Ti□Ni alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 7381-7387	5.3	32
237	The sintering densification, microstructure and mechanical properties of gamma Ti□48Al□2Cr□2Nb alloy with a small addition of copper. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 559, 293-300	5.3	31
236	Modification of the □Ti laths to near equiaxed □Ti grains in as-sintered titanium and titanium alloys by a small addition of boron. *Journal of Alloys and Compounds*, **2013**, 579, 553-557	5.7	31
235	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	2.3	31
234	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	5.3	31
233	In situ preparation of TiB nanowires for high-performance Ti metal matrix nanocomposites. *Journal of Alloys and Compounds*, **2018**, 735, 2640-2645	5.7	31
232	Grain nucleation and formation in Mg□r alloys. *International Journal of Cast Metals Research*, **2009**, 22, 256-259	1	30

231	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	5.3	30
230	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	5.3	29
229	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	5.3	29
228	The surface structure of gas-atomized metallic glass powders. *Scripta Materialia*, **2010**, 62, 266-269	5.6	29
227	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	5.3	28
226	Novel fabrication of titanium by pure microwave radiation of titanium hydride powder. *Scripta Materialia*, **2013**, 69, 69-72	5.6	27
225	Microstructure and elevated temperature mechanical and creep properties of Mg□4Y□3Nd□0.5Zr alloy in the product form of a large structural casting. *Materials & Design*, **2014**, 60, 218-225		26
224	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	2.3	26
223	Uptake of iron and its effect on grain refinement of pure magnesium by zirconium. *Materials Science and Technology*, **2004**, 20, 585-592	1.5	26
222	The effect of a small addition of boron on the sintering densification, microstructure and mechanical properties of powder metallurgy Ti□7Ni alloy. *Journal of Alloys and Compounds*, **2013**, 555, 339-346	5.7	25
221	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	3.9	25
220	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	25
219	Integrating data mining and machine learning to discover high-strength ductile titanium alloys. *Acta Materialia*, **2021**, 202, 211-221	8.4	25
218	Microstructure, Mechanical Properties, and Flatness of SEBM Ti-6Al-4V Sheet in As-Built and Hot Isostatically Pressed Conditions. *Jom*, **2017**, 69, 466-471	2.1	24
217	Comparison of electromagnetic and piezoelectric vibration energy harvesters with different interface circuits. *Mechanical Systems and Signal Processing*, **2016**, 72-73, 906-924	7.8	24
216	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	2.3	24
215	The effects of rheo-diecasting on the integrity and mechanical properties of Mg□Al□Zn. *Scripta Materialia*, **2006**, 54, 207-211	5.6	24
214	On the solidification microstructure of Mg□0Zn□.5Y metal□ntermetallic alloy. *Intermetallics*, **2006**, 14, 596-602	3.5	24

213	Grain coarsening of magnesium alloys by beryllium. *Scripta Materialia*, **2004**, 51, 647-651	5.6	24
212	New Development in Selective Laser Melting of Ti6Al4V: A Wider Processing Window for the Achievement of Fully Lamellar + Microstructures. *Jom*, **2017**, 69, 2679-2683	2.1	23
211	The effect of grain size on the tensile and creep properties of Mg2.6Nd0.35Zn xZr alloys at 250C. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 560, 163-169	5.3	23
210	In-situ observations of the dissolution of carbides in an Fe-Cr-C alloy. *Scripta Materialia*, **1999**, 41, 1301-1303	3.6	23
209	Formation of spheroidal carbide in vanadium white cast iron by rare earth modification. *Materials Science and Technology*, **1990**, 6, 905-910	1.5	23
208	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	4.2	23
207	3D characterization of defects in deep-powder-bed manufactured Ti6Al4V and their influence on tensile properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 761, 138031	5.3	22
206	Metal injection moulding of non-spherical titanium powders: Processing, microstructure and mechanical properties. *Journal of Manufacturing Processes*, **2018**, 31, 416-423	5	22
205	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	2.3	21
204	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	2.3	21
203	In situ fabrication and mechanical properties of Al/AlN composite by hot extrusion of partially nitrided AA6061 powder. *Journal of Materials Research*, **2011**, 26, 1719-1725	2.5	21
202	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	5.3	21
201	Warm die compaction and sintering of titanium and titanium alloy powders. *Journal of Materials Processing Technology*, **2014**, 214, 660-666	5.3	20
200	Cobalt-doped Ti8Al2Cr2Nb alloy fabricated by cold compaction and pressureless sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2013**, 574, 176-185	5.3	20
199	Chemical heterogeneity-induced plasticity in TiFeBi ultrafine eutectic alloys. *Materials & Design*, **2014**, 60, 363-367		20
198	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	5.7	20
197	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	5.3	20
196	Aluminium powder metallurgy **2011**, 655-701		20

195	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	5.3	20
194	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	2.3	19
193	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	3.2	19
192	New insights into nickel-free superelastic titanium alloys for biomedical applications. *Current Opinion in Solid State and Materials Science*, **2019**, 23, 100783	12	19
191	Metal injection moulding of surgical tools, biomaterials and medical devices: A review. *Powder Technology*, **2020**, 364, 189-204	5.2	19
190	The influence of topological structure on bulk glass formation in Al-based metallic glasses. *Scripta Materialia*, **2011**, 65, 755-758	5.6	19
189	3D printed sandwich beams with bioinspired cores: Mechanical performance and modelling. *Thin-Walled Structures*, **2021**, 161, 107471	4.7	19
188	Microwave-assisted fabrication of titanium hollow spheres with tailored shell structures for various potential applications. *Materials Letters*, **2012**, 86, 84-87	3.3	18
187	Microstructure and Mechanical Properties of a Rheo-Diecast Mg–10Zn–4.5Al Alloy. *Materials Transactions*, **2005**, 46, 2221-2228	1.3	18
186	Characterization and decompositional crystallography of the massive phase grains in an additively-manufactured Ti-6Al-4V alloy. *Materials Characterization*, **2017**, 127, 146-152	3.9	17
185	Adaptive Concurrent Topology Optimization of Cellular Composites for Additive Manufacturing. *Jom*, **2020**, 72, 2378-2390	2.1	17
184	Thermal and mechanical properties of Cu60Zr25Ti15Nix bulk metallic glasses with x=0, 1, 3, 5, 7, 9 and 11 at.%. *Metals and Materials International*, **2014**, 20, 1-5	2.4	17
183	Boron nitride nanotube reinforced titanium metal matrix composites with excellent high-temperature performance. *Journal of Materials Research*, **2017**, 32, 3744-3752	2.5	17
182	Abnormal crystallization in Al86Ni6Y4.5Co2La1.5 metallic glass induced by spark plasma sintering. *Intermetallics*, **2013**, 39, 69-73	3.5	17
181	High-intensity ultrasonic grain refinement of magnesium alloys: role of solute. *International Journal of Cast Metals Research*, **2009**, 22, 260-263	1	17
180	Hafnium in peralkaline and peraluminous boro-aluminosilicate glass and glass sub-components: a solubility study. *Journal of Non-Crystalline Solids*, **2003**, 328, 102-122	3.9	17
179	Mechanism of post-weld heat treatment cracking in Rene 80 nickel based superalloy. *Materials Science and Technology*, **2002**, 18, 407-412	1.5	17
178	Trace Carbon in Biomedical Beta-Titanium Alloys: Recent Progress. *Jom*, **2015**, 67, 2236-2243	2.1	16

177	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	5.3	16
176	A Monte Carlo simulation-based approach to realistic modelling of additively manufactured lattice structures. *Additive Manufacturing*, **2020**, 32, 101092	6.1	16
175	Toward Manufacturing Quality Ti-6Al-4V Lattice Struts by Selective Electron Beam Melting (SEBM) for Lattice Design. *Jom*, **2018**, 70, 1870-1876	2.1	16
174	Design of Low Cost High Performance Powder Metallurgy Titanium Alloys: Some Basic Considerations. *Key Engineering Materials*, **2012**, 520, 24-29	0.4	16
173	Fatigue Performance and Equations of Roller Compacted Concrete with Fly Ash. *Cement and Concrete Research*, **1998**, 28, 309-315	10.3	16
172	New approach to analysis of grain refinement. *International Journal of Cast Metals Research*, **2007**, 20, 131-135	1	16
171	Modification of hypoeutectic low alloy white cast irons. *Journal of Materials Science*, **1996**, 31, 1865-1871	4.3	16
170	High oxygen-content titanium and titanium alloys made from powder. *Journal of Alloys and Compounds*, **2020**, 836, 155526	5.7	16
169	Synthetic genetic polymers: advances and applications. *Polymer Chemistry*, **2016**, 7, 5199-5216	4.9	16
168	Microwave processing of titanium and titanium alloys for structural, biomedical and shape memory applications: Current status and challenges. *Materials and Manufacturing Processes*, **2018**, 33, 35-49	4.1	15
167	Layer Additive Production or Manufacturing of Thick Sections of Ti-6Al-4V by Selective Electron Beam Melting (SEBM). *Jom*, **2017**, 69, 1836-1843	2.1	15
166	Impact-abrasion behavior of low alloy white cast irons. *Wear*, **1997**, 209, 308-315	3.5	15
165	Breakup of eutectic carbide network of white cast irons at high temperatures. *Journal of Materials Science*, **1995**, 30, 3383-3386	4.3	15
164	Recent Advances in the Design and Fabrication of Strong and Ductile (Tensile) Titanium Metal Matrix Composites. *Advanced Engineering Materials*, **2019**, 21, 1801331	3.5	14
163	Effect of ultrasonic melt treatment on intermetallic phase formation in a manganese-modified Al-17Si-2Fe alloy. *Journal of Materials Processing Technology*, **2019**, 271, 346-356	5.3	14
162	A Honeycomb-Structured Ti-6Al-4V Oil–Gas Separation Rotor Additively Manufactured by Selective Electron Beam Melting for Aero-engine Applications. *Jom*, **2016**, 68, 799-805	2.1	14
161	Fabrication and anisotropic wettability of titanium-coated microgrooves. *Journal of Applied Physics*, **2018**, 123, 095306	2.5	14
160	On the infiltration mode during fabrication of aluminium composite. *Acta Materialia*, **2010**, 58, 3790-3797	8.4	14

159	Grain Refinement of an Al-2 wt%Cu Alloy by Al3Ti1B Master Alloy and Ultrasonic Treatment. *IOP Conference Series: Materials Science and Engineering*, **2016**, 117, 012050	0.4	13
158	TEM and XRD characterisation of commercially pure Ti made by powder metallurgy and casting. *Materials Letters*, **2012**, 72, 64-67	3.3	13
157	The effect of a small addition of nickel on the sintering, sintered microstructure, and mechanical properties of Ti45Al5Nb0.2C0.2B alloy. *Journal of Alloys and Compounds*, **2013**, 578, 195-201	5.7	13
156	Metal injection moulding of in-situ formed AlN hollow sphere reinforced Al matrix syntactic foam parts. *Materials Chemistry and Physics*, **2012**, 137, 435-438	4.4	13
155	Sintering of titanium and its alloys **2010**, 324-355		13
154	Microwave Sintering of Titanium. *Key Engineering Materials*, **2010**, 436, 141-147	0.4	13
153	The creep behaviour of rheo-diecast AZ91D (Mg9Al1Zn) alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 434, 7-12	5.3	13
152	On the disappearance of Mo2C during low-temperature sintering of Ti(C,N)-Mo2C-Ni cermets. *Journal of Materials Science*, **1999**, 34, 3677-3684	4.3	13
151	Surface hardening of ductile cast iron using stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1996**, 208, 88-92	5.3	13
150	Intensified texture in selective electron beam melted Ti-6Al-4V thin plates by hot isostatic pressing and its fundamental influence on tensile fracture and properties. *Materials Characterization*, **2019**, 152, 162-168	3.9	12
149	Electrochemical nucleic acid biosensors: from fabrication to application. *Analytical Methods*, **2016**, 8, 5169-5189	3.2	12
148	Sintering of Titanium with Yttrium Oxide Additions for the Scavenging of Chlorine Impurities. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 5271-5278	2.3	12
147	Secondary phases and interfaces in a nitrogen-atmosphere sintered Al alloy: Transmission electron microscopy evidence for the formation of AlN during liquid phase sintering. *Acta Materialia*, **2010**, 58, 5667-5674	8.4	12
146	Electron beam processing of Al2Sc alloy for enhanced precipitation hardening. *Scripta Materialia*, **2010**, 63, 151-154	5.6	12
145	A practical method for identifying intermetallic phase particles in aluminium alloys by electron probe microanalysis. *Journal of Light Metals*, **2001**, 1, 187-193		12
144	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	3.2	12
143	Characteristics of oxide films on Ti-(10–75)Ta alloys and their corrosion performance in an aerated Hank's balanced salt solution. *Applied Surface Science*, **2020**, 506, 145013	6.7	12
142	Impacts of Defocusing Amount and Molten Pool Boundaries on Mechanical Properties and Microstructure of Selective Laser Melted AlSi10Mg. *Materials*, **2018**, 12,	3.5	12

141	The Role of Ultrasonically Induced Acoustic Streaming in Developing Fine Equiaxed Grains During the Solidification of an Al-2 Pct Cu Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 5253-5263	2.3	11
140	Spark plasma sintering and hot pressing of titanium and titanium alloys **2015**, 219-235		11
139	A dealloying approach to synthesizing micro-sized porous tin (Sn) from immiscible alloy systems for potential lithium-ion battery anode applications. *Journal of Porous Materials*, **2015**, 22, 713-719	2.4	11
138	A comparative study of the effect of submicron porous and smooth ultrafine-grained Ti-20Mo surfaces on osteoblast responses. *Journal of Biomedical Materials Research - Part A*, **2018**, 106, 2020-2033	3.4	11
137	The □phase evolution in Ti-6Al-4V additively manufactured by laser metal deposition due to cyclic phase transformations. *Materials Letters*, **2018**, 216, 50-53	3.3	11
136	Microstructural development of electron beam processed Al-3Ti-1Sc alloy under different electron beam scanning speeds. *Materials Characterization*, **2018**, 143, 43-49	3.9	11
135	Introduction to the Interdependence Theory of Grain Formation and its Application to Aluminium, Magnesium and Titanium Alloys. *Materials Science Forum*, **2011**, 690, 206-209	0.4	11
134	Solidification of nitrogen-atomized Al86Ni6Y4.5Co2La1.5 metallic glass. *Journal of Materials Research*, **2011**, 26, 944-950	2.5	11
133	Controlling the Semisolid Grain Size during Solidification. *Solid State Phenomena*, **2008**, 141-143, 355-360	0.4	11
132	Effect of Dy addition on microstructure and mechanical properties of Mg-4Y-3Nd-0.4Zr alloy. *Transactions of Nonferrous Metals Society of China*, **2017**, 27, 797-803	3.3	10
131	Scavenging of oxygen and chlorine from powder metallurgy (PM) titanium and titanium alloys **2015**, 253-276		10
130	Effect of polygon order on additively manufactured lattice structures: a method for defining the threshold resolution for lattice geometry. *International Journal of Advanced Manufacturing Technology*, **2019**, 105, 2501-2511	3.2	10
129	In Situ Synchrotron Radiation Study of TiH2-6Al-4V and Ti-6Al-4V: Accelerated Alloying and Phase Transformation, and Formation of an Oxygen-Enriched Ti4Fe2O Phase in TiH2-6Al-4V. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 41-45	2.3	10
128	Electron Beam Processing of Aluminium Alloys. *Materials Science Forum*, **2009**, 618-619, 621-626	0.4	10
127	AMC-SC1: A New Magnesium Alloy Suitable for Powertrain Applications **2003**,		10
126	Cyclic overaging heat treatment for ductility and weldability improvement of nickel based superalloys. *Materials Science and Technology*, **2002**, 18, 413-419	1.5	10
125	Thermodynamic considerations of the equilibrium shape of an infinitely long rod. *Acta Metallurgica Et Materialia*, **1994**, 42, 4083-4086		10
124	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	2.3	10

123	In situ hydrothermal transformation of titanium surface into lithium-doped continuous nanowire network towards augmented bioactivity. *Applied Surface Science*, **2020**, 505, 144604	6.7	10
122	In-situ and ex-situ synchrotron X-ray diffraction studies of microstructural length scale controlled dealloying. *Acta Materialia*, **2019**, 168, 376-392	8.4	10
121	Hollow-walled lattice materials by additive manufacturing: Design, manufacture, properties, applications and challenges. *Current Opinion in Solid State and Materials Science*, **2021**, 25, 100940	12	10
120	Influence of the laser pre-quenched substrate on an electroplated chromium coating/steel substrate. *Applied Surface Science*, **2017**, 405, 273-279	6.7	9
119	Pressureless sintering of titanium and titanium alloys: sintering densification and solute homogenization **2015**, 201-218		9
118	Fatigue Performance of Additively Manufactured Ti-6Al-4V: Surface Condition vs. Internal Defects. *Jom*, **2020**, 72, 1022-1030	2.1	9
117	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	5.7	9
116	Sintering of aluminium and its alloys **2010**, 291-323		9
115	A model for the breakup of rod morphologies. *Scripta Materialia*, **1997**, 36, 77-82	5.6	9
114	Non-linear capillary shape evolution of rod morphologies via interfacial diffusion. *Acta Materialia*, **1998**, 46, 1669-1681	8.4	9
113	Porous Titanium Scaffolds Fabricated by Metal Injection Moulding for Biomedical Applications. *Materials*, **2018**, 11,	3.5	9
112	Additive Manufacturing of Titanium Alloys. *Jom*, **2017**, 69, 2677-2678	2.1	8
111	Porous titanium structures and applications **2015**, 533-554		8
110	Redefining the Phase Stability in Ti-Nb-Zr Alloys for Alloy Design and Microstructural Prediction. *Jom*, **2018**, 70, 2254-2259	2.1	8
109	Pressureless Infiltration and Resulting Mechanical Properties of Al-AlN Preforms Fabricated by Selective Laser Sintering and Partial Nitridation. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2010**, 41, 2417-2424	2.3	8
108	Thermodynamic considerations of the instability of rod morphologies. *Acta Metallurgica Et Materialia*, **1994**, 42, 4087-4089		8
107	High-tensile-strength and ductile novel Ti-Fe-N-B alloys reinforced with TiB nanowires. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 708, 285-290	5.3	8
106	Cuboid-like nanostructure strengthened equiatomic TiZrNbTa medium entropy alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 798, 140169	5.3	8

105	A perspective on the future of titanium powder metallurgy **2015**, 601-608		7
104	Sintering of titanium in argon and vacuum: Pore evolution and mechanical properties. *International Journal of Refractory Metals and Hard Materials*, **2020**, 90, 105226	4.1	7
103	Liquid metal dealloying of titanium-tantalum (Ti-Ta) alloy to fabricate ultrafine Ta ligament structures: A comparative study in molten copper (Cu) and Cu-based alloys. *Corrosion Science*, **2020**, 169, 108600	6.8	7
102	Microstructural modification of recycled aluminium alloys by high-intensity ultrasonication: Observations from custom Al2Si2Mg1.2Fe(0.5,1.0)Mn alloys. *Journal of Alloys and Compounds*, **2020**, 823, 153833	5.7	7
101	Selective Electron Beam Manufacturing of Ti-6Al-4V Strips: Effect of Build Orientation, Columnar Grain Orientation, and Hot Isostatic Pressing on Tensile Properties. *Jom*, **2018**, 70, 638-643	2.1	7
100	Concurrence of de-alloying and re-alloying in a ternary Al67Cu18Sn15 alloy and the fabrication of 3D nanoporous Cu5n composite structures. *RSC Advances*, **2015**, 5, 9574-9580	3.7	7
99	Micrometer-sized quasicrystals in the Al85Ni5Y6Co2Fe2 metallic glass: A TEM study and a brief discussion on the formability of quasicrystals in bulk and marginal glass-forming alloys. *Journal of Materials Research*, **2012**, 27, 2131-2139	2.5	7
98	Formation of aluminium nitride during sintering of powder injection moulded aluminium. *Powder Metallurgy*, **2010**, 53, 118-124	1.9	7
97	Re-evaluation of the experimental results reported by miyazaki et al. on the Gibbs-Thomson effect. *Scripta Materialia*, **1998**, 39, 1451-1455	5.6	7
96	Tensile properties improvement by homogenized nitrogen solid solution strengthening of commercially pure titanium through powder metallurgy process. *Materials Characterization*, **2020**, 170, 110700	3.9	7
95	Non-destructive simulation of node defects in additively manufactured lattice structures. *Additive Manufacturing*, **2020**, 36, 101593	6.1	7
94	Graphene-strengthened Inconel 625 Alloy Fabricated by Selective Laser Melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 798, 140099	5.3	7
93	In situ doping and synthesis of two-dimensional nanomaterials using mechano-chemistry. *Nanoscale Horizons*, **2019**, 4, 642-646	10.8	6
92	Osteoblast Responses to Titanium-Coated Subcellular Scaled Microgrooves.. *ACS Applied Bio Materials*, **2019**, 2, 2405-2413	4.1	6
91	A yttrium-containing high-temperature titanium alloy additively manufactured by selective electron beam melting. *Journal of Central South University*, **2015**, 22, 2857-2863	2.1	6
90	Adoption and Diffusion of Disruptive Technologies: The Case of Additive Manufacturing in Medical Technology Industry in Australia. *Procedia Manufacturing*, **2020**, 43, 18-24	1.5	6
89	Fabrication of High Strength and Ductile Stainless Steel Fiber Felts by Sintering. *Jom*, **2016**, 68, 890-898	2.1	6
88	Titanium-Doped Copper-Diamond Composites Fabricated by Hot-Forging of Powder Mixtures or Cold-Pressed Powder Preforms. *Jom*, **2019**, 71, 4867-4871	2.1	6

87	Formation of anomalously large Al single crystals at triple points during pulsed electric current sintering (PECS) of Al86Ni6Y4.5Co2La1.5 metallic glass. *Materials Letters*, **2014**, 132, 196-199	3.3	6
86	Calibration of temperature measurement by infrared pyrometry in microwave heating of powder materials: an exothermic reaction based approach. *Journal of Microwave Power and Electromagnetic Energy*, **2013**, 47, 5-11	1.4	6
85	Fabrication of Porous Aluminum with Controllable Open-Pore Fraction. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2011**, 42, 2040-2047	2.3	6
84	Investigation of grain refinement during a rejuvenation heat treatment of wrought Alloy 718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2007**, 456, 147-155	5.3	6
83	The gibbs-thomson effect in dilute binary systems. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2002**, 33, 1283-1287	2.3	6
82	Grain refinement of stainless steel in ultrasound-assisted additive manufacturing. *Additive Manufacturing*, **2021**, 37, 101632	6.1	6
81	Initial crystallisation or nucleation in a liquid aluminium alloy containing spinel seeds. *Materials Letters*, **2017**, 196, 358-360	3.3	5
80	Ductility Improvement Mechanism of Pure Titanium with Excessive Oxygen Solid Solution via Rapid Cooling Process. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2018**, 82, 390-395	0.4	5
79	Distortion in a 7xxx Aluminum Alloy during Liquid Phase Sintering. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 1010-1018	2.3	5
78	'Reasonable Period of Time' in the WTO Dispute Settlement System. *Journal of International Economic Law*, **2012**, 15, 257-285	1.8	5
77	Microstructural evolution in the phase mixtures of Ti(C,N)Mo at 1600°C. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1999**, 264, 39-46	5.3	5
76	On the fabrication of steel-wire-reinforced white cast irons. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1996**, 206, 104-109	5.3	5
75	Microstructure and isothermal oxidation behavior of Nb-Ti-Si-based alloy additively manufactured by powder-feeding laser directed energy deposition. *Corrosion Science*, **2020**, 173, 108757	6.8	5
74	Solidification of Aluminium Alloys Under Ultrasonication: An Overview. *Transactions of the Indian Institute of Metals*, **2018**, 71, 2681-2686	1.2	5
73	A Detailed Experimental Assessment of Microwave Heating of Titanium Hydride Powder. *Key Engineering Materials*, **2016**, 704, 388-399	0.4	4
72	Reducing electric current and energy consumption of spark plasma sintering via punch configuration design. *Ceramics International*, **2017**, 43, 17225-17228	5.1	4
71	Novel Ultrafine-Grained Aluminium Metal Matrix Composites Prepared from Fine Atomized Al Powders **2014**, 1423-1430		4
70	The effect of the gas atmosphere on the response of the Al86Ni6Y4.5Co2La1.5 metallic glass powder to heating. *Intermetallics*, **2012**, 30, 117-121	3.5	4

69	Enhanced Sintering of Pre-Alloyed Binary TiAl Powder by a Small Addition of Iron. *Key Engineering Materials*, **2012**, 520, 89-94	0.4	4
68	Phase Equilibria and Solidification of Mg-Rich Al-Mg-Si Alloys. *Materials Science Forum*, **2006**, 508, 621-628	0.4	4
67	Coupled mesoscopic constitutive modelling and finite element simulation for plastic flow and microstructure of two-phase alloys. *Computational Materials Science*, **2007**, 40, 201-212	3.2	4
66	Cyclic overaging pre-weld heat treatment of Rene 80: effect of solution treatment and end aging temperatures. *Materials Science and Technology*, **2002**, 18, 420-428	1.5	4
65	On the gibbs-thomson effect in concentrated binary systems. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2000**, 31, 2659-2661	2.3	4
64	Fabrication of the □c Intermetallic Compound Monoliths by a Novel Powder Metallurgy and Hot-Dipping Approach. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2020**, 51, 836-849	2.5	4
63	Strong and Ductile Ti-6Al-4V Alloy Produced by Hot Pressing of Ti-6Al-4V Swarf. *Jom*, **2019**, 71, 1056-1061	2.1	4
62	Coupling effects of high magnetic field and annealing on the microstructure evolution and mechanical properties of additive manufactured Ti□Al□V. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 824, 141815	5.3	4
61	Microwave sintering of titanium and titanium alloys **2015**, 237-251		3
60	The crystallographic features of □ phase in a powder metallurgy nickel-doped Ti□45Al□Nb□.2C□.2B□1.25Ni alloy. *Intermetallics*, **2016**, 71, 65-72	3.5	3
59	Atomic Distance Tuning Effect for Nucleation in Liquid Iron. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 4419-4423	2.3	3
58	Enhanced Homogenization of Vanadium in Spark Plasma Sintering of Ti-10V-2Fe-3Al Alloy from Titanium and V-Fe-Al Master Alloy Powder Blends. *Jom*, **2017**, 69, 663-668	2.1	3
57	Significant □phase growth confinement in Grade 4 titanium and substantial □phase refinement in Grade 7 titanium. *MRS Communications*, **2014**, 4, 183-188	2.7	3
56	The Effects of Sample Position and Gas Flow Pattern on the Sintering of a 7xxx Aluminum Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 4345-4355	2.3	3
55	Applied Pressure on Altering the Nano-Crystallization Behavior of Al86Ni6Y4.5Co2La1.5Metallic Glass Powder during Spark Plasma Sintering and Its Effect on Powder Consolidation. *Journal of Nanomaterials*, **2013**, 2013, 1-6	3.2	3
54	In situ TEM observations of unusual nanocrystallization in a Ti-based bulk metallic glass. *Scripta Materialia*, **2011**, 64, 701-704	5.6	3
53	The In Situ Fabrication of Al-AlN Composites from Metal Powders and their Resistance to Wear and Cavitation. *Materials Science Forum*, **2009**, 618-619, 617-620	0.4	3
52	Coarsening of intermetallic or compound precipitates in binary systems. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2000**, 31, 3195-3197	2.3	3

51	Microstructure, tensile properties and deformation behaviour of a promising bio-applicable new Ti35Zr15Nb25Ta25 medium entropy alloy (MEA). *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 824, 141805	5.3	3
50	Buckling phenomena in AM lattice strut elements: A design tool applied to Ti-6Al-4V LB-PBF. *Materials and Design*, **2021**, 208, 109892	8.1	3
49	Simulation-informed laser metal powder deposition of Ti-6Al-4V with ultrafine lamellar structures for desired tensile properties. *Additive Manufacturing*, **2021**, 46, 102139	6.1	3
48	Variation in pore distribution along sample length in sintered 7xxx aluminum alloy. *Transactions of Nonferrous Metals Society of China*, **2016**, 26, 2019-2028	3.3	2
47	Titanium background, alloying behavior and advanced fabrication techniques An overview **2018**, 23-37		2
46	A Brief History of the Grain Refinement of Cast Light Alloys. *Materials Science Forum*, **2013**, 765, 123-129	0.4	2
45	Sintering of Titanium Powder Compacts for Containerless Hot Isostatic Pressing. *Materials Science Forum*, **2009**, 618-619, 509-512	0.4	2
44	Architectured hierarchical porous metals enabled by additive manufacturing. *Australian Journal of Mechanical Engineering*,1-11	1	2
43	Microstructure modification of additive manufactured Ti-6Al-4V plates for improved ballistic performance properties. *Journal of Materials Processing Technology*, **2022**, 301, 117436	5.3	2
42	Variant selection in additively manufactured alpha-beta titanium alloys. *Journal of Materials Science and Technology*, **2022**, 113, 14-21	9.1	2
41	A Brief History of the Development of Grain Refinement Technology for Cast Magnesium Alloys **2013**, 3-8		2
40	Development of core shell-structured Ti-(N) powders for additive manufacturing and comparison of tensile properties of the additively manufactured and spark-plasma-sintered Ti-N alloys. *Advanced Powder Technology*, **2021**, 32, 2379-2379	4.6	2
39	Thermodynamic and Kinetic Analyses of the Removal of Impurity Titanium and Vanadium from Molten Aluminum for Electrical Conductor Applications. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2021**, 52, 3130-3141	2.5	2
38	Dissolution Kinetics of Iron-Based Intermetallic Compounds (Fe IMCs) in a Commercial Steel Strip Metallic Alloy Coating Process. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2021**, 52, 41-50	2.5	2
37	Spark Plasma Sintering of Ti-48Al-2Cr-2Nb Alloy Powder and Characterization of an Unexpected Phase. *Jom*, **2019**, 71, 2556-2563	2.1	1
36	Additive Manufacturing The 2nd Asia Pacific International Conference on Additive Manufacturing (APICAM 2019). *Jom*, **2020**, 72, 997-998	2.1	1
35	Ni-free superelastic titanium alloys for medical and dental applications **2018**, 591-611		1
34	Atomic Structural Competition in the Al85.5Ni9.5La5 Alloy During Liquid-to-Solid Transition. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 3441-3445	2.3	1

33	Additively manufactured titanium artworks **2019**, 173-184		1
32	CFD modelling of nitrogen gas flow pattern during sintering of Al□Zn□.5Mg□Cu alloy and its effect on distortion. *Powder Metallurgy*, **2015**, 58, 112-122	1.9	1
31	A Brief History of the Development of Grain Refinement Technology for Cast Magnesium Alloys **2013**, 1-8		1
30	Grain Refinement in Alloys: Novel Approaches **2011**, 1-7		1
29	Microstructural Assessment of the Oxidation Behavior of Cu-Based Metallic Glass Powder. *Materials Science Forum*, **2010**, 654-656, 1054-1057	0.4	1
28	Heterogeneous Nucleation and Grain Formation on Spherical and Flat Substrates. *Materials Science Forum*, **2010**, 654-656, 1339-1342	0.4	1
27	Formation of Aluminium Nitride during Sintering of Powder Injection Moulded Aluminium. *Materials Science Forum*, **2009**, 618-619, 631-634	0.4	1
26	Phase stability of microfine Mo2C phases in high vacuums. *Journal of Materials Science Letters*, **1999**, 18, 1253-1254		1
25	On the critical instability wavelengths of rod morphologies containing an arbitrary sinusoidal perturbation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1996**, 221, 192-194	5.3	1
24	Geometrical parameters and mechanical properties of Ti6Al4V hollow-walled lattices. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 142667	5.3	1
23	Manufacturability of Ti-Al-4V Hollow-Walled Lattice Struts by Laser Powder Bed Fusion. *Jom*, **2021**, 73, 4199	2.1	1
22	The Effect of PostProcessing on the Ductility and Strength of Ti-6Al-4V Lattice Materials. *Jom*, **2021**, 73, 4119	2.1	1
21	Solidification of Cast Magnesium Alloys193-198		1
20	Ultra-High-Speed Laser Cladding of Stellite□ 6 Alloy on Mild Steel. *Jom*, **2020**, 72, 4632-4638	2.1	1
19	Near room-temperature formation of Cu3Sn: In-situ synchrotron X-ray diffraction characterization and thermodynamic assessments of its nucleation. *Acta Materialia*, **2021**, 213, 116894	8.4	1
18	Advances in Sintering. *Jom*, **2016**, 68, 876-877	2.1	1
17	Effect of Ultrasonication on the Solidification Microstructure in Al and Mg-Alloys. *Minerals, Metals and Materials Series*, **2019**, 1589-1595	0.3	1
16	Improved ballistic performance of additively manufactured Ti6Al4V with □lamellar microstructures. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 825, 141888	5.3	1

15	A Digital-Twin Methodology for the Non-destructive Certification of Lattice Structures. *Jom*, **2022**, 74, 1784-1797	2.1	1
14	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*,1-37	10.1	1
13	Sintering and Related Phenomena. *Jom*, **2017**, 69, 628-629	2.1	0
12	Identification of unusual large zones of Category I triple-alpha-variant clusters in additively manufactured Ti-4Al-2V alloy. *Scripta Materialia*, **2022**, 212, 114578	5.6	0
11	Robust bulk micro-nano hierarchical copper structures possessing exceptional bactericidal efficacy. *Biomaterials*, **2021**, 280, 121271	15.6	0
10	Surface Engineering: Applications for Advanced Manufacturing. *Jom*, **2020**, 72, 4574-4575	2.1	
9	Powder Metallurgy of Non-Ferrous Metals: Part I. *Jom*, **2018**, 70, 614-615	2.1	
8	Electrochemical Dealloying of a Ternary Al67Cu18Sn15 Alloy Compared with that of a Binary Al75Cu25 Alloy. *ECS Transactions*, **2015**, 66, 23-30	1	
7	A Correlation Between Failure Angle and Constituent for Al-AlN Composites Under Uniaxial Tensile Conditions. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 3293-3299	2.3	
6	Microstructural Characteristics of Electron Beam Processed Al-2Sc. *Materials Science Forum*, **2010**, 654-656, 910-913	0.4	
5	Rapid Prototyping of Aluminium Alloy Parts: The Effect of Infiltration Atmosphere. *Materials Science Forum*, **2009**, 618-619, 635-640	0.4	
4	Coating molybdenum on fine Ti(C,N) powder. *Journal of Materials Science Letters*, **2001**, 20, 647-649		
3	Improving the accuracy and reliability of temperature field simulation during laser metal deposition. *Australian Journal of Mechanical Engineering*,1-12	1	
2	Selective Chemical Dealloying for Fabrication of Surface Porous Al88Cu6Si6Eutectic Alloy. *Korean Journal of Materials Research*, **2013**, 23, 227-232	0.2	
1	Novel Ultrafine-Grained Aluminium Metal Matrix Composites Prepared from Fine Atomized Al Powders **2014**, 1425-1430		