Milan Brandt

List of Publications by Citations

Source: https://exaly.com/author-pdf/3562478/milan-brandt-publications-by-citations.pdf
Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

253 papers	9,005 citations	46 h-index	90 g-index
271 ext. papers	11,394 ext. citations	3.9 avg, IF	6.64 L-index

#	Paper	IF	Citations
253	Topological design and additive manufacturing of porous metals for bone scaffolds and orthopaedic implants: A review. *Biomaterials*, **2016**, 83, 127-41	15.6	1008
252	Additive manufacturing of strong and ductile Ti6Al4V by selective laser melting via in situ martensite decomposition. *Acta Materialia*, **2015**, 85, 74-84	8.4	620
251	Characteristics of cutting forces and chip formation in machining of titanium alloys. *International Journal of Machine Tools and Manufacture*, **2009**, 49, 561-568	9.4	318
250	In situ tailoring microstructure in additively manufactured Ti-6Al-4V for superior mechanical performance. *Acta Materialia*, **2017**, 125, 390-400	8.4	311
249	SLM lattice structures: Properties, performance, applications and challenges. *Materials and Design*, **2019**, 183, 108137	8.1	299
248	Bioactive coatings for orthopaedic implants-recent trends in development of implant coatings. *International Journal of Molecular Sciences*, **2014**, 15, 11878-921	6.3	239
247	Selective laser melting (SLM) of AlSi12Mg lattice structures. *Materials and Design*, **2016**, 98, 344-357	8.1	234
246	Optimal topology for additive manufacture: A method for enabling additive manufacture of support-free optimal structures. *Materials & Design*, **2014**, 63, 678-690		213
245	Thermally enhanced machining of hard-to-machine materials—A review. *International Journal of Machine Tools and Manufacture*, **2010**, 50, 663-680	9.4	203
244	Grain structure control during metal 3D printing by high-intensity ultrasound. *Nature Communications*, **2020**, 11, 142	17.4	185
243	Experimental investigation and 3D finite element prediction of the heat affected zone during laser assisted machining of Ti6Al4V alloy. *Journal of Materials Processing Technology*, **2010**, 210, 2215-2222	5.3	170
242	Ultrahigh-strength titanium gyroid scaffolds manufactured by selective laser melting (SLM) for bone implant applications. *Acta Materialia*, **2018**, 158, 354-368	8.4	159
241	Additive manufacturing and postprocessing of Ti-6Al-4V for superior mechanical properties. *MRS Bulletin*, **2016**, 41, 775-784	3.2	148
240	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
239	Review of effect of oxygen on room temperature ductility of titanium and titanium alloys. *Powder Metallurgy*, **2014**, 57, 251-257	1.9	139
238	Abrasive wear performance and microstructure of laser clad WC/Ni layers. *Wear*, **2004**, 256, 1095-1105	3.5	128
237	Effect of scan strategy on density and metallurgical properties of 17-4PH parts printed by Selective Laser Melting (SLM). *Journal of Materials Processing Technology*, **2017**, 249, 502-511	5.3	123

236	Machining Ti6Al4V alloy with cryogenic compressed air cooling. *International Journal of Machine Tools and Manufacture*, **2010**, 50, 933-942	9.4	120
235	Parametric investigation of pulsed Nd: YAG laser cladding of stellite 6 on stainless steel. *Surface and Coatings Technology*, **2005**, 194, 225-231	4.4	120
234	Ti-6Al-4V Additively Manufactured by Selective Laser Melting with Superior Mechanical Properties. *Jom*, **2015**, 67, 668-673	2.1	118
233	SLM additive manufacture of H13 tool steel with conformal cooling and structural lattices. *Rapid Prototyping Journal*, **2016**, 22, 504-518	3.8	101
232	Computational modelling of strut defects in SLM manufactured lattice structures. *Materials and Design*, **2019**, 171, 107671	8.1	95
231	The Effect of Manufacturing Defects on the Fatigue Behaviour of Ti-6Al-4V Specimens Fabricated Using Selective Laser Melting. *Advanced Materials Research*, **2014**, 891-892, 1519-1524	0.5	89
230	Numerical and experimental evaluation of a conformally cooled H13 steel injection mould manufactured with selective laser melting. *International Journal of Advanced Manufacturing Technology*, **2017**, 93, 881-900	3.2	87
229	Melt pool temperature control using LabVIEW in Nd:YAG laser blown powder cladding process. *International Journal of Advanced Manufacturing Technology*, **2006**, 29, 273-278	3.2	87
228	Effect of laser clad repair on the fatigue behaviour of ultra-high strength AISI 4340 steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 606, 46-57	5.3	85
227	Comparative study of jetting machining technologies over laser machining technology for cutting composite materials. *Composite Structures*, **2002**, 57, 289-296	5.3	83
226	Cork–PLA composite filaments for fused deposition modelling. *Composites Science and Technology*, **2018**, 168, 230-237	8.6	81
225	Metal Alloys for Fusion-Based Additive Manufacturing. *Advanced Engineering Materials*, **2018**, 20, 1700952	3.5	80
224	Failure and energy absorption characteristics of advanced 3D truss core structures. *Materials and Design*, **2016**, 92, 937-948	8.1	76
223	High-Value SLM Aerospace Components: From Design to Manufacture. *Advanced Materials Research*, **2013**, 633, 135-147	0.5	75
222	Effect of cryogenic compressed air on the evolution of cutting force and tool wear during machining of Ti6Al4V alloy. *Journal of Materials Processing Technology*, **2015**, 221, 243-254	5.3	63
221	Parametric Investigation of Laser-Assisted Machining of Commercially Pure Titanium. *Advanced Engineering Materials*, **2008**, 10, 565-572	3.5	63
220	Combining additive manufacturing and catalysis: a review. *Catalysis Science and Technology*, **2017**, 7, 3421-3439	5.5	58
219	Microscopic observation of laser glazed yttria-stabilized zirconia coatings. *Applied Surface Science*, **2010**, 256, 6213-6218	6.7	56

218	Tribological behaviour and microstructure of TiCxN(1−x) coatings deposited by filtered arc. *Wear*, **2002**, 252, 566-579	3.5	55
217	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
216	Performance of bio-inspired Kagome truss core structures under compression and shear loading. *Composite Structures*, **2014**, 118, 294-302	5.3	54
215	Direct metal deposition (DMD) of H13 tool steel on copper alloy substrate: Evaluation of mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 3342-3349	5.3	53
214	Novel β-Ti35Zr28Nb alloy scaffolds manufactured using selective laser melting for bone implant applications. *Acta Biomaterialia*, **2019**, 87, 273-284	10.8	52
213	An experimental study of laser-assisted machining of hard-to-wear white cast iron. *International Journal of Machine Tools and Manufacture*, **2011**, 51, 450-456	9.4	52
212	Residual stress measurements in laser clad repaired low pressure turbine blades for the power industry. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 437, 70-74	5.3	52
211	Evaluation of fatigue crack propagation behaviour in Ti-6Al-4V manufactured by selective laser melting. *International Journal of Fatigue*, **2017**, 104, 302-308	5	49
210	Evolution of tool wear and its effect on cutting forces during dry machining of Ti-6Al-4V alloy. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2014**, 228, 191-202	2.4	49
209	Fatigue and fracture behavior of laser clad repair of AerMet® 100 ultra-high strength steel. *International Journal of Fatigue*, **2016**, 85, 18-30	5	48
208	Effect of energy per layer on the anisotropy of selective laser melted AlSi12 aluminium alloy. *Additive Manufacturing*, **2018**, 22, 426-439	6.1	47
207	Mechanical properties of Ti6Al4V and AlSi12Mg lattice structures manufactured by Selective Laser Melting (SLM) **2017**, 119-161		46
206	Deformation and failure behaviour of Ti-6Al-4V lattice structures manufactured by selective laser melting (SLM). *International Journal of Advanced Manufacturing Technology*, **2015**, 84, 1391	3.2	45
205	Laser cladding as a potential repair technology for damaged aircraft components. *International Journal of Structural Integrity*, **2011**, 2, 314-331	1	45
204	Experimental investigation of cutting forces and tool wear during laser-assisted milling of Ti-6Al-4V alloy. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2011**, 225, 1512-1527	2.4	44
203	Mechanical response of TiAl6V4 lattice structures manufactured by selective laser melting in quasistatic and dynamic compression tests. *Journal of Laser Applications*, **2015**, 27, S17006	2.1	43
202	Effect of build orientation on the quasi-static and dynamic response of SLM AlSi10Mg. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 788, 139445	5.3	40
201	The Effect of a Laser Beam on Chip Formation during Machining of Ti6Al4V Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2010**, 41, 1573-1581	2.3	39

200	In-situ quench and tempering for microstructure control and enhanced mechanical properties of laser cladded AISI 420 stainless steel powder on 300M steel substrates. *Surface and Coatings Technology*, **2018**, 333, 210-219	4.4	37
199	Angle defines attachment: Switching the biological response to titanium interfaces by modifying the inclination angle during selective laser melting. *Materials and Design*, **2018**, 154, 326-339	8.1	37
198	A Systematic Review on 3D-Printed Imaging and Dosimetry Phantoms in Radiation Therapy. *Technology in Cancer Research and Treatment*, **2019**, 18, 1533033819870208	2.7	35
197	Measurement of actual powder layer height and packing density in a single layer in selective laser melting. *Additive Manufacturing*, **2019**, 28, 176-183	6.1	35
196	Influence of macrosegregation on solidification cracking in laser clad ultra-high strength steels. *Surface and Coatings Technology*, **2018**, 340, 126-136	4.4	35
195	Additive manufacture of custom radiation dosimetry phantoms: An automated method compatible with commercial polymer 3D printers. *Materials and Design*, **2015**, 86, 487-499	8.1	34
194	Selective Laser Melting of Duplex Stainless Steel 2205: Effect of Post-Processing Heat Treatment on Microstructure, Mechanical Properties, and Corrosion Resistance. *Materials*, **2019**, 12,	3.5	34
193	Powder bed fusion processes **2017**, 55-77		34
192	Feasible Build Orientations for Self-Supporting Fused Deposition Manufacture: A Novel Approach to Space-Filling Tesselated Geometries. *Advanced Materials Research*, **2013**, 633, 148-168	0.5	33
191	Pre-placed WC/Ni clad layers produced with a pulsed Nd:YAG laser via optical fibres. *Surface and Coatings Technology*, **2003**, 165, 26-34	4.4	33
190	Laser cladding repair of turbine blades in power plants: from research to commercialisation. *International Heat Treatment and Surface Engineering*, **2009**, 3, 105-114		32
189	Laser Cladding of Ti-6Al-4V Powder on Ti-6Al-4V Substrate: Effect of Laser Cladding Parameters on Microstructure. *Physics Procedia*, **2011**, 12, 323-329		32
188	Just-in-time Design and Additive Manufacture of Patient-specific Medical Implants. *Physics Procedia* , **2016**, 83, 4-14		32
187	Quantitative fractography and modelling of fatigue crack propagation in high strength AerMet 100 steel repaired with a laser cladding process. *International Journal of Fatigue*, **2017**, 94, 288-301	5	30
186	Computationally efficient finite difference method for metal additive manufacturing: A reduced-order DFAM tool applied to SLM. *Materials and Design*, **2017**, 132, 226-243	8.1	29
185	Study of effect of process parameters on titanium sheet metal bending using Nd: YAG laser. *Optics and Laser Technology*, **2013**, 47, 242-247	4.2	28
184	Programmatic Lattice Generation for Additive Manufacture. *Procedia Technology*, **2015**, 20, 178-184		27
183	Laser assisted modification of surface microstructure for localised corrosion resistance of magnesium alloys. *Surface Engineering*, **2007**, 23, 107-111	2.6	27

182	Loading, support and geometry effects for pin-reinforced hybrid metal-composite joints. *Composites Part A: Applied Science and Manufacturing*, **2017**, 98, 192-206	8.4	26
181	Rational design of additively manufactured Ti6Al4V implants to control Staphylococcus aureus biofilm formation. *Materialia*, **2019**, 5, 100250	3.2	25
180	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
179	Fatigue life of laser clad hardfacing alloys on AISI 4130 steel under rotary bending fatigue test. *International Journal of Fatigue*, **2015**, 72, 42-52	5	24
178	The role of lasers in additive manufacturing **2017**, 1-18		24
177	Hierarchical surface features for improved bonding and fracture toughness of metal□metal and metal□composite bonded joints. *International Journal of Adhesion and Adhesives*, **2016**, 66, 81-92	3.4	24
176	Conductive polyolefin□rubber nanocomposites with carbon nanotubes. *Composites Part A: Applied Science and Manufacturing*, **2016**, 80, 13-20	8.4	24
175	Creep and Recovery Behaviour of Polyolefin-Rubber Nanocomposites Developed for Additive Manufacturing. *Polymers*, **2016**, 8,	4.5	24
174	New Development in Selective Laser Melting of Ti□Al□4V: A Wider Processing Window for the Achievement of Fully Lamellar □+□ Microstructures. *Jom*, **2017**, 69, 2679-2683	2.1	23
173	The role of microstructural characteristics in the cavitation erosion behaviour of laser melted and laser processed Nickel□Aluminium Bronze. *Wear*, **2014**, 317, 56-63	3.5	23
172	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
171	3D characterization of defects in deep-powder-bed manufactured Ti□Al□4V and their influence on tensile properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 761, 138031	5.3	22
170	Mechanical and thermal characterisation of AlSi10Mg SLM block support structures. *Materials and Design*, **2019**, 183, 108138	8.1	21
169	Pin pull-out behaviour for hybrid metal-composite joints with integrated reinforcements. *Composite Structures*, **2016**, 155, 160-172	5.3	21
168	Theoretical and Experimental Investigation of Pulsed Laser Cutting. *CIRP Annals - Manufacturing Technology*, **1999**, 48, 163-166	4.9	21
167	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
166	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
165	The influence of sterilization on nitrogen-included ultrananocrystalline diamond for biomedical applications. *Materials Science and Engineering C*, **2016**, 61, 324-32	8.3	19

164	PULSE DISCRIMINATION FOR ELECTRICAL DISCHARGE MACHINING WITH ROTATING ELECTRODE. *Machining Science and Technology*, **2013**, 17, 292-311	2	19
163	The influence of stellite 6 particle size on the inter-track porosity in multi-track cladding. *Surface and Coatings Technology*, **2006**, 201, 998-1005	4.4	19
162	Microstructure and hardness characterisation of laser coatings produced with a mixture of AISI 420 stainless steel and Fe-C-Cr-Nb-B-Mo steel alloy powders. *Surface and Coatings Technology*, **2016**, 296, 76-87	4.4	19
161	The effect of absorption ratio on meltpool features in laser-based powder bed fusion of IN718. *Optics and Laser Technology*, **2022**, 153, 108263	4.2	19
160	Numerical and Experimental Investigation of the Heat-Affected Zone in a Laser-Assisted Machining of Ti-6Al-4V Alloy Process. *Materials Science Forum*, **2009**, 618-619, 143-146	0.4	18
159	The compressive behaviour of ABS gyroid lattice structures manufactured by fused deposition modelling. *International Journal of Advanced Manufacturing Technology*, **2020**, 107, 4449-4467	3.2	17
158	Additive manufacturing in radiation oncology: a review of clinical practice, emerging trends and research opportunities. *International Journal of Extreme Manufacturing*, **2020**, 2, 012003	7.9	17
157	Electrical discharge grinding versus abrasive grinding in polycrystalline diamond machining□ool quality and performance analysis. *International Journal of Advanced Manufacturing Technology*, **2016**, 85, 263-277	3.2	17
156	A Monte Carlo simulation-based approach to realistic modelling of additively manufactured lattice structures. *Additive Manufacturing*, **2020**, 32, 101092	6.1	16
155	Voxel-based support structures for additive manufacture of topologically optimal geometries. *International Journal of Advanced Manufacturing Technology*, **2019**, 105, 1-26	3.2	16
154	Thermal fatigue behavior of direct metal deposited H13 tool steel coating on copper alloy substrate. *Surface and Coatings Technology*, **2012**, 206, 2572-2580	4.4	16
153	Laser cladding with a pulsed Nd:YAG laser and optical fibers. *Journal of Laser Applications*, **1997**, 9, 67-75	2.1	16
152	Subsurface properties of laser peened 6061□6 Al weldments. *Surface Engineering*, **2000**, 16, 116-121	2.6	16
151	Evaluation of Microstructure and Mechanical Properties at the Interface Region of Laser-Clad Stellite 6 on Steel Using Nanoindentation. *Metallography, Microstructure, and Analysis*, **2013**, 2, 328-336	1.1	15
150	Bimetallic dies with direct metal-deposited steel on Moldmax for high-pressure die casting application. *International Journal of Advanced Manufacturing Technology*, **2011**, 52, 855-863	3.2	15
149	Self-Limiting Hardness Changes in Laser Peened 6061-T6 Aluminium. *Surface Engineering*, **2001**, 17, 477-482	1.2	15
148	Effect of tool wear on chip formation during dry machining of Ti-6Al-4V alloy, part 1: Effect of gradual tool wear evolution. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2017**, 231, 1559-1574	2.4	14
147	Fabrication and anisotropic wettability of titanium-coated microgrooves. *Journal of Applied Physics*, **2018**, 123, 095306	2.5	14

146	Effect of tool wear on chip formation during dry machining of Ti-6Al-4V alloy, part 2: Effect of tool failure modes. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2017**, 231, 1575-1586	2.4	13
145	Programmatic generation of computationally efficient lattice structures for additive manufacture. *Rapid Prototyping Journal*, **2017**, 23, 486-494	3.8	13
144	The role of microstructure in the stress relaxation and tempering of laser clad Ti□Al□V. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 601, 65-69	5.3	13
143	3D Printing of polymer composites with material jetting: Mechanical and fractographic analysis. *Additive Manufacturing*, **2020**, 36, 101558	6.1	13
142	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
141	Characteristics of oxide films on Ti-(10□5)Ta alloys and their corrosion performance in an aerated Hank□ balanced salt solution. *Applied Surface Science*, **2020**, 506, 145013	6.7	12
140	Failure modelling and characterisation for pin-reinforced metal-composite joints. *Composite Structures*, **2018**, 188, 185-196	5.3	11
139	Cost-oriented planning of equipment for selective laser melting (SLM) in production lines. *CIRP Annals - Manufacturing Technology*, **2018**, 67, 471-474	4.9	11
138	Laser processing of nickel□luminum bronze for improved surface corrosion properties. *Journal of Laser Applications*, **2013**, 25, 032009	2.1	11
137	Increased efficiency gyroid structures by tailored material distribution. *Materials and Design*, **2021**, 197, 109096	8.1	11
136	Bioprinting and Biofabrication with Peptide and Protein Biomaterials. *Advances in Experimental Medicine and Biology*, **2017**, 1030, 95-129	3.6	10
135	Microstructure, abrasive wear and corrosion characterisation of laser metal deposited Fe-30Cr-6Mo-10Ni-2.2C alloy. *Wear*, **2019**, 438-439, 203070	3.5	10
134	On the role of wet abrasive centrifugal barrel finishing on surface enhancement and material removal rate of LPBF stainless steel 316L. *Journal of Manufacturing Processes*, **2020**, 59, 523-534	5	10
133	Additively manufactured, highly-uniform flow distributor for process intensification. *Chemical Engineering and Processing: Process Intensification*, **2019**, 143, 107595	3.7	10
132	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
131	Thermal expansion of functionally graded and wafer-layered structures produced by laser direct metal deposition. *International Journal of Advanced Manufacturing Technology*, **2013**, 69, 2011-2018	3.2	10
130	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
129	A Rationale for the Acoustic Monitoring of Surface Deformation in Ti6Al4V Alloys during Machining. *Advanced Engineering Materials*, **2007**, 9, 1000-1004	3.5	10

128	3D-Printed Diamond-Titanium Composite: A Hybrid Material for Implant Engineering.. *ACS Applied Bio Materials*, **2020**, 3, 29-36	4.1	10
127	A study on surface morphology and tension in laser powder bed fusion of Ti-6Al-4V. *International Journal of Advanced Manufacturing Technology*, **2020**, 111, 2891-2909	3.2	10
126	Image-Based Geometrical Characterization of Nodes in Additively Manufactured Lattice Structures. *3D Printing and Additive Manufacturing*, **2021**, 8, 51-68	4	10
125	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
124	Laser Beam Machining **2013**, 35-96		10
123	Gyroid structures for 3D-printed heterogeneous radiotherapy phantoms. *Physics in Medicine and Biology*, **2019**, 64, 21NT05	3.8	9
122	Model predictive control of laser metal deposition. *International Journal of Advanced Manufacturing Technology*, **2019**, 105, 1055-1067	3.2	9
121	Microstructural analysis of in-situ reacted Ti2AlC MAX phase composite coating by laser cladding. *Surface and Coatings Technology*, **2020**, 385, 125360	4.4	9
120	Direct Metal Deposition of H13 Tool Steel on Copper Alloy Substrate: Parametric Investigation. *Lasers in Manufacturing and Materials Processing*, **2015**, 2, 242-260	2.1	9
119	Modelling the effects of intergranular corrosion around a fastener hole in 7075-T651 aluminium alloy. *Computational Materials Science*, **2014**, 84, 74-82	3.2	9
118	Effect of laser beam on machining of titanium alloys **2008**,		9
117	Laser modification of metal surfaces. *Optics and Lasers in Engineering*, **1993**, 18, 1-13	4.6	9
116	Operating characteristics of TE copper bromide lasers. *IEEE Journal of Quantum Electronics*, **1981**, 17, 1107-1115	2	9
115	Influence of delay strategies and residual heat on in-situ tempering in the laser metal deposition of 300M high strength steel. *Surface and Coatings Technology*, **2020**, 383, 125279	4.4	9
114	In situ control of tempered martensite during laser cladding repair of aero-grade 300M steel using AISI 420 stainless steel powder. *Journal of Laser Applications*, **2018**, 30, 032502	2.1	8
113	Tensile strength of functionally graded and wafer layered structures produced by direct metal deposition. *Rapid Prototyping Journal*, **2014**, 20, 360-368	3.8	8
112	Rheology and 3D Printability of Percolated Graphene-Polyamide-6 Composites. *Polymers*, **2020**, 12,	4.5	8
111	Laser surface treatment to improve the surface corrosion properties of nickel-aluminum bronze **2015**, 469-481		7

110	Investigation into Heat Treatment and Residual Stress in Laser Clad AA7075 Powder on AA7075 Substrate. *Metallography, Microstructure, and Analysis*, **2013**, 2, 205-212	1.1	7
109	Evaluation of microstructure and fatigue properties in laser cladding repair of ultrahigh strength AerMet® 100 steel. *Journal of Laser Applications*, **2015**, 27, S29202	2.1	7
108	Evaluation of duplex coatings produced with a pulsed Nd:YAG laser and filtered arc. *Surface and Coatings Technology*, **2002**, 153, 31-39	4.4	7
107	Deposition of WC/Ni clad layers with a pulsed Nd:YAG laser. *Journal of Laser Applications*, **2003**, 15, 31-36	2.1	7
106	Fibre Optic Nd:YAG laser cladding of preplaced hastelloy C powder. *Surface Engineering*, **1995**, 11, 223-232	2.6	7
105	cw laser oscillation on transitions of Cd+ and Zn+ He–Cd halide and He–Zn halide discharges. *Journal of Applied Physics*, **1977**, 48, 4486-4494	2.5	7
104	Non-destructive simulation of node defects in additively manufactured lattice structures. *Additive Manufacturing*, **2020**, 36, 101593	6.1	7
103	Model-driven design of a fast material removal electrical discharge machine. *Cogent Engineering*, **2016**, 3, 1233801	1.5	7
102	Three-Dimensional Printing of Sports Equipment **2019**, 161-198		6
101	An Approach for Personalised Product Development. *Procedia Technology*, **2015**, 20, 191-198		6
100	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
99	The Role of Metallurgical Solid State Phase Transformations on the Formation of Residual Stress in Laser Cladding and Heating. *Materials Science Forum*, **2014**, 777, 19-24	0.4	6
98	Transversely excited Sr+ recombination laser. *Applied Physics Letters*, **1983**, 42, 127-129	3.4	6
97	Laser assisted machining of high chromium white cast iron **2004**,		6
96	Heat transfer in lattice structures during metal additive manufacturing: numerical exploration of temperature field evolution. *Rapid Prototyping Journal*, **2020**, 26, 911-928	3.8	6
95	The technology of continuous fibre-reinforced polymers: a review on extrusion additive manufacturing methods. *International Journal of Advanced Manufacturing Technology*, **2021**, 113, 3057-3077	3.2	6
94	Processing window for laser metal deposition of Al 7075 powder with minimized defects. *Journal of Manufacturing Processes*, **2021**, 64, 1484-1492	5	6
93	Additive manufacture of anti-biofouling inserts for marine applications. *Rapid Prototyping Journal*, **2016**, 22, 416-434	3.8	6

92	Grain refinement of stainless steel in ultrasound-assisted additive manufacturing. *Additive Manufacturing*, **2021**, 37, 101632	6.1	6
91	SLM lattice thermal fields acquired by wide-field thermal camera. *Procedia CIRP*, **2018**, 74, 122-126	1.8	6
90	High Speed Machining of Titanium Alloys. *Materials Science Forum*, **2009**, 618-619, 159-163	0.4	5
89	Melt pool temperature and its effect on clad formation in pulsed Nd:yttrium-aluminum-garnet laser cladding of Stellite 6. *Journal of Laser Applications*, **2007**, 19, 32-40	2.1	5
88	Repetitively pulsed transversely excited Sr+recombination laser. *IEEE Journal of Quantum Electronics*, **1984**, 20, 1006-1007	2	5
87	Additive Manufacture of Lung Equivalent Anthropomorphic Phantoms: A Method to Control Hounsfield Number Utilizing Partial Volume Effect. *Journal of Engineering and Science in Medical Diagnostics and Therapy*, **2020**, 3,	1	5
86	Laser Assisted Machining : Current Status and Future Scope. *Springer Series in Materials Science*, **2013**, 113-157	0.9	4
85	Comparison of Endmill Tool Coating Performance during Machining of Ti6Al4V Alloy. *Advanced Materials Research*, **2014**, 974, 126-131	0.5	4
84	Effect of Microstructure on Cutting Force and Chip Formation during Machining of Ti-6Al-4V Alloy. *Advanced Materials Research*, **2013**, 690-693, 2437-2441	0.5	4
83	Electrical Discharge Characteristics of Polycrystalline Diamonds. *Advanced Materials Research*, **2012**, 426, 44-47	0.5	4
82	The Effect of Laser Cladding Deposition Rate on Residual Stress Formation in Ti-6Al-4V Clad Layers. *Key Engineering Materials*, **2012**, 520, 309-313	0.4	4
81	Investigation of capillary waves excited by a Nd□□YAG laser using pyrometry. *Journal Physics D: Applied Physics*, **2003**, 36, 2435-2445	3	4
80	Comparison between continuous wave and pulsed Nd:YAG laser cladding of stellite 6 **2004**,		4
79	Challenges of Scale Modelling Material Behaviour of Additive-Manufactured Nodes **2015**, 45-51		4
78	The effect of heat treatment on the abrasive and erosive wear behaviour of laser metal deposited Fe□8Cr□.7C alloy. *Wear*, **2020**, 458-459, 203410	3.5	4
77	Effect of alloy composition and laser powder bed fusion parameters on the defect formation and mechanical properties of Inconel 625. *International Journal of Advanced Manufacturing Technology*, **2021**, 114, 915-927	3.2	4
76	Role of deposition strategy and fill depth on the tensile and fatigue performance of 300 M repaired through laser directed energy deposition. *International Journal of Fatigue*, **2021**, 146, 106135	5	4
75	Strong and Ductile Ti-6Al-4V Alloy Produced by Hot Pressing of Ti-6Al-4V Swarf. *Jom*, **2019**, 71, 1056-1062	2.1	4

74	Numerical methods to predict overheating in SLM lattice structures **2014**,		3
73	A Model for Predicting the Stress Concentration of Intergranular Corrosion around a Fastener Hole. *Advanced Materials Research*, **2014**, 891-892, 242-247	0.5	3
72	Measurement of Polycrystalline Diamond Craters in Electrical Discharge Machining. *Applied Mechanics and Materials*, **2014**, 664, 304-309	0.3	3
71	Microstructure of Laser Treated ZE41A-T5 Magnesium Alloy. *Materials Science Forum*, **2010**, 654-656, 759-762	0.4	3
70	Development of a Processing Window for the Transformation Hardening of Nickel-Aluminium-Bronze. *Materials Science Forum*, **2010**, 654-656, 1916-1919	0.4	3
69	The post-repair performance of Ti-6Al-4V after foreign object damage. *Procedia Engineering*, **2011**, 10, 3622-3627		3
68	Role of Manganes in the Soldering Reaction in Magnesium High Pressure Die Casting. *Advanced Engineering Materials*, **2003**, 5, 903-906	3.5	3
67	Nd:YAG laser cladding of Al/Si and Al7075 powder on Al7050 and Al7075 substrates **2002**,		3
66	An analytical model for pulsed laser cutting of metals **1996**,		3
65	The effect of topology on the quasi-static and dynamic behaviour of SLM AlSi10Mg lattice structures. *International Journal of Advanced Manufacturing Technology*, **2022**, 118, 4085	3.2	3
64	The interlace deposition method of bone equivalent material extrusion 3D printing for imaging in radiotherapy. *Materials and Design*, **2021**, 199, 109439	8.1	3
63	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
62	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
61	Predicting the likely causes of early crack initiation for extruded aircraft components containing intergranular corrosion. *International Journal of Fatigue*, **2016**, 82, 700-707	5	2
60	Gap width control in electrical discharge machining, using type-2 fuzzy controllers **2013**,		2
59	Design of a Personalised Faceguard for an Elite Cricketer. *Procedia Technology*, **2015**, 20, 199-205		2
58	Tool Life Study of Coated/Uncoated Carbide Inserts during Turning of Ti6Al4V. *Advanced Materials Research*, **2014**, 974, 136-140	0.5	2
57	Experimental Study of Wheel Rotating Speed Effect on Electrical Discharge Grinding. *Applied Mechanics and Materials*, **2014**, 697, 275-279	0.3	2

56	Study on Application of Interval Type 2 Fuzzy Logic Control for Gap Width Controller Used in EDM Machine. *Applied Mechanics and Materials*, **2013**, 365-366, 863-869	0.3	2
55	Electric Discharge Grinding of Polycrystalline Diamond Materials. *Applied Mechanics and Materials*, **2012**, 271-272, 333-337	0.3	2
54	Investigation of Hastelloy C Laser Clad Melt Pool Size and its Effect on Clad Formation. *Key Engineering Materials*, **2008**, 384, 213-227	0.4	2
53	Effect of increment and single-track geometry on the formation of multi-track laser cladding **2006**,		2
52	Effects of process parameters on the quality of laser cladding of 7075-T6 aluminium alloy with Al-Si powder **2004**,		2
51	Fundamental investigations on process monitoring in the laser cladding process **2002**,		2
50	Architectured hierarchical porous metals enabled by additive manufacturing. *Australian Journal of Mechanical Engineering*,1-11	1	2
49	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
48	A customizable anthropomorphic phantom for dosimetric verification of 3D-printed lung, tissue, and bone density materials. *Medical Physics*, **2021**, 49, 52	4.4	2
47	Variant selection in additively manufactured alpha-beta titanium alloys. *Journal of Materials Science and Technology*, **2022**, 113, 14-21	9.1	2
46	Investigation of the Cutting Forces and Tool Wear in Laser Assisted Milling of Ti6Al4V Alloy **2010**, 255-258		2
45	Effect of process parameters and grain refinement on hot tearing susceptibility of high strength aluminum alloy 2139 in laser powder bed fusion. *Progress in Additive Manufacturing*,1	5	2
44	Development of Bulk Metallic Glasses and their Composites by Additive Manufacturing Evolution, Challenges and a Proposed Novel Solution. *Advanced Materials Research*, **2019**, 1155, 1-28	0.5	1
43	[DesktopLabs] Desktop Laboratories: Web Share and Additive Manufacture of Engineering Educational Models. *Procedia Technology*, **2015**, 20, 111-116		1
42	Influence of fill thickness on tensile perfomance of 300M high strength steel following laser metal deposition repair. *Journal of Laser Applications*, **2020**, 32, 022061	2.1	1
41	The effect of pre-heat temperature on the microstructure and abrasive wear properties of laser metal deposited near-eutectic Fe-28Cr-2.9C alloy. *Journal of Laser Applications*, **2020**, 32, 032008	2.1	1
40	Development of Bulk Metallic Glass Matrix Composites (BMGMC) by Additive Manufacturing: Modelling and Simulation A Review: Part A. *Advanced Materials Research*, **2019**, 1154, 1-39	0.5	1
39	Additively manufactured titanium artworks **2019**, 173-184		1

38	Repair of aircraft components by laser cladding process **2014**,		1
37	Mechanical properties of selective laser melted Ti-6Al-4V with different layer thickness **2014**,		1
36	Design of Exotic Materials Machining System. *Advanced Materials Research*, **2013**, 633, 36-46	0.5	1
35	Study of Bond Strength for Laser Direct Metal Deposition of Tool Steel on Copper Alloy Substrate. *Advanced Materials Research*, **2011**, 230-232, 945-948	0.5	1
34	Experimental investigation and 3D modeling of the temperature profile of Ti6Al4V alloy subjected to laser heating **2010**,		1
33	A Study of Microstructure and Surface Hardness of Parts Fabricated by Laser Direct Metal Deposition Process. *Advanced Materials Research*, **2010**, 129-131, 648-651	0.5	1
32	Dielectric spectra of natural cork and derivatives. *Journal of Non-Crystalline Solids*, **2010**, 356, 763-767	3.9	1
31	The Use of Electromagnetic Fields for the Detection of Inclusions in Aluminium. *Materials Science Forum*, **2009**, 630, 155-164	0.4	1
30	3D Finite Element Modeling of the Machining of Ti6Al4V Alloys. *Advanced Materials Research*, **2011**, 189-193, 1926-1929	0.5	1
29	A Study of Laser Cladding with 420 Stainless Steel Powder on the Integrity of the Substrate Metal. *Advanced Materials Research*, **2011**, 230-232, 949-952	0.5	1
28	3D Transient Thermal Modelling and Experimental Validation of the Temperature Distribution during Laser Heating of Ti6Al4V Alloy. *Materials Science Forum*, **2010**, 654-656, 894-897	0.4	1
27	Laser assisted machining of commercially pure titanium **2007**,		1
26	Microstructural features and cracking of laser cladding on 7xxx aluminium alloys with Al-12%Si powder **2006**,		1
25	Residual stresses in Al7075 alloy plate laser clad with Al-12Si alloy powder **2006**,		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	Control of dilution during laser cladding of Al7075 substrates with Al-12Si aluminium alloy powder **2004**,		1
22	Manufacturability of Ti-Al-4V Hollow-Walled Lattice Struts by Laser Powder Bed Fusion. *Jom*, **2021**, 73, 4199	2.1	1
21	Deformation and failure behaviour of Ti-6Al-4V lattice structures manufactured by selective laser melting (SLM) **2016**, 84, 1391		1

20	Robots and Tools for Remodeling Bone. *IEEE Reviews in Biomedical Engineering*, **2020**, 13, 184-198	6.4	1
19	Ultra-High-Speed Laser Cladding of Stellite 6 Alloy on Mild Steel. *Jom*, **2020**, 72, 4632-4638	2.1	1
18	Effects of furnace annealing on in situ reacted Ti2AlC MAX phase composite coatings deposited by laser cladding. *Surface and Coatings Technology*, **2021**, 405, 126597	4.4	1
17	Current state and future trends in laser powder bed fusion technology **2021**, 621-634		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	Fabrication of continuous carbon fibre-reinforced polyetherimide through fused filament fabrication. *Progress in Additive Manufacturing*,1	5	1
13	Development of Bulk Metallic Glass Matrix Composites (BMGMC) by Additive Manufacturing: Modelling and Simulation A Review: Part B. *Advanced Materials Research*, **2019**, 1154, 40-79	0.5	0
12	An accurate and real-time melt pool dimension measurement method for laser direct metal deposition. *International Journal of Advanced Manufacturing Technology*, **2021**, 114, 2421-2432	3.2	0
11	Automated resection planning for bone tumor surgery. *Computers in Biology and Medicine*, **2021**, 137, 104777	7	0
10	A comprehensive study on meltpool depth in laser-based powder bed fusion of Inconel 718. *International Journal of Advanced Manufacturing Technology*, **2022**, 120, 2345	3.2	0
9	Programmatic lattice generation tools for additive manufacture. *Software Impacts*, **2022**, 12, 100262	1.8	0
8	Current Progresses of Laser Assisted Machining of Aerospace Materials for Enhancing Tool Life. *Advanced Materials Research*, **2013**, 690-693, 3359-3364	0.5	
7	A Survey of Control Methods for Electrical Discharge Machining Process. *Recent Patents on Electrical and Electronic Engineering*, **2013**, 6, 7-28		
6	Microstructural Evolution in Chips during Machining of Commercially Pure (Grade 2) Titanium. *Materials Science Forum*, **2010**, 654-656, 823-826	0.4	
5	Nd:YAG laser welding **2005**, 113-157		
4	Parametric Study of Laser Cladding of as 21 Magnesium Alloy with Aluminium Silicon/Tungsten Carbide Powder617-623		
3	50 years of the Laser Institute of America. *Journal of Laser Applications*, **2018**, 30, 041001	2.1	

2	The Effect of Geometry on Local Processing State in Additively Manufactured Ti-6Al-4V Lattices. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 508-523	2.9
1	Effect of composition on the tensile and corrosion performance of nickel aluminium bronze produced via laser powder bed fusion. *Additive Manufacturing*, **2022**, 54, 102771	6.1