

Dermot Brabazon

List of Publications by Year in descending order

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209
papers

5,535
citations

94433

37
h-index

114465

63
g-index

213
all docs

213
docs citations

213
times ranked

5589
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption and Desorption of Methylene Blue on Porous Carbon Monoliths and Nanocrystalline Cellulose. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 8796-8804.	8.0	302
2	Graphene oxide and graphene nanosheet reinforced aluminium matrix composites: Powder synthesis and prepared composite characteristics. <i>Materials and Design</i> , 2016, 94, 87-94.	7.0	176
3	Stir casting process for manufacture of Al-SiC composites. <i>Rare Metals</i> , 2017, 36, 581-590.	7.1	171
4	Selective laser sintering of hydroxyapatite/poly- ϵ -caprolactone scaffolds. <i>Acta Biomaterialia</i> , 2010, 6, 2511-2517.	8.3	164
5	Fabrication of aluminum matrix composites reinforced with nano- to micrometer-sized SiC particles. <i>Materials and Design</i> , 2016, 89, 58-70.	7.0	143
6	Strengthening mechanisms of graphene sheets in aluminium matrix nanocomposites. <i>Materials and Design</i> , 2015, 88, 983-989.	7.0	138
7	Simulation of the stir casting process. <i>Journal of Materials Processing Technology</i> , 2003, 143-144, 567-571.	6.3	133
8	Development and assessment of a new quick quench stir caster design for the production of metal matrix composites. <i>Journal of Materials Processing Technology</i> , 2005, 166, 430-439.	6.3	133
9	Graphene and derivatives – Synthesis techniques, properties and their energy applications. <i>Energy</i> , 2017, 140, 766-778.	8.8	119
10	Advances in three-dimensional rapid prototyping of microfluidic devices for biological applications. <i>Biomicrofluidics</i> , 2014, 8, 052112.	2.4	114
11	Mechanical stir casting of aluminium alloys from the mushy state: process, microstructure and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 326, 370-381.	5.6	111
12	Advanced materials of printed wearables for physiological parameter monitoring. <i>Materials Today</i> , 2020, 32, 147-177.	14.2	110
13	MXene materials based printed flexible devices for healthcare, biomedical and energy storage applications. <i>Materials Today</i> , 2021, 43, 99-131.	14.2	107
14	Mechanical properties of graphene oxide reinforced aluminium matrix composites. <i>Composites Part B: Engineering</i> , 2018, 145, 136-144.	12.0	97
15	3D printed metal columns for capillary liquid chromatography. <i>Analyst</i> , 2014, 139, 6343-6347.	3.5	87
16	Computational and experimental analysis of particulate distribution during Al-SiC MMC fabrication. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 719-729.	7.6	78
17	High speed laser surface modification of Ti-6Al-4V. <i>Surface and Coatings Technology</i> , 2012, 206, 3223-3229.	4.8	74
18	In-situ sensing, process monitoring and machine control in Laser Powder Bed Fusion: A review. <i>Additive Manufacturing</i> , 2021, 45, 102058.	3.0	73

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19	Surface modification of polymers for biocompatibility via exposure to extreme ultraviolet radiation. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 3298-3310.	4.0	71
20	Laser Polishing of Additive Manufactured 316L Stainless Steel Synthesized by Selective Laser Melting. <i>Materials</i> , 2019, 12, 991.	2.9	66
21	Experimental investigation of the transient and steady state rheological behaviour of Al-Si alloys in the mushy state. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 356, 69-80.	5.6	63
22	Advances in Selective Laser Melting of Nitinol Shape Memory Alloy Part Production. <i>Materials</i> , 2019, 12, 809.	2.9	59
23	Study of the plastic deformation mechanism of TRIP-TWIP high entropy alloys at the atomic level. <i>International Journal of Plasticity</i> , 2020, 127, 102649.	8.8	59
24	Enhanced mechanical properties of in situ aluminium matrix composites reinforced by alumina nanoparticles. <i>Archives of Civil and Mechanical Engineering</i> , 2018, 18, 215-226.	3.8	58
25	Recyclability of stainless steel (316L) powder within the additive manufacturing process. <i>Materialia</i> , 2019, 8, 100489.	2.7	56
26	Advanced production routes for metal matrix composites. <i>Engineering Reports</i> , 2021, 3, e12330.	1.7	56
27	Tensile properties of AlCrCoFeCuNi glassy alloys: A molecular dynamics simulation study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 698, 143-151.	5.6	53
28	Laser assisted synthesis of carbon nanoparticles with controlled viscosities for printing applications. <i>Journal of Colloid and Interface Science</i> , 2015, 447, 263-268.	9.4	52
29	Mechanical properties of rolled A356 based composites reinforced by Cu-coated bimodal ceramic particles. <i>Materials and Design</i> , 2015, 83, 678-688.	7.0	52
30	Comparison of ANN and DoE for the prediction of laser-machined micro-channel dimensions. <i>Optics and Lasers in Engineering</i> , 2009, 47, 956-964.	3.8	51
31	Effect of interfacial-active elements addition on the incorporation of micron-sized SiC particles in molten pure aluminum. <i>Ceramics International</i> , 2014, 40, 8323-8332.	4.8	49
32	Liquid Phase Pulsed Laser Ablation: A route to fabricate different carbon nanostructures. <i>Applied Surface Science</i> , 2014, 302, 141-144.	6.1	48
33	Effect of electroless coating parameters and ceramic particle size on fabrication of a uniform Ni-P coating on SiC particles. <i>Ceramics International</i> , 2014, 40, 12149-12159.	4.8	47
34	Laser beam powder bed fusion of nitinol shape memory alloy (SMA). <i>Journal of Materials Research and Technology</i> , 2021, 14, 2554-2570.	5.8	47
35	A new method for assessing the recyclability of powders within Powder Bed Fusion process. <i>Materials Characterization</i> , 2020, 161, 110167.	4.4	46
36	Exopolysaccharides of Lactic Acid Bacteria: Production, Purification and Health Benefits towards Functional Food. <i>Nutrients</i> , 2022, 14, 2938.	4.1	45

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37	Influences of powder morphology and spreading parameters on the powder bed topography uniformity in powder bed fusion metal additive manufacturing. <i>Additive Manufacturing</i> , 2021, 38, 101807.	3.0	40
38	Comparison of the porosity and mechanical performance of 316L stainless steel manufactured on different laser powder bed fusion metal additive manufacturing machines. <i>Journal of Materials Research and Technology</i> , 2021, 13, 2361-2374.	5.8	40
39	ColiSense, today's sample today: A rapid on-site detection of β -D-Glucuronidase activity in surface water as a surrogate for E. coli. <i>Talanta</i> , 2016, 148, 75-83.	5.5	39
40	“Nano” An Emerging Avenue in Electrochemical Detection of Neurotransmitters. <i>ACS Chemical Neuroscience</i> , 2020, 11, 4024-4047.	3.5	39
41	Interaction Between Zinc, Cadmium, and Lead in Scalp Hair Samples of Pakistani and Irish Smokers Rheumatoid Arthritis Subjects in Relation to Controls. <i>Biological Trace Element Research</i> , 2012, 148, 139-147.	3.5	35
42	<i>In vitro</i> fibroblast and pre-osteoblastic cellular responses on laser surface modified Ti-6Al-4V. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 015007.	3.3	35
43	Microchannel fabrication on cyclic olefin polymer substrates via 1064 nm Nd:YAG laser ablation. <i>Applied Surface Science</i> , 2016, 387, 603-608.	6.1	33
44	Determination of atomic-scale structure and compressive behavior of solidified AlxCrCoFeCuNi high entropy alloys. <i>International Journal of Mechanical Sciences</i> , 2020, 171, 105389.	6.7	33
45	Direct thermal method: new process for development of globular alloy microstructure. <i>International Journal of Cast Metals Research</i> , 2003, 16, 418-426.	1.0	32
46	Permeability of rapid prototyped artificial bone scaffold structures. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 4127-4135.	4.0	32
47	Extreme ultraviolet (EUV) surface modification of polytetrafluoroethylene (PTFE) for control of biocompatibility. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015, 364, 98-107.	1.4	32
48	Surface modification of AISI H13 tool steel by laser cladding with NiTi powder. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	32
49	CO2 laser polishing of laser-powder bed fusion produced AlSi10Mg parts. <i>Surface and Coatings Technology</i> , 2021, 419, 127291.	4.8	32
50	Comparative metal distribution in scalp hair of Pakistani and Irish referents and diabetes mellitus patients. <i>Clinica Chimica Acta</i> , 2013, 415, 207-214.	1.1	31
51	Evaluation via powder metallurgy of nano-reinforced iron powders developed for selective laser melting applications. <i>Materials and Design</i> , 2019, 182, 108046.	7.0	30
52	Fast Fabrication Process of Microfluidic Devices Based on Cyclic Olefin Copolymer. <i>Materials and Manufacturing Processes</i> , 2014, 29, 93-99.	4.7	29
53	Xurography actuated valving for centrifugal flow control. <i>Lab on A Chip</i> , 2016, 16, 3454-3459.	6.0	29
54	Laser surface polishing of Ti-6Al-4V parts manufactured by laser powder bed fusion. <i>Surface and Coatings Technology</i> , 2022, 434, 128179.	4.8	29

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55	A comparison study of applying metallic coating on SiC particles for manufacturing of cast aluminum matrix composites. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 81, 433-444.	3.0	28
56	Laser surface texturing of stainless steel 316L cylindrical pins for interference fit applications. <i>Journal of Materials Processing Technology</i> , 2018, 252, 58-68.	6.3	28
57	XPS, SEM, AFM, and Nano-Indentation characterization for powder recycling within additive manufacturing process. <i>IOP Conference Series: Materials Science and Engineering</i> , 2021, 1182, 012025.	0.6	28
58	A Novel Method for Incorporation of Micron-Sized SiC Particles into Molten Pure Aluminum Utilizing a Co Coating. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015, 46, 12-19.	2.1	27
59	Dominant roles of eccentricity, fin design, and nanoparticles in performance enhancement of latent thermal energy storage unit. <i>Journal of Energy Storage</i> , 2021, 43, 103181.	8.1	27
60	Thermal fatigue properties of laser treated steels. <i>International Journal of Material Forming</i> , 2010, 3, 797-800.	2.0	26
61	Assessment of thermo-hydraulic performance of inward dimpled tubes with variation in angular orientations. <i>Applied Thermal Engineering</i> , 2020, 170, 115040.	6.0	25
62	Centrifugally-driven sample extraction, preconcentration and purification in microfluidic compact discs. <i>TrAC - Trends in Analytical Chemistry</i> , 2011, 30, 1575-1586.	11.4	24
63	Estimation of toxic elements in the samples of different cigarettes and their effect on the essential elemental status in the biological samples of Irish smoker rheumatoid arthritis consumers. <i>Environmental Monitoring and Assessment</i> , 2015, 187, 157.	2.7	24
64	Manufacturing of cast A356 matrix composite reinforced with nano- to micrometer-sized SiC particles. <i>Rare Metals</i> , 2017, 36, 46-54.	7.1	24
65	Improved determination of femtogram-level organic explosives in multiple matrices using dual-sorbent solid phase extraction and liquid chromatography-high resolution accurate mass spectrometry. <i>Talanta</i> , 2019, 203, 65-76.	5.5	24
66	Comprehensive assessment of spatter material generated during selective laser melting of stainless steel. <i>Materials Today Communications</i> , 2020, 25, 101294.	1.9	24
67	Thermal stability of laser treated die material for semi-solid metal forming. <i>International Journal of Material Forming</i> , 2009, 2, 761-764.	2.0	23
68	Methacrylate Polymer Monoliths for Separation Applications. <i>Materials</i> , 2016, 9, 446.	2.9	23
69	Methodology of laser processing for precise control of surface micro-topology. <i>Surface and Coatings Technology</i> , 2016, 307, 702-712.	4.8	23
70	XPS, SEM, DSC and Nanoindentation Characterization of Silver Nanoparticle-Coated Biopolymer Pellets. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 7706.	2.5	23
71	X-ray Tomography, AFM and Nanoindentation Measurements for Recyclability Analysis of 316L Powders in 3D Printing Process. <i>Procedia Manufacturing</i> , 2020, 47, 1113-1116.	1.9	23
72	3D transient thermal modelling of laser microchannel fabrication in lime-soda glass. <i>Journal of Materials Processing Technology</i> , 2008, 207, 307-314.	6.3	22

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73	An Innovative Two-Stage Reheating Process for Wrought Aluminum Alloy During Thixoforming. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4191-4201.	2.2	22
74	Detecting voids in 3D printing using melt pool time series data. Journal of Intelligent Manufacturing, 2022, 33, 845-852.	7.3	22
75	Microstructural and mechanical evaluation of post-processed SS 316L manufactured by laser-based powder bed fusion. Journal of Materials Research and Technology, 2021, 12, 210-220.	5.8	22
76	Surface modification of HVOF thermal sprayed WC-CoCr coatings by laser treatment. International Journal of Material Forming, 2010, 3, 801-804.	2.0	21
77	Process mapping of laser surface modification of AISI 316L stainless steel for biomedical applications. Applied Physics A: Materials Science and Processing, 2010, 101, 367-371.	2.3	20
78	Response of a Zn2TiO4 Gas Sensor to Propanol at Room Temperature. Sensors, 2017, 17, 1995.	3.8	20
79	The Effect of Direct Thermal Method, Temperature and Time on Microstructure of a Cast Aluminum Alloy. Materials and Manufacturing Processes, 2014, 29, 134-139.	4.7	19
80	Pulsed laser deposition of plasmonic nanostructured gold on flexible transparent polymers at atmospheric pressure. Journal Physics D: Applied Physics, 2017, 50, 245303.	2.8	19
81	Strength-ductility trade-off via SiC nanoparticle dispersion in A356 aluminium matrix. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138639.	5.6	19
82	316L Stainless Steel Powders for Additive Manufacturing: Relationships of Powder Rheology, Size, Size Distribution to Part Properties. Materials, 2020, 13, 5537.	2.9	19
83	Incorporation of SiC Ceramic Nanoparticles into the Aluminum Matrix by a Novel Method: Production of a Metal Matrix Composite. Metals and Materials International, 2021, 27, 2968-2976.	3.4	19
84	Electroless deposition (ED) of copper coating on micron-sized SiC particles. Surface Engineering, 2014, 30, 747-751.	2.2	18
85	Optimizing selective laser sintering process by grey relational analysis and soft computing techniques. Optik, 2018, 174, 185-194.	2.9	18
86	Recrystallization and grain growth kinetics of IN718 manufactured by laser powder bed fusion. Journal of Materials Research and Technology, 2022, 19, 4242-4257.	5.8	18
87	Evaluation of Essential Trace and Toxic Elements in Scalp Hair Samples of Smokers and Alcohol User Hypertensive Patients. Biological Trace Element Research, 2011, 143, 1349-1366.	3.5	17
88	Review of Materials and Fabrication Methods for Flexible Nano and Micro-Scale Physical and Chemical Property Sensors. Applied Sciences (Switzerland), 2021, 11, 8563.	2.5	17
89	Polycarbonate Polymer Surface Modification by Extreme Ultraviolet (EUV) Radiation. Acta Physica Polonica A, 2014, 125, 924-928.	0.5	17
90	Extreme Ultraviolet Surface Modification of Polyethylene Terephthalate (PET) for Surface Structuring and Wettability Control. Acta Physica Polonica A, 2016, 129, 241-243.	0.5	17

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91	Effect of liquid medium and laser processing parameters on the fabrication of carbon nanoparticles via pulsed laser ablation in liquid towards paper electronics. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 636, 128151.	4.7	17
92	Thermal Profiles and Fraction Solid of Aluminium 7075 at Different Cooling Rate Conditions. <i>Key Engineering Materials</i> , 0, 554-557, 582-595.	0.4	16
93	Estimation of toxic elements in the samples of different cigarettes and their impact on human health of Irish hypertensive consumers. <i>Clinica Chimica Acta</i> , 2013, 426, 51-57.	1.1	16
94	Molecular dynamic simulation of edge dislocation-void interaction in pure Al and Al-Mg alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 674, 82-90.	5.6	16
95	An evaluation of components manufactured from a range of materials, fabricated using PolyJet technology. <i>Advances in Materials and Processing Technologies</i> , 2017, 3, 318-329.	1.4	16
96	Laser surface processing with controlled nitrogen-argon concentration levels for regulated surface life time. <i>Optics and Lasers in Engineering</i> , 2018, 102, 154-160.	3.8	15
97	Trace multi-class organic explosives analysis in complex matrices enabled using LEGO [®] -inspired clickable 3D-printed solid phase extraction block arrays. <i>Journal of Chromatography A</i> , 2020, 1629, 461506.	3.7	15
98	Magnesium Nanoparticle Synthesis from Powders via Pulsed Laser Ablation in Liquid for Nanocolloid Production. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10974.	2.5	15
99	Control of Ni-Ti phase structure, solid-state transformation temperatures and enthalpies via control of L-PBF process parameters. <i>Materials and Design</i> , 2022, 218, 110715.	7.0	15
100	Effect of Hydroxyapatite on Biodegradable Scaffolds Fabricated by SLS. <i>Key Engineering Materials</i> , 2008, 396-398, 659-662.	0.4	14
101	Characteristics of silicon nanocrystals for photovoltaic applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 604-607.	1.8	14
102	Microstructure and morphological study of ball-milled metal matrix nanocomposites. <i>Physics of Metals and Metallography</i> , 2017, 118, 749-758.	1.0	14
103	XPS, XRD, and SEM characterization of the virgin and recycled metallic powders for 3D printing applications. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 591, 012016.	0.6	14
104	Ti6Al4V functionally graded material via high power and high speed laser surface modification. <i>Surface and Coatings Technology</i> , 2020, 398, 126085.	4.8	14
105	Silver nanocolloid generation using dynamic Laser Ablation Synthesis in Solution system and drop-casting. <i>Nano Structures Nano Objects</i> , 2022, 29, 100841.	3.5	14
106	Surface Functionalized MXenes for Wastewater Treatment—A Comprehensive Review. <i>Global Challenges</i> , 2022, 6, .	3.6	14
107	Microstructure and corrosion evaluation of as-built and heat-treated 316L stainless steel manufactured by laser powder bed fusion. <i>Journal of Materials Research and Technology</i> , 2022, 18, 4104-4113.	5.8	14
108	Spinodal decomposition in AISI 316L stainless steel via high-speed laser remelting. <i>Applied Surface Science</i> , 2014, 302, 318-321.	6.1	13

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109	New strategies for stationary phase integration within centrifugal microfluidic platforms for applications in sample preparation and pre-concentration. <i>Analytical Methods</i> , 2017, 9, 1998-2006.	2.7	13
110	Microstructural characterization of ball-milled metal matrix nanocomposites (Cr, Ni, Ti)-25 wt% (Al ₂ O ₃ np, SiCnp). <i>Particulate Science and Technology</i> , 2018, 36, 72-83.	2.1	13
111	Additive-free silver nanoparticle ink development using flow-based Laser Ablation Synthesis in Solution and Aerosol Jet printing. <i>Chemical Engineering Journal</i> , 2022, 449, 137817.	12.7	13
112	Design of Bone Scaffolds Structures for Rapid Prototyping with Increased Strength and Osteoconductivity. <i>Advanced Materials Research</i> , 0, 83-86, 914-922.	0.3	12
113	Improving precision in the prediction of laser texturing and surface interference of 316L assessed by neural network and adaptive neuro-fuzzy inference models. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 104, 4571-4580.	3.0	12
114	Study on the incorporation of ceramic nanoparticles into the semi-solid A356 melt. <i>Materials Chemistry and Physics</i> , 2019, 230, 25-36.	4.0	12
115	Real-time monitoring and control for high-efficiency autonomous laser fabrication of silicon nanoparticle colloids. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 114, 291-304.	3.0	12
116	Additive Manufacturing of Bone Scaffolds Using PolyJet and Stereolithography Techniques. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 7336.	2.5	12
117	Laser-powder bed fusion of silicon carbide reinforced 316L stainless steel using a sinusoidal laser scanning strategy. <i>Journal of Materials Research and Technology</i> , 2022, 18, 2672-2698.	5.8	12
118	Assessment of toxic elements in the samples of different cigarettes and their effect on the essential elemental status in the biological samples of Irish hypertensive consumers. <i>Journal of Human Hypertension</i> , 2015, 29, 309-315.	2.2	11
119	Mitigation and control of the overcuring effect in mask projection micro-stereolithography. <i>AIP Conference Proceedings</i> , 2017, . .	0.4	11
120	Review of duplex electroless coatings and their properties. <i>Advances in Materials and Processing Technologies</i> , 2018, 4, 448-465.	1.4	11
121	Demonstration of an optical biosensor for the detection of faecal indicator bacteria in freshwater and coastal bathing areas. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 7637-7643.	3.7	11
122	Effect of powder metallurgy synthesis parameters for pure aluminium on resultant mechanical properties. <i>International Journal of Material Forming</i> , 2019, 12, 79-87.	2.0	11
123	Comparative study of a cubic, Kelvin and Weaire-Phelan unit cell for the prediction of the thermal conductivity of low density silica aerogels. <i>Microporous and Mesoporous Materials</i> , 2020, 301, 110206.	4.4	11
124	Fabrication and Characterization of Nanotemplated Carbon Monolithic Material. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 8572-8580.	8.0	10
125	Effect of SiC particle morphology on Co-P electroless coating characteristics. <i>Surface Engineering</i> , 2016, 32, 391-396.	2.2	10
126	Powder processing methodology for production of graphene oxide reinforced aluminium matrix composites. <i>Advances in Materials and Processing Technologies</i> , 2016, 2, 437-450.	1.4	10

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127	Comparing the adhesion strength of 316L stainless steel joints after laser surface texturing by CO ₂ and fiber lasers. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 109, 1059-1069.	3.0	10
128	Experimental and empirical model analysis of microsurface texturing on 316 L press-fit joints fabricated by selective laser melting. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 108, 2687-2699.	3.0	10
129	Corrosion behavior of new rare-earth free Cu-based metallic glasses in NaCl solution of different molarity. <i>Journal of Materials Research and Technology</i> , 2022, 16, 482-494.	5.8	10
130	A Magnetic Nanoparticle-Doped Photopolymer for Holographic Recording. <i>Polymers</i> , 2022, 14, 1858.	4.5	10
131	Multi-beam fibre-optic laser scanning system for surface defect recognition. <i>Journal of Materials Processing Technology</i> , 2004, 155-156, 2065-2070.	6.3	9
132	Thermal Simulation of Laser Surface Modification of H13 Die Steel. <i>Key Engineering Materials</i> , 2012, 504-506, 351-356.	0.4	9
133	Focussed ion beam serial sectioning and imaging of monolithic materials for 3D reconstruction and morphological parameter evaluation. <i>Analyst, The</i> , 2014, 139, 99-104.	3.5	9
134	Nanoparticle functionalized laser patterned substrate: an innovative route towards low cost biomimetic platforms. <i>RSC Advances</i> , 2017, 7, 8060-8069.	3.6	9
135	An Evaluation of Classification Methods for 3D Printing Time-Series Data. <i>IFAC-PapersOnLine</i> , 2020, 53, 8211-8216.	0.9	9
136	Effect of Saturation and Post Processing on 3D Printed Calcium Phosphate Scaffolds. <i>Key Engineering Materials</i> , 2008, 396-398, 663-666.	0.4	8
137	Comparative Metal Distribution in Scalp Hair of Pakistani and Irish Referents and Hypertensive Patients. <i>Biological Trace Element Research</i> , 2011, 143, 1367-1382.	3.5	8
138	Taguchi method modelling of Nd:YAG laser ablation of microchannels on cyclic olefin polymer film. <i>Optics and Laser Technology</i> , 2018, 106, 265-271.	4.6	8
139	Nano-scale simulation of directional solidification in TWIP stainless steels: A focus on plastic deformation mechanisms. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 812, 140999.	5.6	8
140	Assessing dependency of part properties on the printing location in laser-powder bed fusion metal additive manufacturing. <i>Materials Today Communications</i> , 2022, 30, 103209.	1.9	8
141	Investigation of the microstructure and phase evolution across multi-material Ni50.83Ti49.17-AISI 316L alloy interface fabricated using laser powder bed fusion (L-PBF). <i>Materials and Design</i> , 2022, 221, 110947.	7.0	8
142	Magnesium nanoparticle synthesis from powders via LASIS “ Effects of liquid medium, laser pulse width and ageing on nanoparticle size, concentration, stability and electrical properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 651, 129651.	4.7	8
143	Analysis of surface defects using a novel developed fiber-optics laser scanning system. <i>Journal of Materials Processing Technology</i> , 2003, 143-144, 875-879.	6.3	7
144	Rapid Solidification Processing and Bulk Metallic Glass Casting. , 2014, , 69-88.		7

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145	Direct Thermal Method of Aluminium 7075. <i>Advanced Materials Research</i> , 0, 939, 400-408.	0.3	7
146	The Circular Economy: Additive Manufacturing and Impacts for Materials Processing. , 2020, , 81-92.		7
147	Stable nano-silver colloid production via Laser Ablation Synthesis in Solution (LASiS) under laminar recirculatory flow. <i>Advances in Materials and Processing Technologies</i> , 2020, 6, 677-685.	1.4	7
148	Laser Surface Modification of Tool Steel for Semi-Solid Steel Forming. <i>Solid State Phenomena</i> , 2008, 141-143, 255-260.	0.3	6
149	Laser Surface Modification of H13 Die Steel using Different Laser Spot Sizes. , 2011, , .		6
150	Effect of vibration on the shear strength of impacted bone graft in revision hip surgery. <i>Journal of Bone and Joint Surgery: British Volume</i> , 2011, 93-B, 755-759.	3.4	6
151	Injection Tests and Effect on Microstructure and Properties of Aluminium 7075 Direct Thermal Method Feedstock Billets. <i>Key Engineering Materials</i> , 2014, 611-612, 1637-1644.	0.4	6
152	A comparison between hot-rolling process and twin-screw rheo-extrusion process for fabrication of aluminum matrix nanocomposite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 760, 152-157.	5.6	6
153	Effects of powder compression and laser re-melting on the microstructure and mechanical properties of additively manufactured parts in laser-powder bed fusion. <i>Results in Materials</i> , 2022, 13, 100264.	1.8	6
154	Digitisation of metal AM for part microstructure and property control. <i>International Journal of Material Forming</i> , 2022, 15, 30.	2.0	6
155	Investigating the morphology, hardness, and porosity of copper filters produced via Hydraulic Pressing. <i>Journal of Materials Research and Technology</i> , 2022, 19, 208-219.	5.8	6
156	An Overview of Microfluidic Mixing Application. <i>Advanced Materials Research</i> , 0, 83-86, 931-939.	0.3	5
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