

Dermot Brabazon

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

193 papers	3,647 citations	30 h-index	52 g-index
213 ext. papers	4,556 ext. citations	4 avg, IF	5.92 L-index

#	Paper	IF	Citations
193	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	5.5	1
192	Laser surface polishing of Ti-6Al-4V parts manufactured by laser powder bed fusion. <i>Surface and Coatings Technology</i> , 2022 , 434, 128179	4.4	2
191	Silver nanocolloid generation using dynamic Laser Ablation Synthesis in Solution system and drop-casting. <i>Nano Structures Nano Objects</i> , 2022 , 29, 100841	5.6	2
190	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	2.5	0
189	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	5.1	1
188	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	2.3	0
187	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 ,	5.5	2
186	Digitisation of metal AM for part microstructure and property control.. <i>International Journal of Material Forming</i> , 2022 , 15, 30	2	0
185	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	5.5	1
184	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	8.1	1
183	Laser-powder bed fusion in-process dispersion of reinforcing ceramic nanoparticles onto powder beds via colloid nebulisation. <i>Materials Chemistry and Physics</i> , 2022 , 287, 126245	4.4	0
182	Magnesium Nanoparticle Synthesis from Powders via Pulsed Laser Ablation in Liquid for Nanocolloid Production. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 10974	2.6	1
181	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	0.4	7
180	MXene materials based printed flexible devices for healthcare, biomedical and energy storage applications. <i>Materials Today</i> , 2021 , 43, 99-131	21.8	29
179	Silver and Copper nano-colloid generation via Pulsed Laser Ablation in Liquid: Recirculation nanoparticle production mode 2021 ,		3
178	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	5.3	3
177	Microstructural and mechanical evaluation of post-processed SS 316L manufactured by laser-based powder bed fusion. <i>Journal of Materials Research and Technology</i> , 2021 , 12, 210-220	5.5	6

176	Advanced production routes for metal matrix composites. <i>Engineering Reports</i> , 2021 , 3, e12330	1.2	12
175	Electrochemical and chronoamperometry assessment of nano-gold sensor surfaces produced via novel laser fabrication methods. <i>Journal of Electroanalytical Chemistry</i> , 2021 , 880, 114813	4.1	1
174	Solid State Routes for Composite Materials Production 2021 , 730-743		
173	Powder characterization methods, standards, and state of the art 2021 , 491-527		1
172	Multi-Material Production of 4D Shape Memory Polymer Composites 2021 , 879-894		3
171	Additive Manufacturing for Sustainability of Composite Materials Production 2021 , 263-275		
170	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	6.1	16
169	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	3.2	3
168	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	5.5	12
167	Additive Manufacturing of Bone Scaffolds Using PolyJet and Stereolithography Techniques. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 7336	2.6	3
166	CO2 laser polishing of laser-powder bed fusion produced AlSi10Mg parts. <i>Surface and Coatings Technology</i> , 2021 , 419, 127291	4.4	10
165	XPS, SEM, DSC and Nanoindentation Characterization of Silver Nanoparticle-Coated Biopolymer Pellets. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 7706	2.6	6
164	Laser beam powder bed fusion of nitinol shape memory alloy (SMA). <i>Journal of Materials Research and Technology</i> , 2021 , 14, 2554-2570	5.5	12
163	Review of Materials and Fabrication Methods for Flexible Nano and Micro-Scale Physical and Chemical Property Sensors. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 8563	2.6	4
162	In-situ sensing, process monitoring and machine control in Laser Powder Bed Fusion: A review. <i>Additive Manufacturing</i> , 2021 , 45, 102058	6.1	18
161	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	7.8	2
160	"Nano": An Emerging Avenue in Electrochemical Detection of Neurotransmitters. <i>ACS Chemical Neuroscience</i> , 2020 , 11, 4024-4047	5.7	8
159	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	3.2	3

158	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	0.8	3
157	Ti6Al4V functionally graded material via high power and high speed laser surface modification. <i>Surface and Coatings Technology</i> , 2020 , 398, 126085	4.4	7
156	A new method for assessing the recyclability of powders within Powder Bed Fusion process. <i>Materials Characterization</i> , 2020 , 161, 110167	3.9	30
155	Incorporation of SiC Ceramic Nanoparticles into the Aluminum Matrix by a Novel Method: Production of a Metal Matrix Composite. <i>Metals and Materials International</i> , 2020 , 27, 2968	2.4	12
154	Assessment of thermo-hydraulic performance of inward dimpled tubes with variation in angular orientations. <i>Applied Thermal Engineering</i> , 2020 , 170, 115040	5.8	11
153	An Evaluation of Classification Methods for 3D Printing Time-Series Data. <i>IFAC-PapersOnLine</i> , 2020 , 53, 8211-8216	0.7	3
152	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	1.5	11
151	Strength-ductility trade-off via SiC nanoparticle dispersion in A356 aluminium matrix. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 771, 138639	5.3	12
150	Development of BMG-B2 nanocomposite structure in HAZ during laser surface processing of ZrCuNiAlTi bulk metallic glasses. <i>Applied Surface Science</i> , 2020 , 505, 144535	6.7	3
149	Determination of atomic-scale structure and compressive behavior of solidified Al _x CrCoFeCuNi high entropy alloys. <i>International Journal of Mechanical Sciences</i> , 2020 , 171, 105389	5.5	17
148	Study of the plastic deformation mechanism of TRIP/WIP high entropy alloys at the atomic level. <i>International Journal of Plasticity</i> , 2020 , 127, 102649	7.6	23
147	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	4.5	5
146	Comprehensive assessment of spatter material generated during selective laser melting of stainless steel. <i>Materials Today Communications</i> , 2020 , 25, 101294	2.5	12
145	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	3.2	5
144	Detecting voids in 3D printing using melt pool time series data. <i>Journal of Intelligent Manufacturing</i> , 2020 , 1	6.7	6
143	316L Stainless Steel Powders for Additive Manufacturing: Relationships of Powder Rheology, Size, Size Distribution to Part Properties. <i>Materials</i> , 2020 , 13,	3.5	5
142	Dry Milling of Aluminum and Ceramic Nanoparticles for a Particulate-Injection Casting of Aluminum Matrix Nanocomposites. <i>Silicon</i> , 2020 , 12, 913-920	2.4	2
141	The Circular Economy: Additive Manufacturing and Impacts for Materials Processing 2020 , 81-92		4

140	Advanced materials of printed wearables for physiological parameter monitoring. <i>Materials Today</i> , 2020 , 32, 147-177	21.8	59
139	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	5.3	2
138	Recyclability of stainless steel (316 L) powder within the additive manufacturing process. <i>Materialia</i> , 2019 , 8, 100489	3.2	35
137	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	6.2	15
136	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	5.3	3
135	Standardized traction versus side-bending radiographs in adolescent idiopathic scoliosis: a preliminary study. <i>Journal of Pediatric Orthopaedics Part B</i> , 2019 , 28, 17-21	1.4	3
134	Laser Polishing of Additive Manufactured 316L Stainless Steel Synthesized by Selective Laser Melting. <i>Materials</i> , 2019 , 12,	3.5	34
133	Laryngoscope burn risk in neonatal intubation. <i>European Journal of Pediatrics</i> , 2019 , 178, 1125-1127	4.1	
132	Study on the incorporation of ceramic nanoparticles into the semi-solid A356 melt. <i>Materials Chemistry and Physics</i> , 2019 , 230, 25-36	4.4	10
131	Advances in Selective Laser Melting of Nitinol Shape Memory Alloy Part Production. <i>Materials</i> , 2019 , 12,	3.5	37
130	Threshold fluences for conditioning, fatigue and damage effects of DKDP crystals. <i>Optical Materials</i> , 2019 , 91, 199-204	3.3	1
129	Thermal analysis of mechanically activated Al-(Fe ₂ O ₃ , MoO ₃ , and MnO ₂) metastable intermolecular composites. <i>Materials Research Express</i> , 2019 , 6, 055516	1.7	2
128	Semi-solid stirring of modified ceramic nanoparticles using iron and nickel in an aluminum A356 melt. <i>Materials Research Express</i> , 2019 , 6, 096553	1.7	
127	Evaluation via powder metallurgy of nano-reinforced iron powders developed for selective laser melting applications. <i>Materials and Design</i> , 2019 , 182, 108046	8.1	20
126	Fast Ferroelectric Liquid Crystal Based Optical Switch: Simulation and Experiments. <i>Crystals</i> , 2019 , 9, 388	2.3	2
125	Enhanced organic species identification via laser structuring of carbon monolithic surfaces. <i>Applied Surface Science</i> , 2019 , 493, 829-837	6.7	
124	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	3.2	7
123	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	4.4	8

122	Effect of Surface Roughness on CO2 Laser Absorption by 316L Stainless Steel and Aluminum. <i>Materials Performance and Characterization</i> , 2019 , 8, 20180091	0.5	3
121	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	0.4	8
120	Prediction of Mechanical Properties of Graphene Oxide Reinforced Aluminum Composites. <i>Metals</i> , 2019 , 9, 1077	2.3	4
119	Improving the Surface Finish and other Properties of Engineering Metal Parts. <i>Key Engineering Materials</i> , 2019 , 813, 197-202	0.4	3
118	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	5
117	Development of Laser Processing Technologies via Experimental Design 2018 , 707-729		3
116	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	4.2	8
115	Review of duplex electroless coatings and their properties. <i>Advances in Materials and Processing Technologies</i> , 2018 , 4, 448-465	0.8	9
114	Mechanical properties of graphene oxide reinforced aluminium matrix composites. <i>Composites Part B: Engineering</i> , 2018 , 145, 136-144	10	64
113	Fabrication of A356-based rolled composites reinforced by NiB-coated bimodal ceramic particles. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2018 , 232, 803-815	1.3	4
112	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	9
111	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	3.4	43
110	Advanced Characterisation Techniques for Nanostructures 2018 , 55-93		1
109	Laser surface texturing of stainless steel 316L cylindrical pins for interference fit applications. <i>Journal of Materials Processing Technology</i> , 2018 , 252, 58-68	5.3	22
108	Modelling and optimisation of single-step laser-based gold nanostructure deposition with tunable optical properties. <i>Optics and Laser Technology</i> , 2018 , 108, 295-305	4.2	1
107	Investigating the effect of the high power and high speed CO2 laser surface melting on the residual stresses and corrosion resistance of 316L stainless steel 2018 ,		1
106	Optimizing selective laser sintering process by grey relational analysis and soft computing techniques. <i>Optik</i> , 2018 , 174, 185-194	2.5	13
105	Manufacturing of copper coated SiC ceramic particles for metal matrix composites: optimizing the electroless deposition parameters. <i>Materials Research Express</i> , 2018 , 5, 106515	1.7	5

104	Modification of Polymer Substrates with Extreme Ultraviolet - Potential Application in Cancer Cell Identification. <i>Acta Physica Polonica A</i> , 2018 , 133, 283-285	0.6	0
103	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	4.6	11
102	Stir casting process for manufacture of AlSiC composites. <i>Rare Metals</i> , 2017 , 36, 581-590	5.5	109
101	Manufacturing of cast A356 matrix composite reinforced with nano- to micrometer-sized SiC particles. <i>Rare Metals</i> , 2017 , 36, 46-54	5.5	20
100	Nanoparticle functionalized laser patterned substrate: an innovative route towards low cost biomimetic platforms. <i>RSC Advances</i> , 2017 , 7, 8060-8069	3.7	6
99	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	3.2	10
98	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	5.3	24
97	Physical integrity of 3D printed parts for use as embossing tools. <i>Advances in Materials and Processing Technologies</i> , 2017 , 3, 308-317	0.8	3
96	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	0.8	12
95	Pulsed laser deposition of plasmonic nanostructured gold on flexible transparent polymers at atmospheric pressure. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 245303	3	12
94	Graphene and derivatives Synthesis techniques, properties and their energy applications. <i>Energy</i> , 2017 , 140, 766-778	7.9	76
93	Microstructure and morphological study of ball-milled metal matrix nanocomposites. <i>Physics of Metals and Metallography</i> , 2017 , 118, 749-758	1.2	10
92	Surface roughness control by extreme ultraviolet (EUV) radiation 2017 ,		1
91	Mitigation and control of the overcuring effect in mask projection micro-stereolithography 2017 ,		6
90	Response of a ZnTiO ₂ Gas Sensor to Propanol at Room Temperature. <i>Sensors</i> , 2017 , 17,	3.8	14
89	Xurography actuated valving for centrifugal flow control. <i>Lab on A Chip</i> , 2016 , 16, 3454-9	7.2	24
88	Microchannel fabrication on cyclic olefin polymer substrates via 1064 nm Nd:YAG laser ablation. <i>Applied Surface Science</i> , 2016 , 387, 603-608	6.7	25
87	Powder processing methodology for production of graphene oxide reinforced aluminium matrix composites. <i>Advances in Materials and Processing Technologies</i> , 2016 , 2, 437-450	0.8	9

86	Corrosion behaviour of rolled A356 matrix composite reinforced with ceramic particles. <i>International Journal of Materials Research</i> , 2016 , 107, 1100-1111	0.5	4
85	Graphene oxide and graphene nanosheet reinforced aluminium matrix composites: Powder synthesis and prepared composite characteristics. <i>Materials and Design</i> , 2016 , 94, 87-94	8.1	143
84	Fabrication of aluminum matrix composites reinforced with nano- to micrometer-sized SiC particles. <i>Materials and Design</i> , 2016 , 89, 58-70	8.1	111
83	ColiSense, today's sample today: A rapid on-site detection of ED-Glucuronidase activity in surface water as a surrogate for E. coli. <i>Talanta</i> , 2016 , 148, 75-83	6.2	31
82	Extreme Ultraviolet Surface Modification of Polyethylene Terephthalate (PET) for Surface Structuring and Wettability Control. <i>Acta Physica Polonica A</i> , 2016 , 129, 241-243	0.6	11
81	Methacrylate Polymer Monoliths for Separation Applications. <i>Materials</i> , 2016 , 9,	3.5	21
80	Laser-assisted synthesis of ultrapure nanostructures for biological sensing applications 2016 ,		2
79	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	2.6	24
78	Effect of SiC particle morphology on CoB electroless coating characteristics. <i>Surface Engineering</i> , 2016 , 32, 391-396	2.6	10
77	Methodology of laser processing for precise control of surface micro-topology. <i>Surface and Coatings Technology</i> , 2016 , 307, 702-712	4.4	18
76	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	5.3	13
75	Mechanical properties of rolled A356 based composites reinforced by Cu-coated bimodal ceramic particles. <i>Materials and Design</i> , 2015 , 83, 678-688	8.1	45
74	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	3.2	25
73	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	3.1	19
72	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	1.2	23
71	Strengthening mechanisms of graphene sheets in aluminium matrix nanocomposites. <i>Materials and Design</i> , 2015 , 88, 983-989	8.1	101
70	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	2.5	26
69	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, 309-15	2.6	8

68	Mechanical Properties of Thixoformed 7075 Feedstock Produced via the Direct Thermal Method. <i>Key Engineering Materials</i> , 2015 , 651-653, 1569-1574	0.4	3
67	An Innovative Two-Stage Reheating Process for Wrought Aluminum Alloy During Thixoforming. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 4191-4201	2.3	16
66	Laser assisted synthesis of carbon nanoparticles with controlled viscosities for printing applications. <i>Journal of Colloid and Interface Science</i> , 2015 , 447, 263-8	9.3	36
65	The Effect of Direct Thermal Method, Temperature and Time on Microstructure of a Cast Aluminum Alloy. <i>Materials and Manufacturing Processes</i> , 2014 , 29, 134-139	4.1	13
64	Fast Fabrication Process of Microfluidic Devices Based on Cyclic Olefin Copolymer. <i>Materials and Manufacturing Processes</i> , 2014 , 29, 93-99	4.1	20
63	3D printed metal columns for capillary liquid chromatography. <i>Analyst, The</i> , 2014 , 139, 6343-7	5	76
62	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	5	8
61	Electroless deposition (ED) of copper coating on micron-sized SiC particles. <i>Surface Engineering</i> , 2014 , 30, 747-751	2.6	17
60	Effect of electroless coating parameters and ceramic particle size on fabrication of a uniform NiB coating on SiC particles. <i>Ceramics International</i> , 2014 , 40, 12149-12159	5.1	39
59	Spinodal decomposition in AISI 316L stainless steel via high-speed laser remelting. <i>Applied Surface Science</i> , 2014 , 302, 318-321	6.7	9
58	O-211 Laryngoscope Burns In Neonatal Intubation. <i>Archives of Disease in Childhood</i> , 2014 , 99, A105.2-A105.2		
57	In vitro fibroblast and pre-osteoblastic cellular responses on laser surface modified Ti-6Al-4V. <i>Biomedical Materials (Bristol)</i> , 2014 , 10, 015007	3.5	26
56	Rapid Solidification Processing and Bulk Metallic Glass Casting		5
55	Advances in three-dimensional rapid prototyping of microfluidic devices for biological applications. <i>Biomicrofluidics</i> , 2014 , 8, 052112	3.2	94
54	Permeability of rapid prototyped artificial bone scaffold structures. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 4127-35	5.4	23
53	Surface modification of polymers for biocompatibility via exposure to extreme ultraviolet radiation. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 3298-310	5.4	58
52	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	4
51	Direct Thermal Method of Aluminium 7075. <i>Advanced Materials Research</i> , 2014 , 939, 400-408	0.5	4

50	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	5.1	45
49	Liquid Phase Pulsed Laser Ablation: A route to fabricate different carbon nanostructures. <i>Applied Surface Science</i> , 2014 , 302, 141-144	6.7	36
48	Polycarbonate Polymer Surface Modification by Extreme Ultraviolet (EUV) Radiation. <i>Acta Physica Polonica A</i> , 2014 , 125, 924-928	0.6	12
47	Adsorption and desorption of methylene blue on porous carbon monoliths and nanocrystalline cellulose. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 8796-804	9.5	247
46	Fabrication and characterization of nanotemplated carbon monolithic material. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 8572-80	9.5	9
45	Thermal Profiles and Fraction Solid of Aluminium 7075 at Different Cooling Rate Conditions. <i>Key Engineering Materials</i> , 2013 , 554-557, 582-595	0.4	12
44	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, 51-7	6.2	13
43	Comparative metal distribution in scalp hair of Pakistani and Irish referents and diabetes mellitus patients. <i>Clinica Chimica Acta</i> , 2013 , 415, 207-14	6.2	24
42	Atomic diffusion in laser surface modified AISI H13 steel. <i>Applied Physics A: Materials Science and Processing</i> , 2013 , 112, 139-142	2.6	5
41	Thermal Barrier Coatings on Laser Surface Modified AISI H13 Tool Steel Using Atmospheric Plasma Spray Technique. <i>Key Engineering Materials</i> , 2013 , 554-557, 603-610	0.4	
40	The Outcome of Sintering Parameters Study toward the Thermal Properties of CuSiC Composite. <i>Key Engineering Materials</i> , 2013 , 594-595, 702-706	0.4	1
39	High speed laser surface modification of TiBAlV. <i>Surface and Coatings Technology</i> , 2012 , 206, 3223-3229	4.4	60
38	Permeability of Rapid Prototyped Artificial Bone Scaffold Structures. <i>Advanced Materials Research</i> , 2012 , 445, 607-612	0.5	2
37	Thermal Simulation of Laser Surface Modification of H13 Die Steel. <i>Key Engineering Materials</i> , 2012 , 504-506, 351-356	0.4	9
36	Interaction between essential trace and toxic elements in the scalp hair samples of smokers and alcohol user diabetics. <i>International Journal of Diabetes in Developing Countries</i> , 2012 , 32, 151-162	0.8	1
35	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, 139-47	4.5	33
34	A Powered Technique for Inserting Acetabular Cups. <i>Advanced Materials Research</i> , 2012 , 445, 1011-1016	0.5	2
33	Laser Processing of Quartz for Microfluidic Device Fabrication. <i>Advanced Materials Research</i> , 2012 , 445, 436-441	0.5	4

32	Centrifugally-driven sample extraction, preconcentration and purification in microfluidic compact discs. <i>TrAC - Trends in Analytical Chemistry</i> , 2011 , 30, 1575-1586	14.6	24
31	Evaluation of essential trace and toxic elements in scalp hair samples of smokers and alcohol user hypertensive patients. <i>Biological Trace Element Research</i> , 2011 , 143, 1349-66	4.5	16
30	Comparative metal distribution in scalp hair of Pakistani and Irish referents and hypertensive patients. <i>Biological Trace Element Research</i> , 2011 , 143, 1367-82	4.5	7
29	Characteristics of silicon nanocrystals for photovoltaic applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011 , 208, 604-607	1.6	11
28	Analysis of Microstructural Changes during Pulsed CO ₂ Laser Surface Processing of AISI 316L Stainless Steel. <i>Advanced Materials Research</i> , 2011 , 264-265, 1401-1408	0.5	5
27	Laser Surface Modification of H13 Die Steel using Different Laser Spot Sizes 2011 ,		6
26	Characterisation of Laser Modified WC-CoCr Coatings 2011 ,		2
25	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, 755-9		6
24	Process mapping of laser surface modification of AISI 316L stainless steel for biomedical applications. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 101, 367-371	2.6	16
23	Thermal fatigue properties of laser treated steels. <i>International Journal of Material Forming</i> , 2010 , 3, 797-800	2	23
22	Surface modification of HVOF thermal sprayed WC-CoCr coatings by laser treatment. <i>International Journal of Material Forming</i> , 2010 , 3, 801-804	2	20
21	Selective laser sintering of hydroxyapatite/poly-epsilon-caprolactone scaffolds. <i>Acta Biomaterialia</i> , 2010 , 6, 2511-7	10.8	144
20	An Overview of Microfluidic Mixing Application. <i>Advanced Materials Research</i> , 2009 , 83-86, 931-939	0.5	3
19	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	4.6	40
18	Thermal stability of laser treated die material for semi-solid metal forming. <i>International Journal of Material Forming</i> , 2009 , 2, 761-764	2	23
17	Design of Bone Scaffolds Structures for Rapid Prototyping with Increased Strength and Osteoconductivity. <i>Advanced Materials Research</i> , 2009 , 83-86, 914-922	0.5	11
16	Laser Surface Modification of Tool Steel for Semi-Solid Steel Forming. <i>Solid State Phenomena</i> , 2008 , 141-143, 255-260	0.4	5
15	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

14	Effect of Hydroxyapatite on Biodegradable Scaffolds Fabricated by SLS. <i>Key Engineering Materials</i> , 2008 , 396-398, 659-662	0.4	10
13	Glazing of tool dies for semi-solid steel forming. <i>International Journal of Material Forming</i> , 2008 , 1, 985-988		3
12	3D transient thermal modelling of laser microchannel fabrication in lime-soda glass. <i>Journal of Materials Processing Technology</i> , 2008 , 207, 307-314	5.3	21
11	Computational and experimental analysis of particulate distribution during Al ₃ SiC MMC fabrication. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007 , 38, 719-729	8.4	63
10	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	5.3	119
9	Multi-beam fibre-optic laser scanning system for surface defect recognition. <i>Journal of Materials Processing Technology</i> , 2004 , 155-156, 2065-2070	5.3	5
8	Direct thermal method: new process for development of globular alloy microstructure. <i>International Journal of Cast Metals Research</i> , 2003 , 16, 418-426	1	26
7	Experimental investigation of the transient and steady state rheological behaviour of Al ₃ Si alloys in the mushy state. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 356, 69-80	5.3	50
6	Simulation of the stir casting process. <i>Journal of Materials Processing Technology</i> , 2003 , 143-144, 567-571	5.3	105
5	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	5.3	5
4	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	5.3	92
3	Fabrication of microstructured planar chromatography platforms via laser ablation. <i>Journal of Liquid Chromatography and Related Technologies</i> , 1-6	1.3	1
2	Fed-Batch System for Propagation of Brewer's Yeast. <i>Journal of the American Society of Brewing Chemists</i> , 1-11	1.9	
1	Surface Functionalized MXenes for Wastewater Treatment: A Comprehensive Review. <i>Global Challenges</i> , 2100120	4.3	1