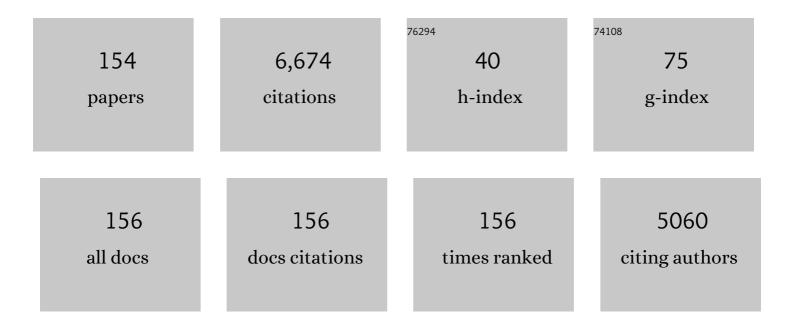
Adam Clare

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1129464/publications.pdf Version: 2024-02-01



ADAM CLADE

#	Article	IF	CITATIONS
1	The interaction of volatile metal coatings during the laser powder bed fusion of copper. Journal of Materials Processing Technology, 2022, 299, 117332.	3.1	4
2	Composition fine-tuning for directed energy deposition of Ti-6Al-4V. Journal of Materials Processing Technology, 2022, 299, 117321.	3.1	7
3	Magnetic manipulation in directed energy deposition using a programmable solenoid. Journal of Materials Processing Technology, 2022, 299, 117342.	3.1	7
4	Evaluating the thermal characteristics of laser powder bed fusion. Journal of Materials Processing Technology, 2022, 299, 117384.	3.1	4
5	Alloy design and adaptation for additive manufacture. Journal of Materials Processing Technology, 2022, 299, 117358.	3.1	41
6	A Metallic Additively Manufactured Metamaterial for Enhanced Monitoring of Acoustic Cavitationâ€Based Therapeutic Ultrasound. Advanced Engineering Materials, 2022, 24, .	1.6	3
7	A dual material removal mechanism for clearing of obstructed holes via electrical discharge machining. Manufacturing Letters, 2022, 31, 10-14.	1.1	0
8	On-machine measurement with an electrochemical jet machine tool. International Journal of Machine Tools and Manufacture, 2022, 174, 103859.	6.2	17
9	Chemical recovery of spent copper powder in laser powder bed fusion. Additive Manufacturing, 2022, 52, 102711.	1.7	3
10	On the thermomechanical aging of LPBF alloy 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 841, 142998.	2.6	2
11	The role of scan strategies in fatigue performance for laser powder bed fusion. CIRP Annals - Manufacturing Technology, 2022, 71, 185-188.	1.7	3
12	Stochastic design for additive manufacture of true biomimetic populations. Additive Manufacturing, 2022, 55, 102739.	1.7	1
13	Extending powder lifetime in additive manufacturing: chemical etching of stainless steel spatter. Additive Manufacturing Letters, 2022, , 100057.	0.9	0
14	Magnetically assisted directed energy deposition. Journal of Materials Processing Technology, 2021, 288, 116892.	3.1	13
15	Design of a resonant Luneburg lens for surface acoustic waves. Ultrasonics, 2021, 111, 106306.	2.1	25
16	Interlaced layer thicknesses within single laser powder bed fusion geometries. CIRP Annals - Manufacturing Technology, 2021, 70, 203-206.	1.7	3
17	In-situ alloying in powder bed fusion: The role of powder morphology. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140849.	2.6	22
18	Surface integrity in metal machining - Part I: Fundamentals of surface characteristics and formation mechanisms. International Journal of Machine Tools and Manufacture, 2021, 162, 103687.	6.2	168

#	Article	IF	CITATIONS
19	Unveiling surfaces for advanced materials characterisation with large-area electrochemical jet machining. Materials and Design, 2021, 202, 109539.	3.3	7
20	Multi-laser scan strategies for enhancing creep performance in LPBF. Additive Manufacturing, 2021, 41, 101948.	1.7	12
21	Surface integrity in metal machining - Part II: Functional performance. International Journal of Machine Tools and Manufacture, 2021, 164, 103718.	6.2	118
22	Residual stress in electrical discharge coatings. Surface and Coatings Technology, 2021, 416, 127156.	2.2	8
23	Post processing of additively manufactured parts using electrochemical jet machining. Materials Letters, 2021, 292, 129671.	1.3	14
24	Powder Bed Fusion of nickel-based superalloys: A review. International Journal of Machine Tools and Manufacture, 2021, 165, 103729.	6.2	207
25	The creep behaviour of nickel alloy 718 manufactured by laser powder bed fusion. Materials and Design, 2021, 204, 109647.	3.3	41
26	Holey-structured tungsten metamaterials for broadband ultrasonic sub-wavelength imaging in water. Journal of the Acoustical Society of America, 2021, 150, 74-81.	0.5	2
27	Tailoring grain morphology in Ti-6Al-3Mo through heterogeneous nucleation in directed energy deposition. Journal of Materials Science and Technology, 2021, 88, 132-142.	5.6	15
28	Implications of vector change in electrochemical jet processing. Manufacturing Letters, 2021, 27, 82-86.	1.1	4
29	Electrical Machining at Nottingham: A Short History. International Journal of Electrical Machining, 2021, 26, 1.	0.4	0
30	On the use of multiple layer thicknesses within laser powder bed fusion and the effect on mechanical properties. Materials and Design, 2021, 212, 110256.	3.3	11
31	A novel numerical method to predict the transient track geometry and thermomechanical effects through in-situ modification of the process parameters in Direct Energy Deposition. Finite Elements in Analysis and Design, 2020, 169, 103347.	1.7	12
32	Controlling ceramic-reinforcement distribution in laser cladding of MMCs. Surface and Coatings Technology, 2020, 381, 125128.	2.2	23
33	Laser Induced Phased Arrays (LIPA) to detect nested features in additively manufactured components. Materials and Design, 2020, 187, 108412.	3.3	42
34	Processability of Atypical WC-Co Composite Feedstock by Laser Powder-Bed Fusion. Materials, 2020, 13, 50.	1.3	7
35	â€~Unit cell' type scan strategies for powder bed fusion: The Hilbert fractal. Additive Manufacturing, 2020, 36, 101588.	1.7	4
36	Tailored elastic surface to body wave Umklapp conversion. Nature Communications, 2020, 11, 3267.	5.8	38

#	Article	IF	CITATIONS
37	Additive manufacturing of metamaterials: A review. Additive Manufacturing, 2020, 36, 101562.	1.7	125
38	Additive Manufacturing for the Aerospace Industry Edited by F. Froes and R. Boyer Elsevier, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. 2019. xvi; 465 pp. Illustrated. £175 ISBN 978-0-12-814062-8 Aeronautical Journal, 2020, 124, 2041-2041.	1.1	2
39	Laser calorimetry for assessment of melting behaviour in multi-walled carbon nanotube decorated aluminium by laser powder bed fusion. CIRP Annals - Manufacturing Technology, 2020, 69, 197-200.	1.7	12
40	Machining of directed energy deposited Ti6Al4V using adaptive control. Journal of Manufacturing Processes, 2020, 54, 240-250.	2.8	13
41	An ultrasonic metallic Fabry–Pérot metamaterial for use in water. Additive Manufacturing, 2020, 35, 101309.	1.7	4
42	Formation of thick electrical discharge coatings. Journal of Materials Processing Technology, 2020, 285, 116801.	3.1	13
43	Performance Verification of a Flexible Vibration Monitoring System. Machines, 2020, 8, 3.	1.2	3
44	The Influence of Iron in Minimizing the Microstructural Anisotropy of Ti-6Al-4V Produced by Laser Powder-Bed Fusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2444-2459.	1.1	58
45	Trapped air metamaterial concept for ultrasonic sub-wavelength imaging in water. Scientific Reports, 2020, 10, 10601.	1.6	12
46	A new method for assessing the recyclability of powders within Powder Bed Fusion process. Materials Characterization, 2020, 161, 110167.	1.9	46
47	Thermal Activation of Electrochemical Seed Surfaces for Selective and Tunable Hydrophobic Patterning. ACS Applied Materials & Interfaces, 2020, 12, 7744-7759.	4.0	9
48	Dry-sliding wear and hardness of thick electrical discharge coatings and laser clads. Tribology International, 2020, 150, 106392.	3.0	20
49	The effect of distortion models on characterisation of real defects using ultrasonic arrays. NDT and E International, 2020, 113, 102263.	1.7	9
50	Generation of graded porous structures by control of process parameters in the selective laser melting of a fixed ratio salt-metal feedstock. Journal of Manufacturing Processes, 2020, 55, 249-253.	2.8	7
51	Towards selective compositionally graded coatings by electrochemical jet processing. Procedia CIRP, 2020, 95, 833-837.	1.0	4
52	Oscillatory behaviour in the electrochemical jet processing of titanium. Journal of Materials Processing Technology, 2019, 273, 116264.	3.1	21
53	Development of metal matrix composites by direct energy deposition of †satellited' powders. Journal of Manufacturing Processes, 2019, 45, 429-437.	2.8	27
54	Laser powder bed fusion of a Magnesium-SiC metal matrix composite. Procedia CIRP, 2019, 81, 506-511.	1.0	12

#	Article	IF	CITATIONS
55	Direct-writing by active tooling in electrochemical jet processing. Manufacturing Letters, 2019, 19, 15-20.	1.1	8
56	Spatially resolved acoustic spectroscopy for integrity assessment in wire–arc additive manufacturing. Additive Manufacturing, 2019, 28, 236-251.	1.7	10
57	Spatially resolved acoustic spectroscopy (SRAS) microstructural imaging. AIP Conference Proceedings, 2019, , .	0.3	6
58	Oxide and spatter powder formation during laser powder bed fusion of Hastelloy X. Powder Technology, 2019, 354, 333-337.	2.1	30
59	Direct Metal Deposition of Satellited Tiâ€15Mo: Microstructure and Mechanical Properties. Advanced Engineering Materials, 2019, 21, 1900152.	1.6	5
60	Spatially resolved acoustic spectroscopy for texture imaging in powder bed fusion nickel superalloys. AIP Conference Proceedings, 2019, , .	0.3	6
61	Surface enhanced micro features using electrochemical jet processing. CIRP Annals - Manufacturing Technology, 2019, 68, 177-180.	1.7	10
62	Influence of contact area on the sliding friction and wear behaviour of an electrochemical jet textured Al-Si alloy. Wear, 2019, 426-427, 1336-1344.	1.5	22
63	Microstructure and properties of Ti-6Al-4V fabricated by low-power pulsed laser directed energy deposition. Journal of Materials Science and Technology, 2019, 35, 2027-2037.	5.6	39
64	Heat-treatment and mechanical properties of cold-sprayed high strength Al alloys from satellited feedstocks. Surface and Coatings Technology, 2019, 374, 21-31.	2.2	14
65	Spheroidisation of metal powder by pulsed electron beam irradiation. Powder Technology, 2019, 350, 100-106.	2.1	14
66	Negative refraction in conventional and additively manufactured phononic crystals. , 2019, , .		3
67	A validated analytical-numerical modelling strategy to predict residual stresses in single-track laser deposited IN718. International Journal of Mechanical Sciences, 2019, 151, 609-621.	3.6	31
68	Effects of tool intermittent vibration on helical internal hole processing in electrochemical machining. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4102-4111.	1.1	2
69	Salt-metal feedstocks for the creation of stochastic cellular structures with controlled relative density by powder bed fabrication. Materials and Design, 2018, 149, 63-72.	3.3	4
70	The influence of shot peening on the fatigue response of Ti-6Al-4V surfaces subject to different machining processes. International Journal of Fatigue, 2018, 111, 196-207.	2.8	41
71	Creep behaviour of inconel 718 processed by laser powder bed fusion. Journal of Materials Processing Technology, 2018, 256, 13-24.	3.1	58
72	Wear performance of TiC/Fe cermet electrical discharge coatings. Wear, 2018, 402-403, 109-123.	1.5	46

#	Article	IF	CITATIONS
73	Process mechanisms based on powder flow spatial distribution in direct metal deposition. Journal of Materials Processing Technology, 2018, 254, 361-372.	3.1	36
74	Transitory electrochemical masking for precision jet processing techniques. Journal of Manufacturing Processes, 2018, 31, 273-285.	2.8	30
75	Advancing electrochemical jet methods through manipulation of the angle of address. Journal of Materials Processing Technology, 2018, 255, 364-372.	3.1	64
76	Focussed arc tungsten inert gas brazing of zinc-coated steels. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 296-304.	1.5	4
77	Modelling of single spark interactions during electrical discharge coating. Journal of Materials Processing Technology, 2018, 252, 760-772.	3.1	23
78	Targeted rework strategies for powder bed additive manufacture. Additive Manufacturing, 2018, 19, 127-133.	1.7	15
79	Direct metal deposition of TiB 2 /AlSi10Mg composites using satellited powders. Materials Letters, 2018, 214, 123-126.	1.3	49
80	Novel nucleation mechanisms through satelliting in direct metal deposition of Ti-15Mo. Materials Letters, 2018, 213, 197-200.	1.3	21
81	On the machinability of directed energy deposited Ti6Al4V. Additive Manufacturing, 2018, 19, 39-50.	1.7	50
82	Specific and Programmable Surface Structuring by Electrochemical Jet Processing. Procedia CIRP, 2018, 68, 460-465.	1.0	15
83	The Dependence of Surface Finish on Material Precondition in Electrochemical Jet Machining. Procedia CIRP, 2018, 68, 477-482.	1.0	11
84	Modelling and Characterisation of Electrical Discharge TiC-Fe Cermet Coatings. Procedia CIRP, 2018, 68, 28-33.	1.0	6
85	Electrolyte Multiplexing in Electrochemical Jet Processing. Procedia CIRP, 2018, 68, 483-487.	1.0	9
86	Human Skeletal Stem Cell Response to Multiscale Topography Induced by Large Area Electron Beam Irradiation Surface Treatment. Frontiers in Bioengineering and Biotechnology, 2018, 6, 91.	2.0	15
87	Spatter and oxide formation in laser powder bed fusion of Inconel 718. Additive Manufacturing, 2018, 24, 446-456.	1.7	63
88	Imaging Material Texture of As-Deposited Selective Laser Melted Parts Using Spatially Resolved Acoustic Spectroscopy. Applied Sciences (Switzerland), 2018, 8, 1991.	1.3	31
89	Effect of post processing on the creep performance of laser powder bed fused Inconel 718. Additive Manufacturing, 2018, 24, 486-497.	1.7	30
90	Machining of functionally graded Ti6Al4V/ WC produced by directed energy deposition. Additive Manufacturing, 2018, 24, 20-29.	1.7	24

#	Article	IF	CITATIONS
91	A comparison of Ti-6Al-4V in-situ alloying in Selective Laser Melting using simply-mixed and satellited powder blend feedstocks. Materials Characterization, 2018, 143, 118-126.	1.9	88
92	Crystallographic texture can be rapidly determined by electrochemical surface analytics. Acta Materialia, 2018, 159, 89-101.	3.8	29
93	The importance of microstructure in electrochemical jet processing. Journal of Materials Processing Technology, 2018, 262, 459-470.	3.1	22
94	Precision enhanced electrochemical jet processing. CIRP Annals - Manufacturing Technology, 2018, 67, 205-208.	1.7	31
95	Defect-free TiC/Si multi-layer electrical discharge coatings. Materials and Design, 2018, 155, 352-365.	3.3	35
96	Defect Detection and Monitoring in Metal Additive Manufactured Parts through Deep Learning of Spatially Resolved Acoustic Spectroscopy Signals. Smart and Sustainable Manufacturing Systems, 2018, 2, 20180035.	0.3	19
97	Cold sprayed metal-ceramic coatings using satellited powders. Materials Letters, 2017, 198, 184-187.	1.3	37
98	Tribological behaviour of an electrochemical jet machined textured Al-Si automotive cylinder liner material. Wear, 2017, 376-377, 1611-1621.	1.5	48
99	Materials for additive manufacturing. CIRP Annals - Manufacturing Technology, 2017, 66, 659-681.	1.7	684
100	Formation mechanism of electrical discharge TiC-Fe composite coatings. Journal of Materials Processing Technology, 2017, 243, 143-151.	3.1	34
101	Assessing the capability of in-situ nondestructive analysis during layer based additive manufacture. Additive Manufacturing, 2017, 13, 135-142.	1.7	42
102	Meso-scale defect evaluation of selective laser melting using spatially resolved acoustic spectroscopy. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170194.	1.0	13
103	Electrolyte design for suspended particulates in electrolyte jet processing. CIRP Annals - Manufacturing Technology, 2017, 66, 201-204.	1.7	4
104	Enhanced sensing and conversion of ultrasonic Rayleigh waves by elastic metasurfaces. Scientific Reports, 2017, 7, 6750.	1.6	84
105	Microstructure and mechanical properties of Ti-2Al alloyed with Mo formed in laser additive manufacture. Journal of Alloys and Compounds, 2017, 727, 821-831.	2.8	39
106	Staged thermomechanical testing of nickel superalloys produced by selective laser melting. Materials and Design, 2017, 133, 520-527.	3.3	20
107	Energy distribution modulation by mechanical design for electrochemical jet processing techniques. International Journal of Machine Tools and Manufacture, 2017, 122, 32-46.	6.2	86
108	In-situ synthesis of titanium aluminides by direct metal deposition. Journal of Materials Processing Technology, 2017, 239, 230-239.	3.1	51

#	Article	IF	CITATIONS
109	Controlling DC permeability in cast steels. Journal of Magnetism and Magnetic Materials, 2017, 429, 79-85.	1.0	2
110	Morphology and Wear Behaviour of Single and Multi-layer Electrical Discharge Coatings. Procedia CIRP, 2016, 42, 236-239.	1.0	9
111	Towards in-situ process monitoring in selective laser sintering using optical coherence tomography. Proceedings of SPIE, 2016, , .	0.8	0
112	A parametric study on laser cladding of Ti-6Al-4V wire and WC/W2C powder. International Journal of Advanced Manufacturing Technology, 2016, 87, 3349-3358.	1.5	47
113	Spatially resolved acoustic spectroscopy for selective laser melting. Journal of Materials Processing Technology, 2016, 236, 93-102.	3.1	104
114	Surface modification of mild steel using a combination of laser and electrochemical processes. Surface and Coatings Technology, 2016, 307, 849-860.	2.2	20
115	Electrical discharge coating of nanostructured TiC-Fe cermets on 304 stainless steel. Surface and Coatings Technology, 2016, 307, 639-649.	2.2	62
116	Loose powder detection and surface characterization in selective laser sintering via optical coherence tomography. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160201.	1.0	13
117	Electrolyte Jet Machining of Titanium Alloys Using Novel Electrolyte Solutions. Procedia CIRP, 2016, 42, 367-372.	1.0	50
118	Machining of Additively Manufactured Parts: Implications for Surface Integrity. Procedia CIRP, 2016, 45, 119-122.	1.0	68
119	Quantification and characterisation of porosity in selectively laser melted Al–Si10–Mg using X-ray computed tomography. Materials Characterization, 2016, 111, 193-204.	1.9	249
120	ElectroChemical Jet Machining of Titanium: Overcoming Passivation Layers with Ultrasonic Assistance. Procedia CIRP, 2016, 42, 379-383.	1.0	69
121	Effect of carbide dissolution on the corrosion performance of tungsten carbide reinforced Inconel 625 wire laser coating. Journal of Materials Processing Technology, 2016, 231, 89-99.	3.1	67
122	Review of in-situ process monitoring and in-situ metrology for metal additive manufacturing. Materials and Design, 2016, 95, 431-445.	3.3	1,025
123	Manufacturing at double the speed. Journal of Materials Processing Technology, 2016, 229, 729-757.	3.1	40
124	Physical and electrical characteristics of EDM debris. Journal of Materials Processing Technology, 2016, 229, 54-60.	3.1	51
125	Functionally graded Ni-Ti microstructures synthesised in process by direct laser metal deposition. International Journal of Advanced Manufacturing Technology, 2015, 79, 843-850.	1.5	48
126	In situ low-cost and adaptable braze tool evaluation system with vision analysis. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 1595-1602.	1.5	2

#	Article	IF	CITATIONS
127	Evaluation of selective laser sintering processes by optical coherence tomography. Materials and Design, 2015, 88, 837-846.	3.3	39
128	Surface improvement of laser clad Ti–6Al–4V using plain waterjet and pulsed electron beam irradiation. Journal of Materials Processing Technology, 2015, 218, 1-11.	3.1	30
129	Laser cladding of Inconel 625 wire for corrosion protection. Journal of Materials Processing Technology, 2015, 217, 232-240.	3.1	256
130	Nanostructures in austenitic steel after EDM and pulsed electron beam irradiation. Surface and Coatings Technology, 2014, 259, 465-472.	2.2	31
131	Effect of prior laser microstructural refinement on the formation of amorphous layer in an Al86Co7.6Ce6.4 alloy. Applied Surface Science, 2014, 289, 230-236.	3.1	6
132	Fundamental study on releasability of molded rubber from mold tool surface. International Journal of Advanced Manufacturing Technology, 2014, 70, 1515-1521.	1.5	8
133	Corrosion behaviour of a rapidly solidified Al 87.4 Co 7.9 Ce 4.7 Âlayer prepared by large area electron beam irradiation. Applied Surface Science, 2014, 320, 581-590.	3.1	6
134	Toward more realistic viscosity measurements of tyre rubber–bitumen blends. Construction and Building Materials, 2014, 67, 270-278.	3.2	24
135	Erosion resistance of laser clad Ti-6Al-4V/WC composite for waterjet tooling. Journal of Materials Processing Technology, 2014, 214, 710-721.	3.1	33
136	Selective Surface Texturing Using Electrolyte Jet Machining. Procedia CIRP, 2014, 13, 345-349.	1.0	49
137	The effect of large-area pulsed electron beam melting on the corrosion and microstructure of a Ti6Al4V alloy. Applied Surface Science, 2014, 311, 534-540.	3.1	46
138	A parametric study of Inconel 625 wire laser deposition. Journal of Materials Processing Technology, 2013, 213, 2145-2151.	3.1	178
139	TEM study on the electrical discharge machined surface of single-crystal silicon. Journal of Materials Processing Technology, 2013, 213, 801-809.	3.1	36
140	Pulsed electron beam surface melting of CoCrMo alloy for biomedical applications. Wear, 2013, 301, 250-256.	1.5	21
141	Laser Deposition of Ti-6Al-4V Wire with WC Powder for Functionally Graded Components. Materials and Manufacturing Processes, 2013, 28, 514-518.	2.7	57
142	Surface finishing of intricate metal mould structures by large-area electron beam irradiation. Precision Engineering, 2013, 37, 443-450.	1.8	48
143	Amorphous layer formation in Al86.0Co7.6Ce6.4 glass-forming alloy by large-area electron beam irradiation. Applied Surface Science, 2013, 280, 431-438.	3.1	23
144	Concurrent Inconel 625 wire and WC powder laser cladding: process stability and microstructural characterisation. Surface Engineering, 2013, 29, 647-653.	1.1	29

#	Article	IF	CITATIONS
145	Laser cladding of rail steel with Co–Cr. Surface Engineering, 2013, 29, 731-736.	1.1	41
146	Laser cladding for railway repair and preventative maintenance. Journal of Laser Applications, 2012, 24,	0.8	36
147	Repair of EDM induced surface cracks by pulsed electron beam irradiation. Journal of Materials Processing Technology, 2012, 212, 2642-2651.	3.1	46
148	Workpiece debris deposition on tool electrodes and secondary discharge phenomena in micro-EDM. Journal of Materials Processing Technology, 2012, 212, 1537-1547.	3.1	46
149	Influence of process parameters and energy density on the microstructure of Ti-6Al-4V wire/wc powder cladding. , 2011, , .		0
150	Laser cladding for railway repair and preventative maintenance. , 2011, , .		1
151	Linear ion trap fabricated using rapid manufacturing technology. Journal of the American Society for Mass Spectrometry, 2010, 21, 317-322.	1.2	26
152	Development of quadrupole mass spectrometers using rapid prototyping technology. Journal of the American Society for Mass Spectrometry, 2009, 20, 1359-1365.	1.2	34
153	Selective laser melting of high aspect ratio 3D nickel–titanium structures two way trained for MEMS applications. International Journal of Mechanics and Materials in Design, 2008, 4, 181-187.	1.7	98
154	Rapid Prototyping Methodologies for Ceramic Micro Components. Solid State Phenomena, 0, 154, 1-7.	0.3	2