

Chee Kai Chua

List of Publications by Citations

Source: <https://exaly.com/author-pdf/9353475/chee-kai-chua-publications-by-citations.pdf>
Version: 2024-04-10

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.

271 papers	19,581 citations	69 h-index	135 g-index
383 ext. papers	22,739 ext. citations	6.4 avg, IF	7.35 L-index

#	Paper	IF	Citations
271	The design of scaffolds for use in tissue engineering. Part I. Traditional factors. <i>Tissue Engineering</i> , 2001 , 7, 679-89		1809
270	Review of selective laser melting: Materials and applications. <i>Applied Physics Reviews</i> , 2015 , 2, 041101	17.3	1001
269	Solid freeform fabrication of three-dimensional scaffolds for engineering replacement tissues and organs. <i>Biomaterials</i> , 2003 , 24, 2363-78	15.6	835
268	Rapid prototyping in tissue engineering: challenges and potential. <i>Trends in Biotechnology</i> , 2004 , 22, 643-52	15.1	658
267	Fundamentals and applications of 3D printing for novel materials. <i>Applied Materials Today</i> , 2017 , 7, 120-133	13.3	622
266	The design of scaffolds for use in tissue engineering. Part II. Rapid prototyping techniques. <i>Tissue Engineering</i> , 2002 , 8, 1-11		616
265	3D printing of smart materials: A review on recent progresses in 4D printing. <i>Virtual and Physical Prototyping</i> , 2015 , 10, 103-122	10.1	503
264	Scaffold development using selective laser sintering of polyetheretherketone-hydroxyapatite biocomposite blends. <i>Biomaterials</i> , 2003 , 24, 3115-23	15.6	481
263	Graded microstructure and mechanical properties of additive manufactured Ti6Al4V via electron beam melting. <i>Acta Materialia</i> , 2015 , 97, 1-16	8.4	395
262	Poly-epsilon-caprolactone/hydroxyapatite for tissue engineering scaffold fabrication via selective laser sintering. <i>Acta Biomaterialia</i> , 2007 , 3, 1-12	10.8	330
261	Rapid Prototyping 2003 ,		304
260	Porous polycaprolactone scaffold for cardiac tissue engineering fabricated by selective laser sintering. <i>Acta Biomaterialia</i> , 2010 , 6, 2028-34	10.8	271
259	Numerical investigation and an effective modelling on the Selective Laser Melting (SLM) process with aluminium alloy 6061. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 80, 288-300	4.9	256
258	Design and 3D Printing of Scaffolds and Tissues. <i>Engineering</i> , 2015 , 1, 261-268	9.7	255
257	Microstructure Characteristics of Inconel 625 Superalloy Manufactured by Selective Laser Melting. <i>Journal of Materials Science and Technology</i> , 2015 , 31, 946-952	9.1	236
256	Engineering functionally graded tissue engineering scaffolds. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2008 , 1, 140-52	4.1	236
255	Simultaneously enhanced strength and ductility for 3D-printed stainless steel 316L by selective laser melting. <i>NPG Asia Materials</i> , 2018 , 10, 127-136	10.3	228

254	Rapid Prototyping 2010 ,		217
253	Emerging 3D-Printed Electrochemical Energy Storage Devices: A Critical Review. <i>Advanced Energy Materials</i> , 2017 , 7, 1700127	21.8	212
252	Polymeric composites for powder-based additive manufacturing: Materials and applications. <i>Progress in Polymer Science</i> , 2019 , 91, 141-168	29.6	201
251	Development of tissue scaffolds using selective laser sintering of polyvinyl alcohol/hydroxyapatite biocomposite for craniofacial and joint defects. <i>Journal of Materials Science: Materials in Medicine</i> , 2004 , 15, 1113-21	4.5	196
250	Particle-reinforced metal matrix nanocomposites fabricated by selective laser melting: A state of the art review. <i>Progress in Materials Science</i> , 2019 , 104, 330-379	42.2	188
249	Effects of layer thickness and binder saturation level parameters on 3D printing process. <i>International Journal of Advanced Manufacturing Technology</i> , 2011 , 53, 275-284	3.2	180
248	Rapid prototyping and tooling techniques: a review of applications for rapid investment casting. <i>International Journal of Advanced Manufacturing Technology</i> , 2005 , 25, 308-320	3.2	180
247	The potential to enhance membrane module design with 3D printing technology. <i>Journal of Membrane Science</i> , 2016 , 499, 480-490	9.6	178
246	Interfacial characterization of SLM parts in multi-material processing: Metallurgical diffusion between 316L stainless steel and C18400 copper alloy. <i>Materials Characterization</i> , 2014 , 94, 116-125	3.9	174
245	Investigation of the mechanical properties and porosity relationships in fused deposition modelling-fabricated porous structures. <i>Rapid Prototyping Journal</i> , 2006 , 12, 100-105	3.8	171
244	Development of a Tissue Engineering Scaffold Structure Library for Rapid Prototyping. Part 1: Investigation and Classification. <i>International Journal of Advanced Manufacturing Technology</i> , 2003 , 21, 291-301	3.2	171
243	Melt flow behaviour of poly-epsilon-caprolactone in fused deposition modelling. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 2541-50	4.5	161
242	Investigation of the mechanical properties and porosity relationships in selective laser-sintered polyhedral for functionally graded scaffolds. <i>Acta Biomaterialia</i> , 2011 , 7, 530-7	10.8	160
241	Two-Way 4D Printing: A Review on the Reversibility of 3D-Printed Shape Memory Materials. <i>Engineering</i> , 2017 , 3, 663-674	9.7	155
240	3D neural tissue models: From spheroids to bioprinting. <i>Biomaterials</i> , 2018 , 154, 113-133	15.6	154
239	Layer-by-layer printing of laminated graphene-based interdigitated microelectrodes for flexible planar micro-supercapacitors. <i>Electrochemistry Communications</i> , 2015 , 51, 33-36	5.1	147
238	Influence of re-melting on surface roughness and porosity of AlSi10Mg parts fabricated by selective laser melting. <i>Journal of Alloys and Compounds</i> , 2019 , 792, 574-581	5.7	146
237	Development of a 95/5 poly(L-lactide-co-glycolide)/hydroxylapatite and beta-tricalcium phosphate scaffold as bone replacement material via selective laser sintering. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 84, 17-25	3.5	137

236	Recent Advances on High-Entropy Alloys for 3D Printing. <i>Advanced Materials</i> , 2020 , 32, e1903855	24	126
235	3D Printing and Additive Manufacturing 2014 ,		121
234	3D soft auxetic lattice structures fabricated by selective laser sintering: TPU powder evaluation and process optimization. <i>Materials and Design</i> , 2017 , 120, 317-327	8.1	120
233	Interfacial characterization of SLM parts in multi-material processing: Intermetallic phase formation between AlSi10Mg and C18400 copper alloy. <i>Materials Characterization</i> , 2015 , 107, 220-227	3.9	115
232	Biomanufacturing for tissue engineering: Present and future trends. <i>Virtual and Physical Prototyping</i> , 2009 , 4, 203-216	10.1	114
231	Modeling temperature and residual stress fields in selective laser melting. <i>International Journal of Mechanical Sciences</i> , 2018 , 136, 24-35	5.5	112
230	Print Me An Organ! Why We Are Not There Yet. <i>Progress in Polymer Science</i> , 2019 , 97, 101145	29.6	109
229	Bioprinting of Thermoresponsive Hydrogels for Next Generation Tissue Engineering: A Review. <i>Macromolecular Materials and Engineering</i> , 2017 , 302, 1600266	3.9	109
228	Fabrication of customised scaffolds using computer-aided design and rapid prototyping techniques. <i>Rapid Prototyping Journal</i> , 2005 , 11, 249-259	3.8	109
227	Development of a Tissue Engineering Scaffold Structure Library for Rapid Prototyping. Part 2: Parametric Library and Assembly Program. <i>International Journal of Advanced Manufacturing Technology</i> , 2003 , 21, 302-312	3.2	105
226	Fabrication and characterization of three-dimensional poly(ether- ether- ketone)/-hydroxyapatite biocomposite scaffolds using laser sintering. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2005 , 219, 183-94	1.7	104
225	The global rise of 3D printing during the COVID-19 pandemic.. <i>Nature Reviews Materials</i> , 2020 , 5, 637-639	3.3	100
224	A highly printable and biocompatible hydrogel composite for direct printing of soft and perfusable vasculature-like structures. <i>Scientific Reports</i> , 2017 , 7, 16902	4.9	98
223	Revealing martensitic transformation and the interface evolution in electron beam melting three-dimensional-printed Ti-6Al-4V. <i>Scientific Reports</i> , 2016 , 6, 26039	4.9	96
222	Rapid investment casting: direct and indirect approaches via fused deposition modelling. <i>International Journal of Advanced Manufacturing Technology</i> , 2004 , 23, 93-101	3.2	94
221	3D-Printed Mechanical Metamaterials with High Energy Absorption. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800419	6.8	93
220	Metallic Nanoparticle Inks for 3D Printing of Electronics. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800831	16.4	92
219	Improved biocomposite development of poly(vinyl alcohol) and hydroxyapatite for tissue engineering scaffold fabrication using selective laser sintering. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 989-96	4.5	90

218	Investigation of 3D Non-Random Porous Structures by Fused Deposition Modelling. <i>International Journal of Advanced Manufacturing Technology</i> , 2002 , 19, 217-223	3.2	90
217	A study of the state-of-the-art rapid prototyping technologies. <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 146-152	3.2	88
216	Automatic algorithm for generating complex polyhedral scaffold structures for tissue engineering. <i>Tissue Engineering</i> , 2004 , 10, 595-610		86
215	3D Printing and Additive Manufacturing 2017 ,		84
214	Indirect fabrication of collagen scaffold based on inkjet printing technique. <i>Rapid Prototyping Journal</i> , 2006 , 12, 229-237	3.8	82
213	A Mathematical Model on the Resolution of Extrusion Bioprinting for the Development of New Bioinks. <i>Materials</i> , 2016 , 9,	3.5	82
212	Crystal structure analysis of M2 high speed steel parts produced by selective laser melting. <i>Materials Characterization</i> , 2013 , 84, 72-80	3.9	81
211	An experimental and simulation study on build thickness dependent microstructure for electron beam melted Ti6Al4V. <i>Journal of Alloys and Compounds</i> , 2015 , 646, 303-309	5.7	81
210	Electrical and thermal conductivities of MWCNT/polymer composites fabricated by selective laser sintering. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018 , 105, 203-213	8.4	81
209	A review: additive manufacturing for active electronic components. <i>Virtual and Physical Prototyping</i> , 2017 , 12, 31-46	10.1	79
208	A review of printed passive electronic components through fully additive manufacturing methods. <i>Virtual and Physical Prototyping</i> , 2016 , 11, 271-288	10.1	79
207	Call for 2nd Editorial Board Meeting: A milestone for IJB. <i>International Journal of Bioprinting</i> , 2018 , 4,	6.2	78
206	Rapid prototyping issues in the 21st century. <i>Computers in Industry</i> , 1999 , 39, 3-10	11.6	77
205	Microstructure evolution and mechanical property response via 3D printing parameter development of AlSiC alloy. <i>Virtual and Physical Prototyping</i> , 2020 , 15, 120-129	10.1	76
204	Rapid investment casting: direct and indirect approaches via model maker II. <i>International Journal of Advanced Manufacturing Technology</i> , 2005 , 25, 26-32	3.2	70
203	Fabrication of porous polymeric matrix drug delivery devices using the selective laser sintering technique. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2001 , 215, 191-201	1.7	70
202	Compressive properties and degradability of poly(epsilon-caprolactone)/hydroxyapatite composites under accelerated hydrolytic degradation. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 80, 655-60	5.4	69
201	Characterization of microfeatures in selective laser sintered drug delivery devices. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2002 , 216, 369-83	1.7	69

200	Characterization of SLS parts for drug delivery devices. <i>Rapid Prototyping Journal</i> , 2001 , 7, 262-268	3.8	68
199	A study of stereolithography file errors and repair. Part 1. Generic solution. <i>International Journal of Advanced Manufacturing Technology</i> , 1996 , 12, 407-414	3.2	68
198	Material Evaluation and Process Optimization of CNT-Coated Polymer Powders for Selective Laser Sintering. <i>Polymers</i> , 2016 , 8,	4.5	68
197	A Perspective on 4D Bioprinting. <i>International Journal of Bioprinting</i> , 2016 , 2,	6.2	66
196	Fabrication and microstructural characterisation of additive manufactured Ti-6Al-4V parts by electron beam melting. <i>Virtual and Physical Prototyping</i> , 2015 , 10, 13-21	10.1	65
195	Phase analysis and microstructure characterisation of AlSi10Mg parts produced by Selective Laser Melting. <i>Virtual and Physical Prototyping</i> , 2015 , 10, 207-215	10.1	64
194	Three-dimensional rapid prototyping technologies and key development areas. <i>Computing & Control Engineering Journal</i> , 1994 , 5, 200-206		62
193	Highly enhanced thermal conductivity of thermoplastic nanocomposites with a low mass fraction of MWCNTs by a facilitated latex approach. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016 , 90, 699-710	8.4	60
192	Interface between CAD and Rapid Prototyping systems. Part 1: A study of existing interfaces. <i>International Journal of Advanced Manufacturing Technology</i> , 1997 , 13, 566-570	3.2	59
191	3D food printing: a categorised review of inks and their development. <i>Virtual and Physical Prototyping</i> , 2019 , 14, 203-218	10.1	58
190	A Review of Selective Laser Melted NiTi Shape Memory Alloy. <i>Materials</i> , 2018 , 11,	3.5	58
189	Rapid tooling technology. Part 1. A comparative study. <i>International Journal of Advanced Manufacturing Technology</i> , 1999 , 15, 604-608	3.2	58
188	Layer-by-layer ultraviolet assisted extrusion-based (UAE) bioprinting of hydrogel constructs with high aspect ratio for soft tissue engineering applications. <i>PLoS ONE</i> , 2019 , 14, e0216776	3.7	56
187	Selective laser sintering of biocompatible polymers for applications in tissue engineering. <i>Bio-Medical Materials and Engineering</i> , 2005 , 15, 113-24	1	56
186	Thermal Influence of CNT on the Polyamide 12 Nanocomposite for Selective Laser Sintering. <i>Molecules</i> , 2015 , 20, 19041-50	4.8	55
185	Building Porous Biopolymeric Microstructures for Controlled Drug Delivery Devices Using Selective Laser Sintering. <i>International Journal of Advanced Manufacturing Technology</i> , 2006 , 31, 483-489	3.2	55
184	Advanced Material Strategies for Next-Generation Additive Manufacturing. <i>Materials</i> , 2018 , 11,	3.5	53
183	Processing and Properties of Construction Materials for 3D Printing. <i>Materials Science Forum</i> , 2016 , 861, 177-181	0.4	52

182	3D food printing of fresh vegetables using food hydrocolloids for dysphagic patients. <i>Food Hydrocolloids</i> , 2021 , 114, 106546	10.6	52
181	Comparison of solid, liquid and powder forms of 3D printing techniques in membrane spacer fabrication. <i>Journal of Membrane Science</i> , 2017 , 537, 283-296	9.6	50
180	Cartilage Tissue Engineering with Silk Fibroin Scaffolds Fabricated by Indirect Additive Manufacturing Technology. <i>Materials</i> , 2014 , 7, 2104-2119	3.5	49
179	Comparison of drying methods in the fabrication of collagen scaffold via indirect rapid prototyping. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 82, 260-6	3.5	49
178	Hierarchically self-morphing structure through 4D printing. <i>Virtual and Physical Prototyping</i> , 2017 , 12, 61-68	10.1	48
177	Selective Laser Melting of aluminium alloy using a uniform beam profile. <i>Virtual and Physical Prototyping</i> , 2014 , 9, 11-16	10.1	47
176	An effective analytical model of selective laser melting. <i>Virtual and Physical Prototyping</i> , 2016 , 11, 21-26	10.1	47
175	Fatigue damage evolution and lifetime prediction of welded joints with the consideration of residual stresses and porosity. <i>International Journal of Fatigue</i> , 2017 , 103, 272-279	5	46
174	Esophageal tissue engineering: an in-depth review on scaffold design. <i>Biotechnology and Bioengineering</i> , 2012 , 109, 1-15	4.9	46
173	Heat transfer and phase transition in the selective laser melting process. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 108, 2408-2416	4.9	45
172	Rapid prototyping assisted surgery planning. <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 624-630	3.2	45
171	Influence of Ni content on microstructure of WNi alloy produced by selective laser melting. <i>International Journal of Refractory Metals and Hard Materials</i> , 2014 , 45, 15-22	4.1	44
170	A study of stereolithography file errors and repair. Part 2. Special cases. <i>International Journal of Advanced Manufacturing Technology</i> , 1996 , 12, 415-422	3.2	44
169	Advancing cancer research using bioprinting for tumor-on-a-chip platforms. <i>International Journal of Bioprinting</i> , 2016 , 2,	6.2	44
168	3D printing by selective laser sintering of polypropylene feed channel spacers for spiral wound membrane modules for the water industry. <i>Virtual and Physical Prototyping</i> , 2016 , 11, 151-158	10.1	44
167	Deep learning for fabrication and maturation of 3D bioprinted tissues and organs. <i>Virtual and Physical Prototyping</i> , 2020 , 15, 340-358	10.1	39
166	Abrasive jet deburring of jewellery models built by stereolithography apparatus (SLA). <i>Journal of Materials Processing Technology</i> , 1998 , 83, 36-47	5.3	39
165	Perspectives of using machine learning in laser powder bed fusion for metal additive manufacturing. <i>Virtual and Physical Prototyping</i> , 2021 , 16, 372-386	10.1	39

164	Acoustic absorptions of multifunctional polymeric cellular structures based on triply periodic minimal surfaces fabricated by stereolithography. <i>Virtual and Physical Prototyping</i> , 2020 , 15, 242-249	10.1	38
163	Fabrication of channeled scaffolds with ordered array of micro-pores through microsphere leaching and indirect Rapid Prototyping technique. <i>Biomedical Microdevices</i> , 2013 , 15, 83-96	3.7	38
162	Facial prosthetic model fabrication using rapid prototyping tools. <i>Journal of Manufacturing Technology Management</i> , 2000 , 11, 42-53		38
161	A 3D biomimetic model of tissue stiffness interface for cancer drug testing. <i>Molecular Pharmaceutics</i> , 2014 , 11, 2016-21	5.6	37
160	Indirect fabrication of gelatin scaffolds using rapid prototyping technology. <i>Virtual and Physical Prototyping</i> , 2010 , 5, 45-53	10.1	37
159	Energy Absorption of Thermoplastic Polyurethane Lattice Structures via 3D Printing: Modeling and Prediction. <i>International Journal of Applied Mechanics</i> , 2016 , 08, 1640006	2.4	37
158	Multi-stage responsive 4D printed smart structure through varying geometric thickness of shape memory polymer. <i>Smart Materials and Structures</i> , 2017 , 26, 125001	3.4	36
157	Biodegradable Polymeric Films and Membranes Processing and Forming for Tissue Engineering. <i>Macromolecular Materials and Engineering</i> , 2015 , 300, 858-877	3.9	36
156	Rapid prototyping versus virtual prototyping in product design and manufacturing. <i>International Journal of Advanced Manufacturing Technology</i> , 1999 , 15, 597-603	3.2	36
155	Geometry dependence of microstructure and microhardness for selective electron beam-melted Ti6Al4V parts. <i>Virtual and Physical Prototyping</i> , 2016 , 11, 183-191	10.1	35
154	Rapid Prototyping Applications in Medicine. Part 1: NURBS-Based Volume Modelling. <i>International Journal of Advanced Manufacturing Technology</i> , 2001 , 18, 103-117	3.2	34
153	Development of process efficiency maps for selective laser sintering of polymeric composite powders: Modeling and experimental testing. <i>Journal of Materials Processing Technology</i> , 2018 , 254, 52-59	5.3	34
152	Clothing polymer fibers with well-aligned and high-aspect ratio carbon nanotubes. <i>Nanoscale</i> , 2013 , 5, 2870-4	7.7	33
151	Selective laser sintering of functionally graded tissue scaffolds. <i>MRS Bulletin</i> , 2011 , 36, 1006-1014	3.2	33
150	Toughening of polyamide 11 with carbon nanotubes for additive manufacturing. <i>Virtual and Physical Prototyping</i> , 2017 , 12, 235-240	10.1	32
149	Design and 4D Printing of Cross-Folded Origami Structures: A Preliminary Investigation. <i>Materials</i> , 2018 , 11,	3.5	32
148	Advanced nanobiomaterial strategies for the development of organized tissue engineering constructs. <i>Nanomedicine</i> , 2013 , 8, 591-602	5.6	32
147	Bioprinting 2015 ,		32

146	Modeling of powder particle heat transfer process in selective laser sintering for fabricating tissue engineering scaffolds. <i>Rapid Prototyping Journal</i> , 2010 , 16, 400-410	3.8	31
145	Rapid Moulding Using Epoxy Tooling Resin. <i>International Journal of Advanced Manufacturing Technology</i> , 2002 , 20, 368-374	3.2	31
144	Development of a new rapid prototyping interface. <i>Computers in Industry</i> , 1999 , 39, 61-70	11.6	31
143	Density Functional Theory Study of Mn ₁ AX _n Phases: A Review. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2019 , 44, 56-107	10.1	30
142	Rapid Sheet Metal Manufacturing. Part 2: Direct Rapid Tooling. <i>International Journal of Advanced Manufacturing Technology</i> , 2002 , 19, 510-515	3.2	29
141	Rapid Prototyping Applications in Medicine. Part 2: STL File Generation and Case Studies. <i>International Journal of Advanced Manufacturing Technology</i> , 2001 , 18, 118-127	3.2	29
140	Roles of support materials in 3D bioprinting - Present and future. <i>International Journal of Bioprinting</i> , 2017 , 3, 006	6.2	29
139	Fabrication of SLM NiTi Shape Memory Alloy via Repetitive Laser Scanning. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 112-120	2.8	28
138	Solvent-free fabrication of three dimensionally aligned polycaprolactone microfibers for engineering of anisotropic tissues. <i>Biomedical Microdevices</i> , 2012 , 14, 863-72	3.7	28
137	Rapid tooling technology. Part 2. A case study using arc spray metal tooling. <i>International Journal of Advanced Manufacturing Technology</i> , 1999 , 15, 609-614	3.2	28
136	Interface between CAD and Rapid Prototyping systems. Part 2: LMI An improved interface. <i>International Journal of Advanced Manufacturing Technology</i> , 1997 , 13, 571-576	3.2	27
135	Integrating rapid prototyping and tooling with vacuum casting for connectors. <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 617-623	3.2	27
134	Dual Material Rapid Prototyping Techniques for the Development of Biomedical Devices. Part 1: Space Creation. <i>International Journal of Advanced Manufacturing Technology</i> , 2001 , 18, 717-723	3.2	27
133	Bioprinting of 3D in vitro skeletal muscle models: A review. <i>Materials and Design</i> , 2020 , 193, 108794	8.1	27
132	Improvement of densification and microstructure of ASTM A131 EH36 steel samples additively manufactured via selective laser melting with varying laser scanning speed and hatch spacing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 746, 300-313	5.3	27
131	Preliminary Investigation of the Reversible 4D Printing of a Dual-Layer Component. <i>Engineering</i> , 2019 , 5, 1159-1170	9.7	26
130	Smooth Muscle Cell Alignment and Phenotype Control by Melt Spun Polycaprolactone Fibers for Seeding of Tissue Engineered Blood Vessels. <i>International Journal of Biomaterials</i> , 2015 , 2015, 434876	3.2	26
129	Characterization of Creeping and Shape Memory Effect in Laser Sintered Thermoplastic Polyurethane. <i>Journal of Computing and Information Science in Engineering</i> , 2016 , 16,	2.4	26

128	Effect of surface orientation on the tribological properties of laser sintered polyamide 12. <i>Polymer Testing</i> , 2015 , 48, 111-114	4.5	25
127	Effect of gas plasma on polycaprolactone (PCL) membrane wettability and collagen type I immobilized for enhancing cell proliferation. <i>Materials Letters</i> , 2016 , 171, 293-296	3.3	25
126	Selective laser sintering adaptation tools for cost effective fabrication of biomedical prototypes. <i>Rapid Prototyping Journal</i> , 2010 , 16, 90-99	3.8	25
125	Rapid Sheet Metal Manufacturing. Part 1: Indirect Rapid Tooling. <i>International Journal of Advanced Manufacturing Technology</i> , 2002 , 19, 411-417	3.2	25
124	A matrix approach to tolerance charting. <i>International Journal of Advanced Manufacturing Technology</i> , 1993 , 8, 175-181	3.2	25
123	Induction Sintering of Silver Nanoparticle Inks on Polyimide Substrates. <i>Advanced Materials Technologies</i> , 2020 , 5, 1900897	6.8	25
122	Selective laser melting of nickel powder. <i>Rapid Prototyping Journal</i> , 2017 , 23, 750-757	3.8	24
121	The development of silk fibroin scaffolds using an indirect rapid prototyping approach: morphological analysis and cell growth monitoring by spectral-domain optical coherence tomography. <i>Medical Engineering and Physics</i> , 2013 , 35, 253-62	2.4	24
120	An integrated experimental approach to link a laser digitiser, a CAD/CAM system and a rapid prototyping system for biomedical applications. <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 110-115	3.2	24
119	Modelling of Extrusion Behaviour of Biopolymer and Composites in Fused Deposition Modelling. <i>Key Engineering Materials</i> , 2007 , 334-335, 1241-1244	0.4	23
118	Dual Material Rapid Prototyping Techniques for the Development of Biomedical Devices. Part 2: Secondary Powder Deposition. <i>International Journal of Advanced Manufacturing Technology</i> , 2002 , 19, 679-687	3.2	23
117	Effect of Heat Treatment on Repetitively Scanned SLM NiTi Shape Memory Alloy. <i>Materials</i> , 2018 , 12,	3.5	23
116	Gas turbine blade manufacturing by use of epoxy resin tooling and silicone rubber molding techniques. <i>Rapid Prototyping Journal</i> , 2011 , 17, 107-115	3.8	22
115	Investigation on processing of ASTM A131 Eh36 high tensile strength steel using selective laser melting—This paper was adapted from the original manuscript titled Preliminary Investigation on SLM of ASTM A131 EH36 High Tensile Strength Steel for Shipbuilding Applications—Submitted to the 1st International Conference on Progress in Additive Manufacturing (Pro-AM 2014) held in	10.1	21
114	Study of Trapped Material in Rapid Prototyping Parts. <i>International Journal of Advanced Manufacturing Technology</i> , 2000 , 16, 120-130	3.2	21
113	Properties of Test Coupons Fabricated by Selective Laser Melting. <i>Key Engineering Materials</i> , 2010 , 447-448, 780-784	0.4	20
112	A review on spacers and membranes: Conventional or hybrid additive manufacturing?. <i>Water Research</i> , 2021 , 188, 116497	12.5	20
111	Rapid Prototyping and Tooling of Custom-Made Tracheobronchial Stents. <i>International Journal of Advanced Manufacturing Technology</i> , 2002 , 20, 44-49	3.2	19

110	Fibroblast response to interstitial flow: A state-of-the-art review. <i>Biotechnology and Bioengineering</i> , 2010 , 107, 1-10	4.9	18
109	Contactless reversible 4D-printing for 3D-to-3D shape morphing. <i>Virtual and Physical Prototyping</i> , 2020 , 15, 481-495	10.1	17
108	A preliminary investigation on Selective Laser Melting of M2 high speed steel 2011 , 339-346		16
107	Investigation on forming process of copper alloys via Selective Laser Melting 2013 , 285-289		15
106	3D Printing of Polymeric Multi-Layer Micro-Perforated Panels for Tunable Wideband Sound Absorption. <i>Polymers</i> , 2020 , 12,	4.5	14
105	A quality management framework for implementing additive manufacturing of medical devices. <i>Virtual and Physical Prototyping</i> , 2013 , 8, 193-199	10.1	14
104	Rapid manufacturing techniques in the development of an axial blood pump impeller. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2003 , 217, 469-75	1.7	14
103	A mathematical model for fluid shear-sensitive 3D tissue construct development. <i>Biomechanics and Modeling in Mechanobiology</i> , 2013 , 12, 19-31	3.8	13
102	A generic micropatterning platform to direct human mesenchymal stem cells from different origins towards myogenic differentiation. <i>Macromolecular Bioscience</i> , 2013 , 13, 799-807	5.5	13
101	Kinematic analysis of total knee prosthesis designed for Asian population. <i>Critical Reviews in Biomedical Engineering</i> , 2000 , 28, 33-40	1.1	13
100	Application of Machine Learning in 3D Bioprinting: Focus on Development of Big Data and Digital Twin. <i>International Journal of Bioprinting</i> , 2021 , 7, 342	6.2	13
99	Benchmarking for Additive Manufacturing 2017 , 181-212		12
98	A knowledge-based system for strip layout design. <i>Computers in Industry</i> , 1994 , 25, 31-44	11.6	12
97	Scaffolds for Tissue Engineering		12
96	Characterization of a poly-epsilon-caprolactone polymeric drug delivery device built by selective laser sintering. <i>Bio-Medical Materials and Engineering</i> , 2007 , 17, 147-57	1	12
95	Joining of 3D-printed AlSi10Mg by friction stir welding. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2018 , 62, 675-682	1.9	11
94	Introduction to rapid prototyping of biomaterials 2014 , 1-15		11
93	A novel bone scaffold design approach based on shape function and all-hexahedral mesh refinement. <i>Methods in Molecular Biology</i> , 2012 , 868, 45-55	1.4	11

92	Investigation of porosity reduction, microstructure and mechanical properties for joining of selective laser melting fabricated aluminium composite via friction stir welding. <i>Journal of Manufacturing Processes</i> , 2018 , 36, 33-43	5	11
91	3D printed electronics: Processes, materials and future trends. <i>Progress in Materials Science</i> , 2022 , 127, 100945	42.2	11
90	Development of an Advisory System for Trapped Material in Rapid Prototyping Parts. <i>International Journal of Advanced Manufacturing Technology</i> , 2000 , 16, 733-738	3.2	10
89	Determination of the major dimensions of femoral implants using morphometrical data and principal component analysis. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2000 , 214, 301-9	1.7	10
88	A novel 3D printing method for cell alignment and differentiation. <i>International Journal of Bioprinting</i> , 2015 ,	6.2	10
87	Computer Aided Tissue Engineering Scaffold Fabrication 2008 , 67-85		10
86	Comparison study of fabrication of ceramic rotor using various manufacturing methods. <i>Ceramics International</i> , 2014 , 40, 12493-12502	5.1	9
85	State-of-the-art review on selective laser melting of ceramics 2013 , 65-70		9
84	Multimedia courseware for teaching of rapid prototyping systems. <i>Rapid Prototyping Journal</i> , 2010 , 16, 80-89	3.8	9
83	Improving the process of making rapid prototyping models from medical ultrasound images. <i>Rapid Prototyping Journal</i> , 2012 , 18, 287-298	3.8	9
82	Application of Electron Beam Melting (EBM) in Additive Manufacturing of an Impeller 2014 ,		9
81	Rapid Tooling in Manufacturing 2015 , 2525-2549		9
80	The development of computer-aided system for tissue scaffolds (CASTS) system for functionally graded tissue-engineering scaffolds. <i>Methods in Molecular Biology</i> , 2012 , 868, 111-23	1.4	8
79	An engineering perspective on 3D printed personalized scaffolds for tracheal suspension technique. <i>Journal of Thoracic Disease</i> , 2016 , 8, E1723-E1725	2.6	8
78	Aerodynamics of badminton shuttlecock: Characterization of flow around a conical skirt with gaps, behind a hemispherical dome. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2014 , 127, 29-39	3.7	7
77	Application of rapid prototyping and computational fluid dynamics in the development of water flow regulating valves. <i>International Journal of Advanced Manufacturing Technology</i> , 2006 , 30, 828-835	3.2	7
76	Influence of erbium addition on the defects of selective laser-melted 7075 aluminium alloy. <i>Virtual and Physical Prototyping</i> , 1-13	10.1	7
75	Dispersion of CNTs in Selective Laser Melting Printed AlSi10Mg Composites via Friction Stir Processing. <i>Materials Science Forum</i> , 2016 , 879, 1915-1920	0.4	7

74	Investigation of the size effect for photonic crystals. <i>Nanotechnology</i> , 2016 , 27, 405703	3.4	7
73	Design of high performance badminton shuttlecocks: virtual and rapid prototyping approach. <i>Virtual and Physical Prototyping</i> , 2013 , 8, 165-171	10.1	6
72	Feasibility of tissue engineering scaffold fabrication using fused deposition modelling 2001 ,		6
71	Lasers in 3D Printing and Manufacturing 2017 ,		6
70	Fouling mitigation in reverse osmosis processes with 3D printed sinusoidal spacers. <i>Water Research</i> , 2021 , 207, 117818	12.5	6
69	Adapting decorative patterns for ceramic tableware. <i>Computing & Control Engineering Journal</i> , 1993 , 4, 209		6
68	Reduced graphene oxide/silver hybrid with N,N-dimethyl formamide for oxygen reduction reactions and surface enhanced Raman scattering. <i>RSC Advances</i> , 2016 , 6, 102519-102527	3.7	5
67	Geometric analysis of parts from a 3-D solid model for manual assembly times. <i>Journal of Manufacturing Technology Management</i> , 1997 , 8, 137-146		5
66	CAD/CAM/CAE for ring design and manufacture. <i>Computer-Aided Engineering Journal</i> , 1991 , 8, 13		5
65	Turnover Stability of Shuttlecocks - Transient Angular Response and Impact Deformation of Feather and Synthetic Shuttlecocks. <i>Procedia Engineering</i> , 2013 , 60, 106-111		4
64	Roadmap on Additive Manufacturing Standards 2017 , 31-55		4
63	Computer Aided Decoration of Ceramic Tableware. Part I: 3-D decoration. <i>Computers and Graphics</i> , 1997 , 21, 641-653	1.8	4
62	Creating machinable textures for CAD/CAM systems. <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 269-279	3.2	4
61	Parametric modelling of drinking bottles. <i>Journal of Manufacturing Technology Management</i> , 1998 , 9, 99-108		4
60	Three-Dimensional Printing of Food Foams Stabilized by Hydrocolloids for Hydration in Dysphagia. <i>International Journal of Bioprinting</i> , 2021 , 7, 393	6.2	4
59	Implementing Additive Manufacturing for medical devices 2013 , 115-120		4
58	Single track and single layer melting of silica by Selective Laser Melting 2013 , 261-265		4
57	State-of-the-Art Review on Selective Laser Melting of Non-Ferrous Metals 2014 ,		4

56	Selective Laser Melting: On the Study of Microstructure of K220 2014 ,		4
55	Effect of nAl ₂ O ₃ on the part density and microstructure during the laser-based powder bed fusion of AlSi10Mg composite. <i>Rapid Prototyping Journal</i> , 2020 , 26, 727-735	3.8	4
54	Introduction to 3D Printing or Additive Manufacturing 2017 , 1-29		3
53	Editorial (VPP Issue 1, 2014). <i>Virtual and Physical Prototyping</i> , 2014 , 9, 1-1	10.1	3
52	Microstructural Investigation of M2 High Speed Steel Produced by Selective Laser Melting: Microstructural Investigation of M2 High Speed Steel 2012 ,		3
51	Rapid prototyping in Singapore: 1988 to 1997. <i>Rapid Prototyping Journal</i> , 1997 , 3, 116-119	3.8	3
50	Rapid prototyping in the development of optical pickup unit. <i>International Journal of Advanced Manufacturing Technology</i> , 2005 , 25, 484-492	3.2	3
49	RAPID PROTOTYPING PROCESS CHAIN 2003 , 25-34		3
48	Analysis and simulation of badminton shuttlecock flight through parameter identification of a slow-speed serve shot. <i>Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology</i> , 2015 , 229, 213-221	0.7	2
47	Material Characterization for Additive Manufacturing 2017 , 95-137		2
46	Quality Management Framework in Additive Manufacturing 2017 , 213-239		2
45	Equipment Qualification 2017 , 139-157		2
44	Foreword. Advanced nanobiomaterials for tissue engineering and regenerative medicine. <i>Nanomedicine</i> , 2013 , 8, 501-3	5.6	2
43	Monitoring cell proliferation in silk fibroin scaffolds using spectroscopic optical coherence tomography. <i>Microwave and Optical Technology Letters</i> , 2013 , 55, 2587-2594	1.2	2
42	Microblasting characteristics of jewellery models built using stereolithography apparatus (SLA). <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 450-458	3.2	2
41	Enhanced Learning of Rapid Prototyping Systems through Multimedia. <i>International Journal of Mechanical Engineering Education</i> , 2004 , 32, 115-125	0.6	2
40	A method of generating motifs aligned along a circular arc. <i>Computers and Graphics</i> , 1994 , 18, 353-362	1.8	2
39	Bioprinting of 3D Functional Tissue Constructs. <i>International Journal of Bioprinting</i> , 2021 , 7, 395	6.2	2

38	Preparation and flowability characterization of ceramic powders for Selective Laser Melting 2013 , 267-271		2
37	PC-based Virtual Reality Surgical Simulation for Orthognathic Surgery. <i>Lecture Notes in Computer Science</i> , 2000 , 1019-1028	0.9	2
36	Product design and improvement of a stop mount using a computer-aided engineering tool. <i>Computing & Control Engineering Journal</i> , 1992 , 3, 195		2
35	Development of a stereolithography preprocessor for model verification. <i>Computing & Control Engineering Journal</i> , 1993 , 4, 218		2
34	Introduction to rapid prototyping of biomaterials 2020 , 1-15		2
33	A Solvent-Free Surface Suspension Melt Technique for Making Biodegradable PCL Membrane Scaffolds for Tissue Engineering Applications. <i>Molecules</i> , 2016 , 21, 386	4.8	2
32	Specialized Fabrication Processes: Rapid Prototyping 2009 , 493-523		2
31	Rapid Tooling in Manufacturing 2013 , 1-22		2
30	Badminton shuttlecock stability: Modelling and simulating the angular response of the turnover. <i>Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology</i> , 2016 , 230, 111-120	0.7	1
29	Computational Design and Simulation 2015 , 207-254		1
28	Process Control and Modeling 2017 , 159-179		1
27	Software and Data Format 2017 , 75-94		1
26	Measurement Science Roadmap for Additive Manufacturing 2017 , 57-73		1
25	Impact of short-term perfusion on cell retention for 3D bioconstruct development. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 647-52	5.4	1
24	Effect of laser beam profile on melt track in Selective Laser Melting 2013 , 83-87		1
23	Classical Lamination Theory applied on parts produced by Selective Laser Melting 2013 , 77-82		1
22	A Portable Device for Fabricating Biomaterial Microfiber Bundles. <i>Key Engineering Materials</i> , 2010 , 447-448, 750-754	0.4	1
21	Computer Aided Decoration of Ceramic Tableware. Part II: Rapid tooling. <i>Computers and Graphics</i> , 1997 , 21, 655-672	1.8	1

20	Polymer-based stents produced by rapid prototyping and tooling. <i>International Journal of Product Development</i> , 2004 , 1, 172	0.7	1
19	Application of rapid prototyping and tooling in customised airway management. <i>Rapid Prototyping Journal</i> , 2005 , 11, 106-112	3.8	1
18	A novel technique for fabricating facial prosthetic model		1
17	Development of a Stereolithography File Interface with ArtCAM® <i>International Journal of Advanced Manufacturing Technology</i> , 1999 , 15, 119-126	3.2	1
16	Spinning of biomaterial microfibers for tendon tissue engineering 2009 ,		1
15	Process flow for designing functionally graded tissue engineering scaffolds 2009 ,		1
14	Lessons learnt from an LCA based re-design for manufacture of soap dispensers 2017 , 243-248		1
13	An Additive Manufacturing method based on xerography 2011 , 603-607		1
12	Additive Manufacturing and 3D Printing 2021 , 621-652		1
11	Systematic Engineering approach for optimization of multi-component alternative protein-fortified 3D printing food Ink. <i>Food Hydrocolloids</i> , 2022 , 131, 107803	10.6	1
10	Introduction to Tissue Engineering 2014 , 1-39		
9	A novel protein-based scaffold with macro- and micro-structural features for tissue engineering applications 2011 , 43-49		
8	Checking for machinability on surface patches. <i>International Journal of Advanced Manufacturing Technology</i> , 1998 , 14, 806-814	3.2	
7	Computer Aided Tissue Engineering Scaffolds 2021 , 77-94		
6	GENERATION OF THREE-DIMENSIONAL SHAPES IN CAD/CAM SYSTEMS USING ART-TO-PART TECHNIQUE 2003 , 1-33		
5	Integrating Solid Freeform Manufacturing with Relief Creation Software. <i>IFIP Advances in Information and Communication Technology</i> , 1995 , 876-883	0.5	
4	Rapid manufacturing of dinnerware 1997 , 310-319		
3	Designing with people for inclusive growth 2017 , 127-131		

2 Melt characterisation of M2 High Speed Steel in Selective Laser Melting **2013**, 279-284

1 Reversible 4D printing **2022**, 395-417