Swee Leong Sing

List of Publications by Year in Descending Order

56 papers	4,836 citations	30 h-index	64 g-index
64 ext. papers	6,224 ext. citations	6.4 avg, IF	6.62 L-index

#	Paper	IF	Citations
56	The role of block-type support structure design on the thermal field and deformation in components fabricated by Laser Powder Bed Fusion. *Additive Manufacturing*, **2022**, 51, 102644	6.1	3
55	Perspectives on Additive Manufacturing Enabled Beta-Titanium Alloys for Biomedical Applications.. *International Journal of Bioprinting*, **2022**, 8, 478	6.2	12
54	Preliminary Investigation on the Geometric Accuracy of 3D Printed Dental Implant Using a Monkey Maxilla Incisor Model.. *International Journal of Bioprinting*, **2022**, 8, 476	6.2	2
53	Use of Fumed Silica Nanostructured Additives in Selective Laser Melting and Fabrication of Steel Matrix Nanocomposites.. *Materials*, **2022**, 15,	3.5	4
52	Machine learning for 3D printed multi-materials tissue-mimicking anatomical models. *Materials and Design*, **2021**, 211, 110125	8.1	14
51	Fabrication and Characterization of 3D Bioprinted Triple-layered Human Alveolar Lung Models. *International Journal of Bioprinting*, **2021**, 7, 332	6.2	8
50	Perspectives of using machine learning in laser powder bed fusion for metal additive manufacturing. *Virtual and Physical Prototyping*, **2021**, 16, 372-386	10.1	39
49	Emerging metallic systems for additive manufacturing: In-situ alloying and multi-metal processing in laser powder bed fusion. *Progress in Materials Science*, **2021**, 119, 100795	42.2	67
48	A review on machine learning in 3D printing: applications, potential, and challenges. *Artificial Intelligence Review*, **2021**, 54, 63-94	9.7	102
47	Resolving the porosity-unmelted inclusion dilemma during in-situ alloying of Ti34Nb via laser powder bed fusion. *Acta Materialia*, **2021**, 204, 116522	8.4	32
46	3D Direct Printing of Silicone Meniscus Implant Using a Novel Heat-Cured Extrusion-Based Printer. *Polymers*, **2020**, 12,	4.5	17
45	Laser powder bed fusion of titanium-tantalum alloys: Compositions and designs for biomedical applications. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 108, 103775	4.1	59
44	Laser powder bed fusion for metal additive manufacturing: perspectives on recent developments. *Virtual and Physical Prototyping*, **2020**, 15, 359-370	10.1	81
43	Bioprinting of Multimaterials with Computer-aided Design/Computer-aided Manufacturing. *International Journal of Bioprinting*, **2020**, 6, 245	6.2	11
42	3D printing of metals in rapid prototyping of biomaterials: Techniques in additive manufacturing **2020**, 17-40		21
41	Microstructure evolution and mechanical property response via 3D printing parameter development of Al□c alloy. *Virtual and Physical Prototyping*, **2020**, 15, 120-129	10.1	76
40	Additive manufacturing of multiple materials by selective laser melting: Ti-alloy to stainless steel via a Cu-alloy interlayer. *Additive Manufacturing*, **2020**, 31, 100970	6.1	17

39	A review of 3D printing processes and materials for soft robotics. *Rapid Prototyping Journal*, **2020**, 26, 1345-1361	3.8	37
38	3D Printed Silicone Meniscus Implants: Influence of the 3D Printing Process on Properties of Silicone Implants. *Polymers*, **2020**, 12,	4.5	11
37	Process–Structure–Properties in Polymer Additive Manufacturing via Material Extrusion: A Review. *Critical Reviews in Solid State and Materials Sciences*, **2020**, 45, 113-133	10.1	133
36	Effect of solution heat treatment on microstructure and mechanical properties of laser powder bed fusion produced cobalt-28chromium-6molybdenum. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 769, 138511	5.3	56
35	Microstructure modelling for metallic additive manufacturing: a review. *Virtual and Physical Prototyping*, **2020**, 15, 87-105	10.1	93
34	Scaffolds for retinal repairs **2019**, 673-691		1
33	Selective Laser Melting of Ti42Nb Composite Powder and the Effect of Laser Re-Melting. *Key Engineering Materials*, **2019**, 801, 270-275	0.4	7
32	Particle-reinforced metal matrix nanocomposites fabricated by selective laser melting: A state of the art review. *Progress in Materials Science*, **2019**, 104, 330-379	42.2	188
31	Influence of re-melting on surface roughness and porosity of AlSi10Mg parts fabricated by selective laser melting. *Journal of Alloys and Compounds*, **2019**, 792, 574-581	5.7	146
30	Characterisation of Titanium-Tantalum Lattice Structures Fabricated by Selective Laser Melting. *Springer Theses*, **2019**, 87-95	0.1	
29	Statistical Modelling of Selective Laser Melting of Cellular Lattice Structures. *Springer Theses*, **2019**, 65-85	0.1	
28	Concepts of Selective Laser Melting for Orthopaedic Implants. *Springer Theses*, **2019**, 9-36	0.1	4
27	Silicone 3D Printing: Process Optimization, Product Biocompatibility, and Reliability of Silicone Meniscus Implants. *3D Printing and Additive Manufacturing*, **2019**, 6, 319-332	4	21
26	Introduction to Additive Manufacturing for Orthopaedic Implants. *Springer Theses*, **2019**, 1-8	0.1	1
25	Characterisation of Selective Laser Melted Titanium-Tantalum Alloy. *Springer Theses*, **2019**, 49-63	0.1	
24	Formation of Titanium-Tantalum Alloy Using Selective Laser Melting. *Springer Theses*, **2019**, 37-47	0.1	1
23	Selective Laser Melting of Novel Titanium-Tantalum Alloy as Orthopaedic Biomaterial. *Springer Theses*, **2019**,	0.1	2
22	Selective laser melting of lattice structures: A statistical approach to manufacturability and mechanical behavior. *Robotics and Computer-Integrated Manufacturing*, **2018**, 49, 170-180	9.2	174

21	Crack monitoring and failure investigation on inkjet printed sandwich structures under quasi-static indentation test. *Materials and Design*, **2018**, 137, 140-151	8.1	32
20	Characterization of mechanical properties and fracture mode of additively manufactured carbon fiber and glass fiber reinforced thermoplastics. *Materials and Design*, **2018**, 137, 79-89	8.1	238
19	Selective laser melting of titanium alloy with 50 wt% tantalum: Effect of laser process parameters on part quality. *International Journal of Refractory Metals and Hard Materials*, **2018**, 77, 120-127	4.1	93
18	3D bioprinting processes: A perspective on classification and terminology. *International Journal of Bioprinting*, **2018**, 4, 151	6.2	69
17	Material jetting additive manufacturing: An experimental study using designed metrological benchmarks. *Precision Engineering*, **2017**, 50, 275-285	2.9	103
16	Direct selective laser sintering and melting of ceramics: a review. *Rapid Prototyping Journal*, **2017**, 23, 611-623	3.8	187
15	Additive manufacturing in unmanned aerial vehicles (UAVs): Challenges and potential. *Aerospace Science and Technology*, **2017**, 63, 140-151	4.9	168
14	Investigation of Quasi-Static Indentation Response of Inkjet Printed Sandwich Structures under Various Indenter Geometries. *Materials*, **2017**, 10,	3.5	31
13	Fabrication of titanium based biphasic scaffold using selective laser melting and collagen immersion. *International Journal of Bioprinting*, **2017**, 3,	6.2	30
12	Fabrication of titanium based biphasic scaffold using selective laser melting and collagen immersion. *International Journal of Bioprinting*, **2017**, 3, 007	6.2	2
11	Laser and electron-beam powder-bed additive manufacturing of metallic implants: A review on processes, materials and designs. *Journal of Orthopaedic Research*, **2016**, 34, 369-85	3.8	489
10	Characterization of Titanium Lattice Structures Fabricated by Selective Laser Melting Using an Adapted Compressive Test Method. *Experimental Mechanics*, **2016**, 56, 735-748	2.6	87
9	Selective laser melting of titanium alloy with 50 wt% tantalum: Microstructure and mechanical properties. *Journal of Alloys and Compounds*, **2016**, 660, 461-470	5.7	238
8	Bioprinting in cardiovascular tissue engineering: a review. *International Journal of Bioprinting*, **2016**, 2,	6.2	26
7	Manufacturability and mechanical testing considerations of metallic scaffolds fabricated using selective laser melting: a review **2016**,		5
6	Interfacial characterization of SLM parts in multi-material processing: Intermetallic phase formation between AlSi10Mg and C18400 copper alloy. *Materials Characterization*, **2015**, 107, 220-227	3.9	115
5	Numerical investigation and an effective modelling on the Selective Laser Melting (SLM) process with aluminium alloy 6061. *International Journal of Heat and Mass Transfer*, **2015**, 80, 288-300	4.9	256
4	Review of selective laser melting: Materials and applications. *Applied Physics Reviews*, **2015**, 2, 041101	17.3	1001

List of Publications

3	Selective Laser Melting of aluminium alloy using a uniform beam profile. *Virtual and Physical Prototyping*, **2014**, 9, 11-16	10.1	47
2	Interfacial characterization of SLM parts in multi-material processing: Metallurgical diffusion between 316L stainless steel and C18400 copper alloy. *Materials Characterization*, **2014**, 94, 116-125	3.9	174
1	Classical Lamination Theory applied on parts produced by Selective Laser Melting **2013**, 77-82		1