

# Sankhya Mohanty

## List of Publications by Year in descending order

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34  
papers

622  
citations

840776

11  
h-index

610901

24  
g-index

34  
all docs

34  
docs citations

34  
times ranked

558  
citing authors

#	ARTICLE	IF	CITATIONS
1	Increasing the productivity of selective laser sintering workflow by integrating cooling channels in the printing powder matrix. CIRP Annals - Manufacturing Technology, 2022, , .	3.6	0
2	Numerical Modelling of Humidity Behaviour in the Electronics Housing. , 2022, , .		0
3	Thermo-mechanical modelling of stress relief heat treatments after laser-based powder bed fusion. Additive Manufacturing, 2021, 38, 101818.	3.0	11
4	Characterization of Geometry and Surface Texture of AlSi10Mg Laser Powder Bed Fusion Channels Using X-ray Computed Tomography. Applied Sciences (Switzerland), 2021, 11, 4304.	2.5	3
5	Multi-metal additive manufacturing process chain for optical quality mold generation. Journal of Materials Processing Technology, 2020, 277, 116451.	6.3	13
6	On the drying process of molded pulp products: Experiments and numerical modelling. Drying Technology, 2020, 38, 1644-1662.	3.1	7
7	An Industry 4.0 framework for tooling production using metal additive manufacturing-based first-time-right smart manufacturing system. Procedia CIRP, 2020, 93, 32-37.	1.9	21
8	Realistic design of laser powder bed fusion channels. Rapid Prototyping Journal, 2020, 26, 1827-1836.	3.2	4
9	Part-scale thermo-mechanical modelling of distortions in Laser Powder Bed Fusion " Analysis of the sequential flash heating method with experimental validation. Additive Manufacturing, 2020, 36, 101508.	3.0	20
10	Investigation of the roughness variation along the length of LPBF manufactured straight channels. Nondestructive Testing and Evaluation, 2020, 35, 304-314.	2.1	9
11	Numerical Investigation into the Effect of Different Parameters on the Geometrical Precision in the Laser-Based Powder Bed Fusion Process Chain. Applied Sciences (Switzerland), 2020, 10, 3414.	2.5	5
12	Microstructural modelling of above $\hat{1}^2$ -transus heat treatment of additively manufactured Ti-6Al-4V using cellular automata. Materials Today Communications, 2020, 24, 101031.	1.9	1
13	Laser polishing of additively manufactured Ti-6Al-4V: Microstructure evolution and material properties. Journal of Laser Applications, 2020, 32, .	1.7	10
14	Keyhole-induced porosities in Laser-based Powder Bed Fusion (L-PBF) of Ti6Al4V: High-fidelity modelling and experimental validation. Additive Manufacturing, 2019, 30, 100835.	3.0	144
15	Benchmarking of Laser Powder Bed Fusion Machines. Journal of Manufacturing and Materials Processing, 2019, 3, 85.	2.2	20
16	Multiphysics modelling of lack-of-fusion voids formation and evolution in IN718 made by multi-track/multi-layer L-PBF. International Journal of Heat and Mass Transfer, 2019, 139, 95-114.	4.8	135
17	A systematic investigation of the effects of process parameters on heat and fluid flow and metallurgical conditions during laser-based powder bed fusion of Ti6Al4V alloy. International Journal of Heat and Mass Transfer, 2019, 139, 213-230.	4.8	64
18	Thermo-fluid-metallurgical modelling of the selective laser melting process chain. Procedia CIRP, 2018, 74, 87-91.	1.9	20

#	ARTICLE	IF	CITATIONS
19	Multiphysics modelling of manufacturing processes: A review. <i>Advances in Mechanical Engineering</i> , 2018, 10, 168781401876618.	1.6	25
20	Laser additive manufacturing of multimaterial tool inserts: a simulation-based optimization study. <i>Proceedings of SPIE</i> , 2017, , .	0.8	6
21	Mathematical modelling of moisture transport into an electronic enclosure under non-isothermal conditions. <i>Microelectronics Reliability</i> , 2017, 79, 526-532.	1.7	3
22	Multi-objective optimization of cellular scanning strategy in selective laser melting. , 2017, , .		4
23	Analysis of moisture transport between connected enclosures under a forced thermal gradient. , 2016, , .		3
24	Optimization of electronic enclosure design for thermal and moisture management using calibrated models of progressive complexity. , 2016, , .		0
25	Semi-empirical prediction of moisture build-up in an electronic enclosure using analysis of variance (ANOVA). , 2016, , .		3
26	Reducing residual stresses and deformations in selective laser melting through multi-level multi-scale optimization of cellular scanning strategy. <i>Proceedings of SPIE</i> , 2016, , .	0.8	3
27	Improving accuracy of overhanging structures for selective laser melting through reliability characterization of single track formation on thick powder beds. , 2016, , .		2
28	Estimation of Average Spot Diameter and Bead Penetration Using Process Model During Electron Beam Welding of AISI 304 Stainless Steel. <i>Transactions of the Indian Institute of Metals</i> , 2015, 68, 935-941.	1.5	9
29	Cellular scanning strategy for selective laser melting: Generating reliable, optimized scanning paths and processing parameters. <i>Proceedings of SPIE</i> , 2015, , .	0.8	3
30	Effect of uncertainty in processing parameters on the microstructure of single melt tracks formed by selective laser melting. , 2014, , .		0
31	Cellular Scanning Strategy for Selective Laser Melting: Capturing Thermal Trends with a Low-Fidelity, Pseudo-Analytical Model. <i>Mathematical Problems in Engineering</i> , 2014, 2014, 1-14.	1.1	24
32	Numerical Model based Reliability Estimation of Selective Laser Melting Process. <i>Physics Procedia</i> , 2014, 56, 379-389.	1.2	29
33	Cellular scanning strategy for selective laser melting: evolution of optimal grid-based scanning path and parametric approach to thermal homogeneity. <i>Proceedings of SPIE</i> , 2013, , .	0.8	11
34	A New Model for Keyhole Mode Laser Welding Using FLUENT. <i>Transactions of the Indian Institute of Metals</i> , 2012, 65, 459-466.	1.5	10