

# Wessel W Wits

## List of Publications by Year in descending order

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Version: 2024-02-01

53  
papers

1,425  
citations

623188

14  
h-index

344852

36  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1298  
citing authors

#	ARTICLE	IF	CITATIONS
1	Additive manufacturing of Ti-6Al-4V parts through laser metal deposition (LMD): Process, microstructure, and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2019, 804, 163-191.	2.8	214
2	Powder Bed Fusion of nickel-based superalloys: A review. <i>International Journal of Machine Tools and Manufacture</i> , 2021, 165, 103729.	6.2	207
3	The utilization of selective laser melting technology on heat transfer devices for thermal energy conversion applications: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 91, 420-442.	8.2	183
4	Porosity testing methods for the quality assessment of selective laser melted parts. <i>CIRP Annals - Manufacturing Technology</i> , 2016, 65, 201-204.	1.7	134
5	Metal 3D-printed wick structures for heat pipe application: Capillary performance analysis. <i>Applied Thermal Engineering</i> , 2018, 143, 403-414.	3.0	101
6	How Additive Manufacturing Enables more Sustainable End-user Maintenance, Repair and Overhaul (MRO) Strategies. <i>Procedia CIRP</i> , 2016, 40, 693-698.	1.0	68
7	Design for Additive Manufacturing: Automated Build Orientation Selection and Optimization. <i>Procedia CIRP</i> , 2016, 55, 128-133.	1.0	67
8	Phase change heat transfer characteristics of an additively manufactured wick for heat pipe applications. <i>Applied Thermal Engineering</i> , 2020, 168, 114890.	3.0	45
9	Metal Additive Manufacturing of a High-pressure Micro-pump. <i>Procedia CIRP</i> , 2013, 7, 252-257.	1.0	34
10	Laser Beam Welding of Titanium Additive Manufactured Parts. <i>Procedia CIRP</i> , 2015, 28, 70-75.	1.0	31
11	Graded structures by multi-material mixing in laser powder bed fusion. <i>CIRP Annals - Manufacturing Technology</i> , 2021, 70, 159-162.	1.7	25
12	Integrated Design and Manufacturing of Flat Miniature Heat Pipes Using Printed Circuit Board Technology. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2010, 33, 398-408.	1.4	22
13	Single scan vector prediction in selective laser melting. <i>Additive Manufacturing</i> , 2016, 9, 1-6.	1.7	22
14	Method to determine thermoelastic material properties of constituent and copper-patterned layers of multilayer printed circuit boards. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 4900-4914.	1.1	17
15	Pulsed mode selective laser melting of porous structures: Structural and thermophysical characterization. <i>Additive Manufacturing</i> , 2020, 35, 101263.	1.7	16
16	Porous materials additively manufactured at low energy: Single-layer manufacturing and characterization. <i>Materials and Design</i> , 2020, 191, 108654.	3.3	13
17	An investigation of porous structure characteristics of heat pipes made by additive manufacturing. , 2017, , .		12
18	Laser powder bed fusion of a Magnesium-SiC metal matrix composite. <i>Procedia CIRP</i> , 2019, 81, 506-511.	1.0	12

#	ARTICLE	IF	CITATIONS
19	Experimental Analysis and Wear Prediction Model for Unfilled Polymerâ€“Polymer Sliding Contacts. Tribology Transactions, 2019, 62, 176-188.	1.1	12
20	Experimental Investigation of a Flat-Plate Closed-Loop Pulsating Heat Pipe. Journal of Heat Transfer, 2019, 141, .	1.2	12
21	Modeling and Validating the Transient Behavior of Flat Miniature Heat Pipes Manufactured in Multilayer Printed Circuit Board Technology. Journal of Heat Transfer, 2011, 133, .	1.2	11
22	Patent Circumvention Strategy Using TRIZ-based Design-around Approaches. Procedia Engineering, 2015, 131, 798-806.	1.2	10
23	Numerical and experimental investigation of a counter-current two-phase thermosyphon with cascading pools. Applied Thermal Engineering, 2016, 99, 133-146.	3.0	10
24	Modelling and experimental investigation of a thermally driven self-oscillating pump. Applied Thermal Engineering, 2017, 126, 1126-1133.	3.0	10
25	Modelling and performance of heat pipes with long evaporator sections. Heat and Mass Transfer, 2017, 53, 3341-3351.	1.2	10
26	Modeling Printed Circuit Board Curvature in Relation to Manufacturing Process Steps. Procedia CIRP, 2013, 9, 55-60.	1.0	9
27	Freeform-Optimized Shapes for Natural-Convection Cooling. , 2018, , .		9
28	Thermal Management through In-Board Heat Pipes Manufactured using Printed Circuit Board Multilayer Technology. Electronics Manufacturing Technology Symposium (IEMT), IEEE/CPMT International, 2006, , .	0.0	8
29	Novel cooling strategy for electronic packages: Directly injected cooling. CIRP Journal of Manufacturing Science and Technology, 2009, 1, 142-147.	2.3	8
30	Improving system performance through an integrated design approach. CIRP Annals - Manufacturing Technology, 2011, 60, 187-190.	1.7	8
31	Experimental Performance of a 3D-Printed Hybrid Heat Pipe-Thermosyphon for Cooling of Power Electronics. , 2018, , .		8
32	Heat Pipe Array for Planar Cooling of Rotating Radar Systems. Journal of Heat Transfer, 2019, 141, .	1.2	8
33	The role of particles flow characteristics in the performance of cold spray nozzles. CIRP Annals - Manufacturing Technology, 2020, 69, 189-192.	1.7	8
34	A Testpart for Interdisciplinary Analyses in Micro Production Engineering. Procedia CIRP, 2015, 28, 106-112.	1.0	7
35	Enabling Lean Design Through Computer Aided Synthesis: The Injection Moulding Cooling Case. Procedia CIRP, 2015, 37, 260-264.	1.0	7
36	TRIZ based interface conflict resolving strategies for modular product architectures. Procedia Engineering, 2011, 9, 30-39.	1.2	6

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37	Introducing Trimming and Function Ranking to SolidWorks Based on Function Analysis. Procedia Engineering, 2015, 131, 184-193.	1.2	6
38	Knowledge Structuring and Simulation Modeling for Product Development. Procedia CIRP, 2012, 2, 4-9.	1.0	5
39	Invention software support by integrating function and mathematical modeling. Chemical Engineering Research and Design, 2015, 103, 32-39.	2.7	5
40	An Information Model for Product Development: A Case Study at PHILIPS Shavers. Procedia CIRP, 2013, 9, 97-102.	1.0	4
41	Improving Thermal Contact Conductance from Electronics Board to Rack Infrastructure. , 2018, , .		3
42	A geometrical model for managing surface productivity of U-shaped assembly lines. CIRP Annals - Manufacturing Technology, 2018, 67, 479-482.	1.7	3
43	The role of scan strategies in fatigue performance for laser powder bed fusion. CIRP Annals - Manufacturing Technology, 2022, 71, 185-188.	1.7	3
44	Advances in integrated heat pipe technology for printed circuit boards. , 2010, , .		2
45	An experimental study towards the practical application of closed-loop flat-plate pulsating heat pipes. , 2017, , .		2
46	Reducing design complexity of multidisciplinary domain integrated products: a case study. , 2008, , 149-154.		2
47	Towards Multidisciplinary Support Tools for Innovation Tasks. Procedia CIRP, 2012, 2, 16-21.	1.0	1
48	Method to explore technology innovation fully exploiting in-house capabilities. CIRP Annals - Manufacturing Technology, 2014, 63, 201-204.	1.7	1
49	Physics in Design: Real-time Numerical Simulation Integrated into the CAD Environment. Procedia CIRP, 2017, 60, 98-103.	1.0	1
50	Pin Fin Heat Sink Optimization for Natural-Convection Cooling. , 2019, , .		1
51	Understanding Thermal Interface Conditions of Chip-on-Board LED Light Sources. , 2020, , .		1
52	Design tool for dynamic loading conditions: a coupled multi-level approach. Procedia CIRP, 2021, 100, 337-342.	1.0	0
53	Utilizing Additive Manufacturing to Enhance Two-Phase Heat Transfer Devices. , 2021, , .		0