

# Steffen G Scholz

## List of Publications by Year in descending order

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41  
papers

552  
citations

687363

13  
h-index

677142

22  
g-index

48  
all docs

48  
docs citations

48  
times ranked

548  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Process Parameters on the Generated Surface Roughness of Down-Facing Surfaces in Selective Laser Melting. Applied Sciences (Switzerland), 2019, 9, 1256.	2.5	109
2	Experiment-Based Process Modeling and Optimization for High-Quality and Resource-Efficient FFF 3D Printing. Applied Sciences (Switzerland), 2020, 10, 2899.	2.5	61
3	Palladium or palladium hydride nanoparticles synthesized by laser ablation of a bulk palladium target in liquids. Journal of Colloid and Interface Science, 2013, 402, 307-311.	9.4	32
4	A modular flexible scalable and reconfigurable system for manufacturing of Microsystems based on additive manufacturing and e-printing. Robotics and Computer-Integrated Manufacturing, 2016, 40, 14-23.	9.9	29
5	Manufacturing routes for replicating micro and nano surface structures with bio-mimetic applications. CIRP Journal of Manufacturing Science and Technology, 2011, 4, 347-356.	4.5	28
6	Dimensional Errors Due to Overhanging Features in Laser Powder Bed Fusion Parts Made of Ti-6Al-4V. Applied Sciences (Switzerland), 2020, 10, 2416.	2.5	25
7	Human Activity Recognition Using K-Nearest Neighbor Machine Learning Algorithm. Smart Innovation, Systems and Technologies, 2022, , 304-313.	0.6	23
8	Industry 4.0-Oriented Deep Learning Models for Human Activity Recognition. IEEE Access, 2021, 9, 150508-150521.	4.2	23
9	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
10	Eight Weeks Later—The Unprecedented Rise of 3D Printing during the COVID-19 Pandemic—A Case Study, Lessons Learned, and Implications on the Future of Global Decentralized Manufacturing. Applied Sciences (Switzerland), 2020, 10, 4135.	2.5	19
11	Design and validation of a novel master-making process chain for organic and large area electronics on flexible substrates. Microelectronic Engineering, 2010, 87, 2139-2145.	2.4	18
12	Advances in microcellular injection moulding. Journal of Cellular Plastics, 2020, 56, 646-674.	2.4	18
13	Characterisation of demoulding parameters in micro-injection moulding. Microsystem Technologies, 2015, 21, 1677-1690.	2.0	17
14	Process chain for serial manufacture of 3D micro- and nano-scale structures. CIRP Journal of Manufacturing Science and Technology, 2011, 4, 340-346.	4.5	13
15	Effect of Process Parameters on the Performance of Drop-On-Demand 3D Inkjet Printing: Geometrical-Based Modeling and Experimental Validation. Polymers, 2022, 14, 2557.	4.5	12
16	Replication of Overmolded Orthopedic Implants with a Functionalized Thin Layer of Biodegradable Polymer. Polymers, 2018, 10, 707.	4.5	11
17	Additive Manufacturing in the Automotive Industry and the Potential for Driving the Green and Electric Transition. Smart Innovation, Systems and Technologies, 2022, , 339-346.	0.6	11
18	Down-facing surfaces in laser powder bed fusion of Ti6Al4V: Effect of dross formation on dimensional accuracy and surface texture. Additive Manufacturing, 2021, 46, 102148.	3.0	11

#	ARTICLE	IF	CITATIONS
19	In-Process Digital Monitoring of Additive Manufacturing: Proposed Machine Learning Approach and Potential Implications on Sustainability. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 297-306.	0.6	10
20	Digital Detection and Correction of Errors in As-built Parts: a Step Towards Automated Quality Control of Additive Manufacturing. , 2018, , .		10
21	On the Assessment of Thermo-mechanical Degradability of Multi-recycled ABS Polymer for 3D Printing Applications. <i>Smart Innovation, Systems and Technologies</i> , 2019, , 363-373.	0.6	8
22	Industrial Internet of Things Solution for Real-Time Monitoring of the Additive Manufacturing Process. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 355-365.	0.6	6
23	Elucidation of droplet formation in laser powder bed fusion at down-facing surfaces: Phenomenon-oriented multiphysics simulation and experimental validation. <i>Additive Manufacturing</i> , 2022, 50, 102551.	3.0	6
24	Multiobjective Optimization of Laser Polishing of Additively Manufactured Ti-6Al-4V Parts for Minimum Surface Roughness and Heat-Affected Zone. <i>Materials</i> , 2022, 15, 3323.	2.9	5
25	Development of Correction Factors for FDM 3D Printers: Experimental Investigation and ANN Modelling. <i>Smart Innovation, Systems and Technologies</i> , 2022, , 314-326.	0.6	4
26	Total Cost of Ownership for Different State of the Art FDM Machines (3D Printers). <i>Smart Innovation, Systems and Technologies</i> , 2019, , 351-361.	0.6	3
27	Detection and Visual Inspection of Highly Obfuscated Plagiarisms. , 2016, , .		2
28	A Knowledge-Based Decision Support System for Micro and Nano Manufacturing Process Chains. , 2018, , .		2
29	Stakeholder-Driven Conceptualization of Open Innovation Approaches in the SYNERGY Project. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 307-317.	0.6	2
30	Laser-assisted surface engineering of thin film electrode materials for lithium-ion batteries. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1365, 1.	0.1	1
31	Nanosecond and picosecond laser structuring of electrode materials for lithium-ion batteries. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1388, 1.	0.1	1
32	2N Period submicron grating at the inner wall of a metal cylinder. <i>Microsystem Technologies</i> , 2014, 20, 1833-1837.	2.0	1
33	Safe By Design in 3D Printing. <i>Smart Innovation, Systems and Technologies</i> , 2019, , 341-350.	0.6	1
34	Moulded Interconnect Devices. <i>Springer Tracts in Mechanical Engineering</i> , 2017, , 175-196.	0.3	1
35	A modular flexible scalable and reconfigurable system for manufacturing of microsystems based on additive manufacturing and e-printing. , 2014, , .		1
36	An Additive Manufacturing and E-Printing Based Approach for Flexible Scalable Manufacturing of Microsystems. , 2013, , .		1

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37	Software Toolkit for Visualization and Process Selection for Modular Scalable Manufacturing of 3D Micro-Devices. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 160-172.	0.6	1
38	Laser milling: Tool making capabilities. , 2011, , .		0
39	Laser structuring of metallic mold inserts by using $\hat{1}$ / <sub>4</sub> s, ns, and ps-laser ablation. <i>Proceedings of SPIE</i> , 2012, , .	0.8	0
40	Process and parameter optimisation for micro structuring of 3D freeform metallic surfaces: a comparative study of short-pulse (nanosecond) and ultrafast (picosecond, femtosecond) laser ablation. , 2017, , .		0
41	Part Tailoring in Metal-Additive Manufacturing: A Step towards Functionally Graded Customized Stainless-Steel Components Using Laser Powder Bed Fusion. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6193.	2.5	0