Ahmed Elkaseer

List of Publications by Year
in descending order

52 papers	883 citations	516710 16 h-index	526287 27 g-index
57 all docs	57 docs citations	57 times ranked	745 citing authors

#	Article	IF	Citations
1	Human Activity Recognition Using K-Nearest Neighbor Machine Learning Algorithm. Smart Innovation, Systems and Technologies, 2022, , 304-313.	0.6	23
2	Development of Correction Factors for FDM 3D Printers: Experimental Investigation and ANN Modelling. Smart Innovation, Systems and Technologies, 2022, , 314-326.	0.6	4
3	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
4	Elucidation of dross formation in laser powder bed fusion at down-facing surfaces: Phenomenon-oriented multiphysics simulation and experimental validation. Additive Manufacturing, 2022, 50, 102551.	3.0	6
5	A Closer Look at Precision Hard Turning of AISI4340: Multi-Objective Optimization for Simultaneous Low Surface Roughness and High Productivity. Materials, 2022, 15, 2106.	2.9	10
6	Multiobjective Optimization of Laser Polishing of Additively Manufactured Ti-6Al-4V Parts for Minimum Surface Roughness and Heat-Affected Zone. Materials, 2022, 15, 3323.	2.9	5
7	Part Tailoring in Metal-Additive Manufacturing: A Step towards Functionally Graded Customized Stainless-Steel Components Using Laser Powder Bed Fusion. Applied Sciences (Switzerland), 2022, 12, 6193.	2.5	0
8	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
9	In-Process Digital Monitoring of Additive Manufacturing: Proposed Machine Learning Approach and Potential Implications on Sustainability. Smart Innovation, Systems and Technologies, 2021, , 297-306.	0.6	10
10	Effect of Different Cooling Strategies on Surface Quality and Power Consumption in Finishing End Milling of Stainless Steel 316. Materials, 2021, 14, 903.	2.9	16
11	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
12	Development of an Efficient Prediction Model for Optimal Design of Serial Production Lines. IEEE Access, 2021, 9, 61807-61818.	4.2	3
13	Fundamental Investigation into Tool Wear and Surface Quality in High-Speed Machining of Ti6Al4V Alloy. Materials, 2021, 14, 7128.	2.9	10
14	Industry 4.0-Oriented Deep Learning Models for Human Activity Recognition. IEEE Access, 2021, 9, 150508-150521.	4.2	23
15	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
16	Comparative Evaluation of Surface Quality, Tool Wear, and Specific Cutting Energy for Wiper and Conventional Carbide Inserts in Hard Turning of AISI 4340 Alloy Steel. Materials, 2020, 13, 5233.	2.9	6
17	Towards an Adaptive Design of Quality, Productivity and Economic Aspects When Machining AISI 4340 Steel With Wiper Inserts. IEEE Access, 2020, 8, 159206-159219.	4.2	11
18	Precision Hard Turning of Ti6Al4V Using Polycrystalline Diamond Inserts: Surface Quality, Cutting Temperature and Productivity in Conventional and High-Speed Machining. Materials, 2020, 13, 5677.	2.9	8

#	Article	IF	Citations
19	On the Assessment of Surface Quality and Productivity Aspects in Precision Hard Turning of AISI 4340 Steel Alloy: Relative Performance of Wiper vs. Conventional Inserts. Materials, 2020, 13, 2036.	2.9	16
20	Principles and Characteristics of Different EDM Processes in Machining Tool and Die Steels. Applied Sciences (Switzerland), 2020, 10, 2082.	2.5	59
21	Experiment-Based Process Modeling and Optimization for High-Quality and Resource-Efficient FFF 3D Printing. Applied Sciences (Switzerland), 2020, 10, 2899.	2.5	61
22	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
23	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
24	Software Toolkit for Visualization and Process Selection for Modular Scalable Manufacturing of 3D Micro-Devices. Advances in Intelligent Systems and Computing, 2020, , 160-172.	0.6	1
25	Modelling and experimental validation of surface roughness in precision turning of dual-phase materials considering process uncertainties. International Journal on Interactive Design and Manufacturing, 2019, 13, 59-74.	2.2	5
26	Total Cost of Ownership for Different State of the Art FDM Machines (3D Printers). Smart Innovation, Systems and Technologies, 2019, , 351-361.	0.6	3
27	On the Assessment of Thermo-mechanical Degradability of Multi-recycled ABS Polymer for 3D Printing Applications. Smart Innovation, Systems and Technologies, 2019, , 363-373.	0.6	8
28	FEM-Based Study of Precision Hard Turning of Stainless Steel 316L. Materials, 2019, 12, 2522.	2.9	24
29	Tailored Chip Breaker Development for Polycrystalline Diamond Inserts: FEM-based Design and Validation. Applied Sciences (Switzerland), 2019, 9, 4117.	2.5	11
30	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
31	Advanced Electric Discharge Machining of Stainless Steels: Assessment of the State of the Art, Gaps and Future Prospect. Materials, 2019, 12, 907.	2.9	75
32	Self-Flushing in EDM Drilling of Ti6Al4V Using Rotating Shaped Electrodes. Materials, 2019, 12, 989.	2.9	18
33	Industrial Internet of Things Solution for Real-Time Monitoring of the Additive Manufacturing Process. Advances in Intelligent Systems and Computing, 2019, , 355-365.	0.6	6
34	Abrasive jet drilling of glass sheets: Effect and optimisation of process parameters on kerf taper. Advances in Mechanical Engineering, 2018, 10, 168781401774843.	1.6	17
35	Electric discharge machining of titanium and its alloys: review. International Journal of Advanced Manufacturing Technology, 2018, 96, 1319-1339.	3.0	89
36	Material microstructure effects in micro-endmilling of Cu99.9E. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 1143-1155.	2.4	14

#	Article	IF	Citations
37	A Knowledge-Based Decision Support System for Micro and Nano Manufacturing Process Chains. , 2018, , .		2
38	Smart modular reconfigurable fully-digital manufacturing system with a knowledge-based framework: example of a fabrication of microfluidic chips. , 2018, , .		8
39	Wear behaviour of grey cast iron with the presence of copper addition. Advances in Mechanical Engineering, 2018, 10, 168781401880474.	1.6	14
40	Replication of Overmolded Orthopedic Implants with a Functionalized Thin Layer of Biodegradable Polymer. Polymers, 2018, 10, 707.	4.5	11
41	Digital Detection and Correction of Errors in As-built Parts: a Step Towards Automated Quality Control of Additive Manufacturing. , 2018, , .		10
42	On the Development of a Chip Breaker in a Metal-Matrix Polycrystalline Diamond Insert: Finite Element Based Design With ns-Laser Ablation and Machining Verification. Journal of Micro and Nano-Manufacturing, 2017, 5, .	0.7	7
43	Abrasive jet machining of glass: Experimental investigation with artificial neural network modelling and genetic algorithm optimisation. Cogent Engineering, 2016, 3, 1276513.	2.2	16
44	Iterative surface warping to shape craters in micro-EDM simulation. Engineering With Computers, 2016, 32, 517-531.	6.1	6
45	On the Development of a Chip breaker in Metal-Matrix PCD Insert. , 2016, , .		0
46	Geometric-Based Modelling of Micro-EDM: Model Development and Simulation Study. , 2015, , .		0
47	Development and experimental validation of an analytical model to predict the demoulding force in hot embossing. Journal of Micromechanics and Microengineering, 2014, 24, 055007.	2.6	20
48	Tool Wear in Micro-Endmilling: Material Microstructure Effects, Modeling, and Experimental Validation. Journal of Micro and Nano-Manufacturing, 2014, 2, .	0.7	9
49	Modelling the surface generation process during AFM probe-based machining: simulation and experimental validation. Surface Topography: Metrology and Properties, 2014, 2, 025001.	1.6	10
50	Micro-EDM Numerical Simulation and Experimental Validation. , 2013, , .		0
51	Surface Roughness Prediction in AFM Probe-Based Machining. , 2013, , .		0
52	Modeling the Material Microstructure Effects on the Surface Generation Process in Microendmilling of Dual-Phase Materials. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2012, 134, .	2.2	15