

Szymon Wojciechowski

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

2,655
citations

159358

30
h-index

197535

49
g-index

69
all docs

69
docs citations

69
times ranked

1541
citing authors

#	ARTICLE	IF	CITATIONS
1	Artificial intelligence systems for tool condition monitoring in machining: analysis and critical review. <i>Journal of Intelligent Manufacturing</i> , 2023, 34, 2079-2121.	4.4	90
2	Synthesis and characterization of mechanically alloyed nanostructured ternary titanium based alloy for bio-medical applications. <i>Journal of Materials Research and Technology</i> , 2022, 16, 88-101.	2.6	20
3	On the Microstructure, Microhardness and Wear Behavior of Gray Cast Iron Surface Layer after Laser Strengthening. <i>Materials</i> , 2022, 15, 1075.	1.3	5
4	Tool wear, surface roughness, cutting temperature and chips morphology evaluation of Al/TiN coated carbide cutting tools in milling of Cu/Ba/CrC based ceramic matrix composites. <i>Journal of Materials Research and Technology</i> , 2022, 16, 1243-1259.	2.6	55
5	Productivity Enhancement by Prediction of Liquid Steel Breakout during Continuous Casting Process in Manufacturing of Steel Slabs in Steel Plant Using Artificial Neural Network with Backpropagation Algorithms. <i>Materials</i> , 2022, 15, 670.	1.3	12
6	Effect of alumina oxide nano-powder on the wear behaviour of CrN coating against cylinder liner using response surface methodology: processing and characterizations. <i>Journal of Materials Research and Technology</i> , 2022, 16, 1102-1113.	2.6	13
7	Estimation of Minimum Uncut Chip Thickness during Precision and Micro-Machining Processes of Various Materials – A Critical Review. <i>Materials</i> , 2022, 15, 59.	1.3	14
8	In Situ Micro-Observation of Surface Roughness and Fracture Mechanism in Metal Microforming of Thin Copper Sheets with Newly Developed Compact Testing Apparatus. <i>Materials</i> , 2022, 15, 1368.	1.3	20
9	Development of an Oxide Layer on Al 6061 Using Plasma Arc Electrolytic Oxidation in Silicate-Based Electrolyte. <i>Materials</i> , 2022, 15, 1616.	1.3	2
10	Estimation, optimization and analysis based investigation of the energy consumption in machinability of ceramic-based metal matrix composite materials. <i>Journal of Materials Research and Technology</i> , 2022, 17, 2987-2998.	2.6	31
11	Effect of mixing method and particle size on hardness and compressive strength of aluminium based metal matrix composite prepared through powder metallurgy route. <i>Journal of Materials Research and Technology</i> , 2022, 18, 282-292.	2.6	46
12	Experimental investigations and prediction of WEDMed surface of nitinol SMA using SinGAN and DenseNet deep learning model. <i>Journal of Materials Research and Technology</i> , 2022, 18, 325-337.	2.6	26
13	Investigation of machinability of Ti/B-SiCp reinforced Cu hybrid composites in dry turning. <i>Journal of Materials Research and Technology</i> , 2022, 18, 1474-1487.	2.6	12
14	Experimental investigation on the effect of dry and multi-jet cryogenic cooling on the machinability and hole accuracy of CFRP composites. <i>Journal of Materials Research and Technology</i> , 2022, 18, 1772-1783.	2.6	17
15	Material independent effectiveness of workpiece vibration in $\frac{1}{4}$ -EDM drilling. <i>Journal of Materials Research and Technology</i> , 2022, 18, 531-546.	2.6	10
16	Application of Generalized Regression Neural Network and Gaussian Process Regression for Modelling Hybrid Micro-Electric Discharge Machining: A Comparative Study. <i>Processes</i> , 2022, 10, 755.	1.3	8
17	On the effectiveness of Ni alloy-bronze composite lattice structures used in slide bearings operated under heavy loads. <i>Journal of Materials Research and Technology</i> , 2022, 19, 2235-2246.	2.6	1
18	Resource saving by optimization and machining environments for sustainable manufacturing: A review and future prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 166, 112660.	8.2	68

#	ARTICLE	IF	CITATIONS
19	Geometric Specification of Non-Circular Pulleys Made with Various Additive Manufacturing Techniques. <i>Materials</i> , 2021, 14, 1682.	1.3	12
20	Improvement of machinability of Ti and its alloys using cooling-lubrication techniques: a review and future prospect. <i>Journal of Materials Research and Technology</i> , 2021, 11, 719-753.	2.6	154
21	High-Performance Face Milling of 42CrMo4 Steel: Influence of Entering Angle on the Measured Surface Roughness, Cutting Force and Vibration Amplitude. <i>Materials</i> , 2021, 14, 2196.	1.3	14
22	Optimization of FFF Process Parameters by Naked Mole-Rat Algorithms with Enhanced Exploration and Exploitation Capabilities. <i>Polymers</i> , 2021, 13, 1702.	2.0	52
23	Experimental investigation of selective laser melting parameters for higher surface quality and microhardness properties: taguchi and super ranking concept approaches. <i>Journal of Materials Research and Technology</i> , 2021, 14, 2586-2600.	2.6	22
24	Effect of ball-milling process parameters on mechanical properties of Al/Al ₂ O ₃ /collagen powder composite using statistical approach. <i>Journal of Materials Research and Technology</i> , 2021, 15, 2918-2932.	2.6	34
25	Image Processing of Mg-Al-Sn Alloy Microstructures for Determining Phase Ratios and Grain Size and Correction with Manual Measurement. <i>Materials</i> , 2021, 14, 5095.	1.3	19
26	Experimental investigations and optimization of MWCNTs-mixed WEDM process parameters of nitinol shape memory alloy. <i>Journal of Materials Research and Technology</i> , 2021, 15, 2152-2169.	2.6	46
27	Experimental investigation on welding of 2.25 Cr-1.0 Mo steel with regulated metal deposition and GMAW technique incorporating metal-cored wires. <i>Journal of Materials Research and Technology</i> , 2021, 15, 1007-1016.	2.6	14
28	Experimental investigation and optimization of compression moulding parameters for MWCNT/glass/kevlar/epoxy composites on mechanical and tribological properties. <i>Journal of Materials Research and Technology</i> , 2021, 15, 327-341.	2.6	32
29	Investigation on microstructure, mechanical, and tribological performance of Cu base hybrid composite materials. <i>Journal of Materials Research and Technology</i> , 2021, 15, 6990-7003.	2.6	39
30	Corrosion Resistance and Surface Bioactivity of Ti6Al4V Alloy after Finish Turning under Ecological Cutting Conditions. <i>Materials</i> , 2021, 14, 6917.	1.3	11
31	Analysis and Optimization of Dimensional Accuracy and Porosity of High Impact Polystyrene Material Printed by FDM Process: PSO, JAYA, Rao, and Bald Eagle Search Algorithms. <i>Materials</i> , 2021, 14, 7479.	1.3	9
32	Integration of Fuzzy AHP and Fuzzy TOPSIS Methods for Wire Electric Discharge Machining of Titanium (Ti6Al4V) Alloy Using RSM. <i>Materials</i> , 2021, 14, 7408.	1.3	35
33	Machine Learning Modelling and Feature Engineering in Seismology Experiment. <i>Sensors</i> , 2020, 20, 4228.	2.1	8
34	Study on Technological Effects of a Precise Grooving of AlSi13MgCuNi Alloy with a Novel WCCo/PCD (DDCC) Inserts. <i>Materials</i> , 2020, 13, 2467.	1.3	12
35	Evaluation of Surface Topography after Face Turning of CoCr Alloys Fabricated by Casting and Selective Laser Melting. <i>Materials</i> , 2020, 13, 2448.	1.3	12
36	Advances in Hard-Cut Materials: Manufacturing, Properties, Process Mechanics and Evaluation of Surface Integrity. <i>Materials</i> , 2020, 13, 612.	1.3	12

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37	Evaluation of turning with different cooling-lubricating techniques in terms of surface integrity and tribological properties. Tribology International, 2020, 148, 106334.	3.0	92
38	Analysis of Cutting Force and Power Under the Conditions of Minimized Cooling in the Process of Turning AISI-1045 Steel with the Use of the Parameter Space Investigation Method. Lecture Notes in Mechanical Engineering, 2020, , 151-162.	0.3	3
39	Hybrid Numerical-Analytical Approach for Force Prediction in End Milling of 42CrMo4 Steel. Lecture Notes in Mechanical Engineering, 2019, , 223-232.	0.3	1
40	Effect of the Relative Position of the Face Milling Tool towards the Workpiece on Machined Surface Roughness and Milling Dynamics. Applied Sciences (Switzerland), 2019, 9, 842.	1.3	62
41	Intelligent Optimization of Hard-Turning Parameters Using Evolutionary Algorithms for Smart Manufacturing. Materials, 2019, 12, 879.	1.3	62
42	The Influence of EP/AW Addition in the MQL Method on the Parameters of Surface Geometrical Structure in the Process of Turning 316L Steel. Lecture Notes in Mechanical Engineering, 2019, , 341-350.	0.3	2
43	The Influence of the Application of EP Additive in the Minimum Quantity Cooling Lubrication Method on the Tool Wear and Surface Roughness in the Process of Turning 316L Steel. Lecture Notes in Mechanical Engineering, 2019, , 254-263.	0.3	1
44	Effects of extreme pressure and anti-wear additives on surface topography and tool wear during MQCL turning of AISI 1045 steel. Journal of Mechanical Science and Technology, 2018, 32, 1585-1591.	0.7	75
45	Parametric and nonparametric description of the surface topography in the dry and MQCL cutting conditions. Measurement: Journal of the International Measurement Confederation, 2018, 121, 225-239.	2.5	131
46	Application of signal to noise ratio and grey relational analysis to minimize forces and vibrations during precise ball end milling. Precision Engineering, 2018, 51, 582-596.	1.8	118
47	Study on metrological relations between instant tool displacements and surface roughness during precise ball end milling. Measurement: Journal of the International Measurement Confederation, 2018, 129, 686-694.	2.5	95
48	The study on minimum uncut chip thickness and cutting forces during laser-assisted turning of WC/NiCr clad layers. International Journal of Advanced Manufacturing Technology, 2017, 91, 3887-3898.	1.5	58
49	Structural and Microhardness Changes After Turning of the AISI 1045 Steel for Minimum Quantity Cooling Lubrication. Journal of Materials Engineering and Performance, 2017, 26, 431-438.	1.2	77
50	Mechanical and technological aspects of micro ball end milling with various tool inclinations. International Journal of Mechanical Sciences, 2017, 134, 424-435.	3.6	75
51	Surface texture formation in precision machining of direct laser deposited tungsten carbide. Advances in Manufacturing, 2017, 5, 251-260.	3.2	15
52	The application of response surface method to optimization of precision ball end milling. MATEC Web of Conferences, 2017, 112, 01004.	0.1	3
53	Dry cutting effect in turning of a duplex stainless steel as a key factor in clean production. Journal of Cleaner Production, 2017, 142, 3343-3354.	4.6	122
54	Wear of carbide inserts during turning of C45 steel in dry cutting conditions and in presence of emulsion mist. E3S Web of Conferences, 2017, 19, 03009.	0.2	3

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55	Turning process monitoring of internal combustion engine piston's cylindrical surface. MATEC Web of Conferences, 2017, 112, 10002.	0.1	1
56	The analysis of instantaneous tool displacements during precise ball end milling. MATEC Web of Conferences, 2017, 137, 05008.	0.1	0
57	The study on dynamic properties of monolithic ball end mills with various slenderness. E3S Web of Conferences, 2017, 19, 03014.	0.2	0
58	The Evaluation of Surface Integrity During Machining of Inconel 718 with Various Laser Assistance Strategies. MATEC Web of Conferences, 2017, 136, 01006.	0.1	28
59	The influence of the cooling conditions on the cutting tool wear and the chip formation mechanism. Journal of Manufacturing Processes, 2016, 24, 107-115.	2.8	130
60	Formation of surface layer in metal matrix composite A359/20SiCP during laser assisted turning. Composites Part A: Applied Science and Manufacturing, 2016, 91, 370-379.	3.8	66
61	Investigation on the edge forces in ball end milling of inclined surfaces. International Journal of Mechanical Sciences, 2016, 119, 360-369.	3.6	78
62	Precision surface characterization for finish cylindrical milling with dynamic tool displacements model. Precision Engineering, 2016, 46, 158-165.	1.8	72
63	The estimation of cutting forces and specific force coefficients during finishing ball end milling of inclined surfaces. International Journal of Machine Tools and Manufacture, 2015, 89, 110-123.	6.2	79
64	SURFACE TEXTURE ANALYSIS AFTER BALL END MILLING WITH VARIOUS SURFACE INCLINATION OF HARDENED STEEL. Metrology and Measurement Systems, 2014, 21, 145-156.	1.4	56
65	The Influence of Tool Wear on the Vibrations During Ball end Milling of Hardened Steel. Procedia CIRP, 2014, 14, 587-592.	1.0	14
66	Cutting Forces and Vibrations During Ball End Milling of Inclined Surfaces. Procedia CIRP, 2014, 14, 113-118.	1.0	43
67	Tool Life and Process Dynamics in High Speed Ball End Milling of Hardened Steel. Procedia CIRP, 2012, 1, 289-294.	1.0	40
68	Machined Surface Roughness Including Cutter Displacements in Milling of Hardened Teel. Metrology and Measurement Systems, 2011, 18, .	1.4	31
69	Surface roughness analysis of hardened steel after high-speed milling. Scanning, 2011, 33, 386-395.	0.7	35