

Akshay Dvivedi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3014358/publications.pdf>

Version: 2024-02-01

90
papers

2,138
citations

186209

28
h-index

265120

42
g-index

99
all docs

99
docs citations

99
times ranked

868
citing authors

#	ARTICLE	IF	CITATIONS
1	Development and performance study of biomedical porous zinc scaffold manufactured by using additive manufacturing and microwave sintering. <i>Materials and Manufacturing Processes</i> , 2023, 38, 1020-1032.	2.7	9
2	Impact of gas film thickness on the performance of RM-ECDM process during machining of glass. <i>Materials and Manufacturing Processes</i> , 2022, 37, 652-663.	2.7	25
3	Fabrication and characterization of Al6063/SiC composites using electromagnetic stir casting process. <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , 2022, 236, 187-193.	1.4	7
4	Decision-making on the selection of lean tools using fuzzy QFD and FMEA approach in the manufacturing industry. <i>Expert Systems With Applications</i> , 2022, 192, 116416.	4.4	32
5	Investigation on Deposition of the Machined By-Products and Its Reduction during Electrochemical Discharge Machining (ECDM). <i>Journal of the Electrochemical Society</i> , 2022, 169, 023506.	1.3	10
6	Investigating the Performance of the Rotary Tool Near-Dry Electrical Discharge Machining Process through Debris Analysis. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 8405-8417.	1.2	4
7	Improvement in energy channelization behaviour during micro hole formation in Y-SZ ceramic with magnetic field assisted ECSM process. <i>Measurement: Journal of the International Measurement Confederation</i> , 2022, 194, 111079.	2.5	15
8	Investigation of hole roundness-error using different electrolytes in STED process. <i>Materials and Manufacturing Processes</i> , 2022, 37, 1405-1421.	2.7	4
9	On energy channelization analysis for ECSM process during fabrication of microchannels in glass. <i>Materials and Manufacturing Processes</i> , 2022, 37, 1506-1510.	2.7	5
10	On the use of sacrificial layer in ECDM process for form accuracy. <i>Journal of Manufacturing Processes</i> , 2022, 79, 219-232.	2.8	8
11	On near-dry wire ECDM of Al6063/SiC/10p MMC. <i>Materials and Manufacturing Processes</i> , 2021, 36, 122-134.	2.7	38
12	On controlling of gas film shape in electrochemical discharge machining process for fabrication of elliptical holes. <i>Materials and Manufacturing Processes</i> , 2021, 36, 558-571.	2.7	35
13	Investigations and optimization of rotary tool micro-USM process for fabrication of microchannels. <i>Materials Today: Proceedings</i> , 2021, 45, 4993-4997.	0.9	0
14	Evaluation of the Surface Integrity of Titanium Nitride Coating Deposited on the Ni-Ti Substrate Through the Near-Dry Electrical Discharge Surface Coating Process. <i>Minerals, Metals and Materials Series</i> , 2021, , 421-429.	0.3	2
15	Investigations on the fabrication of a patterned tool by chemical etching. <i>Materials and Manufacturing Processes</i> , 2021, 36, 1840-1852.	2.7	18
16	Experimental investigations of energy channelization behavior in ultrasonic assisted electrochemical discharge machining. <i>Journal of Materials Processing Technology</i> , 2021, 293, 117084.	3.1	42
17	Fabrication of micro holes in Yttria-stabilized zirconia (Y-SZ) by hybrid process of electrochemical discharge machining (ECDM). <i>Ceramics International</i> , 2021, 47, 23677-23681.	2.3	21
18	Application of value stream mapping (VSM) in low-level technology organizations: a case study. <i>International Journal of Productivity and Performance Management</i> , 2021, ahead-of-print, .	2.2	3

#	ARTICLE	IF	CITATIONS
19	Performance enhancement of rotary tool near-dry EDM process through tool modification. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	21
20	Assessing the performance of STED process for fabricating high aspect ratio holes on Inconel 718 alloy. Materials and Manufacturing Processes, 2021, 36, 677-692.	2.7	5
21	Experimental investigations, empirical modeling and multi objective optimization of performance characteristics for ECDD with pressurized feeding method. Measurement: Journal of the International Measurement Confederation, 2020, 149, 107017.	2.5	10
22	Experimental investigations into rotary mode electrochemical discharge drilling (RM-ECDD) of metal matrix composites. Machining Science and Technology, 2020, 24, 195-226.	1.4	32
23	Experimental investigations and its dimensional analysis based modeling of the UAECDD process. International Journal of Advanced Manufacturing Technology, 2020, 111, 3241-3257.	1.5	6
24	EDM of high aspect ratio micro-holes on Ti-6Al-4V alloy by synchronizing energy interactions. Materials and Manufacturing Processes, 2020, 35, 1188-1203.	2.7	37
25	On prolongation of discharge regime during ECDM by titrated flow of electrolyte. International Journal of Advanced Manufacturing Technology, 2020, 107, 1819-1834.	1.5	32
26	Development of material removal rate model and performance evaluation of ultrasonic turning process. Materials and Manufacturing Processes, 2020, 35, 1598-1611.	2.7	9
27	Sonication of tool electrode for utilizing high discharge energy during ECDM. Materials and Manufacturing Processes, 2020, 35, 415-429.	2.7	46
28	Enhancement in Machining Efficiency and Accuracy of ECDM Process Using Hollow Tool Electrode. Lecture Notes on Multidisciplinary Industrial Engineering, 2020, , 313-323.	0.4	1
29	Investigation on the Effect of Input Parameters on Surface Quality During Rotary Tool Near-Dry EDM. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 41-47.	0.3	7
30	Experimental Investigation on Surface Morphology of Micro-EDMed Ti-6Al-4V Alloy. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 69-74.	0.3	9
31	An environment-friendly and sustainable machining method: near-dry EDM. Materials and Manufacturing Processes, 2019, 34, 1307-1315.	2.7	57
32	Micro-ultrasonic drilling of monocrystalline silicon: An experimental investigation on machined surface topography and optimization using User's preference rating based TOPSIS. Materials Science in Semiconductor Processing, 2019, 102, 104584.	1.9	6
33	Performance enhancement of rotary tool near-dry EDM of HSS by supplying oxygen gas in the dielectric medium. Materials and Manufacturing Processes, 2019, 34, 1832-1846.	2.7	39
34	Effect of tool materials on performance of rotary tool micro-USM process during fabrication of microchannels. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	3
35	Fabrication of micro-slits using W-ECDD process with textured wire surface: An experimental investigation on kerf overcut reduction and straightness improvement. Precision Engineering, 2019, 59, 211-223.	1.8	32
36	Effect of tool rotation in near-dry EDM process on machining characteristics of HSS. Materials and Manufacturing Processes, 2019, 34, 779-790.	2.7	60

#	ARTICLE	IF	CITATIONS
37	On machining of hard and brittle materials using rotary tool micro-ultrasonic drilling process. <i>Materials and Manufacturing Processes</i> , 2019, 34, 736-748.	2.7	26
38	Quality management as a tool for job satisfaction improvement in low-level technology organizations: the case of Ethiopia. <i>Production Planning and Control</i> , 2019, 30, 665-681.	5.8	11
39	On Improvement in Surface Integrity of μ -EDMed Ti-6Al-4V Alloy by μ -ECM Process. <i>Minerals, Metals and Materials Series</i> , 2019, , 745-753.	0.3	9
40	On performance enhancement of electrochemical discharge trepanning (ECDT) process by sonication of tool electrode. <i>Precision Engineering</i> , 2019, 56, 8-19.	1.8	25
41	On effect of tool rotation on performance of rotary tool micro-ultrasonic machining. <i>Materials and Manufacturing Processes</i> , 2019, 34, 475-486.	2.7	31
42	Investigations on quantification and replenishment of vaporized electrolyte during deep micro-holes drilling using pressurized flow-ECDM process. <i>Journal of Materials Processing Technology</i> , 2019, 266, 217-229.	3.1	48
43	Experimental investigations into triplex hybrid process of GA-RDECDM during subtractive processing of MMCs. <i>Materials and Manufacturing Processes</i> , 2019, 34, 243-255.	2.7	32
44	Decision-making on job satisfaction improvement programmes using fuzzy QFD model: a case study in Ethiopia. <i>Total Quality Management and Business Excellence</i> , 2019, 30, 1068-1091.	2.4	10
45	Experimental Investigations on the Effect of Energy Interaction Durations During Micro-channeling with ECDM. <i>Lecture Notes on Multidisciplinary Industrial Engineering</i> , 2019, , 269-277.	0.4	2
46	On performance evaluation of textured tools during micro-channeling with ECDM. <i>Journal of Manufacturing Processes</i> , 2018, 32, 699-713.	2.8	79
47	On pressurized feeding approach for effective control on working gap in ECDM. <i>Materials and Manufacturing Processes</i> , 2018, 33, 462-473.	2.7	63
48	Fabrication of microchannels using rotary tool micro-USM: An experimental investigation on tool wear reduction and form accuracy improvement. <i>Journal of Manufacturing Processes</i> , 2018, 32, 802-815.	2.8	25
49	Determinants of job satisfaction in Ethiopia: evidence from the leather industry. <i>African Journal of Economic and Management Studies</i> , 2018, 9, 410-429.	0.5	12
50	On the analysis of force during secondary processing of natural fiber reinforced composite laminates. <i>Polymer Composites</i> , 2017, 38, 164-174.	2.3	36
51	Investigations on Rotary Tool Near-Dry Electric Discharge Machining. <i>Minerals, Metals and Materials Series</i> , 2017, , 327-334.	0.3	13
52	On Tool Wear in Rotary Tool Micro-Ultrasonic Machining. <i>Minerals, Metals and Materials Series</i> , 2017, , 75-82.	0.3	4
53	Design and development of novel cost effective casting route for production of metal matrix composites (MMCs). <i>International Journal of Cast Metals Research</i> , 2017, 30, 356-364.	0.5	18
54	Dry and Near-Dry Electric Discharge Machining Processes. <i>Materials Forming, Machining and Tribology</i> , 2017, , 249-266.	0.7	6

#	ARTICLE	IF	CITATIONS
55	Experimental Investigation on Near-dry EDM using Glycerin-Air Mixture as Dielectric Medium. Materials Today: Proceedings, 2017, 4, 5344-5350.	0.9	16
56	Identifying and prioritising operational performance indicators of the Ethiopian leather industry. International Journal of Productivity and Quality Management, 2017, 22, 378.	0.1	7
57	Experimental investigation on drilling of borosilicate glass using micro-USM with and without tool rotation: a comparative study. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 213.	0.2	1
58	Influence of glycerin-air dielectric medium on near-dry EDM of titanium alloy. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 328.	0.2	4
59	Identifying and prioritising operational performance indicators of the Ethiopian leather industry. International Journal of Productivity and Quality Management, 2017, 22, 378.	0.1	2
60	Influence of glycerin-air dielectric medium on near-dry EDM of titanium alloy. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 328.	0.2	3
61	Experimental investigation on drilling of borosilicate glass using micro-USM with and without tool rotation: a comparative study. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 213.	0.2	1
62	Experimental investigation on effects of dielectric mediums in near-dry electric discharge machining. Journal of Mechanical Science and Technology, 2016, 30, 2179-2185.	0.7	40
63	Tool wear and form accuracy in ultrasonically machined microchannels. Measurement: Journal of the International Measurement Confederation, 2016, 81, 85-94.	2.5	19
64	Effect of Pulse Duration on Quality Characteristics of Blind Hole Drilled in Glass by ECDM. Materials and Manufacturing Processes, 2016, 31, 1740-1748.	2.7	87
65	Developments in electrochemical discharge machining: A review on electrochemical discharge machining, process variants and their hybrid methods. International Journal of Machine Tools and Manufacture, 2016, 105, 1-13.	6.2	150
66	Parametric Evaluation on Near-Dry Electric Discharge Machining. Materials and Manufacturing Processes, 2016, 31, 413-421.	2.7	58
67	Fabrication of 3D complex micro-features used in bio-medical applications. , 2016, , .		2
68	Near-dry electrical discharge machining of stainless steel. International Journal of Machining and Machinability of Materials, 2015, 17, 127.	0.1	7
69	Tool wear studies in fabrication of microchannels in ultrasonic micromachining. Ultrasonics, 2015, 57, 57-64.	2.1	26
70	Developments on electrochemical discharge machining: A review of experimental investigations on tool electrode process parameters. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 910-920.	1.5	32
71	Rotary mode ultrasonic drilling of glass fiber-reinforced epoxy laminates. Journal of Composite Materials, 2015, 49, 949-963.	1.2	57
72	Design and development of abrasive-assisted drilling process for improvement in surface finish during drilling of metal matrix composites. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 858-867.	1.5	3

#	ARTICLE	IF	CITATIONS
73	Drilling Characteristics of Sisal Fiber-Reinforced Epoxy and Polypropylene Composites. Materials and Manufacturing Processes, 2014, 29, 1401-1409.	2.7	111
74	An Ultrasonic Micromachining Setup for Machining of 3D Geometries. Lecture Notes in Mechanical Engineering, 2014, , 253-260.	0.3	0
75	Comparative study of powder mixed EDM and rotary tool EDM performance during machining of Al-SiC metal matrix composites. International Journal of Machining and Machinability of Materials, 2014, 16, 113.	0.1	9
76	Finishing of Micro-channels Using Abrasive Flow Machining. Lecture Notes in Mechanical Engineering, 2014, , 243-252.	0.3	7
77	Effect of Natural Fillers on Wear Behavior of Glass-Fiber-Reinforced Epoxy Composites. Lecture Notes in Mechanical Engineering, 2014, , 441-450.	0.3	2
78	Multi objective optimization in drilling of Al6063/10% SiC metal matrix composite based on grey relational analysis. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2013, 227, 1767-1776.	1.5	35
79	A hybrid approach to multi-criteria optimization based on user's preference rating. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2013, 227, 1733-1742.	1.5	25
80	Dry Sliding Wear Behaviour of Glass Fibre Reinforced Epoxy Composites Filled with Natural Fillers. Reason-A Technical Journal, 2013, 12, 61.	0.0	4
81	Influence of Process Parameters during Fabrication of Si Microchannels Using Microultrasonic Machining. I-manager's Journal on Mechanical Engineering, 2013, 3, 1-7.	0.4	3
82	Tribological characteristics of Al 6063-SiCp metal matrix composite under reciprocating and wet conditions. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2012, 226, 138-149.	1.0	8
83	Developments in abrasive flow machining: a review on experimental investigations using abrasive flow machining variants and media. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2012, 226, 1951-1962.	1.5	34
84	Parametric optimisation of surface roughness on wire-EDM using Taguchi method. International Journal of Manufacturing Technology and Management, 2011, 24, 88.	0.1	9
85	Effect of EDM process parameters on surface quality of Al 6063 SiCp metal matrix composite. International Journal of Materials and Product Technology, 2010, 39, 357.	0.1	8
86	Taguchi analysis of the residual tensile strength after drilling in glass fiber reinforced epoxy composites. Materials & Design, 2009, 30, 2186-2190.	5.1	67
87	Experimental investigation and optimisation in EDM of Al 6063 SiCp metal matrix composite. International Journal of Machining and Machinability of Materials, 2008, 3, 293.	0.1	45
88	Surface quality evaluation in ultrasonic drilling through the Taguchi technique. International Journal of Advanced Manufacturing Technology, 2007, 34, 131-140.	1.5	84
89	Optimization of the Process Parameters for Drilling of Metal Matrix Composites (MMC) Using Taguchi Analysis. Advanced Materials Research, 0, 410, 249-252.	0.3	14
90	Effect of Electrolytes on Quality Characteristics of Glass during ECDM. Key Engineering Materials, 0, 658, 141-145.	0.4	14