Sudhansu Ranjan Das

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8485033/publications.pdf

Version: 2024-02-01

53	1,111	430874	477307
papers	citations	18 h-index	29 g-index

59	59	59	504
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A new optimized predictive model based on political optimizer for eco-friendly MQL-turning of AISI 4340 alloy with nano-lubricants. Journal of Manufacturing Processes, 2021, 67, 562-578.	5.9	97
2	Experimental investigation into machinability of hardened AISI 4140 steel using TiN coated ceramic tool. Measurement: Journal of the International Measurement Confederation, 2015, 62, 108-126.	5.0	96
3	Study of surface roughness and flank wear in hard turning of AISI 4140 steel with coated ceramic inserts. Journal of Mechanical Science and Technology, 2015, 29, 4329-4340.	1.5	77
4	Performance appraisal of various nanofluids during hard machining of AISI 4340 steel. Journal of Manufacturing Processes, 2019, 46, 248-270.	5.9	45
5	Experimental investigation of surface roughness, flank wear, chip morphology and cost estimation during machining of hardened AISI 4340 steel with coated carbide insert. Mechanics of Advanced Materials and Modern Processes, 2017, 3, .	2.2	43
6	Hard turning of AISI 4340 steel using coated carbide insert: Surface roughness, tool wear, chip morphology and cost estimation. Materials Today: Proceedings, 2018, 5, 6560-6569.	1.8	38
7	Evaluating the effect of minimum quantity lubrication during hard turning of AISI D3 steel using vegetable oil enriched with nano-additives. AEJ - Alexandria Engineering Journal, 2022, 61, 10925-10938.	6.4	38
8	Performance comparison of vegetable oil based nanofluids towards machinability improvement in hard turning of HSLA steel using minimum quantity lubrication. Mechanics and Industry, 2019, 20, 506.	1.3	35
9	Surface Roughness Analysis for Economical Feasibility Study of Coated Ceramic Tool in Hard Turning Operation. Process Integration and Optimization for Sustainability, 2017, 1, 237-249.	2.6	33
10	Sustainability Assessment and Machinability Investigation of Austenitic Stainless Steel in Finish Turning with Advanced Ultra-Hard SiAlON Ceramic Tool under Different Cutting Environments. Silicon, 2021, 13, 119-147.	3.3	33
11	Parametric optimization of Nd:YAG laser microgrooving on aluminum oxide using integrated RSM-ANN-GA approach. Journal of Industrial Engineering International, 2019, 15, 333-349.	1.8	28
12	Effect of MQL and nanofluid on the machinability aspects of hardened alloy steel. Machining Science and Technology, 2020, 24, 291-320.	2.5	28
13	Experimental investigations on surface integrity and chip morphology in hard tuning of AISI D3 steel under sustainable nanofluid-based minimum quantity lubrication. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	1.6	28
14	A Comparison of Machinability in Hard Turning of EN-24 Alloy Steel Under Mist Cooled and Dry Cutting Environments with a Coated Cermet Tool. Journal of Failure Analysis and Prevention, 2019, 19, 115-130.	0.9	27
15	Machinability investigation and sustainability assessment in hard turning of AISI D3 steel with coated carbide tool under nanofluid minimum quantity lubrication-cooling condition. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 6496-6528.	2.1	26
16	Experimental Investigation, Predictive Modeling, Parametric Optimization and Cost Analysis in Electrical Discharge Machining of Al-SiC Metal Matrix Composite. Silicon, 2021, 13, 1017-1040.	3.3	25
17	Performance Assessment and Chip Morphology Evaluation of Austenitic Stainless Steel under Sustainable Machining Conditions. Metals, 2021, 11, 1931.	2.3	23
18	An overview on economic machining of hardened steels by hard turning and its process variables. Manufacturing Review, 2019, 6, 4.	1.5	22

#	Article	IF	Citations
19	Modeling and Optimization of Power Consumption for Economic Analysis, Energy-Saving Carbon Footprint Analysis, and Sustainability Assessment in Finish Hard Turning Under Graphene Nanoparticleâ€“Assisted Minimum Quantity Lubrication. Process Integration and Optimization for Sustainability, 2020, 4, 445-463.	2.6	22
20	Experimental investigation on cutting force and surface roughness in machining of hardened AISI 52100 steel using cBN tool. International Journal of Machining and Machinability of Materials, 2016, 18, 501.	0.1	21
21	Machinability Investigation of Nitronic 60 Steel Turning Using SiAlON Ceramic Tools under Different Cooling/Lubrication Conditions. Materials, 2022, 15, 2368.	2.9	21
22	Machining performance evaluation under recently developed sustainable HAJM process of zirconia ceramic using hot SiC abrasives: An experimental and simulation approach. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 1009-1035.	2.1	20
23	Comparative assessment between AlTiN and AlTiSiN coated carbide tools towards machinability improvement of AISI D6 steel in dry hard turning. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 3174-3197.	2.1	20
24	Experimental investigation on machining of hardstone quartz with modified AJM using hot silicon carbide abrasives. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	1.6	18
25	MACHINING OF HARDSTONE QUARTZ WITH MODIFIED AJM PROCESS USING HOT SiC ABRASIVES: ANALYSIS, MODELING, OPTIMIZATION, AND COST ANALYSIS. Surface Review and Letters, 2021, 28, 2050049.	1.1	17
26	Performance Evaluation of Recently Developed New Process HAJM during Machining Hardstone Quartz Using Hot Silicon Carbide Abrasives: an Experimental Investigation and Sustainability Assessment. Silicon, 2021, 13, 2895-2919.	3.3	17
27	Machinability Investigation of HSLA Steel in Hard Turning with Coated Ceramic Tool: Assessment, Modeling, Optimization and Economic Aspects. Journal of Advanced Manufacturing Systems, 2019, 18, 625-655.	1.0	16
28	Hard turning of AISI D6 steel with recently developed HSN2-TiAlxN and conventional TiCN coated carbide tools: comparative machinability investigation and sustainability assessment. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	1.6	16
29	Machinability Investigation and Cost Estimation During Finish Dry Hard Turning of AISI 4340 Steel with Untreated and Cryo Treated Cermet Inserts. Journal of Superhard Materials, 2019, 41, 247-264.	1.2	14
30	Modelling and Optimization of Alâ€“SiC MMC through EDM Process Using Copper and Brass Electrodes. Materials Today: Proceedings, 2018, 5, 11295-11303.	1.8	13
31	MACHINABILITY INVESTIGATION OF CRYOGENICALLY TREATED HARDENED AISI 4140 ALLOY STEEL USING CBN INSERT UNDER SUSTAINABLE FINISH DRY HARD TURNING. Surface Review and Letters, 2022, 29, .	1.1	13
32	Experimental investigation and optimization on machined surface of Si3N4 ceramic using hot SiC abrasive in HAJM. Materials Today: Proceedings, 2021, 44, 1877-1887.	1.8	12
33	Surface roughness analysis of hardened steel using TiN coated ceramic inserts. International Journal of Machining and Machinability of Materials, 2015, 17, 22.	0.1	11
34	Analysis, predictive modelling and multi-response optimization in electrical discharge machining of Al-22%SiC metal matrix composite for minimization of surface roughness and hole overcut. Manufacturing Review, 2020, 7, 20.	1.5	11
35	Drilling of K-60 Alumina Ceramic with Different Grades of Abrasives at Various Temperatures using Fluidized Bed-Hot Abrasive Jet Machining (FB-HAJM) Process. IOP Conference Series: Materials Science and Engineering, 0, 455, 012076.	0.6	10
36	Experimental investigation, modelling and optimization in hard turning of high strength low alloy steel (AISI 4340). Materiaux Et Techniques, 2018, 106, 404.	0.9	10

#	Article	IF	Citations
37	Experimental investigation into machinability of hardened AISI D6 steel using newly developed AlTiSiN coated carbide tools under sustainable finish dry hard turning. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2022, 236, 1889-1905.	2.5	10
38	Investigations on Surface Integrity in Hard Turning of Functionally Graded Specimen under Nano Fluid Assisted Minimum Quantity Lubrication. Advances in Materials and Processing Technologies, 2022, 8, 1714-1729.	1.4	9
39	Electrical Discharge Machining of Engineered Al-22%SiC Metal Matrix Composite: Surface Roughness Analysis, Optimization, Economic Analysis, and Sustainability Assessment. Process Integration and Optimization for Sustainability, 2022, 6, 223-251.	2.6	9
40	Investigation on MRR and DOC of the micro-holes generated on quartz using silicon carbide by FB-HAJM. Materials Today: Proceedings, 2020, 26, 2005-2012.	1.8	8
41	Comparative stress analysis of different suitable biomaterials for artificial hip joint and femur bone using finite element simulation. Advances in Materials and Processing Technologies, 2022, 8, 1741-1756.	1.4	8
42	Comparative performance evaluation between uncoated and TiAlNâ€‰+â€‰AlCrN coated carbide tools in hard turning of AISI H11 steel. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892211104.	2.5	8
43	Comparative performance evaluation between HSN-TiAlxN and TiCN coated carbide tools in hard turning of AISI D6 steel. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 0, , 095440542211118.	2.4	5
44	Modelling and optimization of technological parameters in hot abrasive jet machining of alumina ceramic. Materiaux Et Techniques, 2019, 107, 603.	0.9	4
45	Modeling and Optimization of Surface Roughness in Hard Turning of AISI 4340 Steel with Coated Ceramic Tool. , 2019, , 151-160.		4
46	Optimization of erosion wears of Alâ€“Mgâ€“Siâ€“Cuâ€“SiC composite produced by the PM method. Corrosion Reviews, 2021, 39, 63-75.	2.0	4
47	Experimental investigation of various machining attributes and cost estimation during machining of hardened AISI 4340 steel with untreated and cryo treated cermet inserts. Mechanics and Industry, 2020, 21, 110.	1.3	3
48	Optimized posture prediction for task specific during stacking process using human upper body movements. International Journal on Interactive Design and Manufacturing, 2022, 16, 291-303.	2.2	3
49	Assessment, Modeling, and Optimization During Nd:YAG Laser Microgrooving of Titanium Alloy. Lecture Notes in Mechanical Engineering, 2019, , 59-70.	0.4	0
50	Experimental Investigation on ECMM With Nimonic 75 Alloy for Prosthetic Component. Advances in Mechatronics and Mechanical Engineering, 2019, , 126-157.	1.0	0
51	Predictive Modeling and Optimization of Technological Response Parameters in Nd:YAG Laser Microgrooving of Titanium Alloy Using Combined RSM-PSO Approach. Lecture Notes in Mechanical Engineering, 2020, , 165-175.	0.4	0
52	Parametric Optimization of Nd:YAG Laser Microgrooving of Alumina Ceramic Using Integrated RSM-PSO Approach. Lecture Notes in Mechanical Engineering, 2020, , 1-10.	0.4	0
53	AnÃ¡lisis de la integridad de la superficie y evaluaciÃ³n de la sostenibilidad en el mecanizado por electroerosiÃ³n de un material compuesto de matriz metÃ¡lica ingenieril Al-22% SiC. Revista De Metalurgia, 2021, 57, e210.	0.5	0