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 papers

1,111 citations

430874 18 h-index 29 g-index

59 all docs 59 docs citations

59 times ranked

504 citing authors

| # | Article | lF | CITATIONS |
|----|--|-----|-----------|
| 1 | 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 |
| 2 | 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 |
| 3 | 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 |
| 4 | 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 |
| 5 | 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 |
| 6 | 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 |
| 7 | 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 |
| 8 | 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 |
| 9 | Machinability Investigation of Nitronic 60 Steel Turning Using SiAlON Ceramic Tools under Different Cooling/Lubrication Conditions. Materials, 2022, 15, 2368. | 2.9 | 21 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | 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 |
| 14 | 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | 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 |
| 18 | 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 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Optimization of erosion wears of Al–Mg–Si–Cu–SiC composite produced by the PM method. Corrosion Reviews, 2021, 39, 63-75. | 2.0 | 4 |
| 20 | Performance Assessment and Chip Morphology Evaluation of Austenitic Stainless Steel under Sustainable Machining Conditions. Metals, 2021, 11, 1931. | 2.3 | 23 |
| 21 | Análisis de la integridad de la superficie y evaluación de la sostenibilidad en el mecanizado por electroerosión de un material compuesto de matriz metálica ingenieril Al-22% SiC. Revista De Metalurgia, 2021, 57, e210. | 0.5 | 0 |
| 22 | Effect of MQL and nanofluid on the machinability aspects of hardened alloy steel. Machining Science and Technology, 2020, 24, 291-320. | 2.5 | 28 |
| 23 | 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 |
| 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 | Modeling and Optimization of Power Consumption for Economic Analysis, Energy-Saving Carbon Footprint Analysis, and Sustainability Assessment in Finish Hard Turning Under Graphene Nanoparticle–Assisted Minimum Quantity Lubrication. Process Integration and Optimization for Sustainability. 2020. 4, 445-463. | 2.6 | 22 |
| 26 | 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 |
| 27 | 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 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | 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 |
| 32 | 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 |
| 33 | Performance appraisal of various nanofluids during hard machining of AISI 4340 steel. Journal of Manufacturing Processes, 2019, 46, 248-270. | 5.9 | 45 |
| 34 | 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 |
| 35 | Assessment, Modeling, and Optimization During Nd:YAG Laser Microgrooving of Titanium Alloy. Lecture Notes in Mechanical Engineering, 2019, , 59-70. | 0.4 | 0 |
| 36 | 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 |
|----|--|-----|-----------|
| 37 | 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 |
| 38 | 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 |
| 39 | Modelling and optimization of technological parameters in hot abrasive jet machining of alumina ceramic. Materiaux Et Techniques, 2019, 107, 603. | 0.9 | 4 |
| 40 | Modeling and Optimization of Surface Roughness in Hard Turning of AISI 4340 Steel with Coated Ceramic Tool. , 2019 , , $151-160$. | | 4 |
| 41 | Experimental Investigation on ECMM With Nimonic 75 Alloy for Prosthetic Component. Advances in Mechatronics and Mechanical Engineering, 2019, , 126-157. | 1.0 | 0 |
| 42 | 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 |
| 43 | Modelling and Optimization of Al–SiC MMC through EDM Process Using Copper and Brass Electrodes. Materials Today: Proceedings, 2018, 5, 11295-11303. | 1.8 | 13 |
| 44 | 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 |
| 45 | 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 |
| 46 | 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 |
| 47 | 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 |
| 48 | 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 |
| 49 | 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 |
| 50 | 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 |
| 51 | 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 |
| 52 | Comparative performance evaluation between uncoated and TiAlN + AlCrN coated carbide tools in hard turning of AlSI H11 steel. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892211104. | 2.5 | 8 |
| 53 | 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 |