

# Arunachalam N

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/367836/publications.pdf>

Version: 2024-02-01

45  
papers

556  
citations

687363

13  
h-index

713466

21  
g-index

45  
all docs

45  
docs citations

45  
times ranked

521  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Digital Twin for Grinding Wheel: An Information Sharing Platform for Sustainable Grinding Process. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	2.2	49
2	Coated tool Performance in Dry Turning of Super Duplex Stainless Steel. Procedia Manufacturing, 2017, 10, 601-611.	1.9	45
3	Wear performance of nano-engineered boron doped graded layer CVD diamond coated cutting tool for machining of Al-SiC MMC. Wear, 2019, 426-427, 1536-1547.	3.1	37
4	Texture analysis for grinding wheel wear assessment using machine vision. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2007, 221, 419-430.	2.4	36
5	Investigation on machining induced surface and subsurface modifications on the stress corrosion crack growth behaviour of super duplex stainless steel. Corrosion Science, 2018, 141, 230-242.	6.6	33
6	A comprehensive investigation on the effect of flood and MQL coolant on the machinability and stress corrosion cracking of super duplex stainless steel. Journal of Materials Processing Technology, 2020, 276, 116417.	6.3	33
7	Image Data-Based Surface Texture Characterization and Prediction Using Machine Learning Approaches for Additive Manufacturing. Journal of Computing and Information Science in Engineering, 2020, 20, .	2.7	29
8	Investigation on tribological behaviour of boron doped diamond coated cemented tungsten carbide for cutting tool applications. Surface and Coatings Technology, 2017, 332, 332-340.	4.8	24
9	Study on grinding of pre-sintered zirconia using diamond wheel. Materials and Manufacturing Processes, 2018, 33, 634-643.	4.7	23
10	Effect of grinding on subsurface modifications of pre-sintered zirconia under different cooling and lubrication conditions. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 86, 122-130.	3.1	21
11	Tool wear prediction in end milling of Ti-6Al-4V through Kalman filter based fusion of texture features and cutting forces. Procedia Manufacturing, 2018, 26, 1459-1470.	1.9	18
12	Effect of multi stage abrasive slurry jet polishing on surface generation in glass. Journal of Materials Processing Technology, 2019, 267, 384-392.	6.3	18
13	Effect of machined surface integrity on the stress corrosion cracking behaviour of super duplex stainless steel. Engineering Failure Analysis, 2021, 125, 105411.	4.0	16
14	Investigation on non-invasive process monitoring of Die Sinking EDM using Acoustic Emission signals. Procedia Manufacturing, 2018, 26, 1471-1482.	1.9	12
15	Illumination Compensated images for surface roughness evaluation using machine vision in grinding process. Procedia Manufacturing, 2019, 34, 969-977.	1.9	12
16	Multi-Sensor Data Analytics for Grinding Wheel Redress Life Estimation- An Approach towards Industry 4.0. Procedia Manufacturing, 2018, 26, 1230-1241.	1.9	11
17	Investigation on Grindability of Medical Implant Material Using a Silicon Carbide Wheel with Different Cooling Conditions. Procedia Manufacturing, 2017, 10, 417-428.	1.9	10
18	Electrophoretic deposited graphene based functional coatings for biocompatibility improvement of Nitinol. Thin Solid Films, 2019, 692, 137616.	1.8	10

#	ARTICLE	IF	CITATIONS
19	Evaluation of grinding strategy for bioceramic material through a single grit scratch test using force and acoustic emission signals. <i>Journal of Manufacturing Processes</i> , 2019, 37, 457-469.	5.9	10
20	Investigation on the effect of EDM process variables and environments on acoustic emission signals. <i>Machining Science and Technology</i> , 2020, 24, 638-662.	2.5	9
21	Analytical Model to Predict Sauter Mean Diameter in Air Assisted Atomizers for MQL in Machining Application. <i>Procedia CIRP</i> , 2015, 37, 117-121.	1.9	8
22	A Study on CVD Diamond Coated Cutting Tools Wear Performance using Vibration and Acoustic Emission Signals. <i>Procedia CIRP</i> , 2018, 72, 1415-1420.	1.9	8
23	Performance of Diamond and Silicon Carbide Wheels on Grinding of Bioceramic Material Under Minimum Quantity Lubrication Condition. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2017, 139, .	2.2	7
24	Grinding wheel redress life estimation using force and surface texture analysis. <i>Procedia CIRP</i> , 2018, 72, 1439-1444.	1.9	7
25	A Novel Iterative-Based Field Search Technique for Roundness Evaluation. <i>Procedia Manufacturing</i> , 2021, 53, 268-275.	1.9	7
26	Fourier Transform based texture measures for grinding wheel condition monitoring using machine vision. <i>International Journal of Manufacturing Technology and Management</i> , 2010, 21, 112.	0.1	6
27	Performance Comparison of Sol-gel with White Alumina Abrasives for Grinding of Super Duplex Stainless Steel (SDSS). <i>Procedia Manufacturing</i> , 2018, 26, 1448-1458.	1.9	6
28	Assessment of grinding wheel conditioning process using machine vision. , 2014, , .		5
29	Time series analysis of tool wear in sheet metal stamping using acoustic emission. <i>Journal of Physics: Conference Series</i> , 2017, 896, 012030.	0.4	5
30	Fabrication of Micro-channels on Polymethyl Methacrylate (PMMA) Plates by Thermal Softening Process Using Nichrome Wire: Tool Design and Surface Property Evaluation. <i>Procedia Manufacturing</i> , 2021, 53, 182-188.	1.9	5
31	Investigation of tribological conditions on grinding of bioceramic material using diamond grinding wheel under different cooling and lubrication environment. <i>Journal of Manufacturing Processes</i> , 2021, 71, 550-564.	5.9	5
32	Novel carbon nanotubes reinforced copper composite electrode for improved performance of electric discharge machining. <i>Materials Letters</i> , 2022, 307, 131063.	2.6	5
33	Classification of rice grain varieties arranged in scattered and heap fashion using image processing. , 2017, , .		4
34	Physical insights about magnetic flux distribution and its effect on surface roughness in MR fluid based finishing process. <i>Materials Research Express</i> , 2019, 6, 016104.	1.6	4
35	Prognostics model for tool life prediction in milling using texture features of surface image data. , 2014, , .		3
36	Development of an Internet of Things enabled manufacturing system for tool wear characterization. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
37	Grindability studies of thermomechanically processed advanced high strength steel using sol-gel and fused alumina grain-based grinding wheels. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2023, 237, 1970-1985.	2.4	3
38	Friction welding: An effective joining process for hybrid additive manufacturing. CIRP Journal of Manufacturing Science and Technology, 2021, 35, 460-473.	4.5	3
39	Performance analysis of Nano Engineered Diamond coated tools for machining of AA2124/SiCp composite material. Procedia Manufacturing, 2018, 26, 424-433.	1.9	2
40	Understanding the source of acoustic emission signals during the wear of stamping tools. IOP Conference Series: Materials Science and Engineering, 2018, 418, 012098.	0.6	2
41	Evaluation and characterization of deterministic laser textured surfaces using machine vision. Measurement: Journal of the International Measurement Confederation, 2019, 135, 537-546.	5.0	1
42	Surface texture characterization of selective laser melted Ti-6Al-4V components using fractal dimension and lacunarity analysis. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2020, , 095440542097108.	2.4	1
43	A preliminary investigation on the application of air-coupled ultrasound to evaluate surface condition of the grinding wheel. International Journal of Abrasive Technology, 2011, 4, 266.	0.2	0
44	Monte Carlo Methodâ€‘Based Tool Life Prediction during the End Milling of Ti-6Al-4V Alloy for Smart Manufacturing. Smart and Sustainable Manufacturing Systems, 2021, 5, 264-289.	0.7	0
45	A Study on Surface Topography Transformation in Abrasive Slurry Jet Polishing of BK7 Glass. Lecture Notes in Mechanical Engineering, 2022, , 15-25.	0.4	0