Amit Rai Dixit

List of Publications by Year
in descending order

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118	5,038	109321	98798
papers	citations	35 h-index	67 g-index

119	119	119	3523
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Joining of carbon fibre reinforced polymer (CFRP) composites and aluminium alloys â€“ A review. Composites Part A: Applied Science and Manufacturing, 2017, 101, 1-29.	7.6	418
2	Effects of Minimum Quantity Lubrication (MQL) in machining processes using conventional and nanofluid based cutting fluids: AÂcomprehensive review. Journal of Cleaner Production, 2016, 127, 1-18.	9.3	398
3	A review of the mechanical and thermal properties of graphene and its hybrid polymer nanocomposites for structural applications. Journal of Materials Science, 2019, 54, 5992-6026.	3.7	367
4	Rheological behaviour of nanofluids: A review. Renewable and Sustainable Energy Reviews, 2016, 53, 779-791.	16.4	258
5	Carbon nanotube- and graphene-reinforced multiphase polymeric composites: review on their properties and applications. Journal of Materials Science, 2020, 55, 2682-2724.	3.7	207
6	A review on the mechanical properties of polymer composites reinforced by carbon nanotubes and graphene. Carbon Letters, 2021, 31, 149-165.	5.9	182
7	Performance evaluation of alumina-graphene hybrid nano-cutting fluid in hard turning. Journal of Cleaner Production, 2017, 162, 830-845.	9.3	170
8	Progress of Nanofluid Application in Machining: A Review. Materials and Manufacturing Processes, 2015, 30, 813-828.	4.7	162
9	Novel uses of alumina/graphene hybrid nanoparticle additives for improved tribological properties of lubricant in turning operation. Tribology International, 2018, 119, 99-111.	5.9	135
10	A review on the mechanical and thermal properties of graphene and graphene-based polymer nanocomposites: understanding of modelling and MD simulation. Molecular Simulation, 2020, 46, 136-154.	2.0	119
11	Novel uses of alumina-MoS2 hybrid nanoparticle enriched cutting fluid in hard turning of AISI 304 steel. Journal of Manufacturing Processes, 2017, 30, 467-482.	5.9	101
12	Modeling and Optimization of Machining Nimonic C-263 Superalloy using Multicut Strategy in WEDM. Materials and Manufacturing Processes, 2016, 31, 860-868.	4.7	90
13	Characterization and experimental investigation of Al2O3 nanoparticle based cutting fluid in turning of AISI 1040 steel under minimum quantity lubrication (MQL). Materials Today: Proceedings, 2016, 3, 1899-1906.	1.8	88
14	Performance evaluation of Al₂O₃ nano powder mixed dielectric for electric discharge machining of Inconel 825. Materials and Manufacturing Processes, 2018, 33, 986-995.	4.7	86
15	Friction stir additive manufacturing â€“ An innovative tool to enhance mechanical and microstructural properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 263, 114832.	3.5	80
16	Fiber laser cutting of CFRP composites and process optimization through response surface methodology. Materials and Manufacturing Processes, 2017, 32, 1612-1621.	4.7	76
17	Surface modification of Ti-alloy by micro-electrical discharge process using tungsten disulphide powder suspension. Journal of Manufacturing Processes, 2019, 37, 28-41.	5.9	71
18	Tribological Investigation of TiO2 Nanoparticle based Cutting Fluid in Machining under Minimum Quantity Lubrication (MQL). Materials Today: Proceedings, 2016, 3, 2155-2162.	1.8	69

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19	Impact of lean practices on performance measures in context to Indian machine tool industry. Journal of Manufacturing Technology Management, 2015, 26, 1218-1242.	6.4	66
20	Ultrasonically generated pulsed water jet peening of austenitic stainless-steel surfaces. Journal of Manufacturing Processes, 2018, 32, 455-468.	5.9	66
21	Residual stress and surface properties of stainless steel welded joints induced by ultrasonic pulsed water jet peening. Measurement: Journal of the International Measurement Confederation, 2018, 127, 453-462.	5.0	59
22	Measurement of machining forces and surface roughness in turning of AISI 304 steel using alumina-MWCNT hybrid nanoparticles enriched cutting fluid. Measurement: Journal of the International Measurement Confederation, 2020, 150, 107078.	5.0	52
23	Improvement of surface integrity of Nimonic C 263 super alloy produced by WEDM through various post-processing techniques. International Journal of Advanced Manufacturing Technology, 2017, 93, 433-443.	3.0	51
24	Potential of Using Water Jet Peening as a Surface Treatment Process for Welded Joints. Procedia Engineering, 2016, 149, 472-480.	1.2	50
25	Comparison in the performance of EDM and NPMEDM using Al2O3 nanopowder as an impurity in DI water dielectric. International Journal of Advanced Manufacturing Technology, 2019, 100, 1327-1339.	3.0	47
26	Modeling Lean implementation for manufacturing sector. Journal of Modelling in Management, 2016, 11, 405-426.	1.9	46
27	Effect of Size, Content and Shape of Reinforcements on the Behavior of Metal Matrix Composites (MMCs) Under Tension. Journal of Materials Engineering and Performance, 2016, 25, 4444-4459.	2.5	45
28	Emerging application of nanoparticle-enriched cutting fluid in metal removal processes: a review. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 4677-4717.	1.6	45
29	A review on the intensification of metal matrix composites and its nonconventional machining. Science and Engineering of Composite Materials, 2018, 25, 213-228.	1.4	45
30	Surface integrity in tangential turning of hybrid MMC A359/B4C/Al2O3 by abrasive waterjet. Journal of Manufacturing Processes, 2017, 28, 11-20.	5.9	43
31	Mechanism of Nanoparticles Functioning and Effects in Machining Processes: A Review. Materials Today: Proceedings, 2015, 2, 3539-3544.	1.8	41
32	Experimental investigations of A359/Si3N4 surface composite produced by multi-pass friction stir processing. Materials Chemistry and Physics, 2021, 257, 123717.	4.0	41
33	Fatigue life of machined components. Advances in Manufacturing, 2017, 5, 59-76.	6.1	39
34	Hybrid aluminium matrix composite AWJ turning using olivine and Barton garnet. International Journal of Advanced Manufacturing Technology, 2018, 94, 2293-2300.	3.0	39
35	Improved Machining Performance with Nanoparticle Enriched Cutting Fluids under Minimum Quantity Lubrication (MQL) Technique: A Review. Materials Today: Proceedings, 2015, 2, 3545-3551.	1.8	38
36	Parametric study and characterization of AlN-Ni-Ti6Al4V composite cladding on titanium alloy. Surface and Coatings Technology, 2018, 349, 37-49.	4.8	37

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37	Role of graphene in biosensor and protective textile against viruses. Medical Hypotheses, 2020, 144, 110253.	1.5	37
38	Wire Arc Additive Manufacturing â€“ A revolutionary method in additive manufacturing. Materials Chemistry and Physics, 2022, 285, 126144.	4.0	37
39	Empirical assessment of the causal relationships among lean criteria using DEMATEL method. Benchmarking, 2016, 23, 1834-1859.	4.6	35
40	Surface alloying of miniature components by micro-electrical discharge process. Materials and Manufacturing Processes, 2018, 33, 1051-1061.	4.7	35
41	State of art in wire electrical discharge machining process and performance. International Journal of Machining and Machinability of Materials, 2014, 16, 1.	0.1	34
42	Surface integrity analysis of abrasive water jet-cut surfaces of friction stir welded joints. International Journal of Advanced Manufacturing Technology, 2017, 88, 1687-1701.	3.0	33
43	Prediction of temperature distribution over cutting tool with alumina-MWCNT hybrid nanofluid using computational fluid dynamics (CFD) analysis. International Journal of Advanced Manufacturing Technology, 2018, 97, 427-439.	3.0	32
44	Investigation into Performance of SiO 2 Nanoparticle Based Cutting Fluid in Machining Process. Materials Today: Proceedings, 2017, 4, 133-141.	1.8	31
45	Experimental investigation of thermal conductivity and specific heat of nanoparticles mixed cutting fluids. Materials Today: Proceedings, 2017, 4, 8587-8596.	1.8	31
46	Acoustic chamber length performance analysis in ultrasonic pulsating water jet erosion of ductile material. Journal of Manufacturing Processes, 2019, 47, 347-356.	5.9	31
47	20th Century Uninterrupted Growth in Friction Stir Processing of Lightweight Composites and Alloys. Materials Chemistry and Physics, 2021, 266, 124572.	4.0	29
48	Surface integrity of Mg-based nanocomposite produced by Abrasive Water Jet Machining (AWJM). Materials and Manufacturing Processes, 2017, 32, 1707-1714.	4.7	28
49	Contribution of machining to the fatigue behaviour of metal matrix composites (MMCs) of varying reinforcement size. International Journal of Fatigue, 2017, 102, 9-17.	5.7	27
50	Current Trends in Electric Discharge Machining Using Micro and Nano Powder Materials- A Review. Materials Today: Proceedings, 2015, 2, 3302-3307.	1.8	25
51	Processing of duplex stainless steel by WEDM. Materials and Manufacturing Processes, 2018, 33, 1559-1567.	4.7	25
52	Characterization of TiO2, Al2O3 and SiO2 Nanoparticle based Cutting Fluids. Materials Today: Proceedings, 2016, 3, 1890-1898.	1.8	24
53	Hardness measurement of surfaces on hybrid metal matrix composite created by turning using an abrasive water jet and WED. Measurement: Journal of the International Measurement Confederation, 2019, 131, 628-639.	5.0	24
54	Influence of graphene-based nanofluid with minimum quantity lubrication on surface roughness and cutting temperature in turning operation. Materials Today: Proceedings, 2018, 5, 24578-24586.	1.8	23

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55	Influence of graphene and multi-walled carbon nanotube additives on tribological behaviour of lubricants. International Journal of Surface Science and Engineering, 2018, 12, 207.	0.4	23
56	Application of Gold(III) Acetate as a New Precursor for the Synthesis of Gold Nanoparticles in PEG Through Ultrasonic Spray Pyrolysis. Journal of Cluster Science, 2017, 28, 1647-1665.	3.3	21
57	Utilization of ultrasonically forced pulsating water jet decaying for bone cement removal. International Journal of Advanced Manufacturing Technology, 2020, 110, 829-840.	3.0	21
58	Investigation of powder mixed EDM process parameters for machining Inconel alloy using response surface methodology. Materials Today: Proceedings, 2018, 5, 6183-6188.	1.8	18
59	Production of hard and lubricating surfaces on miniature components through micro-EDM process. International Journal of Advanced Manufacturing Technology, 2019, 105, 1983-2000.	3.0	18
60	Machining performance enhancement of powder mixed electric discharge machining using Green dielectric fluid. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	1.6	17
61	Influence of the frequency and flow rate of a pulsating water jet on the wear damage of tantalum. Wear, 2021, 477, 203893.	3.1	17
62	Pulse current co-deposition of Ni-WS₂ nano-composite film for solid lubrication. Materials and Manufacturing Processes, 2017, 32, 365-372.	4.7	16
63	Surface integrity and residual stress analysis of Î¼EDM coated Ti-alloy miniature components. Materials and Manufacturing Processes, 2021, 36, 48-58.	4.7	16
64	Tribo-mechanical characterization of spark plasma sintered chopped carbon fibre reinforced silicon carbide composites. Ceramics International, 2016, 42, 18283-18288.	4.8	15
65	Microstructural and fractographic analysis of A359/Si₃N₄ surface composite produced by friction stir processing. International Journal of Materials Research, 2021, 112, 68-77.	0.3	15
66	Tribological properties of Al 7075 alloy and Al 7075 metal matrix composite reinforced with SiC, sliding under dry, oil lubricated, and inert gas environments. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 693-698.	1.8	14
67	Characterization of AuNPs based ink for inkjet printing of low cost paper based sensors. Materials Letters, 2020, 264, 127332.	2.6	14
68	Investigation on the thermal behaviour of AZ31B/waste eggshell surface composites produced by friction stir processing. Composites Communications, 2021, 28, 100912.	6.3	14
69	Application of Lean Six Sigma for cost-optimised solution of a field quality problem: A case study. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 713-729.	2.4	13
70	Influence of Abrasive Water Jet Turning Parameters on Variation of Diameter of Hybrid Metal Matrix Composite. Lecture Notes in Mechanical Engineering, 2018, , 495-504.	0.4	13
71	Surface Integrity analysis of Wire-EDM on in-situ hybrid composite A359/Al2O3/B4C. Materials Today: Proceedings, 2018, 5, 24632-24641.	1.8	13
72	Surface integrity in wire-EDM tangential turning of in situ hybrid metal matrix composite A359/B₄C/Al₂O₃. Science and Engineering of Composite Materials, 2019, 26, 122-133.	1.4	13

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73	Investigations on bending of micro-thin sheets using spark discharges. Materials and Manufacturing Processes, 2020, 35, 1362-1371.	4.7	13
74	An interpretive hierarchical model for lean implementation in machine tool sector. International Journal of Productivity and Quality Management, 2015, 15, 381.	0.2	12
75	Feasibility Study of Friction Surfaced Coatings over Non-ferrous Substrates. Procedia Engineering, 2016, 149, 465-471.	1.2	12
76	Parametric investigation on abrasive waterjet machining of alumina ceramic using response surface methodology. IOP Conference Series: Materials Science and Engineering, 2018, 377, 012005.	0.6	12
77	Current status, enablers & barriers of implementing cellular manufacturing system in Indian industries. Advances in Manufacturing, 2013, 1, 346-356.	6.1	11
78	Effect of Water Pressure During Abrasive Waterjet Machining of Mg-Based Nanocomposite. Lecture Notes in Mechanical Engineering, 2018, , 605-612.	0.4	11
79	Quantitative analysis of bubble size and electrodes gap at different dielectric conditions in powder mixed EDM process. International Journal of Advanced Manufacturing Technology, 2020, 107, 3065-3075.	3.0	11
80	Studies on Non-traditional Machining of Metal Matrix Composites. Materials Today: Proceedings, 2017, 4, 8226-8239.	1.8	10
81	Surface alloying using tungsten disulphide powder mixed in dielectric in micro-EDM on Ti6Al4V. IOP Conference Series: Materials Science and Engineering, 2018, 377, 012040.	0.6	10
82	Surface integrity of tribo-adaptive layer prepared on Ti6Al4V through Î¼EDC process. Surface and Coatings Technology, 2022, 429, 127922.	4.8	10
83	Print fidelity evaluation of PVA hydrogel using computational fluid dynamics for extrusion dependent 3D printing. IOP Conference Series: Materials Science and Engineering, 2022, 1225, 012009.	0.6	10
84	Processing of alumina ceramics by abrasive waterjet- an experimental study. Materials Today: Proceedings, 2018, 5, 18061-18069.	1.8	9
85	An Investigation on Tool Flank Wear Using Alumina/MoS2 Hybrid Nanofluid in Turning Operation. Lecture Notes in Mechanical Engineering, 2019, , 213-219.	0.4	9
86	Influence of tool materials on surface modification using Î¼EDC process. Surface Engineering, 2021, 37, 1084-1097.	2.2	9
87	Direct Ink Writing of Carbon-Doped Polymeric Composite Ink: A Review on Its Requirements and Applications. 3D Printing and Additive Manufacturing, 2023, 10, 828-854.	2.9	9
88	Surface Roughness of Graphite and Aluminium Alloy After Hydro-abrasive Machining. Lecture Notes in Mechanical Engineering, 2018, , 805-813.	0.4	8
89	Surface Treatment of AISI 304 Using Pulsating Water Jet Peening. Lecture Notes in Mechanical Engineering, 2018, , 535-548.	0.4	8
90	Effect of multi-walled carbon nanotubes based nanofluid on surface roughness and cutting temperature in turning operation using minimum quantity lubrication. IOP Conference Series: Materials Science and Engineering, 2018, 377, 012017.	0.6	8

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91	Selective surface modification of SS304 using hybrid powder-mixed EDC process. Surface Engineering, 2022, 38, 8-21.	2.2	8
92	Tribological behaviour and characterisation of Ni-WS2 composite coating. International Journal of Surface Science and Engineering, 2016, 10, 240.	0.4	7
93	Parametric Study During Abrasive Water Jet Turning ofÂHybrid Metal Matrix Composite. Lecture Notes in Mechanical Engineering, 2019, , 72-84.	0.4	7
94	A study on parametric optimization of Micro-electrical discharge coating process using response surface methodology. Materials Today: Proceedings, 2021, 38, 325-332.	1.8	7
95	Effects of various functional groups in graphene on the tensile and flexural properties of epoxy nanocomposites: a comparative study. Fullerenes Nanotubes and Carbon Nanostructures, 2022, 30, 1123-1133.	2.1	7
96	Ex-CLASS: Extended Cell formation and LAyout Selection considering production parameters with Sequence data. International Journal of Product Development, 2010, 10, 180.	0.2	6
97	Modeling and parametric optimization of laser powder bed fusion 3D printing technique using artificial neural network for enhancing dimensional accuracy. Materials Today: Proceedings, 2022, 56, 873-878.	1.8	6
98	Design of flexible manufacturing cell considering uncertain product mix requirement. International Journal of Agile Systems and Management, 2008, 3, 37.	0.3	5
99	Investigation on Pulsating Liquid Jet with Physiological Saline on Aluminium Surface. Lecture Notes in Mechanical Engineering, 2019, , 63-71.	0.4	5
100	Surface Topography Analysis of Mg-Based Composites with Different Nanoparticle Contents Disintegrated Using Abrasive Water Jet. Materials, 2021, 14, 5471.	2.9	5
101	Microstructural characterization of Friction stir assisted laminated lap welding of AA6063 sheets. Materials Today: Proceedings, 2022, 56, 949-953.	1.8	5
102	Experimental investigation on material removal rate, kerf width, surface roughness and the dimensional accuracy the accuracy of hole in Inconel 718 using wire electric discharge. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892210960.	2.5	5
103	Cell formation considering real-life production parameters. International Journal of Manufacturing Technology and Management, 2010, 20, 197.	0.1	4
104	Effect of Frequency Change During Pulsed Waterjet Interaction with Stainless Steel. Lecture Notes in Mechanical Engineering, 2019, , 85-96.	0.4	4
105	Effect of Al<SUB align="right">2O<SUB align="right">3 nanoparticles on tribological behaviour of Mg-6Al alloy-based nanocomposites. International Journal of Surface Science and Engineering, 2018, 12, 402.	0.4	3
106	A concise review on improvement of tribological properties by electrical discharge coating process. AIP Conference Proceedings, 2020, , .	0.4	3
107	Surface modification of high-performance alloys through microelectrical discharge machining processes. , 2021, , 137-157.		3
108	Process excellence in IT sector in an emerging economic scenario. , 2016, , .		2

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109	Rheological Behaviour of Hybrid Nanofluids: A Review. Materials Forming, Machining and Tribology, 2020, , 77-94.	1.1	2
110	Effect of Al<SUB align="right">2O<SUB align="right">3 nanoparticles on tribological behaviour of Mg-6Al alloy-based nanocomposites. International Journal of Surface Science and Engineering, 2018, 12, 402.	0.4	2
111	Dynamic cellular manufacturing design and its sensitivity analysis. International Journal of Applied Management Science, 2012, 4, 239.	0.2	0
112	Application of soft computing techniques for cell formation problems: A review. , 2017, , .		0
113	Tribological Characteristics of Magnesium-based Nanocomposite. Materials Today: Proceedings, 2018, 5, 13079-13084.	1.8	0
114	Additive Printing of Gold Nanoparticles on Paper Substrate Through Office Ink-Jet Printer. Lecture Notes in Mechanical Engineering, 2019, , 220-228.	0.4	0
115	Enhancement of Surface Properties of High Speed Steel Using Powder Mixed Micro-electrical Discharge Process. Lecture Notes in Mechanical Engineering, 2021, , 361-370.	0.4	0
116	On-Line Monitoring of In-Vitro Application of PWJ for Bone Cement Disintegration. Lecture Notes in Mechanical Engineering, 2021, , 100-110.	0.4	0
117	Influence of graphene and multi-walled carbon nanotube additives on tribological behaviour of lubricants. International Journal of Surface Science and Engineering, 2018, 12, 207.	0.4	0
118	Micro-hardness Improvement of HSS Using Tungsten Tool Through Micro-electrical Discharge Process. Lecture Notes on Multidisciplinary Industrial Engineering, 2019, , 289-297.	0.6	0