

Papers published (only)

Book Chapters

1. Anas Ahmad Siddiqui and **Avanish Kumar Dubey**, Laser Surface Treatment, Engineering Steels and High-Entropy Alloys, 2020, pp.1-16, Intech Open Limited, UK.
2. Nisha Gupta, **Avanish Kumar Dubey** and Dhruv Kant Rahi, Analysis of Electrolyte Flow in IEG During Electrochemical Grinding of MMC, Advances in Mechanical Engineering, 2021, pp. 307-315, Springer, Singapore.
3. Deepak Kumar Gupta, **Avanish Kumar Dubey** and Alok Mishra, Numerical Study on Heat Affected Zone and Material Removal Rate of Shape Memory Alloy in Wire Electric Discharge Machining, Advances in Manufacturing and Industrial Engineering, 2021 pp. 509-517, Springer, Singapore.
4. Dhruv Kant Rahi, **Avanish Kumar Dubey** and Nisha Gupta, Analysis of Electrolyte Flow Effects in Surface Micro-ECG, Advances in Manufacturing and Industrial Engineering, 2021 pp. 371-379, Springer, Singapore.
5. Umesh Kumar Singh, **Avanish Kumar Dubey** and Ashutosh Pandey, Thermal Analysis of Friction Stir Welding for Different Tool Geometries, Advances in Manufacturing and Industrial Engineering, 2021 pp. 361-370, Springer, Singapore.
6. Umesh Kumar Singh and **Avanish Kumar Dubey**, Welding performance of dissimilar AZ91 and AZ31 Mg-alloys using developed Friction Stir Welding set-up, Recent advances in Smart manufacturing and materials, 2021 pp. 197-203, Springer, Singapore.
7. Surendra K. Saini, **Avanish K. Dubey** and B.N. Upadhyay, Optimization of surface roughness of laser trepanned hole in ZTA plate, Machines and Mechanisms and Robotics, 2022 pp. 61-67, Springer, Singapore.
8. A.A. Siddiqui, **A.K. Dubey**, Intelligent modeling of Dilution percent in Laser Surface Alloying of $Al_xCu_{0.5}FeNiTi$ High Entropy Alloy, Machines and Mechanisms and Robotics, 2022 pp. 455-61, Springer, Singapore.
9. Surendra K. Saini, **Avanish K. Dubey** and B.N. Upadhyay, Modeling and Optimization of RLT in Laser Trepanned ZTA Plate, Industry 4.0 and Advanced Manufacturing, 2023 pp.231-236, Springer, Singapore.
10. Surendra K. Saini, **Avanish K. Dubey**, Optimization of Hole Characteristics During LTD of ZTA Plate, Industrial Problems on Machines and Mechanism, 2024 pp. 601-605, Springer, Singapore.
11. Surendra K. Saini, **Avanish K. Dubey**, Multi-Objective Optimization of Hole Characteristics During LTD of ZTA. Industry 4.0 and Advanced Manufacturing 2024 Jan 11 (pp. 13-21). Singapore: Springer Nature Singapore.
12. Yadav, Anurag, and **Avanish Kumar Dubey**. "Drilling of Al/SiC Metal Matrix Composite." Machine and Computing Technologies for Sustainable Development, 2025: Volume 2 2: 160.

Journals

13. **Avanish Kumar Dubey** and Vinod Yadava, Capabilities and Applications of Magnetic Abrasive Finishing – A Review, Indian Surface Finishing Vol. 2, Issue 4, 2005, pp. 483-492.
14. **Avanish Kumar Dubey** and Vinod Yadava, Simultaneous optimization of multiple quality characteristics in Laser Beam Cutting using Taguchi method, International Journal of Precision Engineering and Manufacturing8 (2007) 10-15.
15. **Avanish Kumar Dubey** and Vinod Yadava, Experimental Study of Nd:YAG Laser Beam Machining – An Overview, Journal of Materials Processing Technology 195 (2008) 15-26.
16. **Avanish Kumar Dubey** and Vinod Yadava, Multi-Objective Optimization of Laser Beam Cutting Process, Optics and Laser Technology40 (2008) 562-570.
17. **Avanish Kumar Dubey** and Vinod Yadava, Multi-Objective Optimization of Nd:YAG Laser Cutting of Nickel Based Superalloy Sheet using Orthogonal Array with Principal Component Analysis, Optics and Lasers in Engineering 46 (2008) 124-132.
18. **Avanish Kumar Dubey** and Vinod Yadava, Laser Beam Machining – A Review, International Journal of Machine Tools and Manufacture48 (2008) 609-628.
19. **Avanish Kumar Dubey** and Vinod Yadava, Optimization of Kerf Quality during Pulsed Laser Beam Cutting of Aluminium Alloy Sheet, Journal of Materials Processing Technology 204 (2008) 412-418.
20. **Avanish Kumar Dubey** and Vinod Yadava, Robust Parameter Design and Multi-Objective Optimization of Laser Beam Cutting for Aluminium Alloy Sheet, International Journal of Advanced Manufacturing Technology 38 (2008) 268-277.
21. Arun Kumar Pandey and **Avanish Kumar Dubey**, Intelligent Modeling of Laser Cutting of Thin Sheet, International Journal of Modeling and Optimization 1(2) (2011) 107-112.

22. Arun Kumar Pandey and **Avanish Kumar Dubey**, Neuro Fuzzy Modeling of Laser Beam Cutting Process, *Applied Mechanics and Materials* 110-116 (2012) 4109-4117.
23. Arun Kumar Pandey and **Avanish Kumar Dubey**, Simultaneous optimization of multiple quality characteristics in laser cutting of Titanium alloy sheet, *Optics and Laser Technology* 44 (2012) 1858-1865.
24. Arun Kumar Pandey and **Avanish Kumar Dubey**, Taguchi based fuzzy logic optimization of multiple quality characteristics in laser cutting of Duralumin sheet, *Optics and Lasers in Engineering* 50 (2012) 328-335.
25. **Avanish Kumar Dubey**, Gavendra Norkey and Sanat Agrawal, Parameter optimisation in laser cutting of aluminium alloy sheet, *International Journal of Mechatronics and Manufacturing Systems*, 5 (3/4) (2012) 179-188.
26. Ashish Srivastava, **Avanish Kumar Dubey** and Pankaj Kumar Shrivastava, Computer-aided hybrid ANN-GA approach for modelling and optimisation of EDDG process, *International Journal of Abrasive Technology* 5(3) (2012) 245-257.
27. Arun Kumar Pandey, **Avanish Kumar Dubey**, AI based Modeling and Optimization of Laser Cutting of Difficult-to-Laser-Cut Materials, *International Journal of Mechanical Engineering Research* 3(1) (2013) 22-25.
28. Arun Kumar Pandey and **Avanish Kumar Dubey**, Multiple quality optimization in laser cutting of difficult-to-laser-cut material using grey-fuzzy methodology, *International Journal of Advanced Manufacturing Technology* 65 (2013) 421-431.
29. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Intelligent modeling and multi-objective optimization of electric discharge diamond grinding of metal matrix composite, *Materials and Manufacturing Processes* 28 (2013) 1036-1041.
30. Arun Kumar Pandey and **Avanish Kumar Dubey**, Fuzzy Expert System for Prediction of Kerf Qualities in Pulsed Laser Cutting of Ti-alloy Sheet, *Machining Science and Technology – An International Journal* 17 (2013) 545-574.
31. Arun Kumar Pandey and **Avanish Kumar Dubey**, Modeling and Optimization of Kerf Taper and Surface Roughness in Laser Cutting of Titanium Alloy Sheet, *Journal of Mechanical Science and Technology* 27 (2013) 2115-2124.
32. Sanjay Kumar, **Avanish Kumar Dubey** and Arun Kumar Pandey, Computer-Aided Genetic Algorithm Based Multi-Objective Optimization of Laser Trepan Drilling, *International Journal of Precision Engineering and Manufacturing* 14 (2013) 1119-1125.
33. Gavendra Norkey, **Avanish Kumar Dubey** and Sanat Agrawal, Optimization of Multiple Quality Characteristics in Laser Cutting of Difficult-to-laser-cut Material, *Applied Mechanics and Materials* 390 (2013) 621-625.
34. Sivarao Subramonian, K. R. Milkey, A. R. Samsudin, **A. K. Dubey** and P. Kidd, RSM Modelling and Optimization of CO₂ Laser Machining of Industrial PVC Foam, *International Review on Modelling and Simulations* 6 (2013) 1339-1343.
35. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Experimental Modeling and Optimization of Electrical Discharge Diamond Face Grinding of Metal Matrix Composite, *International Journal of Advanced Manufacturing Technology* 69 (2013) 2471-2480.
36. Arvind Kumar Chaudhary, Arun Kumar Pandey, and **Avanish Kumar Dubey**, Computer aided Taguchi Fuzzy Multi-objective Optimization of Laser cutting, *Journal of Intelligent and Fuzzy Systems* 26 (2014) 801-810.
37. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, EDM based Hybrid Machining Processes – A Review, *Proceedings IMechE Part B: Journal of Engineering Manufacture* 228 (2014) 799-825.
38. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Comparison of Artificial Neural Model and Response Surface Model during EDAG of Metal Matrix Composite, *International Journal of Engineering Research (Special Issue 3)* 3 (2014) 182-187.
39. Sivarao Subramonian, K. R. Milkey, A. R. Samsudin, **A. K. Dubey** and P. Kidd, Comparison between Taguchi Method and Response Surface Methodology (RSM) in Modelling CO₂ Laser Machining, *Jordan Journal of Mechanical & Industrial Engineering* 8 (1) (2014) 35 - 42.
40. Rupesh Goyal and **Avanish Kumar Dubey**, Hybrid approach for modeling and optimization of hole taper during laser trepan drilling of Ti-6Al-4V alloy sheet, *Procedia Materials Science* 5 (2014) 1781-1790.
41. Pawan Sharma, **Avanish Kumar Dubey** and Arun Kumar Pandey, Numerical Study of Temperature and Stress Fields in Laser Cutting of Aluminium alloy Sheet, *Procedia Materials Science* 5 (2014) 1887-1896.

42. Gavendra Norkey, **Avanish Kumar Dubey** and Sanat Agrawal, Artificial Intelligence based Modeling and Optimization of Heat Affected Zone in Nd:YAG laser cutting of Duralumin sheet, *Journal of Intelligent and Fuzzy Systems*, (2014), 27 (3) 1545 - 1555.
43. Rupesh Goyal and **Avanish Kumar Dubey**, Quality improvement by parameter optimization in laser trepan drilling of superalloy sheet, *Materials and Manufacturing Processes* 29 (2014) 1410-1416.
44. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Study of electrical discharge abrasive grinding process performance using CBN abrasive, *International Journal of Abrasive Technology* 7 (2015) 90-106.
45. Vineet Yadav and **Avanish Kumar Dubey**, Parametric analysis of laser percussion drilling of Yttria Stabilized Zirconia, *BLB International Journal of Science and Technology*, Special Issue November 2015 pp. 254-259.
46. Rupesh Goyal and **Avanish Kumar Dubey**, Multi-criteria optimization of hole geometry for laser trepanning of Titanium alloy, *Lasers in Engineering* 32 (2015) 423-444.
47. Rupesh Goyal and **Avanish Kumar Dubey**, Modeling and optimization of geometrical characteristics in laser trepan drilling of titanium alloy, *Journal of Mechanical Science and Technology* 30 (3) (2016) 1281-1293.
48. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Modeling and multi-objective optimization of EDDG process using hybrid ANN-GA approach, *International Journal of Abrasive Technology* 7(3) (2016) 226-245.
49. Rupesh Goyal, **Avanish Kumar Dubey** and B. N. Upadhyay, An intelligent approach to quality improvement in laser trepan drilling of superalloy, *Lasers in Engineering* 34 (2016) 15-41.
50. Surendra K. Saini, **Avanish K. Dubey**, Piyush Pant, B. N. Upadhyay and A. Choubey, Study of Laser Drilled Hole Quality of Yttria Stabilized Zirconia, *Lasers in Manufacturing and Materials Processing* 4 (2017) 121-135.
51. Surendra K. Saini, **Avanish K. Dubey**, B.N. Upadhyay and A. Choubey, Study of hole characteristics in Laser Trepan Drilling of ZTA, *Optics and Laser Technology* 103 (2018) 330-339.
52. Anas Ahmad Siddiqui, **Avanish Kumar Dubey**, Christ Prakash Paul, A study of metallurgy and erosion in laser surface alloying of $\text{AlCu}_{0.5}\text{FeNiTi}$ high entropy alloy, *Surface & Coatings Technology* 361 (2019) 27-34.
53. Surendra K. Saini, **Avanish K. Dubey** and B.N. Upadhyay, Study and Optimization of Recast Layer Thickness and Surface Quality in Laser Trepan Drilling of ZTA, *International Journal of Advanced Manufacturing Technology* 103 (2019) 2977-2989.
54. A. A. Siddiqui, **A. K. Dubey**, C. P. Paul, Study of Geometrical Characteristics in Laser Surface Alloying of High Entropy Alloy, *Lasers in Engineering* 43 (2019) 237-259.
55. Surendra K. Saini and **Avanish K. Dubey**, Study of material characteristics in Laser Trepan Drilling of ZTA, *Journal of Manufacturing Processes* 44 (2019) 349-358.
56. Anas Ahmad Siddiqui and **Avanish Kumar Dubey**, Study of Surface Properties in Laser Surface Alloying of $\text{Al}_x\text{Cu}_{0.5}\text{FeNiTi}$ High Entropy Alloy, *Journal of Materials Engineering and Performance* 29 (2020) 6761-6773.
57. Anas Ahmad Siddiqui and **Avanish Kumar Dubey**, Experimental and Numerical Study of Laser Surface Alloying of $\text{Al}_x\text{Cu}_{0.5}\text{FeNiTi}$ High Entropy Alloy, *International Journal of Computational Materials Science and Surface Engineering* 9 (2020) 212-222.
58. Umesh Kumar Singh and **Avanish Kumar Dubey**, Study of joining performance of dissimilar Mg alloys in friction stir welding, *Proc IMechE Part C: Journal of Mechanical Engineering Science* 235(2021), 3554–3562.
59. Anas Ahmad Siddiqui and **Avanish Kumar Dubey**, Recent Trends in Laser Cladding and Surface Alloying, *Optics and Laser Technology* 134 (2021) 106619.
60. Ram Sajeevanand **Avanish Kumar Dubey**, Parametric Study of Die-Sinking Electric Discharge Machining on Aluminium Based Metal Matrix Composite, *Materials Today – Proceedings* 44 (2021) 930-934.
61. Dhruv Kant Rahi and **Avanish Kumar Dubey**, A Study on the Effect of Voltage on Performance Characteristics of Electrochemical Surface Grinding of HMMC, *Materials Today – Proceedings* 44 (2021) 1444-1447.
62. Anas Ahmad Siddiqui and **Avanish Kumar Dubey**, Optimization of geometrical and mechanical characteristics in laser surface alloying, *Materials Today – Proceedings* 44 (2021) 1108-1110.
63. Deepak Kumar Gupta and **Avanish Kumar Dubey**, Multi Process Parameters Optimization of Wire-EDM on Shape Memory Alloy ($\text{Ni}_{54.1}\text{Ti}$) using Taguchi approach, *Materials Today – Proceedings* 44 (2021) 1423-1427.
64. Umesh Kumar Singh and **Avanish Kumar Dubey**, Welding of dissimilar Mg alloys using indigenously developed friction stir welding set-up, *Materials Today – Proceedings* 44 (2021) 975-978.

65. A. A. Siddiqui, **A. K. Dubey**, Modelling of Geometrical Properties in Laser Surface Alloyed AlxCu_{0.5}FeNiTi High-entropy Alloy (HEA), *Lasers in Engineering* 49 (2021)145-154.
66. Umesh Kumar Singh and **Avanish Kumar Dubey**, Study of Weld Characteristics in Friction Stir Welding of Dissimilar Mg-Al-Zn Magnesium Alloys Under Varying Welding Conditions, *Journal of Materials Engineering and Performance* 30 (2021) 7690–7703.
67. Umesh Kumar Singh and **Avanish Kumar Dubey**, Study on the Weldability and Mechanical Performance of Dissimilar AA7075-AZ31 Alloys by Friction Stir Welding, *Materials Today – Proceedings* 47 (2021) 2720–2725.
68. Surendra Kumar Saini, **Avanish Kumar Dubey**, Parameters optimization for microcrack width in laser trepanned hole, *Materials Today – Proceedings* 44 (2021) 3055-3058.
69. Ram Sajeevanand **Avanish Kumar Dubey**, Experimental Study of Magnetic Force-assisted Powder-mixed EDM, *Materials Today – Proceedings* 44 (2021) 2993-2996.
70. R. P. Vishwakarma, U. K. Singh and **A. K. Dubey**, Thermal Analysis of Laser-assisted Friction Stir Welding (LAFSW) for Different Geometrical Parameters. *International Journal of Laser Science: Fundamental Theory and Analytical Methods*, 2022, (3) 65-87.
71. Ram Sajeevanand **Avanish Kumar Dubey**, Experimental Study of Powder mixed EDM of Al based MMC using Indigenously Developed Set-up, *Advances in Materials Processing Technology*, (2021) 1-11.
72. Ram Sajeevanand **Avanish Kumar Dubey**, Machining quality comparison of Al-TiB₂ composite using conventional EDM and magnetic force-assisted powder-mixed EDM, *Advances in Materials and Processing Technologies* (2021) 1-17.
73. Umesh Kumar Singh and **Avanish Kumar Dubey**, Effect of process parameters in friction stir welding of dissimilar magnesium alloys. *Journal of the Brazilian Society of Mechanical Sciences and Engineering* 43(10) (2021)1-16.
74. Umesh Kumar Singh and **Avanish Kumar Dubey**, Study of optimum welding performance in friction stir welding of dissimilar Mg alloys using integrated RSM-TLBO algorithm. *Proc. IMechE Part E: Journal of Process Mechanical Engineering* 236(3) (2021)1153-1166.
75. Dhruv Kant Rahi and **Avanish Kumar Dubey**, Comparative study of machining quality for Al-SiC-Gr hybrid metal matrix composite using ECM and ECSG, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*. 2022, 236(12):6740-51.
76. Ram Sajeevanand **Avanish Kumar Dubey**, Ajit Kumar Singh, Pankaj Kumar Shrivastava, AI-based Modeling and Optimization of Rotating Magnetic Force assisted Powder mixed EDM, *International Journal of Abrasive Technology*, 2022, 11(1):17-32.
77. Surendra K. Saini, **Avanish K. Dubey** and B.N. Upadhyay, Multiobjective optimization of hole characteristics during LTD of ZTA plate. *Materials Today – Proceedings*, 60 (2014): 1-11.
78. Deepak Kumar Gupta, **Avanish Kumar Dubey**, Modeling and optimization of Wire –EDM parameters for machining of Ni54.1Ti45.9 shape memory alloy using hybrid approach, *Proc. IMechE Part E: Journal of Process Mechanical Engineering*, 2022, 236(5):2176-86.
79. Dhruv Kant Rahi and **Avanish Kumar Dubey**, Evaluation of Machining Performance for Electrochemical Surface Grinding of Aluminium Based Hybrid MMC, *International Journal of Precision Engineering and Manufacturing*, 2022, 23(9):1039-47.
80. Vikas Diwakar, **Avanish Kumar Dubey** and Tej Pratap, Prediction of crater shape with different heat flux and parametric simulation in electro-chemical discharge machining, *Proc. IMechE Part E: Journal of Process Mechanical Engineering*, 2023, 237(4):1546-56.
81. Dhruv Kant Rahi and **Avanish Kumar Dubey**, Modeling and Simulation of MRR in Electro- Chemical Surface Grinding of Al-SiC-Gr using hybrid analytical approach, *Journal of Process Mechanical Engineering*. (2023):
82. Umesh Kumar Singh and **Avanish Kumar Dubey**, Microstructure, Mechanical and Corrosion Behaviours in Friction Stir Welding of Dissimilar Magnesium Alloys. *Materials and Corrosion*, 2023.
83. Umesh Kumar Singh and **Avanish Kumar Dubey**, Numerical Assessment of Temperature and Stresses in Friction Stir Welding of Dissimilar Mg-Al-Zn Alloys. *Australian Journal of Mechanical Engineering*, 2023, 1-5.
84. Dhruv Kant Rahi, **Avanish Kumar Dubey**, Experimental modelling and optimisation of electrochemical surface grinding of hybrid metal matrix composite. *Advances in Materials and Processing Technologies*. (2024):1-9.
85. Dhruv Kant Rahi, **Avanish Kumar Dubey**, Modeling and Optimization of Surface Quality Characteristics in Electrochemical Surface Grinding of Metal Matrix Composite, *Journal of Materials Engineering and Performance*. (2024):1-4.

86. Sajeevan R, Dubey AK. Improvement of surface quality in electric discharge machining of metal matrix composite by using hybrid approach. *International Journal of Machining and Machinability of Materials*. 2024;26(2):173-91.
87. Anurag Yadav, **Avanish Kumar Dubey**, SK Sharma, BN Upadhyaya, Precision characterization of hole attributes in Nd: YAG laser percussion drilling of Al/SiC MMC. *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*. 2025 Feb 24:09544089251321931.
88. Singh UK, **Dubey AK**, Saini SK, Yusufzai MK. Experimental investigation of FSW induced property changes in welded dissimilar Mg–Al–Zn alloys. *Welding International*. 2025 Feb 1;39(2):123-33.
89. Nagraj C, **Dubey AK**, Yadav A. Analysis of Mechanical Properties of Steel and Glass Fibre Concrete Compared to Standard Concrete: An Experimental Approach. *International Journal of Scientific Research in Science and Technology*. 2025 Jul 7;12(4):151-64.
90. Rahi DK, **Dubey AK**. Modelling and simulation of MRR in electro-chemical surface grinding of Al-SiC-Gr using hybrid analytical approach. *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*. 2025 Oct;239(5):2905-14.
91. Singh UK, **Dubey AK**, Saini SK, Singh S. Modeling and Optimization of Tensile Strength of Friction Stir Welded Dissimilar Mg-Al-Zn Magnesium Alloys. *Key Engineering Materials*. 2025 Oct 17;1025:3-9.p
92. Yadav, Anurag, and **Avanish Kumar Dubey**. "Investigating Mechanical and Microstructural Characteristics of Aluminium Metal Matrix Composites (Al-MMC) Fabricated via Two-step Stir Casting Technique." *Transactions of the Indian Ceramic Society* 85.2 (2026): 139-150.
93. Yadav, Anurag, **Avanish Kumar Dubey**, and B. N. Upadhyaya. "Experimental Analysis of Ultrasonic Vibration-Assisted Laser Beam Percussion Drilling of 4.5-mm-Thick MMC." *Journal of Materials Engineering and Performance* (2026): 1-12.
94. Singh UK, **Dubey AK**, Saini SK. Modeling and TLBO algorithm based optimization of corrosion rate of friction stir welded dissimilar Mg–Al–Zn alloys. *Welding International*. 2026 Jun 23:1-1.
95. Yadav A, **Dubey AK**. A hybrid ANN–GA framework for multi-objective optimization of surface integrity in Nd: YAG laser percussion drilling of 4.5 mm Al/SiC composites. *Journal of Composite Materials*. 2026.

Conference Proceedings

96. **Avanish Kumar Dubey** and Vinod Yadava, Experimental study and Optimization of Kerf deviation during Laser Beam Cutting, *Proceedings of International Conference on Emerging Challenges in Design and Manufacturing Technologies*, Vol. 1, pp. 93-97, November 28 – 30, 2007, organized jointly by Satyabhama University, Chennai and DRDO, India.
97. **Avanish Kumar Dubey** and Vinod Yadava, Application of Taguchi method for parametric design during Nd:YAG laser cutting, *Proceedings of the National Conference on Modelling and Simulation Techniques in Manufacturing Engineering*, PEC Chennai, 15th March 2007, pp. 1-5.
98. Raghvendra Rao S., **Avanish Kumar Dubey** and Vinod Yadava, Parameter Optimization and Modeling of Straight and Curved Nd-YAG Laser Cutting of Thin Sheet, *Proceedings of 2nd International and 23rd All India Manufacturing Technology, Design and Research (AIMTDR) Conference on Competitive Manufacturing*, Vol. 1, pp. 563-570, December 15 – 17, 2008, organized at IIT Madras, Chennai.
99. Sanjay Mishra, Vinod Yadava and **Avanish Kumar Dubey**, Experimental Study of laser Percussion Drilling- A Review, *Proceedings of the Golden Jubilee National Conference on Recent Advances in Manufacturing (RAM)*, S.V. National Institute of Technology, Surat, July 19-21, 2010, pp. 77-82.
100. **A. K. Dubey**, V. Yadva and G. Norkey, Experimental Investigation of Laser cutting of Highly Reflective and Thermally Conductive Material, *Proceedings of the Golden Jubilee National Conference on Recent Advances in Manufacturing (RAM)*, S.V. National Institute of Technology, Surat, July 19-21, 2010, pp. 387-391.
101. **A. K. Dubey**, Arun Kumar Pandey, Vinod Yadava, Experimental Study on Laser Cutting of Superalloy Sheet, *Proceedings of the 4th International Conference on Advances in Mechanical Engineering (ICAME)*, S.V. National Institute of Technology, Surat, September 23-25, 2010, pp. 244-248.
102. Sanjay Mishra, Vinod Yadava and **Avanish K. Dubey**, A Review of Laser Micro-Drilling, *Proceedings of the 2nd International Conference on Production and Industrial Engineering (CPIE) at National Institute of Technology, Jalandhar*, December 3-5, 2010, pp. 637-642.
103. Rupesh Goyal, **A. K. Dubey** and P. K. Mishra, Fuzzy modeling of recast layer formation in laser trepan drilling of superalloy sheet, *Proceedings of the 5th International Conference on Advances in Mechanical Engineering (ICAME)*, S.V. National Institute of Technology, Surat, June 06-08, 2011, pp. 696-700.
104. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Intelligent Modeling of Surface Roughness during Diamond Grinding of Advanced Ceramics, *Proceedings of World Congress on Engineering 2011*

- (International Conference of Manufacturing Engineering and Engineering Management), London, UK, July 06-08, 2011, Vol. 1, pp. 825-830. (Scopus)
105. Rupesh Goyal and **Avanish Kumar Dubey**, Optimization of recast layer thickness in laser trepan drilling of superalloy sheet, *Proceedings of the International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-7)*, College of Engineering, Pune, December 10-11, 2011, pp. 299-303.
 106. Arun Kumar Pandey and **Avanish Kumar Dubey**, ANN modeling of kerf width in pulsed laser cutting of duralumin sheet, *Proceedings of the International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-7)*, College of Engineering, Pune, December 10-11, 2011, pp. 283-288.
 107. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Intelligent Modeling and Optimization of Material Removal Rate in Electric Discharge Diamond Grinding, *Proceedings of the ASME Conference on Manufacturing Science and Engineering*, University of Notre Dame, USA, June 04-08, 2012, Paper no. MSEC2012-7252, pp. 431-438.
 108. Arun Kumar Pandey and **Avanish Kumar Dubey**, Modeling and Optimization of Kerf Taper in Pulsed Laser Cutting of Duralumin Sheet, *Proceedings of the ASME Conference on Manufacturing Science and Engineering*, University of Notre Dame, USA, June 04-08, 2012, Paper No. MSEC2012-7243, pp. 491-498.
 109. Arun Kumar Pandey and **Avanish Kumar Dubey**, Modeling and Optimization of Surface Roughness in Pulsed Laser Cutting of Duralumin Sheet, *Proceedings of the 3rd International Conference on Production and Industrial Engineering CPIE-2013*, NIT Jalandhar, March 29-31, 2013, pp. 1033-1039 (ISBN: 978-81-920453-1-3).
 110. Ashvarya Agrawal and **Avanish Kumar Dubey**, Modeling and Optimization of MRR in Powder Mixed EDM, *Proceedings of the International Conference on Advanced Engineering Optimization Through Intelligent Techniques*, S.V. National Institute of Technology, Surat, July 01-03, 2013, pp. 96-100.
 111. Md. Sarfaraz Alam and **Avanish Kumar Dubey**, Intelligent Modeling and Optimization of Laser Trepan Drilling of Titanium Alloy Sheet, *Proceedings of the International Conference on Advanced Engineering Optimization Through Intelligent Techniques*, S.V. National Institute of Technology, Surat, July 01-03, 2013, pp. 353-357.
 112. Ashvarya Agrawal, **Avanish Kumar Dubey** and Pankaj Kumar Shrivastava, Modeling and Optimization of Tool Wear Rate in Powder Mixed EDM of MMC, *Proceedings of the 2nd International Conference on Mechanical and Robotics Engineering (ICMRE'2013)*, Pattaya, Thailand, December 17-18, 2013, pp. 1-6 (*Awarded as the best paper*).
 113. Pawan Sharma and **Avanish Kumar Dubey**, Numerical Study of Temperature Field in laser cutting of Aluminium-2024 Alloy, *Proceedings of the National Conference on Advanced Manufacturing Technology (NCAMT)*, NITTTR Chandigarh, May 24, 2013 pp. 203-208.
 114. Saurabh Priyadarshi and **Avanish Kumar Dubey**, A review of Ultrasonic Vibration Assisted Machining, *Proceedings of the National Conference on Advanced Manufacturing Technology (NCAMT)*, NITTTR Chandigarh, May 24, 2013 pp. 209-215.
 115. Saurabh Priyadarshi, **Avanish Kumar Dubey** and Pankaj Kumar Shrivastava, Electrochemical Machining Assisted Machining Processes, *Proceedings of the National Conference on Research and Innovations in Mechanical Engineering (RIME-2014)*, Technocrats Institute of Technology and Sciences Bhopal, March 05-06, 2014 pp. 33-37.
 116. Gavendra Norkey, **Avanish Kumar Dubey** and Sanat Agrawal, Theoretical Investigations in Laser Cutting – A Review, *Proceedings of the National Conference on Research and Innovations in Mechanical Engineering (RIME-2014)*, Technocrats Institute of Technology and Sciences Bhopal, March 05-06, 2014, pp. 103-111.
 117. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Comparison of Artificial Neural Model and Response Surface Model During EDAG of Metal Matrix Composite, published in proceedings of 2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2015), pp.165-169.
 118. Pankaj Kumar Shrivastava and **Avanish Kumar Dubey**, Parametric analysis, modeling and optimization of surface roughness during EDAG using CBN abrasive, 2016 3rd International Conference on Soft Computing and Machine Intelligence (ICSMI 2016), November 23-25, 2016, Dubai, UAE, pp. 1-4.
 119. Ashvarya Agrawal, **Avanish Kumar Dubey** and Pankaj Kumar Shrivastava, Intelligent modeling and multi-objective optimization in powder mixed electric discharge diamond grinding of MMC, published in proceedings of 2016 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2016), December 04-07, 2016, Bali, Indonesia. pp.1036-1040.
 120. Sudeep Kumar Gautam, **Avanish Kumar Dubey** and Surendra Kumar Saini, Numerical Study of Hole Geometry and HAZ in Laser Micro-drilling of Hastelloy sheet, *Proceedings of International Conference*

- on Materials & Manufacturing (ICAMM-2016), e-ISBN: 978-93-86256-19-5, pp.87-93 held on December 08-10, 2016, Osmania University, Hyderabad.
121. Umesh Kumar Singh, **Avanish Kumar Dubey** and Anas Ahmed Siddiqi, Numerical Study of Weld Characteristics in Laser Welding of Ti6Al4V, Proceedings of International Conference on Materials & Manufacturing (ICAMM-2016), e-ISBN: 978-93-86256-19-5, pp.115-121 held on December 08-10, 2016, Osmania University, Hyderabad.
 122. Alok Sanyal, **Avanish Kumar Dubey** and Umesh Kumar Singh, Experimental Study of Friction Stir Welding of Aluminium Alloy, Proceedings of the *National Seminar on Advances in Materials, Manufacturing and Renewable Energy Systems (AMMRES 2018)*, Babu Banarasi Das National Institute of Technology & Management Lucknow, August 17-18, 2018; ISBN: 978-93-86915-57-3 pp.85-94.
 123. Avinash Mani Tripathi, **Avanish Kumar Dubey** and Anas Ahmed Siddiqi, Thermal Analysis in Laser Surface Alloying of Ti6Al4V with TiC, Proceedings of 8th International Conference on *Modeling Simulation and Applied Optimization* ICMSAO 2019, April 15-17, 2019, Bahrain; IEEE *Xplore*: 24 October 2019.
 124. Prateek Pandey, **Avanish Kumar Dubey** and Surendra Kumar Saini, Numerical Study of Laser Hole Cutting in Zirconia Toughened Alumina Plate, Proceedings of 8th International Conference on *Modeling Simulation and Applied Optimization*, April 15-17, 2019, Bahrain; IEEE *Xplore*: 24 October 2019.
 125. Pushpendra Singh, **Avanish Kumar Dubey** and Pankaj Kumar Shrivastava, Performance Evaluation of Electrical Discharge Abrasive Grinding Process using Grinding Ratio, Proceedings of the SMART-2019, IEEE-2019 ISBN: 978-1-7281-3245-7, pp.348-351.
 126. G.K. Tiwari, **A.K. Dubey** and A.A. Siddiqui, A Hybrid Approach for Modelling and Optimization of Laser Cladding Process, International Conference on Advanced Production and Industrial Engineering (ICAPIE 2019) held at DTU Delhi, December 20-21, 2019, IJAPIE-2020-01-142, Vol 5 (1), 17-24.
 127. Umesh Kumar Singh and **Avanish Kumar Dubey**, Study of mechanical properties of friction stir welded armour grade aluminium alloy plates, *Proceedings of the ASME 2020 15th International Manufacturing Science and Engineering Conference*, 2020, Vol. 84263, p. V002T06A013.
 128. Alok Kumar, Umesh Kumar Singh, **Avanish Kumar Dubey** and Pratiksha, Numerical Assessment of Hybrid Laser-Arc Welding of NV E690 Steel, International Conference on Innovations in Mechanical and Materials Engineering, November 4-6, 2022, MNNIT Allahabad, India.
 129. Dhruv Kant Rahi, **Avanish Kumar Dubey** and Ashutosh Maurya, Intelligent Modeling and Optimization of Performance Characteristics in Electro-Chemical Machining of HMMC. International Conference on Innovations in Mechanical and Materials Engineering, November 4-6, 2022, MNNIT Allahabad, India.
 130. Deepak Kumar Gupta, **Avanish Kumar Dubey** and Supriya Yadav, Electric Discharge Wire Cutting Performance of Ni54.1Ti45.9 Shape Memory Alloy. International Conference on Innovations in Mechanical and Materials Engineering, November 4-6, 2022, MNNIT Allahabad, India.
 131. Ankit Priyadarshi, Anurag Yadav, **Avanish Kumar Dubey**, A.A. Siddiqui, Experimental Modelling and Robust Parameter Design in Bevel Gear Lapping. International Conference on Innovations in Mechanical and Materials Engineering, November 4-6, 2022, MNNIT Allahabad, India.
 132. Saini SK, Dubey AK, Maurya AK. Thermal Analysis of Laser Trepan Drilling of Zirconia Toughened Alumina Plate. *NanoWorld J.* 2023 Apr 25;9(S1):S440-3.
 133. Saini SK, Maurya AK, **Dubey AK**, Hango SI. Optimization of Material Characteristics in LTD of ZTA Composite. In International Conference on Composites: Design, Processing, Manufacturing and Health Monitoring 2024 Jun 20 (pp. 145-152). Singapore: Springer Nature Singapore.