

Jaypee University of Engineering & Technology, Guna

Publications – Department of Mechanical Engineering

Book/Book Chapter

- D.S. Hooda and Divya Jain, “Fuzzy Binary Relation Matrix and Its Application in Medical Diagnosis” published in book entitled “Mathematics and Computer Science: Contemporary Developments”, Vol-III, pp.144-163 by BP International Publisher, August 2024.

Journal

- Rohit Mishra and Bhagat Singh, “Ascertaining higher MRR at chatter free milling using spline-based local mean decomposition and artificial neural network based hybrid approach”, Scientia Iranica, Transactions on Mechanical Engineering (B), Vol. 31, No. 16, pp. 1387-1401, September 2024.
- Subas Chandra Dash "Effects of double diffusion and Soret effect on MHD braking of liquid metal packed between enclosed rotating cylindrical annulus." International Journal of Modern Physics C, 2450233, DOI: <https://doi.org/10.1142/S0129183124502334>.
- Amit Sharma, Aman Thakur, Rakesh Kumar Phanden, Tensile behaviour of jute-carbon reinforced polymer matrix composite using ABAQUS, Lecture Notes in Mechanical Engineering, pp. 721-730, July 2024.
- C. K. Chan, Pankaj Dumka, M. Villagómez-Galindo, F. Shaik, G. Tejani, and K. Patel, “Development of thermodynamic relation for mean density of mixture in the risers.pdf,” Applied Chemical Engineering, vol. 7, No. 4, pp. 1–8, 2024.
- N. Jain, R. Chauhan, and Pankaj Dumka, “Implementation of the Tridiagonal Matrix Algorithm (TDMA) in C.pdf,” Recent Trends Programming Language, vol. 11, No. 3, pp. 36–43, 2024.
- Divyanshu Prajapati, Indranil Samanta, Amit Kumar, Pankaj Dumka, “Real-time Ad Click Prediction: Logistic Regression vs. Decision Tree,” International Journal of Scientific Research in Computer Science and Engineering, Vol.12, No.6, pp.36-42, 2024.
- Pankaj Dumka, Rishika Chauhan, and Amit Kumar Srivastava, “Modelling of Gust Factor Based Dynamic Loading of Buildings Using Python Programming,” Computational Engineering and Physical Modelling, vol. 7, No. 3, pp. 61–83, 2024.
- Pankaj Dumka, N. Limbachiya, N. Chippada, V.D. Jiménez Macedo, L. Khatua, N.R. Lakkimsetty, T.C.Manjunath, Feroz Shaik, C. Kit Chan, D.D. Kit Chan, Impact of jute covered hemispherical cups on the performance augmentation of a single slope solar still; An experimental investigation, Applied Chemical Engineering Vol. 7, pp. 1–12, 2024.
- Pankaj Dumka, Krishna Gajula, K. Sharma, Dhananjay R. Mishra, Rishika Chauhan, M.I. Haque Siddiqui, D. Dobrotă, I.M. Rotaru, A case study on single basin solar still augmented with wax filled metallic cylinders, Case Stud. Thermal Engineering Vol. 61, pp. 104847, 2024.

- Pankaj Dumka, Krishna Gajula, A. Mishra, Dhananjay R. Mishra, Modelling of Air Standard Thermodynamic Cycles Using Cycle Pad, International Journal of Engineering and Manufacturing Vol. 14 (2024), pp. 54–76. <https://doi.org/10.5815/ijem.2024.04.05>.
- Pankaj Dumka, Utilizing Microsoft Excel for Critical Path Method (CPM) Problem Solving: A Practical Demonstration for Engineering Students, Ind. Eng. J. Vol. 53, pp. 166–172, 2024.
- Nitesh Pandey, Manish Kumar, Amit Kumar Srivastava and Pankaj Gupta, “Application of Finite Element Analysis in Assessing Mechanical Chair Design”, Journal of Computational Mechanics, Power System and Control, Vol. 7, No. 03, 2024
- Aditya Shrivastava, Nitesh Pandey, Pramiti Tewari, Amit Kumar Srivastava and Pankaj Gupta “Cutting-Edge Generative Design Strategy for Transforming Robot Leg Dynamics in Auto desk Fusion 360”, Journal of Computational Mechanics, Power System and Control, Vol. 07, No. 02, 2024
- Pramiti Tewari, Nitesh Pandey, Amit Kumar Srivastava and Pankaj Gupta, “Designing a CAD model and Optimization of a Glass Cleaning Robot Body Part by Generative Design Using Autodesk Fusion 360”, International Journal of Scientific Research in Multidisciplinary Studies, Vol. 10, No. 02, pages 18-24, 2024

Conference Proceedings

- Palkesh Maithil, Pankaj Gupta and M.L. Chandravanshi “Analysis of Hashin failure criteria for tensile and compression fracture of Fiber Reinforced composite using Finite Element Technique” Lecture Notes in Mechanical Engineering, Recent Advances in Industrial Machines and Mechanisms, Springer, pp. 453–460, 2024
- Harmit Singh Ruhela, Shashwat Bhardwaj, Teerth Agarwal and Pankaj Gupta, “Explicit dynamics analysis of shinpads using finite element analysis” Lecture Notes in Mechanical Engineering, Recent Advances in Industrial Machines and Mechanisms, Springer, pp. 683–690, 2024.
- Atul Dhakar, Bhagat Singh and Pankaj Gupta, “Diagnosing faults of reciprocating air compressor setup using signal processing technique and machine learning approach”, Lecture Notes in Mechanical Engineering, Recent Advances in Mechanical Engineering, Springer, Singapore, pp 447–461, 2024.

Book/Book Chapter

- Dr. Pankaj Gupta, and Dr. Bhagat Singh, “Artificial Intelligence approach in CNC machining”, Publisher : Eliva Press, ISBN: 978-1-63648-757-1.
- Pankaj Dumka, “Building Logic Gate Circuits in Python,” in Mathematics and Computer Science: Contemporary Developments, 5th ed., Leo Willyanto Santoso, Ed., London: BP International, pp. 104–115, 2024