MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

RESEARCH PUBLICATIONS – 2024

Details
Abhilash, H. N., Yanagita, Y., Pai, R., Zuber, M., Tamagawa, M., Prakashini, K., Kamath, G., Padmakumar, R., Barboza, A. B. v, Rao, V. R. K., & others. (2024). Effect of vascular geometry on haemodynamic changes in a carotid artery bifurcation using numerical simulation. Clinical Neurology and Neurosurgery, 237, 108153.
Adhikari, K., Naik, N., Hameed, B. M. Z., Raghunath, S. K., & Somani, B. K. (2024). Exploring the ethical, legal, and social implications of ChatGPT in urology. Current Urology Reports, 25(1), 1–8.
Ahmad, S. M., MC, G., & Shettar, M. (2024). Water-soaking effect and influence of nanoclay on mechanical properties of bamboo/glass fiber reinforced epoxy hybrid composites. Cogent Engineering, 11(1), 2338160.
Anne, G., Bhat, N., Vishwanatha, H. M., Ramesh, S., BH, M. P., Sharma, P., Kudva, A., Jagadeesh, C., & Nanjappa, Y. (2024). Effect of addition of Ce and accumulative roll bonding on structure-property of the Mg-Ce-Al hybrid composite and its prediction and comparison using artificial neural network (ANN) approach. Materials Research Express, 11(9), 96504.
Anne, G., Hegde, A., Kudva, S. A., Sharma, P., Kumar, P., Matapati, M., Ramesh, S., & Sharma, S. S. (2024). Combined effect of multidirectional forging and heat treatment on erosion and corrosion behaviour of the Mg-Zn-Mn alloys. Journal of Mechanical Science and Technology, 38(10), 5429–5437.
Anne, G., Ramesh, S., Sharma, P., BH, M. P., Kudva, A., Kumar, P., Sahu, S., & Bhat, N. (2024). Enhancing wear resistance of AZ61 alloy through friction stir processing: experimental study and prediction model. Materials Research Express, 11(5), 56524.
Arunachala, U. C., Varun, K., & others. (2024). An open-loop and closed loop based passive thermal management techniques applicable to photovoltaic systems. Renewable Energy, 121516.
Arunkumar, H. S., Kumar, S., & Karanth, K. V. (2024). Energy exergy and economic analysis of a multiple inlet solar air heater for augmented thermohydraulic performance. Applied Thermal Engineering, 246, 122981.
Arunkumar, H. S., Madhwesh, N., Anirudh, H. K., Shivamallaiah, M. M., Karanth, K. v, & Amini, Y. (2024). Effect of chamfered turbulators on performance of solar air heater-numerical study. CFD Lett, 16(11), 17–36.
Atul, & Deepak, G. D. (2024). Numerical investigation of smart material-based structures for vibration energy-harvesting applications. Energy Harvesting and Systems, 11(1), 20230097.

Balakrishnan, T. S., Sultan, M. T. H., Shahar, F. S., Nayak, S. Y., Shah, A. U. M., Sebaey, T. A., & Basri, A. A. (2024a). Hybridization of woven kenaf and unidirectional glass fibre roving for unsaturated polyester composite. Iranian Polymer Journal, 33(9), 1231–1244.

Balakrishnan, T. S., Sultan, M. T. H., Shahar, F. S., Nayak, S. Y., Shah, A. U. M., Sebaey, T. A., & Basri, A. A. (2024b). Plant fiber reinforcements as alternatives in pultruded FRP composites manufacturing: a review. Journal of Natural Fibers, 21(1), 2298396.

Balkundhi, M., Baloor, S. S., & Bolar, G. (2024). Assessment of surface treatment methods for strengthening the interfacial adhesion in CARALL fiber metal laminates. Scientific Reports, 14(1), 30909.

Baloor, S. S., Cagan, S. C., Bolar, G., Balkundhi, M., & Dinesh, A. A. (2024). Assessment of surface quality and damages induced during dry helical milling of hybrid composite fiber metal laminates. Materials Research Express, 11(12), 126504.

Barboza, A. B. v, Mohan, S., & Dinesha, P. (2024). Use of biofuel with turpentine oil additive in a compression ignition engine: a green initiative to fulfill sustainable development goals. Cogent Engineering, 11(1), 2364840.

Batista, R. C., Agarwal, A., Gurung, A., Kumar, A., Altarazi, F., Dogra, N., HM, V., Chiniwar, D. S., & Agrawal, A. (2024). Topological and lattice-based AM optimization for improving the structural efficiency of robotic arms. Frontiers in Mechanical Engineering, 10, 1422539.

BH, M. P., Gowda, S., S, R., TK, N., Kandagal, Z. B., P, D. P., Sharma, P., & Anne, G. (2024). Effect of Teak Wood Dust as Filler Material on Mechanical Properties of Abaca-Pineapple-Epoxy Hybrid Composite. Journal of Natural Fibers, 21(1), 2434603.

BH, M. P., Ramesh, S., Gouda, P. S. S., Naik, G. M., Sharma, P., Jagadeesh, C., Math, M. M., & Anne, G. (2024). Impact of ply stacking sequence on the mechanical response of hybrid Jute-Banana fiber phenoplast composites. Materials Research Express, 11(5), 55301.

BH, M. P., Ramesh, S., Gowda, S., Kandagal, Z. B., Pujar, C. v, Anne, G., & others. (2024). Enhancement of mechanical properties of pineapple leaf fiber composites using eggshell powder. Engineering Research Express, 6(4), 45570.

Bhat, R., Rao, P. K., Kamath, C. R., Tandon, V., & Vizzapu, P. (2024). Comparative analysis of Bellman-Ford and Dijkstra's algorithms for optimal evacuation route planning in multi-floor buildings. Cogent Engineering, 11(1), 2319394.

Bhat, S. K., & Deepak, G. D. (2024). Predictive modelling and optimization of double ring electrode based cold plasma using artificial neural network. Int J Eng, 37(1), 83–93.

Bhat, S. K., Yamada, H., Bhat, N. S., & others. (2024). In-silico study on cumulative effects of degeneration and anterior circumferential annular tear on the L5-S1 spinal unit. Biomedical Physics & Engineering Express, 10(6), 65009.

Bhat, T. K., Chadaga, K., Sampathila, N., KS, S., Chadaga, R., Umakanth, S., & Prabhu, S. (2024). Predicting acute myocardial infarction from haematological markers utilizing machine learning and explainable artificial intelligence. Systems Science & Control Engineering, 12(1), 2331074.

Bhatnagar, A., Hegde, A. K., Arunkumar, H. S., Karanth, K. V., & Madhwesh, N. (2024). Innovative cooling for PV panels: Energy and exergy assessments of water-induced V-shaped channels. Results in Engineering, 24, 103100.

Biradar, S., Hiremath, S., Vishwanatha, H. M., Joladarashi, S., & Kulkarni, S. M. (2024). The influence of hygrothermal aging on the hoop tensile strength of glass fiber wound polymer composites fabricated via filament winding technique. Materials Research Express, 11(5), 55305.

BM, G., Hindi, J., Prabhu S, S., YM, S., Prabhu, S., Sharma, S. S., BS, S., & Hiremath, P. (2024). Investigation of mechanical properties on the 3-step T6 treated Al6061/SiCp cascaded bars for structural applications. Cogent Engineering, 11(1), 2315826.

Bolar, G., Dinesh, A. A., Polishetty, A., Shetty, R., Hiremath, A., & Neelakantha, V. L. (2024). Performance Analysis of Helical Milling and Drilling Operations While Machining Carbon Fiber-Reinforced Aluminum Laminates. Journal of Manufacturing and Materials Processing, 8(3), 113.
BRN, M., Beedu, R., PK, J., & Potti, S. R. (2024). Study on machining quality in abrasive water jet machining of jute-polymer composite and optimization of process parameters through grey relational analysis. Journal of Composites Science, 8(1), 20.
BRN, M., Hiremath, A., Giri, J., Makki, E., Bolar, G., HM, V., & others. (2024). A comparative study on milling-induced surface roughness during milling of jute–epoxy and carbon–epoxy composites and optimization for better surface finish through Taguchi and RSM techniques. AIP Advances, 14(4).
Cerrato, C., Jahrreiss, V., Nedbal, C., Ripa, F., Marco, V. de, Monga, M., Hameed, B. M. Z., Kronenberg, P., Pietropaolo, A., Naik, N., & others. (2024). Percutaneous Nephrolithotomy for De Novo Urolithiasis After Kidney Transplantation: A Systematic Review of the Literature. Journal of Endourology, 38(6), 536–544.
Cerrato, C., Nedbal, C., Jahrreiss, V., Ripa, F., Marco, V. D. E., Monga, M., Hameed, B. M., Kronenberg, P., Pietropaolo, A., Naik, N., & others. (2024). URS for de-novo urolithiasis after kidney transplantation: a systematic review of the literature. Minerva Urology and Nephrology.
Chadaga, K., Prabhu, S., Sampathila, N., Chadaga, R., Bhat, D., Sharma, A. K., & Swathi, K. S. (2024). SADXAI: Predicting social anxiety disorder using multiple interpretable artificial intelligence techniques. SLAS Technology, 29(2), 100129.
Chadaga, K., Prabhu, S., Sampathila, N., Chadaga, R., Umakanth, S., Bhat, D., & GS, S. K. (2024). Explainable artificial intelligence approaches for COVID-19 prognosis prediction using clinical markers. Scientific Reports, 14(1), 1783.
Chakraborty, I., Das, B., Govindaraju, I., Yamamoto, T., Noothalapati, H., Managuli, V., & Mazumder, N. (2024). Exploring retrogradation behavior of commercial rice varieties and physicochemical properties of respective extracted starch. ACS Food Science & Technology, 4(4), 947–962.
Chethan, K. N., Waldschmidt, N. S. G., Corda, J. V., Shenoy, S., Shetty, S., Keni, L. G., Nikam, N., Mihcin, S., & others. (2024). Patient-specific finite element analysis for assessing hip fracture risk in aging populations. Biomedical Physics & Engineering Express, 10(3), 35006.
Das, A., Shetty, S., KN, C., Shetty, R., & Suranjan Salins, S. (2024). Electrospun nanofibers: transformative innovations in biomedical applications and Future prospects in healthcare advancement. Cogent Engineering, 11(1), 2433147.
Das, S., Biswas, S. K., Kundu, A., Ghadai, R., & Guha, S. (2024). Investigation of mechanical morphological structural and electrochemical properties of PVD TiAlN coating: A detail experimental and its correlation with an analytical approach using the least square method. Applied Surface Science Advances, 24, 100638.
Deepak, G. D., Anne, G., & others. (2024). Plasma-based Surface Modification Applications of Biomaterials–A Review. International Journal of Multiphysics, 18(1).
Deepak, G. D., & Bhat, S. K. (2024a). A comparative study of breast tumour detection using a semantic segmentation network coupled with different pretrained CNNs. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, 12(1), 2373996.
Deepak, G. D., & Bhat, S. K. (2024b). Deep learning-based CNN for multiclassification of ocular diseases using transfer learning. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, 12(1), 2335959.
Deepak, G. D., & Bhat, S. K. (2024c). Predictive modeling and optimization of pin electrode based cold plasma using machine learning approach. Multiscale and Multidisciplinary Modeling, Experiments and Design, 7(3), 2045–2064.
Deepak, G. D., & Krishna Bhat, S. (2024). Optimization of deep neural networks for multiclassification of dental X-rays using transfer learning. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, 12(1), 2272976.

Deshwal, D., Belgamwar, S. U., Bekinal, S. I., & Doddamani, M. (2024). Role of reinforcement on the tribological properties of polytetrafluoroethylene composites: A comprehensive review. Polymer Composites, 45(16), 14475–14497.
Deshwal, D., U. Belgamwar, S., & Bekinal, S. I. (2024). Tribological characterization of PTFE composites for ball bearing applications. Cogent Engineering, 11(1), 2434625.
DK, S., Bekinal, S. I., & RC, S. (2024). Analysis of factors influencing the performance of radial electrodynamic bearing with radial air gap between permanent magnets using response surface methodology. Cogent Engineering, 11(1), 2401545.
Doreswamy, D., Abhijay, B. R., D'Souza, J. M., Sachidananda, H. K., & Bhat, S. K. (2023). Numerical investigation on the effect of pressurization scenarios on the deformation behaviours and operating volume of a four-chambered soft actuator. World Journal of Engineering, 21(4), 709–719.
Doreswamy, D., Bhat, S. K., Raghunandana, K., Hiremath, P., Shreyas, D. S., & Bongale, A. (2024). ANN-based predictive modelling of the effect of abrasive water-jet parameters on the surface roughness of AZ31 Mg alloy. Manufacturing Review, 11, 21.
Doreswamy, D., Bongale, A. M., Hegde, A. H., Bayezeed, A. A., Das, V., Puneeth, S., Bhat, S., Vamsi, K. N., Castelino, E., Jain, K., & others. (2024). Human-Hand Inspired Elastomeric Soft Pneumatic Actuators: Mapping the Research Landscape and Prospects. Journal Européen Des Systèmes Automatisés, 57(4), 935.
Doreswamy, D., Vijayan, V., Jain, K., & Bhat, S. K. (2024). Machinability of gas metal arc based 3D printed Al-Mg 5356 alloy using wire-EDM. Engineering Research Express, 6(3), 35413.
Eshwar, H., Arunachala, U. C., & Varun, K. (2024). Single-phase thermosyphon heat transport device, a future prospect for heat removal applications: An experimental comparison with heat pipe and two-phase closed thermosyphon. International Journal of Thermal Sciences, 203, 109130.
Fernandes, L. J., Rajashekhar, C. R., & Dinesha, P. (2024). The combined effect of split fueling strategy and EGR on the combustion, performance, and emission characteristics of a CRDI biofuel engine. Heat Transfer, 53(3), 1532–1555.
Ganesha, A., Girish, H., Pai, R., & Khader, S. M. A. (2024). A data-driven exploration of multi pad bidirectional adjustable bearings and deep learning model-based optimization. Tribology International, 194, 109570.
Ganesha, A., Joseph, A., Pai, R., Khader, S. M. A., Kumar, N., Kumar, S., & Girish, H. (2024). Performance optimization of a multi-groove water lubricated journal bearing with partial slip by Taguchi analysis. Arabian Journal for Science and Engineering, 49(2), 2249–2267.
Gangwar, S., Mondal, S. C., Kumar, A., & Ghadai, R. K. (2024). Performance analysis and optimization of machining parameters using coated tungsten carbide cutting tool developed by novel S3P coating method. International Journal on Interactive Design and Manufacturing (IJIDeM), 18(6), 3909–3922.
Ganju, S., Furtado, K. A. D., Birawat, F. H., Shenoy, N., & Acharya, S. (2024). Kinematic simulations and design of a steering upright for a single seater electric car. International Journal of Vehicle Noise and Vibration, 20(1), 27–48.
GHADAI, R. K., KALITA, K., & GUPTA, M. (2024). A HYBRID MEREC-TOPSIS APPROACH FOR THE IMPROVEMENT OF PHYSICAL VAPOUR DEPOSITED TITANIUM CARBO-NITRIDE COATING. MM Science Journal.
Ghadai, R. K., Shanmugasundar, G., Vanitha, M., Čep, R., Das, S., & Swain, B. P. (2024). Investigation of mechanical properties of silver-doped diamond-like carbon coating by varying deposition temperature. Frontiers in Mechanical Engineering, 10, 1354903.
Girish, H., & Pai, R. (2024). Dynamic performance and stability characteristics of a multi pad externally adjustable fluid film bearing. Australian Journal of Mechanical Engineering, 22(1), 133–148.

Gite, S., Rawat, U., Kumar, S., Saini, B., Bhatt, A., Kotecha, K., & Naik, N. (2024). Unfolding Conversational Artificial Intelligence: A Systematic Review of Datasets, Techniques and Challenges in Developments. Engineered Science, 31, 1210.

Goel, C., Mohan, S., Dinesha, P., & Rosen, M. A. (2024). CO2 adsorption by KOH-activated hydrochar derived from banana peel waste. Chemical Papers, 78(6), 3845–3856.

Govenkar, P. G. N., Nayak, S. Y., Oommen, S., & Bhushan, S. (2024). Fabrication, characterization and investigation of flexible light weight nylon-6 based silicon rubber composites for radiation attenuation. Radiation Physics and Chemistry, 220, 111676.

Guler, N., Ismail, Z., Hazem, Z. ben, & Naik, N. (2024). Adaptive Fuzzy Logic Controller-based Intelligent Energy Management System Scheme for Hybrid Electric Vehicles. IEEE Access.

Hariharan, G., MC, G., SS, B., & Kumar, N. (2024). Enhancing strength and damping: a study on the mechanical and vibrational properties of cast iron reinforced granite-epoxy hybrid composite. Cogent Engineering, 11(1), 2368105.

Hariharan, G., Navada, M. K., Brahmavar, J., & Aroor, G. (2024). Machine learning-based predictive model to assess rheological dynamics of eco-friendly oils as biolubricants enriched with SiO2 nanoparticles. Lubricants, 12(3), 92.

Hegde, A., Anne, G., MC, G., Sharma, S., BM, K., & Castelino, M. R. (2024). Effect of austempering parameters and manganese content on the machinability of austempered ductile iron produced using novel method. Cogent Engineering, 11(1), 2378871.

Hegde, A., Birur Manjunathaiah, K., Sharma, S., Mandya Chennegowda, G., Anne, G., & Sadanand, R. V. (2024). Hybrid Treatment and Natural Aging Behavior of Peak-Aged Eutectoid Steel Powder-Reinforced Al 7075 Matrix Composites. Journal of Composites Science, 8(3), 89.

Hegde, A., Nayak, R., Bolar, G., Shetty, R., Ranjan, R., & Naik, N. (2024). Comprehensive investigation of hardness, wear and frictional force in powder metallurgy engineered Ti-6Al-4V-SiCp metal matrix composites. Journal of Composites Science, 8(2), 39.

Hegde, A., Shetty, R., Nayak, R., & Shetty, S. (2024). Design of experiments integrated with neural networks for optimization and predictive modelling of electrode wear of novel Ti-6Al-4V-SiCp composites during die sinking electric discharge machining. Materials Research Express, 11(5), 56522.

Hegde, A., Shetty, R., Nayak, R., Shetty, S., & Shetty SV, U. K. (2024). Optimizing the die-sink EDM machinability of AISI 316L using Ti-6Al-4V-SiCp electrodes: a computational approach. Journal of Manufacturing and Materials Processing, 8(5), 202.

Hegde, M., Karthik, K., Managuli, V., & Bhat, S. K. (2024). A consistent transversely-isotropic hyper-viscoelastic model: Finite element implementation and mechanical characterization of biological tissues. International Journal of Non-Linear Mechanics, 160, 104663.

Hindi, J., Abdul Salam, A. A., K, M., BM, G., YM, S., & Ibrahim, A. (2024). Characterization of Novel Cellulosic Salvadora Persica Fiber for Potentiality in Polymer Matrix Composites. Journal of Natural Fibers, 21(1), 2409874.

Hiremath, A., Bolar, G., BRN, M., Giri, J., Alotaibi, R., Iyer, T., JP, J., & others. (2024). Surface modification of basalt fibers and its effect on the mechanical properties of basalt fiber/epoxy composite laminates. AIP Advances, 14(7).

Hiremath, A., Nayak, S. Y., Heckadka, S. S., & Pramod, J. J. (2024). Mechanical behavior of basalt-reinforced epoxy composites modified with biomass-derived seashell powder. Biomass Conversion and Biorefinery, 14(20), 26281–26291.

Hiremath, P., BM, G., YM, S., Naik, N., Jain, P., Kowshik, S., & BRN, M. (2024). Elevating carbon diffusion: deciphering the interplay of alloy composition and carburizing treatment in low carbon steels. Cogent Engineering, 11(1), 2345847.

Hiremath, P., Naik, N., Bhat, R., Guo, Z., Maddodi, B. S., Narasimha, D. B., Nagraj, N., & others. (2024). Investigating the Mechanical Properties, Durability, and Environmental Impact of Partial

Cement Substitution with Slag Cement and Rice Husk Ash for Sustainable Concrete Production. ES Food & Agroforestry, 18, 1267.

Hiremath, S., Dsouza, J. F., Chiniwar, D. S., Vishwanatha, H. M., & Mallikarjuna, B. (2024). Exploring the impact of epoxy coated 3D-Printed polymers on surface roughness and mechanical behavior: an experimental and numerical study. Results in Engineering, 23, 102779.

HM, V., Rao, R. N., Maiya, M., Kumar, P., Gupta, N., Saxena, K. K., & Vijayan, V. (2024). Effects of arc current and travel speed on the processing of stainless steel via wire arc additive manufacturing (WAAM) process. Journal of Adhesion Science and Technology, 38(12), 2222–2239.

HS, A., N, M., Shenoy, S., & Kumar, S. (2024). Performance evaluation of an indirect-direct evaporative cooler using biomass-based packing material. International Journal of Sustainable Engineering, 17(1), 469–480.

Jagadeesh, C., Prithivirajan, S., Ramesh, S., Anne, G., & others. (2024). On the microstructure, texture and electrochemical properties of severely deformed and artificially aged lightweight AA2050 Al–Cu–Li alloy. Materials Research Express, 11(3), 36509.

Jagadeesh, C., Ramesh, S., Anne, G., & others. (2024). Reciprocating wear behavior of multi-directionally forged and aged Al-Cu-Li alloy. Materials Research Express, 11(7), 76524.

Jamil, M., Manzoor, M., Kumar, A., Agrawal, A., Almeer, R., Kumar, Y. A., & Sharma, R. (2024). A DFT theoretical prediction of new half-metallic ferromagnetism, mechanical stability, optoelectronic and thermoelectric properties of ZnCrO3 perovskites for spintronic applications. Solid State Communications, 394, 115702.

Jayalakshmi, K., Hegde, S., Monteiro, J., & others. (2024). Investigating the properties of hydroxy propyl methyl cellulose based magnesium ion-conducting solid polymer electrolytes for primary battery applications. Journal of Energy Storage, 89, 111575.

JV, S. P. K., Sundharesan, R., Arunkumar, D. T., & Ghadai, R. K. (2024). Enhancing thermal stability and corrosion resistance of carbon-carbon composites with iridium coatings deposited by electron beam physical vapor deposition. Materials Research Express, 11(9), 96404.

Kadam, A. R., Parida, R. K., & others. (2024). Numerical studies on the performance of Savonius turbines for hydropower application by varying the frontal cross-sectional area. Ocean Engineering, 306, 117922.

Kalita, K., Ghadai, R. K., Cep, R., & Jangir, P. (2024). ENHANCING WELDING QUALITY THROUGH PREDICTIVE MODELLING–INSIGHTS FROM MACHINE LEARNING TECHNIQUES. MM Science Journal.

Kalita, K., Ramesh, J. V. N., Čep, R., Jangir, P., Pandya, S. B., Ghadai, R. K., & Abualigah, L. (2024). Many-Objective Whale Optimization Algorithm for Engineering Design and Large-Scale Many-Objective Optimization Problems. International Journal of Computational Intelligence Systems, 17(1), 171.

Kamat, H., Pai, A., Vernekar, N. K., Kini, C. R., & Shenoy, S. B. (2024). Topological optimization and fatigue life prediction of a single pad externally adjustable fluid film bearing. Scientific Reports, 14(1), 13346.

Kanchan, M., Lewis, D., & Varma, A. (2024). Fluid-induced deformation of elastic plate mounted vertically in viscous flow and oscillation frequency prediction using artificial neural networks. Ocean Engineering, 296, 116920.

Kanchan, M., Tambe, P. K., Bharati, S., & Powar, O. S. (2024). Convolutional neural network for colorimetric glucose detection using a smartphone and novel multilayer polyvinyl film microfluidic device. Scientific Reports, 14(1), 28377.

Kanjirakat, A., Mani, N. K., & Fernandes, D. V. (2024). Churning-Motion-Assisted Bubble Removal: A Low-Cost Approach for Enhancing PDMS Mixture Quality. ACS Omega, 9(32), 35080–35087.

Kanwar, V., Managuli, V., & Upadhyaya, Y. S. (2024). Analysis of Damage Value of Aluminum Alloys—Application of a Continuum Damage Mechanics Model. Applied Mechanics, 5(4), 908–923.

Keshyagol, K., Hiremath, S., HM, V., & Hiremath, P. (2024). Investigation of the capacitance and energy storage properties of PDMS-barium titanate composites using numerical method. Interactions, 245(1), 377.

Keshyagol, K., Hiremath, S., HM, V., Kini U, A., Naik, N., & Hiremath, P. (2024). Optimizing Capacitive Pressure Sensor Geometry: A Design of Experiments Approach with a Computer-Generated Model. Sensors, 24(11), 3504.

Keshyagol, K., Hiremath, S., HM, V., Rao, P. K., Hiremath, P., & Naik, N. (2024). Analysis of Polymer-Ceramic Composites Performance on Electrical and Mechanical Properties through Finite Element and Empirical Models. Materials, 17(15), 3837.

Khanna, N., Prajapati, R., & Bolar, G. (2024). Fabrication, machining (dry vs. cryogenic) and life cycle analysis of hybrid titanium composite laminates (HTCL). Machining Science and Technology, 28(4), 626–655.

Kowshik, S., Sharma, S., Rao, S., Naik, N., Bhat, R., Hiremath, P., & Manjunath, M. (2024). Impact of drilling parameters on the surface roughness of egg shell filled glass fibre/polyester composites. Materials Research Express, 11(10), 105306.

Kowshik, S., Sharma, S., Rao, S., Shetty, S. V. U. K., Jain, P., Hiremath, P., Naik, N., & Manjunath, M. (2024). Comparative Study of Unhatched and Hatched Chicken Egg Shell-Filled Glass Fibre/Polyester Composites. Journal of Composites Science, 8(10), 432.

Krishna, A. v, Varma, A., & Nidhul, K. (2024). Heat transfer and entropy generation characteristics of nanofluid flow over bluff bodies under steady and unsteady flow: A two-phase approach. Case Studies in Thermal Engineering, 63, 105242.

Kudva, S. A., Anne, G., Ramesh, S., Kumar, P., Prashanth, B. H. M., SUDHIR, PATIL, N. S., SINGH, Y., & YADAV, C. B. K. (2024). MULTIDIRECTIONAL FORGING OF Mg–Zn–Ca BIODEGRADABLE ALLOYS; INVESTIGATING MICROSTRUCTURE, MECHANICAL, AND CORROSION BEHAVIORS. Surface Review and Letters, 2550073.

Kudva, S. A., Anne, G., Ramesh, S., Sharma, P., Jagadeesh, C., Ritti, L., Naik, G., & Deepak, G. D. (2024). Enhancing surface characteristics of Mg-Zn-Sr alloy through cryo-ball burnishing; modeling and experimentation. Journal of Mechanical Science and Technology, 38(3), 1175–1185.

Kumar, N., Ganesha, A., Girish, H., Harsha, A. K., Vidya Shekar, M., Suranjan Salins, S., & Kumar, S. (2024). The synergy of hybrid desiccants and membrane-assisted techniques for enhancing dehumidifier efficiency. International Journal of Sustainable Engineering, 17(1), 1140–1153.

Kumar, P., Anne, G., Ramesh, M. R., Doddamani, M., & Prabhu, A. (2024). Enhancing the functionality of biodegradable Mg–Zn–Mn alloys using poly (lactic) acid (PLA) coating for temporary implants. Journal of Coatings Technology and Research, 21(4), 1525–1537.

Kumar P, K., Lokeshwar, G., Reddy, C. U. K., Jyotis, A., Shetty, S., Acharya, S., & Shetty, N. (2024). Effect of drilling parameters on surface roughness and delamination of Ramie–Bamboo-reinforced natural hybrid composites. Journal of Manufacturing and Materials Processing, 8(5), 195.

Kumar, S., Hariharan, G., MC, G. S., Suranjan Salins, S., & Kumar, N. (2024). A comparative study of performance and energy efficiency in evaporative cooling: assessing different configurations of organic packings. Cogent Engineering, 11(1), 2376927.

Kumar, S., Kumar, R., Phanden, R. K., Kumar, A., Bala, J., Bharath Kumar, S., Giri, J., Sathish, R. U., Agrawal, A., & Vishwanatha, H. M. (2024). A study on critical failure factors for implementation of sustainable Lean Six Sigma from Indian manufacturing industries perspective using BWM technique. Frontiers in Mechanical Engineering, 10, 1451568.

Kumaraswamy, J., Praveen, P. M. V., Alzahrani, H. A. H., Sharma, S., Shetty, V., & Shedthi, B. S. (2024). Experimental investigation of heat transfer rate for building roof with corrugated sheets using phase change material (PCM). Case Studies in Thermal Engineering, 59, 104508.

Lavanya, M., Hegde, B., Gaonkar, S. L., Shankar, G., Sinha, R. K., & Kumari, P. P. (2024). Corrosion mitigation of 6061 aluminium alloy hybrid metal matrix composite using a green inhibitor: experimental and theoretical investigations. Materials Research Express, 11(7), 76510.
Laxmi, B., PK, J., Hegde, A., Hande, R., & Sharma, S. (2024). Austenitising temperature and quenchant viscosity influence on mechanical properties of normalised green oil quenched 42CrMo4 steel. Cogent Engineering, 11(1), 2340676.
M. C, G., P, P. K., Nayak, P., Bhagavath, P., A. Rao, S., R. Shetty, A., & B. M, K. (2024). Investigation on corrosion behavior of 7075 aluminum alloy reinforced with Ni coated duralumin powder-A hybrid metal matrix composite in acid and neutral medium. Cogent Engineering, 11(1), 2367118.
M. Naik, G., Sharma, P., S, R., Tak, M., Samal, P., Raj A, N., & Anne, G. (2024). Effect of die parameters and coefficient of friction on equivalent plastic strain during ECAE: modeling and optimization. Cogent Engineering, 11(1), 2399735.
Madival, A. S., Doreswamy, D., & Shetty, R. (2024). Experimental investigation on the effect of rice straw reinforcement on the wear properties of polymer composite. International Journal of Surface Science and Engineering, 18(3), 189–203.
Mahajan, A., Hariharan, G., & Pai, R. (2024). Performance prediction and optimization of nanolubricants for hydrodynamic journal bearings: a data-driven approach for regulating volumetric fraction and aggregate particle size. Cogent Engineering, 11(1), 2374946.
Majithia, A., Shah, D., Dave, J., Kumar, A., Rathee, S., Dogra, N., HM, V., Chiniwar, D. S., & Hiremath, S. (2024). Design, motions, capabilities, and applications of quadruped robots: a comprehensive review. Frontiers in Mechanical Engineering, 10, 1448681.
Mallya, R., Pai, R., & Shenoy Baloor, S. (2024). Nonlinear transient analysis of water lubricated bearing in the turbulent regime. Scientific Reports, 14(1), 26871.
Mandal, P., Mondal, S., Cep, R., & Ghadai, R. K. (2024). Multi-objective optimization of an EDM process for Monel K-500 alloy using response surface methodology-multi-objective dragonfly algorithm. Scientific Reports, 14(1), 20757.
Marakini, V., Bolar, G., Achar, B. P., & others. (2024). Cryogenic and conventional milling of AZ91 magnesium alloy. Journal of Magnesium and Alloys, 12(6), 2503–2519.
MC, G., Sharma, S., Hegde, A., Bhat M, S., Nayak, R., & others. (2024). Tribological simulation analysis of artificially aged A356 alloy with minor addition of copper and zinc. Cogent Engineering, 11(1).
Mehar, K., Kumar, E. K., Patle, B. K., Panda, S. K., Biswas, S., & Devarajan, Y. (2024). Thermoelastic frequency prediction of nanotube-reinforced graded smart (shape memory alloy-reinforced) sandwich structure. Journal of Vibration Engineering & Technologies, 12(3), 5307–5323.
Mhetre, H., Chendake, Y., Nayyar, M., Kumar, P., Sorte, S., Naik, N., Salmataj, S. A., & Hiremath, P. (2024). Harnessing the potential of electrospun TiO2 nanofibers and nanoparticles enriched with natural dyes: a path towards affordable aolutions for low-cost electronic devices. Materials Research Express, 11(10), 105002.
Mohan, S., Barboza, A. B. v, Ashwini, K., & Dinesha, P. (2024). Biogas yield from co-digesting banana pseudostems with cow dung: Transitioning from mesophilic to thermophilic regimes. Cogent Engineering, 11(1), 2429774.
Mohan, S., Dinesha, P., & Dasari, H. (2024). Cu/BEA catalysts for the selective catalytic reduction of engine-out NOx emissions: Experimental and kinetic investigations. Fuel, 357, 130041.
Mohan, S., Dinesha, P., & Rosen, M. A. (2024). CH4/air combustion in a microscale recirculating heat exchanger: Sizing design using the heat transfer approach. Heat Transfer, 53(4), 1839–1855.
Monteiro, J., Nayak, S. Y., Mathias, K. A., Patil, N., Singh, A., Chaudhari, A., & Sudheer, P. (2024). Effect of fiber orientation and reinforcements on the performance of composite pressure vessel using finite element analysis. Cogent Engineering, 11(1), 2361056.

MP, B., Natesan, K., GL, A. K., & others. (2024). Impact of thermal barrier coatings on temperature distribution of high-pressure gas turbine rotor blades: a computational study. Cogent Engineering, 11(1).

Mujawar, A., Shaikh, K., Lokhande, P., Supekar, A., Naik, N., Kowshik, S., & Jadkar, S. (2024). Effect of nickel oxide concentration on titanium oxide bilayer photoanode for dye-sensitized solar cell application. Journal of Materials Science: Materials in Electronics, 35(20), 1387.

Murthy, B. R. N., Ambekar, A. M., & Hiremath, A. (2024). An investigation of the thermal properties of LM13-quartz-fly-ash hybrid composites. Journal of Composites Science, 8(3), 90.

Mustafa, Z., Ghadai, R. K., Pradhan, B. B., Swain, B. P., Biswas, J., & Kumar, D. (2024). Recent advances in polyaniline/graphene nanocomposites for supercapacitor applications: Synthesis, properties, and future directions. Results in Surfaces and Interfaces, 100316.

Mustafa, Z., Kumar, D., Pradhan, B. B., Swain, B. P., & Ghadai, R. K. (2024). Structural, optical and electrochemical properties of reduced graphene oxide-polyaniline composites for supercapacitor applications. Journal of Materials Science: Materials in Electronics, 35(31), 2037.

Naik, N., Talyshinskii, A., Rassweiler, J., Hameed, B. M. Z., & Somani, B. K. (2024). Digital health innovations in urology: telemedicine, wearables, and mobile applications–a systematic review of literature. Current Opinion in Urology, 34(2), 116–127.

Naik, N., Talyshinskii, A., Shetty, D. K., Hameed, B. M. Z., Zhankina, R., & Somani, B. K. (2024). Smart diagnosis of urinary tract infections: is Artificial Intelligence the fast-Lane Solution? Current Urology Reports, 25(1), 37–47.

Nakul, S., & Arunachala, U. C. (2024). Computational and analytical study on the stability and utility aspects of single-phase natural circulation loop in parabolic trough collector. International Journal of Thermal Sciences, 197, 108817.

Nambiar S, S., BM, K., Sharma, S., Anne, G., Agarwal, P., Agrawal, T., Adiga, S., & Chickkannan, V. (2024). Mechanical and microstructural analysis of cobalt coated CNT/Al2024 reinforced aluminum based composites for aerospace and automotive applications. Cogent Engineering, 11(1), 2436642.

Namlimhemnatee, T., Padmaraj, N. H., Chethan, K. N., Shetty, S., Eram, A., Shetty, N., Bamrungwong, J., & Keni, L. G. (2024). Investigating dental structure response to air abrasion: a finite element analysis. Materials Research Express, 11(3), 35402.

Nargis, T., Shahabaz, S. M., Acharya, S., Shetty, N., Malghan, R. L., & Shetty, S. D. (2024). A comprehensive study on the optimization of drilling performance in hybrid nano-composites and neat CFRP composites using statistical and machine learning approaches. Journal of Manufacturing and Materials Processing, 8(2), 67.

Natesan, K., Ahmed, A. S., YM, S., & Prabhu S, S. (2024). Performance studies on a solar PV-powered multi-stage cooling system. Cogent Engineering, 11(1), 2397497.

Natesan, K., Narayanasamy, S., Mazlan, N., Kamat, H., & others. (2024). Effect of Thermal Aging and Experimental Studies on Enhancement of the Performance of Solar Photovoltaic Panels. International Journal on Energy Conversion, 12(4).

Navada, M. K., Rai, R., Shetty, A. R., Hariharan, G., Kumar, N., Kumar, S., Chandrashekar, G. S., & Aroor, G. (2024). Sol–gel-assisted synthesis of ultra-fine porous SiO2 nanoparticles for investigation of lubricity and rheological properties of eco-friendly bio-lubricant oil. Chemical Papers, 78(4), 2437–2450.

Nedbal, C., Adithya, S., Gite, S., Naik, N., Griffin, S., & Somani, B. K. (2024). A Machine Learning Predictive Model for Ureteroscopy Lasertripsy Outcomes in a Pediatric Population—Results from a Large Endourology Tertiary Center. Journal of Endourology, 38(10), 1044–1055.

Nedbal, C., Adithya, S., Naik, N., Gite, S., Juliebø-Jones, P., & Somani, B. K. (2024). Can Machine Learning Correctly Predict Outcomes of Flexible Ureteroscopy with Laser Lithotripsy for Kidney Stone Disease? Results from a Large Endourology University Centre. European Urology Open Science, 64, 30–37.

Nedbal, C., Naik, N., Castellani, D., Gauhar, V., Geraghty, R., & Somani, B. K. (2024). ChatGPT in urology practice: revolutionizing efficiency and patient care with generative artificial intelligence. Current Opinion in Urology, 34(2), 98–104.

Nedbal, C., Naik, N., Davis, N., Madaan, S., Tokas, T., Cacciamani, G., Ventimiglia, E., Geraghty, R. M., Enikeev, D., & Somani, B. K. (2024). Comprehensive consent in urology using decision aids, leaflets, videos and newer technologies: empowering patient choice and shared decision-making. Therapeutic Advances in Urology, 16, 17562872241301728.

Noronha, D. J., Sharma, S., Prabhu Parkala, R., Shankar, G., Kumar, N., & Doddapaneni, S. (2024). Deep rolling techniques: a comprehensive review of process parameters and impacts on the Material properties of Commercial Steels. Metals, 14(6), 667.

Pai, A., Virk, S. S., Shenoy, S., Nayak, S. Y., & others. (2024). Enhancing oil pressure dynamics in a high-performance racing engine with innovative lubrication system tuning. Engineering Research Express, 6(1), 15515.

Pal, D., Bhagat, S. K., Shanmugasundar, G., & Ghadai, R. K. (2024). An efficient tuning method for networked control systems. Discover Applied Sciences, 6(12), 654.

Pandya, S. B., Kalita, K., Jangir, P., Ghadai, R. K., & Abualigah, L. (2024). Multi-objective geometric mean optimizer (mogmo): A novel metaphor-free population-based math-inspired multi-objective algorithm. International Journal of Computational Intelligence Systems, 17(1), 91.

Pattar, J., Ramesh, D., Malghan, R. L., Kumar, A., Kumar, P., & HM, V. (2024). Investigation of AA6063-based metal–matrix composites reinforced with TiO2 dispersoids through digitally assisted techniques for mechanical, tribological, and microstructural characterizations. Frontiers in Mechanical Engineering, 10, 1393959.

Pittala, R. K., Sharma, P., Anne, G., Arab, J., Unune, D. R., Kumar, C. S., & Fernandes, F. (2024). Synthesis and characterization of open cell Ni-Cr foam developed using Pulse electro deposition technique for filtration applications. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 09544054241238908.

PK, J., BRN, M., Hiremath, A., Giri, J., Alotaibi, R., Laxmi, B., & others. (2024). An experimental analysis on sliding wear characteristics of TIG-welded Al6061 reinforced with SiC. AIP Advances, 14(6).

Polishetty, A., Bolar, G., Nomani, J., & Littelfair, G. (2024). Evaluating productivity characteristics of laser engineered net shaping titanium alloy. The International Journal of Advanced Manufacturing Technology, 135(3), 1377–1383.

Poojary, U. R., Kiran, K., Hegde, S., & Gangadharan, K. v. (2024). An experimental investigation on the matrix dependent rheological properties of MRE. Journal of Intelligent Material Systems and Structures, 35(1), 81–98.

Prabhu, A., Raghunandana, K., & Yogesh, P. P. (2024). Workload control in flow shops with bottleneck shifting and process time variability. Production Engineering Archives, 30.

Prabhu, A., Raghunandana, K., Yogesh, P. P., & Barboza, A. B. v. (2024). Investigation of Workload Control Methods for Shops with Re-Entrant Flows. Management Systems in Production Engineering, 32(1).

Prabhu, N. N., Shivamurthy, B., Anandhan, S., BV, R., & RB, J. C. (2024). Synthesis and characterization of Cu-doped ZnO nanofibers for ethanol vapor sensing. Cogent Engineering, 11(1), 2403702.

Pramod, G. K., Arunachala, U. C., Madhwesh, N., & Manjunath, M. S. (2024). A comprehensive review on the effect of turbulence promoters on heat transfer augmentation of solar air heater and the evaluation of thermo-hydraulic performance using metaheuristic optimization algorithms. Environment, Development and Sustainability, 1–50.

Pramod, G. K., Madhwesh, N., Arunachala, U. C., & Manjunath, M. S. (2024). Thermohydraulic performance augmentation of triangular duct solar air heater using semi-conical vortex generators: Numerical and experimental study. Heat Transfer, 53(6), 3021–3053.

Prasad, G., Gaddale, V. S., Kamath, R. C., Shekaranaik, V. J., & Pai, S. P. (2024). A study of dimensionality reduction in GLCM feature-based classification of machined surface images. Arabian Journal for Science and Engineering, 49(2), 1531–1553.
Prasad, G., Vijay, G. S., & Kamath C, R. (2024). Evaluation of tool wear and surface roughness in high-speed dry turning of Incoloy 800. Cogent Engineering, 11(1), 2376913.
Prasad, G., Vijay, G. S., Kamath, R. C., & Hemmady, H. J. (2024). Optimization of the tool wear and surface roughness in the high-speed dry turning of Inconel 800. Cogent Engineering, 11(1), 2308993.
Prasanna, L. C., Managuli, V., & Bhat, K. M. R. (2024). Histological Observations of the Developing Human Fetal Humerus at Different Trimesters of Pregnancy. International Journal of Anatomy and Research, 12(2), 8917.
Prashanth, S. P., Arunachala, U. C., & Varun, K. (2024). Thermal performance augmentation of honeycomb metal matrix embedded phase change material in shell-tube latent heat storage unit. Journal of Energy Storage, 91, 112045.
Prasoetsopha, N., Somdee, P., Shettar, M., Ansari, M. A., & Chumsamrong, P. (2024). Effects of Modified Silicon Carbide on The Physical Properties of Bioplastic Blends. Applied Science and Engineering Progress, 17(4), 7514.
Priyadarshini, M., Vishwanatha, H. M., Biswas, C. K., Singhal, P., Buddhi, D., & Behera, A. (2024). Effect of grey relational optimization of process parameters on surface and tribological characteristics of annealed AISI P20 tool steel machined using wire EDM. International Journal on Interactive Design and Manufacturing (IJIDeM), 18(1), 1–10.
Puttaswamygowda, P. H., Sharma, S., Ullal, A. K., & Shettar, M. (2024). Synergistic enhancement of the mechanical properties of epoxy-based coir fiber composites through alkaline treatment and nanoclay reinforcement. Journal of Composites Science, 8(2), 66.
Rai, R., Shetty, A. R., Shree, M., CH, S., Kumar, N., & Navada, M. K. (2024). Exploring the antimicrobial and antioxidant potential of CuO doped NiO nanocomposites: synthesis, characterization, and melamine sensing evaluation. Nanocomposites, 10(1), 417–431.
Rajesh, V., Prabhu, N. N., & Shivamurthy, B. (2024). Acetone vapor sensing characteristics of Cr-doped ZnO nanofibers. Cogent Engineering, 11(1), 2311090.
Raju, G., Ranjan, A., Banik, S., Poddar, A., Managuli, V., & Mazumder, N. (2024). A commentary on the development and use of smartphone imaging devices. Biophysical Reviews, 16(2), 151–163.
Ramesh, S., BH, M. P., Gomathi, P., Swamy, G. M., Kandagal, Z. B., & Anne, G. (2024). Influence of fibre direction on the mechanical properties and artificial intelligence-based performance prediction of hybrid abaca-jute amino composites. Materials Research Express, 11(7), 75302.
RB, J. C., Prabhu, N. N., Rao, A., Babu, P. D., & Shivamurthy, B. (2024). Morphology, conductivity, thermal stability and electromagnetic radiation shielding study on Cu, Cu-Ni coated polyester fabric and polyester mesh. Cogent Engineering, 11(1), 2356175.
Sadanand, R. V., Sharma, S., & Prabhu, P. R. (2024). Synergistic effects of cold rolling and age hardening on the hardness and tensile characteristics of AA6061 hybrid composites. Materials Research Express, 11(4), 46502.
Salins, S. S., Kumar, S., Ganesha, A., & Reddy, S. V. K. (2024). Machine learning-based optimization and performance analysis of cooling towers. Journal of Building Engineering, 96, 110415.
Salins, S. S., Kumar, S., Reddy, K., Sachidanandaa, H. K., Shetty, S., Stephen, C., & Tejero-González, A. (2024). Assessment of a sustainable technology-based novel humidifier system. Journal of Building Engineering, 90, 109352.
Salins, S. S., Kumar, S., Reddy, K., Shetty, S., & Tejero-González, A. (2024). Experimental investigation in a forced draft wet cooling tower using aluminum oxide nano particles. Chemical Engineering Research and Design, 212, 281–292.

Salins, S. S., Kumar, S., Shetty, S., & Raghavendra, R. (2024). Theoretical and experimental study of the effect of biomass based organic packing wettability on the LDDS and its life cycle analysis. Renewable Energy, 225, 120301.

Salins, S. S., Kumar, S., Shetty, S., Sachidananda, H. K., & Khan, M. S. A. (2024). Characterization of the aluminium-based metal foam properties for automotive applications. Arabian Journal for Science and Engineering, 1–14.

Salunke, S. A., Shelke, H. D., Mujawar, A., Bhujbal, P. K., Shaikh, S. F., Pathan, H. M., Kowshik, S., & Naik, N. (2024). Synthesis and characterization of copper tin sulfide counter electrode for enhanced performance in third-generation solar cells. Journal of Materials Science: Materials in Electronics, 35(17), 1181.

Sangamesh, R., Hiremath, S., Biradar, S., Kumar B, S., Sondar, P., Vishwanatha, H. M., & others. (2024). Effect of alkaline treatment on mechanical properties of natural fiber-reinforced composite. Journal of Mechanical Science and Technology, 38(12), 6597–6605.

Sangamesh, R., Twinkle, R., Chiniwar, D. S., Vishwanatha, H. M., Sondar, P., & Hiremath, S. (2024). Modelling of single and multi-port manifolds and studying the influence of structural and thermal behaviour on exhaust manifolds used in automotive applications. International Journal on Interactive Design and Manufacturing (IJIDeM), 18(4), 2237–2246.

Sankalp Shekar, S., Nagaraj, M., & Mallashetty Shivamallaiah, M. (2024). Heat transfer augmentation of solar air heater using discrete transverse sinewave corrugations. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 238(5), 1778–1799.

Sapkota, G., Ghadai, R. K., Čep, R., Shanmugasundar, G., Chohan, J. S., & Kalita, K. (2024). Enhancing efficiency in photo chemical machining: a multivariate decision-making approach. Frontiers in Mechanical Engineering, 10, 1325018.

Sapkota, G., Ghadai, R. K., Das, S., Sharma, A., Shanmugasundar, G., Čep, R., & Kalita, K. (2024). Development of rare earth element-based hybrid aluminium composites using stir casting process. Scientific Reports, 14(1), 27829.

Shahabaz, S. M., Shetty, N., Sharma, S., Jayashree, P. K., Shetty, S. D., & Naik, N. (2024). Optimization of drilling parameters on delamination and burr formation in drilling of neat CFRP and hybrid CFRP nano-composites. Materials Research Express, 11(3), 35006.

Shanegowda, T. G., Shashikumar, C. M., Gumptapure, V., & Madav, V. (2024). Numerical studies on the performance of Savonius hydrokinetic turbines with varying blade configurations for hydropower utilization. Energy Conversion and Management, 312, 118535.

Sharma, R., Dutta, P., & Murthy, S. S. (2024). Application of hydrogen storage in polygeneration microgrids: Case study of wind microgrid in India. Energy, 311, 133331.

Sharma, S., Nayak, R., Hegde, A., Bhat, R., & others. (2024). Microstructure and surface characterization of copper and zinc added heat treated stir cast A356 alloy. Cogent Engineering, 11(1).

Shcheklein, S. E., Kumar, A., Agrawal, A., & Vasudev, V. (2024). Evaluating hybrid nuclear-thermal power systems for reduced carbon footprint: A comparative analysis. International Journal of Thermofluids, 23, 100768.

Shetty, A., Bhat, T., Mangalore, P., Hegde, A., Sharma, S., & MC, G. (2024). Contribution of mg dissolution on the age hardening characteristics of SiC reinforced Al-Si alloy composites. Cogent Engineering, 11(1), 2396041.

Shetty, A., Bhat, T., Sharma, S., Prabhu, R., Hegde, A., Nithesh, K., & Anne, G. (2024). Modeling and analysis of the effects of age hardening, magnesium dissolution, and SiC reinforcement on wear properties in eutectic Al-Si composites using full factorial techniques. Materials Research Express, 11(12), 126513.

Shetty, B., Pai, B. J., Salmataj, S. A., & Naik, N. (2024). Assessment of Carcinogenic and non-carcinogenic risk indices of heavy metal exposure in different age groups using Monte Carlo Simulation Approach. Scientific Reports, 14(1), 1–20.
Shetty, D. K., Malarout, N., Naik, N., Kamath, R., Duhan, A., & Parthasarathy, K. (2024). Development of a scorecard to measure the satisfaction and happiness in higher education. International Journal of Business Information Systems, 45(2), 143–171.
Shetty, S. R., Umaranikar, R. A., Kasthurirengan, S., & Kumar, S. (2024). Thermal studies on cryocooler thermal masses from 4 K to 300 K for MRI applications. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 46(12), 1–18.
Shetty, S., Shetty, R., Nayak, R., Hegde, A., & Shetty SV, U. K. (2024). DOE coupled MLP-ANN for optimization of thrust force and torque during drilling of CCFRP composite laminates. Cogent Engineering, 11(1), 2319397.
Shetty, S., Shetty, R., Nayak, R., Supriya, J. P., & Hegde, A. (2024). Machinability characteristics study on hibiscus rosa-sinensis reinforced polymer composites using soft computing techniques. Engineering Research Express, 6(4), 45530.
Shetty, S., Shetty, R., Shetty, N., & Hegde, A. (2024). An integrated experimental and analytical approach on mechanical characterization of advanced powder metallurgy aluminium metal matrix composites reinforced with different particulates. Materials Research Express, 11(5), 56515.
Shivamurthy, B., HK, S., Prabhu, N. N., Prabhu, P. M., Selvam, R., & others. (2024). CFRP hybrid composites manufacturing and electromagnetic wave shielding performance-a review. Cogent Engineering, 11(1).
Singh, B., Ahmad, K. A., Murugaiah, M., Yidris, N., Basri, A. A., & Pai, R. (2024). Quasi-steady aerodynamic modeling and dynamic stability of mosquito-inspired flapping wing pico aerial vehicle. Frontiers in Robotics and AI, 11, 1362206.
Somdee, P., Shettar, M., Prasoetsopha, N., & Ansari, M. A. (2024). Reinforcing poly (lactic acid)/poly (butylene succinate) biodegradable blends with silicon carbide (SiC): A silane-coupled approach for enhanced mechanical and thermal performance. Polymer Composites, 45(14), 12624–12635.
Suhas, K., Murthy, B. R. N., & Hiremath, A. (2024). A study on the optimization and functionalization of zirconia-coated multi-walled carbon nanotubes through hydrothermal process. Materials Research Express, 11(4), 45603.
Supekar, A. T., Bhujbal, P. K., Mujawar, A. M., Jadkar, S. R., Shaikh, S. F., Rathod, S. M., Kowshik, S., & Naik, N. (2024). Synthesis of Bi2S3-sensitized TiO2 photoanodes for enhanced photovoltaic performance in solar cell application. Journal of Materials Science: Materials in Electronics, 35(20), 1434.
Supreeth, D. K., Bekinal, S. I., & Shivamurthy, R. C. (2024). Optimization of radial electrodynamic bearing using artificial neural network. IEEE Access.
Supriya, J. P., Shetty, R., Naik, N., Maddasani, S., & Hegde, A. (2024). Chemical characterization of hibiscus rosa-sinensis plant fibers facilitated through design of experiments and artificial neural network hybrid approach. Scientific Reports, 14(1), 22510.
Supriya, J. P., Shetty, R., Shetty, S., Bolar, G., & Hegde, A. (2024). Mechanical and physical characterization of chemically treated Hibiscus Rosa-Sinensis polymer matrix composites using deep learning and statistical approach. Materials Research Express, 11(11), 115304.
Supriya, J. P., Shetty, S., Shetty, R., Nayak, R., Maddasani, S., & Hegde, A. (2024). Quantitative and deep learning based fourier transform infrared radiation and tensile characteristics study on chemically treated hibiscus rosa-sinensis plant fibers. Materials Research Express, 11(7), 75102.
Suranjan Salins, S., Reddy, S. V. K., Kumar, S., & Nair, P. S. (2024). Application of biomass-based wood shaving packing in a liquid desiccant dehumidification system–a source of sustainable energy. International Journal of Sustainable Energy, 43(1), 2287783.

Suresh, S., Barboza, A. B. v, Ashwini, K., & Dinesha, P. (2024). Optimization of ANN Models Using Metaheuristic Algorithms for Prediction of Tailpipe Emissions in Biodiesel Engine. Heat Transfer.

Talyshinskii, A., Hameed, B. M. Z., Naik, N., Adhikari, K., Zhanbyrbekuly, U., Juliebø-Jones, P., & Somani, B. K. (2024). Being all-seeing gymnast within kidney cavity: analysis of the optical and flexibility characteristics trends of 61 flexible ureteroscopes over four decades. Urolithiasis, 52(1), 92.

Talyshinskii, A., Hameed, B. M. Z., Naik, N., Guliev, B., Zhanbyrbekuly, U., Khairley, G., Juliebø-Jones, P., & Somani, B. K. (2023). Miniaturization of flexible ureteroscopes: a comparative trend analysis of 59 flexible ureteroscopes. Urolithiasis, 52(1), 16.

Talyshinskii, A., Hameed, B. M. Z., Naik, N., Juliebø-Jones, P., & Somani, B. K. (2024). Innovation, development and clinical adoption of ureteroscopy: a time trend since its first inception. BJU International, 134(4), 551–553.

Talyshinskii, A., Hameed, B. M. Z., Ravinder, P. P., Naik, N., Randhawa, P., Shah, M., Rai, B. P., Tokas, T., & Somani, B. K. (2024). Catalyzing precision medicine: artificial intelligence advancements in prostate cancer diagnosis and management. Cancers, 16(10), 1809.

Talyshinskii, A., Hameed, B. Z., Zhanbyrbekuly, U., Silay, M. S., Naik, N., Shah, M., Singh, A., Guliev, B., Juliebø-Jones, P., & Somani, B. K. (2024). Role of virtual reality in improving the spatial perception of the kidney during flexible ureteroscopy: A feasibility study using virtual reality simulators and 3D models. Current Urology, 18(1), 24–29.

Talyshinskii, A., Juliebø-Jones, P., Hameed, B. M. Z., Naik, N., Adhikari, K., Zhanbyrbekuly, U., Tzelves, L., & Somani, B. K. (2024). Chatgpt as a clinical decision maker for urolithiasis: Compliance with the current european association of urology guidelines. European Urology Open Science, 69, 51–62.

Talyshinskii, A., Naik, N., Hameed, B. M. Z., Juliebø-Jones, P., & Somani, B. K. (2024). Potential of AI-driven chatbots in urology: revolutionizing patient care through artificial intelligence. Current Urology Reports, 25(1), 9–18.

Talyshinskii, A., Naik, N., Hameed, B. M. Z., Khairley, G., Randhawa, P., & Somani, B. K. (2024). Telemedicine in Endourology for Patient Management and Healthcare Delivery: Current Status and Future Perspectives. Current Urology Reports, 25(11), 299–310.

Tangsali, P. R., Katagi, N. N., Bhat, A., & Shettar, M. (2024). Analysis of magnetohydrodynamic free convection in micropolar fluids over a permeable shrinking sheet with slip boundary conditions. Symmetry, 16(4), 400.

Thanisha, F., Koliyoor, J., Monteiro, J., & others. (2024). Amorphous Magnesium-Doped Chitosan films as solid polymer electrolytes for energy storage device applications. Materials Science and Engineering: B, 301, 117149.

Thomas, L. C., Akkasali, N. K., Patle, B. K., Mehar, K., Kumar, V., & Panda, S. K. (2024). Numerical and experimental frequency analysis of damaged fiber-reinforced metal laminated composite. ZAMM-Journal of Applied Mathematics and Mechanics/Zeitschrift Für Angewandte Mathematik Und Mechanik, 104(12), e202400953.

Trivedi, P., Jain, D., Gite, S., Kotecha, K., Bhatt, A., & Naik, N. (2023). Indian Legal Corpus (ILC): A Dataset for A Dataset Summarizing Indian Legal Proceeding Using Natural Language. Engineered Science, 27, 1022.

Uppar, R., Dinesha, P., & Kumar, S. (2024a). Characterization of bio-lubricants with nanoparticles additives. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 46(1), 3684–3706.

Uppar, R., Dinesha, P., & Kumar, S. (2024b). Yield optimization of nonedible vegetable oil-based bio-lubricant using design of experiments. Environment, Development and Sustainability, 26(11), 29557–29582.

Uppar, R., Kumar, S., & Dinesha, P. (2024). Comparative evaluation of lubricant properties of jatropha and jojoba methyl ester. Cogent Engineering, 11(1), 2334397.

Varma, A., & Nidhul, K. (2024). Thermo-hydraulic and entropy generation analysis of nanofluid flow with variable properties in various duct cross sections: a 3-D two-phase approach. Journal of Thermal Analysis and Calorimetry, 149(9), 4209–4225.

Varun, K., Arunachala, U. C., & Vijayan, P. K. (2024a). Experimental, computational, and analytical investigation of cooktop thermosyphon heat transport device for its feasibility in indoor solar cooking system. Applied Thermal Engineering, 250, 123562.

Varun, K., Arunachala, U. C., & Vijayan, P. K. (2024b). Optimizing the geometry of tube-in-tube Thermosyphon heat transport device from instability Perspective: A computational study. Applied Thermal Engineering, 257, 124398.

Vishwanatha, H. M., Saxena, K. K., Pramanik, A., & Behera, A. (2024). Cryo treatment and corrosion studies of nickel-titanium shape-memory alloy. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 238(3), 1079–1087.

Wagh, S. S., Chougale, A. S., Survase, A. A., Patil, R. S., Naik, N., Naushad, M., & Pathan, H. M. (2024). Rapid photocatalytic dye degradation, enhanced antibacterial and antifungal activities of silver stacked zinc oxide garnished on carbon nanotubes. Scientific Reports, 14(1), 14045.

Wang, Z., Zhao, Z., Bai, P., Ren, J., Liu, B., Naik, N., Liu, B., & Qu, H. (2024). The microstructure and property evolutions of Inconel718 lattice structure by selective laser melting. Advanced Composites and Hybrid Materials, 7(2), 59.

Xiao, H., Sultan, M. T. H., Shahar, F. S., & Nayak, S. Y. (2024). Mechanical and viscoelastic behavior characterization of hybrid aluminum/carbon fiber/pineapple leaf fiber composite via VARTM for automotive industry. Journal of Natural Fibers, 21(1), 2382874.

Xiao, H., Sultan, M. T. H., Shahar, F. S., Nayak, S. Y., Yidris, N., & Shah, A. U. M. (2024). Development of hybrid aluminum/carbon fiber/pineapple leaf fiber laminates using vacuum assisted resin transfer molding (VARTM) for automotive applications. Applied Composite Materials, 31(2), 561–581.

Yadav, P., Gupta, P., Rai, P., Naik, N., Kasip, K., & others. (2023). Exploring the factors influencing the adoption and continuous engagement in unlocking the potential of technology driven chatbots in banking and financial institutions. Engineered Science, 28, 1054.

Zhang, L., Haldorai, A., & Naik, N. (2024). GAN-Augmented Naïve Bayes for identifying high-risk coronary artery disease patients using CT angiography data. Scientific Reports, 14(1), 23278.