

S.No.	Date of Publication	Academic Session	Journal	Title	Author/s
1	2022	2022-23	Journal Paper	HA-ZnO-Fe3O4 Composite Manufactured by Wet Powder Metallurgy Process For Implant Applications	Vinay Pratap Singh
2	1-9-2023	2023-24	Journal Paper	Production and Tribological performance under sliding contact conditions of Zirconia and reduced Graphene oxide loaded Polymer nanocomposites for Biomedical applications,	Rajesh Verma, V.P.Singh
3	12-3-2024	2023-24	Journal Paper (JIIDeM)	Tribological and mechanical testing of artificial bio-bearing materials followed by design and analysis of patient-specific artificial hip joint	Vinay Pratap Singh,
4	1-2024	2023-24	International Journal Phase Transitions	Metallurgical and interfacial co-relation of HA-ZnO-Fe3O4 composite for implant application with properties: Experimental interaction study with ANOVA and ANCOVA model	Vinay Pratap Singh,
5	10-2024	2024-25	Journal of Thermoplastic Composite Materials	Optimization through combined compromise solution and weight determination through SHANNON-ENTROPY for multi criteria decision making in tribological testing of ultrahigh molecular weight polyethylene nano-composite in SBF environment and compression testing with it's invitro analysis	Vinay Pratap Singh,
6	19/10/2024	2024-25	Iranian Polymer Journal	Optimizing tribological performance of 3D-printed poly(lactic acid) components through process parameter analysis	Vinay Pratap Singh,
7	2021	Springer Nature Singapore Pte Ltd. 345-356	Study of Harmful Effects and Disposal Techniques for E-waste in Emerging Nations, Advances in Interdisciplinary Engineering, Lecture Notes in Mechanical Engineering, <a href="https://doi.org/10.1007/978-981-15-9956-9_35">https://doi.org/10.1007/978-981-15-9956-9_35</a> ,	Shyam Sunder and Vinay Pratap Singh,	Vinay Pratap Singh,
8	2021	Journal of Materials Engineering and Performance, ASM International, 2021, Volume 30(2) February 2021, pp955-963.	Determination of Mechanical Properties and Physical Characterization of HA-ZnO-Fe_3 O_4 Composites for Implants applications,	Ruchi Gupta and Dr. Vinay Pratap Singh,	Yashvir Singh
9	20/05/2025	2024-25	Australian Journal of Mechanical Engineering	FEM-based designing and modelling of a porous customised hip implant stem using n-Topology software	Yashvir Singh
10	31/7/2025	2024-25	Advances in Manufacturing Engineering	Effect of Nanoparticles Concentration on the Lubricant Oiliness—A Review	Yashvir Singh
11	22/12/2023	2023-24	Advances in Material Science Reserach	Multifunctional advanced ceramics in aerospace and aeronautical engineering: Applications, challenges, and future directions	Yashvir Singh
12	2-3-2024	2023-24	Environmental Science and Pollution Research	Biodiesel production and exploring properties of Datura stramonium L. oil with its optimization using combined approaches—Taguchi, grey relational analysis, and response surface methodology	Yashvir Singh
13	22/3/2024	2023-24	Part C: Journal of Mechanical Engineering Science	Integrated optimization of common rail direct injection diesel engine input parameters with linseed biodiesel: A hybrid approach using grey relational analysis and genetic algorithm techniques	S.Mishra, R.Kumar, A.Kumar S.K. S Yadav and R.Porwal
14	1-8-2024	2024-25	AIP Advances	Bio-oil yield maximization and characteristics of neem based biomass at optimum conditions along with feasibility of biochar through pyrolysis	D.P.Singh, Sanjay Mishra, Sanjeev Kumar Singh Yadav, R. K. Porwal
15	2021	2020-21	Journal of the Brazilian Society of Mechanical Sciences and Engineering	Comparative analysis of ultrasonic drilling process using static and rotary tools	Versha Nigam and Dr S.K.S.Yadav
16	2022	2022	Journal of Advanced Manufacturing Systems	Comparative analysis and optimization of thermoelectric machining of alumina and silicon carbide reinforced aluminum metal matrix composites using different electrodes	Gaurav Pandey and Dr S.K.S.Yadav
17	2022	2022	Materials Today: Proceedings	Analysis of Surface Roughness during Machining of AISI H-13 steel using EDDFG	Sunil Kumar Yadav and S.K.S.Yadav
18		2022	International Journal on Interactive Design and Manufacturing (JIIDeM)	Experimental Investigation of Vibration Assisted Electrical Discharge Drilling of Al-TiB2	Mayank Shekhar and S.K.S Yadav
19		2022	International Journal on Interactive Design and Manufacturing (JIIDeM)	Designing of Electrochemical Cut-off Grinding Process of Ti-6Al-4V	Mayank Shekhar and S.K.S Yadav
20		2023	Journal of Advanced Manufacturing Systems	Development and Experimental Study of Electrochemical Diamond Drilling Process on Ti6Al4V	Praveen Kumar and S.K.S. Yadav
21	14 June 2023	2023	Sādhanā	The optimal machining parameters of electrochemical diamond drilling process: RSM approach	Sunil Yadav and S.K.S Yadav

22		2023	Materials Today: Proceedings	Measurement and analysis of cutting forces using dynamometer in turning of EN-8 steel	Gaurav Pandey and S.K.S.Yadav
23	22 July 2023	2023	Advances in Material and Processing Technologies	Experimental investigation of electrochemical cut-off grinding for Inconel 718 and comparative study with Ti-6Al-4V	Srivastava ARPIT and S.K.S.Yadav
24	8-2024	2024	<i>Sādhanā</i>	Machining characteristics of Al-TiB <sub>2</sub> using a combination of rotary and low-frequency vibratory motion of tool electrode	Dhirendra Pratap Singh, Sanjay Mishra, Sanjeev Kumar Singh Yadav
25	2024	2024	U.P.B. Sci. Bull.	Experimental Analysis of Micro-Channel Fabrication on Quartz Glass Using ECSM Process	Vivekanand Singh Sanjay Mishra Sanjeev Kr Singh Yadav, Abhishek Kumar and Avadesh Yadav
26	4-2025	2024-25	<a href="#">Journal of Advanced Manufacturing Systems</a>	Parametric study and optimization of WEDM process for sustainable machining of Hybrid Magnesium Metal Matrix Composites	Prof.SKS Yadav
27	2025	2024-25	Polymer Bulletin 2025	Development and Characterization of SWCNT reinforced bio-epoxy nanocomposites	Prof.SKS Yadav
28		2023	Journal of Mechanical Engineering and Sciences	<i>Design and analysis of strut-based lattice structure cranial implant</i>	Khan, M.Z., Bhaskar, J., Kumar, A.
29		2023	J. Mater. Environ	<i>Comprehensive review on properties of polyvinyl alcohol (PVA) crosslinked with carboxylic acid</i>	Pragya Sharma, Pawan Kumar Agrawal, V. K. Singh, Sakshi Chauhan, Jitendra Bhaskar
30		2024	Polym Eng Sci.	<i>Experimental synthesis and characterization of PVA-fumaric acid cross-linked biodegradable films: Implications as a sustainable matrix for composites.</i>	Sharma P, Agrawal PK, Singh VK, Bhaskar J, Verma A, Chauhan S.
31		2023	IOP Publishing Ltd.	<i>Vibration analysis of active composite structures embedded with long and short shape memory alloy (SMA) fibers.</i>	Jitendra Bhaskar, Vivek Gupta, Arun Kumar Sharma and Bishakh Bhattacharya
32		2023	Journal of Vinyl & Additive Technology	<i>Multi-response optimization of characteristics for graphite reinforced biodegradable PVA-fumaric acid cross-linked composite: A gray-fuzzy logic-based hybrid approach</i>	<a href="#">Saurabh Kafaliya</a> , <a href="#">Pawan Kumar Agrawal</a> , <a href="#">Pragya Sharma</a> , <a href="#">V. K. Singh</a> , <a href="#">Jitendra Bhaskar</a> , <a href="#">Sakshi Chauhan</a> , <a href="#">Akarsh Verma</a>
33	September 26, 2022	2022-23	Journal Paper (Journal of Thermoplastic Composite Materials )	Development of reduced Graphene oxide modified Ultrahigh molecular weight polyethylene (rGO/UHMWPE) based Nanocomposites for Biomedical Applications	Devendra Kumar Singh and Rajesh Kumar Verma
34	May 2024	2023-24	Journal paper (Archives of Metallurgy and Materials)	Stacking effect of Carbon/Glass fiber during Drilling operation of laminated polymer composite” Archives of Metallurgy and Materials	Ankit Dhar Dubey, Jogendra Kumar, Panagiotis Kyrtatsis and Rajesh Kumar Verma
35	May 2024	2023-24	Journal paper (Archives of Metallurgy and Materials)	Effect of Zirconia and Graphene Nanoparticles Loading on Thermo-Mechanical Performance of Hybrid Polymer Nanocomposite” Archives of Metallurgy and Materials	Devendra Kumar Singh, Rajesh Kumar Verma and Sanjay Mishra
36	25 Apr 2023	2022-2023	Journal Paper (The Journal of the Textile Institute (JOTI))	Investigation of physiochemical and mechanical properties of reduced Graphene Oxide (rGO) modified Carbon fiber Polymer composites	Shivi Kesarwani and Rajesh Kumar Verma
37	March 2023	2022-23	Journal Paper (Materials Today Communications)	Evaluation of the cutting force, burr formation, and surface quality during the machining of carbon nanoparticle modified polymer composites for structural applications	Shivi Kesarwani, Rajesh Kumar Verma and S.C. Jayswal
38	11 June 2023	2022-23	Journal Paper (Journal of Inorganic and Organometallic Polymers and Materials)	Enhancement in Physiomechanical, Thermal and Morphological Characteristics of Zirconia and reduced Graphene oxide modified Hybrid Polymer Nanocomposites for Orthopedic Application	Devendra Kumar Singh, Rajesh Kumar Verma and Sanjay Mishra
39	June 2023	2022-23	Journal Paper (Journal of Surface Review and Letters)	Using Additive Ratio Assessment and Artificial Bee Colony (ARAS-ABC) optimization algorithm during Drilling of Carbon Nanomaterial/Glass fiber reinforced polymer laminated composites	Kuldeep Kumar, and Rajesh Kumar Verma
40	Feb 2023	2022-23	Journal Paper (Materials Research Express)	Using Harris Hawk algorithm for experimental study on the hole dilation mechanism during Micro-machining (µM) of Graphene nanoplatelets/Carbon fiber (GnP/C) reinforced polymeric composite	Rahul Vishwakarma, Shivi Kesarwani, Rajesh Kumar Verma Kishore Debnath and J Paulo Davim
41	10 Jan2024	2023-24	Journal Paper (Journal of the Brazilian Society of Mechanical Sciences and Engineering)	Modified whale intelligence algorithm and Combined Compromise Solution (CoCoSo) for machinability evaluation of polymer nanocomposites	Shivi Kesarwani, Rajesh Kumar Verma and Jinyang Xu
42	September 2024	2024-25	Journal Paper (Journal of the Brazilian Society of Mechanical Sciences and Engineering)	Production and Machinability evaluation of reduced Graphene Oxide nanoparticles reinforced Polymer Composites during Abrasive Water jet Machining Process	Shivi Kesarwani, Rajesh Kumar Verma, J. Ramkumar and S.C Jayswal
43	09 Oct 2024	2024-25	Journal Paper (Journal of Adhesion Science and Technology )	Comparative study of microstructural evolution and mechanical properties in friction stir processed, reinforced friction stir processed, and heat-treated reinforced friction stir processed Al composites	Anubhav Banerjee, Arindam Dhar, Arpan K. Mondal, Ajay Kumar, Rajesh K. Verma & Suman Chatterjee

44	30 August 2024	2024-25	Journal Paper (Surface Review and Letters (SRL) )	A Bionic Inspired Dragonfly Algorithm for Parametric Optimization and Damage Investigation During Machining of Modified Polymer Nanocomposite	Jogendra Kumar, and Rajesh Kumar Verma
45	24 August 2024	2024-25	Journal Paper (Experimental Techniques )	Improving the Efficiency of Single Lap Riveted Joints in the Carbon Nanofiller Reinforced Laminated Polymer Composites	Kuldeep Kumar, Rajesh Kumar Verma, J. Ramkumar and S. C. Jayswal
46	April 25, 2025	2024-25	Journal Paper (" Progress in Rubber Plastics and Recycling Technology)	Morphological and Thermo-Mechanical Performance Evaluation of rGO-modified Ultra-High Molecular Weight Polyethylene Polymeric Composites for Artificial Bio-Bearing Application	Devendra Kumar Singh and Rajesh Kumar Verma
47	22 April 2025	2024-25	Journal Paper (Journal of the Textile Institute)	Production of Zirconia modified Ultra-high molecular weight polyethylene Polymeric Bio-nanocomposites: Evaluation of Wear mechanisms and Fracture behavior	Devendra Kumar Singh and Rajesh Kumar Verma
48	8 February 2025	2024-25	Journal Paper (Surface Review and Letters)	Improvement in Mechanical Characteristics of Zirconium Nanoparticles Loaded Polymer Composites for Biomedical Applications, Surface Review and Letters	Devendra Kumar Singh and Rajesh Kumar Verma
49	July 2024	2024-25	Journal Paper (FME Transactions )	Evaluation of Machining Characteristics and Tool Wear During Drilling of Carbon/Aluminium Laminated	Ali Riza Motorcu, Ergün Ekici , Shivi Kesarwani and Rajesh Kumar Verma
50	20 June 2024	2023-2024	Journal Paper (Engineering Research Express)	Production and mechanical characterization of Carbon fiber laminated composites modified by Graphene nano platelets (GnP) for high performance application	Amit Kumar Srivastava, Abhishek Singh and Rajesh Kumar Verma
51	2025	2024-25	Part (c): Journal of Mechanical Engineering Science	Nanoparticles for Bio-lubricant Applications	Nishant Singh
52	2024	2024-25	Energy Conversion and Management	Engine using Ternary Fuel doped with Cerium Oxide Nano additives	Nishant Singh
53	2024	2024-25	Biomass Conv. Bioref.	Production and feasibility characterization of bio-oil from jojoba seed	Yashvir Singh, Nishant Singh
54	2024	2024-25	International Journal of Energy for a Clean Environment	Prospect of Bio-lubricants in Automotive Engines: Review	Nishant Singh
55	2024	2024-25	SAE Technical Paper, 2024-01-2823	Synthesis of Biolubricant with Chemical Modification of Dehydrated	Nishant Singh
56	2024	2024-25	Archives of Thermodynamics	Numerical study on effect of operating pressures on CRKEC-based t	Nishant Singh
57	2023	2023-24	Environmental Progress and Sustainable Energy	Running with Cottonseed-Ethyl Oleate Biodiesel Blends	Nishant Singh
58	2023	2023-24	Journal of Cleaner Production	and maximization of bio-oil yield with statistical and machine	Nishant Singh
59	2023	2023-24	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	Effect of nanoparticles as additives to the biofuels and their feasibility assessment on the engine performance and emission analysis—A review	Nishant Singh
60	2023	2023-24	Materials Today: Proceeding	sustainability criteria: A review	Nishant Singh
61	2023	2023-24	Biomass Conv. Bioref	CeO2 nanoparticles as an additive for improving the lubrication	Nishant Singh
62	2023	2023-24	Australian Journal of Mechanical Engineering	dielectrics for sustainable developments	Nishant Singh
63	2023	2023-24	Prabha Materials Science Letters	Rapeseed Oil-based Biodiesel as Lubricant: Frictional Force and Trib	Nishant Singh
64	2023	2023-24	Indian Journal.com	Development of bio-lubricant for electrical vehicles	Nishant Singh
65	2023	2023-24	Materials Today: Proceedings	(CKREC) based variable area supersonic nozzle	Nishant Singh
66	2022	2022-23	Biomass and Bioenergy	methanol: A response surface methodology approach coupled with	Nishant Singh
67	2022	2022-23	Biomass Conversion and Biorefinery	their characterization through solar thermal energy approach.	Nishant Singh
68	2022	2022-23	Journal of process Mechanical Engineering, Part-E	various biofuel generation processes- A review	Nishant Singh
69	2022	2022-23	Wear	(Madhuca Indica) oil based lubricant with SiO2 nanoparticles as	Nishant Singh
70	2022	2022-23	Biomass Conversion and Biorefinery	tribological applications and chemical structure analysis at different	Nishant Singh
71	2022	2022-23	Energy and Environment	blend as a potential alternative fuel for existing DI diesel engine	Nishant Singh
72	2022	2022-23	Biomass Conversion and Biorefinery	based biomass through Solar thermal energy pyrolysis process	Nishant Singh
73	2022	2022-23	Journal of cleaner production	Forecasting of future green house gas emission trajectory for india using energy and economic index with various algorithms	Dr. Gaurav saini
74	Jul-22	22-23	Sustainable energy technologies and assesment	Performance based optimal selection of communication technologies for different smart micro grid applications	Dr. Gaurav saini
75	Jul-22	22-23	Sustainable energy technologies and assesment	Agriculture crop residue based biomass in India - potential assessment methodology and key issues	Dr. Gaurav saini
76	Apr-22	21-22	Journal of environmental sustainability	The effect on performance and emission characteristic of DI Engines filled with CeO2 Nanoparticle addition in diesel/Tyrepolyolysis oil blends	Dr. Gaurav saini
77	Jul-22	22-23	International Journal of Energy for a Clean Environment	On the self starting comparative performance evaluation of darius and hybrid kinetic rotor	Dr. Gaurav saini
78	Jan-23	22-23	Sustainable energy technologies and assesment	Optimal planning and multi criterion decision making for effective design and performance of hybrid microgrid integrated with ennergy magt strategy	Dr. Gaurav saini
79	16-02-2023	22-23	Internation Journal of Electrical power and energy systems	Effective monitoring of pelton turbine based hydropowerplant using data driven approach	Dr. Gaurav saini
80	Mar-23	22-23	Energy conversion and mangt.	Novel comparison of energy exergy and sustainability analysis for biomass fueled solid oxide fuel cell inetegrated gas turbine hybrid config.	Dr. Gaurav saini

81	Dec-23	23-24	Ocean Engineering	Hydrodynamic performance enhancement of sagovonius hydrokinetic turbine using wedge shaped triangular deflector in conjunction with circular deflector	Dr. Gaurav saini
82	Dec-23	23-24	cleaner production	Active elevation of fatigue stress on blade by adaptively manuvaoured deformable trailing edge flaps.	Dr. Gaurav saini
83	Aug-23	23-24	Environmental and climate	diesel engine using carbon nanotube blended with three different	Dr. Gaurav saini
84	Apr-23	22-23	Journal of grid computing	Solar irradiance prediction using a optimized data driven machine learning model	Dr. Gaurav saini
85	Mar-23	22-23	Sustainable energy technologies and assesment	PV/biomass based hybrid enrgy system for a remorye hilly area	Dr. Gaurav saini
86	Mar-23	22-23	Annals of Operation Research	Security issues and challenges in cloud of things based application for industrial automation	Dr. Gaurav saini
87	22-04-2023	22-23	Sustainable energy socities	floating solar hydro and pump hydro storage system	Dr. Gaurav saini
88	Jul-24	24-25	Applied physisics	hemispherical shells and memberane type acoustic meta material	Dr.Rishi kant
89	Jun-23	23-24	Material and Manufacturing process	industrial application	Dr.Rishi kant
90	2023	2022-23	Journal of Physicial sciences	Applications on Solar powered vapor absorption Refrigeration based air conditioning	Mr. RK Ambikesh
	Jul-21	21-22	IRAJET	Finite element analysis and optimization of motor cycle frame for weight reduction	Mr. RK Ambikesh