

**List of Research Publications in SCI/Impact Factor Journals (2018-19)**

S.No	Title of paper	Name of journal	Name of the author/s	Impact Factor
1	Development and characterization of microwave processed cast iron joint	International Journal of Engineering Science and Technology	Satnam Singh, Praveen Singh, Dheeraj Gupta, Vivek Jain, Rohit Kumar, Sarbjeet Kaushal	2.018
2	Biogas reforming for hydrogen enrichment by ceria decorated over nickel catalyst supported on titania and alumina	International Journal of Hydrogen Energy	Pali Rosha, Saroj Kumar Mohapatra, Sunil Kumar Mahla	4.229
3	Enhanced thermal resistance of rammed earth blocks with recycled industry by-products	International Journal of Thermal Sciences, Vol. 138, Pg. 447-458	Deepak Jain, Abhijit Mukherjee, Hannah Porter, Joushua Blake	3.91
4	Experimental and numerical investigations on the effect of alkaline hornification on the hydrothermal ageing of Agave natural fiber composites	International Journal of heat and mass transfer . Vol 130, Pg. 431-439	Deepak Jain, Ishita Kamboj, T K Bera, Amardeep S Kang, Rohit Kumar Singla	3.89
5	Fault detection, isolation and reconfiguration of a bipedal-legged robot	Simulation International, Sage Publishing House, Vol. 95, No. 10, pp. 955–977, 2019	Singh R. and Bera T. K.	1.455
6	Tribological behaviour of hybrid AMMC sliding against steel and cast iron under MWCNT-Oil lubrication	Tribology International	Harpreet Singh, Hiralal Bhowmick	3.246

7	Effect of RE addition on wear behaviour of an Al-6061 based hybrid composite	WEAR	V.K. SHARMA, V.K. SINGLA, R.S. JOSHI	3.2
8	A Bezier extraction based XIGA approach for three-dimensional crack simulations	Advances in Engineering Software	S. K Singh, I. V Singh, G. Bhardwaj and B. K. Mishra	3.198
9	A comparative study to evaluate the corrosion performance of Zr incorporated Cr <sub>3</sub> C <sub>2</sub> -(NiCr) coating at 900° C	Ceramics International , Vol.44, no. 6 (2018): 6479-6492	Lalit Ahuja, Deepa Mudgal, Surendra Singh, Satya Prakash	3.057
10	Correlation between Lüders band formation and precipitation kinetics behaviour during the industrial processing of interstitial free high strength steels	Archives of Civil and Mechanical Engineering Volume 19, Issue 2, Page No. 469–483	Gurpreet Singh, Tarun Nanda, Sk Javed Miadad, Nemai Chandra Gorain, T Venugopalan, B Ravi Kumar	2.846
11	Effect of heat-input and cooling-time on bead characteristics in SAW	Materials and Manufacturing Processes, Vol 34, Issue 2, pp 208-215, ( <a href="https://doi.org/10.1080/10426914.2018.1532578">https://doi.org/10.1080/10426914.2018.1532578</a> )	Satish Kumar Sharma, Sachin Maheshwari, Ratnesh Kumar Raj Singh	3.35
12	Adaptive ball drop algorithm for toolpath generation of axisymmetric triangulated parts to eliminate overcutting	Int J Adv Manuf Technol (2018). <a href="https://doi.org/10.1007/s00170-018-2507-7">https://doi.org/10.1007/s00170-018-2507-7</a>	Ajayinder Singh Jawanda, Ajay Batish, Sanjeev Bedi	2.601
13	Modular Manipulators for Cluttered Environments: A Task-Based Configuration Design Approach	ASME Journal of Mechanisms and Robotics, Vol. 10 (5), pp. 051010-1-11, 2018	Satwinder Singh, Ashish Singla and Ekta Singla	2.23

14	Suppression of contact bounce in beam-type microelectromechanical switches using a feedforward control scheme	Journal of Vibration and Control	R.K. Godara, MM Joglekar	2.197
15	Nodal integral method for convection-diffusion transport using linear and higher order quadrilateral elements	Numerical Heat Transfer, Part B: Fundamentals, Volume 74, 2018 - Issue 3, <a href="https://doi.org/10.1080/10407790.2018.1523596">https://doi.org/10.1080/10407790.2018.1523596</a>	Rishabh Prakash Sharma, Neeraj Kumar	1.775
16	Nonpolynomial Zigzag Theories for Random Static Analysis of Laminated-Composite and Sandwich Plates	AIAA Journal Vol. 57, No. 1 pp. 437-447.	R Sahoo, N Grover, BN Singh.	1.638
17	Processing of Ni–WC–Cr <sub>3</sub> C <sub>2</sub> -based metal matrix composite cladding on SS-316L substrate through microwave irradiation	Journal of Composite Materials	Sarbjeet Kaushal, Dilkaran Singh, Dheeraj Gupta, Vivek Jain	1.613
18	An approach for developing nickel–alumina powder-based metal matrix composite cladding on SS-304 substrate through microwave heating	Journal of Composite Materials	Sarbjeet Kaushal, Bhupinder Singh, Dheeraj Gupta, Hiralal Bhowmick, Vivek Jain	1.613
19	Effect of elevated temperatures and applied pressure on the tribological properties of LM30/sillimanite aluminium alloy composites	Journal of Composite Materials, Volume 53, Issue 11, Page No. 1521-1539	Sandeep Sharma, Tarun Nanda, and O. P. Pandey	1.755
20	Static and DC dynamic pull-in analysis of curled microcantilevers with a compliant support	Microsystem Technologies	Atul Kumar Sharma, R.K. Godara, MM Joglekar	1.581

21	Potential Risk by Disposal of Bottom Ash from Thermal Power Plants and Minimization by Addition of NaHCO <sub>3</sub>	Bulletin of Environmental Contamination and Toxicology	Gurprit Singh, Satish Kuma, S.K. Mohapatra	1.48
22	On Development and Dry Sliding Wear Behavior of Microwave Processed Ni/Al <sub>2</sub> O <sub>3</sub> Composite Clad	Journal of Tribology	Singh, B., Kaushal, S., Gupta, D., and Bhowmick, H. L.	1.318
23	Fuzzy logic controller for obstacle avoidance of mobile robot	International Journal of Nonlinear Sciences and Numerical Simulation, De Gruyter	Singh R. and Bera T. K.	1.162
24	Enhanced tribological properties of SiC reinforced copper metal matrix composites	Materials Research Express	Nalin Somani, Y K Tyagi, Parveen Kumar, Vineet Srivastava and Hiralal Bhowmick	1.151
25	Addition of nanomer clays to GFRPs for enhanced impact strength and fracture toughness	Materials Research Express, Volume 5, Issue 10, 105013, Page No. 1–12	Daksh Shelly, Karanbir Singh, Tarun Nanda and Rajeev Mehta	1.449
26	ANFIS Based Path Planning of 5-DOFs Spatial Manipulator for Medical Applications	Sage - Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, Vol. 232 (7), pp. 726-732, 2018	Jyotindra Narayan, Ekta Singla, Sanjeev Soni and Ashish Singla	1.124

27	Chemical treatment of low-grade coal using Taguchi approach	Particulate Science and Technology- An International Journal	Jatinder Pal Singh, Satish Kumar, S.K. Mohapatra	1.081
28	Friction Stir Welding of Nuclear grade SA508Gr.3Cl.1 and SS304LN dissimilar steels	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 232 (21), 3814–3822	Ratnesh Kumar Raj Singh, Dinesh W Rathod, Sunil Pandey	1.359
29	Fault detection, isolation and reconfiguration of a bipedal-legged robot	Simulation, Sage Publishing House	Singh R. and Bera T. K.	0.94
30	Modeling and optimization of HAZ characteristics for submerged arc welded high strength pipeline steel	Transactions of Indian Institute of Metals. ( <a href="https://doi.org/10.1007/s12666-018-1495-5">https://doi.org/10.1007/s12666-018-1495-5</a> ).	Satish Kumar Sharma, Sachin Maheshwari, Ratnesh Kumar Raj Singh	1.176
31	Bond Graph Modelling and Simulation of Quadruple Robot with Different Gaits	Arabian Journal for Science and Engineering, Springer	Soharu G., Singh R. and Bera T. K.	0.865
32	Hydrogen enrichment of biogas via dry and autothermal-dry reforming with pure nickel (Ni) nanoparticle	Energy	Pali Rosha, Saroj Kumar Mohapatra, Sunil Kumar Mahla, Amit Dhir	
33	Crack Growth Analysis of CNT Reinforced Polymer Nanocomposite using XFEM	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, Vol 233, Issue 5, pp. 1750-1770	Alok Negi, Gagandeep Bhardwaj, J. S. Saini, Neeraj Groover	0.996

34	Investigations to Increase the Failure Load for Joints in Glass Epoxy Composites	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, Vol 233, Issue 6, pp. 2074-2090	Kulwinder Singh, J. S. Saini, H. Bhunia, Jaspreet Singh	0.996
35	A novel electrochemical hydrogen storage-based proton battery for renewable energy storage	MDPI Energies 2019. vol. 12, issue 1, 82 doi: 10.3390/en12010082,	Amandeep Singh Oberoi, Parag Nijhawan, and Parminder Singh	2.676
36	Comparison of Different Hydrophobic Treatments for the Durability Improvement of Palmyra Natural Fiber Composites under Hydrothermal Ageing Environments	Journal of Natural Fibers. <a href="https://doi.org/10.1080/15440478.2019.1588828">https://doi.org/10.1080/15440478.2019.1588828</a>	Deepak Jain, Harpreet Kaur, T K Bera, Rajat Jain	1.07
37	Synthesis, characterization, and bioactivity investigation of biomimetic biodegradable PLA scaffold fabricated by fused filament fabrication process	Journal of the Brazilian Society of Mechanical Sciences and Engineering (2019) 41:121, Springer	Daljeet Singh, Atul Babbar, Vivek Jain, Dheeraj Gupta, Sanjai Saxena, Vagish Dwibedi	1.627
38	Development and Performance Analysis of Semi-Automatic Movement Setup for Planar Welding	Materials and Manufacturing Processes. Vol. 34, No. 11, pp. 1251–1261, 2019	Suri V.K., Bera T. K. and Bhattacharya A.	3.35

39	Effect of multiple passes on Lüders / yield plateaus, microstructure and tensile behavior of narrow-gap thick-section weld plates	Journal of Materials Science, Vol.54(19), pp. 12833-50	Dinesh W Rathod, Y. Sun, G. Obasi, M. Roy	3.442
40	A-TIG welding process for enhanced penetration in Duplex Stainless Steel: An effect of activated fluxes	Materials and Manufacturing Processes, Accepted- In press	S K Tathgir, Dinesh W Rathod, A Batish	3.365
41	Effect of B4C abrasive mixed into dielectric fluid on electrical discharge machining	Journal of the Brazilian Society of Mechanical Sciences and Engineering, 40.12 (2018): 554.	Abhinav Shard , Deep Shikha, Vishal Gupta, M. P. Garg	1.743
42	Analysis of Cracked Functionally Graded Material Plates using XIGA based on Generalized Higher-Order Shear Deformation Theory	Composite Structures	SK Singh, IV Singh, BK Mishra, G Bhardwaj	4.829
43	Analysis of CNT reinforced polymer nanocomposite plate in the presence of discontinuities using XFEM	Theoretical and Applied Fracture Mechanics	A Negi, G Bhardwaj, JS Saini, Kishore Khanna, RK Godara	2.848
44	Experimental Investigation on thermal behaviour of fly ash reinforced Aluminum alloy 6061 hybrid composite	Journal of Mechanical Engineering and Sciences	Shashikanth Kushnoore, Vinay Atgur, P K C Kanigalpula, Nitin Kamitkar, Pratik Shetty	1.7
45	Walking Model of Jansen Mechanism Based Quadruped Robot and Application to Obstacle Avoidance	Arabian Journal for Science and Engineering, Springer	Singh R. and Bera T. K.	1.518

46	An efficient multipoint 5-axis tool positioning method for tensor product surfaces	Int. J. of Advanced Manufacturing Technology, Vol 97(1), pp. 279-295, DOI: <a href="https://doi.org/10.1007/s00170-018-1940-y">https://doi.org/10.1007/s00170-018-1940-y</a>	Ravinder Kumar Duvedi, Sanjeev Bedi, Stephen Mann	2.601
47	A multipoint tool positioning method for five-axis machining in the region of two intersecting tensor product Bézier surfaces	International Journal of Machine Tools and Manufacture, Elsevier, Vol 142, pp. 42–53, Impact Factor: 6.039, DOI: <a href="https://doi.org/10.1016/j.ijmachtools.2019.04.007">https://doi.org/10.1016/j.ijmachtools.2019.04.007</a>	Sandeep Kumar Sharma, Ravinder Kumar Duvedi, Sanjeev Bedi, Stephen Mann	6.039
48	A method for generating multiple solutions for multipoint five-axis tool positioning	Int. Journal of Advanced Manufacturing Technology, Springer-Verlag London, Vol 100, pp. 2509–2520, 2019	Sandeep Kumar Sharma, Ravinder Kumar Duvedi, Sanjeev Bedi, Stephen Mann	2.601
49	Applicability of heat mirrors in reducing thermal losses in concentrating solar collectors.	Journal of Thermal Science and Engineering Applications	Khullar, V., Mahendra, P., and Mittal, M.	1.115
50	Parametric study of the energy efficiency of the HDH desalination unit integrated with nanofluid-based solar collector	Journal of Thermal Analysis and Calorimetry	K Garg, V Khullar, SK Das, H Tyagi	2.471



51	Using solar energy for water purification through nanoparticles assisted evaporation	Journal of Solar Energy Engineering	V Ohri, V Khullar	1.19
52	Investigation of factors influencing the performance of nanofluid-based direct absorption solar collector using Taguchi method	Journal of Thermal Analysis and Calorimetry	V Bhalla, V Khullar, H Tyagi	2.471
53	Technological Advances to Maximize Solar Collector Energy Output: A Review	Journal of Electronic Packaging	SS Salvi, V Bhalla, RA Taylor, V Khullar, TP Otanicar, PE Phelan, H Tyagi	1.99
54	Investigation of rare earth particulate on tribological and mechanical properties of Al-6061 alloy composites for aerospace application	Journal of Materials Research and Technology	Vipin Sharma, Vinod kumar, Ravinder Singh Joshi	3.3
55	Quantitative analysis of microstructure refinement in ultrafine-grained strips of Al6063 fabricated using large strain extrusion machining	Machining Science and Technology	Vipin Sharma, Vinod kumar, Ravinder Singh Joshi	1.7
56	Experimental investigation on effect of RE oxides addition on tribological and mechanical properties of Al-6063 based hybrid composites	Material Research Express	Vipin Sharma, Vinod kumar, Ravinder Singh Joshi	1.4
57	Impact of Martensite Spatial Distribution on Quasi-Static and Dynamic Deformation Behavior of Dual-Phase Steel	Metallurgical and Materials Transactions A, Volume 49A, Page No. 463–475	Manpreet Singh, Anindya Das, T. Venugopalan, Krishenendu Mukherjee, Mahesh Walnuj, Tarun Nanda, B.Ravi Kumar	1.985

58	Effect of dual particle size (DPS) on dry sliding wear behaviour of LM30/sillimanite composites	Tribology International, Volume 123, Page No. 142-154	Sandeep Sharma Tarun Nanda O.P.Pandey	3.517
59	Effect of particle size on dry sliding wear behaviour of sillimanite reinforced aluminium matrix composites	Ceramics International, Volume 44, Page No. 104–114	Sandeep Sharma, Tarun Nanda, O.P.Pandey	3.45
60	Development and performance evaluation of sintered tool tip while EDMing of hardened steel	Material Research Express, 6(8) 6520	Arminster Singh Walia, Vineet Srivastava, Vivek Jain	1.449
61	The impact of academia - industry collaboration on core academic activities: Assessing the latent dimensions	Technological Forecasting and Social Change	Supreet S. Bhullar, Vinay K. Nangia, Ajay Batish	3.815
62	Effect of heat treatment on the wear behavior of zircon reinforced aluminium matrix composites	Materials Research Express, Volume 6, Issue 5, 056535	Sandeep Sharma, Suresh Kumar, Tarun Nanda and OP Pandey	1.449
63	In-situ investigations of microstructural changes during tensile deformation of AISI 304L stainless steels	Archives of Civil and Mechanical Engineering, Volume 19, Issue 3, Page No. 672–679	Swapan Kumar Das, Tarun Nanda, B. Ravi Kumar, Navjot Singh, Vishal Singh	2.846

64	Hydrogen enrichment of biogas via dry and autothermal-dry reformation with pure nickel (Ni) nanoparticles	Energy	Pali Rosha., Dhir, A., Mohapatra, S. K., and Mahla, S.	4.39
65	Production of syngas from agricultural residue as a renewable fuel and its sustainable use in dual-fuel compression ignition engine to investigate performance, emission, and noise characterization	Energy Sources, Part A: Recovery, Utilisation and Environmental Effects	Singh, J., Singh, S., and Mohapatra, S. K.	
66	Biodiesel production from waste cooking oil using heterogeneous catalysts and its operational characteristics on variable compression ratio CI engine	Journal of the Energy Institute	Kataria, J., Mohapatra, S. K., and Kundu, K.	3.204

67	An experimental study on head loss characteristics of pipe bends for flow of cal water slurry at high solid concentration	Journal of Process Mechanical Engineering	Singh, J. Kumar, S., Mohapatra, S. K.,	1.2
68	Erosion wear performance of Ni-Cr-o and NiCrBSiFe-WC (Co) composite coatings deposited by HVOF technique	Industrial Lubrication and Tribology	Singh, J. Kumar, S., Mohapatra	
69	A feasibility study to utilize kitchen waste for power generation in urban areas using CI engines	Energy Sources , Part A: Recovery utilization and Experimental Effects	Lal, S. and Mohapatra, S. K.	0.56
70	Catalytic reforming of synthetic biogas for hydrogen enrichment over Ni supported on ZnO-CeO <sub>2</sub> mixed catalyst	Biomass and Bioenergy, Elsevier,	Pali Rosha., Dhir, A., Mohapatra, S. K., and Mahla, S.,	3.36

71	Effect of compression ratio on combustion, performance, and emission characteristics of compression ignition engine fueled with palm (B20) biodiesel blend	Energy	Rosha P., Mohapatra, S. K., Mahla, S. K., Cho, H., Chauhan, B.S., Dhir, A.,	4.39
72	Dry reforming of methane using various catalysts in the process review	Ceramics International	Singh Rattanvir, Dhir A., Mohapatra S. K., and Mahla S. K.	1.31
73	Tribological performance of Yttrium (III) and Zirconium (IV) ceramics reinforced WC-10Co4Cr cerment powder HVOF thermally sprayed on X2Cr NiMo-17-12-2 steel			

74	Investigations of polylactic acid reinforced composite feedstock filaments for multimaterial three-dimensional printing applications	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	Sudhir Kumar, Dr. Rupinder Singh, Dr. TP Singh, Dr. Ajay Batish	1.359
75	Multimaterial printing and characterization for mechanical and surface properties of functionally graded prototype	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	Sudhir Kumar, Dr. Rupinder Singh, Dr. TP Singh, Dr. Ajay Batish	1.359
76	On investigation of rheological, mechanical and morphological characteristics of waste polymer-based feedstock filament for 3D printing applications	Journal of Thermoplastic Composite Materials	Sudhir Kumar, Dr. Rupinder Singh, Dr. TP Singh, Dr. Ajay Batish	1.343

77	Investigations for magnetic properties of PLA-PVC-Fe <sub>3</sub> O <sub>4</sub> -wood dust blend for self-assembly applications	Journal of Thermoplastic Composite Materials	Sudhir Kumar, Dr. Rupinder Singh, Dr. TP Singh, Dr. Ajay Batish	1.343
78	Improved design of magnetorheological honing tool based on finite element analysis and experimental examination of its performance	International Journal of Advanced Manufacturing Technology 100:1067–1080.	Vishwas Grover, Anant Kumar Singh	2.209
79	Modelling of surface roughness in magnetorehological cylindrical finishing process	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering 233/1: 104-117.	Vishwas Grover, Anant Kumar Singh	1.126
80	An initial new approach for magnetorheological finishing of ferromagnetic internal cylindrical surfaces	International Journal of Advanced Manufacturing Technology 100:1017–1030.	An initial new approach for magnetorheological finishing of ferromagnetic internal cylindrical surfaces	2.496
81	Analysis of surface roughness for novel magnetorheological finishing of a typical blind hole workpiece	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science 233/5: 1541-1561.	Sohaib Ahmad Sirwal, Anant Kumar Singh	1.359

82	Analysis of surface finishing mechanism in a newly developed rotational magnetorheological honing process for its productivity improvement	WEAR 426–427: 68-82	Sunil Kumar Paswan, Anant Kumar Singh	2.95
83	A novel magnetorheological gear profile finishing with high shape accuracy	International Journal of Machine Tools and Manufacture 139: 75-92.	Ravi Datt Yadav, Anant Kumar Singh	6.093
84	Improved magnetorheological finishing process with rectangular core tip for external cylindrical surfaces	Materials and Manufacturing Processes 34/9, 1049-1061.	Manpreet Singh, Anant Kumar Singh	3.35
85	Magnetorheological nano-finishing of tube extrusion punch for improving its functional applications in press machine	International Journal of Advanced Manufacturing Technology 103, 2037–2052.	Anirudh Chana, Anant Kumar Singh	2.601
86	Performance investigation of magnetorheological finishing of rolls surface in cold rolling process	, Journal of Manufacturing Processes 41, 315-329.	Manpreet Singh, Anant Kumar Singh	3.462
87	Effect of cooling environment and welding speed on fatigue properties of friction stir welded Al-Mg-Cr alloy	International Journal of Fatigue, Volume 127, Pages 551-563	Ratnesh Kumar Raj Singh, Rajesh Prasad, Sunil Pandey, Satish Kumar Sharma	3.67