

SCI Publications Jul 2019-June 2020

S.No	Paper	I.F.
1.	Sharma, Sandeep Kumar, Ravinder Kumar Duvedi, Sanjeev Bedi, and Stephen Mann. "A multipoint tool positioning method for five-axis machining in the region of two intersecting tensor product Bézier surfaces." <i>International Journal of Machine Tools and Manufacture</i> 142 (2019): 42-53.	8.019
2.	Bhalla, Vishal, Sachin Beejawat, Jay Doshi, Vikrant Khullar, Harjit Singh, and Himanshu Tyagi. "Silicone oil envelope for enhancing the performance of nanofluid-based direct absorption solar collectors." <i>Renewable energy</i> 145 (2020): 2733-2740.	5.439
3.	Jain, D., Y. Q. Zhao, and R. C. Batra. "Analysis of three-dimensional bending deformations and failure of wet and dry laminates." <i>Composite Structures</i> 252 (2020): 112687.	5.138
4.	Singh, Gurmeet, Neeraj Kumar, and Pramod Kumar Avti. "Computational evaluation of effectiveness for intratumoral injection strategies in magnetic nanoparticle assisted thermotherapy." <i>International Journal of Heat and Mass Transfer</i> 148 (2020): 119129.	4.947
5.	Soni, Aakash, Neeraj Grover, Gagandeep Bhardwaj, and B. N. Singh. "Non-polynomial framework for static analysis of functionally graded carbon nanotube reinforced plates." <i>Composite Structures</i> 233 (2020): 111569.	4.829
6.	Singh, Harmanpreet, Satish Kumar, and Saroj Kumar Mohapatra. "Modeling of solid-liquid flow inside conical diverging sections using computational fluid dynamics approach." <i>International Journal of Mechanical Sciences</i> 186 (2020): 105909.	4.6
7.	Singh, Nirmal, and Vikrant Khullar. "Efficient volumetric absorption solar thermal platforms employing thermally stable-solar selective nanofluids engineered from used engine oil." <i>Scientific reports</i> 9, no. 1 (2019): 1-12.	4.525
8.	Sharma, Atul, and S. S. Mallick. "Modelling pressure drop in bends for pneumatic conveying of fine powders." <i>Powder Technology</i> 356 (2019): 273-283.	4.142
9.	Sharma, Kapil, S. S. Mallick, and Anu Mittal. "A study of energy loss due to particle to particle and wall collisions during fluidized dense-phase pneumatic transport." <i>Powder Technology</i> 362 (2020): 707-716.	4.142
10.	Singh, Sarvjeet, and Rohit Kumar Singla. "Experimental and numerical analysis of a nonlinear pin fin with temperature dependent properties and disparate boundary conditions." <i>International Communications in Heat and Mass Transfer</i> 108 (2019): 104313.	4.127
11.	Singhal, Meenal, Sarvjeet Singh, Rohit Kumar Singla, Kavita Goyal, and Deepak Jain. "Experimental and computational inverse thermal analysis of transient, non-linear heat flux in circular pin fin with temperature-dependent thermal properties." <i>Applied Thermal Engineering</i> 168 (2020): 114721.	4.026
12.	Gupta, Rahul, Sandeep Sharma, Tarun Nanda, and O. P. Pandey. "Wear studies of hybrid AMCs reinforced with naturally occurring sillimanite and rutile ceramic particles for brake-rotor applications." <i>Ceramics International</i> 46, no. 10 (2020): 16849-16859.	3.83
13.	Singh, Ratnesh Kumar Raj, Rajesh Prasad, Sunil Pandey, and Satish Kumar Sharma. "Effect of cooling environment and welding speed on fatigue properties of friction stir welded Al-Mg-Cr alloy." <i>International Journal of Fatigue</i> 127 (2019): 551-563.	3.67
14.	Singh, Harpreet, and Hiralal Bhowmick. "Lubrication characteristics and wear mechanism mapping for hybrid aluminium metal matrix composite	3.517

	sliding under surfactant functionalized MWCNT-oil." <i>Tribology International</i> 145 (2020): 106152.	
15.	Kumar, Rajesh, Rajesh Kumar Shukla, Alok Kumar, and Arvind Kumar. "A computational study on air entrapment and its effect on convective heat transfer during droplet impact on a substrate." <i>International Journal of Thermal Sciences</i> 153 (2020): 106363.	3.488
16.	Baraiya, Rajendra, Atul Babbar, Vivek Jain, and Dheeraj Gupta. "In-situ simultaneous surface finishing using abrasive flow machining via novel fixture." <i>Journal of Manufacturing Processes</i> 50 (2020): 266-278.	3.46
17.	Tathgir, Surinder, Dinesh W. Rathod, and Ajay Batish. "A-TIG welding process for enhanced-penetration in Duplex stainless-steel: effect of activated fluxes." <i>Materials and Manufacturing Processes</i> 34, no. 15 (2019): 1659-1670.	3.365
18.	Tathgir, Surinder, Dinesh W. Rathod, and Ajay Batish. "Process enhancement using hydrogen-induced shielding: H ₂ -induced A-TIG welding process." <i>Materials and Manufacturing Processes</i> 35, no. 10 (2020): 1084-1095.	3.365
19.	Shukla, Rajesh Kumar, Alok Kumar, Rajesh Kumar, Digvijay Singh, and Arvind Kumar. "Numerical study of pore formation in thermal spray coating process by investigating dynamics of air entrapment." <i>Surface and Coatings Technology</i> 378 (2019): 124972.	3.19
20.	Singh, Manpreet, and Anant Kumar Singh. "Magnetorheological finishing of micro-punches for enhanced performance of micro-extrusion process." <i>Materials and Manufacturing Processes</i> 34, no. 14 (2019): 1646-1657.	3.046
21.	Kim, Youngshik, Taesoo Jang, Hema Gurung, Nader A. Mansour, Bongjo Ryu, and Buhyun Shin. "Bidirectional rotating actuators using shape memory alloy wires." <i>Sensors and Actuators A: Physical</i> 295 (2019): 512-522.	2.904
22.	Gada, Hannan, Deepa Mudgal, Saad Parvez, and Babar Ahmad. "Investigation of high temperature corrosion resistance of Ni25Cr coated and bare 347H SS in actual husk fired boiler atmosphere." <i>Engineering Failure Analysis</i> 108 (2020): 104256.	2.897
23.	Negi, A., G. Bhardwaj, J. S. Saini, Kishore Khanna, and R. K. Godara. "Analysis of CNT reinforced polymer nanocomposite plate in the presence of discontinuities using XFEM." <i>Theoretical and Applied Fracture Mechanics</i> 103 (2019): 102292.	2.848
24.	Joshan, Yadwinder S., Sushma Santapuri, and Neeraj Grover. "Analysis of laminated piezoelectric composite plates using an inverse hyperbolic coupled plate theory." <i>Applied Mathematical Modelling</i> 82 (2020): 359-378.	2.841
25.	Sharma, Vipin Kumar, Vinod Kumar, Ravinder Singh Joshi, and Deepak Sharma. "Experimental analysis and characterization of SiC and RE oxides reinforced Al-6063 alloy based hybrid composites." <i>The International Journal of Advanced Manufacturing Technology</i> 108, no. 4 (2020): 1173-1187.	2.633
26.	Singh, Manpreet, and Anant Kumar Singh. "Magnetorheological finishing of grooved drum surface and its performance analysis in winding process." <i>The International Journal of Advanced Manufacturing Technology</i> 106, no. 7 (2020): 2921-2937.	2.601
27.	Babbar, Atul, Akhilesh Kumar, Vivek Jain, and Dheeraj Gupta. "Enhancement of activated tungsten inert gas (A-TIG) welding using multi-component TiO ₂ -SiO ₂ -Al ₂ O ₃ hybrid flux." <i>Measurement</i> 148 (2019): 106912.	2.359

28.	Babbar, Atul, Vivek Jain, and Dheeraj Gupta. "Preliminary investigations of rotary ultrasonic neurosurgical bone grinding using Grey-Taguchi optimization methodology." <i>Grey Systems: Theory and Application</i> (2020).	2.268
29.	Gada, Hannan, Deepa Mudgal, Saad Parvez, and Babar Ahmad. "Investigation of high temperature corrosion resistance of Ni25Cr coated and bare 347H SS in actual husk fired boiler atmosphere." <i>Engineering Failure Analysis</i> 108 (2020): 104256.	2.203
30.	Singh, Harmanpreet, Satish Kumar, and Saroj Kumar Mohapatra. "Improved surface morphology by reforming of oxygen functional groups of Indian coal upon irradiating with microwave radiations." <i>International Journal of Coal Preparation and Utilization</i> (2020): 1-19.	2.18
31.	Singh, Sachin, Mamilla Ravi Sankar, and V. K. Jain. "Simulation and experimental investigations into abrasive flow nanofinishing of surgical stainless steel tubes." <i>Machining Science and Technology</i> 22, no. 3 (2018): 454-475.	2.071
32.	Singh, Jaskaran, Moslem Azamfar, Abhijeet Ainapure, and Jay Lee. "Deep learning-based cross-domain adaptation for gearbox fault diagnosis under variable speed conditions." <i>Measurement Science and Technology</i> 31, no. 5 (2020): 055601.	1.857
33.	Singh, Jaskaran, Moslem Azamfar, Fei Li, and Jay Lee. "A systematic review of machine learning algorithms for prognostics and health management of rolling element bearings: fundamentals, concepts and applications." <i>Measurement Science and Technology</i> 32, no. 1 (2020): 012001.	1.857
34.	Singh, Jaskaran, A. K. Darpe, and Satinder P. Singh. "Bearing remaining useful life estimation using an adaptive data-driven model based on health state change point identification and K-means clustering." <i>Measurement Science and Technology</i> 31, no. 8 (2020): 085601.	1.857
35.	Singh, Satnam, Dheeraj Gupta, and Vivek Jain. "Microwave processing and characterization of nickel powder based metal matrix composite castings." <i>Materials Research Express</i> 6, no. 8 (2019): 0865b1.	1.783
36.	Singh, Kulwinder, J. S. Saini, H. Bhunia, and S. Ray Chowdhury. "Hygrothermal effects on mechanical joints prepared from fiber reinforced plastic nanocomposites." <i>Journal of Composite Materials</i> 53, no. 26-27 (2019): 3875-3891.	1.755
37.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "Flexural, pull-out, and fractured surface characterization for multi-material 3D printed functionally graded prototype." <i>Journal of Composite Materials</i> 54, no. 16 (2020): 2087-2099.	1.755
38.	Agarwal, Raj, Vivek Jain, Vishal Gupta, Sanjai Saxena, and Vagish Dwibedi. "Effect of surface topography on pull-out strength of cortical screw after ultrasonic bone drilling: an in vitro study." <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 42, no. 7 (2020): 1-13.	1.755
39.	Singh, Sachin, and M. Ravi Sankar. "Development of polymer abrasive medium for nanofinishing of microholes on surgical stainless steel using abrasive flow finishing process." <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> 234, no. 3 (2020): 355-370.	1.752
40.	Arora, Rashmi, Dharmveer Agarwal, and Tarun Kumar Bera. "Workspace analysis and trajectory tracking of a planar hybrid manipulator with ball screw feed drive." <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 41, no. 9 (2019): 1-18.	1.743
41.	Singh, Rajmeet, and Tarun Kumar Bera. "Bond graph approach for dynamic modelling of the biped robot and application to obstacle avoidance." <i>Journal</i>	1.743

	<i>of the Brazilian Society of Mechanical Sciences and Engineering</i> 41, no. 10 (2019): 1-12.	
42.	Jain, Deepak, Sandeep Vats, Tarun Kumar Bera, and Abhijit Mukherjee. "A framework for three-dimensional finite element analysis of unidirectional and cross-ply composite layups through localized microstructures under hygromechanical conditions." <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 42 (2020): 1-12.	1.743
43.	Babbar, Atul, Vivek Jain, and Dheeraj Gupta. "Thermogenesis mitigation using ultrasonic actuation during bone grinding: a hybrid approach using CEM43° C and Arrhenius model." <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 41, no. 10 (2019): 1-14.	1.743
44.	Sirwal, Sohaib Ahmad, Anant Kumar Singh, and Sunil Kumar Paswan. "Experimental analysis of magnetorheological finishing of blind hole surfaces using permanent magnet designed tools." <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 42, no. 3 (2020): 1-23.	1.743
45.	Sharma, Deepika, Kavita Goyal, and Rohit Kumar Singla. "A curvelet method for numerical solution of partial differential equations." <i>Applied Numerical Mathematics</i> 148 (2020): 28-44.	1.678
46.	Sharma, Atul, and Soumya Suddha Mallick. "An investigation into pressure drop through bends in pneumatic conveying systems." <i>Particulate Science and Technology</i> (2019): 1-12.	1.619
47.	Chani, Kulwinder Singh, J. S. Saini, and H. Bhunia. "Accelerated weathering of bolted joints prepared from woven glass fiber-reinforced nanocomposites." <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> 233, no. 10 (2019): 2108-2125.	1.568
48.	Kundan, Lal, and Kuljeet Singh. "Improved performance of a nanorefrigerant-based vapor compression refrigeration system: A new alternative." <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> (2020): 0957650920904553.	1.563
49.	Vats, S., T. K. Bera, and D. Jain. "Moisture absorption in fibre matrix laminates for different fibre orientations: simulation and experimental study." <i>Arabian Journal for Science and Engineering</i> 45, no. 2 (2020): 1207-1218.	1.518
50.	Singh, R., and T. K. Bera. "Walking model of Jansen Mechanism-based quadruped robot and application to obstacle avoidance." <i>Arabian Journal for Science and Engineering</i> 45, no. 2 (2020): 653-664.	1.518
51.	Walia, Armander Singh, Vineet Srivastava, and Vivek Jain. "Impact of copper-titanium carbide tooltip on machined surface integrity during electrical discharge machining of EN31 steel." <i>Materials Research Express</i> 6, no. 10 (2019): 106582.	1.449
52.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "On flexural and pull out properties of 3D printed PLA based hybrid composite matrix." <i>Materials Research Express</i> 7, no. 1 (2020): 015330.	1.449
53.	Gupta, Rahul, Sandeep Sharma, Tarun Nanda, and O. P. Pandey. "A comparative study of dry sliding wear behaviour of sillimanite and rutile reinforced LM27 aluminium alloy composites." <i>Materials Research Express</i> 7, no. 1 (2020): 016540.	1.449
54.	Kaushal, Sarbjeet, Dheeraj Gupta, and Hiralal Bhowmick. "On processing and flexural behaviour of functionally graded clads developed through microwave irradiation." <i>Materials Research Express</i> 6, no. 7 (2019): 076405.	1.449
55.	Kaushal, A. K., and M. K. Mittal. "Performance study of an improved basin type vertical multiple effect diffusion solar still." <i>International Journal of Green Energy</i> 16, no. 14 (2019): 1343-1352.	1.388

56.	Saini, J. S., Luke Dowling, John Kennedy, and Daniel Trimble. "Investigations of the mechanical properties on different print orientations in SLA 3D printed resin." <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> 234, no. 11 (2020): 2279-2293.	1.386
57.	Bhardwaj, G., R. K. Godara, Kishore Khanna, and R. U. Patil. "A semi-homogenized extended isogeometric analysis approach for fracture in functionally graded materials containing discontinuities." <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> 234, no. 11 (2020): 2211-2232.	1.386
58.	Paswan, Sunil K., and Anant K. Singh. "Theoretical and experimental investigations on nano-finishing of internal cylindrical surfaces with a newly developed rotational magnetorheological honing process." <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> 234, no. 2 (2020): 363-383.	1.386
59.	Singh, Manpreet, and Anant Kumar Singh. "Theoretical investigations into magnetorheological finishing of external cylindrical surfaces for improved performance." <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> 234, no. 24 (2020): 4872-4892.	1.386
60.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "Investigations of polylactic acid reinforced composite feedstock filaments for multimaterial three-dimensional printing applications." <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> 233, no. 17 (2019): 5953-5965.	1.359
61.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "Multimaterial printing and characterization for mechanical and surface properties of functionally graded prototype." <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> 233, no. 19-20 (2019): 6741-6753.	1.359
62.	Kumar, Mohit, J. S. Saini, and H. Bhunia. "Investigations on the strength of mechanical joints prepared from carbon fiber laminates with addition of carbon nanotubes." <i>Journal of Mechanical Science and Technology</i> 34, no. 3 (2020): 1059-1070.	1.345
63.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "On investigation of rheological, mechanical and morphological characteristics of waste polymer-based feedstock filament for 3D printing applications." <i>Journal of Thermoplastic Composite Materials</i> (2019): 0892705719856063.	1.343
64.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "On mechanical characterization of 3-D printed PLA-PVC-wood dust-Fe ₃ O ₄ composite." <i>Journal of Thermoplastic Composite Materials</i> (2019): 0892705719879195.	1.343
65.	Kumar, Sudhir, Rupinder Singh, T. P. Singh, and Ajay Batish. "Investigations for magnetic properties of PLA-PVC-Fe ₃ O ₄ -wood dust blend for self-assembly applications." <i>Journal of Thermoplastic Composite Materials</i> (2019): 0892705719857778.	1.343
66.	Kumar, Sudhir, Rupinder Singh, Ajay Batish, and T. P. Singh. "Additive manufacturing of smart materials exhibiting 4-D properties: a state of art review." <i>Journal of Thermoplastic Composite Materials</i> (2019): 0892705719895052.	1.343
67.	Gupta, Vishal, Ravinder Pal Singh, Pulak M. Pandey, and Ravi Gupta. "In vitro comparison of conventional surgical and rotary ultrasonic bone drilling	1.317

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68.	Sharma, Vipin Kumar, Vinod Kumar, and Ravinder Singh Joshi. "Investigation of rare earth particulate on tribological and mechanical properties of Al-6061 alloy composites for aerospace application." <i>Journal of Materials Research and Technology</i> 8, no. 4 (2019): 3504-3516.	1.289
69.	Arora, Rashmi, and Tarun K. Bera. "Impedance control of three dimensional hybrid manipulator." <i>Journal of Mechanical Science and Technology</i> 34, no. 1 (2020): 359-367.	1.221
70.	Kumar, Narinder, Arshpreet Singh, and Anupam Agrawal. "Formability Analysis of AA1200 H14 Aluminum Alloy Using Single Point Incremental Forming Process." <i>Transactions of the Indian Institute of Metals</i> 73, no. 7 (2020): 1975-1984.	1.205
71.	Singh, H., and H. Bhowmick. "Lubricated tribology of hybrid AMMC–steel sliding contact: A comparative investigation between fully formulated commercial engine oils and surfactant functionalized MWCNT–base oil formulation." <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> 235, no. 2 (2021): 315-328.	1.137
72.	Singh, Jatinderpal, Sandeep Singh, and Saroj Kumar Mohapatra. "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 characteristics." <i>Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</i> 42, no. 1 (2020): 41-55.	0.894
73.	Rosha, Pali, Hussameldin Ibrahim, Anil Kumar Nanda, Saroj Kumar Mohapatra, Sunil Kumar Mahla, and Amit Dhir. "Effect of hydrogen-enriched biogas induction on combustion, performance, and emission characteristics of dual-fuel compression ignition engine." <i>Asia-Pacific Journal of Chemical Engineering</i> 15, no. 3 (2020): e2435.	0.758
74.	Singh, Rajinder, Ravindra K. Saxena, Kishore Khanna, and V. K. Gupta. "Creep Response of Rotating Composite Discs having Exponential, Hyperbolic, Linear and Constant Thickness Profiles." <i>Defence Science Journal</i> 70, no. 3 (2020).	0.73
75.	Singh, Sachin, and M. Ravi Sankar. "Development and Rheological Characterisation of Abrasive Flow Finishing Medium for Finishing Macro to Micro Features." <i>Defence Science Journal</i> 70, no. 2 (2020).	0.73
76.	Arora, Deepti, Ravinder Kumar Duvedi, and Daljeet Singh. "Effect of Machining Parameters on Surface Finish and Noise Patterns for Machining EN-19 Steel with PVD-TiN Coated Mixed Ceramic Inserts in CNC Turning Operation." (2020).	0.729
77.	Kumar, Rajat, Hiralal Bhowmick, and Dheeraj Gupta. "Metallurgical and wear study of MWCNT-reinforced h-AMMC fabricated through microwave hybrid sintering." <i>International Journal of Materials Research</i> (2020).	0.653
78.	Kumar, Devender, and Kulvir Singh. "Effect of process parameters and VC content on structural and mechanical properties of WC-20Co nano composites." (2020).	0.521
79.	Singhal, Meenal, Rohit Kumar Singla, and Kavita Goyal. "Convective and radiative thermal analysis of composite wall with nonlinear temperature-dependent properties." <i>Heat Transfer Research</i> 51, no. 3 (2020).	0.398