

Profile Page

Research Interests :

Advanced / Hybrid Machining Methods, Additive Manufacturing, Rotary Ultrasonic Machining, Ceramics & Composite Materials, Ultrasonic Machining, Surface Integrity, Optimization Techniques

Journal Publications :

Year	Journal	Publication
2021	World Journal of Engineering(Scopus-Indexed), Emerald Publications.	R Sharma, V Dabra, G Singh, R Kumar, R P Singh, S Sharma “Multi-response optimization while machining of Stainless steel 316L using Intelligent approach of Grey Theory and Grey-TLBO”
2021	Indian Journal of Radiology and Imaging (Scopus- Indexed).	Mohd Javaid, Abid Haleem, Ravi Pratap Singh, and Rajiv Suman, “3D printing applications for Radiology: An overview”
2021	World Journal of Engineering(Scopus-Indexed), Emerald Publications.	Sonika Sahu, Piyush D Ukey, Narendra Kumar, Ravi Pratap Singh, and Mohd Zahid Ansari, “Three Dimensional modelling of Aluminum Foam through Computed Tomography Scan Technique”
2020	Diabetes & Metabolic Syndrome: Clinical Research & Reviews (Scopus- Indexed), Elsevier Publications.	Significant applications of virtual reality for COVID-19 pandemic
2020	Diabetes & Metabolic Syndrome: Clinical Research & Reviews (Scopus- Indexed), Elsevier Publications.	Internet of things (IoT) applications to fight against COVID-19 pandemic.
2020	Diabetes & Metabolic Syndrome: Clinical Research & Reviews (Scopus- Indexed), Elsevier Publications.	Letter to the editor in response to: Telemedicine for diabetes care in India during COVID19 pandemic and national lockdown period: Guidelines for physicians.
2020	Diabetes & Metabolic Syndrome: Clinical Research & Reviews (Scopus- Indexed), Elsevier Publications.	Letter to the editor in response to: COVID-19 pandemic and challenges for socio-economic issues, healthcare and national programs in India (Gopalan and Misra).
2020	Advances in Materials and Processing Technologies, (Scopus-Indexed), Taylor & Francis Publications.	Machining of WC-Co composite using ultrasonic drilling: optimisation and mathematical modelling
2020	Journal of Clinical Orthopaedics and Trauma. (Scopus- Indexed), Elsevier Publications.	Internet of Medical Things (IoMT) for orthopaedic in COVID-19 pandemic: Roles, challenges, and applications.
2020	Materials Today: Proceedings, Elsevier Publications. (Scopus Indexed)	Investigation of Process Responses in Rotary Ultrasonic Machining of Al/SiC Composite Through Designed Experiments
2020	Silicon, Springer Publication (SCI Indexed)	Hole Quality Measures in Rotary Ultrasonic Drilling of Silicon Dioxide (SiO ₂): Investigation and Modeling through Designed Experiments
2019	Materials Today: Proceedings, Elsevier Publications. (Scopus Indexed)	Investigation of Dimensional Deviation in Wire EDM of M42 HSS using cryogenically treated brass wire

2019	World Journal of Engineering, Emerald Publications, Vol. 16/3; pp. 389–400. (Scopus Indexed)	Study on flexural performance of fabricated natural fiber hybrid polypropylene composite: an experimental investigation through designed experiments
2018	Journal of Materials: Design and Applications, SAGE Publications, Vol. 232(12), pp. 967-986 (SCI-Indexed; IP-1.568)	Ravi Pratap Singh, and Sandeep Singhal; Experimental Study on Rotary Ultrasonic Machining of Alumina Ceramic: Microstructure Analysis and Multi-response Optimization.
2018	AIMS Material Science, Vol. 5(1), pp. 75-92 (SCOPUS Indexed)	Ravi Pratap Singh, Ravinder Kataria, Jatinder Kumar, and Jageswar Verma; Multi-response optimization of machining characteristics in ultrasonic machining of WC-Co composite through Taguchi method and grey-fuzzy logic.
2018	Journal of Engineering Research, Kuwait University Publications, Vol. 6(1), pp.192-215 (SCI-Indexed; IP-0.128)	Ravi Pratap Singh, and Sandeep Singhal; Experimental investigation and microstructure analysis in rotary ultrasonic machining of alumina ceramic.
2017	Materials and Manufacturing Processes, Taylor & Francis Publication, Vol. 32(3), pp. 309-326 (SCI-Indexed; IP-3.350)	Ravi Pratap Singh, and Sandeep Singhal; Investigation of Machining Characteristics in Rotary Ultrasonic Machining of Alumina Ceramic.
2017	Materials and Manufacturing Processes, Taylor & Francis Publication, Vol. 32(9), pp. 927-939 (SCI-Indexed; IP-3.350)	Ravi Pratap Singh, and Sandeep Singhal; Rotary Ultrasonic Machining of Macor Ceramic: An Experimental Investigation and Microstructure Analysis.
2016	Materials and Manufacturing Processes, Taylor & Francis Publication, Vol. 31(14), pp.1795-1824 (SCI-Indexed; IP-3.350)	Ravi Pratap Singh, and Sandeep Singhal; Rotary Ultrasonic Machining: A Review.
2016	Journal of Engineering Manufacture, SAGE Publications, Vol. 232(7), pp. 1221-1234 (SCI-Indexed; IP-1.752)	Ravi Pratap Singh, and Sandeep Singhal; An Experimental Study on Rotary Ultrasonic Machining of Macor Ceramic.
2016	Journal of Materials: Design and Applications, SAGE Publications, Vol. 232 (10), pp. 870-889 (SCI-Indexed; IP-1.568)	Ravi Pratap Singh, and Sandeep Singhal; Experimental Investigation of Machining Characteristics in Rotary Ultrasonic Machining of Quartz Ceramic.
2016	AIMS Material Science, Vol. 3(4), pp. 1391-1409 (SCOPUS Indexed)	Ravinder Kataria, Ravi Pratap Singh, and Jatinder Kumar; An experimental study on ultrasonic machining of tungsten carbide cobalt composite materials.
2015	Journal of Engineering Research, Kuwait University Publications, Vol. 3 (4), pp. 75-94 (SCI-Indexed; IP-0.128)	Ravi Pratap Singh, Jatinder Kumar, Ravinder Kataria, and Sandeep Singhal; Investigation of the machinability of commercially pure titanium in ultrasonic machining using graph theory and matrix method.

Conference Publications :

Year	Conference	Publication
2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Ranjit Singh, Ravi Pratap Singh and Rajeev Trehan, Investigation into Machining Rate and Tool Wear while processing Fe-based-SMA through sinking EDM.

2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Madhusudan Painuly, Ravi Pratap Singh and Rajeev Trehan, A Review on the Effect of Process Parameters in Electro-Chemical Machining of Advanced Materials.
2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Rahul Soni, Ravi Pratap Singh and Shailendra Singh Bhadauria, Influence of Key Electric Discharge Machining Parameters on Various Process Characteristics: A Review.
2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Rahul Soni, Ravi Pratap Singh and Shailendra Singh Bhadauria, Study on Electric Discharge Machining of Aluminium 7075-T651 Alloy: An Experimental Investigation.
2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Ashutosh Kumar Gupta and Ravi Pratap Singh, Study of MRR in Milling of Aluminium 8090 alloy through Designed Experiments.
2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Ashutosh Kumar Gupta and Ravi Pratap Singh, Effect of Process Variables in Milling of Aluminium based Alloys: A Review.
2020	International Conference on Industrial & Manufacturing Systems (CIMS-2020)	Shailendra Chauhan, Ravi Pratap Singh and Rajeev Trehan, "Study of Influential Parameters during Milling of Advanced Engineering Materials",
2019	International Conference on New Frontiers in Engineering, Science & Technology (NFEST-2019) held from February, 18-22, 2019 at NIT Kurukshetra.	Sudhir Ranjan, Ravi Pratap Singh, "Surface Quality and Machinability in Wire EDM of Superalloys: A Review based Study"
2019	International Conference on New Frontiers in Engineering, Science & Technology (NFEST-2019) held from February, 18-22, 2019 at NIT Kurukshetra.	Himanshu Bisht, Ravi Pratap Singh, Varun Sharma "Influence of Process Variables on Several Welding Responses: A Review based Study on Super Alloys"
2019	CPIE-2019, held on 08-10 June, 2019, organized by NIT Jalandhar	Sudhir Ranjan, Ravi Pratap Singh, "Investigation of MRR in wire cut EDM of incoloy-800 using statistical approach"
2019	CPIE-2019, held on 08-10 June, 2019, organized by NIT Jalandhar	Himanshu Bisht, Ravi Pratap Singh, Varun Sharma "Study of impact strength in TIG welding of Incoloy-800 super alloy: An experimental investigation and optimization"
2019	CPIE-2019, held on 08-10 June, 2019, organized by NIT Jalandhar	Dr. Ravi Pratap Singh, Ranjit Singh, Dr. Rajeev Trehan, Prof. R K Garg, Dr. Mohit Tyagi, "Investigation into the surface quality in wirecut EDM of M42 HSS: An experimental study and modeling using RSM" - (Best Paper Award)
2019	2nd International Conference on Environmental Geotechnical, Recycled Waste Materials, and Sustainable Engineering (EGRWSE'19), held on 16th – 20th June, 2019, organized by University of Illinois, Chicago, USA.	Ranjit Singh, Dr. Ravi Pratap Singh, and Dr. Rajeev Trehan, "Sustainable Engineering approaches used in Electric Discharge Machining processes: A Review"
2019	2nd International Conference on Computational and Experimental Method in Mechanical Engineering (ICCEMME-2019), held on 03rd -05th May, 2019, organized by GLBITM, Greater Noida, UP, India.	Ranjit Singh, Dr. Ravi Pratap Singh, Dr. Mohit Tyagi, and Dr. Ravinder Kataria, "Investigation of Dimensional Deviation in Wire EDM of M42 HSS using cryogenically treated brass wire"
2019	CPIE-2019, held on 08-10 June, 2019, organized by NIT Jalandhar	Deepak Kumar, Dr. Ravi Pratap Singh, "Assessing the critical factors of telecommunication industry"

2018	International Conference on Advanced Production and Industrial Engineering (ICAPIE'18), DTU, New Delhi, India.	Ranjit Singh, Dr. Ravi Pratap Singh, Dr. Rajeev Trehan, Dr. Mohit Tyagi, Dr. Ajay Gupta; Study of surface roughness in Wire EDM of M42 HSS using cryogenically treated brass wire: An experimental investigation and modeling through designed experiments.
2016	National Conference on Recent Advances in Manufacturing (RAM); SVNIT, Surat, Gujrat, India.	Ravi Pratap Singh, Sandeep Singhal; Modeling and Optimization of Material Removal Rate in Rotary Ultrasonic Machining of Quartz Ceramic using RSM approach.
2015	National Conference on Emerging Trends in Management & Technology Challenges & Opportunities; SGIT Ghaziabad, Uttar Pradesh, India.	Ravi Pratap Singh, Sandeep Singhal; A Review on Rotary Ultrasonic Machining of Advanced Engineering Materials.
2014	International Conference on Newest Drift in Mechanical Engineering, MMU Mullana, Ambala, Haryana, India.	Ravi Pratap Singh, Sandeep Singhal; Rotary ultrasonic machining of advanced materials: A review.

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Core Technical	Optimization in Industrial and Manufacturing Systems and Applications	Springer Publications	Ravi Pratap Singh Mohit Tyagi Dilbagh Panchal J. Paulo Davim	978-3-030-73494-7	2021
Core Technical	Investigation of MRR in Wire-Cut Electrical Discharge Machining of Incoloy-800 Using Statistical Approach	Springer Publications	Sudhir Ranjan, Dr. Ravi Pratap Singh	978-981-15-4549-8	2020
Core Technical	Study of Impact Strength in TIG Welding of Incoloy-800 Super Alloy: An Experimental Investigation and Optimization	Springer Publications	Himanshu Bisht, Dr. Ravi Pratap Singh	978-981-15-4549-8	2020
Core Technical	Investigation into the Surface Quality in Wire-Cut EDM of M42 HSS: An Experimental Study and Modeling Using RSM	Springer Publications	Dr. Ravi Pratap Singh, Ranjit Singh, Dr Rajeev Trehan, Prof R K Garg, Dr Mohit Tyagi,	978-981-15-4549-8	2020
Core Technical	Sustainable Manufacturing-Related Aspects in Turning Operation: A Review Based Study	Springer Publications	Dr. Ravi Pratap Singh, Dr. Ravinder Kataria, and A K Tiwari	978-981-15-4618-1	2020
Core Technical	Selection of the Optimum Hole Quality Conditions in Manufacturing Environment Using MCDM Approach: A Case Study	Springer Publications	Dr. Ravi Pratap Singh, Dr. Mohit Tyagi, Dr. Ravinder Kataria,	978-981-13-6476-1	2019
Core Technical	Modeling and Analysis of Critical Success Factors for Implementing the IT-Based Supply-Chain Performance System	Springer Publications	Dr. Mohit Tyagi, Dr. Dilbagh Panchal, Dr. Ravi Pratap Singh, Dr. Anish Sachdeva	978-981-13-6476-1	2019

Core Technical	Decision Making in Real Life Industrial Environment through Graph Theory Approach	IntechOpen Publications, London, UK.	Dr. Ravi Pratap Singh, Dr. Ravinder Kataria, and Dr. Sandeep Singhal	978-1-78984-384-2	2018
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Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Core Technical	Study of penetration rate and chipping diameter in rotary ultrasonic drilling of macor dental ceramic	TEQIP-III			Rs. 0.94 Lacs	Completed	-
Principal Investigator (PI)	Research Project	HAAMECM Process for Miniaturized Textured Surfaces	Science and Engineering Research Board (SERB) Project, Govt. of India.	2022	2025		On-Going	--
Co-PI	Research Project	Development of Cost-Effective COVID Medical Protective Face Shield using Additive Manufacturing	TEQIP-III	2020	2021	Rs 1.90 Lacs	Completed	Dr Narendra Kumar; Prof R K Garg; Prof Anish Sachdeva

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Conference	International	International Conference on Production & Industrial Engineering (CPIE 2019)	Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India	08-06-2019	10-06-2019	Convener
Conference	National	IBPESNB - 2019	Dr. B. R. Ambedkar National Institute of Technology (NIT), Jalandhar, Punjab, India	30-11-2019	01-12-2019	Session Coordinator

STC	National	Advances in Manufacturing Methods and Process Optimization (AMMPO-2019)	Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India	11-12-2019	15-12-2019	Coordinator
Online STC	International	Additive Manufacturing with Interdisciplinary Applications (AMIA-20)	Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India	29-06-2020	03-07-2020	Coordinator
Online STC	International	Hybrid Manufacturing Processes: Opportunities and Challenges (HMPOC-20)	Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India	06-07-2020	10-07-2020	Coordinator
Webinar	National	Indo-German Bilateral Funding Programmes for Advanced Industrial Research	Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India	26-06-2020	26-06-2020	Coordinator

Professional Affiliations :

Designation	Organization
Life Member	Indian Institution of Industrial Engineering (IIIE), Mumbai, India.
Life Member	SCIENCE and Engineering Institute (SCIEI), Log Angeles, USA.
Member	Viser Academic Committee (VAC), Singapore.
Ambassador	Bentham Open, Sharjah, UAE
Senior Member	Indian Society of Mechanical Engineers (ISME), Chennai, India.
Fellow	Society of Innovative Educationalist & Scientific Research Professional (SIESRP), India
Life Fellow	Ultrasonic Society of India (USI), New Delhi, India
Life Member	The Institution of Engineers (IE), Kolkata, India
Life Member	Additive Manufacturing Society of India (AMSI), Bangalore, India

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Piyush D Ukey	Design & Additive Manufacturing of Synthetic Bones	On-Going	2020	Narendra Kumar
Madhusudan Painuly	Development of Hybrid ECM Process	On-Going	2019	Rajeev Trehan
Shailendra Chauhan	Modelling and Optimization of CNC Milling Process	On-Going	2019	Rajeev Trehan
Ranjit Singh	Experimental Investigation in Electrical Discharge Machining of Shape Memory Alloys	On-Going	2018	Rajeev Trehan

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Ashutosh Kumar Gupta	Investigation of Machining Responses in Milling of Aluminium Alloy Al - 8090	Completed	2020	

Rahul Soni	Experimental Study and Optimization of Performance Characteristics in Electric Discharge Machining of Al7075 T651	Completed	2020	S S Bhadauria
Sudhir Ranjan	Investigation of machining responses in wire cut electrical discharge machining of Incoloy-800	Completed	2019	Anish Sachdeva
Himanshu Bisht	Investigation and optimization of welding parameters in TIG welding of Incoloy-800 using designed experiments	Completed	2019	Varun Sharma

Award and Honours :

Title	Activity	Given by	Year
Best Researcher Award	The unprecedented levels of discovery and innovation that are the hallmarks of recent decades are giving birth to entirely new meetings, which are in turn stimulating further advances, new opportunities, fresh insights and serve as a 'Continuing Force for Progress'.	VDGOOD Professional Association	2020
Young Faculty in Engineering (Major Area: Mechanical Engineering)	This award recognizes the extraordinary teachers who have demonstrated excellence in engaging their students in 'Inspiring - Innovative - Path breaking' ways to ignite their potential.	Venus International Foundation, Chennai	2019
Young Scientist in Mechanical Engineering	This award recognizes an 'Expertly Qualified Research Professional' for the exceptional research record (Fundamental Discoveries, New Theories, or Insights which had an Impact on their own discipline and beyond and cutting-edge achievements) and significant contribution to the Laboratory/Institute.	Venus International Foundation, Chennai	2019
Best Research Paper Award	Article has been selected for Best Paper Award in International Conference.	CPIE-2019, NIT Jalandhar	2019