

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Jai Inder Preet Singh, Amrinder Singh Pannu, Sehijpal Singh, Vikas Dhawan, Ashok Kumar Sharma, Avtar Singh, Naresh Kumar, Vinod Kumar	Characterization of surface treated flax fiber using fourier transformation infrared (FTIR) analysis	AIP Conference Proceedings , Volume 2962, Issue 1, 1/30/2024	https://doi.org/10.1063/5.0192266	SCOPUS
Subhrajeet Mohanty, Jai Inder Preet Singh, Vikas Dhawan, Sehijpal Singh, Ahmed Belaadi	A review on basalt/PLA composite and its chemical and mechanical properties	AIP Conference Proceedings , Volume 2962, Issue 1, 1/30/2024	https://doi.org/10.1063/5.0192257	SCOPUS
Valiveti Adithya Ajitesh, Jai Inder Preet Singh, Sehijpal Singh, Vikas Dhawan, Vikas Sharma	A review on natural fibres: Its applications, chemical and mechanical properties	AIP Conference Proceedings , Volume 2962, Issue 1, 1/30/2024	https://doi.org/10.1063/5.0192259	SCOPUS
Mukesh Kumar, Harnam Singh Farwaha, Raman Kumar, TM Yunus Khan, Syed Javed, Anish Kumar Sachdeva, Sehijpal Singh, Achmad Rizal, Muhammad Imam Ammarullah	Thermal performance evaluation of solar collector with rice husk Graphene-PCM: bioengineering approach	Case Studies in Thermal Engineering, Volume 52, Pages 103773, 12/1/2023	https://doi.org/10.1016/j.csite.2023.103773	SCI
Shekhar Srivastava, Rajiv Kumar Garg, Anish Sachdeva, Vishal S Sharma, Sehijpal Singh, Munish Kumar Gupta	Distribution of temperature and residual stresses in GMA-DED based wire-arc additive manufacturing	Rapid Prototyping Journal, Volume 29, Issue 10, Pages 2001-2018, 11/27/2023	ISSN: 1355-2546	SCI
Amrinder Singh Pannu; Jai Inder Preet Singh; Sehijpal Singh; Vikas Dhawan	Green composites and their manufacturing techniques-a review	AIP Conference Proceedings , Volume 2800, Issue 1, 9/8/2023	https://doi.org/10.1063/5.0163999	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Raman Kumar, Arvinder Singh Channi, Rupinder Kaur, Shubham Sharma, Jasmaninder Singh Grewal, Sehijpal Singh, Amit Verma, Rodolfo Haber	Exploring the intricacies of machine learning-based optimization of electric discharge machining on squeeze cast TiB ₂ /AA6061 composites: Insights from morphological, and microstructural aspects in the surface structure analysis of recast layer formation and worn-out analysis	Journal of Materials Research and Technology, Volume 26, Pages 8569-8603, 9/1/2023	https://doi.org/10.1016/j.jmrt.2023.09.127	SCIE
Gurpreet Singh, Vivek Aggarwal, Sehijpal Singh, Balkar Singh, Shubham Sharma, Jujhar Singh, Changhe Li, Grzegorz Królczyk, Abhinav Kumar, Sayed M Eldin	Performance investigations for sustainability assessment of Hastelloy C-276 under different machining environments	Heliyon, Volume 9, Issue 3, 3/1/2023		SCOPUS
Palwinder Singh, Lakhvir Singh, Sehijpal Singh	A review on magnetically assisted abrasive flow machining and abrasive material type	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, Volume 236, Issue 6, Pages 2765-2781,	https://doi.org/10.1177/0954408922109	SCI
Gurpreet Singh, Vivek Aggarwal, Sehijpal Singh, Rajiv Kumar Garg, Balkar Singh	Experimental and Analytical Investigation into Cutting Forces during Turning of EN-31 Steel in Different Machining	Key Engineering Materials, Volume 933, Pages 42-61, 11/17/2022	https://doi.org/10.4028/p-d72alb	SCI
Gurpreet Singh, Vivek Aggarwal, Sehijpal Singh, Balkar Singh	Sustainable machining of Hastelloy C-276 enabling minimum quantity lubrication of environmentally compatible	Journal of Cleaner Production, Volume 373, Pages 133928,11/1/2022	https://doi.org/10.1016/j.jclepro.2022.133928	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Ramandeep Singh Sidhu, Raman Kumar, Ranvijay Kumar, Pankaj Goel, Sehijpal Singh, Danil Yurievich Pimenov, Khaled Giasin, Krzysztof Adamczuk	Joining of dissimilar Al and Mg metal alloys by friction stir welding	Materials, Volume 15, Issue 1744799, 8/26/2022	https://doi.org/10.3390/ma15175901	SCI
Amardeep Singh, Palwinder Singh, Sehijpal Singh, Lakhvir Singh	Effect of annealing temperature on the magnetic properties and finishing efficiency of mechanically alloyed magnetic	Journal of Magnetism and Magnetic Materials, Volume 556, 8/15/2022	https://doi.org/10.1016/j.jmmm.2022.169455	SCI
Raman Kumar, Sehijpal Singh, Vivek Aggarwal, Sunpreet Singh, Danil Yurievich Pimenov, Khaled Giasin, Krzysztof Nadolny	Hand and abrasive flow polished tungsten carbide die: optimization of surface roughness, polishing time and comparative analysis in wire	Materials, Volume 15, Issue 4, 2/9/2022		SCI
Gurpreet Singh, Ajay Kumar, Vivek Aggarwal, Sehijpal Singh	Experimental investigations and optimization of machining performance during turning of EN-31 steel using TOPSIS	Materials Today: Proceedings Volume 48 Pages 1089-1094, 11/2022	https://doi.org/10.1016/j.matpr.2021.07.381	SCOPUS
Palwinder Singh, Lakhvir Singh, Sehijpal Singh	Mechanism of Material Removal in Magneto Abrasive Flow Machining	Machines, Mechanism and Robotics: Proceedings of iNaCoMM 2019, Pages 225-238, 2022	
Gurpreet Singh, Sehijpal Singh, Vivek Aggarwal, Jujhar Singh, Neelkanth Grover, Amoljit Singh Gill	Ecological aspects of cutting fluids applications in small scale industries of Northern India region	Materials Today: Proceedings, Volume 48, Pages 1325-1331, 01/01/2022		SCOPUS
Varun Chodha, Rohit Dubey, Raman Kumar, Sehijpal Singh, Swapandeep Kaur	Selection of industrial arc welding robot with TOPSIS and Entropy MCDM techniques	Materials Today: Proceedings, Volume 50, Pages 709-715, 1/1/2022	https://doi.org/10.1016/j.matpr.2021.04.487	SCOPUS
Ardamanbir Singh Sidhu, Sehijpal Singh, Raman Kumar	Bibliometric analysis of entropy weights method for multi-objective optimization in machining operations	Materials Today: Proceedings, Volume 50, Pages 1248-1255, 1/1/2022	https://doi.org/10.1016/j.matpr.2021.09.340	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Raj Kumar, Harish Kumar Banga, Raman Kumar, Sehijpal Singh, Sunpreet Singh, Maria-Luminița Scutaru, Cătălin Iulian Pruncu	Ergonomic evaluation of workstation design using taguchi experimental approach: A case of an automotive industry	International Journal on Interactive Design and Manufacturing (IJIDeM), Volume 15, Pages 481-498, 2021/12	
Gurpreet Singh, Vivek Aggarwal, Sehijpal Singh	Experimental investigations into machining performance of Hastelloy C-276 in different cooling environments	Materials and Manufacturing Processes, Volume 36, Issue 15, Pages1789-1799, 11/18/2021	https://doi.org/10.1080/10426914.2021.1945099	SCIE
Grewal Jasmaninder Singh, Sidhu Buta Singh and Prakash Satya	Characterization of nano-structured and conventional TiAlN coatings deposited on AISI-304 boiler steel	International journal of advanced material research vol. 1137 pp. 1-14, 2016.	ISSN 1662-8985	SCOPUS
Grewal Jasmaninder Singh, Sidhu Buta Singh and Prakash Satya	Effect of sliding velocity on wear behaviour of TiAlN coatings	International journal of advanced material research vol. 1137 pp. 24-38, 2016.	ISSN 1662-8985	SCOPUS
Sahni Kanwalpreet, Singh Prabhjot and Grewal Jasmaninder Singh	Evaluation of slurry erosion wear of HVOF Sprayed WC-12Co coatings	International journal of advanced material research vol. 9(1) pp.85-89, 2017		SCOPUS
Bedi Manjot Singh, Grewal Jasmaninder Singh and Singh Sehijpal	Experimental investigation on modelling of green manufacturing grinding process	International journal of advanced material research vol. 9(1) pp.99-104, 2017		SCOPUS
Kaur Arshpreet, Grewal Jasmaninder Singh and Karan Daanvir	High temperature erosion of thermal spraying processes on AISI-310 boiler steel substrate	International journal of material science and engineering,” vol. 8(1) pp.77-84, 2017.		SCOPUS
Singh Gagandeep, Grewal Jasmaninder Singh	Effect of fiber volume fraction on dynamic properties of glass fibre reinforced polymer (GFRP) Composite	International journal of material science and engineering,” vol. 8(1) pp.85-88, 2017		SCOPUS
Kaur Arshpreet, Bedi Manjot Singh and Grewal Jasmaninder Singh	To study the effect of HVOF coating on AISI-310 stainless steel over detonation gun spray	International Journal of material science and engineering vol 8(2) 2017: July-December. pp. 203-207		SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Punn Abhishek, Grewal Jasmaninder Singh and Punnu Amrinder Singh	Investigating tensile properties of extruded biocomposite rod of polylactic acid reinforced with treated/untreated sisal fiber	International Journal of material science and engineering vol 8(2) 2017: July-December. pp. 155-160		SCOPUS
Kumar Amandeep and Grewal Jasmaninder Singh	Effect of slurry erosion on CF8M turbine steel	International Journal of material science and engineering vol 8(2) 2017: July-December. pp. 161-165		SCOPUS
Singh Pawandeep, Grewal J.S. and Kapoor Jatinder	Behaviour of Cr ₃ C ₂ -NiCr & Al ₂ O ₃ -40% TiO ₂ Coated SS-316 boiler steel with respect to low and high temperature hot	International Journal of advanced mechatronics and robotics vol 9(2) 2017: July-December. pp. 75-81		SCOPUS
Shah Arun, Grewal Jasmaninder Singh and Sahni Kanwalpreet	Study the behavior of high temperature hot corrosion on uncoated and coated boiler steel	International Journal of advanced mechatronics and robotics vol 9(2) 2017: July-December. pp. 49-55		SCOPUS
Kumar Arvind, Grewal J.S. and Kapoor Jatinder,	To study the hot corrosion behavior of NiCr and Al ₂ O ₃ coatings with respect to high and low temperature hot corrosion of SS 304L boiler steel	International Journal of material science and engineering vol 8(2) 2017: July-December. pp. 167-172	
Kang Amardeep S., Grewal Jasmaninder S., and Cheema Gurmeet S	Effect of thermal spray coatings on wear behaviour of high tensile steel applicable for tiller	Materials Today: Proceedings 4 (2017), pp 95-103		SCOPUS
Bains Preetkanwal Singh, Grewal Jasmaninder Singh, Sidhu Sarabjeet Singh and Kaur Sandeep	Wear between ring and traveller: A pin-on-disc mapping of various detonation gun sprayed coatings	Materials Today: Proceedings 4 (2017), pp 369-378		SCOPUS
Mehta Jimmy, Grewal J.S. and Gupta Pallav	Wear Behaviour of boron steel coated cerium oxide tungsten carbide cobalt coating	Journal of applied science and engineering, Vol. 21, No.4, pp.519-526, 2018		SCOPUS
Vasudev Hitesh, Singh Harmeet, Thakur Lalit and Grewal Jasmaninder Singh	Investigation on microstructural and mechanical properties of HVOF sprayed inconel-718 coatings on grey cast iron	International Journal of Scientific Research in Science and Technology, Vol 4(2) 2018 pp. 33-37		UGC

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Singh Gursharan, Singh Sukhinderpal & Grewal Jasmaninder Singh	Erosion wear characterization of DLC and AlCrN-based coated AISI-304/316 steels	International of Surface Engineering, The Institute of Materials, Minerals and Mining, 2018, pp 1743-2944		SCI
Channi, Arvinder Singh, Bains, H.S., Vettivel, S.C. & Grewal, J.S.,(2018)	Processing and Mechanical Behavior of TiB ₂ and ZnSn ₂ Reinforced Aluminium Alloy 6061 Hybrid Composite Using Stir Casting	International Journal of Emerging Technologies in Engineering Research, Vol. 6(2),pp.37-42		UGC
Kumar, N., Singh, T. and Grewal, J.S.	Tribo-performance evaluation of eco-friendly brake friction composite materials	American Institute of Physics	,(https://doi.org/10.1063/1.5032930),2018
Kumar, N., Singh T., Grewal J.S., Patnaik A. and Fekete G.	A novel hybrid AHP-SAW approach for optimal selection of natural fiber reinforced non-asbestos organic brake friction	Material Research Express March 2019,Vol.6(6)	DOI : 10.1088/2053-1591/ab0b2b.	SCI
Singh Saravjot and Grewal Jasmaninder Singh	Characterisation and behaviour of AlCrN nano-coatings deposited on SS316 with respect to erosive wear	Journal of emerging technologies and innovative research,An International open access journal Volume 6, Issue 5,May 2019,pp. 454-462	ISSN:2349-5162	UGC
Singh Manpreet and Grewal Jasmaninder Singh	Wear performance of TiAlN nano-coatings applicable to rotavator blades at varying loads	Journal of emerging technologies and innovative research,An International open access journal Volume 6, Issue 5,May 2019,pp. 477-485	ISSN:2349-5162	UGC
Singh Gurdeep and Grewal Jasmaninder Singh,	Experimental investigation of tribological properties of mono-layered and multi-layered AlCrN-based coatings	Journal of emerging technologies and innovative research,An International open access journalVolume 6, Issue 5,May 2019,pp. 486-493	ISSN:2349-5162	UGC
Kumar, N., Singh T., Grewal J.S., Patnaik A. and Fekete G.,	Experimental investigation on the physical, mechanical and tribological properties of hemp fiber-based non-asbestos organic brake friction composites	Material Research Express	May 2019,Vol.8(6),DOI; 10.1088/2053-1591/ab2399.	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Singh, T., Kumar N., Grewal J.S., Ashok, Raj and Fekete, G	Natural fiber reinforced non-asbestos brake friction composites: Influence of ramie fiber on physico-mechanical and tribological properties	Material Research Express, May 2019, Vol.6(11),	DOI; 10.1088/2053-1591/ab45a4	SCI
Kumar, N., Singh, T., Grewal, JS.	Natural Fiber Reinforced brake friction composites: Optimization using hybrid AHP-Moora Approach	AIP Conference proceedings, Vol.2142(1), August 2019,	DOI:10.1063?1.5122564	SCOPUS
Grewal, JS., Kumar, N. and Singh, T.	Experimental investigation on the physical, mechanical and thermal properties of chemical treated ramie fiber-based non-asbestos organic brake friction	International Journal of Mechanical and Production Engineering Research and Development(IJMPERD),2249-6890;, Vol.10(5) pp.889-899,2020	ISSN(E):2249-8001	SCOPUS
Channi, A.S., Bains, H. S., Grewal, J. S. and Vettivel, S.C.	Tribological behavior of AA 6061 aluminium alloy reinforced with TiB ₂ composite using squeeze casting	Compliance Engineering Journal, Vol. 11 (12), 2020,	ISSN no. 0898-3577	UGC
Grewal J.S., Kumar N. and Singh T.	Mechanical and thermal properties of chemical treated hemp natural fiber reinforced polymer composites	International Journal of Mechanical and Production Engineering Research and Development,(IJMPERD),2249-6890;, Vol.10(5) pp.879-888,2020	ISSN(E):2249-8001	SCOPUS
Kumar N., Grewal J. S. and Kumar S.	Mechanical and Thermal Properties of NaOH treated sisal natural fiber reinforced polymer composites: Barium sulphate used as filler	Material Today Proceedings, Vol.45(7), March 2021	DOI:10.1016/j.maptr.2021.02.310	SCOPUS
Kumar N., Grewal J S. and Singh T.	Mechanical and thermal properties of chemically treated Kenaf natural fiber reinforced polymer composites	Material Today proceedings, Vol.45(7), April 2021	DOI:10.1016/j.maptr.2021.03.368	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Dhand D., Kumar P., and Grewal J.S.	A review of thermal spray coatings for protection of steels from degradation in coal fired power plants	Corrosion Reviews, Vol.39(3), pp.243-268, April 2021	https://doi.org/10.1515/correv-2020-0043	SCI
Kumar, N., Grewal J.S., Kumar N., Kumar S., and Sarafat A.	A novel pinus roxburghii natural leaves fiber used as reinforcement polymer composite: As asbestos-free	Polymer Composites, Vol.43(1), pp:566-573, October 2021	,DOI:10.1002/PC.26339.	SCOPUS
Kumar N., Grewal J.S., Kumar S., Sarafat A., and Kumar N.	A novel Himachal's Bagar(Sabai) grass fiber used as brake friction material in brake polymer composite material	Polymer Composites, Vol.43(1), pp:215-224, October 2021	DOI:10.1002/pc.26368.	SCOPUS
Sahni Kanwalpreet and Grewal Jasmaninder Singh	Role of thermal spray and hardfacing techniques on slurry erosion and wear behaviour : A review	Complex systems and complexity science journal, Vol8(4), pp:1-11, October, 2021		SCOPUS
Kumar, N., Kumar S., Grewal J.S., Mehta V., and Sarafat A.	Comparative study of Abaca fiber and Kevlar fibers based brake friction composites	Polymer Composites, Vol.43(2), pp:730-740, November 2021	DOI:10.1002/pc.26405	SCI
Dhand D., Grewal J.S., and Kumar P.	Study and comparison of wear behavior of Ni-Al ₂ O ₃ coatings deposited by hot and cold spray	Surface Topography: Metrology and Properties, Vol.9 (4), pp.1-12, December 2021	https://doi.org/10.1088/2051-672X/ac4402	SCI
Kumar, N., Grewal J.S., Singh A., and Mehta V.	Comparative study of alkali treated date palm fiber friction composites and standard Kelvar based brake friction composites pads	Polymer Composites, Vol.43(1), pp:239-249, January 2022,	https://doi.org/10.1002/pc.26370	SCI
Sharma, A., Singh, A., Chawla, V., Grewal, J.S. and Bansal, A.	Microwave processing and characterization of alumina reinforced HA cladding for biomedical applications	Materials Today: Proceedings, Vol.(57), pp-650-656, February, 2022	https://doi.org/10.1016/j.matpr.2022.02.069	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Sarafat A.,Kumar N., Grewal J.S., Thakur V., Chau K.W., and Kumar M.	Cocunut waste fiber used as brake pad reinforcement polymer composite and compared to standard Kelvar based brake pads to produce abestos-free brake friction	Polymer Composites,Vol.43(3),pp:1518-1525,January 2022	DOI:10.1002/pc.26472	SCI
Kumar N., Mehta V., Kumar S., Grewal J.S. , Sarafat A., Kashyap K., Kumar N., and Devi S.	Physical, mechanical, tribological and thermal properties of new developed composites with Grewia optiva fiber and Pan material	Polymer Composites,Vol.1(1),pp:1-7,April 2022	DOI:10.1002/pc.26726	SCI
Kumar, N., Mehta V., Kumar S., Grewal J.S., and Sarafat A.	Bamboo natural fiber and PAN fiber used as a reinforced brake friction material : Developed asbestos-free brake pads	Polymer Composites,Vol.43(5),pp:2888-2895,May 2022	https://doi.org/10.1002/pc.26584	SCI
Dhand D., Kumar P., and Grewal J.S.	Wear behavior and microstructural characteristics of cold sprayed nickel-alumina coatings on boiler steel	Journal of Electrochemical Science and Engineering, Vol.12(5),pp. 841-849,May 2022	https://doi.org/10.5599/jese.1270	SCI
Dhand D., Grewal J.S., and Kumar P.	The microstructural characterization and wear behavior of HVOF sprayed nickel-alumina coatings on	AIP conference proceedings, May 2022		SCOPUS
Singh, S., Grewal, J.S., Rakha K.	Erosion wear performance of HVOF and cold spray coatings deposited on T-91 boiler steel	Materials Today : Proceedings,Vol.(62),pp-7509-7516, May,2022,	https://10.1016/j.matpr.2022.04.277	SCOPUS
Dhand D., Grewal J.S., and Kumar P.	Application of high –velocity oxy-fuel technique to combat surface degradation in power generation industry- A review	Journal of Mines, Metals and Fuels,Vol.70(3A).pp 84-91,July 2022	https://doi.org/10.18311/jmmf/2022/30673	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Channi, A.S., Bains, H. S., Grewal, J. S., Vettivel, S. C., and Kumar R.	Tool wear rate during electrical discharge machining for aluminium metal matrix composite prepared by squeeze casting: A prospect as a	Journal of electrochemical science and engineering, Vol . 13 (1), pp. 149-162, August 2022		SCI
Channi, A.S., Bains, H. S., Grewal, J. S., Kumar, R., and Budhi, D.	Exploring the application sphere of electrical discharge machining in composite materials considering surface feature:	International journal of interactive design and manufacturing, October 2022	https://doi.org/10.1007/s12008-022-01060-3	SCI
Sahni Kanwalpret and Grewal Jasmaninder Singh	Slurry erosion behavior of WC-10Co-4Cr coated CF8M turbine steel	Materials Today Proceedings, Vol.56(5),pp 2666-2671,2022		SCOPUS
Amandeep Singh, Naser Nawayseh, Harwinder Singh, Siby Samuel, Chander Prakash, Rupinder Singh, Yash Kumar, Manjeet Singh, Naresh Kumar Chhuneja	Modelling and optimization of tractor ride conditions under water tanker operation	Theoretical Issues in Ergonomics Science, VOLUME 23 ISSUE 4 PAGES 453-474, 2022	1463-922X	SCOPUS
Jasvir Singh, Harmeet Singh	Sustainable Energy Potential from Different Types of Waste Products	Recent Developments in Waste Management (Springer) Vol. 57, pp 219-230, 2020	ISBN 978-981-15-0990-2 https://doi.org/10.1007/978-981-15-0990-2	SCOPUS
Harmeet Singh, Radhey Sham, Gaurav Vohra , Vineet Kumar	Effect of Antioxidants on the Storage Stability of Biodiesel Produced from Jatropha curcas	International Journal on Emerging Technologies, Vol.11, No.1, pp 114-123, 2020	ISSN : 0975-8364	UGC
Hitesh Vasudev, Lalit Thakur, Harmeet Singh, Amit Bansal	An investigation on oxidation behaviour of high velocity oxy-fuel sprayed Inconel718-Al ₂ O ₃ composite coatings	Surface and Coatings Technology (Elsevier), Vol.393, July 2020	https://doi.org/10.1016/j.surfcoat.2020.125770	SCI
Kulwant Singh, Gurbhinder Singh, Harmeet Singh	Microstructural and Mechanical Behaviour Evaluation of Mg-Al-Zn Alloy Friction Stir Welded	International Journal of Automotive and Mechanical Engineering, Vol.17, No.3, pp 8150-8159, October 2020	DOI: https://doi.org/10.15282/ijame.17.3.2020.08.0612

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Hitesh Vasudev, Lalit Thakur, Harmeet Singh	Applications of Nanostructured Materials for High-Temperature Wear and Corrosion Resistance in Power Plants	Nanotechnology, pp 91-104, October 2020	DOI:10.1201/9781003082859-7	SCI
Hitesh Vasudev, Lalit Thakur, Harmeet Singh, Amit Bansal	A study on processing and hot corrosion behaviour of HVOF sprayed Inconel718-nano	Materials Today Communications (Elsevier), Vol.25, December 2020	https://doi.org/10.1016/j.matcom.2020.101626	SCI
Harmeet Singh, R.P.Saini, J.S.Saini	Thermohydraulic Performance of a Packed Bed Solar Energy Storage System	Sustainable Development Through Engineering Innovations (Springer), pp 451-456, 2021	http://doi.org/10.1007/978-981-15-9554-7_39	SCOPUS
Kulwant Singh, Gurbhinder Singh, Harmeet Singh	Influence of post welding heat treatment on the microstructure and mechanical properties of friction stir welding joint of AZ31 Mg alloy	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering (SAGE Publications), Feb.2021	https://doi.org/10.1177/0954408921997626	SCI
Hitesh Vasudev, Lalit Thakur, Harmeet Singh, Amit Bansal	Erosion behaviour of HVOF sprayed Alloy718-nano Al ₂ O ₃ composite coatings on grey cast iron at elevated temperature conditions	Surface Topography: Metrology and Properties (IOP Publishing), Aug 2021	ISSN: 2051-672X	SCI
Hitesh Vasudev, Lalit Thakur, Harmeet Singh, Amit Bansal,	Effect of addition of Al ₂ O ₃ on the high-temperature solid particle erosion behaviour of HVOF sprayed Inconel-718	Material Today Communications (Elsevier), March 2022	https://doi.org/10.1016/j.matcom.2021.103017	SCI
Satwant Singh, Raman Kumar, Panakj Goel, Harmeet Singh	Analysis of wear and hardness during surface hardfacing of alloy steel by thermal spraying, electric arc and TIG welding	Materials Today: Proceedings, pp 1599-1605, Vol.50 January2022.	https://doi.org/10.1016/j.matpr.2021.09.122	SCOPUS
Kulwant Singh, Anuj Kumar Sehgal, Gurbhinder Singh, Harmeet Singh	Influence of PWHT on FSW joint of AZ61 Mg alloy	Materials Today Proceedings (Elsevier), pp 2217-2221 Vol.60, January 2022.	https://doi.org/10.1016/j.matpr.2022.03.117	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Kulwant Singh, Gurbhinder Singh, Harmeet Singh	The influence of holding time on the characteristics of friction stir welded dissimilar magnesium alloy joints during post welding heat treatment	Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, SAGE Publishers, June 2022.	https://doi.org/10.1177/14644207221106576	SCI
Singh, P., Deepak, D., & Brar, G.S	Investigations on the effect of friction crush welding parameters in joining 6061 aluminium alloy to 304 stainless	Journal of Mechanical Science and Technology 37 (4), 1999-2008	https://doi.org/10.1007/s12206-023-0336-6	SCIE
Satjot Singh Dhillon, Vikas Chawla, Gurbhinder Singh	Analysis of plasma gun sprayed coatings on SS-304 steel to evaluate cyclic oxidation and hot corrosion.	Material Today: Proceedings, 50(2022), 1580-1590	https://doi.org/10.1016/j.matpr.2021.09.120	SCOPUS
Satjot Singh Dhillon, Vikas Chawla, Gurbhinder Singh	Analysis of solid particle erosion in plasmasprayed alumina based coatings on SAE-347H steel.	Material Today: Proceedings, 50(2022), 1210-1220	https://doi.org/10.1016/j.matpr.2021.08.072	SCOPUS
Dr. Shehbaaz Singh Brar	Characterization of D-gun sprayed Al ₂ O ₃ -13%TiO ₂ and Al ₂ O ₃ -40%TiO ₂ coatings on ASTM 316 boiler steel and their	Materials Today: Proceedings 50 (2022) 2299-2306	https://doi.org/10.1016/j.matpr.2021.10.005/2214-7853	SCOPUS
Dr. Shehbaaz Singh Brar	Microstructure and characterization of LVOF sprayed aluminium oxide-13% titanium dioxide and aluminium oxide-40% titanium dioxide coatings on ASTM 316 boiler	Materials Today: Proceedings 50 (2022) 2474-2481	https://doi.org/10.1016/j.matpr.2021.10.413/2214-7853	SCOPUS
Jorawar Chumber, Gurpreet Singh, Amrinder Singh Pannu and Jasmaninder Singh Grewal	Development of Bio-Degradable Composites by Hybridization of Hemp And Cotton Fibers With Epoxy	Modernization in Engineering Technology and Science, Publisher- IRJMET, vol 5, issue 3, pp: 3423-3429, 2023	2582-5208	-----
Pal J, Gupta D and Singh TP	Processing and characterization of SS316 based metal matrix composite casting through	ProcIMEchE Part C: J Mechanical Engineering Science, 2022, Vol. 236(20) 10508–10527	DOI: 10.1177/09544062221104443	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Pal J, Gupta D and Singh TP	microwave hybrid heating	ProcIMechE Part C: J Mechanical Engineering Science, 2024, Vol. 238(4) 926–948	DOI: 10.1177/09544062231181826	SCI
Pal J, Gupta D and Singh TP	Development of iron-based composite materials through electromagnetic radiations in a domestic microwave oven	ProcIMechE Part C: J Mechanical Engineering Science 2024, Vol. 238(4) 949–970, IMechE 2023	https://doi.org/10.1177/09544062231181832	SCI
Pal J, Gupta D and Singh TP		ProcIMechE Part C: J Mechanical Engineering Science, 1–30, IMechE	DOI: 10.1177/09544062241228389	SCI
Chamakur Jindal, Buta Singh Sidhu, Pardeep Kumar, Hazoor Singh Sidhu	Performance of hardfaced/heat treated materials under solid particle erosion: A systematic literature review	Materials Today: Proceedings	https://doi.org/10.1016/j.matpr.2021.03.441	SCOPUS
Gulvir Singh and Pradeep K. Singh	Effect of process parameters on roll separating force, driving torque and end crop length during grooved hot rolling of SAE 1020 steel	<i>Journal of Manufacturing Processes (Elsevier)</i> , 79, 1003-1016. Year 2022.	https://doi.org/10.1016/j.jmapro.2022.05.015	SCIE
Gulvir Singh and Pradeep K. Singh	Effect of process parameters on performance of grooved hot rolling of SAE 4340 steel bars.	<i>Materials and Manufacturing Processes (Taylor & Francis)</i> , 38(2), 206-219. 1003-1016. Year 2023.	https://doi.org/10.1080/10426914.2022.2075894	SCIE
Gulvir Singh and Pradeep K. Singh	Effect of process parameters on roll separating force, driving torque, and end crop length during grooved hot rolling of SAE 1541 steel.	<i>The International Journal of Advanced Manufacturing Technology (Springer)</i> , 124(7-8), 2463-2482. Year 2023.	https://doi.org/10.1007/s00170-022-10232-0	SCIE
Gulvir Singh and Pradeep K. Singh	Modelling and Optimization of Process Parameters during Grooved Hot Rolling of SAE 1020 Steel.	<i>Materials and Manufacturing Processes (Taylor & Francis)</i> , 38(6), 701-721. Year 2023.	https://doi.org/10.1080/10426914.2022.2149778	SCIE
Gulvir Singh and Pradeep K. Singh	Improving the energy efficiency and process scrap in grooved hot rolling of SAE 52100 steel billets	<i>CIRP Journal of Manufacturing Science and Technology (Elsevier)</i> , 41, 55-68. Year 2023.	https://doi.org/10.1016/j.cirpj.2022.11.014	SCIE

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Gulvir Singh and Pradeep K. Singh	Modeling and Optimization of Process Parameters during Grooved Hot Rolling of SAE 1541 Steel	<i>Journal of Materials Engineering and Performance (Springer)</i> , 1-13. Year 2023.	https://doi.org/10.1007/s11665-023-07860-2 .	SCIE
Gulvir Singh and Pradeep K. Singh	Process Variable Optimization for Hot-Profiled Rolling of SAE 52100 Steel	<i>International Journal of Precision Engineering and Manufacturing (Springer)</i> , 1-9. Year 2023.	https://doi.org/10.1007/s12541-023-00819-2 .	SCIE
Gulvir Singh and Pradeep K. Singh	Hot profiled rolling of C40 steel: production variable's effect on rolling performance.	<i>Materials and Manufacturing Processes (Taylor & Francis)</i> , 1-21. Year 2023.	https://doi.org/10.1080/10426914.2023.2236224 .	SCIE
Gulvir Singh and Pradeep K. Singh	Reduction of energy and fuel consumption in the hot-rolling steel sector.	<i>Cleaner Engineering and Technology (Elsevier)</i> , 100689. Year 2023.	https://doi.org/10.1016/j.clet.2023.100689 .	SCOPUS
Harnam Singh Farwaha, Gurinder Singh Brar, Dharmpal Deepak	Mathematical modeling and process parameters optimization of ultrasonic assisted electrochemical magnetic	<i>Journal of Mechanical Science and Technology</i> 34, (12) (2020) pp5063-5073.	doi: 10.1007/s12206-020-1110-7	SCI
Harnam Singh Farwaha, Gurinder Singh Brar, Dharmpal Deepak	Investigation of a novel ultrasonically aided electrochemical magnetic abrasive machining process for	<i>The International Journal of Advanced manufacturing Technology</i> 122 (2022) pp2343–2359 (2022)	https://doi.org/10.1007/s00170-022-10045-1	SCI
Harnam Singh Farwaha	Investigation and development of aluminium matrix composite reinforced with silicon carbide using process of stir casting	<i>Elsevier Materials Today: Proceedings</i> , 11/1/2022	https://doi.org/10.1016/j.matpr.2022.11.124	SCOPUS
Harnam Singh Farwaha	Use of Response Surface Methodology to Optimize the crystalline size of rice husk derived graphene produced by microwave process	<i>IOP Conf. Series: Earth & Environmental Science</i> , Volume 1110, February 2023 pp 012069.	doi:10.1088/1755-1315/1110/1/012069	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Harnam Singh Farwaha	Enhancing sustainability in manufacturing: A case study on reducing changeover time through single minute exchange of dies and risk analysis	AIP Conf. Proc. 3050, February 2024 pp 050009.	https://doi.org/10.1063/5.0193678	SCOPUS
Harnam Singh Farwaha	Comparative study of metallic foil friction stir welded and conventional friction stir welded AZ61 Mg alloy butt joints: Biomedical and engineering applications	AIP Advances 14, 045209, April 2024 pp 045209-1 – 045209-12.	https://doi.org/10.1063/5.0199003	SCI
Deepak Dhand, Jasmaninder Singh Grewal and Parlad kumar	A review of thermal spray coatings for the protection of steels from degradation in coal fired boiler plants	CORROSION REVIEWS,39,2021	doi.org/10.1515/corrrev-2020-0043	SCI
Deepak Dhand, Jasmaninder Singh Grewal and Parlad kumar	Study and comparison of wear behaviour of Ni-Al ₂ O ₃ coatings deposited by hot and cold spray	SURFACE TOPOGRAPHY: METROLOGY AND PROPERTIES, 9 (4),2021	doi.org/10.1088/2051-672X/ac4402	SCI
Deepak Dhand, Jasmaninder Singh Grewal and Parlad kumar	Wear behaviour and microstructural characteristics of cold sprayed nickel-alumina coatings on boiler steel	Journal of Electrochemical Science and Engineering 12 (5), 2022	doi.org/10.5599/jese.1270	SCI
Deepak Dhand, Jasmaninder Singh Grewal and Parlad kumar	Application of high velocity oxy-fuel technique to combat surface degradation in power generation industry – a review	Journal of Mines, Metals and Fuels 70 (3A),2022	doi.org/10.18311/jmmf/2022/30673	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Mukesh Singh Manola, Balwant Singh, Manoj Kumar Singla, Jasgurpreet Singh Chohan, Raman Kumar, Yashwant Singh Bisht, Raman Kumar , Meshel Q. Alkahtani, Saiful Islam, Muhammad Imam Ammarullah*	Investigation of Melt Flow Index and Tensile Properties of Dual Metal Reinforced Polymer Composites for 3D Printing using Machine Learning Approach: Biomedical and Engineering Applications	AIP Advances/ 2158-3226	Accepted	SCI
Karanbir Singh Randhawa, Raman Kumar , Hamad Alkaabi, Meshel Q. Alkahtani, Saiful Islam, Chander Prakash, Rahul Kumar, Muhammad Imam Ammarullah*	Bioengineering Solutions for Expansive Soil Stabilization Using Waste Materials: An Experimental Evaluation	AIP Advances/ 2158-3226	Accepted	SCI
Gagandeep Kaur, Jaspreet Kaur, Ashish Sharma, Abhilasha Jain, Raman Kumar, Raman Kumar , Majed Alsubih, Saiful Islam, Muhammad Imam Ammarullah*	Techno-Economic Investigation and Empowering Rural Resilience through Bioengineering: A Case Study on Self-Sustainable Village Energy Models	International Journal of Low-Carbon Technologies/1748-1325	Accepted	SCI
Md. Rezaul Karim, Shah Md. AshiquzzamanNipu, Md. Sabbir Hossain Shawon, Raman Kumar , Sheak Salman, Amit Verma, El-Sayed M. Sherif, Saiful Islam, Muhammad Imam Ammarullah*	Machinability Investigation of Natural Fibers Reinforced Polymer Matrix Composite Under Drilling: Leveraging Machine Learning in Bioengineering Applications	AIP Advances/ 2158-3226	25-04-2024 AIP Advances 14, 045139 (2024) https://doi.org/10.1063/5.0200625	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Raman Kumar* , Sunpreet Singh, Sushant, Atul Babbar, Shubham Sharma, Gurminder Singh, Pankaj Goel, Nishant Ranjan	Application of Additive Manufacturing in Biomedical Domain: A Bibliometric Review, Thematic Evolution and Content Analysis	International Journal on Interactive Design and Manufacturing (IJIDeM)	16-04-2024 https://doi.org/10.1007/s12008-024-01830-1	SCI
Prem Chand R, T. V. Sreerama Reddy, NamdevGawade, Atul Babbar, R. Ganapati, Chandrashekar Anjinappa, Raman Kumar*, Ankit Sharma, Raman Kumar	Cutting Force and Surface Roughness Evaluation of Cryogenic Treated Inserts for Machining EN24 Grade Alloy Steel: RSM Modelling Approach	International Journal on Interactive Design and Manufacturing (IJIDeM)	Accepted	SCI
BabuErappaRajj, MadevaNagaral, Sanjay Chintakindi, Raman Kumar* , Ali E. Anqi, Ali A. Rajhi, Alaauldeen A. Duhduh, Gedala Sridevi, Chander Prakash*, Raman Kumar, Choon Kit Chan	Nano-Sized Al ₂ O ₃ - Gr Reinforced Al7075 Hybrid Composite: Impact of Cooling Agents on Mechanical, Wear and Fracture Behavior	ACS Omega/2470-1343	12-04-2024 https://doi.org/10.1021/acsomega.3c08822	SCI
M. Arun, Debabrata Barik, Sreejesh SR. Chandran, Nikhil Govil, Prabhakar Sharma, T.M. Yunus Khan, Rahmath Ulla Baig, Bhaskor Jyoti Bora, Bhaskar Jyoti Medhi, Raman Kumar* , Achmad Rizal, Muhammad Imam Ammarullah	Twisted helical Tape's impact on heat transfer and friction in zinc oxide (ZnO) nanofluids for solar water heaters: Biomedical insight	Case Studies in Thermal Engineering/ 2214-157X	Available online 4 March 2024, 104204 https://doi.org/10.1016/j.csite.2024.104204	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Pragyan Jain, R.S. Rajput, Sunil Kumar Gupta, Arti Sharma, Akshay Jain, Bhaskor Jyoti Bora, Prabhakar Sharma, Raman Kumar* , Mohammad Shahid, Ali A. Rajhi, Majed Alsubih, Mohd Asif Shah, Abhijit Bhowmik	Recent Advances in Graphene-Enabled Materials for Photovoltaic Applications: A Comprehensive Review	ACS Omega/2470-1343	09-03-2024 https://doi.org/10.1021/acsomega.3c07994	SCI
Reza Aghazadeh, Mohammad Rafighi, Raman Kumar, Mohammed Al Awadh	Material gradation effects on twisting statics of bi-directional functionally graded micro-tubes	AIP Advances/ 2158-3226	AIP Advances 14, 025228 (2024) https://doi.org/10.1063/5.0194270	SCI
Lu Yang*, Raman Kumar , Rupinder Kaur, Atul Babbar, Gurfateh Singh Makhanshahi, Arshpreet Singh, Raman Kumar, Abhijit Bhowmik, Ahmed HussienAlawadi	Exploring the Role of Computer Vision in Product Design and Development: A Comprehensive Review	International Journal on Interactive Design and Manufacturing (IJIDeM)	online 14 March 2024 https://doi.org/10.1007/s12008-024-01765-7	SCI
Babu E R, Nagaraja C Reddy, Atul Babbar, Chandrashekar A, Raman Kumar , Pardeep Singh Bains, Majed Alsubih, Saiful Islam, Sanjeev Kumar Joshi, Achmad Rizal*, Muhammad Imam Ammarullah	Characteristics of Pulsating Heat Pipe with Variation of Tube Diameter, Filling Ratio, and SiO ₂ Nanoparticles: Biomedical and Engineering Implications	Case Studies in Thermal Engineering/ 2214-157X	online 10 February 2024 Volume 55, March 2024, 104065 https://doi.org/10.1016/j.csite.2024.104065	SCI
Suresh Poyil Subramanyam, Dilip Kumar Kotikula, BasavarajuBennehalli, Atul Babbar, SagarAlamri, Alaauldeen A. Duhduh, Ali A. Rajhi, Raman Kumar* , Ketan Kotecha**	Plain Woven Areca Sheath Fibre Reinforced Epoxy-Composites: Influence of Fibre Fraction on Physical, Mechanical Features and Responses of Tribo-System: Machine Learning Modelling	ACS Omega/2470-1343	ACS Omega 2024, XXXX, XXX, XXX-XXX Publication Date: February 5, 2024 https://doi.org/10.1021/acsomega.3c08164	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Pulkit Kumar, Harpreet Kaur Channi, Atul Babbar, Raman Kumar* , Javed Khan Bhutto, T. M. Yunus Khan, Abhijit Bhowmik, Abdul Razak, AntenehWogassoWodajo*	A Systematic Review of Nanotechnology for Electric Vehicles Battery	International Journal of Low-Carbon Technologies/1748-1325	Accepted 4 February 2024	SCI
Md. Rezaul Karim, Raman Kumar* , Atul Babbar, Shubham Sharma, Ranvijay Kumar	Surface Roughness and Cutting Force in Turning of Alkaline Treated BFRP Composite: Compressed Air Cutting	Journal of Reinforced Plastics and Composites	https://doi.org/10.1177/07316844241228935	SCI
Nikhil Dev, Raman Kumar , Rajeev Kumar Saha, Atul Babbar, Vladimir Simic*, Raman Kumar, Nebojsa Bacanin	Performance Evaluation Methodology for Gas Turbine Power Plants using Graph Theory and Combinatorics	International Journal of Hydrogen Energy/0360-3199	Online 18 January 2024 Volume 57, 29 February 2024, Pages 1286-1301 https://doi.org/10.1016/j.ijhydene.2024.01.064	SCI
Kiran M D, Lokesh Yadhav B R, Atul Babbar, Raman Kumar* , Sharath Chandra H S, Rashmi P Shetty, Sudeepa K B, Sampath Kumar. L, Rupinder Kaur, Meshel Q. Alkahtani, Saiful Islam, Raman Kumar	Tribological properties of CNT-filled epoxy-carbon fabric composites: Optimization and modelling by machine learning	Journal of Materials Research and Technology	Online 24 December 2023 Volume 28, January–February 2024, Pages 2582-2601	SCI
KatikaHarikrishna, Abhijit Bhowmik, M J Davidson, Raman Kumar* , Ali E. Anqi, Ali A. Rajhi, SAGR Alamri, Raman Kumar	Evaluation of constitutive equations for modeling and characterization of microstructure during hot deformation of sintered Al-Zn-Mg alloy Evaluation of constitutive equations for modeling and characterization of	Journal of Materials Research and Technology	online 10 December 2023 https://doi.org/10.1016/j.jmrt.2023.12.050	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Abhijit Bhowmik, Raman Kumar , Atul Babbar, Valentin Romanovski, Sujit Roy, Lokeswar Patnaik, J Pradeep Kumar, Ahmed HussienAlawadi	Analysis of physical, mechanical and tribological behavior of Al7075-fly ash composite for lightweight applications	International Journal on Interactive Design and Manufacturing (IJIDeM)	https://doi.org/10.1007/s12008-023-01583-3	SCI
PapabathinaMastan Rao, Sneha Hareesh Dhoria, S Gopal Krishna Patro, Radha Krishna Gopidesi, Meshel Q Alkahtani, Saiful Islam, Murkonda Vijaya, Juturi Lakshmi Jayanthi, Mohammad Amir Khan, Abdul Razak, Raman Kumar , Achmad Rizal, Muhammad Imam Ammarullah	Artificial intelligence based modelling and hybrid optimization of linseed oil biodiesel with graphene nanoparticles to stringent biomedical safety and environmental standards	Case Studies in Thermal Engineering	Volume 51, November 2023, 103554 https://doi.org/10.1016/j.csite.2023.103554	SCI
Raman Kumar , Arvinder Singh Channi, Rupinder Kaur, Shubham Sharma, Jasmaninder Singh Grewal, Sehijpal Singh, Amit Verma, Rodolfo Haber	Exploring the intricacies of machine learning-based optimization of electric discharge machining on squeeze cast TiB ₂ /AA6061 composites: Insights from morphological, and microstructural aspects in the surface structure analysis of recast layer formation and worn-	Journal of Materials Research and Technology	Volume 26, September–October 2023, Pages 8569-8603 https://doi.org/10.1016/j.jmrt.2023.09.127	SCI
PraveenaBindiganavile Anand, Santhosh Nagaraja, Nagendra Jayaram, Shashank PaidiSreenivasa, NaifAlmakayeel, TM Yunus Khan, Raman Kumar , Raman Kumar, Muhammad Imam Ammarullah	Kenaf Fiber and Hemp Fiber Multi-Walled Carbon Nanotube Filler-Reinforced Epoxy-Based Hybrid Composites for Biomedical Applications: Morphological and Mechanical Characterization	Journal of Composites Science	J. Compos. Sci. 2023, 7(8), 324; https://doi.org/10.3390/jcs7080324	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Ketan Badogu, Vishal Thakur, Raman Kumar , Ranvijay Kumar, Sunpreet Singh	Acrylonitrile Butadiene Styrene-ZrO2 Composites for Roller Burnishing as Post-processing of 3D Printed Parts: Machine Learning Modeling Using Classification and Regression	Journal of Materials Engineering and Performance	J. of MateriEng and Perform (2023). https://doi.org/10.1007/s11665-023-08620-y	SCI
Asim Ahmad, Om Prakash, Shailesh Kumar Sarangi, Prashant Singh Chauhan, Rajeshwari Chatterjee, Shubham Sharma*, Raman Kumar, Sayed M. Tag, Abhinav Kumar, Bashir Salah and Syed Sajid Ullah	Thermal and CFD Analyses of Sustainable Heat Storage-based Passive Greenhouse Dryer operating in No-load Condition	Sustainability / 2071-1050/Basel, Switzerland	Accepted 18 July 2023, Sustainability 2023, 15(15), 12067; https://doi.org/10.3390/su151512067	SCI
Rajeev Kumar Saha, Raman Kumar* , Nikhil Dev, Rajender Kumar, Raman Kumar, Raul M. Del Toro, Sofia Haber, and José E. Naranjo	Structural modeling and analysis of fuel cell: a graph-theoretic approach	PeerJ Computer Science/ ISSN: 2376-5992	Accepted 7 July 2023 PeerJ Computer Science 9:e1510 https://doi.org/10.7717/peerj-cs.1510	SCI
Vishal Thakur, Ranvijay Kumar*, Raman Kumar , Rupinder Singh, Vinay Kumar	Hybrid Additive Manufacturing of Highly Sustainable PLA-CF-PLA Sandwiched Composite Structures: Optimization and Machine Learning	Journal of Thermoplastic Composite Materials/ ISSN: 0892-7057 Online ISSN: 1530-7980/ SAGE Publications	Accepted 19 May 2023 https://doi.org/10.1177/089270572311180	SCI
Raman Kumar* , Shubham Sharma, Ranvijay Kumar, Sanjeev Verma, and Mohammad Rafighi	Review of Lubrication and Cooling in Computer Numerical Control (CNC) Machine Tools: A Content and Visualization Analysis, Research Hotspots and	Sustainability / 2071-1050/Basel, Switzerland	Online 10 March 2023 5(6), 4970; https://doi.org/10.3390/su15064970	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Xiaoyang Shu, Raman Kumar* , Rajeev Kumar Saha, Nikhil Dev, ŽeljkoStević *, Shubham Sharma, and Mohammad Rafighi	Sustainability Assessment of Energy Storage Technologies based on Commercialization Viability: MCDM Model	Sustainability / 2071-1050/Basel, Switzerland	Online 7 March 2023, 15 (6), 4707; https://doi.org/10.3390/su15064707	SCI
Shivani Bali, Vikram Bali, Dev Gaur, Sita Rani, Raman Kumar , Chander Prakash, Nikolai Vatin, Saurav Dixit, PadmakarShahare	A Framework to Assess the Smartphone Buying Behaviour using DEMATEL Method in the Indian Context	Ain Shams Engineering Journal/ 2090-4479	In Press	SCI
Ali YurdunOrbak, MetinKüçük, Mehmet Akansel, Shubham Sharma, Changhe Li, Raman Kumar , Sunpreet Singh, Gianpaolo Di Bona	Mathematical Model Assisted Six-Sigma Approach for reducing the Logistics Costs of a Pipe Manufacturing Company: A novel experimental approach	Mathematics/ 2227-7390	Online 26 January 2023 Mathematics 2023, 11(3), 621; https://doi.org/10.3390/math11030621	SCI
Raman Kumar , Pankaj Goel, EdmondKazimieras Zavadskas, ŽeljkoStević, Vladimir Vujović	A New Joint Strategy for Multi-Criteria Decision-Making: A Case Study for Prioritizing	International Journal of Computers Communications & Control/ 1841-9844	Online 14 December 2022 17 (6)/5010 (2022): International Journal of Computers Communications & Control (December) / https://doi.org/10.15837/ijccc.2022.6.5010	SCI
Pradeep Kumar, Kakoli Banerjee, Niraj Singhal, Ajay Kumar, Sita Rani, Raman Kumar* , Cioca Adriana-Lavinia	Solid-State Drive Verifiable, Secure Mobile Agent Migration in Healthcare Systems Using a Polynomial-Based Threshold Secret Sharing Scheme with a Blowfish Algorithm	Sensors MDPI (Basel, Switzerland/ ISSN 1424-8220	Online 8 November 2022	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Muhammad Umar Farooq, Saqib Anwar, M. Saravana Kumar, Abdullah AlFaify, Muhammad Asad Ali, Raman Kumar* , Rodolfo Haber	A Novel Flushing Mechanism to Minimize Roughness and Dimensional Errors during Wire Electric Discharge Machining of Complex Profiles on Inconel 718	Materials/1996-1944/ Basel, Switzerland	Sensors 2022, 22(22), 8620; https://doi.org/10.3390/s22228620 Online 20 October 2022, 15(20), 7330; https://doi.org/10.3390/ma15207330	SCI
Pankaj Goel, Sandhya Mehta, Raman Kumar * , Fernando Castaño	Sustainable Green Human Resource Management Practices in Educational Institutions: An Interpretive Structural Modelling and Analytic Hierarchy Process Approach	Sustainability / 2071-1050/Basel, Switzerland	Online 9 October 2022 Sustainability 2022, 14(19), 12853; https://doi.org/10.3390/su141912853	SCI
Nishant Ranjan, Raman Kumar* , Ranvijay Kumar, Rupinder Kaur, Sunpreet Singh	Investigation of Fused Filament Fabrication-Based Manufacturing of ABS-Al Composite Structures: Prediction by Machine Learning	Journal of Materials Engineering and Performance ISSN: 1059-9495 (print); 1544-1024 (web) Publisher: ASM International, Springer Science+Business Media	Online 30 September 2022/32, pages4555–4574 (2023) https://doi.org/10.1007/s11665-022-07431-x	SCI
Gurminder Singh, Sunpreet Singh, Raman Kumar , Chandra Prakash, Catlin Pruncu, and Sreeram Ramakrishna	Tissues and Organ Printing: An Evolution of Technology and Materials	Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine/ 0954-4119	In Press Accepted Online 22 September 2022 2022;236(12):1695-1710 https://doi.org/10.1177/09544119221125084	SCI
Priya Darshni, Balwinder Singh, Dhaliwal, Raman Kumar* , Vincent Aizebeoje Balogun, Sunpreet Singh, Cătălin Iulian Pruncu	Artificial neural network based character recognition using SciLab	Multimedia Tools and Applications/ ISSN: 13807501, 15737721/Springer Nature Switzerland AG.	June 29 2022 82, pages2517–2538 (2023) https://doi.org/10.1007/s11042-022-13082-w	SCI
Raman Kumar , Sita Rani*, Mohammed Al Awadh	Exploring the Application Sphere of the Internet of Things in Industry 4.0: A Review, Bibliometric and Content Analysis	Sensors , MDPI (Basel, Switzerland/ ISSN 1424-8220	Online 3 June 2022 22(11)/4276/ / https://doi.org/10.3390/s22114276	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Raman Kumar* , Harpreet Kaur Channi	A PV-Biomass off-grid hybrid renewable energy system (HRES) for rural electrification: Design, optimization and techno-economic-environmental analysis	Journal of Cleaner Production/ 0959-6526	349, May 15 2022, 131347, Yes Online 9 February 2022	SCI
Raman Kumar* , Sehijpal Singh, Vivek Aggarwal, Sunpreet Singh, DanilYurievichPimenov, Khaled Giasin and Krzysztof Nadolny	Hand and Abrasive Flow Polished Tungsten Carbide Die: Optimization of Surface Roughness, Polishing Time and Comparative Analysis in Wire	Materials/1996-1944/ Basel, Switzerland	Materials 2022, 15(4), 1287; https://doi.org/10.3390/ma15041287	SCI
Kapil K Goyal, Neeraj Sharma, Rahul Dev Gupta, Gurpreet Singh, Deepika Rani, Harish Kumar Banga, Raman Kumar* , Danil Yu. Pimenov, Khaled Giasin*	A Soft Computing-based Analysis of Cutting Rate and Recast Layer Thickness for AZ31 Alloy on WEDM using RSM-MOPSO	Materials/1996-1944/ Basel, Switzerland	Online 15 January 2022 Materials 2022, 15(2), 635; https://doi.org/10.3390/ma15020635	SCI
Raman Kumar* , Pankaj Goel	Exploring the Domain of Interpretive Structural Modelling (ISM) for Sustainable Future Panorama: A Bibliometric and Content Analysis	Archives of Computational Methods in Engineering/ 1134-3060/ Barcelona, Spain/Springer Science+Business Media	Online 3 November 2021; 29, pp 2781–2810 (2022) https://doi.org/10.1007/s11831-021-09675-7	SCI
Angel Swastik Duggal, Rajesh Singh, Anita Gehlot, Lovi Raj Gupta, Sheik VaseemAkram, Chander Prakash, Sunpreet Singh, Raman Kumar*	Infrastructure, Mobility and Safety 4.0: Modernization in Road Transportation	<i>Technology in Society/ ISSN: 0160-791X/United Kingdom/ Elsevier Ltd</i>	Online 16 October 2021 67/101791/2021/ https://doi.org/10.1016/j.techsoc.2021.101791	SCI
Sunpreet Singh, Raman Kumar , Ranvijay Kumar, Jasgurpreet Singh Chohan, Nishant Ranjan, Raman Kumar	Aluminium metal composite primed by FDM assisted investment casting: Hardness, surface, wear and dimensional	<i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications/ 1464-4207 /UK</i>	Online December 6, 2021; 236/3/ pp. 674-691/ 2022/ https://doi.org/10.1177/14644207211054143	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Sidhu, Ardamanbir Singh, Sehijpal Singh, Raman Kumar , DanilYurievichPimenov, and Khaled Giasin.	Prioritizing Energy-Intensive Machining Operations and Gauging the Influence of Electric Parameters: An Industrial Case Study	Energies / 1996-1073/ Basel, Switzerland	Online 5 August 2021 14, no. 16 (2021): 4761/ https://doi.org/10.3390/en14164761	SCI
Md Karim, JuairiyaBinte Tariq, Shah Murtoza Morshed, Sabbir Hossain Shawon, Abir Hasan, Chander Prakash, Sunpreet Singh, Raman Kumar , YadaiahNirsanametla, Catalin I Pruncu	Environmental, Economical and Technological Analysis of MQL-Assisted Machining of Al-Mg-Zr Alloy Using PCD Tool	Sustainability / 2071-1050/Basel, Switzerland	Online 30 June 2021; <i>13(13)</i> /7321/ https://doi.org/10.3390/su13137321	SCI
Rajesh Singh, Anita Gehlot, Shaik VaseemAkram, Lovi Raj Gupta, Manoj Kumar Jena, Chander Prakash*, Sunpreet Singh, and Raman Kumar	Cloud Manufacturing, Internet of Things-Assisted Manufacturing and 3D Printing Technology Reliable Tools for Sustainable Construction	Sustainability / 2071-1050/Basel, Switzerland	Online 30 June 2021; <i>13(13)</i> /7327/2021/ https://doi.org/10.3390/su13137327	SCI
Raman Kumar , Sehijpal Singh, Ardamanbir Singh Sidhu and CatalinPruncu*	Bibliometric Analysis of Specific Energy Consumption (SEC) in Machining Operations: A Sustainable Response	Sustainability / 2071-1050/Basel, Switzerland	Online 18 May 2021; <i>13(10)</i> /5617/ 2021/ https://doi.org/10.3390/su13105617	SCI
Raman Kumar, Rohit Dubey, Sehijpal Singh, Sunpreet Singh, Chander Prakash, YadaiahNirsanametla, Grzegorz Królczyk, Roman Chudy	Multiple-criteria decision-making and Sensitivity analysis for selection of Materials for Knee Implant Femoral Component	Materials/ 1996-1944/ Basel, Switzerland	Online 20 April 2021; <i>14 (8)</i> /2084/ 2021/ https://doi.org/10.3390/ma14082084	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Harish Kumar Banga, Pankaj Goel, Raman Kumar* , Vikas Kumar, Parveen Kalra, Sehijpal Singh, Sunpreet Singh, Chander Prakash and Catalin Pruncu	Vibration Exposure and Transmissibility on Dentist's Anatomy: A Study of Micro Motors and Air-Turbines	International Journal of Environmental Research and Public Health/1660-4601/Basel, Switzerland	13 April 2021; 18/4084 (22)/2021/ https://doi.org/10.3390/ijerph18084084	SCI
Raman Kumar , Sehijpal Singh, Paramjit Singh Bilga, Jatin, Jasveer Singh, Sunpreet Singh, Maria-Luminița Scutaru, Cătălin Iulian Pruncu	Revealing the benefits of entropy weights method for multi-objective optimization in machining operations: A critical review	Journal of Materials Research and Technology/ 2238-7854/Elsevier on behalf of the Brazilian Metallurgical, Materials and Mining Association	3 January 2021;10/ 1471-1492/ 2021/ https://doi.org/10.1016/j.jmrt.2020.12.114	SCI
Gurminder Singh, Sunpreet Singh*, Chander Prakash Raman Kumar , Ranvijay Kumar, Seeram Ramakrishna,	Characterization of 3D printed thermal-stimulus polylactic acid-hydroxyapatite based shape memory scaffolds	Polymer Composites/0272-8397/ John Wiley and sons	Online 25 June 2020; 41(9), 3871-3891/2020/ https://doi.org/10.1002/pc.25683	SCI
Kamalpreet Sandhu, Gurminder Singh, Sunpreet Singh, Raman Kumar , Chander Prakash, Seeram Ramakrishna, Grzegorz Krolczyk and Catalin I. Pruncu*	Surface Characteristics of Machined Polystyrene with 3D Printed Thermoplastic Tool	Materials/1996-1944/Basel, Switzerland	Online 16 June 2020; 13, 2729/ 2020/ https://doi.org/10.3390/ma13122729	SCI
Raman Kumar , Abhishek Bhattacherjee, Angad Deep Singh, Sunpreet Singh, and Catalin I. Pruncu*	Selection of Portable Hard Disk Drive based upon Weighted Aggregated Sum Product Assessment Method: A Case of Indian Market	Measurement and Control/ 0020-2940	Online 9 June 2020;2020;53(7-8):1218-1230/ https://doi.org/10.1177/0020294020925841	SCI
Raman Kumar and Sunpreet Singh	Selection of Vacuum Cleaner with TOPSIS Method based upon Multi Criteria Decision Making Theory	Measurement and Control/0020-2940	Online 24 January 2020; 53(3-4), 627-634/ 2020 https://doi.org/10.1177/0020294019877524	SCI

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Falak Bharadwaj, Arti Saxena, Rajender Kumar, Raman Kumar , Sandeep Kumar, Željko Stević*	Player Performance Predictive Analysis in Cricket Using Machine Learning	Revue d'Intelligence Artificielle (RIA)/ ISSN: 0992-499X (print); 1958-5748 (online)	online: 24-04-2024, Page: 449-457 https://doi.org/10.18280/ria.380208	SCOPUS
Veeranna Modi, Prasad B. Rampure, Atul Babbar, Raman Kumar , Madeva Nagaral, Abhijit Bhowmik, Raman Kumar, Shatrudhan Pandey, S.M. Mozammil Hasnain, Muhammad Mahmood Ali, Muhammad Nasir Bashir	Nanoparticle-enhanced biodiesel blends: A comprehensive review on improving engine performance and emissions	Materials Science for Energy Technologies/ 2589-2991	online 27 February 2024 Volume 7, 2024, Pages 257-273, ISSN 2589-2991, https://doi.org/10.1016/j.ms.et.2024.02.001 .	SCOPUS
Swapandeeep Kaur*, Raman Kumar *, Kanwardeep Singh, Yinglai Huang	Leveraging Artificial Intelligence for Enhanced Sustainable Energy Management	Journal of Sustainability for Energy	vol. 3, no. 1, pp. 1–20, 2024. https://doi.org/10.56578/jse030101	Referred
Raman Kumar *, Swapandeeep Kaur, Živko Erceg, Ivan Mirović	Industry 4.0 and its impact on entrepreneurial ecosystems: An examination of trends and key implications	Journal of Organizations, Technology and Entrepreneurship	Volume 1, Issue 1, 2023 Pages 12-34 https://doi.org/10.56578/jote010102	Referred
Vikram Bali, Shivani Bali, Dev Gaur, Sita Rani, Raman Kumar *	Commercial-Off-The Shelf Vendor Selection: A Multi-Criteria Decision-Making Approach Using Intuitionistic Fuzzy Sets and TOPSIS	Operational Research in Engineering Sciences: Theory and Applications (ORESTA)/ 2620-1747	10.09.2023 6(2). Retrieved from https://oresta.org/menu-script/index.php/oresta/article/view/571	SCOPUS
Arvinder Singh Channi, Harminder Singh Bains, Jasmaninder Singh Grewal, Raman Kumar *, Dharam Buddhi	Exploring the application sphere of electrical discharge machining in composite materials considering surface features: a content analysis	International Journal on Interactive Design and Manufacturing (IJIDeM)/ 1955-2505	Online 26 October 2022/ https://link.springer.com/article/10.1007/s12008-022-01060-3	SCOPUS
Swapandeeep Kaur, Raman Kumar *, Rupinder Kaur, Sukhpal Singh, Sita Rani, Arshdeep Kaur	Piezoelectric materials in sensors: Bibliometric and visualization analysis	Materials Today: Proceedings/2214-7853/ Elsevier Ltd	65(8)/ 23 August 2022/3780-3786 https://doi.org/10.1016/j.matpr.2022.06.484	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Pankaj Goel, Raman Kumar* , Harish Kumar Banga, Swapandeep Kaur, Rajesh Kumar, DanilYurievichPimenov, Khaled Giasin	Deployment of Interpretive Structural Modeling in Barriers to Industry 4.0: A Case of Small and Medium Enterprises	Journal of Risk and Financial Management/ 1911-8074/ MDPI (Basel, Switzerland	15(4) / 171/ 2022/ 7 April 2022/ https://doi.org/10.3390/jrfm15040171	SCOPUS
Sita Rania, Aman Kataria, Meetal Chauhan, Punam Rattan, Raman Kumar* , ArunKumar Sivaramane	Security and Privacy Challenges in the Deployment of Cyber-Physical Systems in Smart City Applications: State-of-Art Work	Materials Today: Proceedings/2214-7853/ Elsevier Ltd	62(7)/ 4671-4677/ 15 March 2022/ https://doi.org/10.1016/j.matpr.2022.03.123	SCOPUS
Sita Rani, Raman Kumar*	Bibliometric Review of Actuators: Key Automation Technology in a Smart City Framework	Materials Today: Proceedings/2214-7853/ Elsevier Ltd	60(3)/ 18 May 2022/ 800-1807/ https://doi.org/10.1016/j.matpr.2021.12.469	SCOPUS
Sanjay Kumar Vaid, Gopal Vaid, Swapandeep Kaur, Raman Kumar* , Manpreet Singh Sidhu	Application of multi-criteria decision-making theory with VIKOR-WASPAS-Entropy methods: a case study of Silent Genset	Materials Today: Proceedings/2214-7853/ Elsevier Ltd	50(5), 7 February 2022/2416-2423/ https://doi.org/10.1016/j.matpr.2021.10.259	SCOPUS
Ardamanbir Singh Sidhu, Sehijpal Singh, Raman Kumar*	Optimization and Modelling of Active Power Consumption of ST52.3 Alloy Steel during a Drilling Operation	Materials Today: Proceedings/ 2214-7853/ Elsevier Ltd	50(5)/ 7 February 2022/1999-2006 https://doi.org/10.1016/j.matpr.2021.09.340	SCOPUS
Karanbir Singh Randhawa, Rajiv Chauhan, Raman Kumar*	An investigation on the effect of lime addition on UCS of Indian black cotton soil	Materials Today: Proceedings/2214-7853/ Elsevier Ltd	Volume 50, Part 5, 2022, Pages 797-803 https://doi.org/10.1016/j.matpr.2021.05.586	SCOPUS
Chandel, Robin Singh, Sudeepti Sharma, Swapandeep Kaur, Sehijpal Singh, and Raman Kumar	Smart watches: A review of evolution in bio-medical sector	Materials Today: Proceedings/2214-7853	Volume 50, Part 5, 2022, Pages 1053-1066; Online: 6 August 2021 https://doi.org/10.1016/j.matpr.2021.07.460	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Verma, Sanjeev, Vinod Kumar, Raman Kumar* , and Ramandeep Singh Sidhu	Exploring the application domain of friction stir welding in aluminum and other alloys	Materials Today: Proceedings/2214-7853	Volume 50, Part 5, 2022, Pages 1032-1042 ; Online: 3 August 2021/ https://doi.org/10.1016/j.matpr.2021.07.449	SCOPUS
Robin Singh Chandel, Raman Kumar* , Jatinder Kapoor	Sustainability Aspects of Machining Operations: A Summary of Concepts	Materials Today: Proceedings/2214-7853	Volume 50, Part 5, 2022, Pages 716-727 ; Online: 20 May 2021/ https://doi.org/10.1016/j.matpr.2021.04.624	SCOPUS
Harpreet Kaur Channi, Manjeet Singh, Yadwinder Singh Brar, Arvind Dhingra, Surbhi Gupta, Harpuneet Singh, Raman Kumar* , Swapandeep Kaur	Agricultural waste assessment for the optimal power generation in the Ludhiana district, Punjab, India	Materials Today: Proceedings/2214-7853	Volume 50, Part 5, 2022, Pages 700-708/Online: 15 May 2021 https://doi.org/10.1016/j.matpr.2021.04.481	SCOPUS
Harjit Singh, Raman Kumar , Chander Prakash, Sunpreet Singh	HA-based coating by plasma spray techniques on titanium alloy for orthopedic applications	Materials Today: Proceedings/2214-7853	Volume 50, Part 5, 2022, Pages 612-628/ Online: 31 March 2021 https://doi.org/10.1016/j.matpr.2021.03.165	SCOPUS
Harish Kumar Banga, Parveen Kalra, Raman Kumar , Sunpreet Singh, Catalin I Pruncu	Optimization of the cycle time of robotics resistance spot welding for automotive applications	Journal of Advanced Manufacturing and Processing/ 2637-403X	2021; 3:e10084. https://doi.org/10.1002/amp2.10084	SCOPUS
Raman Kumar* , Paramjit Singh Bilga, and Sehijpal Singh	An Investigation of Energy Efficiency in Finish Turning of EN 353 Alloy Steel	Procedia CIRP/ 2212-8271/ Netherlands	98/654-659/2021 /https://doi.org/10.1016/j.procir.2021.01.170	SCOPUS

Authors	Title of paper	Name of journal, Vol No. and Year	DOI/ISSN	SCI/SCOPUS/UGC
Lovnesh Kumar Goyal, Rajiv Chauhan, Raman Kumar , Hardeep Singh Rai	Use of BIM in Development of Smart Cities: A Review	IOP Conf. Series: Materials Science and Engineering/ 1757-8981/ IOP Publishing House	955/1-10/2020/ 955 (2020) 012010 https://doi.org/10.1088/1757-899X/955/1/012010	SCOPUS
Raman Kumar* , Harish Kumar Banga, Harpreet Kaur	Internet of Things-Supported Smart City Platform	IOP Conf. Series: Materials Science and Engineering/1757-8981	955/1-9/2020/ https://doi.org/10.1088/1757-899X/955/1/012003	SCOPUS
Raman Kumar* , Paramjit Singh Bilga, and Sehijpal Singh	Optimization of Active Cutting Power Consumption by Taguchi Method for Rough Turning of Alloy Steel	International Journal of Metallurgy and Alloys/2456-5113	6(1)/ 37-45/ 2020/ http://materials.journalspub.info/index.php?journal=IJM&page=article&op=view&path%5B%5D=632	Referred
Raman Kumar* , Harish Kumar Banga, Harpreet Singh*, SumitKundal	An outline on modern day applications of solid lubricants	Materials Today: Proceedings/2214-7853	28 (2020)/1962-1967/ https://doi.org/10.1016/j.matpr.2020.05.558	SCOPUS