



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA

माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत

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Department of Mechanical Engineering

Publications in SCI/ SCIE/ESCISCOPUS/UGC Indexed Journals (2020-2021)

S.No.	Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal		
						Link to website of the Journal	Link to article/paper/abstract of the article	SCI/SCIE/ESCISCOPUS/UGC Indexed Journals
1	Environmental and economic analysis of novel hybrid active greenhouse solar dryer with evacuated tube solar collector	Singh P., Gaur M.K.	Sustainable Energy Technologies and Assessments	2021	2213-1388	https://www.journals.elsevier.com/sustainable-energy-technologies-and-assessments	10.1016/j.seta.2021.101428	Web of science
2	Performance Evaluation and Drying Kinetics for Solar Drying of Hygroscopic Crops in Vacuum Tube Assisted Hybrid Dryer	Saxena G., Gaur M.K.	Journal of Solar Energy Engineering, Transactions of the ASME	2020	0199-6231	https://asmedigitalcollection.asme.org/solarenergyengineering	10.1115/1.4046465	Web of science
3	Application of phase change materials for cooling of solar photovoltaic panels: A review	Sharma N.K., Gaur M.K., Malvi C.S.	Materials Today: Proceedings	2021	2214-7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.05.127	Scopus
4	Energy, exergy and economic analysis of evacuated tube solar water heating system integrated with heat exchanger	Saxena G., Gaur M.K.	Materials Today: Proceedings	2020	2214-7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2020.04.793	Scopus

5	Review on development, recent advancement and applications of various types of solar dryers	Singh P., Gaur M.K.	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2020	1556-7036	https://www.tandfonline.com/journals/ueso20	10.1080/15567036.2020.1806951	web of science
6	Application of ELECTRE- I,II methods for EDM performance measures in manufacturing decision making	Tiwari R., Agrawal S., Kasdekar D.K.	IOP Conference Series: Materials Science and Engineering	2020	17578981	https://iopscience.iop.org/journal/1757-899X	10.1088/1757-899X/748/1/012015	Confere nce
7	DFT analysis of H2S adsorbed zigzag and armchair graphene nanoribbons	Suman H., Srivastava R., Shrivastava S., Srivastava A., Jacob A.P., Malvi C.S.	Chemical Physics Letters	2020	92614	https://www.sciencedirect.com/journal/chemical-physics-letters	10.1016/j.cplett.2020.137280	Web of science
8	Influence of silicon carbide and porcelain on tribological performance of Al6061 based hybrid composites	Anand V.K., Aherwar A., Mia M., Elfakir O., Wang L.	Tribology International	2020	0301679X	https://www.journals.elsevier.com/tribology-international	10.1016/j.triboint.2020.106514	SCIE
9	A study on tribological effect and surface treatment methods of Bio-ceramics composites	Belwanshi M., Jayaswal P., Aherwar A.	Materials Today: Proceedings	2020	22147853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2020.10.458	Scopus
10	Effect of B4C and waste porcelain ceramic particulate reinforcements on mechanical and tribological characteristics of high strength AA7075 based hybrid composite	Aherwar A., Patnaik A., Pruncu C.I.	Journal of Materials Research and Technology	2020	22387854	https://www.journals.elsevier.com/journal-of-materials-research-and-technology	10.1016/j.jmrt.2020.07.003	SCIE
11	A study of fabrication methods of aluminum based composites focused on stir casting process	Sharma A.K., Bhandari R., Aherwar A., Pinca-Bretotean C.	Materials Today: Proceedings	2020	22147853	https://www.journals.elsevier.com/materials-today-proceedings	https://doi.org/10.1016/j.jmrt.2020.07.003	Scopus
12	A study of advancement in application opportunities of aluminum metal matrix composites	Sharma A.K., Bhandari R., Aherwar A., Rimašauskiene R., Pinca-Bretotean C.	Materials Today: Proceedings	2020	22147853	https://www.journals.elsevier.com/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2020.02.516	Scopus

13	Matrix materials used in composites: A comprehensive study	Sharma A.K., Bhandari R., Aherwar A., Rimašauskiene R.	Materials Today: Proceedings	2020	22147853	https://www.journals.elsevier.com/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2019.11.086	Scopus
14	Material Selection for Automotive Piston Component Using Entropy-VIKOR Method	Dev S., Aherwar A., Patnaik A.	Silicon	2020	1876990X	https://www.springer.com/journal/12633	https://doi.org/10.1007/s12633-019-00110-y	SCIE
15	Diagnosis and Classifications of Bearing Faults Using Artificial Neural Network and Support Vector Machine	Agrawal P., Jayaswal P.	Journal of The Institution of Engineers (India): Series C	2020	22500545	https://www.springer.com/journal/40032	https://doi.org/10.1007/s40032-019-00519-9	Web of science
16	Advances in perturb and observe based MPPT algorithm	ampurna Panda, Manoj Gupta, CS Malvi	WEENTECH Proceedings in Energy	2020	2059-2353	www.weentechpublishers.com	10.32438/WPE.060245	Other
17	Light sources selection for solar simulators: A review	Deepak, Shubham Srivastava, C. S. Malvi	WEENTECH Proceedings in Energy	2020	2059-2354	www.weentechpublishers.com	10.32438/WPE.060257	Other
18	Application of nano-PCMs in solar Photovoltaic	Shubham Srivastava, Deepak, C. S. Malvi	WEENTECH Proceedings in Energy	2020	2059-2355	www.weentechpublishers.com	10.32438/WPE.060259	Other
19	Experimentally Diagnosing the Effect of Colour and Shade on PV Panel in Gwalior Region	ampurna Panda, Manoj Gupta, CS Malvi	TEST Engineering & Management	2020	0193-4120	http://www.testmagazine.biz/index.php/testmagazine	https://www.researchgate.net/publication/345672468_Experimentally_Diagnosing_the_Effect_of_Colour_and_Shade_on_PV_Panel_in_Gwalior_Region	Scopus
20	Solar Water Purifier Using Graphene Membrane	Somya Sharma; Shubham Goud; Shivam pandey; Moha Shrivastava; Dr C. S. Malvi	Journal of Fluid Mechanics and Mechanical Design	2020	2582-9165	https://matjournals.com/Journal-of-Fluid-Mechanics-and-Mechanical-Design.html	10.5281/zenodo.3791972	Other

21	A Review of Fault Detection, Diagnosis, and Prognosis of Rolling Element Bearing Using Advanced Approaches and Vibration Signature Analysis	Agrawal P., Jayaswal P.	Lecture Notes in Mechanical Engineering	2020	219543 56	https://www.springer.com/series/11236	https://doi.org/10.1007/978-981-15-3746-2_19	Scopus
22	Heat transfer analysis of hybrid active solar still with water flowing over glass cover	Gaur M.K., Tiwari G.N., Singh P., Kushwah A.	Journal of Thermal Engineering	2021	2148- 7847	https://eds.yildiz.edu.tr/journal-of-thermal-engineering	https://doi.org/10.18186/thermal.989993	Web of science
23	Garlic dehydration inside heat exchanger-evacuated tube assisted drying system: Thermal performance, drying kinetic and color index	Kushwah A., Kumar A., Gaur M.K., Pal A.	Journal of Stored Products Research	2021	002247 4X	https://www.science-direct.com/journal/journal-of-stored-products-research	https://doi.org/10.1016/j.jspr.2021.101852	Web of science
24	Heat transfer analysis of hybrid active greenhouse solar dryer attached with evacuated tube solar collector	Singh P., Gaur M.K.	Solar Energy	2021	003809 2X	https://www.science-direct.com/journal/solar-energy	https://doi.org/10.1016/j.solener.2021.06.050	Web of science
25	A study on heat and mass transfer analysis of solar distillation system	Thakur V.K., Gaur M.K., Sagar M.K., Tiwari G.N.	Journal of Thermal Engineering	2021	2148- 7847	https://eds.yildiz.edu.tr/journal-of-thermal-engineering	https://doi.org/10.18186/thermal.978021	Web of science
26	Performance analysis of passive solar still with and without nanoparticles	Thakur V.K., Gaur M.K., Dhamneya A.K., Sagar M.K.	Materials Today: Proceedings	2021	2214- 7853	https://www.journals.elsevier.com/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2021.05.539	Scopus
27	Validation of thermal models to predict the productivity and heat transfer coefficients for passive solar still with different nanoparticles	Thakur V.K., Gaur M.K., Dhamneya A.K., Chaurasiya P.K.	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2021	1556- 7036	https://www.tandfonline.com/toc/ueso20/current	https://doi.org/10.1080/15567036.2021.1971338	Web of science
28	Role of Building Design in Sustainable Green Development: A Review	Shah R., Pandit R.K., Gaur M.K.	Environmental Science and Engineering	2021	1863- 5520	https://www.springer.com/series/7487	https://doi.org/10.1007/978-3-030-61891-9_4	Other
29	Performance analysis of passive solar still with and without nanoparticles	Thakur V.K., Gaur M.K., Dhamneya A.K., Sagar M.K.	Materials Today: Proceedings	2021	2214- 7853	https://www.journals.elsevier.com/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2021.05.539	Scopus

30	Mechanical characterization of plant fortified fiber polymer composites	Singh S.K., Sagar M.K., Upadhyay R.K.	Materials Today: Proceedings	2021	221478 53	https://www.journals.elsevier.com/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2021.02.507	Scopus
31	Performance analysis of PCM curtain for thermal comfort	Srivastava S., Srivastava A., Jain S., Kumar N., Malvi C.S.	Research Journal of Textile and Apparel	2021	156060 74	https://www.emerald.com/insight/publication/issn/1560-6074	https://doi.org/10.1108/RJTA-05-2021-0066	Web of science
32	Hybrid Nano-materials Properties Analysis for Solar Photovoltaic	Kosti S., Malvi C.S., Vishwakarma S.K.	Lecture Notes in Mechanical Engineering	2021	219543 56	https://www.springer.com/series/11236	https://doi.org/10.1007/978-981-15-9678-0_26	Scopus
33	Optimal Design Based on Fabricated SiC/B4C/Porcelain Filled Aluminium Alloy Matrix Composite Using Hybrid AHP/CRITIC-COPRAS Approach	Aherwar A., Pruncu C.I., Mia M.	Silicon	2021	187699 0X	https://www.springer.com/journal/12633	https://doi.org/10.1007/s12633-020-00916-1	SCIE
34	Application of phase change materials for cooling of solar photovoltaic panels: A review	Nagendra Kumar Sharma, M.K.Gaur, C.S. Malvi	Materials Today: Proceedings	2021	221478 53	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.05.127	Scopus
35	Development of PVC Flute and Acoustic Testing for Commercial Production	Mayank Keshari, C.S. Malvi	Journal of Polymer Science and Engineering	2021	2455- 8745	https://systems.enpress-publisher.com/index.php/jpse	10.37628/IJPSE	Other
36	POTENTIAL OF SOLAR PANELS FOR SMALL ELECTRIC PUBLIC TRANSPORT VEHICLES/TUMTUMS	Vasu Pandey, M.K. Sagar, C.S. Malvi	International journal of multidisciplinary education research	2021	2277- 7881	http://www.ijmer.in/	http://ijmer.in/doi/2021/10.06.125	Other
37	Mechanical behaviour investigation of PEEK coated titanium alloys for hip arthroplasty using finite element analysis	Manish Belwanshi, Pratesh Jayaswal, Amit Aherwar	Materials Today: Proceedings	2021	2214- 7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.10.112	Scopus
38	Wear and fatigue behaviour investigation of hip implant head-stem interface using finite element analysis	Manish Belwanshi, Pratesh Jayaswal, Amit Aherwar	Materials Today: Proceedings	2021	2214- 7854	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.10.188	Scopus

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39	A study on finite element analysis methodologies and approaches used for total hip arthroplasty	Manish Belwanshi, Pratesh Jayaswal, Amit Aherwar	Materials Today: Proceedings	2021	2214-7855	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.09.161	Scopus
40	Study the effect of CuO nanoparticles on the performance of passive solar still in winter and summer season	Vikas KumarThakur, Manoj KumarGaur	Materials Today: Proceedings	2021	2214-7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.11.119	Scopus
41	Thermal comfort analysis through development of artificial neural network models: An experimental study in Cwa climate	RishikaShah, R.K.Pandit, M.K.Gaur	Materials Today: Proceedings	2021	2214-7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.11.139	Scopus
42	Performance evaluation of evacuated solar collector assisted hybrid greenhouse solar dryer under active and passive mode	PushpendraSingh, Bhupendra Kumar Pandey, M.K. Gaur	Materials Today: Proceedings	2021	2214-7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.10.461	Scopus
43	Sustainability assessment of hybrid active greenhouse solar dryer integrated with evacuated solar collector	PushpendraSingh, M.K. Gaur	Current Research in Food Science	2021	2665-9271	https://www.sciencedirect.com/journal/current-research-in-food-science	10.1016/j.crf.2021.09.011	Web of science
44	Heat and mass transfer analysis of passive solar still with nanoparticles, operating at different water depth and various slope of glass cover	Vikas Kumar Thakur, Manoj Kumar Gaur	Desalination and Water Treatment	2021	19443994	https://www.tandfonline.com/journals/twdwt20	10.5004/dwt.2021.27627	Web of science
45	Thermal Performance of Greenhouse Solar Dryer with Single and Double Evacuated Tube Solar Collector under no-load	Pushpendra Singh, Aman Singh Parihar, M.K. Gaur, Chandra Mohan Yadav	Journal of Modern Thermodynamics in Mechanical System	2021	2582-5771	https://matjournals.com/Journal-of-Modern-Thermodynamics-in-Mechanical-System.html	10.46610/JMTMS.2021.v03i01.002	Other
46	Performance Assessment of Greenhouse Solar Dryer with and	Pushpendra Singh, Amrit Kumar Pandey, Ananya	Journal of Thermal Energy	2021	2582-5747	https://matjournals.com/Journal-of-	10.46610/JoTES.2021.v06i02.001	Other

	without Evacuated Tube Solar Collector under no-load	Anup Jain, M.K. Gaur	Systems			Thermal-Energy-Systems.html		
47	Experimental analysis and thermal performance of evacuated tube solar collector assisted solar dryer	Anand Kushwah, Anil Kumar, Amit Pal, Manoj Kumar Gaur	Materials Today: Proceedings	2021	2214-7853	https://www.journals.elsevier.com/materials-today-proceedings	10.1016/j.matpr.2021.04.243	Scopus
48	The Role of Phase Change Materials for Lifetime Heating of Buildings in Cold Climatic Conditions	Anand Kushwah, Manoj Kumar Gaur, Rajindra Kumar Pandit	International Journal of Built Environment and Sustainability	2020	2289-8948	https://ijbes.utm.my/index.php/ijbes	10.11113/ijbes.v7.n3.600	Web of science
49	Mechanical and Tribological Properties of Composite made of marble dust reinforced C93200 Cu Alloy	Santosh Kumar Rajak, Amit Aherwar, Catalin I Pruncu	Material research express	2020	2053-1591	https://iopscience.iop.org/journal/2053-1591	https://doi.org/10.1088/2053-1591/ab6534	SCIE
50	Material thermal performance comparison between the tomb of Mohammad Ghaus heritage building and a modern style dwelling in Madhya Pradesh	M.K Gaur, Anand Kushwah, R.K. Pandit, Pushpendra Singh	International Journal of Built Environment and Sustainability	2020	2289-8948	https://ijbes.utm.my/	10.11113/ijbes.v7.n2.482	Web of science
51	Environmental and economic analysis of hybrid greenhouse solar dryer: A Review	Pushpendra Singh, M.K. Gaur	International Journal of Energy Technology	2020	2633-0709	http://weentechpublishers.com/index.aspx	10.32438/IJET.203006	Other
52	A study on passive solar still with nanoparticles	V.K. Thakur, M.K. Gaur	International Journal of Energy Technology	2020	2633-0709	http://weentechpublishers.com/index.aspx	10.32438/IJET.203009	Other
53	A Study on Response Parameters of Injection Moulding Process in Polypropylene Plastic using Grey Relational Analysis	Harsh Vardhan Etondia, M.K. Gaur, Anand Kushwah	Journal of Experimental & Applied Mechanics	2020	2321-516X	www.stmjournals.com	https://www.researchgate.net/publication/339043809_A_Study_on_Response_Parameters_of_Injection_Moulding_Process_in_Polypropylene_Plastic_using_Grey_Relational	Other

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54	Numerical Study on Buckling Resistance of Uniaxially Compressed Laminates Containing V-Shaped Edge Notch	Nikhil Aditya, Jyoti Vimal	Advanced Engineering Forum	2021	2234-991X	https://www.scientific.net/AEF	10.4028/www.scientific.net/AEF.41.27	Other
55	L.B.H.P. (Low Budget High Power) Leaf Vacuum Machine	Satyam Gupta, Abhishek Dohare, Vaibhav Shivhare	International Research Journal of Engineering and Technology	2020	2395-0056	https://www.irjet.net/	https://www.irjet.net/archives/V7/i8/IRJET-V7I884.pdf	Other
56	Mechanical and tribological properties of composite made of marble dust-reinforced C93200 copper alloy	Santosh Kumar Rajak, Amit Aherwar, Catalin I Pruncu	Materials Research Express	2020	2053-1591	https://iopscience.iop.org/article/10.1088/2053-1591/ab6534	10.1088/2053-1591/ab6534	SCIE
57	Design and finite element analysis of femoral stem prosthesis using functional graded materials	Harbhajan Ahirwar, Ankit Sahu, Vijay kumar Gupta, Prasoon Kumar, Himansu Sekhar Nanda	Computer Methods in Biomechanics and Biomedical Engineering	2021	14768259	https://www.tandfonline.com/journals/gcmb20	10.1080/10255842.2021.2006648	Web of science