

Bansilal Ramnath Agarwal Charitable Trust's
VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE. 37
(An Autonomous Institute Affiliated to Savitribai Phule University of Pune)

Department of Mechanical Engineering

Research Data (Academic year 2022-23)

Year	Journal Publication (SCI Indexed) (I)	Journal Publication (Scopus Indexed) (II)	Journal Publication (others) (III)	Total (I+II+III) (Journal Publication) (IV)	Publications in Conference (V)	Book Chapter (VI)	Total publication (IV+V+VI)
2022-23	06	23	18	47	7	1	54

Journal Publications (Academic year 2022-23)

Sr. No.	Faculty	Title of the paper	Journal	Publisher	DOI	Index type
1	10439: DATTATRAY BAPU HULWAN	Performance Testing of Multicylinder Compressed Ignition Engine with Dual Fuel Mode of CNG with Biodiesel and Diesel	International Journal of Vehicle Structures	MECHAEROFUNDATION FOR TECHNICAL RESEARCH AND EDUCATION EXCELLENCE	http://www.maftre.org/eja	Scopus
2	10439: DATTATRAY BAPU HULWAN	Recent advancements in synthesis, rheological characterization, and tribological performance of vegetable oil-based lubricants enhanced	Journal of Cleaner Production	ELSEVIER	https://doi.org/10.1016/j.jclepro.2022.134454	SCI

		with nanoparticles for sustainable lubrication				
3	10439: DATTATRAY BAPU HULWAN	Investigating the Effect of Compression Ratio on Operating Characteristics of Compression Ignition Engine Fueled with Diesel Ricebran Biodiesel n Butanol Additive Blends	Journal of The Institution of Engineers India Series E	Institution of Engineers	https://link.springer.com/article/10.1007/s40034-022-00264-2	Scopus
4	10031: SUNIL DATTATRAY CHOUGULE	AUTO-PROVOKING FIRE SUPPRESSION SYSTEM	European Chemical Bulletin	European Chemical Bulletin	0	Scopus
5	10036:PROF . PATKI NITIN	Experimental Analysis of SS using Brass	Materials Today	Elsevier	NIL	Scopus

	BHALCHA NDRA	Electrode in Electric Discharge Machining				
6	10037: MAHESH VISHNU WALAME	# TORSIONAL TUNED MASS DAMPER SYSTEM PARAMETE R IDENTIFICA TION WITH EXPERIME NTAL METHOD	IEEE	IEEE	https://ieeexplore. ieee.org/ documen t/985314 2	Scopus
7	10037: MAHESH VISHNU WALAME	Influence of Different Parameters on the Specific Wear Rate of PTFE Composites in the Steam Environment	IOP science	IOP science	discover @morres sier.com	Scopus
8	10037: MAHESH VISHNU WALAME	N EFFECT OF FABRICATE D TWIN ROLLER	International Journal of Recent Technology and	Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP)	https://w ww.ijrte. org/portf olio- item/E74	others

		ARRANGE MENT OF CHASSIS DYNAMOM ETER ON MEASUREM ENT OF PERFORMA NCE PARAMETE RS OF ELECTRIC TWO WHEELERS	Engineering (IJRTE)		2901115 23/	
9	10037: MAHESH VISHNU WALAME	N INFLUENCE OF DIFFERENT PARAMETE RS ON SPECIFIC WEAR RATE OF PTFE COMPOSITE S IN THE STEAM ENVIRONM ENT	IOP science	IOP science	https://www.researchgate.net/publication/366664162	Scopus
10	10037: MAHESH	N Torsional Tuned Mass Damper	IEEE	IEEE	https://ieeexplore.ieee.org/	Scopus

	VISHNU WALAME	System Parameter Identification with Experimental Method			documen t/985314 2	
11	10357: RAJKUMA R KISHOR BHAGAT	COMPARAT IVE STUDY OF CONVENTI ONAL AND GENERATI VE DESIGN	IJRASET	International journal for research in applied science and engg tech	www.ijra set.com	others
12	10438: SHRINIVA S PANDURA NG CHIPPA	N Issues related to the numerical simulation of herringbone grooved journal bearing including cavitation condition	Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology	SAGE	https://do i.org/10. 1177/135 0650121 10625	SCI
13	10529: GANESH DATTATR AYA KORWAR	"Kinematic Analysis of compliant slider Crank Mechanism"	GIS SCIENCE JOURNAL	GIS SCIENCE JOURNAL	0	Scopus
14	10529: GANESH DATTATR	Self powered MEMS sensor system	ICCAKM-2022	IEEE	0	Scopus

	AYA KORWAR	for monitoring of ocean parameters				
15	10563: MANGESH BHAURAO CHAUDHARI	Design and Analysis of Stabilizing Ambulance Stretcher	Transactions of the Indian National Academy of Engineering	Springer	https://link.springer.com/article/10.1007/s41403-022-00356-w	Scopus
16	10644: SHINDE SUNIL SHYAM	An Edge Blending to Enhance the Flow Over Double delta wing configuration during re- entry	IOP Conf. Series: Materials Science and Engineering	IOP Conf. Series: Materials Science and Engineering	Krishna Jaiswal et al 2022 IOP Conf. Ser.: Mater. Sci. Eng. 1272 012018	Scopus
17	10644: SHINDE SUNIL SHYAM	LONG RANGE SPY ROBOT WITH NIGHT VISION	Intof Innovative research in Technology-	IJIRT	www.ijirt.com	others
18	10644: SHINDE SUNIL SHYAM	Heat transfer in Triangular Fins	International Journal of All Research Education and	International Journal of All Research Education and Scientific Methods	www.ijaresm.com	others

			Scientific Methods			
19	10644: SHINDE SUNIL SHYAM	Design of Orthosis to assist patients with wrist fracture	International Journal of Innovative Research in Technology	IJIRT	www.ijirt.com	others
20	10754: SACHIN PRABHAKAR KOMBLE	Numerical Model for Solar Drying Mechanism of Grapes Using Double Glazed Cabinet Type Solar Dryer	Journal of Food Process Engineering	Wiley	www.onlinelibrary.wiley.com	SCI
21	10754: SACHIN PRABHAKAR KOMBLE	Design and investigation on rain saucer: The technique of roofless rainwater harvesting	Materials Today Proceedings	Elsevier	0	Scopus
22	10754: SACHIN PRABHAKAR KOMBLE	Mathematical modeling of drying characteristics for cylindrical Thompson seedless	Journal of Food Process Engineering	Wiley	www.wiley.com	SCI

		grapes under natural convection				
23	10754: SACHIN PRABHAKAR KOMBLE	Review On Challenges of Electric Vehicle	TIJER - INTERNATIONAL RESEARCH JOURNAL	TIJER	www.tijer.org	others
24	10754: SACHIN PRABHAKAR KOMBLE	Topology Optimization of Bell Crank Lever	TIJER - INTERNATIONAL RESEARCH JOURNAL	TIJER	www.tijer.org	UGC Care
25	11224: UMESH SOMALU CHAVAN	A Global Scenario of Sustainable Technologies and Progress in a Biodiesel Production	Biodiesel Technology and Applications	Wiley-Scrivener Publishing LLC	https://onlinelibrary.wiley.com/doi/book/10.1002/9781119724957	Scopus
26	11224: UMESH SOMALU CHAVAN	Hierarchical ultrathin nanosheet of Ni(OH) ₂ /rGO composite chemically deposited on Ni foam for NO _x gas sensors	ES materials and Manufacturing	Engineered Science Publisher LLC	https://www.espublisher.com/journals/articles/article-details/721	Scopus

27	11224: UMESH SOMALU CHAVAN	Analysis for Effect of Optimized Air Drag Braking System on the Drag Force of Vehicle	Elsevier Materials Today Proceedings	Elsevier	na	Scopus
28	11224: UMESH SOMALU CHAVAN	Lithium ion battery thermal management by using heat pipe coupled and liquid cold plate	Materials Today Proceedings	Elsevier	na	Scopus
29	11224: UMESH SOMALU CHAVAN	Development of compact packaging machine for small industries	Journal of Xidian University	Journal of Xidian University	https://doi.org/10.37896/jxu17.2/051	others
30	11224: UMESH SOMALU CHAVAN	Plastic zone analysis of SS316L and Ti6Al4V materials under mixed mode loading conditions-	INTERNATIONAL JOURNAL FOR COMPUTATIONAL METHODS IN ENGINEERING SCIENCE	Taylor and Francis	https://doi.org/10.1080/15502287.2021.1992542	SCI

			AND MECHANICS			
31	11224: UMESH SOMALU CHAVAN	Nickel hydroxide nanosheets grown on nickel foam for high performance supercapacito r applications-	MATERIALS TECHNOLOG Y	Taylor	https://doi.org/10.1080/10667857.2021.1873636	SCI
32	11224: UMESH SOMALU CHAVAN	Lithium ion battery thermal management by using coupled heat pipe and liquid cold plate-	Materials Today: Proceedings	Elsevier	https://doi.org/10.1016/j.matpr.2022.10.185	Scopus
33	11224: UMESH SOMALU CHAVAN	Investigation of Effect of Mass on Performance of Suspension System using Quarter Car Test Rig-	3rd International Conference on Computational and Experimental Methods in Mechanical Engineering	AIP Conference Proceedings	https://doi.org/10.1063/5.0101143	Scopus
34	11224: UMESH	Magnification of energy transmission	IOP Conf. Series: Materials	IOP Conf. Series: Materials Science and Engineering	10.1088/1757-899X/12	Scopus

	SOMALU CHAVAN	ratio using miniature cycloidal gear box for humanoids-	Science and Engineering		72/1/012 017	
35	11224: UMESH SOMALU CHAVAN	Design and analysis of energy efficient wind turbine blades-	IOP Conf. Series: Materials Science and Engineering	IOP Conf. Series: Materials Science and Engineering	10.1088/ 1757- 899X/12 72/1/012 020	Scopus
36	11224: UMESH SOMALU CHAVAN	Study of LCF behaviour and life estimation based on modified SWT model and enhanced strain energy density of Ti- 6Al-4V ELI-	IOP Conf. Series: Materials Science and Engineering	IOP Conf. Series: Materials Science and Engineering	doi:10.10 88/1757- 899X/12 72/1/012 027	Scopus
37	11224: UMESH SOMALU CHAVAN	Experimental studies on carbon nanotube strain sensors-	Materials Today: Proceedings	Elsevier	https://doi.org/10.1016/j.matpr.2023.03.383	Scopus
38	10492: LAXMIKA NT	Review on Antilock Breaking System	YMER	YMER	http://ymerdigital.com/curr	others

	DADARAO MANGATE				ent- issue/	
39	10492: LAXMIKA NT DADARAO MANGATE	Development of Livestock Healthcare Management System using Heartbeat Sensor and Temperature Sensor	YMER	YMER	http://ymerdigital.com/current-issue/	others
40	10492: LAXMIKA NT DADARAO MANGATE	Energy Harvesting From Speed Breaker	YMER	YMER	http://ymerdigital.com/current-issue/	others
41	10492: LAXMIKA NT DADARAO MANGATE	Smart Water Quality Detection System	YMER	YMER	http://ymerdigital.com/current-issue/	others
42	10492: LAXMIKA NT DADARAO MANGATE	Gesture Replication Robo Arm	IJRASET	IJRASET	https://www.ijraset.com/research-paper/gesture-replication-robot-arm	others

43	11220:KET KI AKSHAY SHIRBAVI KAR	Portable design of an automated Pneumatic bending machine	YMER	YMER	http://ymerdigital.com	others
44	11220:KET KI AKSHAY SHIRBAVI KAR	Study of variation of aspect ratio of Savonius Rotor	YMER	YMER	http://ymerdigital.com	others
45	11220:KET KI AKSHAY SHIRBAVI KAR	Design of Centrifugal Pump	IARJSET	International Advanced Research Journal in Science, Engineering and Technology	https://iarjset.com/issues/volume-9-issue-11-november-2022/	others
46	11220:KET KI AKSHAY SHIRBAVI KAR	Review of Home Automation Systems	IARJSET	https://iarjset.com/papers/review-of-home-automation-systems/	https://iarjset.com/papers/review-of-home-automation-systems/	others
47	11220:KET KI AKSHAY SHIRBAVI KAR	Modelling and Analysis of C-D Nozzle Using CFD	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY	https://ijirt.org/master/publishedpaper/IJIRT159600_P	others

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Conference Publications (Academic year 2022-23)

Sr. No.	Faculty	Title of the paper	Conference
1	10529: GANESH DATTATRAYA KORWAR	Review Paper on Design Parameters of Pressure Dam Bearing Tilting Pad Bearing	conference
2	10529: GANESH DATTATRAYA KORWAR	Design and development of rover with pick and place mechanism	INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTICS, MECHATRONICS AND AUTOMATION SYSTEMS (IRMAS 2023)
3	10754: SACHIN PRABHAKAR KOMBLE	Investigation of Different Regression Models For The Predictive Maintenance of Aircraft's Engine	2022 Fourth International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT
4	11224: UMESH SOMALU CHAVAN	Plastic zone analysis of SS316L and Ti6Al4V	International Journal for Computational Methods in

		materials under mixed mode loading conditions	Engineering Science and Mechanics
5	11224: UMESH SOMALU CHAVAN	Nickel hydroxide nanosheets grown on nickel foam for high performance supercapacitor applications, materials technology	Materials Technology
6	10131: MUKUND KERBA NALAWADE	APPLICATION OF SMED (SINGLE MINUTE EXCHANGE OF DIE) FOR CNC MACHINE	International Conference on Industrial Production and Systems Engineering
7	10529: GANESH DATTATRAYA KORWAR	“A Comprehensive Review on Topology Optimization and Modal Analysis of Base Frame of Diesel Engine Driven Twin Screw Compressor”	National Conference in Mechanical Engineering: Advances in Material and Design (NCMEAMD-2022)

(List of Book Chapters)

Sr. No.	Faculty	Title of the paper	book	Publisher	doi	Index type
1	11224: UMESH SOMALU CHAVAN	New-generation materials for flexible supercapacitors	Flexible Supercapacitor Nanoarchitectonics	Wiley- Scrivener Publishing LLC	https://onlinelibrary.wiley.com/doi/book/10.1002/9781119711469	NA