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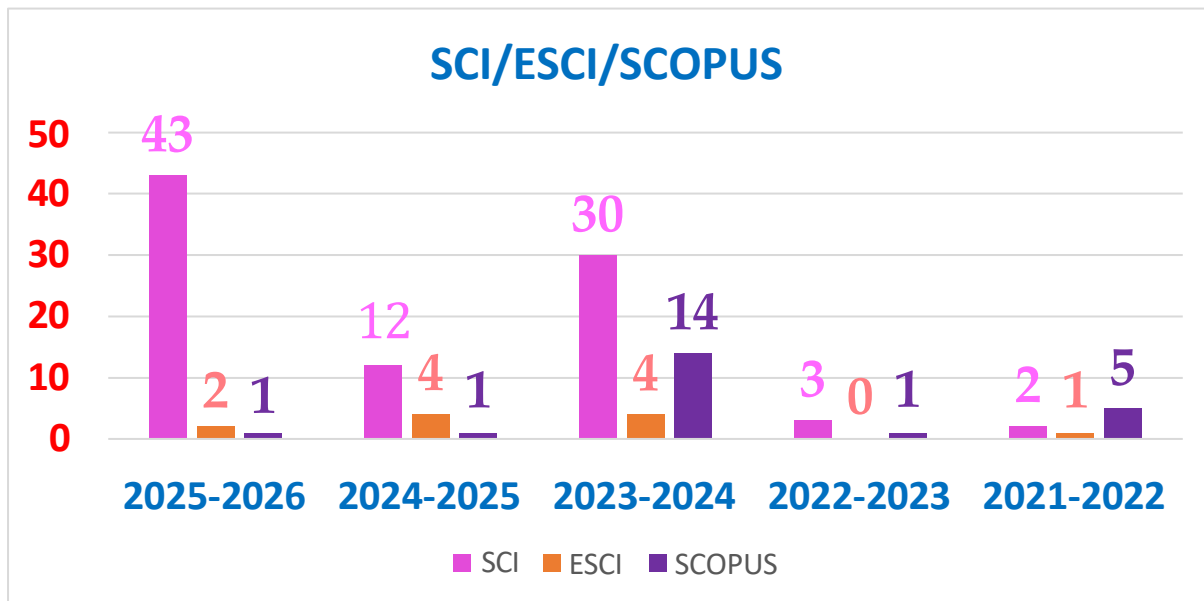
Chennai – 600 097

DEPARTMENT OF MECHANICAL ENGINEERING



FACULTY – JOURNAL PUBLICATIONS

JOURNAL PUBLICATIONS SUMMARY



Academic Year	SCIE	ESCI	SCOPUS	Total
2025-2026	43	2	1	46
2024-2025	12	4	1	17
2023-2024	30	4	14	48
2022-2023	3	-	1	04
2021-2022	2	1	5	08
Total	90	11	22	123

S. Jesudoss Thomas.

HOD/MECH

DEPARTMENT OF MECHANICAL ENGINEERING
Faculty Publications CAY (2024-2025)

S. N O	AUTHOR NAMES	TITLE OF THE PAPER	JOURNAL NAME	PUBLISHER	QUARTILE	SCOPUS /SCIE	DOI	IMPACT FACTOR
1	K. Pratheesh, S. Kaliappan , L. Natrayan, M. Ramya	Mechanical, tribological, fatigue, and creep performance of AA 7075 composites reinforced with annealed and functionalized biosilica from red matta rice husk	Surface Review and Letters	World Scientific	Q3	SCIE	https://doi.org/10.1142/S0218625X25501975	1.1
2	Seeniappan Kaliappan , L. Natrayan, M.Muthukannan, A. George Fernandez Raj, Ramya Maranan, Vinayagam Mohanavel,	Static and Dynamic Analysis of Sandwiched Silane Treated Aluminum	Fibers and Polymers	Springer	Q2	SCIE	https://doi.org/10.1007/s12207-025-	3.1

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Faculty Publications CAY (2024-2025)

	Manzoore Elahi M. Soudagar A. H. Seikh	Coated Glass Fabric and Pineapple Fibre/Granite Dust Polyester Composite					01129-2	
3	Jeevanantham Subramanian, Seeniappan Kaliappan , Natrayan Lakshmaiya, Ramya Maranan	Eco-friendly synthesis of chitosan-ag nanocomposites using tabernaemontan a divaricata: a multi-scale analysis of their structural, thermal, and mechanical properties	Global NEST Journal	Cosmos S.A	Q3	SCIE	https://doi.org/10.30955/gnj.07179	1.7

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Faculty Publications CAY (2024-2025)

4	Diviya Mariya Louis, Subramanian Manivel, Kaliappan Seeniappan, Natrayan L	Multiresponse optimization and network-based prediction modelling for the WEDM of AM60B biomedical material	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	Sage	Q2	SCIE	https://doi.org/10.1177/09544062241264939	1.8
5	S Jeevanantham, Seeniappan Kaliappan, L. Natrayan, M.Muthukannan	Influence of peanut husk derived heat-treated Si3N4 on load bearing properties of basalt fibre-reinforced polyester composite	Journal of the Australian Ceramic Society	Springer	Q3	SCIE	https://doi.org/10.1007/s41779-024-01104-9	2.6
6	K Pratheesh, Seeniappan Kaliappan,	Dry and wet sliding, fatigue,	Journal of the Australian	Springer	Q3	SCIE	https://doi.org/	2.6

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Faculty Publications CAY (2024-2025)

	L Natrayan V P Arthanarieswaran	creep and mechanical properties of AA-7475 metal matrix composite reinforced with Si2N2O from rice husk ash	Ceramic Society				g/10.1007/s41779-024-01131-6	
7	M Sivaperumal, J V Sai Prasanna Kumar, L Natrayan, S Kaliappan	Characterization of Pearl Millet Husk Biosilica and Areca Microfibre toughened polyvinyl alcohol flexible food packaging composite	Journal of the Australian Ceramic Society	Springer	Q3	SCIE	https://doi.org/10.1007/s41779-025-01152-9	2.6

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Faculty Publications CAY (2024-2025)

8	Pitchai Marish Kumar, Alagar Karthick, Seeniappan Kaliappan, Md Muhibbullah	Investigation of Concentrated Semitransparent Photovoltaic System for Hot and Humid Climatic Conditions	International Journal of Photoenergy	Wiley	Q2	SCIE	https://doi.org/10.1155/ijph/1321921	4.5
9	K.S.Ashraff Ali, Samraj Ravi, Vinayagam Mohanavel, Manikandan Ayyar, Selvakumar Kathiresan, Sathish Kannan, Arunkumar Munimathan, Manzoore Elahi M. Soudagar, Seeniappan Kaliappan	Effect of continuous fiber reinforcement on mechanical and tribological characteristics of cellulose and human hair fiber polymer composites	Results in Engineering	Elsevier	Q1	ESCI	https://doi.org/10.1016/j.rineng.2025.104480	9.4
10	Gobu Natarajana, Giridharan Krishnan, Kaliappan Seeniappan,	Influence of Heat Treated Manihot Esculenta	Materials Research	SciELO	Q3	SCIE	https://doi.org/10.1590/1980/198	1.46

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Faculty Publications CAY (2024-2025)

	Natrayan Lakshmaiya	Biosilica on Friction Stir Welded AA 6065- Al2 O3 Metal Matrix Composite and Microstructural, Mechanical, and Fatigue Analysis					0-5373-MR-2024-0473	
11	Chandramohan R, Seeniappan Kaliappan, L. Natrayan, M.Muthukannan	Optimization of tensile and water absorption properties of biosilica dispersed cardanol oil blended PLA/PCL biocomposite for packaging appli	Journal of the Australian Ceramic Society	Springer	Q3	SCIE	https://doi.org/10.1007/s41779-025-01175-2	2.6

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Faculty Publications CAY (2024-2025)

		cations						
12	Natrayan Lakshmaiya, Naga Dheeraj Kumar Reddy Chukka , M. Karthick, Nimel Sworna Ross, Seeniappan Kaliappan , Ramya Maranan	Optimization of thermal efficiency in double pass solar air heating systems with emphasis on collector design parameters and operating	Results in Engineering	Elsevier	Q1	ESCI	https://doi.org/10.1016/j.rineng.2025.104948	9.4

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Faculty Publications CAY (2024-2025)

		conditions						
13	Utkal Suresh Patil, Seeniappan Kaliappan, L. Natrayan, T. Mothilal, N. Durga Devi M.Muthukannan	Optimized Energy Management in Renewable Energy Integrated Microgrids Using Pyramidal Dilation Attention Convolutional Neural Networks	Journal of Environmental Nanotechnology	IENT	Q4	SCOPUS	https://doi.org/10.13074/jent.2025.03.2441156	1.7

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Faculty Publications CAY (2024-2025)

14	Natrayan Lakshmaiya, V. Swamy Nadh, Seeniappan Kaliappan , G. Muthu, Nimel Sworna Ross Ramya Maranan	Enhanced tribological performance of AA6018 aluminium composites reinforced with copper chromate exploring ceramic-based strengthening mechanisms	Journal of the Australian Ceramic Society	Springer	Q3	SCIE	https://doi.org/10.1007/s41779-025-01215-x	2.6
15	Natrayan Lakshmaiya , Naga Dheeraj Kumar Reddy Chukka , Seeniappan Kaliappan , V. Balaji , Nimel Sworna Ross, Ramya Maranan	An integrated Artificial neural network technique to optimize the various parameters of Pineapple/SiO ₂ /epoxy-based nanocomposites under NaOH	Results in Engineering	Elsevier	Q1	ESCI	https://doi.org/10.1016/j.rineng.2025.104737	9.4

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Faculty Publications CAY (2024-2025)

		treatment						
16	Ramesh Krishnan L., Jasgurpreet Singh Chohan, S. Vijayakumar, N. Beemkumar, Sriram Desikan, V. Nagabhushana Rao, M. Naga Swapna Sri, Mayank Kundlas	Investigation of Pressure and Temperature Distributions in Aerofoils Using CFD Simulation	Journal of Metals, Materials and Minerals (JMMM)	Metallurgy and Materials Science Research Institute (MMRI), Chulalongkorn University	Q2	ESCI	10.5571 3/jmm m.v35i2 .2213	3.1
17	Gopal Vijayan, Bharanidaran Ramalingam, Libu George Babu, Alphin Masilamany Santha	A New Two- Phase Design Process for a Compliant Mechanism Gripper	Mechanika	Kaunas University of Technology, Lithuania	Q4	SCIE	10.5755 /j02.me ch.3359 2	1.6

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Faculty Publications CAYm1 (2023-2024)

S.N O	AUTHOR NAMES	TITLE OF THE PAPER	JOURNAL NAME	PUBLISHER	QUARTILE	IMPACT FACTOR	SCOPUS/ SCIE	DOI
1.	M. Arulprakasajothi , N. Dilip Raja, A. Saranya, K. Elangovan, S. Murugapoopathi, N. Poyyamozhi, Kassian T.T. Amesho	Optimizing heat transfer efficiency in electronic component cooling through fruit waste-derived phase change material	Journal of Energy Storage	ELSEVIER	Q1	9.8	SCIE	https://doi.org/10.1016/j.est.2023.110238
2.	B. Rajasekaran, G. Kumaresan, M.Arulprakasajoth , D. Yuvarajan	Improving the performance of heat sinks through the integration of fins and the utilization of graphene-mixed latent heat energy storage	Thermal Science and Engineering Progress	ELSEVIER	Q1	5.4	SCIE	https://doi.org/10.1016/j.tsep.2024.102525
3.	M. Arulprakasajothi , R. Santhanakrishnan , A. Saranya , Yuvarajan Devarajan	Augmentation of heat storage capacity of compact salinity gradient solar pond using dragon fruit	Thermal Science and Engineering Progress	ELSEVIER	Q1	5.4	SCIE	https://doi.org/10.1016/j.tsep.2024.102525

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Faculty Publications CAYm1 (2023-2024)

		extract coated magnesium powder and paraffin wax						02518
4.	Arulprakasajothi, M., Poyyamozi, N., Saranya, A., Elangovan, K., Devarajan, Y., Murugapoopathi, S., Amesho, K. T.	An experimental investigation on winter heat storage in compact salinity gradient solar ponds with silicon dioxide particulates infused paraffin wax	Journal of Energy Storage	ELSEVIER	Q1	9.8	SCIE	https://doi.org/10.1016/j.est.2024.110503
5.	B. Rajasekaran, G. Kumaresan , M. Arulprakasajothi, Suresh Vellaiyan	Latent heat energy storage using nanomaterials as a heat sink for the prevention of thermal runaway: A study in conjugate heat dissipation	International Communications in Heat and Mass Transfer	ELSEVIER	Q1	6.4	SCIE	https://doi.org/10.1016/j.icheatmasstransfer.2023.107225
6.	Rajasekaran B, Kumaresan G,	Exploring Thermal ResponseIn	Thermal Science	SERBIA	Q4	1.1	SCIE	https://doi.org/

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Faculty Publications CAYm1 (2023-2024)

	Arulprakasajothi M, Beemkumar N	Aluminum Heat Sinks With Variable Surface Roughness For Enhanced Cooling						g/10.2298/TSC1230916013B
7.	A. Saranya , M. Arulprakasajothi , B. Srimanickam, N. Prithivikumaran, R. Marnadu & D. Manoharan	A novel sol-gel assisted nanoporous TiO /PS electrode-based carbohydrate biosensor	Journal of Materials Science: Materials in Electronics	SPRINGER	Q2	2.9	SCIE	https://doi.org/10.1007/s10854-023-11659-1
8.	M. Arulprakasajothi , N. Poyyamozi, P. Chandrakumar, N. Dilip Raja, Yuvarajan D	Experimental investigation of salinity gradient solar pond with nano-based phase change materials	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	TAYLOR & FRANCIS	Q2	2.2	SCIE	https://doi.org/10.1080/15567036.2023.2207508
9.	Vikas V. Ugle, Lenin Nagarajan, Arulprakasajothi M, Heera thekkineydeh	The Tlbo Algorithm-Based Optimal Heat Transfer Parameters	Thermal Science	SERBIA	Q4	1.1	SCIE	https://doi.org/10.2298/TSC

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	Rajan	Prediction Of Al ₂ O ₃ Water Nanofluids In Variable Pitch Corrugated Tube Heat Exchanger						1230724236U
10.	Premkumar Mani, Santhanakrishnan Radhakrishnan, Arulprakasajothi M , Suresh Vellaiyan	Heat Dissipation EffectsOf Different Nanocoated Lateral FinsAn Experimantal Investigation	Thermal Science	SERBIA	Q4	1.1	SCIE	https://doi.org/10.2298/TSC1230715234M
11.	Vellaiyan S, Kandasamy M, Arulprakasajothi M , Santhanakrishnan R, Srimanickam B, Elangovan, K	Optimization of Fuel Modification Parameters for Effective and Environmentally-Friendly Energy from Plant Waste Biodiesel.	Results in Engineering	ELSEVIER	Q1	7.9	ESCI	https://doi.org/10.1016/j.rineng.2024.102177
12.	V. Andal, Z. Edward Kennedy ,V. Karthikeyan,V. Rumesh	Cobalt Ferrite Activated Carbon Nanocomposites for	International Journal of Vehicle	MechAero Foundation for Technical	Q4	NA	SCOPUS	https://doi.org/10.42

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Faculty Publications CAYm1 (2023-2024)

	Karthick,R. Vasanth Bala, V. Hariram	Effective Microwave Energy Absorption	Structures and Systems	Research & Education Excellence (MAFTREE)				73/ijvss .15.6.19
13.	N. Dhanush, S.A. Anoop, G. Arunamoorthy, S. Jesudass Thomas , V. Hariram	<u>Computational Fluid Dynamics Simulation for Aerodynamic Effects of Retractable Flaps on a Passenger Vehicle</u>	International Journal of vehicle structures and systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	https:// doi.or g/10.42 73/ijvss .16.1.16
14.	K Karthikeyan, S Astro Divine, J Jibin, S Jesudass Thomas	CFD Analysis of Air Intake Manifold System To Improve The Efficiency Of Student Formula Car	International Journal of vehicle structures and systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	https:// doi.or g/10.42 73/ijvss .15.6.18 [https:// doi.or g/10.42 73/ijvss .15.6.18]

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Faculty Publications CAYm1 (2023-2024)

15.	Sairam C, Guhan Balaji S, Adarsh A Menon, Manikandan I	Experimental Investigation on TIG Welded Copper B370 and Stainless Steel 434	International Journal of vehicle structures and systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	https://doi.org/10.4273/ijvss.15.6.17
16.	Ravikumar Jayabal , Gopinath Soundararajan , R. Ashok Kumar , Gautam Choubey , Yuvarajan Devarajan , T. Raja, Nandagopal Kaliappan	Study of the effects of bio-silica nanoparticle additives on the performance, combustion, and emission characteristics of biodiesel produced from waste fat	Scientific Reports	SPRINGER	Q1	3.9	SCIE	https://doi.org/10.1038/s41598-023-46140-w
17.	N. Poyyamozhi, S. Senthil Kumar, R. Ashok Kumar, Gopinath Soundararajan	An investigation into enhancing energy storage capacity of solar ponds integrated with	Renewable Energy	ELSEVIER	Q1	9.1	SCIE	https://doi.org/10.1016/j.renene.2023.11973

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Faculty Publications CAYm1 (2023-2024)

		nanoparticles through PCM coupling and RSM optimization						3
18.	Gopinath Soundararajan, Bibin Chidambaranathan, Ashok Kumar Rajendran, Dillibabu Venugopal Yuvarajan Devarajan	Plastic pyrolytic oils as renewable fuel: improving its physical properties and ignition patterns by waste renewable source—an experimental analysis	Environmental Science and Pollution Research	SPRINGER	Q4	NA	SCOPUS	https://doi.org/10.1007/s11356-024-32668-5
19.	Easu Dakshnamoorthy Siddharthan Arjunan Amrutha Radhakrishnan, Andal Gopal	Study on the Influence of Synthesized Nano Ferrite Powder and Micron Ferrite Powder on Damping of a Single Degree of Freedom System	mechanika	Kaunas University of Technology (KTU)	Q4	0.7	SCIE	https://doi.org/10.5755/j02.mech.32055

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Faculty Publications CAYm1 (2023-2024)

20.	R. Venkatesh, P. Chandramohan, M. Vignesh Kumar , S. Lakshmanan, A. Kumar, S. Manivannan Gopal Kaliyaperumal	Processing and Characteristics Evaluation of Polyester Resin Nanocomposite Synthesized with Natural Fiber	Journal of The Institution of Engineers (India): Series D	SPRINGER	Q2	0.735	SCOPUS	https://doi.org/10.1007/s40033-024-00673-0
21.	R. Venkatesh, M. Vignesh Kumar , S. Lakshmanan, A. Kumar, S. Manivannan, P. Chandramohan & Gopal Kaliyaperumal	Development of Low-Density Polyethylene Nanocomposite with CNT Fibre Via Injection Moulding: Performance Study	Journal of The Institution of Engineers (India): Series D	SPRINGER	Q2	0.735	SCOPUS	https://doi.org/10.1007/s40033-024-00674-z
22.	Gobivel, K , Vijaysekar, K.S	Assessment of Johnson-Cook material constitutive parameters in finite element simulation of machining Al-SiC metal matrix composite	Journal of the Brazilian Society of Mechanical Sciences and Engineering	SPRINGER	Q2	2.1	SCIE	https://doi.org/10.1007/s40430-023-04494-2

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Faculty Publications CAYm1 (2023-2024)

23.	S Gowthaman	Impact of radial rake angle and machining constraints on the machining behavior and functionality of additive manufactured inconel 718 alloy	Engineering Research Express	IOP SCIENCE	Q2	1.6	ESCI	10.1088/2631-8695/aad0927
24.	Easu Dakshnamoorthy, Ralph H. Ryntathiang, Sarang Sivakumar, Siddharthan Krishna, Vinod Kumar	Experimental study of Vibration isolation using Electromagnetic damping	mechanika	Kaunas University of Technology (KTU)	Q4	0.7	SCIE	https://doi.org/10.5755/j02.mech.34759
25.	Naveen Kumar Gurajala, Javvadi Eswara Manikanta, V. Gopal, L. Ranganathan G. Senthilkumar	Fabrication and Performance of Aluminium Alloy 6351-Zirconium Boride Particles In situ Composite of Erosive Wear Properties	Journal of The Institution of Engineers (India): Series D	SPRINGER	Q2	0.735	SCOPUS	https://doi.org/10.1007/s40033-024-00711-x

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Faculty Publications CAYm1 (2023-2024)

26.	M. Aruna S, Manivannan, A. Kumar, M. Vignesh Kumar , P. Chandramohan, S. Lakshmanan, R. Venkatesh	Impact of Silicon Carbide Particle on the Behavior of Coir Fiber-Incorporated Polypropylene Hybrid Composite	Journal of The Institution of Engineers (India): Series D	SPRINGER	Q2	0.735	SCOPUS	https://doi.org/10.1007/s40033-024-00734-4
27.	B. NagarajaGanesh, B. Rekha, C. Kailasanathan , P. Ganeshan V. Mohanavel	Sustainable fiber extraction and determination of mechanical and wear properties of Borassus flabellifer sprout fiber-reinforced polymer composites	Biomass Conversion and Biorefinery	SPRINGER	Q2	4.1	SCIE	https://doi.org/10.1007/s13399-024-05480-x
28.	A. Gobidass, Edward Kennedy , Densingh Joshua Israel, B. Poorani, V. Hariram,	Improvement on Net Recovery of Slabs for Aluminium 5052 and 8150 Alloys	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	https://doi.org/10.4273/ijvss.15.6.21

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Faculty Publications CAYm1 (2023-2024)

29.	Edward Kennedy , Shivappa, B. Poorani, V. Hariram, S. Mohan,	Laser Texturing on Magnesium Alloys for Bio-Implants	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	https://doi.org/10.4273/ijvss.15.6.22
30.	Rathinavelu Venkatesh, Lakshmanan Selvam, Palaniappan Chandramohan, Subramaniam Manivannan, Vignesh Kumar Marimuthu , Annamalai Kumar, Gopal Kaliyaperumal	Reduction in environmental hazards and enhance the energy conversion from microalgae wastewater: Characteristics evaluation	Environmental Quality Management	WILEY	Q3	1.3	ESCI	https://doi.org/10.1002/tqem.22241
31.	R. Venkatesh , M. Vignesh Kumar , I. Kantharaj , Roshita David , Melvin Victor De Poures, Ismail Hossain , A.H. Seikh ,	Improvement of mechanical performance on zirconium dioxide nanoparticle synthesized magnesium alloy	Heliyon	ELSEVIER	Q1	3.6	SCIE	https://doi.org/10.1016/j.heliyon.2024.e298

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Faculty Publications CAYm1 (2023-2024)

	M.A. Kalam , Murugan P	nano composite						92
32.	Natrayan Lakshmaiya, Raviteja Surakasi, V Swamy Nadh, Chidurala Srinivas, Seniappan Kaliappan , Velmurugan Ganesan, Prabhu Paramasivam, Seshathiri Dhanasekaran	Tanning Wastewater Sterilization in the Dark and Sunlight Using Psidium guajava Leaf- Derived Copper Oxide Nanoparticles and Their Characteristics	ACS Omega	ACS	Q1	4.3	SCIE	https://doi.org/10.1021/acsomega.3c05588
33.	Thandavamoorthy Raja, Vinayagam Mohanavel , Palanivel Velmurugan , Kaliappan Seeniappan , Durgesh Pratap Singh , Sinouvassane Djearamane , Lai-Hock Tey , Ling Shing Wong , Saminathan Kayarohanam , Sami Al Obaid ,	Fatigue behaviour of Kevlar/carbon/basa It fibre-reinforced SiC nanofiller particulate hybrid epoxy composite	e-polymers	DE GRUYTER	Q2	3.3	SCIE	https://doi.org/10.1515/epoly-2023-0048

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Faculty Publications CAYm1 (2023-2024)

	Saleh Alfarraj Subpiramaniyan Sivakumar							
34.	Felix Sahayaraj Arockiasamy, Mayakrishnan Muthukrishnan , Jenish Iyyadurai , Seeniappan Kaliappan , Natrayan Lakshmaiya , Sinouvassane Djearamane , Lai-Hock Tey , Ling Shing Wong , Saminathan Kayarohanam , Sami Al Obaid , Saleh Alfarraj , Subpiramaniyan Sivakumar	Tribological characterization of sponge gourd outer skin fiber-reinforced epoxy composite with Tamarindus indica seed filler addition using the Box-Behnken method	e-polymers	DE GRUYTER	Q2	3.3	SCIE	https://doi.org/10.1515/epoly-2023-0052
35.	Digvijay Singh, Rubina Chaudhary, Alagar Karthick, Praveen P. Patil	Economic and life cycle cost analysis of building-integrated photovoltaic system	Environmental Science and Pollution	SPRINGER	Q4	NA	SCOPUS	https://doi.org/10.1007/s113

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Faculty Publications CAYm1 (2023-2024)

	Seeniappan Kaliappan	for composite climatic conditions	Research					56-023-31781-1
36.	L. Natrayan , Neelima Devi Chinta , Balakrishna Gogulamudi , V. Swamy Nadh , G. Muthu , S. Kaliappan Chidurala Srinivas	Investigation on mechanical properties of the green synthesis bamboo fiber/eggshell/coco nut shell powder-based hybrid biocomposites under NaOH conditions	Green Processing and Synthesis	DE GRUYTER	Q2	4.3	SCIE	https://doi.org/10.1515/gps-2023-0185
37.	L. Natrayan, Fuad Ameen , Neelima Devi Chinta , Nalla Bhanu Teja , G. Muthu , S. Kaliappan , Saheb Ali Ashiwin Vadiveloo	Antibacterial and dynamical behaviour of silicon nanoparticles influenced sustainable waste flax fibre-reinforced epoxy composite for biomedical application	Green Processing and Synthesis	DE GRUYTER	Q2	4.3	SCIE	https://doi.org/10.1515/gps-2023-0214

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38.	Prachi Singh, Vikas Mahor, Natrayan L, Kandukuri Shanker, Kaliappan Seeniappan , Muthiah Muthukannan, Gopinath Rajendran	Prediction of groundwater contamination in an open landfill area using a novel hybrid clustering-based ai model	Environment Protection Engineering	Wroclaw University of Science and Technology	Q4	0.9	ESCI	DOI: 10.37190/epe240106
39.	L. Natrayan, Neelima Devi Chinta, Nalla Bhanu Teja, G. Muthu, S. Kaliappan , S. Kirubanandan Prabhu Paramasivam	Evaluating mechanical, thermal, and water absorption properties of biocomposites with Opuntia cladode fiber and palm flower biochar for industrial applications	Discover Applied Sciences	SPRINGER	Q2	2.8	ESCI	https://doi.org/10.1007/s42452-024-05660-4
40.	Natrayan L, Jayakrishna M, Shanker K, Muthu G, Kaliappan S ,	Green Synthesis of Silver Nanoparticles using Lawsonia inermis for Enhanced	Global Nest Journal	Global Network of Environmental Science and	Q3	2.24	SCIE	https://doi.org/10.30955/gnj

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Faculty Publications CAYm1 (2023-2024)

	Velmurugan G	Degradation of Organic Pollutants in Wastewater Treatment		Technology				.005463
41.	J. V. Sai Prasanna Kumar, Seeniappan Kaliappan , L. Natrayan, Anuj Raturi, A. H. Seikh, A. Iqbal, V. Mohanavel	Isolation of biosilica from biomass waste Setaria italica husks and its reinforcement effect on banana fiber-epoxy composite	Biomass Conversion and Biorefinery	SPRINGER	Q2	4.1	SCIE	https://doi.org/10.1007/s13399-024-05334-6
42.	S. Jeevanantham Kaliappan Seeniappan Natrayan L Sudhir Joshi	Characterization of peanut husk-derived Si3N4 basalt fiber-reinforced unsaturated polyester resin composites	Biomass Conversion and Biorefinery	SPRINGER	Q2	4.1	SCIE	https://doi.org/10.1007/s13399-024-05385-9
43.	L. Natrayan, Raviteja Surakasi, S. Kaliappan , G. Muthu,	Effectiveness of natural dye adsorption on ILSS and optical	Discover Applied Sciences	SPRINGER	Q2	2.8	ESCI	https://doi.org/10.1007/s424

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Faculty Publications CAYm1 (2023-2024)

	Prabhu Paramasivam , Kirubanandan Shanmugam	properties of bio synthesised TiO ₂ nano particles and reinforced with flax seed fiber/epoxy based hybrid composites						52-024-05758-9
44.	L Natrayan Gorti Janardhan Vandanapu Swamy Nadh Chidurala Srinivas Kaliappan Seeniappan G. Velmurugan	Eco-friendly zinc oxide nanoparticles from Moringa oleifera leaf extract for photocatalytic and antibacterial applications	Clean Technologies and Environmental Policy	SPRINGER	Q2	3.9	SCIE	https://doi.org/10.1007/s10098-024-02814-1
45.	Natrayan L Kaliappan Seeniappan Mohammad K. Okla Josphineleela Ramakrishnan A. Iqbal	Extraction of Lignin from Fluorescent Perianths of Jack Fruit and it's Mechanical, Wear, Creep and Flammability Behaviour of Abaca- Polyester	Waste and Biomass Valorization	SPRINGER	Q2	2.8	SCIE	https://doi.org/10.1007/s12649-024-02556-7

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Faculty Publications CAYm1 (2023-2024)

		Composites						
46.	Ramesh Velumayil, G Gnanakumar, L, Natrayan, Neelima Devi Chinta, S. Kaliappan	Bifunctional Aluminum Oxide/Carbon Fiber/Epoxy Nanocomposites Preparation and Evaluation	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	https://doi.org/10.4273/ijvss.15.7.18
47.	Neelima Devi Chinta K. Raja Karthikeyan L. Natrayan S. Kaliappan	Pressure Induced Variations in Mode II Behaviour of Uni- Directional Kenaf Reinforced Polymers	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	NA	SCOPUS	10.4273/ijvss.15.7.19
48.	T. Sathish, D.B. Sivakumar, G.A. Sivasankar, K.T. Thilagham, Seeniappan Kaliappan, R. Saravanan,	Building heating by solar parabolic through collector with metallic fined PCM for net zero energy/emission	Case Studies in Thermal Engineering	ELSEVIER	Q1	6.4	SCIE	https://doi.org/10.1016/j.csit.2023.103862



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Faculty Publications CAYm1 (2023-2024)

	Mohd Ubaidullah Mohaseen, S. Tamboli, Manish Gupta	buildings						
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Faculty Publications CAYm2 (2022-2023)

S.N O	AUTHOR NAMES	TITLE OF THE PAPER	JOURNAL NAME	PUBLISHER	QUARTILE	IMPACT FACTOR	SCOPUS/ SCIE	DOI
1.	Vignesh Kumar M, Veerappan Ar	Process factors optimisation for friction stir process of ZK 60 magnesium alloy employing Box Behnken approach	Advances in Materials and Processing Technologies	TAYLOR & FRANCIS	Q2	SCIE	https://doi.org/10.1080/2374068X.2022.2094594	2.1
2.	R.T. Sarathbabu , M. Kannan	Performance study on the CI engine using LHR and LTC in combination with biodiesel blends	Journal of Engineering Research	ELSEVIER	Q3	SCOPUS	https://doi.org/10.36909/jer.10471	2.2
3.	K. Gobivel , K.S. Vijay Sekar	Machinability Studies on the Turning of Magnesium Metal Matrix Composites	Archives of Metallurgy and Materials	Polish Academy of Sciences	Q3	SCIE	https://doi.org/10.24425/am.m.2022.139686	0.7
4.	S. Arunkumar, M. S. Alphin, Z. Edward Kennedy,	Development Of A Co-Extruded Al-Ti Bimetal Composite	Materiali in Tehnologije	Institute of Metals and Technology	Q3	SCIE	doi:10.17222/mit.2021.312	0.8



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Faculty Publications CAYm2 (2022-2023)

	N. Sriraman							
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Faculty Publications CAYm3 (2021-2022)

S.N O	AUTHOR NAMES	TITLE OF THE PAPER	JOURNAL NAME	PUBLISHER	QUARTILE	IMPACT FACTOR	SCOPUS/ SCIE	DOI
1.	R.T. Sarathbabu M Lakshmikantha Reddy M Kannan, R Balaji	Thermodynamic investigation of a modified compression ignition engine fuelled by Diesel - Bio Diesel ethanol beln	Defence Science Journal	DEFENCE SCIENTIFIC INFORMATI ON DOCUMENT ATION CENTRE	Q2	SCIE	https://doi.org/10.14429/dsj.72.17383	0.8
2.	T. Raja A. Rajasekar Arvind Menon V. Dineshkumar M. Jayakumar	Tribological and Mechanical Behaviour of Hybrid Al 6061 Metal Matrix Composites	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	SCOPUS	https://doi.org/10.4273/ijvss.13.3.21	0.78
3.	V. Gopal, D. Marx Raghu Raja, Jaikumar Mayakrishnan, V. Hariram	Mechanical Behaviour of Al7075 Hybrid Composites Developed through Squeeze Casting	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education	Q4	SCOPUS	https://doi.org/10.4273/ijvss.13.3.14	0.78

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Faculty Publications CAYm3 (2021-2022)

				Excellence (MAFTREE)				
4.	M.Kannan, R.Balaji, R.T Sarath Babu, Chandrakant B. Shende, Ashish Selokar	Investigation on diesel engine fuelled by mahua biodiesel	Information Technology In Industry	Science Research Society	Q4	ESCI	https://doi.org/10.17762/iti.v9i1.149	1.3
5.	K Gobivel, Krishnaraju Srinivasaraju Vijaysekar, Gopalakrishnan Prabhakaran	Impact of cutting parameters on machining of Ti-6Al- 4V alloy: an experimental and FEM approach	International Journal for Simulation and Multidisciplin ary Design Optimization	EDP Sciences	Q4	SCOPUS	https://doi.org/10.1051/smdo/2021002	1.47
6.	S. Rajeshkannan I. Manikandan M. Vigneshkumar	Experimental Investigation of Aluminium Hybrid Composites Reinforced with ZnS, TiO ₂ and BaTiO ₃ Produced Through Powder	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	SCOPUS	https://doi.org/10.4273/ijvss.13.3.11	0.78

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Faculty Publications CAYm3 (2021-2022)

		Metallurgy						
7.	Vignesh Kumar M, Veerappan A.R, Padmanaban G, Balasubramanian V	Microstructural Evolution of a Cast ZK60 Mg Alloy/SiCp Surface Composites Induced by Friction Stir Process	Physics of Metals and Metallography	SPRINGER	Q3	SCIE	https://doi.org/10.1134/S0031918X21040049	1
8.	S. Rajeshkannan M. Vigneshkumar V. Gopal S. Ramesh	Optimization and Mechanical Characterization of AA5083 and AA7075 Dissimilar Aluminium Alloy Joints Produced by Friction Stir Welding	International Journal of Vehicle Structures and Systems	MechAero Foundation for Technical Research & Education Excellence (MAFTREE)	Q4	SCOPUS	https://doi.org/10.4273/ijvss.13.3.19	0.78

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