**PANIMALAR ENGINEERING COLLEGE**
**An Autonomous Institution**
**[JAISAKTHI EDUCATIONAL TRUST]**
Approved by AICTE | Affiliated to Anna University | Recognized by UGC
**All Eligible UG Programs are Accredited by NBA**
Bangalore Trunk Road,Varadharajapuram, Poonamallee, Chennai- 600 123

# DEPARTMENT OF MECHANICAL ENGINEERING
# FACULTY JOURNAL PUBLICATIONS
# ACADEMIC YEAR 2025-2026

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Arulprakasajothi, M., **Karthikeyan, L.,** Saranya, A., Poyyamozhi, N., Prabhakar, P. | Comparative analysis of air-based Photovoltaic Thermal (PVT) systems with enhanced performance through fins and baffles: Experimental and CFD study | Thermal Science and Engineering Progress | Elsevier | July 2025 | 24519049 | 5.4 | 10.1016/j.tsep.2025.103736 | SCIE |
| 2 | **Saravanan, R.,** Karthikeyan, A., Prabhakar, P., Poyyamozhi, N. | Experimental analysis of thermal energy variations in parabolic dish solar collector with hybrid heat storage medium | Renewable Energy | Elsevier | Oct 2025 | 09601481 | 9.1 | 10.1016/j.renene.2025.123436 | SCIE |
| 3 | C Rathinasuriyan, R Sankar, M Puviyarasan, VS Senthil Kumar, K Palanikumar | Influence of Cooling Medium on Microstructure and Mechanical Properties in Friction Stir Processing of Magnesium Alloy—a Review | Surface Review and Letters | World Scientific Publishing Company | Vol.32.Issue 1. 24300113 Jan 25 | 1793-6667 | 1.2 | https://doi.org/10.1142/S0218625X24300132 | SCIE |

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 4 | Rathinasuriyan C., Sankar R., Puviyarasan M., Govindarajan S. | Development of Internal Channels on AA6061-T6 Alloy using Friction Stir Channelling Process | International Journal of Vehicle Structures and Systems | Carbon Magics Ltd | Vol.17.Issue 2. Jul 25 | 0975-3060 | 0.66 | https://yanthrika.com/eja/index.php/ijvss/article/view/3338 | Scopus |
| 5 | Rathinasuriyan C., J. Bharani Chandar, Lenin N., Puviyarasan M. | Exploring materials, technologies, applications, and future outlooks in 4D printing: a comprehensive survey | Progress in Additive Manufacturing | Springer Nature | Vol.10..Issue 9. Sep 25 | 2363-9512 | 5.4 | https://doi.org/10.1007/s40964-025-01034-3 | Scopus |
| 6 | Murugan.R Senthilkumar.G Vinodkumar.V Rathinasabapathy. G | Analysis of machining parameters for EN24 material in CNC vertical machining center by Ti-N coated HSS tool using GRG reinforced RSM technique | International Research Journal of Multidisciplinary Technovation | Asean Research Association | Aug 2025 | 25821040 | 0.1 | 10.54392/irjmt2543 | Scopus |
| 7 | Palani Kumar D., Saravanakumar S.S., Prithiviraj M., Murugan R. | Performance Evaluation of Eco-Friendly Biocomposite Films Prepared on PLA and China Root Powder | Waste and Biomass Valorization | Springer | Vol.16. Issue 10 5713-5725 | 1877-2641 | 2.8 | DOI: 10.1007/s12649-025-03176-5 | SCIE |

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 8 | J.Anvar Shathik, M.Sivaranajani ,K.Glory Prasanth, T.K.Sethuramalingam, Arcchana kocharekar, **G.Senthilkumar.** | Implementing Federated Learning in Diverse Urban Sensing Systems to Improve Public Safety | Journal of Environmental Protection and Ecology | Scibulcom | Aug 25 | 13115065 | 0.1 | https://scibulcom.net/en/article/978jBq7nD0ujbpdz5moI | Scopus |
| 9 | K.Thiruselvam | Towards green mobility: investigating hydrogen-enriched waste plastic biodiesel blends with n-butanol for sustainable diesel engine applications | Energy Advances | Royal Society of Chemistry | Vol.4Issue.6 763-775 Apr 25 | 2753 -1457 | 2.1 | 10.1039/d5ya00002e | Scopus |
| 10 | K.Thiruselvam | Enhancement of compression ignition engine performance and emission reduction using pyrolyzed waste plastic oil blended with aluminum oxide nanoparticles | Environmental Progress and Sustainable Energy | John Wiley and Sons Inc | Vol.44Issue.4 E70008 Aug 25 | 1944 -7442 | 2.4 | 10.1002/ep.70008 | SCIE |

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 11 | K.Thiruselvam | Computational Evaluation and Thermal Optimization of Advanced Heat Sinks in Proton Exchange Membrane Fuel Cells | Thermal science and engineering Progress | Elsevier | Vol.68 104699 Oct 25 | 2451-9049 | 5.4 | https://doi.org/10.1016/j.tsep.2025.104199 | SCIE |
| 12 | Murugapoopathi S. Manieniyan V. Rajaganapathy C. Sathiyamoorthi R. **Thiruselvam K.** Dillikannan, Damodharan | Energy, exergy and environmental assessments of rubber seed oil methyl ester-diesel blend for an agricultural diesel engine under the influence of exhaust gas recirculation | Environmental Progress and Sustainable Energy | John Wiley and Sons Inc | Vol.44Issue.4 E70011 Aug 25 | 1944 -7442 | 2.4 | 10.1002/ep.70011 | SCIE |
| 13 | Dr.J.Gunasekaran | Multi-Objective Optimization of Parameters during Friction Stir Welding of AM50A Mg Alloy Using Genetic Algorithm and Desirability Function Approach for Maximizing Tensile … | Journal of Materials Engineering and Performance | Springer | 1-20 | 1059-9495 | 2.3 | 10.1007/s11665-025-11516-8 | SCIE |

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 14 | G.Gnanakumar | DACNN based predicting tensile strength of friction stir welded aluminium alloy joints | International Journal of Machine Learning and Cybernetics | Springer | Vol.16 3997–4016 | 1868-8071 | 2.7 | https://link.springer.com/article/10.1007/s13042-024-02494-9 | SCIE |
| 15 | J. Murugesan | Impact of varying volume fraction of multi-walled carbon nanotubes to develop the microstructure and mechanical properties of friction stir processed Al-Cu alloy | Part E: J Process Mechanical Engineering | Springer | Apr 25 | 0954-4089 | 2.2 | 10.1177/09544089251336838 | SCIE |
| 16 | N.Poyyamozhi | Machine learning models and experimental evaluation on mass and temperature of dried coriander seeds in solar hybrid collector with dryer (SHCD) | Renewable Energy | Elsevier | Vol.246. 124882 Jan 26 | 1879-0682 | 8.6 | https://www.sciencedirect.com/science/article/abs/pii/S0960148125021469 | SCIE |

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 17 | N.Poyyamozhi | Optimized multi-objective energy management strategy for solar-fuel cell hybrid electric vehicles using RSM and SFOA | RESULTS IN ENGINEERING | Elsevier | Vol.28 107106 Dec 25 | 2590-1230 | 7.9 | https://www.sciencedirect.com/science/article/pii/S2590123025031615 | Scopus |
| 18 | N.Poyyamozhi | Exergy efficiency optimization of a water-based titanium dioxide nanofluid hybrid solar collector using advanced machine learning models | Case Studies in Thermal Engineering | Elsevier | Vol.74 106815 Oct 25 | 2274-157X | 6.4 | https://www.sciencedirect.com/science/article/pii/S2214157X25010755 | SCIE |
| 19 | N.Poyyamozhi | CFD analysis of thermal enhancement in salt gradient solar ponds using hybrid nanomaterials | Journal of Thermal Analysis and Calorimetry | Springer | Sep 25 | 1388-1650 | 3.1 | https://link.springer.com/article/10.1007/s10973-025-14698-4 | SCIE |

**PANIMALAR ENGINEERING COLLEGE**
**An Autonomous Institution**
**[JAISAKTHI EDUCATIONAL TRUST]**
Approved by AICTE | Affiliated to Anna University | Recognized by UGC
**All Eligible UG Programs are Accredited by NBA**
Bangalore Trunk Road,Varadharajapuram, Poonamallee, Chennai- 600 123

| Sl. No | All Authors Name (As Mentioned in the Article) | Paper Title | Journal Name | Publisher Name | Vol, Issue, Page No, Month, Year of publication | ISSN No. | Impact Factor | DOI-Link | Indexing (Scopus/ WOS |
|---|---|---|---|---|---|---|---|---|---|
| 20 | B.Prabhu | Constant temperature line identification on prototype gas turbine combustor with multi-colour change coating | De Gruyter Brill | De Gruyter Brill | Nov 24 | 0334-0082 & 2191-0332 | 0.9 | https://doi.org/10.1515/tjj-2024-0083 | SCIE |