

Journal Publications

- A N Shankar, Mattipally Prasad, Rajeshkumar Selvaraj, Manuel George, Akash Mohanty, J Sivakumar. Experimental Investigation of the hydrophobic and modal properties of epoxy nanocomposites reinforced with graphene nanofillers. Transactions of the Indian Institute of Metals, December 2022(Article in Press)
- K Pratheesh, Navish Kumar, “Effect of squeeze pressure and strontium addition on tribological and mechanical properties of Al-Si Piston Alloy with varying amount of nickel “Transaction of Indian Institute of Metals. (Article in Press)
- Dhanup S. Pillai, Veronika Shabunko, Amal Krishna, A comprehensive review on building integrated photovoltaic systems: Emphasis to technological advancements, outdoor testing, and predictive maintenance” Renewable and Sustainable Energy Reviews, Volume 156, 2022, 111946, ISSN 1364-0321, <https://doi.org/10.1016/j.rser.2021.111946>.
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- Oommen, L.P., Narayanappa, K.G. Assimilative capacity approach for air pollution control in automotive engines through magnetic field-assisted combustion of hydrocarbons. Environ Science and Pollution Research 28, 63661–63671 (2021). <https://doi.org/10.1007/s11356-020-11923-5>
- Rakesh Krishnan P P, Sujith Vijayan, Praveen Wilson, P. Arun Kumar, K. Prabhakaran,” Machinable green bodies by dry pressing of alumina powder using natural rubber latex as a cross-linkable binder”, Powder Technology, Vol 385,2021,227-233, <https://doi.org/10.1016/j.powtec.2021.02.054>.
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- Wilson, P, Vijayan, S, Prabhakaran, K. Nanowire-decorated SiC foam from tissue paper and silicon powder by filter-pressing. International Journal of Appl Ceramic Technology 2020; 17: 519– 528. <https://doi.org/10.1111/ijac.13412>
- Sujith Vijayan, Praveen Wilson, K. Prabhakaran, Abdusamad A Salih & Kuruvilla Joseph (2020) Preparation of ceramic foam spheres by injection moulding of emulsions, Journal of Asian Ceramic Societies, 8:1, 21-28, DOI: 10.1080/21870764.2019.1695558
- K. Pratheesh, M. Ravi & Manoj George (2021) Characterisation of tensile fracture in squeeze casted Al–Si piston alloy, International Journal of Cast Metals Research, 34:2, 57-69, DOI: 10.1080/13640461.2021.1889163
- S. Vaishak, Purnanand V. Bhale, ”Investigation on the effect of different backsheets materials on performance characteristics of a photovoltaic/thermal

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- Manuel George, Tony Shaji, Rahul A K, Rino Thomas Mathew, Rahul R Nair. “Hardness and Tribological Characteristics of Epoxy Composite Filled with Reduced Graphene Nanoparticles”,*International Research Journal of Engineering and Technology (IRJET)* e-ISSN: 2395-0056. Volume: 09 Issue: 06 | June 2022
- Roshin George, Kailasnath H, Robin Manaf ,Sakku Saju Kuruvilla,. Shinto Baby,Manuel George. Elastic Property Evaluation of Fibre Reinforced Geopolymer Composite Using Sugarcane Bagasse Fibre. *International Research Journal of Engineering and Technology (IRJET)* E-ISSN: 2395-0056. Volume: 09 Issue: 06 | Jun 2022
- Nirmal P Sabu, Mithun Cheriyan, Nevin Philip Joji, Sanju Jacob Varghese, Tony Mathew.”Experimental and Numerical Analysis of an Automobile Cabin Thermal Management Using Phase Change Material (PCM).” *International Research Journal of Engineering and Technology (IRJET)* E-ISSN: 2395-0056. Volume: 09 Issue: 06 | Jun 2022
- Analysis of Vertical Axis Wind Turbine with Increasing the Number of Blades and Changing the Material. Rejeesh A S, Yadhukrishnan B, Sreenath K S, Sanath Koshy, Rajeev K Mohan. *International Research Journal of Engineering and Technology (IRJET)* E-ISSN: 2395-0056. Volume: 09 Issue: 06 | Jun 2022
- Aswin Rose Thomas, Aswin Saju, Berin M Biju, Eldho Babychan,Rabi Johnson. “Design and Analysis of Inlet Manifold with Vortex Generator in GDI Engine.” *International Research Journal of Engineering and Technology (IRJET)* E-ISSN: 2395-0056. Volume: 09 Issue: 06 | Jun 2022
- Abhijith Shaji, Akhil P, Arjun B Lal, Cyril Babu, Abin Babu.”Performance Enhancement of Heat Exchangers Using Vortex Flaps.”*International Research*

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- Alex Jayaprakash Thomas, Ambady S, Abhiram K, Merit Kurian, Santhu Varghese Thomas.”Piezoelectric Thermo-Acoustic Refrigeration System with Peltier Module Energy Regeneration,”International Research Journal Of Engineering And Technology (IRJET) E-Issn: 2395-0056. Volume: 09 Issue: 06 | Jun 2022

Conference Publications

- Arun Chand, Manikandan H, Bhasi A B,” Selecting the Optimum Tool for Driving Performance Evaluation by Assessing the Ergonomic Methods—An Overview”, 29 November 2022, Select Proceedings of 3rd International Conference on Computing in Mechanical Engineering (ICCME 2021) Applications of Computation in Mechanical Engineering pp 227–237 Part of the Lecture Notes in Mechanical Engineering book series (LNME).DOI: 10.1007/978-981-19-6032-1_18
- Manuel George, K. Pratheesh, Akash Mohanty, Nakul Suresh, Tijo Varghese, Richard Sunny, S. Narayanan,” Thermal and magnetic properties study of NiCo₂O₄/graphene and NiFe₂O₄/graphene”, Selection and peer-review under responsibility of 2nd International Conference on Sustainable Materials, Manufacturing and Renewable Technologies 2022 (i-SMART 2022) Materials Today: Proceedings,2022, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.07.457>.
- Navaneeth Santhosh, Sudhimon Selvam, Rahul Reghu, Jishnu Sundaran, Benphil C. Mathew, Sivasubramanian Palanisamy,” Mechanical properties studies on rubber composites reinforced with Acacia Caesia fibre, Selection and peer-review under responsibility of 2nd International Conference on Sustainable Materials, Manufacturing and Renewable Technologies 2022 (i-SMART 2022) “Materials Today: Proceedings,2022, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.11.099>
- S. Selvakumar, S. Aneesh, J. Rabi, N. Mohammed Raffic, K. Ganesh Babu,” Micro thermal behaviour of Ti- Mg composite processed through friction stir processing, Selection and peer-review under responsibility of the scientific committee of the Second Global Conference on Recent Advances in Sustainable Materials 2022. Materials Today: Proceedings, In Press, Corrected Proof 2022 ISSN 2214 - 7853, <https://doi.org/10.1016/j.matpr.2022.12.125>.
- Tijo M Joy, K.S. Aneesh, V. Sreekumar, Analysis of a decision support system for supplier selection in glove industry, Selection and peer-review under responsibility of 2nd International Conference on Sustainable Materials, Manufacturing and Renewable Technologies 2022 (i-SMART 2022 Materials Today: Proceedings, 2022, In Press Corrected Proof ISSN 2214 7853, <https://doi.org/10.1016/j.matpr.2022.11.344>.
- M.H. Faisal, V. Sreekumar, Nidhish Mathew Nidhiry,” Comparison of mechanical and wearing properties between LM6, LM6/B4C and LM6/B4C/Gr aluminium metal matrix composites, Materials Today: Proceedings, Volume 43, Part 6,2021, Pages 3916-3921, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2021.01.340>.

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- Arjun T Mulloorakam, Nidhish Mathew Nidhiry,” Combined Objective Optimization for Vehicle Routing Using Genetic Algorithm, “Materials Today: Proceedings, Volume 11, Part 3, 2019, Pages 891-902, ISSN Number 2214-7853, <https://doi.org/10.1016/j.matpr.2018.12.016>.

Patents Published

- **Patent title:** Effect of Management Information System on Operative Human Resource Management in an Association
Application no: 20221107958
- **Patent title:** Energy Meter Reading System Over Internet.
Application no: 202241026791
- **Patent title:** A System for Block Chain Based Threat Detection in a Network Security System
Application no: 202241010063
- **Patent title:** Self Assistive Transfer Device
Application no: 202141047095
- **Patent title:** Fully Automated Hybrid Grinder
Application no: 202041056252
- **Patent title:** Adjustable Standing Frame with Activity Trainer
Application no: 20194102558

Patents Applied Under Examination

- **Patent title:** Earth Air Heat Tunnel Transformer
Application no: 202141025367

Books Authored

1. Title: **Engineering Mechanics**
Author: Dr K. Pratheesh
Publishing House: Jayalakshmi Publications Madurai Tamil Nadu
ISBN:**978-93-91987-27-5**
2. Title: **Smart Manufacturing Technology**
Author: Dr K. Pratheesh
Publishing House: Jayalakshmi Publications Madurai Tamil Nadu
ISBN: **978-93-91987-62-6**
3. Title: **Diesel Engine Emission Reduction Using Ceria Nanoparticles**
Author(s): Dr Ajin C Sajeevan and V Sajith
Publishing House: Lambert Academic Publishing London

ISBN: **978-620-3-02701-3**

4. Title: Production Management

Author(s): Dr Saurabh Tege, Dr Jayaraman R, Dr Rabi Johnson and Sathish G J

Publishing House: Taran Publications New Delhi

ISBN:**978-93-92313-31-8**

5. Title: Basic Principles of Industrial Hygiene

Author(s): Vivek K A and Dr Manikandan H

Publishing House: Notion Press Chennai

ISBN: **978-16-44293-92-8**

6. Title: Industrial Safety Engineering

Author: Subin George Mathew

Publishing House: Cherrys Publishers Kochi