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Department of Mechanical Engineering

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### LIST OF PUBLICATIONS

#### CAYM2(2019 – 2020)

1. Paramasamy.S, Manimaran.A, Vinayagar.K, Nagaraj.G, 'Cell Formation In Sheet Metal Processing Industry Using Genetic Algorithm', Caribbean Journal of Science, ISSN: 0008-6452 - Volume 53, ISSUE 2 (MAY - AUG), 2019
2. Muralikannan.R, Senthilkumar.T.S., 'Evaluation of recast layer and parametric optimization of EDM process on aluminium based HMMCs using grey relational analysis', Materials Research Express, doi: <https://iopscience.iop.org/article/10.1088/2053-1591/ab3d73/meta>
3. Muralikannan.R, Senthilkumar.T.S., 'Role of TiC and h-BN particles on morphological characterization and surface effects of Al 4032 hybrid composites using EDM process', Journal of Mechanical Science and Technology, doi: <https://inis.iaea.org/search/searchsinglerecord.aspx?recordsFor=SingleRecord&RN=50066534>.
4. Subramanian.R, Senthil Kumar. A, Vinayagar.K, Muthusamy.C., 'Experimental analyses on heat transfer performance of TiO<sub>2</sub>-water nanofluid in double-pipe counter-flow heat exchanger for various flow regimes' Journal of Thermal Analysis and Calorimetry, doi: <https://link.springer.com/article/10.1007/s10973-019-08887-1>.
5. Jani.S.P, SenthilKumar.A, Adam Khan.M, Sajith.S & Saravanan.A., 'Influence of Natural Filler on Mechanical Properties of Hemp/Kevlar Hybrid Green Composite and Analysis of Change in Material Behavior Using Acoustic Emission', Journal of Natural Fibers, <https://doi:10.1080/15440478.2019.169233121>
6. Kailainathan.S, Muralikannan.R, Nijandhan.K, Venkatachalam Srisaran, 'High-strength hybrid particulate-fibre polymer composites: The role of process temperature on the mechanical strength', Materials Research Express, <https://doi.org/10.1088/2053-1591/ab54a0>.
7. Vennila.T, Muneeswaran.T, Manjula.M, Stalin.B and Vairamuthu.J 'Synergism between sodium molybdate and binary inhibitor (BHI+ Zn<sup>2+</sup> ) on corrosion inhibition of mild steel in aqueous medium containing 60 ppm Cl<sup>-</sup> ion', Materials Research Express, <https://doi.org/10.1088/2053-1591/ab5233>.

8. Sridhar S. V, Karuppasamy.R, Sivakumar.G.D, 'Experimental Investigation of Heat Transfer Enhancement of Shell and Tube Heat Exchanger Using SnO<sub>2</sub>-Water and Ag-Water Nanofluids', Journal of Thermal Science and Engineering Applications, <https://doi.org/10.1115/1.4045699>
9. Rajamuneeswaran.S, Vairamuthu.J, Nagarajan.S, Stalin.B, Jayabal.S, 'A comparative study on mechanical properties of coir fiber reinforced polymer composites filled with calcium carbonate particles', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2020.08.366>.
10. Ravichandran.M, Meignanamoorthy.M, Chellasivam.G.P, Vairamuthu.J, Senthil Kumar.A, Stalin.B, 'Effect of Stir Casting Parameters on Properties of Cast Metal Matrix Composite', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2020.03.391>
11. LouieFrango.T, Prabhakaran.M, Sivakandhan.C, Vinoth Babu.K, Vairamuthu.J, 'Enhancement of welding strength on Eglin steel using MIG welding process', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2020.08.198>
12. RajaSekaran.P, Ganesh Kumar.S, Anix Joel Singh.J, Vairamuthu.J, 'Experiment investigation and analysis of fish scale reinforced polymer composite materials', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2020.08.059>.
13. Stalin.B, Ravichandran.M, Jasper.S, Vairamuthu.J, 'Experimental investigation and characterization of brass – AlN composites synthesized using powder metallurgy technique', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2019.04.212>.
14. Yoganandam.K, Mohanavel.V, Vairamuthu.J, Kannadhasan.V, 'Mechanical properties of titanium matrix composites fabricated via powder metallurgy method', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2020.04.569>,
15. Vinayagar.K, SenthilKumar.A, Paramasamy.S, pitchayya pillai.G, Nagaraj.G, Sivakumar.P, 'Multi Response Optimization Of Gas Metal Arc Welding Process Parameters', International Journal of Future Generation Communication and Networking, ISSN: 2233-7857 IJFGCN, Vol. 13, No. 2, (2020), pp. 397 – 406. [https://www.researchgate.net/publication/343166562\\_MULTI\\_RESPONSE\\_OPTIMIZATION\\_OF\\_GAS\\_METAL\\_ARC\\_WELDING\\_PROCESS\\_PARAMETERS/comments](https://www.researchgate.net/publication/343166562_MULTI_RESPONSE_OPTIMIZATION_OF_GAS_METAL_ARC_WELDING_PROCESS_PARAMETERS/comments)
16. Stalin.B, Ravichandran.M, Vadivel.K, Vairamuthu.J, 'Optimization of brazing process parameters in butt joint of brass 319 using Taguchi method', ELSEVIER - Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2019.04.226>.
17. Sivakandhan.C, Munusamy.P, Anandan.K, Balaji.R, Vairamuthu.J, 'Parametric optimization of Al 7068 metal matrix using spark plasma sintering process', ELSEVIER - Materials Today: Proceedings, doi: <https://doi.org/10.1016/j.matpr.2020.08.196>.

18. Lakshmi Keshav, Sai Teja.V, Vairamuthu.J, 'Performance analysis on synthesized reinforced carbon steel for structural applications', ELSEVIER - Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.08.001>.
19. Pritima.D, Vairamuthu.J, Gopi Krishnan.P, Marichamy.S, Stalin.B, Sheeba Rani.S, 'Response analysis on synthesized aluminium-scandium metal matrix composite using unconventional machining processes', ELSEVIER - Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.07.672>.
20. Mohan Babu.P, Rajamuneeswaran.S, Pritima.D, Marichamy.S, Vairamuthu.J, 'Spark erosion machining behaviour of coconut shell ash reinforced silicon metal matrix', ELSEVIER - Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.08.195>.
21. Sathishkumar.A.S, Arun Balasubramanian.K, Ramkumar.T, 'Structural Characterization of ZnO, CuO and Fe<sub>2</sub>O<sub>3</sub> Nanoparticles: Evaluation of Rietveld Refinement', Tierärztliche Praxis, <https://tierarztliche.com/gallery/v40.88.pdf>,
22. Rajkumar.P.R, Kailasanathan.C, Senthilkumar.A, Selvakumar.N, and JohnRajan.A, 'Study on formability and strain hardening index: influence of particle size of boron carbide (B<sub>4</sub>C) in magnesium matrix composites fabricated by powder metallurgy technique', Materials Research Express, <https://doi.org/10.1088/2053-1591/ab6c0b>.
23. Senthilkumar.T.S, Muralikannan.R, Senthilkumar.S, 'Surface morphology and parametric optimization of AWJM parameters using GRA on aluminum HMMC', ELSEVIER - Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2019.07.404>,
24. Sudarsan.D, Sivakumar.G.D, 'Implementation of kanban to improve efficiency of a manufacturing system subject to bottlenecks' International Journal of Manufacturing Technology and Management, Vol. 34, No. 5, 2020. <https://www.inderscienceonline.com/doi/abs/10.1504/IJMTM.2020.109366>
25. Nagaraj G, Senthil Kumar.A, Paramasamy. K.P.S, Vinayagar.K, Siva Kumar, Pitchayya Pillai.G, 'Multi Response Optimization Of Gas Metal Arc Welding Process Parameters', International Journal of Future Generation Communication and Networking, ISSN: 2233-7857 IJFGCN, Vol. 13, No. 2, (2020), pp. 397 – 406.
26. Saravana kumaar.A, Senthilkumar.A, SaravanakumarS.S., Senthamaraikannan.P, Loganathan.L, Muthu Chozha Rajan.B, 'Mechanical Properties of Alkali-Treated CaricaPapaya Fiber-Reinforced Epoxy Composites', Journal of Natural Fibers, <https://doi.org/10.1080/15440478.2020.1739590>