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### **List of last 5 years publications:**

1. VJ Binu Kumar, J Bensam Raj, R Karuppasamy, R Thanigaivelan, Influence of Chemical Treatment and Moisture Absorption on Tensile Behavior of Neem/banana Fibers Reinforced Hybrid Composites: An Experimental Investigation, Journal of Natural Fibers , pp 1-12 (2020)
2. D Deepa, R Thanigaivelan, M Venkateshwaran, Identifying a suitable micro-fin material for natural convective heat transfer using multi-criteria decision analysis methods, Materials Today: Proceedings(2020)
3. R Kumar, R Thanigaivelan, GK Rajanikant, T Jagadeesha, J Das, Evaluation of hydroxyapatite-and zinc-coated Ti-6Al-4V surface for biomedical application using electrochemical process, Journal of the Australian Ceramic Society, pp 1-10 (2020)
4. Vinod Kumaar, J.R., Thanigaivelan, R., Performance of magnetic field-assisted citric acid electrolyte on electrochemical micro-machining of SS 316L- materials and manufacturing processes, vol.35,pp 969-977 (2020)
5. R Thiraviam, V Ravisankar, P Kumar, R Thanigaivelan, R Arunachalam, A novel approach for the production and characterisation of aluminium–alumina hybrid metal matrix composites- Materials Research Express vol.7,pp 046152.(2020)
6. S Maniraj, R Thanigaivelan, R Viswanathan, P Elumalai, Experimental investigation of MRR and ROC in aluminium metal matrix composites- Materials Today: Proceedings (2020)
7. Narayanan Nampoorithi ,S., Bensam Raj .J, Thanigaivelan, R., Karuppasamy R, Experimental Investigation on Mechanical and Biodegradation Properties of Indian Almond–Kenaf Fiber-Reinforced Hybrid Composites for Construction Applications, Journal of Natural Fibers (2020)
8. R.Thanigaivelan M.Soundarrajan, Effect of coated and geometrically modified tools on performance of electrochemical micromachining- Materials and Manufacturing Processes, vol.35,pp 775-782.(2020)
9. R Thanigaivelan, RM Arunachalam, A Nithish, S Venkatesh, P Naveenkumar, S Selvaganapathy, AR SIRANJEEVI ARAVIND, Optimization of Laser and Electrochemical Process Parameters for Surface Modification of Hardness and Hydrophobicity on 316L Steel- Lasers in Engineering (Old City Publishing), vol. 45.(2020)

10. Thanigaivelan, R., Arunachalam, R. M., Madhan, C., Kumar, R. R., & Muthuselvam, M. Impact of Electrochemical Passivation on Burr Suppression of Ti-4Al-6V Alloy during Machining. *Surface Engineering and Applied Electrochemistry*, vol.55(4),pp 424-429. (2019)
11. Maniraj, S., & Thanigaivelan, R. Optimization of Electrochemical Micromachining Process Parameters for Machining of AMCs with Different% Compositions of GGBS Using Taguchi and TOPSIS Methods. *Transactions of the Indian Institute of Metals*, pp1, vol 10 (2019)
12. Maniraj, S., & Thanigaivelan, R. Effect of electrode heating on performance of electrochemical micromachining. *Materials and Manufacturing Processes*,pp.1-8. (2019).
13. Soundarrajan, M., & Thanigaivelan, R. Investigation on Electrochemical Micromachining (ECMM) of Copper Inorganic Material Using UV Heated Electrolyte. *Russian Journal of Applied Chemistry*, vol.91(11), pp.1805-1813. (2018).
14. Thanigaivelan, R., Arunachalam, R. M., Kumar, M., &Dheeraj, B. P. Performance of electrochemical micromachining of copper through infrared heated electrolyte. *Materials and Manufacturing Processes*, vol. 33(4), pp.383-389 (2018).
15. Thanigaivelan, R., & Deepa, D. Heat Transfer Enhancement By Coated Fins in the Microscale Domain. *Thermal Science*, vol.22(6B), pp.2783-2789. (2018).
16. M. Soundarrajan, R. Thanigaivelan, M. Maniyarasn , M. Mohan Raj, Analysis of Fuel Properties and Emission Behaviour of Biodiesel, *International Journal for Innovative Research in Science & Technology*, Volume 3 | Issue 06 ISSN (online): 2349-601006 November (2016).
17. R.Thanigaivelan, R.Arunachalam and N.Natarajan. Study on Influence of Electrodes in Electric Discharge Machining, *Recent Patents on Mechanical Engineering*, Vol 4, pp. , (2015).
18. R.Thanigaivelan, M.Ranjithkumar, L.Rohinikarthick, A.Shahjahan B.Tamilarasan K.Gunasekaran. Effect of Tool Electrode Tip Shape on Machining Rate and Overcut in Electrochemical Micromachining (EMM), *International Journal of Innovative Research in Science Engineering and Technology*, Vol 4, pp. 1594-03, (2015).
19. R.Thanigaivelan, E.Susindran, S.Shanmugaraj, E.Ramachandran, K.Gunasekaran. Parameter Optimization Model in Electrochemical Micromachining Process,

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Vol 4, pp. 1602-1607, (2015).

20. R.Thanigaivelan, S.Praveen, T.Ragul, M.Selvamani, K.Gunasekaran. Influence of EDM Parameters on Taper Angle Generation Using Different Electrodes, International Journal of Innovative Research in Science Engineering and Technology, Vol 4, pp. 1608-1615, (2015).
21. R.Thanigaivelan, T.Mythili, P.Sathishkumar, A.Tamizhazhagan, Vigneshraj. Development of on Board Weighing System Using Sensor in Static Truck, International Journal of Innovative Research in Science Engineering and Technology, Vol 4, pp. 581-589, (2015).