

ANNA UNIVERSITY DC MEMBER 3 - Dr. TITUS THANKACHAN

Last five years publications

1. **Titus Thankachan**, K. SooryaPrakash, Microstructural, mechanical and tribological behavior of aluminum nitride reinforced copper surface composites fabricated through friction stir processing route, *Material Science and Engineering A*, 2017, vol. 688, pp. 301–308[**SCI/SCIE., I.F.: 3.094**].
2. **Titus Thankachan**, K. SooryaPrakash, V. Kavimani, Investigations on the effect of friction stir processing on Cu-BN surface composites, *Materials and Manufacturing Process*, 2018, vol. 33(3), pp.299–307[**SCIE., I.F.: 2.274**].
3. V. Kavimani, K. SooryaPrakash, **Titus Thankachan**, Surface characterization and specific wear rate prediction of r-GO/AZ31 composite under dry sliding wear condition, *Surfaces and Interfaces*, 2017, vol. 6, pp.143-153.
4. K. SooryaPrakash, **Titus Thankachan**, R. Radhakrishnan, Parametric optimization of dry sliding wear loss of copper-MWCNT composites - A statistical and ANN approach. *Transaction of Non Ferrous Metals Society of China*, 2017, vol. 27, pp.627-637[**SCIE., I.F.: 1.342**].
5. **Titus Thankachan**, K. SooryaPrakash, M. Loganathan, Effect of process parameters in WEDM of Copper-BN surface composites, *Materials and Manufacturing Process*, 2018, vol. 33 (3), pp. 350–358 [**SCIE., I.F.: 2.274**].
6. **Titus Thankachan**, Soorya Prakash K, Devaraj Ramasamy, Balasubramanian Prabakaran, SathiskumarJothi, Machine Learning for degraded Mechanical Properties of Metallic Materials due to the presence of hydrogen, *International Journal of Hydrogen Energy*, 2017, vol. 42, pp.28612-28621[**SCI/SCIE., I.F.: 3.582**].
7. **Titus Thankachan**, K. SooryaPrakash, MujibRahman, Optimizing the tribological behavior of hybrid copper surface composites using statistical and machine learning techniques, *ASME Journal of Tribology*, 2018, vol. 140, pp. 03161-1 - 03161-8[**SCI/SCIE., I.F.: 1.521**].
8. **Titus Thankachan**, K. SooryaPrakash, Artificial neural network based modeling for impact energy of cast duplex stainless steel, *Arabian Journal for Science and Engineering*, 2018, vol. 43(3), pp.1335-1343. [**SCIE., I.F.: 0.865**].
9. K. SooryaPrakash, V. Kavimani, **Titus Thankachan**, P.M.Gopal, Investigations on mechanical and machinability behaviour of aluminium/flyashcenosphere/Gr hybrid composites processed through compocasting. *Journal of Applied Research and Technology*, 2017, vol. 15, pp.430–441.
10. **Titus Thankachan**, K. Soorya Prakash, V. Kavimani, Effect of friction stir processing and hybrid reinforcements on copper. *Materials and Manufacturing Processes*, 2018 pp.1-12[**SCIE., I.F.: 2.274**].
11. **Titus Thankachan**, SooryaPrakash K, R. Malini, S. Ramu, Prabhu Sundararaj, Sivakumar Rajandran, Devaraj Ramasamy, Sathiskumar Jothi, Prediction of Surface roughness and Material removal rate in Wire Electrical Discharge Machining on Aluminum Based Alloys/Composites using Taguchi Coupled Grey Relational Analysis and Artificial Neural Networks. *Applied Surface Science*, 2019, vol. 472, pp.22-35[**SCI/SCIE., I.F.: 3.387**].

12. **Titus Thankachan**, Sooryaprasanth K, Saranya C, Inigovalan V, Mathematical analysis on the effect of tin on mechanical, electrical and thermal properties in magnesium-tin alloys. *Materials discovery*, 2018, vol.12, pp.55-62.
13. Kavimani, V., K. Soorya Prakash, **Titus Thankachan**, Experimental investigations on wear and friction behaviour of SiC@ r-GO reinforced Mg matrix composites produced through solvent-based powder metallurgy. *Composites Part B: Engineering*, 2019, vol. 162, pp. 508–521 [SCI/SCIE., I.F.: 4.920].
14. Kavimani, V., K Soorya Prakash, **Titus Thankachan**, Investigation of graphene-reinforced magnesium metal matrix composites processed through a solvent-based powder metallurgy route. *Bulletin of Material Science*, 2019, vol. 42, pp. 39[SCIE., I.F.: 0.925].
15. Kavimani, V., K. Soorya Prakash, **Titus Thankachan**, Influence of machining parameters on wire electrical discharge machining performance of reduced graphene oxide/magnesium composite and its surface integrity characteristics. *Composites Part B: Engineering*, 2019, vol. 167, pp. 621-630[SCI/SCIE., I.F.: 4.920].
16. Rubesh, G. Prabhu, A. Ramesh, Ebenezer Jacob Dhas DS, **Titus Thankachan**, Characterization of Al-Si12Fe/silicon nitride composites based on microstructure and influence of weight fraction of silicon nitride particles on the mechanical and tribological behaviour. *Materials Research Express*, , 2019. [SCIE., I.F.: 1.925].
17. Kavimani, V., K. Soorya Prakash, **Titus Thankachan**, S. Nagaraja, A. K. Jeevanantham, Jithin P. Jhon. WEDM Parameter Optimization for Silicon@ r-GO/Magnesium Composite Using Taguchi Based GRA Coupled PCA. *Silicon*, 2019, pp. 1-15. [SCIE., I.F.: 1.25].
18. Kavimani, V., K. Soorya Prakash, **Titus Thankachan**. Multi-objective optimization in WEDM process of graphene–SiC-magnesium composite through hybrid techniques. *Measurement*, 2019, vol. 145, pp. 335-349. [SCI/SCIE., I.F.: 3.520].
19. **Titus Thankachan**, K. Soorya Prakash, V. Kavimani. "Investigating the effects of hybrid reinforcement particles on the microstructural, mechanical and tribological properties of friction stir processed copper surface composites." *Composites Part B: Engineering*, 2019, vol. 174 , pp. 107057. [SCI/SCIE., I.F.: 4.920].
20. Kumar, T. Satish, S. Shalini, M. Ramu, **Titus Thankachan**. Characterization of ZrC reinforced AA6061 alloy composites produced using stir casting process. *Journal of Mechanical Science and Technology*, 2020, vol.34, pp. 143-147. [SCIE., I.F.: 0.85].
21. V Kavimani, K Soorya Prakash, **Titus Thankachan**, R Udayakumar. "Synergistic improvement of epoxy derived polymer composites reinforced with Graphene Oxide (GO) plus Titanium di oxide (TiO2)." *Composites Part B: Engineering*, 2020, vol. 191 , pp. 107911. [SCI/SCIE., I.F.: 4.920].
22. **Titus Thankachan**, K. Soorya Prakash, V. Kavimani, and S. R. Silambarasan. "Machine Learning and Statistical Approach to Predict and Analyze Wear Rates in Copper Surface Composites." *Metals and Materials International* (2020): 1-15.[SCIE., I.F.: 1.99].