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Publication year: 2020

1. Mohanraj, T., Shankar, S., Rajasekar, R., Sakthivel, N. R., & Pramanik, A. (2020). Tool condition monitoring techniques in milling process—A review. *Journal of Materials Research and Technology*, 9(1), 1032-1042
2. Shankar, S., Nithyaprakash, R., Santhosh, B. R., Uddin, M. S., & Pramanik, A. (2020). Finite element submodeling technique to analyze the contact pressure and wear of hard bearing couples in hip prosthesis. *Computer Methods in Biomechanics and Biomedical Engineering*, 1-10.
3. Shankar, S., Nithyaprakash, R., Sugunesh, A. P., Selvamani, K. A., & Uddin, M. S. (2020). Experimental and Finite Element Wear Study of Silicon Nitride Against Alumina for Hip Implants with Bio-Lubricant for Various Gait Activities. *Silicon*, 1-12.
4. Mohanraj, T., Shankar, S., Rajasekar, R., & Uddin, M. S. (2020). Design, development, calibration, and testing of indigenously developed strain gauge-based dynamometer for cutting force measurement in the milling process. *Journal of Mechanical Engineering and Sciences*, 14(2), 6594-6609.
5. Shankar, S., Manikandan, M., Raja, G., & Pramanik, A. (2020). Experimental investigations of vibration and acoustics signals in milling process using kapok oil as cutting fluid. *Mechanics & Industry*, 21(5), 521.
6. Shankar, S., Nithyaprakash, R., Santhosh, B. R., Gur, A. K., & Pramanik, A. (2020). Experimental and submodeling technique to investigate the wear of silicon nitride against Ti6Al4V alloy with bio-lubricants for various gait activities. *Tribology International*, 151, 106529.
7. Shankar, S., Nithyaprakash, R., Sugunesh, P., Uddin, M., & Pramanik, A. (2020). Contact Stress and Wear Analysis of Zirconia Against Alumina for Normal and Physically Demanding Loads in Hip Prosthesis. *Journal of Bionic Engineering*, 17(5), 1045-1058
8. Shankar, S., Nithyaprakash, R., Sugunesh, A. P., & Uddin, M. S. (2020). Long-term wear prediction of zirconia on alumina ceramic for hip prosthesis. *International Journal of Surface Science and Engineering*, 14(3), 192-206.
9. Shankar, S., Nithyaprakash, R., Praveen, S., Kumar, S. S., & Sriram, A. M. (2020). Analysis of motor cycle helmet under static and dynamic conditions considering different materials. *Materials Today: Proceedings*.
10. Kumar, H. K. M., Subramaniam, S., Rathanasamy, R., Pal, S. K., & Palaniappan, S. K. (2020). Substantial reduction of carbon black and balancing the technical properties of styrene butadiene rubber compounds using nanoclay. *Journal of Rubber Research*, 23(2), 79-87.

11. Karupannasamy, D. K., SasiKumar, K. S. K., & Shankar, S. (2020). Experimental and numerical analysis of impact strength of Al6082 for automotive structural applications. *MaterialsToday:Proceedings*, doi.org/10.1016/j.matpr.2020.02.747

Publication year: 2019

12. Shankar, S., Mohanraj, T., & Rajasekar, R. (2019). Prediction of cutting tool wear during milling process using artificial intelligence techniques. *International Journal of Computer Integrated Manufacturing*, 32(2), 174-182.
13. Mohanraj, T., Shankar, S., Rajasekar, R., Deivasigamani, R., & Arunkumar, P. M. (2019). Tool condition monitoring in the milling process with vegetable based cutting fluids using vibration signatures. *Materials Testing*, 61(3), 282-288.
14. Pramanik, A., Basak, A. K., Uddin, M. S., Shankar, S., Debnath, S., & Islam, M. N. (2019). Burr formation during drilling of mild steel at different machining conditions. *Materials and Manufacturing Processes*, 34(7), 726-735.
15. Shankar, S., Mohanraj, T., & Pramanik, A. (2019). Tool Condition Monitoring While Using Vegetable Based Cutting Fluids During Milling of Inconel 625. *Journal of Advanced Manufacturing Systems*, 18(04), 563-581.
16. Thangarasu, S. K., Shankar, S., & Prasath, R. N. (2019). Experimental study and behavior in turning process of EN8 steel using RSM with hybrid algorithm approach. *International Journal of Bio-Inspired Computation*, 13(4), 242-256.
17. Subramanian, S., Arunachalam, B., Nallasivam, K., & Pramanik, A. (2019). Investigations on tribo-mechanical behavior of Al-Si10-Mg/sugarcane bagasse ash/SiC hybrid composites. *China Foundry*, 16(4), 277-284.
18. Shankar, S., Balaji, A., & Pramanik, A. (2019). Optimization of turning parameters for AlSi10Mg/SCBA/SiC hybrid metal matrix composite using response surface methodology. *Materials Research Express*, 6(10), 106553.
19. Shankar, S., & Harichandran, S. (2019). Aluminium alloy reinforced with fly ash: Techniques and particle size. *Jurnal Tribologi*, 23, 13-37.
20. Baaskaran, N., Ponappa, K., & Shankar, S. (2019). Study of the effect of varying shapes of holes in energy absorption characteristics on aluminium circular windowed tubes under quasi-static loading. *Structural Engineering and Mechanics*, 70(2), 153-168.
21. Shankar, S., Naveenkumar, R., & Karthick, J. (2019). Management of musculoskeletal shoulder and neck pain through ergonomic intervention: a pre-post design analysis in hand screen printing industry. *International Journal of Business Innovation and Research*, 18(3), 392-409.
22. S Shankar, C Maheshwari, R Gowtham, P Kiruba, K Mohansrinivas, 2019/1. Design and fabrication of portable sugarcane harvesting machine. *International Journal of Scientific and Technology Research*. 8. 12. 2059-2062.
23. S Shankar, V.G Pratheep, G Pranesh, P Umesh, VM Vignesh. 2019. Air suffocation prevention inside a car cabin. *International Journal of Scientific and Technology Research*. 8. 12. 2003-2006.

Publication year: 2018

24. Shankar, S., Balaji, A., & Kawin, N. (2018). Investigations on mechanical and tribological properties of Al-Si10-Mg alloy/sugarcane bagasse ash particulate composites. *Particulate Science and Technology*, 36(6), 762-770.
25. Pramanik, A., Basak, A. K., Dong, Y., Shankar, S., & Littlefair, G. (2018). Milling of nanoparticles reinforced Al-based metal matrix composites. *Journal of Composites Science*, 2(1), 13.
26. Nithyaprakash, R., Shankar, S., & Uddin, M. S. (2018). Computational wear assessment of hard on hard hip implants subject to physically demanding tasks. *Medical & biological engineering & computing*, 56(5), 899-910.
27. Shankar, S., Manikandan, M., & Raja, G. (2018). Evaluation of tribological properties of Ceiba pentandra (kapok) seed oil as an alternative lubricant. *Industrial Lubrication and Tribology*. 70(3). 506-5011.
28. Thangarasu, S. K., Shankar, S., Thomas, A. T., & Sridhar, G. (2018, February). Prediction of Cutting Force in Turning Process-an Experimental Approach. In *IOP conference series: materials science and engineering* (Vol. 310, No. 1).
29. Kalayarasan, M., Shankar, S., Manikandan, M., & Adithan, K. (2018). Mechanical loading characteristics of total hip prosthetics subjected to dynamic loading cycles. *Bio-Medical Materials and Engineering*, 29(6), 723-737.
30. Subramaniam, S., Murugesan, S., & Jayaraman, S. (2018). Assessment of shoulder and low back muscle activity of male kitchen workers using surface electromyography. *International journal of occupational medicine and environmental health*, 31(1), 81-90.
31. Subramaniam, S., Raju, N., Jeganathan, K., & Periyasamy, M. (2018). Evaluation of vibrant muscles over the shoulder region among workers of the hand screen printing industry. *International Journal of Occupational Safety and Ergonomics*, 24(2), 278-285.
32. Baaskaran, N., Ponappa, K., & Shankar, S. (2018). Assessment of dynamic crushing and energy absorption characteristics of thin-walled cylinders due to axial and oblique impact load. *Steel and Composite Structures*, 28(2), 179-194.
33. Subramanian, S., Raju, N., Srinivasan, P., Jeganathan, K., & Jayaraman, S. (2018). Low back pain assessment using surface electromyography among industry workers during the repetitive bending tasks. *International Journal of Human Factors and Ergonomics*, 5(4), 277-292.
34. Shankar, S., Siddarth, R., Nithyaprakash, R., & Uddin, M. S. (2018). Wear prediction of hard carbon coated hard-on-hard hip implants using finite element method. *International Journal of Computer Aided Engineering and Technology*, 10(4), 440-456.

Publication year: 2017

35. Uddin, M. S., Ibatan, T., & Shankar, S. (2017). Influence of surface texture shape, geometry and orientation on hydrodynamic lubrication performance of plane- to-plane slider surfaces. *Lubrication Science*, 29(3), 153-181.
36. Shankar, S., Mohanraj, T., & Ponappa, K. (2017). Influence of vegetable based cutting fluids on cutting force and vibration signature during milling of aluminium metal matrix composites. *Jurnal Tribologi*, 12, 1-17.
37. Shankar, S., Naveen Kumar, R., Mohankumar, P., & Jayaraman, S. (2017). Prevalence of work-related musculoskeletal injuries among South Indian hand screen-printing workers. *Work*, 58(2), 163-172.
38. Shankar, S., & Elango, S. (2017). Dry sliding wear behavior of palmyra shell ash-reinforced aluminum matrix (AlSi10Mg) composites. *Tribology Transactions*, 60(3), 469-478.
39. Baaskaran, N., Ponappa, K., & Shankar, S. (2017). Quasi-static crushing and energy absorption characteristics of thin-walled cylinders with geometric discontinuities of various aspect ratios. *Latin American Journal of Solids and Structures*, 14(9), 1767-1787.
40. S Shankar, T Mohanraj. 2017/7. Experimental Investigation and Process Parameter Optimization in Milling of 7075 – T6 Hybrid Aluminium Metal Matrix Composite using Response Surface Methodology. *Journal of the Balkan Tribological Association*. 23. 1. 124-138.
41. Kumar, M. K. H., Shankar, S., Rajasekar, R., Kumar, P. S., & Kumar, P. S. (2017). Partial replacement of carbon black by nanoclay in butyl rubber compounds for tubeless tires. *Materials Testing*, 59(11-12), 1054-1060.
42. Boopathi, M., Shankar, S., & Kanish, T. (2017). Investigation of Surface Texture Generated by Friction Drilling on Al2024-T6.
43. Shankar, S., & Kumar, P. K. (2017). Frictional characteristics of diamond like carbon and tungsten carbide/carbon coated high carbon high chromium steel against carbon in dry sliding conformal contact for mechanical seals. *Mechanics & Industry*, 18(1), 115.
44. Shankar, S., Gowthaman, K., & Uddin, M. S. (2017). Combined effect of cup abduction and anteversion angles on long-term wear evolution of PCD-on-PCD hip bearing couple. *International Journal of Biomedical Engineering and Technology*, 24(2), 169-183.
45. Uddin, M. S., Liu, Y. W., & Shankar, S. (2017). A New Star-Like Surface Texture for Enhanced Hydrodynamic Lubrication Performance. *Archives of Metallurgy and Materials*, 62.
46. Shankar, S., Karthick, J., & Naveenkumar, R. (2018). Ergonomics for Hand Screen Printing Workers: Cognitive Perception. In *Ergonomic Design of Products and Worksystems-21st Century Perspectives of Asia* (pp. 155-162). Springer, Singapore.
47. Shankar, S., Shanmugam, M., & Srinivasan, J. (2018). Prevalence of Upper Limb Disorders and Investigation of Risk Factors Among Commercial Kitchen Male

Workers in South India. In *Ergonomics in Caring for People* (pp. 27-33). Springer, Singapore.

48. Kalayarasan, M., Raja, V. P., Shankar, S., Nithin, V., & Karthik, V. (2017). Experimental and numerical investigations on plasma sprayed ceramic coatings with varying coating thickness. *International Journal of Computational Materials Science and Surface Engineering*, 7(1), 26-43.

Publication year: 2016

49. Venkatachalam, N., Navaneethakrishnan, P., Rajsekar, R., & Shankar, S. (2016). Effect of pretreatment methods on properties of natural fiber composites: a review. *Polymers and Polymer Composites*, 24(7), 555-566.
50. Shankar, S., Mohanraj, T., & Thangarasu, S. K. (2016). Multi-response milling process optimization using the Taguchi method coupled to grey relational analysis. *Materials Testing*, 58(5), 462-470.
51. Shankar, S., Gowthaman, K., & Uddin, M. S. (2016). Predicting long-term wear performance of hard-on-hard bearing couples: effect of cup orientation. *Medical & biological engineering & computing*, 54(10), 1541-1552.
52. Shankar, S., & Krishnakumar, P. (2016). Frictional characteristics of PVD coated mechanical seals against carbon under various classes of liquid lubricants. *Industrial Lubrication and Tribology*.
53. Shankar, S., & Praveenkumar, G. (2016). Experimental study on frictional characteristics of tungsten carbide versus carbon as mechanical seals under dry and eco-friendly lubrications. *International Journal of Refractory Metals and Hard Materials*, 54, 39-45.
54. Elango, B., Bornmann, L., & Shankar, S. (2016). Study of citation networks in tribology research. *Collnet Journal of Scientometrics and Information Management*, 10(1), 71-96.
55. Shankar, S., & Nithyaprakash, R. (2016). Predicting the wear of soft-on-hard bearing couples for human hip prosthesis using finite element concepts. *Journal of Mechanics in Medicine and Biology*, 16(03), 1650020.
56. Shankar, S., & Kesavan, D. (2016). Wear prediction of the lumbar total disc replacement using finite element method. *Journal of Mechanics in Medicine and Biology*, 16(02), 1650004.
57. Shankar, S., Gowthaman, K., Nirmala, C., Raja, G., & Kumar, N. S. (2016). Investigations on Various Thread Designs and Materials for Dental Implants: A 3D Finite Element Study. *Trends in Biomaterials & Artificial Organs*, 30(2).