

Dr. Rajyalakshmi G

Publications:

Year: 2020

1. Rajyalakshmi, G. (2020). FE Simulation for stress distribution and surface deformation in Ti-6Al-4 V induced by interaction of multi scale laser shock peening parameters. *Optik*, 164280.
2. Ganji, D. K., & Rajyalakshmi, G. (2020). Influence of Alloying Compositions on the Properties of Nickel-Based Superalloys: A Review. In *Recent Advances in Mechanical Engineering* (pp. 537-555). Springer, Singapore.
3. Sreerag, C., Gokul, R., Vinaykumar, J., & Rajyalakshmi, G. (2020). Impact of instantaneous curvature on force and heat generation in manufacturing processes—a mathematical modelling. *Engineering Computations*.
4. Yelamasetti, B., Rajyalakshmi, G., & Vemanaboina, H. (2020). Comparison of metallurgical and mechanical properties of dissimilar joint of AISI 316 and Monel 400 developed by pulsed and constant current gas tungsten arc welding processes. *The International Journal of Advanced Manufacturing Technology*, 1-12.
5. Viswanth, V. S., Ramanujam, R., & Rajyalakshmi, G. (2020). Performance study of eco-friendly dielectric in EDM of AISI 2507 super duplex steel using Taguchi-fuzzy TOPSIS approach. *International Journal of Productivity and Quality Management*, 29(4), 518-541.
6. Ganji, D. K., & Rajyalakshmi, G. (2020). Influence of Alloying Compositions on the Properties of Nickel-Based Superalloys: A Review. In *Recent Advances in Mechanical Engineering* (pp. 537-555). Springer, Singapore.

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7. Ranjith Kumar, G., Rajyalakshmi, G., & Swaroop, S. (2019). A critical appraisal of laser peening and its impact on hydrogen embrittlement of titanium alloys. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 233(13), 2371-2398.
8. Varela, M. L., Putnik, G. D., Manupati, V. K., Rajyalakshmi, G., Trojanowska, J., & Machado, J. (2019). Integrated process planning and scheduling in networked manufacturing systems for I4. 0: a review and framework proposal. *Wireless Networks*, 1-13.
9. Balram, Y., & Rajyalakshmi, G. (2019). Thermal fields and residual stresses analysis in TIG weldments of SS 316 and Monel 400 by numerical simulation and experimentation. *Materials Research Express*, 6(8), 0865e2.
10. Kumar, G. R., & Rajyalakshmi, G. (2019). Role of nano second laser wavelength embedded recast layer and residual stress on electrochemical corrosion of titanium alloy. *Materials Research Express*, 6(8), 086583.
11. Kumar, G. R., Rajyalakshmi, G., Swaroop, S., Stango, S. A. X., & Vijayalakshmi, U. (2019). Laser shock peening wavelength conditions for enhancing corrosion behaviour of titanium alloy in chloride environment. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41(3), 129.
12. Yelamasetti, B., & Rajyalakshmi, G. (2019). Effect of TIG, pulsed TIG and Interpulse TIG welding techniques on weld strength of dissimilar joints between Monel 400 and AISI 316. *Materials Today: Proceedings*, 19, 755-760.

Year: 2018

13. Manupati, V. K., Rajyalakshmi, G., Varela, M. L. R., Machado, J., & Putnik, G. D. (2018, June). Investigation of Copper and Zinc Contamination on the Work Piece Surface with WEDM. In *International Conference on Innovation, Engineering and Entrepreneurship* (pp. 608-615). Springer, Cham.

14. Kumar, G. R., Joshi, K. S., Rajyalakshmi, G., Kalainathan, S., & Prabhakaran, S. (2018, February). Investigation of Mechanical, Microstructural and Corrosion behaviour of Titanium subjected to Laser Peening with and without Ablation. In *IOP Conference Series: Materials Science and Engineering* (Vol. 310, No. 1, p. 012015). IOP Publishing.
15. Varela, M. L., Putnik, G. D., Manupati, V. K., Rajyalakshmi, G., Trojanowska, J., & Machado, J. (2018). Collaborative manufacturing based on cloud, and on other i4. 0 oriented principles and technologies: a systematic literature review and reflections. *Management and Production Engineering Review*, 9.
16. Viswanth, V. S., Ramanujam, R., & Rajyalakshmi, G. (2018). A review of research scope on sustainable and eco-friendly electrical discharge machining (E-EDM). *Materials Today: Proceedings*, 5(5), 12525-12533.
17. Joshi, K. S., Rajyalakshmi, G., Ranjith, G., Kalainathan, S., & Prabhakaran, S. (2018). Optimization of Laser Shock Peening For Titanium. *Materials Today: Proceedings*, 5(5), 12174-12186.
18. Indumathi, S., Rajyalakshmi, G., & Rajasekhar, K. (2018). Experimental Investigations On Friction Stir Spot Welding Process Of Dissimilar Metals. *Materials Today: Proceedings*, 5(5), 12056-12061.
19. Singla, A. M., Sharma, S., Kaul, A., & Rajyalakshmi, G. (2018). Optimization of WEDM process during machining of Al-Al₂O₃ composite using Taguchi based Grey Relational Analysis. In *MATEC Web of Conferences* (Vol. 172, p. 04008). EDP Sciences.
20. Yelamsetti Balram and Rajyalakshmi G (2018) 'Thermal stress analysis of similar and dissimilar welded joints', U.P.B. Sci. Bull., Series D, 80.
21. Ranjith Kumar, G., Gopalakrishnan, A., Malav, A., Panjawani, H.S., Rajyalakshmi, G.(2018). Comparative studies of simulation, artificial neural network and fuzzy logic for laser shock peening. UPB Scientific Bulletin, Series D: Mechanical Engineering 80(1), pp. 229-242.
22. Reddy, M. S., Ratnam, C., Rajyalakshmi, G., & Manupati, V. K. (2018). An effective hybrid multi objective evolutionary algorithm for solving real time event in flexible job shop scheduling problem. *Measurement*, 114, 78-90.

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23. Tirumala, D., Gajjela, R., & Das, R. (2018). ANN and RSM approach for modelling and multi objective optimization of abrasive water jet machining process. *Decision Science Letters*, 7(4), 535-548.
24. Kumar, G. R., Rajyalakshmi, G., & Manupati, V. K. (2017). Surface Micro Patterning of Aluminium Reinforced Composite through Laser Peening. *International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME)*, 7(4), 15-27.
25. Manupati, V. K., Rajyalakshmi, G., Chan, F. T., & Thakkar, J. J. (2017). A hybrid multi-objective evolutionary algorithm approach for handling sequence-and machine-dependent set-up times in unrelated parallel machine scheduling problem. *Sādhana*, 42(3), 391-403.
26. Kumar, G. R., & Rajyalakshmi, G. (2017). Modelling and multi objective optimization of laser peening process using Taguchi utility concept. In *IOP Conference Series: Materials Science and Engineering* (Vol. 263, No. 6, p. 062055).
27. Ajay, B. T., Vitthal, P. M., & Rajyalakshmi, G. (2017). WEDM machining on Aerospace Materials for improving Material Properties. *Materials Today: Proceedings*, 4(8), 9107-9116.

Year: 2016

28. Rajyalakshmi, G., Mahesh, S., Chaitanya, P. L., & Kaushik, T. (2016). Optimization of WEDM process during machining of reinforced aluminium metal matrix. *International Journal of Pure and Applied Mathematics*, 109(5), 151-159.
29. Varun, S., Rajyalakshmi, G., Reddy, B. B., & Reddy, R. R. V. V. (2016, September). Modelling and multi objective optimization of WEDM of commercially Monel super alloy using evolutionary

algorithms. In *IOP Conference Series: Materials Science and Engineering* (Vol. 149, No. 1, pp. 1-15).

30. Rajyalakshmi, G. (2016). Modeling and Multi-Objective Optimization of WEDM of Commercially Monel Super Alloy considering Multiple Users Preferences. *Journal of Pharmaceutical Sciences and Research*, 8(8), 902.
31. Reddy, A. S. N., Rao, P. S., & Rajyalakshmi, G. (2016). Productivity improvement using time study analysis in a small scale solar appliances industry-a case study. *Arpn J. Eng. Appl. Sci*, 11(1), 666-674.