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Journal Publications

- 1. R Rajasekaran, AK Lakshminarayanan, R Damodaram, V Balasubramanian, Stress Corrosion Cracking Failure of Friction Stir Welded Nuclear Grade Austenitic Stainless Steel, Engineering Failure Analysis Elsevier, Available online 15 October 2020, 105012 https://doi.org/10.1016/j.engfailanal.2020.105012 (IF: 2.897)
- 2. R Rajasekaran, AK Lakshminarayanan, Probing the stress corrosion cracking resistance of laser beam welded AISI 316LN austenitic stainless steel, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, (IF: 1.386)
- 3. K Radhika, AK Lakshminarayanan, An insight into the stress corrosion cracking resistance of friction stir processed and micro arc oxidation coated ZE41 grade magnesium alloy, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Science, Sage Publication (IF: 1.386)
- 4. S RAMACHANDRAN, AK LAKSHMINARAYANAN, An insight into microstructural heterogeneities formation between weld subregions of laser welded copper to stainless steel joints, Transactions of Nonferrous Metals Society of China 30 (3), 727-745 (IF: 2.615)
- 5. AK Lakshminarayanan, R Rajasekaran, M Menaka, Correlation between Tensile Deformation Behavior and Microstructural Morphology of Nuclear Grade Austenitic Stainless Steel Weld Joints using Infrared Thermography Technique Welding Technology Review 92 (1), 7-15
- AK Lakshminarayanan, KL Harikrishna, Role of Overlap Ratio on the Microstructure of Friction Stir Multiseam Cladded Copper-Stainless Steel Lap Joints, Materials Science Forum 979, 102-106
- 7. AK Lakshminarayanan, CJ Daniel, Influence of Friction Stir Welding Variants on Crashworthiness of Friction Stir Welded Aluminium Top Hat Sections Materials Science Forum 979, 97-101
- 8. VK Srinivas, AK Lakshminarayanan On the Local Constitutive Behavior of Friction Stir Welded AISI 304 Stainless Steel Joints Materials Science Forum 979, 107-113

- 9. AK Lakshminarayanan, SR Rao, K Sridhar, A Vignesh Materials Science Forum 979, 157-161 On the Microstructure and Erosion Corrosion Behavior of Laser Processed Nickel Aluminium Bronze, Materials Science Forum 979, 157-161
- AK Lakshminarayanan, KS Jayakumar Use of Friction Extrusion to Fabricate Magnesium Alloy Wires with Rare Earths from Machined Chips Materials Science Forum 979, 119-123
- 11. S Ramesh, AK Lakshminarayanan, Y Raghavan, Y Harathi Fabrication and Numerical Analysis of Friction Stir Back Extruded Lightweight Magnesium Alloy Heat Pipes Materials Science Forum 979, 129-134
- 12. A Venkatakrishna, AK Lakshminarayanan, M Menaka Analysis of Tensile Deformation Behavior in Friction Stir Welded P91-316LN Dissimilar Joints Using Infrared Thermography Materials Science Forum 979, 114-118
- 13. R Rajasekaran, AK Lakshminarayanan, A Venkatakrishna, K Radhika Study of Infrared Thermography on Tensile Behavior of Laser Beam Welded 316LN Austenitic Stainless Steel Trends in Manufacturing and Engineering Management, 779-787
- 14. A Venkatakrishna, AK Lakshminarayanan, K Radhika, R Rajasekaran Characterizing the Tensile Deformation Behavior of Friction Stir Welded Dissimilar Joints Using Acoustic Emission Technique Trends in Manufacturing and Engineering Management, 767-778
- 15. SCJ Daniel, AK Lakshminarayanan Comparative Study of Friction Stir Welding and Underwater Friction Stir Welding on Magnesium ZE41 Alloy Trends in Manufacturing and Engineering Management, 755-766

2019

- 16. C Sekkappan, V Valsaraj, AK Lakshminarayanan, Enhancement of properties of pure lead via underwater friction stir processing for thermoelectric and battery applications, Kovove Mater 57, 415-427 (IF: 0.569)
- 17. R Rajasekaran, AK Lakshminarayanan, M Vasudevan, P Vasantharaja Role of welding processes on microstructure and mechanical properties of nuclear grade stainless steel joints (IF: 1.3)
- 18. S Ramachandran, AK Lakshminarayanan, PAS Reed, JM Dulieu-Barton Development of High-Fidelity Imaging Procedures to Establish the Local Material Behavior in Friction Stir Welded Stainless Steel Joints Metals 9 (5), 592 (IF: 2.1)
- 19. R Saranarayanan, AK Lakshminarayanan, B Venkatraman, A combined full-field imaging and metallography approach to assess the local properties of gas tungsten arc welded copper–stainless steel joints Archives of Civil and Mechanical Engineering 19 (1), 251-267(IF: 2.846)

2017

- 20. Prabhuraj, P, Rajakumar, S, Lakshminarayanan, A.K, Balasubramanian, V. Evaluating stress corrosion cracking behaviour of high strength AA7075-T651 aluminium alloy, Journal of the Mechanical Behavior of Materials, Vol. 26(3-4), 2017, pp. 105-112
- 21. B. Alwin, A. K. Lakshminarayanan, M. Vasudevan, P. Vasantharaja, Assessment of Stress Corrosion Cracking Resistance of Activated Tungsten Inert Gas-Welded Duplex Stainless Steel Joints, Journal of Materials Engineering and Performance, Vol. 26 (12) (2017), pp 5825–5836 (IF: 1.331)
- 22. Aravind Murugan, R. Sai Santhosh, Ravikumar Raju, A.K. Lakshminarayanan, Shaju K. Albert, Dissimilar and Similar Laser Beam and GTA Welding of Nuclear Fuel Pin

- Cladding Tube to End Plug Joint", Advanced Engineering Forum, Vol. 24, pp. 40-47, 2017, 40-47
- 23. B.Rajabharathi, AK Lakshminarayanan, T.Ramprabhu, Impact of friction diffusion welding parameters on the properties of rare earth containing magnesium alloy tube-tube plate welds, Journal of Alloys and Compounds 712, 355–364 (IF: 3.014)
- 24. A.K.Lakshminarayanan, VE.Annamalai, Fabrication and performance evaluation of friction stir multiseam clad dissimilar Al-Mg Joints, Transactions of Non Ferrous Society of China (Elsevier), Transactions of Nonferrous Metals Society of China 27 (1), 25-35-(IF:1.34)

2016

25. A.K.Lakshminarayanan, Enhancing the properties of friction stir welded stainless steel joints via multi-criteria optimization, Archives of Civil and Mechanical Engineering (Elsevier), Volume 16, Issue 4, September 2016, Pages 605-617 (IF:2.00)

2015

- 26. A.K.Lakshminarayanan, M. Suresh, M. Sibi VarshanThermal Performance Evaluation Of Friction Stir Welded And Bolted Cold Plates With Al/Cu Interface, JOM, Springer 67(5), (2015), 1032-1044 (IF: 1.8)
- 27. A.K. Lakshminarayanan, V.E. Annamalai , K. Elangovan Identification of optimum friction stir spot welding process parameters controlling the properties of low carbon automotive steel joints, Journal of Materials Research Technology (Elsevier) Volume 4, Issue 3, July–September 2015, Pages 262–272 (IF: 2.5)
- 28. A.K. Lakshminarayanan, R. Saranarayanan, V. Karthik Srinivas, B. Venkatraman, Characteristics of friction welded AZ31B magnesium–commercial pure titanium dissimilar joints, Journal of Magnesium and Alloys (Elsevier), Volume 3, Issue 4, December 2015, Pages 315–321
- 29. B.Ezhil Vendhan, K.L.Hari krishna, A.K.Lakshminarayanan, Numerical simulation on effect of impact velocity and target thickness in magnesium alloy AZ31B, Applied Mechanics and Materials Vol. 787 (2015) pp 291-295
- 30. R.Archish, A.K.Lakshminarayanan, V.E. Annamalai, Optimum welding conditions for dissimilar spot friction joining of Aluminium-Interstitial free steel joints, Applied Mechanics and Materials Vol. 787 (2015) pp 396-400
- 31. V.G.Vijay Prakaash, A.Vignesh, A.K.Lakshminarayanan and V.Balasubramanian, Role of Induction preheating on tool wear and properties of friction stir welded 409M stainless steel joints, Applied Mechanics and Materials Vol. 787 (2015) pp 401-405
- 32. G.Manimaran, A.K.Lakshminarayanan and S.Balaji, Understanding the parameters controlling the resistance spot welding of DP980 steel, Applied Mechanics and Materials Vol. 787 (2015) pp 411-415
- 33. A. Vignesh1, V.G. Vijay Prakaash, and A.K. Lakshminarayanan, Improving wear resistance of AISI 316LN austenitic stainless steel using friction stir processing, Applied Mechanics and Materials Vol. 787 (2015) pp 421-425
- 34. Jason Christopher Jolly, Karthik Srinivas V, and A K Lakshminarayanan, Corrosion resistance of friction stir processed AZ91D magnesium alloy under a salt fog environment, Applied Mechanics and Materials Vol. 787 (2015) pp 426-430
- 35. R. Jayaraman, T.Balusamy, and A.K.Lakshminarayanan, Assessment of Microstructure and Wear Resistance of Friction Stir Processed Cast Mg-Al-Zn Magnesium Alloy, Applied Mechanics and Materials Vol. 787 (2015) pp 442-447

- 36. A.Shanmugasundaram, A.K.Lakshminarayanan, and V.E.Annamalai, Microstructure and tensile properties of friction stir and gas tungsten arc welded AZ91D magnesium alloy joints, Applied Mechanics and Materials Vol. 787 (2015) pp 470-474
- 37. Karthik Srinivas, R. Saranarayanan, A.K.Lakshminarayanan, N.Srinivasan, .Venkatraman Zone wise properties of friction stir welded copper stainless steel joints using Digital Image Correlation, Applied Mechanics and Materials Vol. 787 (2015) pp 485-489
- 38. A.K.Lakshminarayanan, and M.Suresh, Thermal Performance Evaluation of Friction Stir Welded Flat Plate Heat Sink Using CFD Analysis, Applied Mechanics and Materials Vol. 787 (2015) pp 505-509
- 39. K. Maniraj, , A.K. Lakshminarayanan, Wear mitigation in cast magnesium alloy through flyash reinforced friction stir surface compositing, Applied Mechanics and Materials Vol. 787 (2015) pp 627-631