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Area of Specialization: Welding Metallurgy

List of Publications

- 1. Effect of Welding Speed on Aspect Ratio of Hastelloy X Weldment by Keyhole Plasma Arc Welding (K-PAW).** M Sathishkumar, M Manikandan, P Subramani, N Anbarasan, S Jerome, Materials Today: Proceedings 22, 3297-3304.
- 2. An Automated Detection of Diabetic Retinopathy Using Convolutional Neural Network in ResNet-50.** S Mishra, M Manikandan, RN Raj EasyChair.
- 3. Exploration of mechanical and metallurgical characterization of Incoloy 20 weldment using gas tungsten arc welding methods.** M Natesh, M Manikandan Materials Today: Proceedings.
- 4. Influence of Filler Wires to Suppress the Microsegregation and to Improve Mechanical Properties of Conventional Arc-Welded Nickel-Based Superalloy Incoloy 20.** M Natesh, M Manikandan. TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS.
- 5. Hot fissuring mitigation in arc welding of Nickelvac 23 superalloy.** M Natesh, M Manikandan. Journal of Manufacturing Processes 56, 228-237
- 6. Effect of hot corrosion demeanour on aerospace-grade Hastelloy X made by pulsed and constant current arc welding in molten salts at 820°.** C M Sathishkumar, P Subramani, M Natesh, M Venkateshkannan, IOP Conference Series: Materials Science and Engineering 912 (3), 032060.
- 7. Hot Corrosion Demeanour of Key-Hole Plasma Arc Welded Aerospace Grade Hastelloy X in Molten Salts Environment.** M Sathishkumar, P Subramani, N Arivazhagan, K GokulKumar, CD Naiju, SAE Technical Paper.
- 8. Effect of Austenitic Filler Wires on Duplex Stainless Steel 2205 Weldment Made by Gas Tungsten Arc Welding.** M Natesh, M Sathishkumar, NS Gulati, S Abhinav, L Nimish, JR Nithin, SAE Technical Paper.
- 9. Investigation on the Effect of Pulsed Frequency on Microstructure and Hardness of Alloy C-2000 by Current Pulsing.** B Arulmurugan, MS Kumar, D Balaji, S Sathish, S Rajkumar, SAE Technical Paper

- 10. Study on the High Temperature Tensile Properties of Aerospace Grade Hastelloy X Joined by Pulsed Current Arc Welding.** S Mathiyazhagan, N Arivazhagan, K Gokulkumar, CG Mohan, CD Naiju, SAE Technical Paper
- 11. Development of Pulsed Cold Metal Transfer and Gas Metal Arc Welding Techniques on High-Strength Aerospace-Grade AA7475-T761.** TAV Kumaran, SANJ Reddy, S Jerome, N Anbarasan, N Arivazhagan, Journal of Materials Engineering and Performance 29 (11), 7270-7290.
- 12. Investigation on Microstructure and Mechanical Properties of Corrosion Resistance Alloy C-2000 Fabricated by Conventional Arc Welding Technique.** A John, KJ Johny, B Arulmurugan, S Rajkumar, N Arivazhagan, CD Naiju, SAE Technical Paper.
- 13. Laser Shock Peening (LSP) to Improve the Metallurgical and Mechanical Properties of Gas Tungsten Arc Welding (GTAW) Joints in Hastelloy C-276.** SANJ REDDY, S PRABHAKARAN, S KALAINATHAN, N ARIVAZHAGAN, Lasers in Engineering (Old City Publishing) 42.
- 14. Effect of post-weld heat treatment on the microstructure and tensile properties of electron-beam-welded 21st century nickel-based super alloy 686.** B Arulmurugan, K Modi, AP Sanjay, PA Yashwant, N Rickwith, CG Mohan, Sādhanā 44 (2), 38.
- 15. Influence of Laser Shock Peening on Wire Arc Additive Manufactured Low Carbon Steel** M Manikandan, SSM Prabu, S Jayachandran, K Akash, IA Palani, Advances in Micro and Nano Manufacturing and Surface Engineering, 509-516.
- 16. Surface modification technique to enhance metallurgical and mechanical properties of alloy C-276 weldment by laser shock peening without coating** SANJ Reddy, E Thrinadh, S Prabhakaran, S Kalainathan, N Arivazhagan, Sādhanā 43 (12), 193.
- 17. WELDING OF ALLOY C-276.** M MANIKANDAN, N ARIVAZHAGAN, R NAGESWARA, Microscopy Applied to Materials Sciences and Life Sciences, 167.
- 18. Investigation on microstructure and tensile properties of dissimilar weld joints between AISI 316l and duplex 2205 stainless steel.** DP Tumu, P Subramani, KG Kumar, M Manikandan, CG Mohan, IOP Conference Series: Materials Science and Engineering 402 (1), 012075.
- 19. Investigation on Microstructure and Mechanical Properties of ATIG welded alloy C-276 with Fe₂O₃ flux.** A Surve, S Bhosage, A Mehta, A Srikanth, M Arivarasu, M Manikandan, IOP Conference Series: Materials Science and Engineering 310 (1), 012080.
- 20. Investigation on Microstructure and Mechanical Properties of Continuous and Pulsed Current Gas Tungsten Arc Welded alloy 600.** A Srikanth, M Manikandan MS&E 310 (1), 012073.