

Publications of DC member 5 (Dr. N SIVA SHANMUGAM)

NUMBER OF PUBLICATIONS: 45

1. A.R. Kannan, **N. Siva Shanmugam**, V. Rajkumar, M. Vishnukumar. Insight into the microstructural features and corrosion properties of wire arc additive manufactured super duplex stainless steel (ER2594), Materials Letters, 127680, 2020
2. R. Duraisamy, S.M. Kumar, A.R. Kannan, **N. Siva shanmugam**, K. Sankaranarayananasamy, M.R. Ramesh. Tribological performance of wire arc additive manufactured 347 austenitic stainless steel under unlubricated conditions at elevated temperatures, Journal of Manufacturing Processes 56, 306-321, 2020
3. A.R. Kannan, S.M. Kumar, N.P. Kumar, **N. Siva shanmugam**, A.S. Vishnu, YasamPalguna. Process-microstructural features for tailoring fatigue strength of Wire Arc Additive Manufactured Functionally Graded Material of SS904L and Hastelloy C-276, Materials Letters, 127968, 2020
4. R. Pramod, **N. Siva shanmugam**, C.K. Krishnadasan. Studies on cold metal transfer welding of aluminium alloy 6061-T6 using ER 4043, Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2020
5. S.M. Kumar, **N. Siva shanmugam**. Effect of heat input and weld chemistry on mechanical and microstructural aspects of double side welded austenitic stainless steel 321 grade using tungsten inert gas arc welding process Einfluss der Warmeeinbringung und Schweisschemie auf die mechanischen und mikrostrukturellen Eigenschaften beim beidseitigen Wolfram inertgasschweißen von rostfreiem Stahl (X6CrNiTi18-10), Materialwissenschaft und werkstofftechnik 51 (3), 349-367, 2020
6. B. Girinath, **N. Siva shanmugam**, C. Sathiyarayanan. Studies on influence of torch orientation on microstructure, mechanical properties and formability of AA5052 CMT welded blanks, Archives of Civil and Mechanical Engineering 20 (1): 1-22, 2020
7. R. Pramod, S. Mohan Kumar, **N. Siva shanmugam**, S.A. Vendan. Formability studies on plasma arc welded duplex stainless steel 2205 sheet, Materialwissenschaft und Werkstofftechnik 51 (2): 163-173, 2020
8. A.R. Kannan, **N. Siva shanmugam**. Some Studies on Mechanical Properties of AISI 316L Austenitic Stainless Steel Weldments by Cold Metal Transfer Process, Advances in Additive Manufacturing and Joining, 359-371, 2020
9. B. Girinath, **N. Siva Shanmugam**, K. Sankaranarayananasamy. Weld bead graphical prediction of cold metal transfer weldment using ANFIS and MRA model on Matlab platform, Simulation 95 (8): 725-736, 2019
10. A.R. Kannan, **N. Siva Shanmugam**, S.A. Vendan. Effect of cold metal transfer process parameters on microstructural evolution and mechanical properties of AISI 316L tailor welded

blanks, The International Journal of Advanced Manufacturing Technology 103 (9-12):4265-4282, 2019

11. A. Karpagaraj, **N. Siva Shanmugam**, K. Sankaranarayanan. Experimental investigations and numerical prediction on the effect of shielding area and post flow time in the GTAW of CP Ti sheets, The International Journal of Advanced Manufacturing Technology 101 (9-12):2933-2945, 2019
12. A.R. Kannan, **N. Siva Shanmugam**, S. Naveenkumar. Effect of Arc Length Correction on Weld Bead Geometry and Mechanical Properties of AISI 316L Weldments by Cold Metal Transfer (CMT) Process, Materials Today: Proceedings 18: 3916-3921, 2019
13. V. Dhinakaran, **N. Siva Shanmugam**, M. Arunkumar. Numerical prediction of temperature distribution and residual stresses on plasma arc welded thin titanium sheets, International Journal of Modelling and Simulation, 2019
14. S. Mohan Kumar, **N. Siva Shanmugam**. Finite element simulation for tensile and impact test of activated TIG welding of AISI 321 austenitic stainless steel, Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications 233 (11):2323-2334, 2019
15. R. Pramod, C.K. Krishnadasan, **N. Siva Shanmugam**. Design and finite element analysis of metal-elastomer lined composite over wrapped spherical pressure vessel, Composite Structures 224: 111028, 2019
16. R. Duraisamy, S. Mohan Kumar, A. Rajesh Kannan, **N. Siva Shanmugam**, K. Sankaranarayanan. Reliability and sustainability of wire arc additive manufactured plates using ER 347 wire-mechanical and metallurgical perspectives, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science 2019
17. B. Girinath, **N. Siva Shanmugam**, K. Sankaranarayanan. Investigation on the Effect of Torch Angle on the Formability of AA5052 CMT Weldments, Transactions of the Indian Institute of Metals, 1-5, 2019
18. S.M. Kumar, **N. Siva shanmugam**, K. Sankaranarayanan. Activated TIG Welding of AISI 321 Austenitic Stainless Steel for Predicting, Advances in Computational Methods in Manufacturing: Select Papers from ICCMM, 179, 2019
19. A.R. Kannan, **N. Siva shanmugam**. Some Studies on Mechanical Properties of AISI 316L Austenitic Stainless Steel, Advances in Additive Manufacturing and Joining: Proceedings of AIMTDR, 359, 2019
20. K. Parthiban, **N. Siva shanmugam**, K. Sankaranarayanan, S.A. Vendan. Studies on spin arc welding process on the behavior of C1018 plates-an insight into mechanical and metallurgical transformation, Materials Research Express 6 (10): 106540, 2019
21. J.A.S. Edberk, **N. Siva shanmugam**. Studies on the weld integrity, formability and

microstructural evolution of grade 2 titanium sheets of laser beam welding process, *Materials Research Express* 6 (4): 046525, 2019

22. V. Dhinakaran, R. Patil, G. Sriram, **N. Siva shanmugam**. Studies on crack propagation in plasma arc welded Ti-6Al-4V joint during erichsen cupping test, 2019
23. M. Arunkumar, V. Dhinakaran, **N. Siva shanmugam**, V. Petley, Effect of Plasma Arc Welding on Residual Stress and Distortion of Thin Titanium Sheet, *Materials Research* 22 (6): 2019
24. B. Suresha, S.G. Channabasavanna, **N. Siva shanmugam**. Microstructure and Abrasive Wear Behaviour of Nickel Based Hardfacing Stainless Steel Deposited by Gas Metal Arc Welding, *Applied Mechanics and Materials* 895: 278-283, 2019
25. S.M. Kumar, **N. Siva shanmugam**, K. Sankaranarayananasamy. Activated TIG Welding of AISI 321 Austenitic Stainless Steel for Predicting Parametric Influences on Weld Strength of Tensile Test—Experimental and Finite Element Method Approach, *Advances in Computational Methods in Manufacturing*, 179-192, 2019
26. R. Pramod, **N. Siva shanmugam**, C.K. Krishnadasan, K. Sankaranarayananasamy. Finite Element Analysis of Potential Liner Failures During Operation in Spherical Pressure Vessel, *Advances in Computational Methods in Manufacturing*, 1073-1087, 2019
27. S.M. Kumar, **N. Siva Shanmugam**. Studies on the weldability, mechanical properties and microstructural characterization of activated flux TIG welding of AISI 321 austenitic stainless steel, *Materials Research Express* 5 (10): 106524, 2018
28. K.D. Ramkumar, V. Varma, M. Prasad, N.D. Rajan, **N. Siva Shanmugam**. Effect of activated flux on penetration depth, microstructure and mechanical properties of Ti-6Al-4V TIG welds, *Journal of Materials Processing Technology* 261, 233-241, 2018
29. P. Subramani, S. Shetty, R. Anirudhapandit, P.R. Hari, K.G. Kumar, M. Manikandan, N. Arivazhagan, **N. Siva Shanmugam**. Investigations on the Microstructure, Microsegregation and Hardness Properties of Bead on Plasma Arc Welded C-276 Alloy, *Materials Today: Proceedings* 5 (5): 13628-13636, 2018
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33. C. Mani, K. Sankaranarayananasamy, **N. Siva shanmugam**.Evaluating the effects of different types of hand gloves and handle grip materials on hand-arm response while operating hand grinding machines,Journal of Industrial Safety Engineering 4 (3): 10-23, 2018
34. A. Karpagaraj, **N. Siva shanmugam**, B. Suresha, S.A. Vendan.Studies on Spring Back Effect of TIG Welded Ti-6Al-4V Sheets,Simulations for Design and Manufacturing, 147-171, 2018
35. S. Hiremath, **N. Siva shanmugam**, B.R.R. Bapu.Advances in Manufacturing Technology, 2018
36. V. Dhinakaran, **N.SivaShanmugam**, K. Sankaranarayananasamy.Some studies on temperature field during plasma arc welding of thin titanium alloy sheets using parabolic Gaussian heat source model,Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science 231 (4):695-711, 2017
37. V. Dhinakaran, **N. Siva Shanmugam**, K. Sankaranarayananasamy.Experimental investigation and numerical simulation of weld bead geometry and temperature distribution during plasma arc welding of thin Ti-6Al-4V sheets,The Journal of Strain Analysis for Engineering Design 52 (1): 30-44, 2017
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39. V. Dhinkaran, **N. Siva Shanmugam**, K. Sankaranarayananasamy, R. Rahul.Analytical and numerical investigations of weld bead shape in plasma arc welding of thin Ti-6al-4v sheets,Simulation, 2017
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41. R.S. Bharathi, **N. Siva Shanmugam**, R.M. Kannan, S.A. Vendan.Studies on the Parametric Effects of Plasma Arc Welding of 2205 Duplex Stainless Steel,High Temperature Materials and Processes, 2017
42. N.P. Kumar, S.A. Vendan, **N. Siva Shanmugam**.Investigations on the parametric effects of cold metal transfer process on the microstructural aspects in AA6061,Journal of Alloys and Compounds 658: 255-264, 2016
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