

List of Publications

1. Sunilkumar, D., Dey, H.C., Albert, S.K. et al. Characterization of Interfacial Microstructure and Mechanical Properties of the Diffusion Bonded CP-Ti to AISI 304L Stainless Steel. *Trans Indian Inst Met* (2020). <https://doi.org/10.1007/s12666-020-02116-2>.
2. RKKS R. Sundar, C. Sudha, A. K. Rai, P. Ganesh, Ashish Kolhatkar, S . Effect of laser shock peening on the microstructure, tensile and heat transport properties of Alloy D9 *Lasers in Manufacturing and Materials Processing* 7, 259-277.
3. Beatriceveena, T. V., Murthy, A. S. R., Prabhu, E., & Gnanasekar, K. I. (2020). Wide range hydrogen sensing behavior of a silver delafossite: Performance towards long term stability, repeatability and selectivity. *International Journal of Hydrogen Energy*.
4. R Priya, S Ningshen, S Murugesan, P Parameswaran Microstructure and corrosion behaviour of ferritic steel–Zr-based metal waste form alloys in simulated ground water *Corrosion Engineering, Science and Technology* 54 (6), 529-540.
5. S Haribabu, C Sudha, S Raju, RN Hajra, R Mythili, J Jayaraj, Effect of Al addition on the microstructure and phase stability of P91 ferritic-martensitic steel *Metallurgical and Materials Transactions A* 50 (3), 1421-1436.
6. S Murugesan, R Thirumurugesan, E Mohandas, P Parameswaran X-ray diffraction Rietveld analysis and Bond Valence analysis of nano titania containing oxygen vacancies synthesized via sol-gel route *Materials Chemistry and Physics* 225, 320-330.
7. VT Paul, S Mahadevan, SK Krovvidi, S Goyal, S Murugesan, Failure Analysis of Motorized Bellow-Sealed Valve of Sodium Loop in Fast Breeder Test Reactor *Journal of Failure Analysis and Prevention* 19 (1), 237-244.
8. A Singh, P Parameswaran, R Thirumurugesan, AK Panda, S Murugesan, Development and Characterization of MgO Coatings on 316L Stainless Steel *Transactions of the Indian Institute of Metals* 72 (2), 319-325.
9. VT Paul, B Sundaravel, S Murugesan, P Parameswaran, Proton Irradiation Induced Hardening and Its Recovery During Healing Treatment of Modified 9Cr–1Mo Steel *Transactions of the Indian Institute of Metals* 71 (9), 2293-2301.
10. AK Panda, A Singh, R Divakar, NG Krishna, VR Reddy, Crystallographic texture study of pulsed laser deposited Cr₂O₃ thin films *Thin Solid Films* 660, 328-334.
11. S Murugesan, R Thirumurugesan, P Parameswaran Understanding microstrain anisotropy in yttrium oxide synthesized by sol-gel route *AIP Conference Proceedings* 1942 (1), 050063.
12. B Aashranth, D Samantaray, MA Davinci, S Murugesan, U Borah, ...A micro-mechanism to explain the post-DRX grain growth at temperatures > 0.8 T_m *Materials Characterization* 136, 100-110.
13. AK Rai, N Vijayashanthi, H Tripathy, RN Hajra, S Raju, S Murugesan, Investigation of diffusional interaction between P91 grade ferritic steel and Fe-15 wt.% B alloy and study of kinetics of boride formation at high temperature *Journal of Nuclear Materials* 495, 58-66.
14. G Chakraborty, PK Chaurasia, S Murugesan, SK Albert, S Murugan Effect of brazing temperature on the microstructure of martensitic–austenitic steel joints *Materials Science and Technology* 33 (11), 1372-1378.

15. GSD Babu, XS Shajan, A George, P Parameswaran, S Murugesan, Low-cost hydrothermal synthesis and characterization of pentanary $\text{Cu}_2\text{Zn}_x\text{Ni}_{1-x}\text{SnS}_4$ nanoparticle inks for thin film solar cell applications *Materials Science in Semiconductor Processing* 63, 127-136.
16. M Sabeena, S Murugesan, P Anees, E Mohandas, M Vijayalakshmi Crystal structure and bonding characteristics of transformation products of bcc β in Ti-Mo alloys *Journal of Alloys and Compounds* 705, 769-781.
17. P Bhaskar, A Dasgupta, S Murugesan, S Saroja Comparison of Microtexture Evolution During Cryo and Room Temperature Rolling of Ti-5Ta-2Nb Alloy *Transactions of the Indian Institute of Metals* 70 (4), 927-933.
18. A Singh, S Murugesan, P Parameswaran, R Priya, R Thirumurugessan, Characterization and performance of magnetron-sputtered zirconium coatings deposited on 9Cr-1Mo steel *Journal of Materials Engineering and Performance* 25 (11), 4666-4679.
19. S Raju, B Jeyaganesh, H Tripathy, S Murugesan, S Saibaba, SK Albert, Thermal stability, phase transformation characteristics, and thermal properties of T91 steel and welding consumables *Welding in the World* 60 (5), 963-977
20. A Sarkar, A Nagesha, P Parameswaran, S Murugesan, R Sandhya, Insights into dynamic strain aging under cyclic creep with reference to strain burst: Some new observations and mechanisms part-II: Microstructural aspects *Materials Science and Engineering: A* 660, 225-240.
21. G Chakraborty, CR Das, SK Albert, AK Bhaduri, S Murugesan, Effect of alloy 625 buffer layer on Hardfacing of modified 9Cr-1Mo steel using nickel base Hardfacing alloy *Journal of Materials Engineering and Performance* 25 (4), 1663-1672.
22. M Sabeena, A George, S Murugesan, R Divakar, E Mohandas, Microstructural characterization of transformation products of bcc β in Ti-15 Mo alloy *Journal of Alloys and Compounds* 658, 301-315.
23. J Purushothaman, R Ramaseshan, SK Albert, R Rajendran, Influence of surface roughness and melt superheat on HDA process to form a tritium permeation barrier on RAFM steel *Fusion Engineering and Design* 101, 154-164.
24. TN Prasanthi, C Sudha, S Murugesan, VT Paul, S Saroja Reverse transformation of deformation-induced phases and associated changes in the microstructure of explosively clad Ti-5Ta-2Nb and 304L SS *Metallurgical and Materials Transactions A* 46 (10), 4429-4435.
25. M Mishra, P Kuppusami, S Murugesan, C Ghosh, R Divakar, A Singh, Thermal stability and thermal expansion behaviour of $\text{ZrO}_2/\text{Y}_2\text{O}_3$ multilayers deposited by pulsed laser deposition technique *Materials Chemistry and Physics* 162, 592-607.
26. M Sabeena, S Murugesan, R Mythili, AK Sinha, MN Singh, Studies on ω phase formation in Ti-Mo alloys using synchrotron XRD *Transactions of the Indian Institute of Metals* 68 (1), 1-6.
27. M Shahid, D Shikha, SK Sinha, U Jha, S Murugesan, E Mohandas, Morphological Study of HAP Coated Alumina by Sol-Gel Method for Orthopedic Implants *Advanced Materials Research* 1086, 50-60.