

Last 5 years publication details

1. Gunavathy K V, Tamilarasan K, Rangasami C, Arulanantham AMS, "Solution processed copper zinc tin sulfide thin films for thermoelectric device applications", *Ceramics International*, August 2020, <https://doi.org/10.1016/j.ceramint.2020.07.338>
2. Gunavathy K V, Tamilarasan K, Rangasami C, Arulanantham AMS, "Investigations on copper zinc tin sulfide thin films grown through nebulizer assisted spray pyrolysis technique", *International Journal of Energy Research*, May 2020, doi:10.1002/er.5451
3. K. V. Gunavathy, K. Tamilarasan, C. Rangasami, A.M.S.Arulanantham,"Effect of Solvent on the Characteristic Properties of Nebulizer Spray Pyrolyzed Cu₂ZnSnS₄ Absorber Thin Films for Photovoltaic Application", *Thin Solid Films*, Vol.697, 137841 March 2020.
4. Gunavathy K V, Parthibaraj V, Rangasami C, Tamilarasan K., "Effect of Spray Volume on the properties of Cu₂ZnSnS₄ Absorber Thin Film fabricated through Nebulizer Assisted Spray Pyrolysis Technique", *Materials Research Express*, Vol.6, No.10, P 106434, Sep 2019.
5. K. V. Gunavathy, K. Tamilarasan, C. Rangasami, A.M.S.Arulanantham,"A review on growth optimization of spray pyrolyzed Cu₂ZnSnS₄ chalcogenide absorber thin film", *International Journal of Energy Research*,1 -39, July 2019. <https://doi.org/10.1002/er.4693>.
6. K. V. Gunavathy, K. Tamilarasan, C. Rangasami, V. Parthibaraj., "Influence of substrate temperature on the properties of nebulizer sprayed CZTS absorber thin film for photovoltaic applications", *AIP Conference Proceedings of DAE-SSPS 2018*, 2115, 030563 (1- 4), July 2019.
7. Rangasami, C., "Crystal structure of Sb₈Te₃ and Sb₁₀Te₃, *AIP conf. Proceedings of DAE-SSPS 2018*, 2115, 030004 (1-4), July 2019.
8. Rangasami, C., "Vibrational modes of AgIn₃Te₅ and effect of laser irradiation", *Vibrational Spectroscopy*, 97, pp 66-73, Jan 2018.
9. Rangasami, C., "Effect of laser irradiation on Ag₄In₁₂Sb₅₆Te₂₈", *AIP conf. Proceedings of DAE-SSPS 2017*, 942, 080031(1-4),
10. Santhiya, M., Pugazhivadivu, K.S, Tamilarasan, K., Rangasami, C., "Influence of sputtering power on the structure and electrical properties of Bi₂Fe₄O₉ thin films", *Acta Metallurgica Sinica (English Letters)*, vol 30, Issue 7, pp 650–658.

11. Rangasami, C., "Phase preference in some Ag-In-Sb-Te alloys", AIP conf. Proceedings of DAE-SSPS 2016, December 2016, 1832, 14008(1-3).
12. Gunavathy, K. V., Parthibaraj, V., Rangasami, C., Tamilarasan, K., "Prospects of alternate buffer layers for CZTS based thin films solar cells from Numerical Analysis – A Review", South Asian Journal of Engineering and Technology, 2, pp. 88–96, March 2016.
13. Srinivasan, V., Rangasami, C., Kannan, J. C., "Synthesis, structure and optical properties of ZnO nanoparticles", Applied Engineering research, 10, pp.343-345, July 2015.
14. Parthibaraj, V., Tamilarasan, K., Pugazhivadivu, K S., Rangasami, C., "Growth and Characterization of $\text{Cu}_2\text{ZnSnS}_4$ Thin Film by RF-Magnetron Sputtering", International Journal of Innovative Research in Science, Engineering and Technology, 2, 670-675. February 2015.
15. Rangasami, C., "Non-equilibrium Phases Formed in Cu–In–Se– Te System Synthesized by Melt-Quench Method", Acta Metallurgica Sinica, English Letters, 28, 567-577, February 2015.