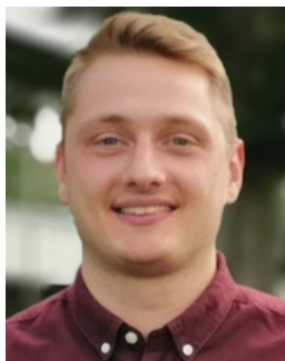


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**Poster No. : 1-P-16****Posttreatment of Powder Aerosol Deposited Functional Ceramics Using LED Radiation***Jürgen Schneider¹, Jaroslaw Kita¹, Daniel Paulus¹, Ralf Moos¹¹ Department of Functional Materials, University of Bayreuth, Germany*Juergen.Schneider@Uni-Bayreuth.de

Keywords : Aerosol Deposition, Electrical Conductivity, Thermal Annealing

Highlights of This Poster Presentation

➤ Target

The Room Temperature Impact Consolidation (RTIC) during Powder Aerosol Deposition (PAD) of films can lead to reduced functional properties. This work investigates thermal annealing using a High Power LED as a fast method for a mild thermal annealing and restoration of electrical conductivity.

➤ Conclusion

The electrical conductivity of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ - and CuFeO_2 -PAD films was successfully increased by two decades within short processing times. Furthermore, the novel annealing method is compared to conventional furnace-based annealing.

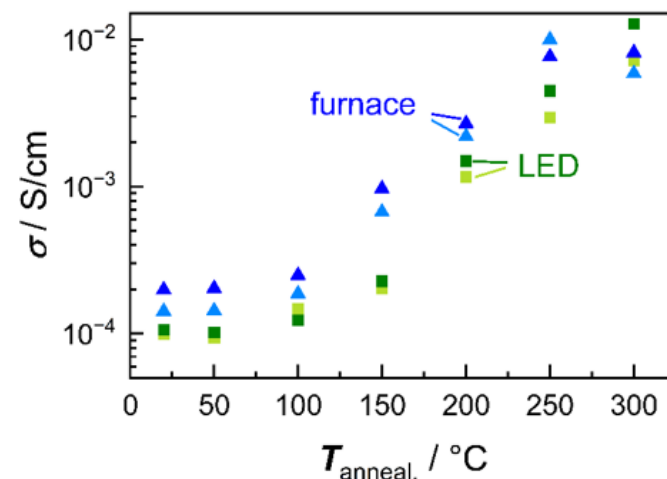


Fig. 1. Electrical conductivity of LED and furnace annealed CuFeO_2 PAD films as a function of the maximum annealing temperature.