

## First doctoral thesis within BayBatt deals with All Solid-State Batteries Tobias Nazarenus defended his doctoral thesis



### Congratulations!

Tobias Nazarenus defended his doctoral thesis about “Powder aerosol deposition for the industrial production of oxide ceramic solid electrolytes for metallic lithium accumulators” (German original title: “*Aerosolbasierte Kaltabscheidung zur industriellen Produktion von oxidkeramischen Festelektrolyten für metallische Lithiumakkumulatoren*”) on Wednesday, December 21<sup>st</sup>, 2022.

Special thanks to Prof. Kyle G. Webber from FAU Erlangen-Nürnberg for his support as the second examiner!

The research work for his dissertation was conducted at the Department of Functional Materials in the framework of the BMBF project cluster “Festbatt2” and in the Research Training Group of the Bavarian Center for Battery Technology (BayBatt).

Dr. Nazarenus already published several parts of his thesis in peer-reviewed journals (examples):

T. Nazarenus, Y. Sun, J. Exner, J. Kita, R. Moos, Powder Aerosol Deposition as a Method to Produce Garnet-Type Solid Ceramic Electrolytes: A Study on Electrochemical Film Properties and Industrial Application, *Energy Technology*, **9**, 2100211 (2021), doi: 10.1002/ente.202100211

T. Nazarenus, K. Schlesier, S. Biberger, J. Exner, J. Kita, A. Köhler, R. Moos, Posttreatment of powder aerosol deposited oxide ceramic films by high power LED, *International Journal of Applied Ceramic Technology*, **19**, 1540-1553 (2022), doi: 10.1111/ijac.13977

T. Nazarenus, K. Schlesier, F. Lebeda, M. Retsch, R. Moos, Microstrain release decouples electronic and thermal conductivity in powder aerosol deposited films, *Materials Letters*, **322**, 132461 (2022), doi: 10.1016/j.matlet.2022.132461



The evaluation board and the candidate.

From left to right: Prof. Freitag, Prof. Webber, Dr. Nazarenus, Prof. Moos, and Prof. Danzer