

Battery-related papers

M. Sozak, T. Nazarenius, J. Exner, J. Kita, R. Moos:

Room temperature manufacture of dense NaSICON solid electrolyte films for all-solid-state-sodium batteries
open access - free *Journal of Materials Science*, **58**, 10108-10119 (2023), doi: [10.1007/s10853-023-08642-w](https://doi.org/10.1007/s10853-023-08642-w)

S. Müllner, T. Michlik, M. Reichel, T. Held, R. Moos, C. Roth:

Effect of Water-Soluble CMC/SBR Binder Ratios on Si-rGO Composites Using μm - and nm-Sized Silicon as Anode Materials for Lithium-Ion Batteries
open access - free *Batteries*, **9**, 248 (2023), doi: [10.3390/batteries9050248](https://doi.org/10.3390/batteries9050248)

T. Nazarenius, 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](https://doi.org/10.1016/j.matlet.2022.132461)

T. Nazarenius, K. Schlesier, S. Biberger, J. Exner, J. Kita, A. Köhler, R. Moos:

Posttreatment of powder aerosol deposited oxide ceramic films by high power LED
open access - free *International Journal of Applied Ceramic Technology*, **19**, 1540-1553 (2022), doi: [10.1111/ijac.13977](https://doi.org/10.1111/ijac.13977)

T. Nazarenius, 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
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M. Hahn, D. Rosenbach, A. Krimalowski, T. Nazarenius, R. Moos, M. Thelakkat, M.A. Danzer:

Investigating solid polymer and ceramic electrolytes for lithium-ion batteries by means of an extended Distribution of Relaxation Times analysis
Electrochimica Acta, **344**, 136060 (2020), doi: [10.1016/j.electacta.2020.136060](https://doi.org/10.1016/j.electacta.2020.136060)

U. Schadeck, T. Gerdes, W. Krenkel, R. Moos:

A Glass Platelet Coating on Battery Electrodes and Its Use as a Separator for Lithium-Ion Batteries
Journal of Electrochemical Conversion and Storage, **17**, 034502 (2020), doi: [10.1115/1.4045783](https://doi.org/10.1115/1.4045783)

U. Schadeck, M. Hahn, T. Gerdes, W. Krenkel, M.A. Danzer, R. Moos:

Sodium Borosilicate Glass Separators as an Electrolyte Additive Donor for Improving the Electrochemical Performance of Lithium-Ion Batteries
Journal of the Electrochemical Society, **166**, A3416-A3424 (2019), doi: [10.1149/2.1011914jes](https://doi.org/10.1149/2.1011914jes)

T. Michlik, A. Rosin, T. Gerdes, R. Moos:

Improved Discharge Capacity of Zinc Particles by Applying Bismuth-Doped Silica Coating for Zinc-Based Batteries
open access - free *Batteries*, **5**, 32 (2019), doi: [10.3390/batteries5010032](https://doi.org/10.3390/batteries5010032)

O. Isakin, S. Hiltl, O. Struck, M. Willert-Porada, R. Moos:

High-Yield Preparation of ZnO Nanoparticles on Exfoliated Graphite as Anode Material for Lithium Ion Batteries and the Effect of Particle Size as well as of Conductivity on the Electrochemical Performance of Such Composites
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U. Schadeck, K. Kyrgyzbaev, H. Zettl, T. Gerdes, R. Moos:

Flexible, Heat-Resistant, and Flame-Retardant Glass Fiber Nonwoven/Glass Platelet Composite Separator for Lithium-Ion Batteries
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Mechanical Coating of Zinc Particles with $\text{Bi}_2\text{O}_3\text{-Li}_2\text{O-ZnO}$ Glasses as Anode Material for Rechargeable Zinc-Based Batteries
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O. Isakin, S. Hiltl, R. Schneider, J. Bleisteiner, O. Struck, K. Schindler, M. Willert-Porada, R. Moos:

Ultrasound-assisted one-pot syntheses of ZnO nanoparticles that are homogeneously adsorbed on exfoliated graphite and a simplified method to determine the graphite layer thickness in such composites
Journal of Materials Science, **53**, 6586-6601 (2018), doi: [10.1007/s10853-018-2023-z](https://doi.org/10.1007/s10853-018-2023-z)

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D. Hanft, J. Exner, R. Moos:

Thick-films of garnet-type lithium ion conductor prepared by the Aerosol Deposition Method: The role of morphology and annealing treatment on the ionic conductivity
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