

Subdivision 3, Publications 2018 – 2020

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Articles in journals

- 1)* Gorshkov, N., Vikulova, M., **Gorbunov, M., Mikhailova, D.**, Burmistrov, I., Kiselev, N., Artyukhov, D., Gorokhovskiy, A., Synthesis of the hollandite-like copper doped potassium titanate high-k ceramics, *Ceramics International* 4 47 (2021), S. 5721-5729
<https://www.sciencedirect.com/science/article/pii/S0272884220332016>.
- 2) **Ding, L., Leones, R., Omar, A., Guo, J., Lu, Q., Oswald, S., Nielsch, K., Giebeler, L., Mikhailova, D.**, Highly Efficient Multicomponent Gel Biopolymer Binder Enables Ultrafast Cycling and Applicability in Diverse Battery Formats, *ACS Applied Materials & Interfaces* 48 12 (2020), S. 53827-53840 <https://pubs.acs.org/doi/abs/10.1021/acsami.0c16635>.
- 3) **Sabaghi, D., Madian, M., Omar, A., Oswald, S., Uhlemann, M.**, Maghrebi, M., Baniadam, M., **Mikhailova, D.**, Directly Anodized Sulfur-Doped TiO₂ Nanotubes as Improved Anodes for Li-ion Batteries, *Batteries* 4 6 (2020), S. 51/1-10 <https://www.mdpi.com/2313-0105/6/4/51>.
- 4) **Maletti, S., Herzog-Arbeitmann, A., Oswald, S.**, Senyshyn, A., **Giebeler, L., Mikhailova, D.**, TiNb₂O₇ and VNb₉O₂₅ of ReO₃ Type in Hybrid Mg–Li Batteries: Electrochemical and Interfacial Insights, *The Journal of Physical Chemistry C* 46 124 (2020), S. 25239-25248 <https://pubs.acs.org/doi/abs/10.1021/acs.jpcc.0c07373>.
- 5) **Gorbunov, M.V., Carrocci, S., Maletti, S., Valldor, M.**, Doert, T., **Hampel, S., Gonzalez Martinez, I., Mikhailova, D., Gräßler, N.**, Synthesis of (Li₂Fe_{1-y}Mn_y)SO Antiperovskites with Comprehensive Investigations of (Li₂Fe_{0.5}Mn_{0.5})SO as Cathode in Li-ion Batteries, *Inorganic Chemistry* 21 59 (2020), S. 15626-15635
<https://pubs.acs.org/doi/10.1021/acs.inorgchem.0c01753>.
- 6)* **Schwabe, S., Niemann, R., Backen, A., Wolf, D., Damm, C., Walter, T.**, Seiner, H., Heczko, O., **Nielsch, K., Fähler, S.**, Building Hierarchical Martensite, *Advanced Functional Materials* 7 31 (2021), S. 2005715/1-11
<https://onlinelibrary.wiley.com/doi/10.1002/adfm.202005715>.
- 7) Xu, X., Qiu, Y., Wu, J., Ding, B., Liu, Q., Jiang, G., **Lu, Q.**, Wang, J., Xu, F., Wang, H., Porous nitrogen-enriched hollow carbon nanofibers as freestanding electrode for enhanced lithium storage, *Chinese Journal of Chemical Engineering* 11 28 (2020), S. 1-22
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- 8) Petrov, D., Long, P., Koshkid'ko, Y., Ćwik, J., **Nenkov, K.**, Large magnetocaloric effect in LiLnP₄O₁₂ (Ln = Gd, Tb, Dy) single crystals, *Journal of Physics D: Applied Physics* 49 53 (2020), S. 495005/1-11 <https://doi.org/10.1088/1361-6463/abb26f>.
- 9) Smuda, M., **Damm, C.**, Ruck, M., Doert, T., Mechanism of Bi–Ni Phase Formation in a Microwave-Assisted Polyol Process, *ChemistryOpen* 11 9 (2020), S. 1-11
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- 10) **Lünser, K., Diestel, A., Nielsch, K., Fähler, S.**, Influencing Martensitic Transition in Epitaxial Ni-Mn-Ga-Co Films with Large Angle Grain Boundaries, *Materials* 17 13 (2020), S. 3674/1-11 <https://doi.org/10.3390/ma13173674>.
- 11) Novák, V., Kostura, B., Raška, P., Dědková, K., **Mendes, R., Gemming, T.**, Leško, J., Oxide nanolayer formation on surface of modified blast furnace sludge particles during voltammetric cycling in alkaline media, *Journal of Solid State Electrochemistry* (2020), S. 365–372 <https://doi.org/10.1007/s10008-020-04819-4>.

- 12) Zhou, J., Shi, Q., Ullah, S., Yang, X., Bachmatiuk, A., Yang, R., **Rümmeli, M.H.**, Phosphorus-Based Composites as Anode Materials for Advanced Alkali Metal Ion Batteries, *Advanced Functional Materials* (2020), S. 2004648/1-19 <https://doi.org/10.1002/adfm.202004648>.
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- 14) **Uhlemann, M., Madian, M., Leones, R., Oswald, S., Maletti, S., Eychmüller, A., Mikhailova, D.**, In-Depth Study of Li₄Ti₅O₁₂ Performing beyond Conventional Operating Conditions, *ACS Applied Materials & Interfaces* 33 12 (2020), S. 37227-37238 <https://pubs.acs.org/doi/10.1021/acsmi.0c10576>.
- 15) Qin, X., Wang, X., Sun, J., **Lu, Q., Omar, A., Mikhailova, D.**, Polypyrrole Wrapped V₂O₅ Nanowires Composite for Advanced Aqueous Zinc-Ion Batteries, *Frontiers in Energy Research* 8 (2020), S. 199/1-6 <https://doi.org/10.3389/fenrg.2020.00199>.
- 16) **Feng, L., Freudenberger, J., Mix, T., Nielsch, K., Woodcock, T.G.**, Rare-Earth-Free MnAl-C-Ni Permanent Magnets Produced by Extrusion of Powder Milled from Bulk, *Acta Materialia* 199 (2020), S. 155-168 <https://doi.org/10.1016/j.actamat.2020.08.031>.
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- 18) Fedorenko, S., Elistratova, J., Stepanov, A., Khazieva, A., Mikhailov, M., Sokolov, M., Kholin, K., Nizameev, I., **Mendes, R., Rümmeli, M., Gemming, T., Weise, B., Giebeler, L., Mikhailova, D.**, Dutz, S., Zahn, D., Voloshina, A., Sapunova, A., Daminova, A., Fedosimova, S., Mustafina, A., ROS-generation and cellular uptake behavior of amino-silica nanoparticles arisen from their uploading by both iron-oxides and hexamolybdenum clusters, *Materials Science and Engineering C* (2020), S. 111305/ <https://doi.org/10.1016/j.msec.2020.111305>.
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- 21) **Mikhailova, D., Maletti, S.**, Missyul, A., **Büchner, B.**, Comparison of Layered Li(Li_{0.2}Rh_{0.8})O₂ and LiRhO₂ upon Li Removal: Stabilizing Effect of Li Substitution, *Inorganic Chemistry* 13 59 (2020), S. 9108-9115 <https://pubs.acs.org/doi/10.1021/acs.inorgchem.0c00970>.
- 22) **Lu, Q.**, Wang, X., **Omar, A., Mikhailova, D.**, 3D Ni/Na metal anode for improved sodium metal batteries, *Materials Letters* 275 (2020), S. 128206/1-4 <https://doi.org/10.1016/j.matlet.2020.128206>.
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