

## Publikationen

- : Fast Li Self-Diffusion in Amorphous Li-Si Electrochemically Prepared from Semiconductor Grade, Monocrystalline Silicon — Insights from Spin-Locking Nuclear Magnetic Relaxometry. Poster presentation. In: 20th International Conference on Solid State Ionics, Keystone, CO, USA.
- : Ageing studies on commercial 18650 batteries used in Tesla model S electric vehicles. Poster presentation. In: International Battery Association Meeting 2016, Nantes, France.
- : Ageing of Commercial 18650 Batteries Used in Tesla Model S Electric Vehicles. In: 18th International Meeting on Lithium Batteries, Chicago, IL, USA.
- : Aging of Tesla's 18650 Lithium-Ion Cells: Correlating Solid-Electrolyte-Interphase Evolution with Fading in Capacity and Power. In: Journal of The Electrochemical Society, vol. 164, no. 14. DOI: 10.1149/2.0171714jes.
- : A Microbattery Made from Monocrystalline Silicon. In: Thermec 2016, Graz, Österreich.
- : Die Leistung steigt, der Preis fällt. In: Oberösterreichische Nachrichten.
- : VERFAHREN ZUM HERSTELLEN EINER BATTERIE, BATTERIE UND INTEGRIERTE SCHALTUNG..
- : The microstructure matters: breaking down the barriers with single crystalline silicon as negative electrode in Li-ion batteries. In: Scientific Reports (Nature Publishing Group), vol. 6, no. Article number: 31712 (2016). DOI: 10.1038/srep31712.
- : Powering the Digital Revolution: A Miniaturized Lithium Battery Made of Single-Crystalline Silicon. Poster presentation. In: 18th International Meeting on Lithium Batteries, Chicago, IL, USA.
- : Small Change—Great Effect: Steep Increase of Li Ion Dynamics in Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub> at the Early Stages of Chemical Li Insertion. In: Chemistry of Materials, vol. 27, no. 5, pp. 1740-1750. DOI: 10.1021/cm504564k.
- : Diffusion-induced <sup>7</sup>Li NMR relaxation of layer-structured tin disulphide — Li diffusion along the buried interfaces in Li<sub>0.17</sub>SnS<sub>2</sub>. In: Solid State Ionics, vol. 276, no. August, pp. 56-61. DOI: 10.1016/j.ssi.2015.03.039.
- : METHOD OF MANUFACTURING A BATTERY, BATTERY AND INTEGRATED CIRCUIT.
- : Lithium Distribution in Monocrystalline Silicon-Based Lithium-Ion Batteries. In: ECS Transactions, vol. 62, no. 1, pp. 247-253. DOI: 10.1149/06201.0247ecst.
- : Lithium Distribution in Monocrystalline Silicon based Lithium-Ion Batteries. Poster presentation. In: 17th International Meeting on Lithium Batteries, Como, Italien.
- : Lithium barrier materials for on-chip Si-based microbatteries. In: Journal of Materials Science: Materials in Electronics, vol. 28, no. 19, pp. 14605-14614. DOI: 10.1007/s10854-017-7325-4.
- : Overall conductivity and NCL-type relaxation behavior in nanocrystalline sodium peroxide Na<sub>2</sub>O<sub>2</sub> —Consequences for Na-oxygen batteries. In: Materials Science and Engineering: B, vol. 211, no. September, pp. 85-93. DOI: 10.1016/j.mseb.2016.06.002.
- : Fast Li+ Self-Diffusion in Amorphous Li-Si Electrochemically Prepared from Semiconductor Grade, Monocrystalline Silicon: Insights from Spin-Locking Nuclear Magnetic Relaxometry. In: The Journal of Physical Chemistry C, vol. 119, no. 22, pp. 12183-12192. DOI: 10.1021/acs.jpcc.5b02490.

- : Li Self-Diffusion in Metastable  $\text{Li}_{15}\text{Si}_4$  prepared from Monocrystalline Si - An Ex Situ  $^7\text{Li}$  NMR Relaxometry Study. Poster presentation. In: 17th International Meeting on Lithium Batteries, Como, Italien.
- : Li Self-Diffusion in Amorphous Li/Si Prepared from Monocrystalline Si - A  $^7\text{Li}$  NMR Relaxometry Study. Poster presentation. In: 65th Annual Meeting of the International Society of Electrochemistry (ISE), Lausanne, Schweiz.
- : Lithium ion dynamics in amorphous Li-Si electrochemically prepared from semiconductor grade, monocrystalline silicon — An NMR Study. Poster presentation. In: Materials Day 2015, Graz, Österreich.
- : Fast Li self-diffusion in Li-Si Electrochemically Prepared from Semiconductor Grade, Monocrystalline Silicon. In: 15th European Conference on Solid State Chemistry (ECSSC), Wien, Österreich.
- : Impact of the Native  $\text{SiO}_2$  Surface Layer on the Electron Transfer at Amorphous Si Electrodes. In: ECS Transactions, vol. 68, no. 2, pp. 1-11. DOI: 10.1149/06802.0001ecst.
- : Comparison of Spatiotemporal Changes of SEI Properties on Different Anodes by SECM. In: ECS Conference on Electrochemical Energy Conversion & Storage with SOFC-XIV, Glasgow, United Kingdom.
- : Investigation of the Electron Transfer at Si Electrodes: Impact and Removal of the Native  $\text{SiO}_2$  Layer. In: Journal of The Electrochemical Society, vol. 163, no. 3. DOI: 10.1149/2.0731603jes.

