

# POSTERS AT BIENNIAL MEETING HIU 2023

Nr.	Family Name	First Name	Authors	Title	Group	Contact Author
1	Kuhn	Yannick	Birger Horstmann, Arnulf Latz	Automated Battery Model Selection with Bayesian Quadrature and Bayesian Optimization	DLR	<a href="mailto:Yannick.Kuhn@dlr.de">Yannick.Kuhn@dlr.de</a>
2	Werres	Martin	Yaobin Xu, Hao Jia, Chongmin Wang, Wu Xu, Arnulf Latz, Birger Horstmann	Understanding isolated lithium formation in lithium metal batteries with liquid electrolytes	DLR	<a href="mailto:Martin.Werres@dlr.de">Martin.Werres@dlr.de</a>
3	Mandade	Prasad	Marcel Weil	Environmental life cycle assessment of emerging solid-state batteries: some insights	Sonstige	<a href="mailto:prasad.mandade@kit.edu">prasad.mandade@kit.edu</a>
4	Borchers	Niklas	Niklas Herrmann, Holger Euchner, Birger Horstmann	Deciphering the operating principle of aqueous zinc-ion batteries with MnO <sub>2</sub> -based cathodes	DLR	<a href="mailto:Niklas.Borchers@dlr.de">Niklas.Borchers@dlr.de</a>
5	Malik	Yoga Trianzar	Simon Fleischmann	Influence of Particle Size on The Lithiation Kinetics of Titanium Sulfide	Fleischmann	<a href="mailto:yoga.malik@kit.edu">yoga.malik@kit.edu</a>
6	Doppl	Britta	F.K. Schwab, N.J. Herrmann, B. Horstmann	Modelling Alkaline Nickel Zinc Battery Cells	DLR	<a href="mailto:Britta.Doppl@dlr.de">Britta.Doppl@dlr.de</a>
7	Chandrappa	Shivaraju	Zhirong Zhao-Karger, Maximilain Fichtner	Effect of silicon-based electrolyte additive on the electrochemical performance of rechargeable Mg batteries	Mat 1	<a href="mailto:shivaraju.guddehalli-chandrappa@uni-ulm.de">shivaraju.guddehalli-chandrappa@uni-ulm.de</a>

8	Juárez	Fernanda	Konstantin Lamp, Alejandro D. Somoza, Giorgio Silvi, Marina Walt, Birger Horstmann	Electronic Structure Simulations for Batteries and Fuel Cells Using a Quantum Computer	DLR	<a href="mailto:konstantin.lamp@dlr.de">konstantin.lamp@dlr.de</a>
9	Pool	Albert	Alejandro D. Somoza, Conor McKeever, Michael Lubasch, Birger Horstmann	g Partial Differential Equations using a Quantum Com	DLR	<a href="mailto:albert.pool@dlr.de">albert.pool@dlr.de</a>
10	Schwetlick	Constantin	M. Schammer, B. Horstmann, A. Latz	A model for highly concentrated electrolytes including solvation	DLR	<a href="mailto:Constantin.Schwetlick@dlr.de">Constantin.Schwetlick@dlr.de</a>
11	Philipp	Micha	Birger Horstmann, Arnulf Latz	Machine Learning to identify degradation mechanisms	DLR	<a href="mailto:micha.philipp@dlr.de">micha.philipp@dlr.de</a>
12	Prasad	Mrudula	Simon Hein, Timo Danner, Matthias Neumann, Benedikt Prifling, Rares Scurtu, Alice Hoffmann, André Hilger, Markus Osenberg, Ingo Manke, Margret Wohlfahrt-Mehrens, Volker Schmidt, Arnulf Latz	Influence of carbon-binder morphology and distribution on electrode performance	DLR	<a href="mailto:mrudula.prasad@uni-ulm.de">mrudula.prasad@uni-ulm.de</a>
13	Vollmer	Ellen	Simon Fleischmann	Impact of nanoconfinement on the charge storage mechanism of redox active organic molecules	Fleischmann	<a href="mailto:ellen.vollmer@uni-ulm.de">ellen.vollmer@uni-ulm.de</a>
14	Lenzer	Anja	Jakob Asenbauer, Kai Shi, Tobias Eisenmann, and Dominic Bresser	Insights into Perylene-Tetra-Carboxylate derivatives as versatile anode materials for Alkali-Metal-Ion batteries	Echem 1	<a href="mailto:anja.lenzer@kit.edu">anja.lenzer@kit.edu</a>
15	Pammer	Frank		Computational Design of Weakly Coordinating Anions	Mat 1	<a href="mailto:frank.pammer@kit.edu">frank.pammer@kit.edu</a>
16	Duan	Kanjun	Alexey Ershov, Kerstin Köble, Monja Schilling, Alexander Rampf, Angelica Cecilia, Tomáš Faragó, Marcus Zuber, Tilo Baumbach, Pang-chieh Sui, Roswitha Zeis	Bubbles in Vanadium Redox Flow Batteries - A Synchrotron X-Ray Study	Sonstige	<a href="mailto:kangjun.duan@kit.edu">kangjun.duan@kit.edu</a>

17	Riedel	Sibylle	Laurin Kahnt, Paula Finke, Zhirong Zhao-Karger, Maximilian Fichtner	Quinone-based Cathode Materials in Magnesium and Calcium Batteries using non-corrosive [B(hfip) <sub>4</sub> ]-Electrolytes	Mat 1	<a href="mailto:sibylle.riedel@partner.kit.edu">sibylle.riedel@partner.kit.edu</a>
18	Lyu	Ziyuan	Dominik Stepien, Thomas Diemant, Alessandro Mariani, Dominic Bresser and Stefano Passerini	Ether aided ionic liquid-based electrolytes for optimized safety and performance of lithium-metal batteries	Echem 1	<a href="mailto:ziyuan.lyu@kit.edu">ziyuan.lyu@kit.edu</a>
19	Vollert	Elias	Mayokun Olutogun, Kerli Liivand, Dominic Bresser, Stefano Passerini	Sustainable Graphite Recovery: Investigating methods to purify graphite from spent lithium-ion batteries for efficient recycling	Echem 1	<a href="mailto:elias.vollert@kit.edu">elias.vollert@kit.edu</a>
20	Rampf	Alexander	Roswitha Zeis	Silver Doped Manganese Oxide as Electrocatalyst for Oxygen Reduction Reaction	Sonstige	<a href="mailto:alexander.rampf@kit.edu">alexander.rampf@kit.edu</a>
21	Geng	Katrin	Tobias Eisenmann, Dominik Stepien, Thomas Diemant, Rahul Parmar, Javad Rezvani, Roberto Gunnella, Matteo Amati, Luca Gregoratti, Dominic Bresser	An <i>ex situ</i> Study on "Zero Excess" Lithium-Metal Batteries with Polymer-based Artificial Interphase	Echem 1	<a href="mailto:Katrin.geng@kit.edu">Katrin.geng@kit.edu</a>
22	Roy	Ananyo	Mohsen Sotoudeh, Yushu Tang, Christian Kübel, Axel Groß, Maximilian Fichtner, Zhenyou Li	Unlocking the potential of magnesium batteries through dual cation co-intercalation strategy	Sonstige	<a href="mailto:ananyo.roy@partner.kit.edu">ananyo.roy@partner.kit.edu</a>
23	Ali	Hina	Montaha Anjass	Regulation of Lamellar Structure of Vanadium Oxide via Polyaniline Intercalation for High-Performance Sodium-Ion Battery	Sonstige	<a href="mailto:hina.ali@kit.edu">hina.ali@kit.edu</a>
24	Uhl	Matthias	Sadeeda, Benjamin W. Schick, Tanja Geng, Attila Farkas, Timo Jacob	The Importance of the Eutectic Ratio for Deep Eutectic Solvents in Battery Applications	Sonstige	<a href="mailto:matthias.uhl@uni-ulm.de">matthias.uhl@uni-ulm.de</a>
25	Elkhafif	Omar	Hagar K. Hassan, Timo Jacob	Boosting Mg Deposition/Dissolution from Ionic liquids; Effect of Additives for Applications in Mg-ion Batteries for Applications in Mg-ion Batteries	Sonstige	<a href="mailto:omar.el-khafif@uni-ulm.de">omar.el-khafif@uni-ulm.de</a>

26	Simanjuntaka	Esther Kezia	Timo Danner and Arnulf Latz	Theoretical studies on the influence of morphology sulfur–poly(acrylonitrile) as cathode materials in lithium–sulfur batteries on electrochemical performance	DLR	<a href="mailto:Esther.Simanjuntak@dlr.de">Esther.Simanjuntak@dlr.de</a>
27	Gandolfo	Matteo	Daniele Versaci, Carlotta Francia, Silvia Bodoardo and Julia Amici	Enhancing the safety and stability of lithium metal batteries through the use of composite ionogels	Echem 1	<a href="mailto:matteo.gandolfo@polito.it">matteo.gandolfo@polito.it</a>
28	Reupert	Adam	Zhenyou Li, Gauthier Studer, Maximilian Fichtner	Stabilization strategies for Patrónite vanadium sulfide in magnesium batteries	Sonstige	<a href="mailto:adam.reupert@uni-ulm.de">adam.reupert@uni-ulm.de</a>
29	Boehler	Timo	Matthias Kuenzel, Tobias Eisenmann, Jakob Asenbauer, Seyed Javad Rezvani, Maider Zarrabeitia, Sylvio Indris, Zenonas Jusys, R. Juergen Behm, Stefano Passerini, Dominic Bresser	Understanding the Redox Behaviour of Na+/Li+ exchanged T2/O2 Li0.67+xNi0.33Mn0.67O2 Cathode Materials for Lithium-Ion Batteries	Echem 1	<a href="mailto:timo.boehler@kit.edu">timo.boehler@kit.edu</a>
30	Wiedemann	Johannes	Ashutosh Agrawal, Dennis Kopljar, Timo Danner, Arnulf Latz	Complementary investigation of lithium-ion batteries on the particle scale via single-particle measurements and simulations	DLR	<a href="mailto:Johannes.wiedemann@dlr.de">Johannes.wiedemann@dlr.de</a>
31	Vengarathody	Rishikesh	Prabeer Barpanda, Maximilian Fichtner	Layered oxide cathode for sodium ion batteries	Mat 1	<a href="mailto:rishikesh.vengarathody@uni-ulm.de">rishikesh.vengarathody@uni-ulm.de</a>
32	Arya	Nikhil	Montaha Anjass	Hierarchically structured supramolecular polyoxovanadate thin films for energy storage applications	Sonstige	<a href="mailto:nikhil.arya@uni-ulm.de">nikhil.arya@uni-ulm.de</a>
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