

# Lehrstühle und Professuren

**Name:**

2016

**Occurrences:**

- Einrichtungen > Fakultäten > Fakultät für Elektrotechnik und Informationstechnik > Lehrstühle und Professuren > Elektrische Energiespeichertechnik (Prof. Jossen)

## Entries:

- [1/76]: Bayerische Motoren Werke AG, Power supply device for stationary installations with a reactor for the release of hydrogen from liquid compounds, 2016
- [2/76]: Heike Bart, Björn Bayer, Joaquin Klee Barillas, Michael Danzer, Martin Dennenmoser, Alexander Gitis, Basem Idlbi, Christian Klabunde, Karolina Koring, Natalia Moskalenko, Maik Naumann, Markus Landau, Stephan Lux, Matthias Puchta, Sebastian Raab, Weiwei Shan, Verena Spielmann, Eric Tchoupou Lando, Jan von Appen, Heinz Wenzl, Hans-Peter Beck, Potentiale elektrochemischer Speicher in elektrischen Netzen in Konkurrenz zu anderen Technologien, Cuvillier Verlag, 2016
- [3/76]: Marco Steinhardt, Martin J. Brand, Markus H. Hofmann, Simon F. Schuster, Andreas Jossen, Hochpräzise Strommessung in parallel verschalteten Batteriezellen unter dynamischer Belastung, 2016, 49-53
- [4/76]: Marcus Müller, Andreas Jossen, 2nd Life - Vehicle to Grid - Speicherschwärme, Regensburg, 2016
- [5/76]: Marcus Müller, Hubert Gasteiger, Andreas Jossen, Herbert Schein, Energie lokal erzeugen, speichern und nutzen!, München, 2016
- [6/76]: Marcus Müller, Fragmentierte Ortsnetzspeicher, München, 2016
- [7/76]: Marcus Müller, Shared Economy Approaches for Stationary Battery Storage Systems, Düsseldorf, 2016
- [8/76]: Marcus Müller, Cong Nam Truong, Michael Schimpe, Maik Naumann, Holger C. Hesse, Fragmented Local Community Battery Storage Systems, Münster, 2016
- [9/76]: Marcus Müller, Eigenheim, Mehrfamilienhaus, Ortsnetz - Energiewende lokal?, Unterhaching, 2016
- [10/76]: Marcus Müller, Energie lokal erzeugen, speichern und nutzen, München, 2016
- [11/76]: Marcus Müller, Andreas Jossen, Gastvorlesung Lithium Technologie und Anwendungen, München, 2016
- [12/76]: Marcus Müller, Stationary Battery Research at TUM. Project EEBat, Garching, 2016
- [13/76]: Marcus Müller, Energy Storage as a Key Enabler of a New Electrification Wave, Cambridge, US, 2016
- [14/76]: Marcus Müller, Anwendungen für Batteriespeicher, Berlin, 2016
- [15/76]: Marcus Müller, Fragmentierte Ortsnetzspeicher, Berlin, 2016
- [16/76]: Alexander Rheinfeld, Johannes Sturm, Simon V. Erhard, Stephan Kosch, Andreas Jossen, Localised effects during high current scenarios: Identifying limiting performance and safety characteristics of lithium-ion cells, VII European Congress on Computational Methods in Applied Sciences and Engineering, 2016
- [17/76]: Alexander Rheinfeld, Simon V. Erhard, Eike Höffer, Korbinian Schmidt, Andreas Jossen, Shifting the Temperature Distribution within Li-ion Pouch Cells based on Contact Resistance Variations at its Terminals, 2016
- [18/76]: Alexander Rheinfeld, Stephan Kosch, Simon V. Erhard, Patrick J. Osswald, Bernhard Rieger, Andreas Jossen, Electro-Thermal Modeling of Large Format Lithium-Ion Pouch Cells. A Cell Temperature Dependent Linear Polarization Expression, Journal of the Electrochemical Society, 2016, 163
- [19/76]: Alexander Zeh, Marcus Müller, Maik Naumann, Holger C. Hesse, Andreas Jossen, Rolf Witzmann, Fundamentals of Using Battery Energy Storage Systems to Provide Primary Control Reserves in Germany, Batteries, 2016, Sep
- [20/76]: Andreas Jossen, Bernhard Rieger, Patrick J. Osswald, Simon V. Erhard, Simon F. Schuster, Thermal, Mechanical and Electrical Inhomogeneity in Li-Ion Cells, Batteries 2016, 2016
- [21/76]: Andreas Jossen, Peter Keil, Simon F. Schuster, Christian von Lüders, Holger C. Hesse, Raghuvendra Arunachala, Lifetime Optimized Charging Method of Lithium-Ion Batteries, Electric & Electronic Systems in Hybrid and Electric Vehicles and Electrical Energy Management, 2016
- [22/76]: Bernhard Rieger, Simon F. Schuster, Simon V. Erhard, Patrick J. Osswald, Alexander Rheinfeld, Christopher Willmann, Andreas Jossen, Multi-directional laser scanning as innovative method to detect local cell damage during fast charging of lithium-ion cells, Journal of Energy Storage, 2016, 8
- [23/76]: Bernhard Rieger, Simon V. Erhard, Katharina Rumpf, Andreas Jossen, A New Method to Model the Thickness Change of a Commercial Pouch Cell during Discharge, J. Electrochem. Soc. (Journal of The Electrochemical Society), 2016, 163, 8, A1566-A1575
- [24/76]: Bernhard Rieger, Simon V. Erhard, Peter Keil, Andreas Jossen, An innovative method to detect inhomogeneity in lithium-ion cells during cycling and aging, 2016

- [25/76]: Bernhard Rieger, Simon V. Erhard, Peter Keil, Andreas Jossen, Multi - Directional 3D Laser Scanning of Lithium - Ion Cells to Detect Inhomogeneity during Cycling and Aging, 2016
- [26/76]: Bernhard Rieger, Steffen Schlueter, Simon V. Erhard, Andreas Jossen, Multi-scale investigation of thickness changes in a lithium-ion battery, Kraftwerk Batterie 2016, 2016
- [27/76]: Bernhard Rieger, Steffen Schlueter, Simon V. Erhard, Andreas Jossen, Strain Propagation in Lithium-Ion Batteries from the Crystal Structure to the Electrode Level, J. Electrochem. Soc. (Journal of The Electrochemical Society), 2016, 163, 8, A1595-A1606
- [28/76]: Bernhard Rieger, Steffen Schlueter, Simon V. Erhard, Johannes Schmalz, Gunther Reinhart, Andreas Jossen, Multi-scale investigation of thickness changes in a commercial pouch type lithium-ion battery, Journal of Energy Storage, 2016, Volume 6
- [29/76]: Christian Campestrini, Max F. Horsche, Ilya Zilberman, Thomas Heil, Thomas Zimmermann, Andreas Jossen, Validation and benchmark methods for battery management system functionalities: State of charge estimation algorithms, Journal of Energy Storage, 2016, 7, 38-51
- [30/76]: Christian Campestrini, Peter Keil, Simon F. Schuster, Andreas Jossen, Ageing of lithium-ion battery modules with dissipative balancing compared with single-cell ageing, Journal of Energy Storage, 2016, 6, 142-152
- [31/76]: Christian Campestrini, Thomas Heil, Stephan Kosch, Andreas Jossen, A comparative study and review of different Kalman filters by applying an enhanced validation method, Journal of Energy Storage, 2016, 8, Nov, 142 - 159
- [32/76]: Christoph Göbel, Holger Hesse, Michael Schimpe, Andreas Jossen, Hans-Arno Jacobsen, Model-based Dispatch Strategies for Lithium-Ion Battery Energy Storage applied to Pay-as-Bid Markets for Secondary Reserve, IEEE Transactions on Smart Grid, 2016
- [33/76]: Cong Nam Truong, Maik Naumann, Ralph Ch. Karl, Marcus Müller, Andreas Jossen, Holger C. Hesse, Economics of Residential Photovoltaic Battery Systems in Germany: The Case of Tesla's Powerwall, Batteries, 2016, 2
- [34/76]: Elisabeth I. Kolp, Christian Huber, Andreas Jossen, Designing thermally safe battery packs for electric vehicle applications, Internect - International Forum Automotive Thermal Management, 2016
- [35/76]: Eluid Cabrera-Castillo, Florian Niedermeier, Andreas Jossen, Calculation of the state of safety (SOS) for lithium ion batteries, Journal of Power Sources, 2016, 324, 509 - 520
- [36/76]: Holger C. Hesse, Maik Naumann, Marcus Müller, Cong Nam Truong, Michael Schimpe, Andreas Jossen, A holistic battery storage simulation tool for use case specific cost analysis, 2016
- [37/76]: Ilya Zilberman, Andreas Jossen, Influences of the cell and system quality on balancing, IQPC 2016 - Automotive Battery Management Systems, 2016
- [38/76]: Johannes Sturm, Bernhard Rieger, Alexander Rheinfeld, Stephan Kosch, Simon V. Erhard, Andreas Jossen, Mechanical Displacement Models for Lithium- Ion Cells, ECS Student Chapter Munich, 2nd Symposium, 2016
- [39/76]: Jonas Keil, Alexander Rheinfeld, Simon V. Erhard, Andreas Jossen, Modeling Self-Discharge of Li-Ion Batteries with Redox-Shuttle Additives, 2016
- [40/76]: Jonas Keil, Frank M. Kindermann, Ludwig Kraft, Andreas Jossen, Modeling Capacity Fade due to SEI Formation in Lithium-Ion Cells, 2016
- [41/76]: Jürgen Stich, Thomas Hamacher, Marcus Müller, Holger C. Hesse, Andreas Jossen, Sustainable Power Supply Options for Large Islands - A case study for Belitung Island, IEEE PES Innovative Smart Grid Technologies Asia, 2016
- [42/76]: Katharina Rumpf, Alexander Rheinfeld, Andreas Geltinger, Tobias Schua, Andreas Jossen, Modeling inhomogeneity in lithium-ion battery modules, ECS Student Chapter Munich, 2nd Symposium, 2016
- [43/76]: Katharina Rumpf, Lemuel Moraleja, Jan Geder, Andreas Jossen, Comparing the specific heat capacity of lithium-ion cells using adiabatic calorimetry, 2016
- [44/76]: Marco Steinhardt, Martin J. Brand, Markus H. Hofmann, Simon F. Schuster, Andreas Jossen, Hochpräzise Strommessung in parallel verschalteten Batteriezellen unter dynamischer Belastung, 49 - 53, Virtuelle Instrumente in der Praxis, Rahman Jamal, Ronald Heinze, VDE Verlag, 2016
- [45/76]: Marcus Müller, Large Battery Storage. Market, Technical Fitness and Future Outlook, Intersolar 2016, 2016

- [46/76]: Markus H. Hofmann, Marco Steinhardt, Martin J. Brand, Simon F. Schuster, Andreas Jossen, Effects of compensating Current in the parallel Connection of Battery Cells, 2184 - 2193, EVS29 - The 29th International Electric Vehicle Symposium, 2016
- [47/76]: Markus H. Hofmann, Martin J. Brand, Marco Steinhardt, Max F. Horsche, Thomas Zimmermann, Andreas Jossen, DriveBattery2015 - Untersuchungen an vielzelligen und modularen Batteriesystemen, 2016
- [48/76]: Markus H. Hofmann, Martin J. Brand, Marco Steinhardt, Simon F. Schuster, Andreas Jossen, Measurement and simulation of the current distribution within parallel connected battery cells, Batterietagung 2016 (Kraftwerk Batterie), 2016
- [49/76]: Martin J. Brand, Markus H. Hofmann, Marco Steinhardt, Simon F. Schuster, Andreas Jossen, Current distribution within parallel-connected battery cells, Journal of Power Sources, 2016, 334, 202-212
- [50/76]: Martin J. Brand, Philipp Berg, Elisabeth I. Kolp, Tobias Bach, Philipp Schmidt, Andreas Jossen, Detachable electrical connection of battery cells by press contact, Journal of Energy Storage, 2016, 8, S. 69 - 77
- [51/76]: Max F. Horsche, Michael Sturm, Andreas Jossen, Realising Serial Hybrid Energy Storage Systems (sHESS) by implementing Switching Circuits on Battery Cell Level, World Electric Vehicle Association (Hg.) 2016 - EVS29, 2016
- [52/76]: Michael Schimpe, Maik Naumann, Marcus Müller, Cong Nam Truong, Holger C. Hesse, Andreas Jossen, System Simulation of a Large Stationary Battery System with Thermal Management, 2016
- [53/76]: Michael Winger, Markus Herzog, Jörg Kammermann, Julian Taube, Thomas Heil, Andreas Jossen, Hans-Georg Herzog, eCARus - Analysis of an established student hands-on project, IEEE Global Engineering Education Conference (EDUCON 2016), 2016
- [54/76]: Patrick J. Osswald, Simon V. Erhard, Alexander Rheinfeld, Bernhard Rieger, Harry E. Hoster, Andreas Jossen, Temperature dependency of state of charge inhomogeneities and their equalization in cylindrical lithium-ion cells, Journal of Power Sources, 2016, 329
- [55/76]: Patrick J. Osswald, Simon V. Erhard, Andreas Noel, Peter Keil, Frank M. Kindermann, Harry E. Hoster, Andreas Jossen, Current density distribution in cylindrical Li-Ion cells during impedance measurements, Journal of Power Sources, 2016, 314
- [56/76]: Patrick J. Osswald, Simon V. Erhard, Harry E. Hoster, Andreas Jossen, Local Measurements within Cylindrical Lithium-Ion Batteries: How to Tab Pattern, Frequency and Temperature, Kraftwerk Batterie 2016, 2016
- [57/76]: Peter Keil, Kalendarische Alterung, Alterungsworkshop, 2016
- [58/76]: Peter Keil, Andreas Jossen, Aging of Lithium-Ion Batteries in Electric Vehicles, Kraftwerk Batterie 2016, 2016
- [59/76]: Peter Keil, Andreas Jossen, Charging protocols for lithium-ion batteries and their impact on cycle life—An experimental study with different 18650 high-power cells, Journal of Energy Storage, 2016, 6, 125-141
- [60/76]: Peter Keil, Jörn Wilhelm, Simon F. Schuster, Andreas Jossen, Insights on Calendar Aging of Lithium-Ion Batteries from Differential Voltage Analysis and Coulometry, 2016
- [61/76]: Peter Keil, Matthias Englberger, Andreas Jossen, Hybrid Energy Storage Systems for Electric Vehicles: An Experimental Analysis of Performance Improvements at Subzero Temperatures, IEEE Transactions on Vehicular Technology, 2016, 65/3, 998-1006
- [62/76]: Peter Keil, Simon F. Schuster, Jörn Wilhelm, Julian Travi, Andreas Hauser, Ralph C. Karl, Andreas Jossen, Calendar Aging of Lithium-Ion Batteries - I. Impact of the Graphite Anode on Capacity Fade, Journal of the Electrochemical Society, 2016, 163
- [63/76]: Philipp Berg, Patrick Schmitz, Martin J. Brand, Michael F. Zaeh, Andreas Jossen, Lithium-ion battery safety during laser welding for battery system production, 2016
- [64/76]: Rodrigo Martins, Petr Musilek, Holger C. Hesse, Optimization of Photovoltaic Power Self-Consumption using Linear Programming, 16th IEEE International Conference on Environment and Electrical Engineering, 2016
- [65/76]: Sebastian Fischhaber, Anika Regett, Simon F. Schuster, Holger C. Hesse, Studie: Second-Life-Konzepte für Lithium-Ionen-Batterien aus Elektrofahrzeugen, Studie: Second-Life-Konzepte für Lithium-Ionen-Batterien aus Elektrofahrzeugen, VDE Verlag, 2016
- [66/76]: Shivam Anand Vaish, Naqqash Ghaffar Abbassi, Thomas Zimmermann, A high precision current measurement device for Battery Management Systems (BMS), 23. DESIGN&ELEKTRONIK, 2016

- [67/76]: Simon F. Schuster, Martin J. Brand, Christian Campestrini, Markus Gleissenberger, Andreas Jossen, Correlation between capacity and impedance of lithium-ion cells during calendar and cycle life, *Journal of Power Sources*, 2016, 305, 191-199
- [68/76]: Simon V. Erhard, Patrick J. Osswald, Alexander Rheinfeld, Jörn Wilhelm, Stephan Kosch, Andreas Jossen, Local potential measurements within modified commercial Li-ion batteries for validation of multi-dimensional models, VII European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS Congress 2016, 2016
- [69/76]: Simon V. Erhard, Patrick J. Osswald, Jörn Wilhelm, Alexander Rheinfeld, Stephan Kosch, Bernhard Rieger, Korbinian Schmidt et al., The Impact of Tab Alignment and Temperature on Current Density Distribution in a Multi-Tab Lithium-Ion Cell, 2016
- [70/76]: Stephan Kosch, Alexander Rheinfeld, Simon V. Erhard, Andreas Jossen, Battery modeling: influence of current collector geometry on the behavior of large lithium-ion pouch cells, *EVS 29*, 2016
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- [72/76]: Stephan Kosch, Jörg Schuster, Johannes Hattendorff, Christian von Lüders, Andreas Jossen, Optimization of the gravimetric energy density of a lithium-ion cell by altering the electrode thickness, 2016
- [73/76]: Thomas Zimmermann, Michele Blank, Andreas Jossen, Design of a distributed battery management system: A cyber-physical approach, 2016
- [74/76]: Till Günther, Nicolas Billot, Jörg Schuster, Joscha Schnell, Franz B. Spingler, Hubert A. Gasteiger, The Manufacturing of Electrodes: Key Process for the Future Success of Lithium-Ion Batteries, *Advanced Materials Research*, 2016, 1140, Aug, 304 - 311
- [75/76]: Yu-Shan Cheng, Holger Hesse, Nam Truong, Andreas Jossen, Yi-Hua Liu, Charging Strategy for a Residential Battery Storage System using Fuzzy Logic Controller, Schulz (Hg.) 2017 – NEIS Conference 2016, 2016
- [76/76]: Zimmermann, Thomas; Keil, Peter; Hofmann, Markus H.; Horsche, Max F.; Pichlmaier, Simon; Jossen, Andreas, Review of system topologies for hybrid electrical energy storage systems, *Journal of Energy Storage*, 2016, 8