# Timo Danner

List of Publications by Year
in descending order



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|---|---|---|---|
| 40 papers | 1,158 citations | 516710 16 h-index | 501196 28 g-index |
| 41 all docs | 41 docs citations | 41 times ranked | 1387 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Understanding Electrolyte Filling of Lithiumâ€Ion Battery Electrodes on the Pore Scale Using the Lattice Boltzmann Method. Batteries and Supercaps, 2022, 5, . | 4.7 | 21 |
| 2 | Elucidating the Role of Microstructure in Thiophosphate Electrolytes â€“ a Combined Experimental and Theoretical Study of Î²â€Li<sub>3</sub>PS<sub>4</sub>. Advanced Science, 2022, 9, e2105234. | 11.2 | 9 |
| 3 | Effect of a Heterogeneous Distribution of the Conductive Additives and Binder Domain on the Impedances of Lithium-Ion Battery Electrodes. ECS Meeting Abstracts, 2022, MA2022-01, 266-266. | 0.0 | 0 |
| 4 | On the Additive Microstructure in Composite Cathodes and Alumina-Coated Carbon Microwires for Improved All-Solid-State Batteries. Chemistry of Materials, 2021, 33, 1380-1393. | 6.7 | 38 |
| 5 | Degradation Effects in Metalâ€“Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 2365-2376. | 5.1 | 12 |
| 6 | Investigating Grain Boundary Contributions in Polycrystalline Solid Electrolytes. ECS Meeting Abstracts, 2021, MA2021-01, 441-441. | 0.0 | 0 |
| 7 | Investigation of Li Metal Plating and Dissolution on Graphite Electrodes. ECS Meeting Abstracts, 2021, MA2021-01, 294-294. | 0.0 | 0 |
| 8 | Effect of the 3D Structure and Grain Boundaries on Lithium Transport in Garnet Solid Electrolytes. ACS Applied Energy Materials, 2021, 4, 4786-4804. | 5.1 | 13 |
| 9 | Investigation of Lithium Transport in 3D Porous Solid-State Li-Ion Electrolytes. ECS Meeting Abstracts, 2021, MA2021-01, 321-321. | 0.0 | 0 |
| 10 | Modeling of Electronâ€Transfer Kinetics in Magnesium Electrolytes: Influence of the Solvent on the Battery Performance. ChemSusChem, 2021, 14, 4820-4835. | 6.8 | 15 |
| 11 | Modeling of Electron-Transfer Kinetics in Magnesium Electrolytes: Influence of the Solvent on the Battery Performance. ECS Meeting Abstracts, 2021, MA2021-02, 161-161. | 0.0 | 0 |
| 12 | Optimizing the Microstructure of Composite Cathodes in Garnet-Based All Solid-State Batteries By Continuum Modeling and Simulation. ECS Meeting Abstracts, 2021, MA2021-02, 305-305. | 0.0 | 0 |
| 13 | The Role of Secondary Particle Information in Microstructure-Resolved Simulations. ECS Meeting Abstracts, 2021, MA2021-02, 420-420. | 0.0 | 0 |
| 14 | Beneficial Effects of Three-Dimensional Structured Electrodes for the Fast Charging of Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 13847-13859. | 5.1 | 17 |
| 15 | Manufacturing Process for Improved Ultraâ€Thick Cathodes in Highâ€Energy Lithiumâ€Ion Batteries. Energy Technology, 2020, 8, 1900167. | 3.8 | 89 |
| 16 | An Electrochemical Model of Lithium Plating and Stripping in Lithium Ion Batteries. ACS Applied Energy Materials, 2020, 3, 8519-8531. | 5.1 | 48 |
| 17 | Insights into Self-Discharge of Lithiumâ€“ and Magnesiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 8457-8474. | 5.1 | 26 |
| 18 | Modeling of Ion Agglomeration in Magnesium Electrolytes and its Impacts on Battery Performance. ChemSusChem, 2020, 13, 3599-3604. | 6.8 | 15 |

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|---|---|---|---|
| 19 | Influence of Conductive Additives and Binder on the Impedance of Lithium-Ion Battery Electrodes: Effect of Morphology. Journal of the Electrochemical Society, 2020, 167, 013546. | 2.9 | 105 |
| 20 | Influence of the Electrolyte Salt Concentration on the Rate Capability of Ultraâ€Thick NCM 622 Electrodes. Batteries and Supercaps, 2020, 3, 1172-1182. | 4.7 | 25 |
| 21 | Analysis of Interfacial Effects in All-Solid-State Batteries with Thiophosphate Solid Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 9277-9291. | 8.0 | 73 |
| 22 | Mechanistic Details of the Spontaneous Intercalation of Li Metal into Graphite Electrodes. Journal of the Electrochemical Society, 2020, 167, 140546. | 2.9 | 12 |
| 23 | Microstructureâ€and Theoryâ€Based Modeling andÂSimulation of Batteries and Fuel Cells. Chemie-Ingenieur-Technik, 2019, 91, 758-768. | 0.8 | 4 |
| 24 | On the influence of nucleation and growth of S8 and Li2S in lithium-sulfur batteries. Electrochimica Acta, 2019, 322, 134719. | 5.2 | 40 |
| 25 | Analysis of microstructural effects in multi-layer lithium-ion battery cathodes. Materials Characterization, 2019, 151, 166-174. | 4.4 | 16 |
| 26 | Strategies to Improve Energy and Power Density of Li-Ion Batteries By Virtual Electrode Design. ECS Meeting Abstracts, 2019, MA2019-04, 186-186. | 0.0 | 2 |
| 27 | Investigating the Grain Boundary Transport and Resulting Effective Bulk Properties for Polycrystalline Solid Electrolytes. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 28 | Application and Comparison of Different Structuring Concepts for Ultra-Thick NMC 622 Cathodes in High Energy Lithium Ion Batteries. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 29 | High Capacity Garnet-Based All-Solid-State Lithium Batteries: Fabrication and 3D-Microstructure Resolved Modeling. ACS Applied Materials & Interfaces, 2018, 10, 22329-22339. | 8.0 | 91 |
| 30 | First Steps Towards a Continuum Model of Mg-S Batteries. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 31 | Insights on the Operation of Metal-Sulfur Batteries: A Modeling Perspective. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 32 | Virtual Design of Thick Electrodes for Li-Ion Batteries. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 33 | Thick electrodes for Li-ion batteries: A model based analysis. Journal of Power Sources, 2016, 334, 191-201. | 7.8 | 191 |
| 34 | Characterization of gas diffusion electrodes for metal-air batteries. Journal of Power Sources, 2016, 324, 646-656. | 7.8 | 53 |
| 35 | Modeling of nano-structured cathodes for improved lithium-sulfur batteries. Electrochimica Acta, 2015, 184, 124-133. | 5.2 | 47 |
| 36 | Screening and further investigations on promising bi-functional catalysts for metalâ€“air batteries with an aqueous alkaline electrolyte. Journal of Applied Electrochemistry, 2014, 44, 73-85. | 2.9 | 17 |

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|---|---|---|---|
| 37 | Reaction and transport in Ag/Ag2O gas diffusion electrodes of aqueous Liâ€“O2 batteries: Experiments and modeling. Journal of Power Sources, 2014, 264, 320-332. | 7.8 | 30 |
| 38 | Precipitation in aqueous lithiumâ€“oxygen batteries: a model-based analysis. Energy and Environmental Science, 2013, 6, 1299. | 30.8 | 63 |
| 39 | Grand canonical Monte Carlo simulations of vapor-liquid equilibria using a bias potential from an analytic equation of state. Journal of Chemical Physics, 2013, 138, 234106. | 3.0 | 8 |
| 40 | A Flexible Framework for Modeling Multiple Solid, Liquid and Gaseous Phases in Batteries and Fuel Cells. Journal of the Electrochemical Society, 2012, 159, A1528-A1542. | 2.9 | 78 |