Norbert Wagner

List of Publications by Year
in descending order

34 papers	1,526 citations	361413 20 h-index	361022 35 g-index
36 all docs	36 docs citations	36 times ranked	2307 citing authors

#	Article	IF	Citations
1	Investigations of lithiumâ€“sulfur batteries using electrochemical impedance spectroscopy. Electrochimica Acta, 2013, 97, 42-51.	5.2	353
2	In-situ X-ray diffraction studies of lithiumâ€“sulfur batteries. Journal of Power Sources, 2013, 226, 313-319.	7.8	195
3	Investigation of the Solid Electrolyte Interphase Formation at Graphite Anodes in Lithium-Ion Batteries with Electrochemical Impedance Spectroscopy. Electrochimica Acta, 2017, 228, 652-658.	5.2	130
4	Experimental and Theoretical Analysis of Products and Reaction Intermediates of Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry C, 2014, 118, 12106-12114.	3.1	101
5	Influence of Temperature on the Performance of Gas Diffusion Electrodes in the CO₂ Reduction Reaction. ChemElectroChem, 2019, 6, 4497-4506.	3.4	72
6	In Situ Studies of Solid Electrolyte Interphase (SEI) Formation on Crystalline Carbon Surfaces by Neutron Reflectometry and Atomic Force Microscopy. ACS Applied Materials & Interfaces, 2017, 9, 35794-35801.	8.0	59
7	Correlation of capacity fading processes and electrochemical impedance spectra in lithium/sulfur cells. Journal of Power Sources, 2016, 323, 107-114.	7.8	55
8	Transferring Electrochemical CO₂ Reduction from Semiâ€Batch into Continuous Operation Mode Using Gas Diffusion Electrodes. Chemical Engineering and Technology, 2016, 39, 2042-2050.	1.5	52
9	Investigation of Magnesiumâ€“Sulfur Batteries using Electrochemical Impedance Spectroscopy. Electrochimica Acta, 2020, 338, 135787.	5.2	48
10	Optimizing Reaction Conditions and Gas Diffusion Electrodes Applied in the CO₂ Reduction Reaction to Formate to Reach Current Densities up to 1.8 A cm^{â€“2}. ACS Sustainable Chemistry and Engineering, 2021, 9, 4213-4223.	6.7	33
11	Modified carbon-free silver electrodes for the use as cathodes in lithiumâ€“air batteries with an aqueous alkaline electrolyte. Journal of Power Sources, 2014, 265, 299-308.	7.8	30
12	Utilizing Formate as an Energy Carrier by Coupling CO₂ Electrolysis with Fuel Cell Devices. Chemie-Ingenieur-Technik, 2019, 91, 872-882.	0.8	30
13	Degradation study on tin- and bismuth-based gas-diffusion electrodes during electrochemical CO2 reduction in highly alkaline media. Journal of Energy Chemistry, 2021, 62, 367-376.	12.9	30
14	Ultramicroporous carbon aerogels encapsulating sulfur as the cathode for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 6508-6519.	10.3	30
15	Operando UV/vis Spectroscopy Providing Insights into the Sulfur and Polysulfide Dissolution in Magnesiumâ€“Sulfur Batteries. ACS Energy Letters, 2022, 7, 1-9.	17.4	29
16	Investigation of CO₂ Electrolysis on Tin Foil by Electrochemical Impedance Spectroscopy. ACS Sustainable Chemistry and Engineering, 2020, 8, 5192-5199.	6.7	27
17	Insights into Self-Discharge of Lithiumâ€“ and Magnesiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 8457-8474.	5.1	26
18	Revealing Mechanistic Processes in Gas-Diffusion Electrodes During CO₂ Reduction via Impedance Spectroscopy. ACS Sustainable Chemistry and Engineering, 2020, 8, 13759-13768.	6.7	25

#	Article	IF	Citations
19	Design-Considerations regarding Silicon/Graphite and Tin/Graphite Composite Electrodes for Lithium-Ion Batteries. Scientific Reports, 2018, 8, 15851.	3.3	24
20	Investigation of the Influence of Nanostructured LiNi_{0.33}Co_{0.33}Mn_{0.33}O₂Lithium-Ion Battery Electrodes on Performance and Aging. Journal of the Electrochemical Society, 2018, 165, A273-A282.	2.9	23
21	Bifunctional, Carbon-Free Nickel/Cobalt-Oxide Cathodes for Lithium-Air Batteries with an Aqueous Alkaline Electrolyte. Electrochimica Acta, 2014, 149, 355-363.	5.2	21
22	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
23	Entwicklung und Einsatz von Gasdiffusionselektroden zur elektrochemischen Reduktion vonÂCO₂. Chemie-Ingenieur-Technik, 2015, 87, 855-859.	0.8	17
24	Insights into solid electrolyte interphase formation on alternative anode materials in lithium-ion batteries. Journal of Applied Electrochemistry, 2017, 47, 249-259.	2.9	17
25	Impedance Spectroscopic Investigation of Proton Conductivity in Nafion Using Transient Electrochemical Atomic Force Microscopy (AFM). Membranes, 2012, 2, 237-252.	3.0	15
26	Modeling of Electronâ€Transfer Kinetics in Magnesium Electrolytes: Influence of the Solvent on the Battery Performance. ChemSusChem, 2021, 14, 4820-4835.	6.8	15
27	Understanding the Nature of Solidâ€Electrolyte Interphase on Lithium Metal in Liquid Electrolytes: A Review on Growth, Properties, and Applicationâ€Related Challenges. Batteries and Supercaps, 2021, 4, 909-922.	4.7	13
28	Degradation Effects in Metalâ€“Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 2365-2376.	5.1	12
29	Importance of Timeâ€Dependent Wetting Behavior of Gasâ€Diffusion Electrodes for Reactivity Determination. Chemie-Ingenieur-Technik, 2021, 93, 1015-1019.	0.8	8
30	Influence of Organic Additives for Zinc-Air Batteries on Cathode Stability and Performance. Journal of the Electrochemical Society, 2021, 168, 050531.	2.9	5
31	Wetting Behavior of Aprotic Liâ€“Air Battery Electrolytes. Advanced Materials Interfaces, 2022, 9, 2101569.	3.7	4
32	Understanding the Influence of Temperature on Phase Evolution during Lithiumâ€Graphite (Deâ€)Intercalation Processes: An Operando Xâ€ray Diffraction Study. ChemElectroChem, 2022, 9, e202101342.	3.4	3
33	Identification of the Underlying Processes in Impedance Response of Sulfur/Carbon Composite Cathodes at Different SOC. Journal of the Electrochemical Society, 2022, 169, 030505.	2.9	3
34	A Segmented Cell Measuring Technique for Current Distribution Measurements in Batteries, Exemplified by the Operando Investigation of a Zn-Air Battery. Journal of the Electrochemical Society, 2021, 168, 120530.	2.9	3