

# Andreas Jossen

## List of Publications by Year in descending order

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214  
papers

10,592  
citations

28274

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38395

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g-index

216  
all docs

216  
docs citations

216  
times ranked

6804  
citing authors

#	ARTICLE	IF	CITATIONS
1	Methods for state-of-charge determination and their applications. <i>Journal of Power Sources</i> , 2001, 96, 113-120.	7.8	955
2	Lithium-Ion Battery Storage for the Grid—A Review of Stationary Battery Storage System Design Tailored for Applications in Modern Power Grids. <i>Energies</i> , 2017, 10, 2107.	3.1	480
3	Fundamentals of battery dynamics. <i>Journal of Power Sources</i> , 2006, 154, 530-538.	7.8	390
4	Calendar Aging of Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2016, 163, A1872-A1880.	2.9	367
5	Nonlinear aging characteristics of lithium-ion cells under different operational conditions. <i>Journal of Energy Storage</i> , 2015, 1, 44-53.	8.1	302
6	Charging protocols for lithium-ion batteries and their impact on cycle life—An experimental study with different 18650 high-power cells. <i>Journal of Energy Storage</i> , 2016, 6, 125-141.	8.1	286
7	Lithium plating in lithium-ion batteries at sub-ambient temperatures investigated by in situ neutron diffraction. <i>Journal of Power Sources</i> , 2014, 271, 152-159.	7.8	277
8	Nonlinear aging of cylindrical lithium-ion cells linked to heterogeneous compression. <i>Journal of Energy Storage</i> , 2016, 5, 212-223.	8.1	219
9	Lithium-ion cell-to-cell variation during battery electric vehicle operation. <i>Journal of Power Sources</i> , 2015, 297, 242-251.	7.8	214
10	Lithium plating in lithium-ion batteries investigated by voltage relaxation and in situ neutron diffraction. <i>Journal of Power Sources</i> , 2017, 342, 17-23.	7.8	205
11	Modeling and simulation of inhomogeneities in a 18650 nickel-rich, silicon-graphite lithium-ion cell during fast charging. <i>Journal of Power Sources</i> , 2019, 412, 204-223.	7.8	165
12	Operation conditions of batteries in PV applications. <i>Solar Energy</i> , 2004, 76, 759-769.	6.1	156
13	Welding techniques for battery cells and resulting electrical contact resistances. <i>Journal of Energy Storage</i> , 2015, 1, 7-14.	8.1	141
14	Calendar Aging of NCA Lithium-Ion Batteries Investigated by Differential Voltage Analysis and Coulomb Tracking. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6066-A6074.	2.9	136
15	Analysis and modeling of calendar aging of a commercial LiFePO <sub>4</sub> /graphite cell. <i>Journal of Energy Storage</i> , 2018, 17, 153-169.	8.1	136
16	Experimental investigation of parametric cell-to-cell variation and correlation based on 1100 commercial lithium-ion cells. <i>Journal of Energy Storage</i> , 2017, 14, 224-243.	8.1	135
17	Comprehensive Modeling of Temperature-Dependent Degradation Mechanisms in Lithium Iron Phosphate Batteries. <i>Journal of the Electrochemical Society</i> , 2018, 165, A181-A193.	2.9	135
18	Economic Optimization of Component Sizing for Residential Battery Storage Systems. <i>Energies</i> , 2017, 10, 835.	3.1	132

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19	Multi-scale investigation of thickness changes in a commercial pouch type lithium-ion battery. Journal of Energy Storage, 2016, 6, 213-221.	8.1	124
20	Economics of Residential Photovoltaic Battery Systems in Germany: The Case of Tesla's Powerwall. Batteries, 2016, 2, 14.	4.5	115
21	Current distribution within parallel-connected battery cells. Journal of Power Sources, 2016, 334, 202-212.	7.8	108
22	Review of system topologies for hybrid electrical energy storage systems. Journal of Energy Storage, 2016, 8, 78-90.	8.1	107
23	Lithium-ion Battery Cost Analysis in PV-household Application. Energy Procedia, 2015, 73, 37-47.	1.8	104
24	Energy efficiency evaluation of a stationary lithium-ion battery container storage system via electro-thermal modeling and detailed component analysis. Applied Energy, 2018, 210, 211-229.	10.1	101
25	Correlation between capacity and impedance of lithium-ion cells during calendar and cycle life. Journal of Power Sources, 2016, 305, 191-199.	7.8	97
26	Effects of vibrations and shocks on lithium-ion cells. Journal of Power Sources, 2015, 288, 62-69.	7.8	94
27	Modeling of lithium plating and lithium stripping in lithium-ion batteries. Journal of Power Sources, 2019, 414, 41-47.	7.8	89
28	Review of fast charging strategies for lithium-ion battery systems and their applicability for battery electric vehicles. Journal of Energy Storage, 2021, 44, 103306.	8.1	86
29	A comparative study and review of different Kalman filters by applying an enhanced validation method. Journal of Energy Storage, 2016, 8, 142-159.	8.1	83
30	Calculation of the state of safety (SOS) for lithium ion batteries. Journal of Power Sources, 2016, 324, 509-520.	7.8	83
31	Analysis and modeling of cycle aging of a commercial LiFePO <sub>4</sub> /graphite cell. Journal of Power Sources, 2020, 451, 227666.	7.8	83
32	Fundamentals of Using Battery Energy Storage Systems to Provide Primary Control Reserves in Germany. Batteries, 2016, 2, 29.	4.5	81
33	Operating conditions of batteries in off-grid renewable energy systems. Solar Energy, 2007, 81, 1409-1425.	6.1	80
34	Long-term equalization effects in Li-ion batteries due to local state of charge inhomogeneities and their impact on impedance measurements. Electrochimica Acta, 2015, 185, 107-116.	5.2	79
35	Ageing of lithium-ion battery modules with dissipative balancing compared with single-cell ageing. Journal of Energy Storage, 2016, 6, 142-152.	8.1	79
36	Impact of Temperature and Discharge Rate on the Aging of a LiCoO <sub>2</sub> /LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Lithium-Ion Pouch Cell. Journal of the Electrochemical Society, 2017, 164, A1438-A1445.	2.9	79

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37	Reversible self-discharge and calendar aging of 18650 nickel-rich, silicon-graphite lithium-ion cells. <i>Journal of Power Sources</i> , 2019, 425, 217-226.	7.8	79
38	A New Method to Model the Thickness Change of a Commercial Pouch Cell during Discharge. <i>Journal of the Electrochemical Society</i> , 2016, 163, A1566-A1575.	2.9	75
39	Optimum fast charging of lithium-ion pouch cells based on local volume expansion criteria. <i>Journal of Power Sources</i> , 2018, 393, 152-160.	7.8	75
40	The Influence of Current Ripples on the Lifetime of Lithium-Ion Batteries. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 10438-10445.	6.3	74
41	Evaluation of grid-level adaptability for stationary battery energy storage system applications in Europe. <i>Journal of Energy Storage</i> , 2017, 9, 1-11.	8.1	73
42	Increasing the Discharge Rate Capability of Lithium-Ion Cells with Laser-Structured Graphite Anodes: Modeling and Simulation. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1563-A1573.	2.9	68
43	Fast and Accurate Measurement of Entropy Profiles of Commercial Lithium-Ion Cells. <i>Electrochimica Acta</i> , 2015, 177, 270-276.	5.2	65
44	Multi-directional laser scanning as innovative method to detect local cell damage during fast charging of lithium-ion cells. <i>Journal of Energy Storage</i> , 2016, 8, 1-5.	8.1	65
45	Influence of Cell-to-Cell Variations on the Inhomogeneity of Lithium-Ion Battery Modules. <i>Journal of the Electrochemical Society</i> , 2018, 165, A2587-A2607.	2.9	65
46	Impact of active material surface area on thermal stability of LiCoO <sub>2</sub> cathode. <i>Journal of Power Sources</i> , 2014, 257, 286-292.	7.8	64
47	The influence of different operating conditions, especially over-discharge, on the lifetime and performance of lead/acid batteries for photovoltaic systems. <i>Journal of Power Sources</i> , 1997, 67, 201-212.	7.8	63
48	Simulation and Measurement of the Current Density Distribution in Lithium-Ion Batteries by a Multi-Tab Cell Approach. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6324-A6333.	2.9	63
49	State estimation of lithium-ion cells using a physicochemical model based extended Kalman filter. <i>Applied Energy</i> , 2018, 223, 103-123.	10.1	63
50	Electrochemical Modeling of Linear and Nonlinear Aging of Lithium-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 110535.	2.9	63
51	Reliable battery operation "a challenge for the battery management system. <i>Journal of Power Sources</i> , 1999, 84, 283-286.	7.8	61
52	Standard battery energy storage system profiles: Analysis of various applications for stationary energy storage systems using a holistic simulation framework. <i>Journal of Energy Storage</i> , 2020, 28, 101077.	8.1	60
53	Electrochemical Thermal-Mechanical Modelling of Stress Inhomogeneity in Lithium-Ion Pouch Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013512.	2.9	59
54	Current density distribution in cylindrical Li-Ion cells during impedance measurements. <i>Journal of Power Sources</i> , 2016, 314, 93-101.	7.8	56

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55	Cycling capacity recovery effect: A coulombic efficiency and post-mortem study. Journal of Power Sources, 2017, 365, 327-338.	7.8	56
56	Model-Based Dispatch Strategies for Lithium-Ion Battery Energy Storage Applied to Pay-as-Bid Markets for Secondary Reserve. IEEE Transactions on Power Systems, 2017, 32, 2724-2734.	6.5	56
57	A SEI Modeling Approach Distinguishing between Capacity and Power Fade. Journal of the Electrochemical Society, 2017, 164, E287-E294.	2.9	55
58	Strain Propagation in Lithium-Ion Batteries from the Crystal Structure to the Electrode Level. Journal of the Electrochemical Society, 2016, 163, A1595-A1606.	2.9	50
59	An extended polarization model to study the influence of current collector geometry of large-format lithium-ion pouch cells. Journal of Power Sources, 2017, 342, 666-676.	7.8	47
60	Enhanced performance and lifetime of lithium-ion batteries by laser structuring of graphite anodes. Applied Energy, 2021, 303, 117693.	10.1	47
61	Unlocking the Potential of Battery Storage with the Dynamic Stacking of Multiple Applications. Cell Reports Physical Science, 2020, 1, 100238.	5.6	46
62	Multi-Dimensional Modeling of the Influence of Cell Design on Temperature, Displacement and Stress Inhomogeneity in Large-Format Lithium-Ion Cells. Journal of the Electrochemical Society, 2016, 163, A3099-A3110.	2.9	45
63	Validation and benchmark methods for battery management system functionalities: State of charge estimation algorithms. Journal of Energy Storage, 2016, 7, 38-51.	8.1	45
64	Simulation and Measurement of Local Potentials of Modified Commercial Cylindrical Cells. Journal of the Electrochemical Society, 2015, 162, A2707-A2719.	2.9	44
65	Simulation and Measurement of Local Potentials of Modified Commercial Cylindrical Cells. Journal of the Electrochemical Society, 2015, 162, A2099-A2105.	2.9	44
66	Evolution of initial cell-to-cell variations during a three-year production cycle. ETransportation, 2021, 8, 100102.	14.8	44
67	Electric vehicle multi-use: Optimizing multiple value streams using mobile storage systems in a vehicle-to-grid context. Applied Energy, 2021, 304, 117862.	10.1	44
68	Hybrid systems with lead-acid battery and proton-exchange membrane fuel cell. Journal of Power Sources, 2005, 144, 395-401.	7.8	43
69	Experimental study of the impedance behavior of 18650 lithium-ion battery cells under deforming mechanical abuse. Journal of Energy Storage, 2019, 26, 101039.	8.1	43
70	Cell-to-cell variation of calendar aging and reversible self-discharge in 18650 nickel-rich, silicon-graphite lithium-ion cells. Journal of Energy Storage, 2019, 26, 100900.	8.1	42
71	Modeling and Simulation of Pore Morphology Modifications using Laser-Structured Graphite Anodes in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 013506.	2.9	42
72	Electrochemical impedance spectroscopy for online battery monitoring - power electronics control. , 2014, , .		41

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73	Reducing grid peak load through the coordinated control of battery energy storage systems located at electric vehicle charging parks. <i>Applied Energy</i> , 2021, 295, 116936.	10.1	39
74	Influence of change in open circuit voltage on the state of charge estimation with an extended Kalman filter. <i>Journal of Energy Storage</i> , 2017, 12, 149-156.	8.1	38
75	Impact of Dynamic Driving Loads and Regenerative Braking on the Aging of Lithium-Ion Batteries in Electric Vehicles. <i>Journal of the Electrochemical Society</i> , 2017, 164, A3081-A3092.	2.9	38
76	Impact of Electrode and Cell Design on Fast Charging Capabilities of Cylindrical Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 130505.	2.9	37
77	Electrochemically Stable In Situ Dilatometry of NMC, NCA and Graphite Electrodes for Lithium-Ion Cells Compared to XRD Measurements. <i>Journal of the Electrochemical Society</i> , 2021, 168, 040515.	2.9	36
78	Comparative Evaluation of LMR-NCM and NCA Cathode Active Materials in Multilayer Lithium-Ion Pouch Cells: Part I. Production, Electrode Characterization, and Formation. <i>Journal of the Electrochemical Society</i> , 2021, 168, 030507.	2.9	35
79	Electrical resistances of soldered battery cell connections. <i>Journal of Energy Storage</i> , 2017, 12, 45-54.	8.1	34
80	Multi-phase formation induced by kinetic limitations in graphite-based lithium-ion cells: Analyzing the effects on dilation and voltage response. <i>Journal of Energy Storage</i> , 2017, 10, 1-10.	8.1	34
81	Inhomogeneity and relaxation phenomena in the graphite anode of a lithium-ion battery probed by in situ neutron diffraction. <i>Journal of Power Sources</i> , 2017, 361, 54-60.	7.8	34
82	Online aging determination in lithium-ion battery module with forced temperature gradient. <i>Journal of Energy Storage</i> , 2020, 28, 101170.	8.1	34
83	Development of an All Kapton-Based Thin-Film Thermocouple Matrix for <i>In Situ</i> Temperature Measurement in a Lithium Ion Pouch Cell. <i>IEEE Sensors Journal</i> , 2014, 14, 3377-3384.	4.7	33
84	Measurement of gas pressure inside large-format prismatic lithium-ion cells during operation and cycle aging. <i>Journal of Power Sources</i> , 2020, 478, 228661.	7.8	33
85	Aging of Lithium-Ion Batteries in Electric Vehicles: Impact of Regenerative Braking. <i>World Electric Vehicle Journal</i> , 2015, 7, 41-51.	3.0	30
86	Entropy-induced temperature variation as a new indicator for state of health estimation of lithium-ion cells. <i>Electrochimica Acta</i> , 2018, 276, 370-376.	5.2	30
87	Optimal pool composition of commercial electric vehicles in V2G fleet operation of various electricity markets. <i>Applied Energy</i> , 2022, 308, 118351.	10.1	30
88	Ageing and Efficiency Aware Battery Dispatch for Arbitrage Markets Using Mixed Integer Linear Programming. <i>Energies</i> , 2019, 12, 999.	3.1	29
89	Linear and Nonlinear Aging of Lithium-Ion Cells Investigated by Electrochemical Analysis and In-Situ Neutron Diffraction. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3908-A3917.	2.9	29
90	Aging in 18650-type Li-ion cells examined with neutron diffraction, electrochemical analysis and physico-chemical modeling. <i>Journal of Energy Storage</i> , 2018, 17, 383-394.	8.1	28

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91	The Role of Silicon in Silicon-Graphite Composite Electrodes Regarding Specific Capacity, Cycle Stability, and Expansion. <i>Journal of the Electrochemical Society</i> , 2022, 169, 010504.	2.9	28
92	Meta-analysis of experimental results for heat capacity and thermal conductivity in lithium-ion batteries: A critical review. <i>Journal of Power Sources</i> , 2022, 522, 230829.	7.8	28
93	Electrical safety of commercial Li-ion cells based on NMC and NCA technology compared to LFP technology. <i>World Electric Vehicle Journal</i> , 2013, 6, 572-580.	3.0	27
94	Hybrid Energy Storage Systems for Electric Vehicles: An Experimental Analysis of Performance Improvements at Subzero Temperatures. <i>IEEE Transactions on Vehicular Technology</i> , 2016, 65, 998-1006.	6.3	27
95	Dynamics of current distribution within battery cells connected in parallel. <i>Journal of Energy Storage</i> , 2018, 20, 120-133.	8.1	27
96	A Computationally Efficient Multi-Scale Model for Lithium-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, A2374-A2388.	2.9	27
97	Quasi-Isothermal External Short Circuit Tests Applied to Lithium-Ion Cells: Part II. Modeling and Simulation. <i>Journal of the Electrochemical Society</i> , 2019, 166, A151-A177.	2.9	27
98	Durability of lithium-ion 18650 cells under random vibration load with respect to the inner cell design. <i>Journal of Energy Storage</i> , 2020, 31, 101499.	8.1	27
99	Impact of Silicon Content within Silicon-Graphite Anodes on Performance and Li Concentration Profiles of Li-Ion Cells using Neutron Depth Profiling. <i>Journal of the Electrochemical Society</i> , 2021, 168, 020519.	2.9	27
100	Detachable electrical connection of battery cells by press contacts. <i>Journal of Energy Storage</i> , 2016, 8, 69-77.	8.1	26
101	Non-Destructive Detection of Local Aging in Lithium-Ion Pouch Cells by Multi-Directional Laser Scanning. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1342-A1351.	2.9	26
102	Design and analysis of an aging-aware energy management system for islanded grids using mixed-integer quadratic programming. <i>International Journal of Energy Research</i> , 2019, 43, 4127-4147.	4.5	26
103	Capacity Recovery Effect in Commercial LiFePO <sub>4</sub> / Graphite Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 040526.	2.9	26
104	Charging optimization of battery electric vehicles including cycle battery aging. , 2014, , .		25
105	Energy efficiency evaluation of grid connection scenarios for stationary battery energy storage systems. <i>Energy Procedia</i> , 2018, 155, 77-101.	1.8	25
106	Power Flow Distribution Strategy for Improved Power Electronics Energy Efficiency in Battery Storage Systems: Development and Implementation in a Utility-Scale System. <i>Energies</i> , 2018, 11, 533.	3.1	25
107	Change in the half-cell open-circuit potential curves of silicon-graphite and nickel-rich lithium nickel manganese cobalt oxide during cycle aging. <i>Journal of Power Sources</i> , 2021, 506, 230240.	7.8	25
108	Determination of degradation modes of lithium-ion batteries considering aging-induced changes in the half-cell open-circuit potential curve of silicon-graphite. <i>Journal of Power Sources</i> , 2022, 532, 231296.	7.8	25

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109	Electro-Thermal Modeling of Large Format Lithium-Ion Pouch Cells: A Cell Temperature Dependent Linear Polarization Expression. <i>Journal of the Electrochemical Society</i> , 2016, 163, A3046-A3062.	2.9	24
110	Simulation of voltage imbalance in large lithium-ion battery packs influenced by cell-to-cell variations and balancing systems. <i>Journal of Energy Storage</i> , 2020, 32, 101828.	8.1	24
111	Low-effort determination of heat capacity and thermal conductivity for cylindrical 18650 and 21700 lithium-ion cells. <i>Journal of Energy Storage</i> , 2021, 42, 103065.	8.1	24
112	A PSO-Optimized Fuzzy Logic Control-Based Charging Method for Individual Household Battery Storage Systems within a Community. <i>Energies</i> , 2018, 11, 469.	3.1	23
113	Quasi-Isothermal External Short Circuit Tests Applied to Lithium-Ion Cells: Part I. Measurements. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3427-A3448.	2.9	22
114	A Techno-Economic Analysis of Vehicle-to-Building: Battery Degradation and Efficiency Analysis in the Context of Coordinated Electric Vehicle Charging. <i>Energies</i> , 2019, 12, 955.	3.1	22
115	A Lumped Electro-Thermal Model for Li-Ion Cells in Electric Vehicle Application. <i>World Electric Vehicle Journal</i> , 2015, 7, 1-13.	3.0	21
116	Temperature dependency of state of charge inhomogeneities and their equalization in cylindrical lithium-ion cells. <i>Journal of Power Sources</i> , 2016, 329, 546-552.	7.8	21
117	Suitability of physicochemical models for embedded systems regarding a nickel-rich, silicon-graphite lithium-ion battery. <i>Journal of Power Sources</i> , 2019, 436, 226834.	7.8	21
118	Localized Swelling Inhomogeneity Detection in Lithium Ion Cells Using Multi-Dimensional Laser Scanning. <i>Journal of the Electrochemical Society</i> , 2019, 166, A27-A34.	2.9	21
119	Thermal conductivity inside prismatic lithium-ion cells with dependencies on temperature and external compression pressure. <i>Journal of Energy Storage</i> , 2020, 32, 101680.	8.1	21
120	In Situ Neutron Diffraction Study of Lithiation Gradients in Graphite Anodes during Discharge and Relaxation. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1846-A1856.	2.9	20
121	Proton exchange membrane water electrolysis at high current densities: Investigation of thermal limitations. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 1417-1428.	7.1	20
122	Ethanol catalytic membrane reformer for direct PEM FC feeding. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 5605-5615.	7.1	19
123	Electrical safety of commercial Li-ion cells based on NMC and NCA technology compared to LFP technology. , 2013, , .		19
124	Battery management systems (BMS) for increasing battery life time. , 0, , .		18
125	Impedance spectroscopy for battery monitoring with switched mode amplifiers. , 2014, , .		18
126	Thermal Analysis of $\text{LiNi}_{0.4}\text{Co}_{0.2}\text{Mn}_{0.4}\text{O}_2$ /Mesocarbon Microbeads Cells and Electrodes: State-of-Charge and State-of-Health Influences on Reaction Kinetics. <i>Journal of the Electrochemical Society</i> , 2018, 165, A104-A117.	2.9	18



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127	Comparative Evaluation of LMR-NCM and NCA Cathode Active Materials in Multilayer Lithium-Ion Pouch Cells: Part II. Rate Capability, Long-Term Stability, and Thermal Behavior. Journal of the Electrochemical Society, 2021, 168, 020537.	2.9	18
128	High frequency impedance characteristics of cylindrical lithium-ion cells: Physical-based modeling of cell state and cell design dependencies. Journal of Power Sources, 2021, 488, 229463.	7.8	18
129	The Effects of Non-Uniform Mechanical Compression of Lithium-Ion Cells on Local Current Densities and Lithium Plating. Journal of the Electrochemical Society, 2021, 168, 110515.	2.9	18
130	A Novel Method for High Frequency Battery Impedance Measurements. , 2019, , .		17
131	Impact of Cell Size and Format on External Short Circuit Behavior of Lithium-Ion Cells at Varying Cooling Conditions: Modeling and Simulation. Journal of the Electrochemical Society, 2020, 167, 013511.	2.9	17
132	Pulse resistance based online temperature estimation for lithium-ion cells. Journal of Power Sources, 2021, 490, 229523.	7.8	17
133	Comprehensive Analysis of the Aging Behavior of Nickel-Rich, Silicon-Graphite Lithium-Ion Cells Subject to Varying Temperature and Charging Profiles. Journal of the Electrochemical Society, 2021, 168, 060522.	2.9	17
134	Evaluating the interdependency between peer-to-peer networks and energy storages: A techno-economic proof for prosumers. Advances in Applied Energy, 2021, 3, 100059.	13.2	17
135	The carbon footprint of island grids with lithium-ion battery systems: An analysis based on levelized emissions of energy supply. Renewable and Sustainable Energy Reviews, 2021, 149, 111353.	16.4	17
136	Uncertainties in entropy due to temperature path dependent voltage hysteresis in Li-ion cells. Journal of Power Sources, 2018, 395, 179-184.	7.8	16
137	Energy Arbitrage Optimization With Battery Storage: 3D-MILP for Electro-Thermal Performance and Semi-Empirical Aging Models. IEEE Access, 2020, 8, 204325-204341.	4.2	16
138	Multi-Use of Stationary Battery Storage Systems with Blockchain Based Markets. Energy Procedia, 2018, 155, 3-16.	1.8	15
139	Investigation of the distribution of relaxation times of a porous electrode using a physics-based impedance model. Journal of Power Sources, 2022, 530, 231250.	7.8	15
140	Reducing Inhomogeneous Current Density Distribution in Graphite Electrodes by Design Variation. Journal of the Electrochemical Society, 2017, 164, E3105-E3113.	2.9	14
141	Continuous approximation of the ZARC element with passive components. Measurement Science and Technology, 2021, 32, 104011.	2.6	14
142	On the Impact of Internal Cross-Linking and Connection Properties on the Current Distribution in Lithium-Ion Battery Modules. Journal of the Electrochemical Society, 2020, 167, 120542.	2.9	14
143	Temperature behaviour: Comparison for nine storage technologies. Journal of Power Sources, 2006, 154, 545-549.	7.8	13
144	Inhomogeneities in Large Format Lithium Ion Cells: A Study by Battery Modelling Approach. ECS Transactions, 2016, 73, 201-212.	0.5	13

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145	State-of-health estimation using a neural network trained on vehicle data. Journal of Power Sources, 2021, 512, 230493.	7.8	12
146	Improving the Low-Temperature Performance of Electric Vehicles by Hybrid Energy Storage Systems. , 2014, , .		11
147	Power Line Communications for Automotive High Voltage Battery Systems: Channel Modeling and Coexistence Study with Battery Monitoring. Energies, 2021, 14, 1851.	3.1	11
148	SimSES: A holistic simulation framework for modeling and analyzing stationary energy storage systems. Journal of Energy Storage, 2022, 49, 103743.	8.1	11
149	Improved lithium-ion battery model with hysteresis effect. , 2014, , .		10
150	Measurements of lithium-ion concentration equilibration processes inside graphite electrodes. Journal of Power Sources, 2017, 342, 638-643.	7.8	10
151	Evaluating frequency regulation operated on two stationary energy systems with batteries from electric vehicles. Energy Procedia, 2018, 155, 32-43.	1.8	10
152	Structural dynamics of lithium-ion cells “ Part I: Method, test bench validation and investigation of lithium-ion pouch cells. Journal of Energy Storage, 2019, 26, 100916.	8.1	10
153	Anode Potential Estimation in Lithium-Ion Batteries Using Data-Driven Models for Online Applications. Journal of the Electrochemical Society, 2021, 168, 030535.	2.9	10
154	Battery Management systems (BMS) for increasing battery life time. , 2000, , .		9
155	Comprehensive Modeling of Temperature-Dependent Degradation Mechanisms in Lithium Iron Phosphate Batteries. ECS Transactions, 2017, 80, 147-170.	0.5	9
156	Assessment of residential battery storage systems and operation strategies considering battery aging. International Journal of Energy Research, 2020, 44, 718-731.	4.5	9
157	Continuous Shuttle Current Measurement Method for Lithium Sulfur Cells. Journal of the Electrochemical Society, 2020, 167, 090534.	2.9	9
158	Structural dynamics of lithium-ion cells”part II: Investigation of large-format prismatic cells and method evaluation. Journal of Energy Storage, 2020, 28, 101246.	8.1	9
159	Embedded real-time state observer implementation for lithium-ion cells using an electrochemical model and extended Kalman filter. Journal of Power Sources, 2022, 525, 231018.	7.8	9
160	Modeling capacity fade of lithium-ion batteries during dynamic cycling considering path dependence. Journal of Energy Storage, 2022, 52, 104718.	8.1	9
161	Development of a thin-film thermocouple matrix for in-situ temperature measurement in a lithium ion pouch cell. , 2013, , .		8
162	On-line electrochemical impedance spectroscopy implementation for telecommunication power supplies. , 2015, , .		8

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163	Capacity Recovery Effect in Lithium Sulfur Batteries for Electric Vehicles. World Electric Vehicle Journal, 2018, 9, 34.	3.0	8
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