Xianke lithium battery

View Xianke Lin"s profile on LinkedIn, a professional community of 1 billion members. ... ATI vision, etc..
Skilled in C++/ programming for PC applications

Lithium battery design ...

DOI: 10.1016/J.PECS.2021.100953 Corpus ID: 238668799; Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries @article{Lin2021LithiumPM, title={Lithium Plating Mechanism, ...

Siyang Wang, Xianke Lin, SDP-based energy management strategy with lithium plating prevention for PHEVs. CSME 2019 International Congress, Toronto, Canada. Olaoluwa Joseph Ojo, Xianke Lin, Haoxiang Lang, A Data-Driven Thermal Fault Detection Method in Lithium-Ion Batteries. CSME 2019 International Congress, Toronto, Canada.

Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries. Xianke Lin Kavian Khosravinia Xiaosong Hu Ju Li Wei Lu. Materials Science, Engineering. 2021; 141. Highly Influenced. PDF. 25 Excerpts; Save.

Zhong, Liang & Zhang, Chenbin & He, Yao & Chen, Zonghai, 2014. "A method for the estimation of the battery pack state of charge based on in-pack cells uniformity analysis," Applied Energy, Elsevier, vol. 113(C), pages 558-564.Dai, Haifeng & Wei, Xuezhe & Sun, Zechang & Wang, Jiayuan & Gu, Weijun, 2012. "Online cell SOC estimation of Li-ion ...

2.2. Features extraction. As the battery ages, its charge or discharge curve changes gradually. The cycle to cycle evolution of discharge capacity curve Q(V) includes implicit information about battery health [3] using Q(V) curves, IC and DV analysis can be conducted to extract features that indicate battery aging mechanism ...

Xianke LIN, Professor (Assistant) | Cited by 4,219 | of Ontario Tech University, Oshawa (UOIT) | Read 108 publications | Contact Xianke LIN ... Lithium-ion battery aging mechanism analysis and ...

The success of electric vehicles depends largely on energy storage systems. Lithium-ion batteries have many important properties to meet a wide range of requirements, especially for the development of electric mobility. However, there are still many issues facing lithium-ion batteries. One of the issues is the deposition of metallic lithium on the anode ...

@article{Hu2020AdvancedFD, title={Advanced Fault Diagnosis for Lithium-Ion Battery Systems: A Review of Fault Mechanisms, Fault Features, and Diagnosis Procedures}, author={Xiaosong Hu and Kai Zhang and Kailong Liu and Xianke Lin and Satadru Dey and Simona Onori}, journal={IEEE Industrial Electronics Magazine}, ...

1. Introduction. Solid electrolytes can fundamentally alleviate the safety hazards of lithium metal batteries,

inhibiting the growth of lithium dendrite [1], [2], [3], [4].Currently, the solid-state electrolytes are classed into polymer solid electrolytes [5], solid oxide electrolytes [6] and solid sulfide electrolytes [7].Among them, solid polymer ...

DOI: 10.1039/d2ee03019e Corpus ID: 255672306; Health prognostics for lithium-ion batteries: mechanisms, methods, and prospects @article{Che2023HealthPF, title={Health prognostics for lithium-ion batteries: mechanisms, methods, and prospects}, author={Yunhong Che and Xiaosong Hu and Xianke Lin and Jia Guo and Remus ...

Xianke Lin. Ontario Tech University; Kavian Khosravinia. ... Lithium-ion batteries (LIBs) have been distinguished themselves from alternative energy storage technologies for electric vehicles (EVs ...

Cycle-life prediction model of lithium iron phosphate-based lithium-ion battery module International Journal of Energy Research (IF 4.3) Pub Date: 2021-05-25, DOI: 10.1002/er.6895 Dae Hyun Jung, Dong Min Kim, Jonghoo Park, Sang-il ...

Yunhong Che1,2, Zhongwei Deng1,2, Xiaolin Tang 1,2*, Xianke Lin3, Xianghong Nie4 and Xiaosong Hu1,2* Abstract Aging diagnosis of batteries is essential to ensure that the energy storage systems operate within a safe region. This ... for lithium-ion batteries can be divided into model-based, data-driven, and hybrid methods [[1]]. One type

Semantic Scholar extracted view of "Enabling high-fidelity electrochemical P2D modeling of lithium-ion batteries via fast and non-destructive parameter identification" by Le Xu et al. Skip to search form Skip to main content Skip to ... {Le Xu and Xianke Lin and Yi Xie and Xiaosong Hu}, journal={Energy Storage Materials}, year={2021}, url ...

Nb 2 O 5 /Carbon (C) submicrostructures are fabricated by using a solvothermal method followed by a calcination process. As lithium ion batterie anodes, the Nb 2 O 5 /C submicrostructures exhibit ...

Lithium-ion batteries have become a preferred choice for energy storage because of having high energy density, lower discharge rate, and long cycle life than ...

In this paper, an impedance-based method is proposed to detect lithium plating of lithium-ion battery by comparing the normalized charing internal resistance ...

Figure 6. In-situ Cell Design and Results of Optical Microscopy and Ex-situ SEM for Lithium Plating Morphology Characterization. (A) Schematic of the custom-made optical in-situ cell with a quartz glass window. (B) In-situ ...

Lithium (Li)-ion batteries have become the mainstream energy storage solution for many applications, such as electric vehicles (EVs) and smart grids. However, various faults in a Li-ion battery system (LIBS) can

potentially cause performance degradation and severe safety issues. Developing advanced fault diagnosis technologies ...

A Review of Second-Life Lithium-Ion Batteries for Stationary Energy Storage Applications. Xiaosong Hu 1, Xinchen Deng 1, Feng Wang 1, Zhongwei Deng 1, Xianke Lin 2, Remus Teodorescu 3 and Michael G. Pecht 4 1 Chongqing University, Chongqing, China 2 Ontario Tech University, Oshawa, ON, Canada 3 Aalborg University, Aalborg, Denmark

DOI: 10.1016/J.PECS.2021.100953 Corpus ID: 238668799; Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries @article{Lin2021LithiumPM, title={Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries}, author={Xianke Lin and Kavian Khosravinia and Xiaosong Hu and Ju Li and Wei Lu}, ...

Nb 2 O 5 /Carbon (C) submicrostructures are fabricated by using a solvothermal method followed by a calcination process. As lithium ion batterie anodes, the Nb 2 O 5 /C submicrostructures exhibit outstanding rate behavior and cyclic performance. The superior electrochemical property is attributed to the distinctive structure for Nb 2 O ...

Advanced Fault Diagnosis for Lithium-Ion Battery Systems: A Review of Fault Mechanisms, Fault Features, and Diagnosis Procedures September 2020 IEEE Industrial Electronics Magazine 14(3):65-91

Among lithium-ion battery diagnostic tests, electrochemical impedance spectroscopy, being highly informative on the physics of battery operation within limited testing times, deserves a prominent ...

Figure 6. In-situ Cell Design and Results of Optical Microscopy and Ex-situ SEM for Lithium Plating Morphology Characterization. (A) Schematic of the custom-made optical in-situ cell with a quartz glass window. (B) In-situ optical microscopy at a current density of 1 mA/cm2 (t = 0 - 600 s). The gap between lithium metal and separator helps in the observation of ...

Several studies have been conducted to investigate the lithium deposition in lithium-ion batteries. White et al. 16 developed a physics-based mathematical model to study the lithium deposition on the anode electrode under a variety of operating conditions. Their plating model shows that the lithium plating rate is highly dependent on the anode ...

Currently, lithium-ion batteries have become the mainstream energy storage solution, owing to their inherent benefits such as high energy density, high power density, and long lifespan. However ...

An Early Soft Internal Short-Circuit Fault Diagnosis Method for Lithium-Ion Battery Packs in Electric Vehicles. IEEE/ASME Transactions on Mechatronics ... Zhongwei Deng; Yi Xie; Jonathan Couture; Xianke Lin; Jingjing Zhou; Xiaosong Hu Show more detail. Source: check_circle. Crossref Battery States Monitoring for Electric Vehicles Based on ...

Xianke lithium battery

Real-time prediction of anode potential in Li-ion batteries using long short-term neural networks for lithium plating prevention. Xianke Lin (Single Author) Journal of The ...

Request PDF | On Jun 26, 2019, Xianke Lin published Real-Time Prediction of Anode Potential in Li-Ion Batteries Using Long Short-Term Neural Networks for Lithium Plating Prevention | Find, read ...

health indicator, lithium-ion battery, state of health. I. ... Xianke Lin, Member, IEEE, Le Xu, Yunhong Che and Lin Hu, Member, IEEE T Authorized licensed use limited to: CHONGQING UNIVERSITY ...