

# Energy storage charging pile fault type classification table

What is fault characteristic diagnosis of charging pile?

Fault characteristic diagnosis of the charging pile is essentially fault diagnosis of the power electronic circuits, and the current fault diagnosis methods can be divided into two types: diagnostic methods based on analytical models or methods based on process data. The analytical-model-based approach is by building a mathematical model.

Can CS-LR predict smart charging pile faults based on classified data?

CS-LR is first used to classify the fault data of smart charging piles, then the CS-SVM is adopted to predict the faults based on the classified data. The feasibility of the proposed model is illustrated through the case study on fault prediction of real-world smart charging piles.

What are the possible faults of DC charging pile?

During the operation of DC charging pile, faults are easy to occur, mainly including communication faults, charging gun faults, charging module faults, etc. Among the possible faults of the DC charging post, the charging module failure rate is extremely high.

Can deep learning help diagnose a charging pile fault?

The research purpose of this paper is to make better and faster diagnosis of the fault of the charging pile using technology based on deep learning. Compared with the traditional machine learning algorithm, this paper does not need to calibrate the fault characteristics manually.

How accurate is fault detection in DC charging pile?

It is necessary to accurately judge the fault state of the charging module of DC charging pile in order to ensure the safe and reliable operation of DC charging pile. However, the fault signal processing of the fault detection method is poor, resulting in low fault detection accuracy.

Can cost-sensitive logistic regression predict smart charging pile faults?

In this article, a real-time fault prediction method combining cost-sensitive logistic regression (CS-LR) and cost-sensitive support vector machine classification (CS-SVM) is proposed. CS-LR is first used to classify the fault data of smart charging piles, then the CS-SVM is adopted to predict the faults based on the classified data.

Distributed energy generation increases the need for smart grid monitoring, protection, and control. Localization, classification, and fault detection are essential for addressing any problems immediately and resuming the smart grid as soon as possible. Simultaneously, the capacity to swiftly identify smart grid issues utilizing sensor data and easily accessible ...

