

Short Communication

Study on Preparation and Performance of PEO-PVDF Composite Binder for Lithium ion Batteries

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PEO-PVDF composite binder was used to prepare lithium manganate positive pole piece and its phase and morphology were characterized by X-ray diffractometer (XRD) and scanning electron microscope (SEM). At the same time, CV, AC resistance and charge-discharge tests are used to perform electrochemical performance tests. The results appeared that the specific discharge capacity of the battery declined from 113mAh / g to 88mAh / g after 150 cycles, and the Coulomb efficiency remains at about 99%. And the CV curve almost coincides with 100 times, which indicates excellent cycle performance.

Keywords: LiMn₂O₄; Lithium ion battery; Binder; PEO-PVDF; Cycle performance

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