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添加剂对SiO电性能的影响及其机理分析

Electrochemical Performances of SiO: Effects of Additive and Mechanism

中文关键词：SiO　负极　锂离子电池　电化学性能

英文关键词：SiO　anode　lithium ion battery　electrochemical performance

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中文摘要：

英文摘要：

SiO_x/CoO and SiO/Li_2CO_3 composite materials were prepared by mechanical ball-milling. The structures of the obtained materials were characterized by X-ray diffraction (XRD). And scanning electron microscopes (SEM) of three samples after 20 cycles were also given. In addition, the electrochemical performances of three materials with galvanostatic charge-discharge cycling were investigated. The results show that the composite samples have larger initial reversible capacities and better cycle performance than pure SiO. Also, a schematic diagram showing the buffer effects of Li_2CO_3 addition and the mechanism of improving electrochemical performance by adding Li_2CO_3 are suggested.

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