Preparation and characterization of silicon incorporated mesoporous SnO_2 anode for high energy storage Li ion batteries in a different experiment conditioned

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High energy batteries are important for the development of high performance portable devices and electric vehicles. Silicon incorporated mesoporous SnO_2 was prepared using silicon nano-particle contained KIT-6 silica template via nano-replication method. Silicon species are in the range of 15-40 wt%, which induce high capacity. Mesoporous structure that have nano-sized pores separated by walls attributes to enhance the transfer of Li ions and reduce the diffusing resistance of the electrode. In this report, we present silicon incorporated mesoporous SnO_2 electrode material as a high energy anode for Li ion secondary batteries. We have experiments silicon incorporated mesoporous SnO_2 in different conditions such as different electrolyte and different cut off voltage.