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Boosting the electrochemical performance of MoO<sub>3</sub> anode for long-life lithium ion batteries: Dominated by an ultrathin TiO<sub>2</sub> passivation layer

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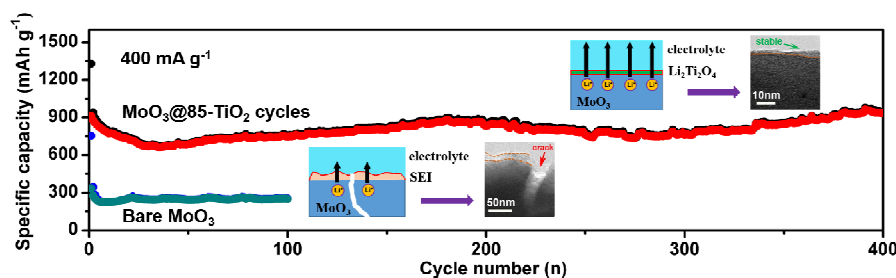
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## TOC



In this work, amorphous TiO<sub>2</sub> layer with different thickness (sub 10 nm) is homogeneously coated MoO<sub>3</sub> nanobelts by atomic layer deposition method. As an anode for LIBs, compared to the bare MoO<sub>3</sub> nanobelts, the MoO<sub>3</sub>@85 cycles TiO<sub>2</sub> nanobelts show a remarkable boosted capacitance and long-life stability, which is attributed to the high interfacial Li<sup>+</sup> transport paths and mechanical integrity regulated by the ultrathin layer.

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