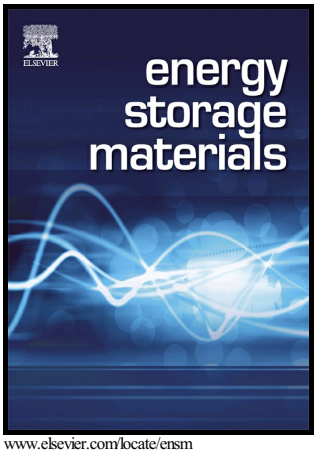

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Large-scale synthesis of high-quality lithium−graphite hybrid anodes for mass-controllable and cycling-stable lithium metal batteries

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Abstract

Lithium (Li) metal is extremely attractive for rechargeable high–energy density batteries, but suffers from uncontrolled dendrite growth, infinite relative volume change and poor solid electrolyte interphase (SEI). Herein, we report large-scale fabrication of lithium−graphite hybrid (LGH) anodes through a facile one-step stirring molten process. Li metal shell is uniformly combined with commercial graphite core forming high-quality LGH anodes. Impressively, the mass loading of Li metal can be precisely controlled in the LGH and avoids