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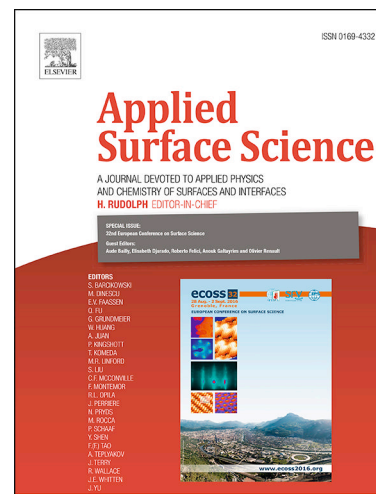
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Lithium Intercalated Graphite with Preformed Passivation Layer as Superior Anode for Lithium Ion Batteries

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Highlights

Lithium Intercalated Graphite with Preformed Passivation Layer as Superior Anode for Lithium Ion Batteries

Sukyong Choi, Gyujin Jung, Jong Eun Kim, TaeYoung Kim,* and Kwang S. Suh*

- ✚ Lithium intercalated graphite (LIG) with a thin passivation layer on the surface was produced by thermal treatment of graphite powder in the presence of lithium metal vapor.
- ✚ A passivation layer on LIG consists of Li_2CO_3 and functions as preformed stable solid electrolyte interphase (SEI) film.
- ✚ Lithium ion batteries with LIG as anode shows a high reversible capacity, high Coulombic efficiency, and stable cycle life.

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