Title (en)

ADVANCED LITHIUM (LI) ION AND LITHIUM SULFUR (LI S) BATTERIES

Title (de)

FORTSCHRITTLICHE LITHIUM-(LI)-IONEN- UND LITHIUM-SCHWEFEL-(LI S)-BATTERIEN

Title (fr)

BATTERIES AVANCÉES AU LITHIUM (LI) ION ET LITHIUM SOUFRE (LI S)

Publication

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Application

EP 20880283 A 20200731

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- US 201962942103 P 20191130
- US 202016785076 A 20200207
- US 202016785020 A 20200207
- US 202016942305 A 20200729
- US 202016942266 A 20200729
- US 202016942229 A 20200729
- US 2020044488 W 20200731

Abstract (en)

[origin: WO2021080664A1] This disclosure provides a lithium (Li) ion battery that includes an anode, a cathode positioned opposite to the anode, a porous separator positioned between the anode and the cathode, and a liquid electrolyte in contact with the anode and the cathode. The anode includes an electrically conductive substrate. A first film is deposited on the electrically conductive substrate. The first film includes a first concentration of carbon particles in contact with each other and defines a first electrical conductivity for the first film. Each of the carbon particles includes a plurality of aggregates formed of few layer graphene sheets. The plurality of aggregates form a porous structure configured to undergo a lithiation, which can include any one or more of an intercalation operation or a plating operation. The anode and the cathode can include an electroactive material. The porous structure can provide conduction between the few layer graphene sheets.

IPC 8 full level

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Citation (search report)

See references of WO 2021080664A1

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DOCDB simple family (application)

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