Review

A critical review of electrode materials and electrolytes for Low-Temperature Lithium-Ion Batteries

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The critical analysis of literature of last 15 years, concerning features of low-temperature behavior of lithium-ion batteries is presented. Certain approaches to the problem; the role of different constituents of electrode polarization at low temperatures; features of functioning of negative and positive electrodes are reviewed. Low-temperature electrolytes are reviewed as well.

Keywords: lithium-ion batteries, low temperatures, electrode polarization, low-temperature electrolytes.

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