

Development of Prospective Energy Materials and Batteries

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Abstract

Nowadays tremendous efforts have been put among the full scientific communities to pursue the development of next generation batteries including the development of low cost with high performance electrode materials, the assembly of electrochemical system, and the possible of combination of energy conversion and storage in battery systems.

The lithium-ion battery (LIB) is still active to attract the attention from public because of their merits over industrial mass production compared to modern advanced but high cost energy technologies.

However, next generation LIB systems are still suffering from difficulties including the insufficient electric density and capacity in terms of stable and safety power for transportation applications. Accordingly, in this speech, we would like to share experience of the development and application of various new materials and batteries from industrial application point of view.

Keywords - *Lithium-ion battery(LIB),energy material,Ni-rich .*