

Magneto-Electrochemical Method of In-Situ Repair of Li-Ion Cathode Materials and Improving Recovery Rate of Active Materials During Recycling

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Technology Summary

Recently there has been significant scientific interest in the magnetic properties of Li-ion cathode materials as an indicator of battery health and underlying phase equilibria. Our team at ORNL is taking a different approach by using these magnetic properties not as a diagnostic tool, but as a path to healing/repairing Li-ion batteries. We are developing a method to use the abundant magnetism present in energy storage materials in order to reactivate inactive phases by a novel method of electrochemical transformation.

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