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(57) Abstract :

[027] The present invention provides an improved lithium-ion battery using an aqueous electrolyte solution with IoT connectivity. The two biggest issues in today's society are energy and environmental pollution. It is vitally necessary to develop green energy storage technologies that are low-cost, high-energy-density, high-reliability, and safe. We discuss a lithium-ion battery that uses an aqueous electrolyte solution in this report. It is constructed utilising LISICON as the negative electrode, graphite coated with a gel polymer membrane as the positive electrode, and LiFePO4 in aqueous solution as the middle electrode. Based on the two electrode materials, it has a 258 Wh/kg energy density and an average discharge voltage of up to 3.1 V. It's an effective cooling system with outstanding safety as a promising energy storage system. Accompanied Drawing [FIG. 1]

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