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### PERSPECTIVE ON ELECTROCHEMICAL CAPACITOR ENERGY STORAGE

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## ABSTRACT

Electrochemical capacitors, a type of capacitor also known by the product names Supercapacitor or Ultracapacitor, can provide short-term energy storage in a wide range of applications. These capacitors are powerful, have extremely high cycle life, store energy efficiently, and operate with unexcelled reliability. This article discusses highly-reversible energy storage, presents electrochemical capacitor basics, and identifies several resources that may be useful to a researcher who wishes to participate in this technology arena. A perspective on the future of electrochemical capacitor technology is offered.

Keywords: electrochemical capacitor, electric double layer capacitor, EDLC, pseudocapacitor, energy storage, carbon

# HIGHLIGHTS

- 1. Electrochemical capacitors provide highly-reversible energy storage.
- 2. Specialized meetings held to advance electrochemical capacitor technology.
- 3. Perspective view presented on electrochemical capacitor technology.

## INTRODUCTION

Energy storage systems are used to power an application. An example application is the cell phone, where its battery powers the phone and is

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