

Carbon materials for Energy Storage

Won-Chun Oh

*Department of Advanced Materials Science & Engineering, Hanseo University,
Chungnam 356-706, Korea*

**Corresponding author, E-mail: wc_oh@hanseo.ac.kr*

Abstract

Electrical devices that have recently become an issue in the world are semiconductor and energy storage devices such as secondary batteries and capacitors. In particular, energy storage devices require secondary batteries and capacitors due to the introduction of eco-friendly electric vehicles to reduce pollutant gases in relation to global environmental pollution. Globally, the demand for electric vehicles, capacitor and secondary batteries is increasing in parallel. In the next 6 to 7 years, the demand is expected to reach 6 to 7 times the current level. The anode and cathode materials used in these energy storage devices are used in various forms, and new materials continue to be developed. Especially, anode materials and nanocarbon materials are used in various forms for various purposes. They play an important role in determining the electrical performance of energy storage devices.

Keywords: Carbon material, Energy storage, Secondary batteries, Capacitor

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