

Facile preparation of microporous conjugated metalloporphyrin polymer based electrode as high-performance supercapacitor

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Large demand for energy-storing materials are being developed currently as more electronic gadgets are requiring faster release of energy from storage devices like supercapacitors. Hence, transition metal containing conjugated metalloporphyrin polymer was prepared via a one-pot hydrothermal synthesis. This material was investigated as a promising high-performance electrode material for supercapacitors. Due to its  $\pi$ -conjugated system, high surface area and microporosity, high specific capacitance of 457 F/g is observed at high current density. This relatively high specific capacitance may potentially rival other materials well-known for supercapacitors (e.g. Metal Oxides). This work was supported by KCRC through the NRF funded by Ministry of Science, ICT, and Future Planning (NRF-2015M1A8A1048902).