

## Synthesis and Characterization of manganese oxide into pore of OMCs including heteroatom

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Ordered mesoporous carbon (OMCs) have attracted considerable attention in various field of study due to high surface area. In particular, OMCs containing heteroatom(O, N, S, P, B and so on.) as the next generation energy storage device used in electrode materials are involved not only electrical double layer capacitor mechanism by high surface area but also operation of pseudo-capacitor by redox reactions of heteroatom. Thus, Manganese oxide was synthesized inside the pore system of host material OMCs containing heteroatom through a nano-replication method. The Mn/hetero-OMCs material thus obtained could be utilized excellent electrode of supercapacitor, because it is exhibited simultaneously redox reaction and EDL reaction to obtain the greater capacitance.