## 研究論文

## 異なる細孔物性の活性炭を用いた電気二重層キャパシタに関する研究

Study on Electric Double Layer Capacitor Using Activated Carbons with Different Pore Properties

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In this paper, electric double layer capacitors were produced using commercial activated carbons which were modified with different pore properties. It was found that the micropore distribution shifted to the larger size as the additional activation yield decreased. Moreover, the higher gravimetric cell capacitance was attributable to the micropores with diameter of around 0.8 nm. Additionally, the durability test results showed that the specific mesopores decreased the capacitance and increased the internal resistance. Better fabrication method of the activated carbon for higher cell performance was discussed.

Keywords: activated carbon, specific surface area, micropore volume, mesopore volume, electric double layer