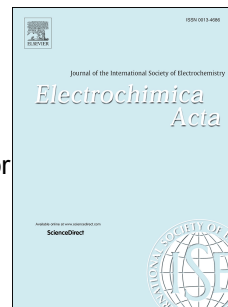


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# Densely Packed Porous Graphene Film for High Volumetric Performance Supercapacitor

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## Abstract

Improving volumetric capacitance of supercapacitor is important and challenging for practical application. Here, porous graphene oxide (PGO) is prepared through an efficient method at room temperature after etched by  $\text{Zn}(\text{CH}_3\text{COO})_2$  in several minutes. The obtained densely packed porous graphene film (PGF) was constructed by a template-assisted method. And the perforated PGF electrode material exhibits a high volumetric capacitance ( $C_V$ ) of  $318.8 \text{ F} \cdot \text{cm}^{-3}$  in 6.0 M KOH electrolyte at the current density of  $1 \text{ A} \cdot \text{g}^{-1}$ . In addition, it exhibited excellent cycling

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