

### **S1-3.3**

## **Investigation of the Electrochemical Properties of Lithium-Sulfur Cells with Sulfur Electrodes Based on Carbon Inverted Opals**

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Carbon structures with an inverted opal lattice was synthesized. Comparative studies of the electrochemical properties of lithium-sulfur cells with sulfur electrodes based on the samples and other carbon materials have been carried out. The synthesized material showed a good stability when cycling in the range of more than 300 cycles. That says about the prospects for the use of such structures in lithium-sulfur batteries.