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Carbon monoliths as CO₂ sorbents

Publication date:	30.12.2020
Publication title:	Carbon monoliths as CO₂ sorbents
Authors:	Katarzyna Maresz , Julita Mrowiec-Białoń , Agnieszka Ciemięga , Janusz J. Malinowski
Journal information:	Prace Naukowe Instytutu Inżynierii Chemicznej Polskiej Akademii Nauk
Tags:	carbon monoliths , carbon dioxide sorption

Abstract: The paper presents the results of study on the synthesis of carbon monoliths. The hard template method was used in the synthesis, where a silica monolith was applied as a structure scaffold. The obtained monoliths were characterized by a flow structure of macropores and an extensive network of micro and mesopores. The influence of the carbon precursor on the structural and sorption properties was investigated. It was found that the materials synthesized using resorcinol and phenol showed the highest sorption capacity.

Attachments:

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Tagi: carbon monoliths, carbon dioxide sorption

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