



## Gas permeability properties of modified membranes based on exfoliated graphite

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### ABSTRACT

This article presents the results of the gas permeability measurements of the graphite foil after gas phase fluorination. Membranes based on exfoliated graphite were treated with undiluted F<sub>2</sub> under variation of temperatures. Gas diffusion measurements were carried out using integral method. It was shown that modified graphite possesses incredibly high permeability in relation to H<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub> and O<sub>2</sub> in comparison with initial foil.

*Keywords:* Exfoliated graphite; Gas-phase fluorination; Gas diffusion measurements

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