

## عنوان مقاله:

Mullite-Supported SAPO-34 Membranes for CO<sub>2</sub>/CH<sub>4</sub> Separation

## محل انتشار:

اولین کنفرانس ملی غشا و فرایندهای غشایی (سال: 1389)

تعداد صفحات اصل مقاله: 2

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## خلاصه مقاله:

In this research, SAPO-34 membranes for CO<sub>2</sub> separation have been synthesized via secondary growth method on mullite support for the first time. The ceramic supports were prepared during calcination of kaolin clay, followed by a leaching post-treatment. Experiments were carried out at three levels of synthesis temperature: 185, 195 and 220 C. Single gas permeation properties of SAPO-34 membranes were studied and effect of synthesis temperature on CO<sub>2</sub> and CH<sub>4</sub> permeances and CO<sub>2</sub>/CH<sub>4</sub> ideal separation selectivity were observed. All the gas separation experiments were conducted at two levels of feed pressure: 1 and 6 bar. The pure gas ideal separation factor for the synthesized membranes varied from 5.78 at 185 C to 17.39 at 220 C.

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/169249>

