Institute of Chemical Engineering

Adres artykułu: http://sportal2.lo.pl/en/article/investigation-of-co2-and-n2-separation-on-silms-based-on-ceramic-al2o3-support

Investigation of CO2 and N2 separation on SILMS based on ceramic Al2O3 support

Publication date:	30.12.2021
Publication title:	Investigation of CO2 and N2 separation on SILMS based on ceramic Al2O3 support
Authors:	Adam Rotkegel, Zenon Ziobrowski
Journal information:	Prace Naukowe Instytutu Inżynierii Chemicznej Polskiej Akademii Nauk
Tags:	absorption, carbon dioxide, ionic liquids

Abstract: The experimental results of carbon dioxide and nitrogen separation on ceramic membranes impregnated with ionic liquids [Emim][Ac] (1-ethyl-3-methylimidazolium acetate) and [Emim][BF4] ((1-ethyl-3-methylimidazolium tetra fluoroborate) are presented. Ceramic membranes made by Inopor were investigated in 20-60°C and in the pressure range 1-7 bar. The ionic liquid was introduced into ceramic support by coating method. It was found, that prepared SILMs are characterized by small mass fluxes and high selectivities.

Attachments:

Zeszyt-25-2021 pdf, 6.38 MB

Created at:	05.08.2025
Published by:	Artur Wojdyła
Published at:	05.08.2025 12:16
Number of downloads:	23

Tagi: absorption, carbon dioxide, ionic liquids

Metryczka

Published by:	Artur Wojdyła
Published at:	06.08.2025 08:41
Number of views:	20