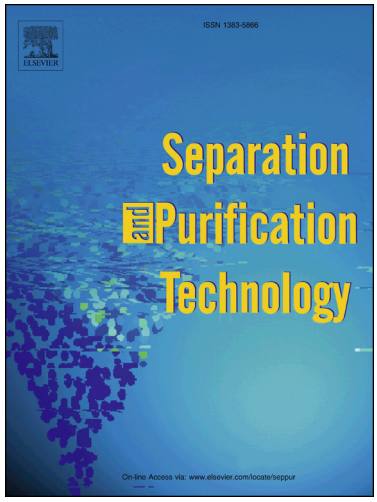

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Abstract

In the present work, supported liquid membranes based on three ionic liquids (ILs) (1-(2-aminoethyl)-3-methylimidazolium trifluoromethanesulfonate ([AEMIm]Tf), 1-(2-aminoethyl)-3-methylimidazolium tetrafluoroborate ([AEMIm]BF_4) and trioctylmethylammonium anthranilate ([TOMA])), used as mobile phases, were studied in the separation of carbon dioxide from nitrogen. The IL chemical structures and thermal properties were confirmed by spectroscopic techniques and thermogravimetric analysis (TGA), respectively. The IL homogeneous distribution of the impregnation on alumina tubular supports was determined by scanning