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Study of nanofilament catalysts based on aluminum and titanium oxides in the cracking reaction of propane

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Abstract

Catalysts from aerogel of aluminum oxide nanofilaments, covered by the layer of titan dioxide in reaction of cracking of propane at atmospheric pressure were investigated. The optimum temperature of reaction and selectivity in ethylene and propylene were determined for catalytic conversion of propane. Stability and possibility of regeneration of catalysts depending on contact duration and temperature were studied.