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Kinetic modeling of hydrocarbons conversion on the high-silica zeolite system Ga-ZSM-5

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Abstract

The kinetic scheme of hydrocarbons conversion on the high-silica zeolite system Ga-ZSM-5 were proposed. A system of differential rate equations for each of the reaction components were compiled. Methods for solving direct and inverse kinetic problem with the use of parallel computing systems and technologies to speed up calculations are developed.