

Title (en)

METHOD FOR FAST SYNTHESIS OF AN AFX-STRUCTURE ZEOLITE WITH A FAUJASITE SOURCE

Title (de)

VERFAHREN ZUR SCHNELLEN SYNTHESE EINES AFX-STRUKTUR-ZEOLITHS MIT FAUJASIT-QUELLE

Title (fr)

PROCEDE DE SYNTHESE RAPIDE D'UNE ZEOLITHE DE TYPE STRUCTURAL AFX AVEC UNE SOURCE DE FAUJASITE

Publication

**EP 3956264 A1 20220223 (FR)**

Application

**EP 20717887 A 20200414**

Priority

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- EP 2020060476 W 20200414

Abstract (en)

[origin: WO2020212356A1] The present invention relates to a method for fast synthesis of an AFX-structure zeolite, which comprises at least:  
i) mixing, in an aqueous medium, an FAU-structure zeolite having a molar ratio  $\text{SiO}_2(\text{FAU})/\text{Al}_2\text{O}_3(\text{FAU})$  of between 2.00 and 100, an organic nitrogen compound R, at least one source of at least one alkali and/or alkaline-earth metal M of valency n, with the following molar composition:  $(\text{SiO}_2(\text{FAU})) / (\text{Al}_2\text{O}_3(\text{FAU}))$  between 2.00 and 100,  $\text{H}_2\text{O} / (\text{SiO}_2(\text{FAU}))$  between 1 and 100,  $\text{R} / (\text{SiO}_2(\text{FAU}))$  between 0.01 and 0.6,  $\text{M}_2/\text{nO} / (\text{SiO}_2(\text{FAU}))$  between 0.005 and 0.45, in which  $\text{SiO}_2(\text{FAU})$  designates the amount of  $\text{SiO}_2$  supplied by the FAU zeolite, and  $\text{Al}_2\text{O}_3(\text{FAU})$  designates the amount of  $\text{Al}_2\text{O}_3$  supplied by the FAU zeolite, until obtaining a homogeneous precursor gel; ii) hydrothermally treating said precursor gel obtained at the end of step i) under autogenous pressure at a temperature of between 120°C and 250°C, for 4 to 12 hours.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2020212356A1

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