عنوان مقاله:

Catalysts Synthesis and Crystalline Modification of Acrylic Acid Production

محل انتشار:

سومین کنفرانس بین المللی توسعه فناوری در مهندسی شیمی (سال: 1399)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

Acrylic acid is an important industrial chemical, and efficient catalysts for its direct preparation bypropane oxidation are highly desirable. For this purpose, neutral silica networks were introduced on thesurface of MoVTeNb mixed oxide catalysts by controlled silylation using a methyl silicate oligomer. Thecatalysts were characterized by X-ray fluorescence, Fourier-transform infrared spectroscopy. MoVTeNbmixed oxide was found to be composed of 90.9% M1 phase and 2.3% M2 phase, and upon silylation, thesurface was uniformly covered by a thin SiO2 layer with 0.14 molar ratio with respect to Mo and anestimated thickness of 2.4 nm. The number of acid sites decreased after the first .three silylation cycles, butwas not affected by repeated cycles

کلمات کلیدی:

Acrylic acid, catalyst, Characterization