

عنوان مقاله:

Preparation of functionalized Alumina Nanoparticle and its application in wettability alteration

محل انتشار:

اولین کنگره بین المللی شیمی و نانو شیمی از پژوهش تا فناوری (سال: 1397)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

A wettability alteration toward more water- wet would remarkably modify oil movement yield, and therefore productivity. In this study, we found that a specific type of functionalized nanoparticle have a capability to change the wettability of such carbonate surfaces. Nanoparticle size and concentration had a considerable effect on the wettability alteration yeild. We derived that such nanofluid formulations can be very effective as enhanced hydrocarbon recovery agents. The functionalized particle size is estimated between 50 to 150 nm and its morphology is as joined Nanosheets. In general, by increasing nanoparticles concentration, contact angle declines and the rock surface becomes more water wet.

کلمات کلیدی:

Wettability alteration, functionalized Nanoparticles

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