عنوان مقاله:
Evaluation of fatty acids effects on apatite and iron oxides wettability and their prediction by fuzzy logic

محل انتشار:
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خلاصه مقاله:
Determination of minerals wettability is essential in understanding the performance of flotation process. Contact angle measurement is an indicative of a mineral wettability. In the present study, the effects of two fatty acids based collectors, which are the most common collectors used in floating apatite from iron oxides, on wettability of apatite and iron oxide (magnetite) minerals in various experimental conditions is investigated. Nonlinear relationship among these parameters in contact angle change i.e. type and concentration of collector, pH, and the cations concentration are simulated as a MISO (multi input-single output) fuzzy model by means of the power of fuzzy logic technology in implementing and modeling the real world's data. A good correlation had been perceived between experimental and model data.

کلمات کلیدی:
Wettability, Contact angle, Fatty acids, Fuzzy logic, Apatite, Flotation

لینک ثابت مقاله در پایگاه سیویلیکا: