

## عنوان مقاله:

Emulsion Liquid Membrane Pertraction of Gold (III) Ions from Aqueous Solutions

## محل انتشار:

نهمین کنگره ملی مهندسی شیمی ایران (سال: 1383)

تعداد صفحات اصل مقاله: 21

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## خلاصه مقاله:

Experimental results for the batch extraction of gold (III) ions using an emulsion liquid membrane with an internal alkaline aqueous sodium sulfite are presented. Experiments were performed using LK-80 as the biodegradable emulsifier for the first time in emulsion liquid membrane technology. The effects of various parameters, such as Au(III) concentration in the aqueous phase, concentration of carrier in the membrane phase, concentration of sodium sulfite in the internal stripping phase, pH of the external aqueous phase and the speed of agitation on the extraction rate were studied. Results showed that nearly all of the Au (III) ions in the aqueous phase were extracted in few minutes. By proper selection of the extraction conditions, almost all of the gold ions present in a concentrated feed solution were extracted within less than 25 minutes. A Taguchi analysis has been performed on the experimental results, which determined the effects and contribution of each of the parameter on the extraction efficiency and interaction between the parameters

## کلمات کلیدی:

emulsion liquid membrane – gold – extraction – carrier – Taguchi analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/29871>

