

### عنوان مقاله:

Cr3+ Influence on microbial cluster formation in biofilm and on steel corrosion

## محل انتشار:

اولین کنگره سراسری فناوریهای نوین ایران با هدف دستیابی به توسعه پایدار (سال: 1393)

تعداد صفحات اصل مقاله: 5

# نویسندگان:

Seyyed Mehdi Mostashiri - University of Amirkabir Industrial Technology, Tehran, Iran

Heidar Abbasi - University of Applied Science and Technology of Khormuj, Chemical Engineering Department, Bushehr, Iran

Ali Haghighi Shad - University of Amirkabir Industrial Technology, Tehran, Iran

Abdolmajid Ramezani - University of Applied Science and Technology of Khormuj, Chemical Engineering Department, Bushehr, Iran

#### خلاصه مقاله:

Pit corrosion of mild steel in seawater increased with Cr3+ concentration. SEM observations showed that increasing Cr3+ concentration caused microbes in biofilm on the steel surface to aggregate forming clusters. AFM images suggested that pit corrosion occurred largely on the mild steel surface between clusters, and only little corrosion on the surface covered by microbes

## کلمات کلیدی:

biofilm, chromium, corrosion, microbial clusters, sulphate-reducing bacteria

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/345144

