

عنوان مقاله:

Interaction Study of Iron Corrosion in HCl and NaCl solutions

محل انتشار:

نخستین همایش ملی توسعه در علوم و صنایع شیمیایی (سال: 1395)

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خلاصه مقاله:

The purpose of this investigation was to study the corrosion behaviour of iron in HCl and NaCl media, by means of theoretical approaches. The quantum chemical calculation was performed to investigate interactions between metallic atoms and solution ions at metal-solution interface using cluster model. Calculations indicated that in addition to chloride ion, hydrogen ion (H^+) adsorb on the iron surface in acidic solution. Thus corrosion of iron in HCl environment was more than in NaCl environment. Interaction data corroborate well with experimental results

کلمات کلیدی:

Corrosion, iron, Cluster/polarized continuum model, HCl solution

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