

عنوان مقاله:

Analysis of Acoustic Emission From Fatigue Crack Propagation

محل انتشار:

اولین کنفرانس بین المللی و هفتمین کنفرانس ملی مهندسی ساخت و تولید (سال: 1384)

تعداد صفحات اصل مقاله: 6

نویسنده:

M Talebzadeh - Civil Engineering Faculty, Shahrood University of Technology, PO Box ۳۶۱۹۹۹۵۱۶۱-۳۱۶, Shahrood, Iran

خلاصه مقاله:

Acoustic Emission (AE) technique is used to assess structural integrity. For this purpose there is a need for discrimination of AE signals from fatigue crack growth and extraneous AE in order to quantitatively evaluate fatigue crack growth. In this paper AE signals recorded during fatigue crack propagation in steel specimens are filtered and analysed. First, AE signals are filtered for AE signals from fatigue crack activities. Then, the results are analysed to separate AE signals from fatigue crack growth. It is observed that less than 1% of all recorded signals are related to fatigue crack growth. The results indicate that AE related to the peak load show reasonable correlation with crack growth rate. Based on this correlation it may be possible to predict fatigue life

کلمات کلیدی:

Acoustic emission, Fatigue, Crack growth

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/82556>

