

## عنوان مقاله:

CONSIDERATION OF SITE EFFECT IN NEAR FIELD STRONG GROUND MOTION

## محل انتشار:

دهمین کنگره بین المللی مهندسی عمران (سال: 1394)

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## خلاصه مقاله:

Accelerograms recorded near active faults have some important characteristics that make them different from those recorded in far-fault regions. High-frequency components in acceleration records and longperiod velocity pulses are among notable specifications of such ground motions. Moreover recent investigations about site effect indicate seismic hazards during many disastrous earthquakes are observed to be aggravating at the sites with the soft soil deposits due to amplification of ground motion. The characteristics of strong ground motion, the site category, depth of the soil column, type of rock strata, and the dynamic soil properties at a particular site significantly influence the free field motion during an earthquake. In this paper, free field surface motion is evaluated via seismic site response analysis that involves the propagation of earthquake ground motions from the bedrock through the overlying soil layers to the ground surface. These analyses are carried out for three well-know multiple near-fault seismic ground motions at two different site classes. The free field surface motion is quantified in terms of amplification ratio and spectral acceleration. Seismic site coefficients at different time periods are also evaluated for each site category due to near-fault ground motions from the acceleration response spectra of free field surface motion at each site and the corresponding acceleration response spectra at a reference rock outcrop site

## کلمات کلیدی:

Near Fault, Amplification Ratio, Spectral Acceleration

## لینک ثابت مقاله در پایگاه سیویلیکا:

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