

## عنوان مقاله:

Dynamic Nonlinear Response of Offshore Platform Piles

## محل انتشار:

ششمین کنفرانس بین المللی مهندسی عمران (سال: 1382)

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## خلاصه مقاله:

The seismic response of pile supported offshore structures is strongly affected by the nonlinear behavior of the supporting piles. Offshore latforms in seismically active areas should be designed to survive sever earthquake excitations with no global structural failure. To meet this requirement, it is often required to perform nonlinear dynamic analysis of offshore platforms that accounts for soil nonlinearity, discontinuity condition at pile soil interfaces, energy dissipation through soil radiation damping and structural nonlinear behaviors of foundation and superstructure. Nonlinear response of piles is the most important source of potentially nonlinear dynamic response of offshore platforms due to earthquake excitations. This paper deals with some of the more recent developments in dynamic nonlinear soil behavior, different interface models and seismic free field ground motion analysis. Different parts of a BNWF (Beam on Nonlinear Winkler Foundation) model together with state of the art findings and conclusions for dynamic nonlinear response of offshore platform piles are discussed and addressed in detail

## کلمات کلیدی:

Pile, nonlinear dynamic response, interaction, seismic behavior

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1073>

