

## عنوان مقاله:

Modal Response of Dam-Reservoir-Foundation Interaction

## محل انتشار:

هشتمین کنگره بین المللی مهندسی عمران (سال: 1388)

تعداد صفحات اصل مقاله: 8

## نویسندگان:

Hashem Shariatmadar - Assistant Professor, Civil Engineering Dept., Eng. Faculty, Ferdowsi University of Mashhad

Adel Mirhaj - Structural Eng., Civil Engineering Dept., Eng. Faculty

## خلاصه مقاله:

Vital and special structure such as dams, must have sufficient safety margin under conditions like when earthquake occurred as same as normal servicing time. Hydrodynamic pressures induced due to seismic forces and Fluid-Structure Interaction (FSI) are evaluated. The interaction of reservoir water-dam structure and foundation bed rock are modeled using the ANSYS computer program. The analytical results obtained from over twenty 2D finite element modal analysis of concrete gravity dam show that the accurate modeling of dam-reservoir-foundation and their interaction considerably affects the modal periods, mode shapes and modal hydrodynamic pressure distribution.

## کلمات کلیدی:

Concrete Gravity Dam, Modal Analyze, Dam-Reservoir-Foundation Interaction, Hydrodynamic Pressure

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/62772>

