

عنوان مقاله:

A New Predictive Model for Estimaion of the Liquefaction-Induced Lateral displacements Using Genetic Programming Approach

محل انتشار:

دهمین کنگره بین المللی مهندسی عمران (سال: 1394)

تعداد صفحات اصل مقاله: 8

نویسندگان:

M. Sadegh Maghsoudi - *PhD Student, Civil Engineering Department, University of Zanjan, Zanjan, Iran*

Farhang Farrokhi - *Assistant Professor, Civil Engineering Department, University of Zanjan, Zanjan, Iran*

خلاصه مقاله:

Liquefaction-induced lateral spreading is known as a significant type of geotechnical damages for the engineering structures. This paper presents a new developed predictive model, based on genetic programming (GP) approach, for predicting the liquefaction-induced lateral displacements during earthquakes. A new and comprehensive database containing 508 case histories observed during past 12 major earthquakes has been used for developing and analysis of the new model . Since the presented model has been developed based on numerous earthquakes and site conditions, it is more general and reliable than previous models. The obtained results, also, demonstrate reliable .predictive cappableability of the proposed model in comparison to the the previous models

کلمات کلیدی:

earthquake-induced lateral spreading, Genetic Programming (GP), training and testing sets, database

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/364888>

