

عنوان مقاله:

ANALYSIS AND DESIGN CIRCULAR TUNNELS UNDER EARTHQUAKE LOADS BY ARTIFICIAL NEURAL NETWORK

محل انتشار:

ششمین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1390)

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خلاصه مقاله:

In general effect of earthquake design loads on underground constructions, confined by soil, assessed in strain and deformation of those constructions. In this paper ovaling deformation and forces, created by soil-structure interaction, under earthquake loads, evaluated and results are compared by artificial neural network and analytical approaches (closed form) in a twodimensional space for circular tunnels. We used Multi Layer Perceptron (MLP) and Radial Basis Function (RBF) networks. Results between MLP and RBF networks are compared and finally considered little diversity. In some cases MLP was better and other cases RBF. At the end benefits of artificial neural network and its power in circular tunnels analysis were clear.

کلمات کلیدی:

Artificial Neural Networks, Circular Tunnels, Analytical Approaches

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