

عنوان مقاله:

Seismic Response of Triple Friction Pendulum base isolated structures and its advantages over Friction Pendulum Systems

محل انتشار:

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خلاصه مقاله:

Triple Friction Pendulum system (TFPS) is a new generation of friction isolator that contains four separated concave sliding surfaces with different properties. In this paper, the main focus is on comparison of the seismic behavior of two structures isolated by TFPS with the response of the same structures using Friction Pendulum System (FPS). Accordingly, several nonlinear dynamic analyses are carried out under various ground motions at three different hazard levels (SLE, DBE and MCE) using SAP2000. The story shear, peak roof's acceleration and base shear are compared for two mentioned types of isolation system. The results support the advantages of TFPS over FPS isolation system

کلمات کلیدی:

Triple Friction Pendulum System, Base isolation, nonlinear dynamic analyses

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