

## عنوان مقاله:

Development of a Light Mass-Spring System for Ground- Borne Vibration Mitigation in Shiraz LRT Line

## محل انتشار:

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## خلاصه مقاله:

Today with progressive increase in urban transportation demand, implementation of modern and effective transportation plans is inevitable. In this regards, light railway lines are often selected as the most appropriate alternative. However the residential pattern of the adjacent lands, as well as urban vibration-prone regions and historical building along the LRT line, impose new design criteria, which may not be seriously considered in rural or intercity heavy haul railway lines. Among them, minimizing noise and vibration impacts are noticeable. In Shiraz LRT line, due to the prominent presence of old historical buildings and dense residential regions throughout the line, an efficient massspring system has been developed aiming at the minimization of the ground-borne noise and vibration impacts. The application of new Sylomer® materials in railway track permanent way as an elastic layer for vibration attenuation, were the basis of this development. In this article, the development of a new mass-spring system for minimizing effects of the transmission of the track vibration on the track side facilities is investigated. The results of the static, dynamic and vibration analysis of the developed system is presented

## کلمات کلیدی:

Track, LRT, Vibration, Attenuation, Damping, Sylomer, Shiraz

## لینک ثابت مقاله در پایگاه سیویلیکا:

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