

عنوان مقاله:

Analysis of the dynamic behavior of the car user in the irregular terrain

محل انتشار:

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خلاصه مقاله:

Many people experience vibration effects on whole-body throughout their lives frequently. Vibrating energy absorbed is exposed all-body caused with vibration hazard in the vertically on body and biodynamic responses from body in speed 2.37 to 5.14 m/s could captivate with car seat on user body, so the vibration energy transferred to a seated people body. In this paper, the human body is modeled as a series/parallel 4 DOF dynamic models of system and use Lagrange equation for calculate head and neck equation and investigation the effect of vibration energy absorbed in whole body. The hybrid model is analyzed with Matlab software for vertical vibration responses and vibration energy absorption. It is shown improvement seat vehicle cause, drastically ameliorate the tolerance to high-intensity vibrations in the 0.8 Hz range with reducing the maximum amplitude ratios and relative displacements of the body

کلمات کلیدی:

Transient analysis; People body vibration; Vibration answer; Mathematical model

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