عنوان مقاله:

Investigation of Wagon Derailment Moving on Random Rail Irregularities using Nonlinear ۳-Dimentional Model (RESEARCH NOTE)

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خلاصه مقاله:

Rail irregularity is one of the most effective factors in train derailment. theste irregularities have generally random distribution that are assumed to be stationary random and ergodic processes in space, with Gaussian amplitude probabiliy densities and zero mean values. The quality of irregularities, their distribution along the rails and wagon speed are the main factors for train derailment which is investigated in this article. The car model is nonlinear and three-dimensional with ۴۸ DOF. Using simulation results, the safe speed for moving wagon on different types of random rail irregularities is also determined.

کلمات کلیدی:

۳, D Train Model, Nonlinear Train Model, Random Rail Irregularities, derailment, Simulation