

## عنوان مقاله:

Vibration Control of Heavy Truck Suspension System using Model Reference Adaptive Controller

## محل انتشار:

کنفرانس بین المللی پژوهش در علوم و مهندسی (سال: 1395)

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## خلاصه مقاله:

Suspension system is one of the most vital parts of a car that directly effects many factors, such as: road holding, ride comfort and safety. Passive suspension systems do not satisfy the given factors to a good degree. Therefore, Active suspension systems are more desired to work with. In this paper we will be using model reference adaptive control by Lyapunov rule. This method ensures the stability of system. In this adaptive suspension system, a hydraulic actuator which is controlled by feedforward controller is placed between the wheel and the passenger car's body. This way, we can guarantee safety in aggressive maneuvers or Critical situations. In order to simplify the modelling and calculations, we will be using a  $\frac{1}{4}$  model of a car. The simulation and implementation of the controller is done using .MATLAB/SIMULINK

## کلمات کلیدی:

Active Suspension, Adaptive Controller, Model Reference Controller, Truck Suspension

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/536839>

