Review of: "Simulation of Control System for a Half-Car Suspension System for Passenger Vehicle Application by Designing an LQR Controller"

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This paper proposes a mathematical model for a 4-DOF half active suspension system (ASS) employing an LQR (Linear Quadratic Regulator) controller which is based on a control method for ride comfort and vehicle handling.This work focuses on the modeling and control of a passenger half-car suspension system and is simulated using MATLAB/Simulink software.The simulation uses two bumpy sinusoidal roads and a random road input and compares to the antiquated passive suspension technology.The results of the simulation demonstrate that this study has improved the system's modeling and control capabilities.

But there are still some problems as follows:

1.The figure bove 2.2.State-space Model for an Active Suspension System is not marked, please note the format.

2.In last part of 3.1 LQR Controller, K structure confusion, please clarify in detail.

3.In Figure 13, the wrong spelling of Maas and posion should be changed to Mass and position.

4.In this paper, the use of PID control is mentioned in the design of control system. Why is there no comparison with PID method in the simulation later?

5.In this paper, we should pay attention to the inentation of the first line of the two characters and the center alignment of the formula.

6.In the conclusion, it is suggested to properly explain the positive impact of the proposed LQR method on the automobile industry.