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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Potential competing interests: No potential competing interests to declare.

The article is useful and has a thorough analysis. It can be published, after some corrections,

1. There are some sentences to be corrected for English such as,

Compared to the antiquated passive suspension technology, its performance is superior (PSS)

The ever-increasing improvement needs related to driving dynamics, ride comfort,

and vehicle handling, however, pose a difficulty

etc.

1. The following sentence is to be elaborated, needs a literature survey. In the literature what are the methodologies used, how they compare, what is the advantage of the methodology used with respect to the others. Also a similarity check is needed.

“To improve the performance of the active suspension system, researchers have suggested LQR control methods”

1. On table 1 and table M is to be changed to m I suppose.
2. In section 3 also PID design is mentioned. And also LQR. It must be explained more clearly how both systems are used?
3. “In the new design, the controller responds when the odd thing happens before it reaches the passengers.” ODD thing is not a scientific term. To be changed.
4. In the conclusion more specific and numeric results are to be given. “*The research demonstrates that in controlled ASS, sprung and unsprung mass heave displacements*

have amplitudes and settling times that are much less than in uncontrolled” kind of statements are vague.