

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 acceptable but lacks novelty. There are some suggestions the authors can consider:

- 1. The text font should be consistent, for example, the text fonts are not the same in the paragraph below figure 8.
- 2. Check the equations, for example, equation 10 is not correct.
- 3. Figures should be improved, for example, figure 5 is too small to see. Figures 10-13 are very hard to see. Figure 2 is not necessary.
- 4. Can you put the variables in Nomenclature or in appendix?
- 5. You mentioned the PID controller, where is the PID controller simulation result?
- 6. Based on figures 10-13, how can you conclude that the settling time is faster? Please illustrate.
- 7. How can you handle the external disturbance with the LQR controller and how can you observe all states in real practice?
- 8. Literature review of the state-of-art in this application should be mentioned in the introduction.

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