

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.

I read the paper carefully in detail and investigated different sections. I see the paper not suitable for publication in the journal and I reject this paper for following reasons:

1. In the Introduction section, there is no information and detailed critical valuable evaluations about the research area you studied in Introduction part. This is important to enhance the motivation of this study.
2. The Abstract does not include highlighting of your main contributions.
3. The main contributions of this paper are not clear in Introduction section, authors should give the detailed research motivation.
4. The feasibility of the control approach from the implementation and computational points of views is not clear.
5. What is the difference between a paper and existing results? Especially, compared to existing results, what are the main contributions of the paper? What is the novelty of this paper compare to previous works? Thousands of works have been done in LQR approached and published until now. The LQR method is a basic and old method in control theory to be used. Using LQR method to solve a state space model and plotting results is not called a work or publication. I see the paper just an exercise of a course at the University, not a journal paper.
6. The author does not emphasize the advantages of the method, and a discussion on the shortcomings of the paper's method cannot be seen.
7. A discuss of some difficulties associated with real-time implementation of the process is not seen.
8. A system diagram of the proposed control schema would help to a large extent. The block diagram of the state space you provided is so basic and not enough. An in detail block diagram of the overall process has been done in this paper must have been provided.
9. A side-by-side insightful analysis comparison with competitive methods would be desirable.
10. From the paper, I find some language problems.

Surly, I reject this paper and recommend authors not to send it to other journals.

