

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.

- 1- The active and semi-active control systems are definitely superior to the passive system, so comparing your proposed system with a passive control is not correct, and stating this comparison as an achievement is wrong.
 - 2- What does the term PSS refer to in the abstract of the article? There is no need for it in the abstract.
 - 3- No innovation or special achievement as its distinguishing feature compared to a simple LQR controller and previous articles are not seen.
 - 4- What is the reference for choosing system specifications (mass, spring stiffness, etc.)? Is it based on a real model or a scaled model? Or a hypothetical and imaginary model?
 - 5- The parameters written in figure 1 are not readable.
 - 6- The LQR controller is full-state; the matrices A, B, C, and D and their dimensions should be specified correctly.
 - 7- Where is the G matrix used in relation (5)?
 - 8- The relation (10) is incompletely written.
 - 9- The most important part of the LQR controller is determining the Q and R matrices; the values of these matrices and the basis of their selection should be stated correctly.
 - 10-...
- The article does not have any innovation or special achievement and is rejected, in my opinion.