

Review of: "Optimizing Energy Efficiency for Connected and Autonomous Electric Vehicles in the Context of Vehicle-Traffic Interaction"

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Potential competing interests: No potential competing interests to declare.

The author of the paper entitled "Optimizing Energy Efficiency for Connected and Autonomous Electric Vehicles in the Context of Vehicle-Traffic Interaction" focused on an extremely important topic, especially in times of energy crises, regarding the energy efficiency of electric vehicles. Their proposed "ECO" strategy serves to guide the electric powertrain, ensuring its operation within the high-efficiency region. The paper also proposes the use of an iterative neighborhood search algorithm for optimization and draws attention to the need to conduct real-world experiments to validate the effectiveness of the proposed approach and compare it with other known methods.

After reading the paper, I have some advice:

1. You should consider changing the title of the article (maybe it should be more general?), or expanding the issue of "Optimal Efficiency Search Using V-T Coordinate System and NIS Algorithm". Currently, the work does not indicate the optimization function or optimization criteria and parameters.
2. In the summary, the author of the manuscript should clearly outline the further research plan on the discussed topic and indicate possible disadvantages of the proposed approach to the "ECO" strategy.
3. The work should include a comparison of the described strategy and its results with other existing research results of other scientists.

I also have some tips for text editing:

1. In the final version of the paper, pay attention to the correct formatting of formulas (e.g. multiplication sign) and text (e.g. sometimes there is a space between the value and the unit, and sometimes there is not - Table 1).
2. Figure captions should be more precise (e.g. in Vehicle Kinematics).

Nevertheless, in my opinion the paper is valuable and the topic is very interesting.