Review of: "Performance Evaluation and Analysis of Electric Vehicle Parameters – A Test Bench"

Paolo M. Congedo[1]

1 University Of Salento

Thank you for submitting your paper "Performance Evaluation and Analysis of Electric Vehicle Parameters – A Test Bench" to Queios.

In this research, authors integrated actual critical parameters and driving cycle information to craft an enhanced model. The study delved into how various factors influence vehicle performance and energy consumption. It introduces a robust approach for selecting the appropriate motor rating and battery capacity for electric vehicles.

The article is well written and well structured as a scientific text; the literature review is comprehensive and up to date. However, several issues need to be addressed properly before the paper is considered for publication.

To improve the article:

Introduction

Include updated statistics and recent forecasts to highlight the growing importance of EVs. A comparison with conventional vehicle technologies could better contextualize and underscore the relevance of EV research.

Driving Cycles

Expand the discussion on the impact of various driving cycles on EV performance. A more detailed comparison between driving cycles could offer a more comprehensive understanding of how different scenarios affect energy usage and EV performance.

Electric Vehicle Parameters

Add details about the methods of optimizing vehicle parameters, such as the algorithm used or the selection criteria for EV components. This could provide a more technical and in-depth view of the design process.

Functional EV Subsystems

Discussing technical challenges encountered in simulation and how they were overcome could be beneficial. Additionally, including case studies or practical examples could make this section more applicable and tied to real-world situations.

Electric Vehicle Design Parameters

Expand the analysis to include a comparison between the parameters of different EV models. This could offer a broader view of industry trends and best design practices.

Conclusions

Integrate conclusions with specific suggestions for future research, or identifying new areas of development in the EV field, can provide a clear direction for subsequent studies and highlight the long-term significance of the work conducted.