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

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Potential competing interests: No potential competing interests to declare.

The paper presents the original scientific results relating to Electric Vehicle Parameters definition. Methods, data, and results are appropriate for scientific value, but they are valid for closed working conditions.

The paper can be accepted, but it is necessary to carry out certain refinements in order to improve the quality of the work and its application for subsequent tests.

First of all, check whether the driving cycles you specified are appropriate and whether they are prescribed for electric vehicles. NEDC, FTP-75, and 10-15 mode Japan tests are old tests for vehicles with IC engines. Do not forget that electric vehicles do not make noise, so there are special tests. In short, tests for these vehicles are still under development.

Specify the electric vehicle subsystem scheme. Specify which vehicle it is and provide more details about it.

You explained some parts of the vehicle subsystem at the school level, which is not necessary. Why and what is the reason to analyze vehicle resistances? Electric vehicles are lighter, batteries and other elements are mostly on the floor, and there is no problem with the center of gravity compared to vehicles with IC engines.

It is necessary to pay more attention to the radius of movement of electric vehicles and the capacity of the batteries. Recycling of rare electric motor magnets, such as neodymium, is also very important.

Also, it is desirable to give an example of the use of an electric vehicle and compare the characteristics in the case when a vehicle with an IC engine is used.

The application of electric vehicles in traffic implies broader logistics, such as the introduction of chargers, the ecological production of electricity for charging batteries, etc.

For the aforementioned analyses, it is necessary to apply the corresponding prescribed standards, about which you can find more details in the following literature, which you can refer to in the work:

https://doi.org/10.3390/su11184948

https://doi.org/10.2478/ttt-2018-0005

Expand the introduction or other chapters with papers from this field.

- At the end of the introduction, state what the main contribution of the work is and how this work differs from similar works in this field. What is the reason? (i.e., why should this work be published?)
- Increase the number of references in the work based on the given remarks.
- Explain in more detail the test conditions and equipment characteristics. Explain the more appropriate test method.
- In the concluding remarks, it is necessary to unequivocally state whether the obtained results confirmed the expectations and assumptions, i.e., whether there were deviations or completely opposite results from the expected ones.
- Based on the analysis and discussion, expand the concluding considerations, especially in terms of further research in the field of application of other batteries, etc.
- In accordance with current possibilities, it is necessary to comment on the expected costs and the price of the application of this technological procedure (full electric or hybrid, etc.), primarily because of the possibility of its commercialization and mass application, with indications of future research in this field.
- Symbols for variables, marks, labels, etc., must be identical in the text, figures, tables, and nomenclature. Variables must be in italic style. Dimensions of variables in the text, if you need to use them, should be put in brackets, e.g., thermal conductivity [Wm–1K–1], not [W/m/K] or [W/mK], but, for example, the velocity as v = 70 km/h, not [kmh–1]. Do not use “letter el” instead of “number 1”, the letter “x” instead of “symbol ´”, the letter “O” instead of zero “0”, or the symbol “-” instead of minus (–, Alt0150). For the symbol degree “°” (e.g., °C, a = 45°), do not use the letter “o” or zero. The mark “%” should be written close to the number, without a blank space.
- The span of values “from to” needs to be written like 250-300 °C. Except at the beginning of a sentence, use the abbreviation fig. for figure, tab. for table, and eq. for equation.

Extract equations from the text and number them separately. Take care of the referencing in the text.

The paper can be accepted after the proposed revisions.