

Review of: "Design of an intelligent controller for improving the solar system efficiency"

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Potential competing interests: No potential competing interests to declare.

1. The paper contains some grammatical, type, and spelling errors, as well as numbering errors, it is of great significance to check out the English of the whole paper as much as it is necessary to remove all grammatical errors and provide all the necessary punctuation tools to link the sentences as well.

2- The title should be more attractive

3- Some effective statistical results that show the accuracy of the best proposed machine learning models should be added to the abstract

4. In the review section; I would recommend strengthening your literature review by adding recent papers studying innovative hybrid combinations of machine learning algorithms and metaheuristic a;

gorithms <https://doi.org/10.1016/j.csite.2022.101797>, <https://doi.org/10.1016/j.applthermaleng.2021.117055>, <https://doi.org/10.1016/j.psep.2022.12.079>, and <https://doi.org/10.1016/j.tsep.2023.102051>

5- The limitations of the previous design optimization studies and AI models in the summarized literature should be further deeply discussed. Please explain to highlight the novelty of the paper.

6- A detailed diagram (schema) of the of the proposed systems and it ralted processing components is highly needed to present.

7- It is necessary to discuss the methods' pros and cons, such as computational time and other limitations of the proposed fuzzy method

8- Please provide a clear case study, how you applied the proposed methodology to solve it.

9- The quality of Fig. 5 is not clear. The quality of the figures and diagrams presented in the article should be improved

10- I suggest to state the evaluation process of the multi-objectives of the back propagation neural network, in series or simultaneously.

11- It can also be precious for readers to make suggestions to continue the research path in the next steps

