

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

Muhammad Ragab¹

1 Alexandria University

Potential competing interests: No potential competing interests to declare.

This study shows that the fuzzy logic control methodology outperforms traditional methods such as the perturb and observe methods. The report is badly written and missing many facts about the MPPT issue, which can be summarized as follows:

- 1. The abstract is inadequately written and should be supplemented with numerical numbers indicating how much progress the proposed technique has made.
- 2. The title is poorly constructed and does not adequately represent the manuscript's content. I mistook it for the title of a thesis rather than an article.
- 3. More references should be added to the introduction section.
- 4. Use bullet points to highlight the main points of the paper.
- 5. How did you decide on the shapes of the FLC's membership functions?
- 6. Explain why the MFs for input E differ from those for input P and output.
- 7. How did you decide on the MF range?
- 8. Figure 6 is unnecessary because you already supplied a table for the fuzzy rule base.
- 9. The figures are inadequately presented, particularly Figure 5. Please double-check and fix all figures.
- 10. The section on outcomes discussion should include numerical values.
- 11. Statistical analysis, such as a table comparing findings in terms of average tracking time, average power output ripples, response time, steady state error values, and so on, must be added to compare the results more effectively.
- 12. What are the advantages of this paper? What are the difficulties in this field? What is the need for a fresh strategy? What are the existing ones' limitations? Please list them quickly after a thorough assessment of the contributions and novelties. Please be more specific.
- 13. Include the Nomenclature to increase the manuscript's quality and readability.

