



Immanuel Jiya &lt;jiyahills@gmail.com&gt;

---

**[IJEECS] Editor Decision**

---

**Tole Sutikno** <ijeecs.iaes@gmail.com>

Wed, May 1, 2019 at 4:24 PM

Reply-To: "T. Sutikno" &lt;ijeecs.iaes@gmail.com&gt;

To: Immanuel Ninma Jiya &lt;jiyahills@gmail.com&gt;

Cc: Henning Buitendach &lt;immanueljiya@ieee.org&gt;, Rupert Gouws &lt;rupert.gouws@nwu.ac.za&gt;

The following message is being delivered on behalf of Indonesian Journal of Electrical Engineering and Computer Science.

---

Immanuel Ninma Jiya:

We have reached a decision regarding your submission to Indonesian Journal of Electrical Engineering and Computer Science, "Intelligent Solar Powered Peltier Cooling Storage for Vaccines".

Our decision is to: REJECT

Thank your for interesting to our journal

T. Sutikno  
Editor, IJEECS  
[ijeecs.iaes@gmail.com](mailto:ijeecs.iaes@gmail.com)

---

Reviewer comments

Does the title of the paper accurately reflect the major focus contribution of this paper?:

No

Please suggest change of the title as appropriate within 10 words::  
Solar Powered Peltier Cooling Storage for Vaccines to Rural Areas

Is the abstract an appropriate and adequate digest of the work?:

Yes

If No, please suggest change of the abstract as appropriate?:

Is the paper clear, concise, and well organized?:

Yes

If No, please suggest change of the paper presentation as appropriate?

:  
Some modifications may strengthen the paper further as according to separate report sent to the editor

Rate of the contribution strength to the field is represented in this paper?:

Average

Rate the scientific quality of the paper?:

Below average

As far as your knowledge, have the authors already published a very similar paper?:

No

If yes, kindly please cite below:

:  
Technical report version is online:  
[https://www.researchgate.net/publication/328119427\\_Development\\_of\\_an\\_intelligent\\_controlled\\_solar\\_powered\\_vaccine\\_cooling\\_holder\\_with\\_energy\\_monitoring\\_system](https://www.researchgate.net/publication/328119427_Development_of_an_intelligent_controlled_solar_powered_vaccine_cooling_holder_with_energy_monitoring_system)

Do authors place the paper in proper context by citing relevant papers?:

Yes

Is the paper free from obvious errors, misconceptions, or ambiguity?:

Yes

Is the paper written in correct English?:

Yes

If No, please note grammatical errors and suggest corrections:

:

Fixing minor spelling errors should further improve the paper

Are the references in IJEECS style?\*

No

Are the figures and tables in IJEECS style, clear, relevant, and are the captions adequate?:

Yes

Is the length of the paper adequate?:

Yes

Please mark appropriate scale for the overall grade for this paper? (A score of 7 or above typically provides ground for IJEECS acceptance):

4

Reviewer's comments and suggestions to improve the paper. (If it is not possible, kindly please use separate sheets or a copy of the paper for comments and suggestions for revision. Indicate whether revisions are mandatory or suggested. Please use word processing type format if possible, and then upload or submit via email to [telkomnika.iaes@gmail.com](mailto:telkomnika.iaes@gmail.com)):

Overview and general recommendation:

The transport of vaccines to rural areas is very important to improve the wellbeing of health standard worldwide, especially in developing countries. The temperature control of a storage unit for vaccines is one of the main challenges that must be overcome with limited resources available in such rural areas according to the WHO report. As the authors emphasised in the manuscript, the requirements include energy supply independent of electricity, size and temperature control inside a storage unit. The design of a solar powder control system for cooling storage has been studied well previously (10.1109/WCICA.2010.5553992, 10.15242/IIE.E0714028, 10.1109/RTEICT.2017.8256943, 10.1109/RTEICT.2017.8256944) to name a few. I found the paper to be technically important and meaningful, but I felt that the scientific contribution of the paper is not properly justified. This is mainly because it does not contain enough and proper references relevant to the main contents of this paper (i.e. control and energy management system). Most of the cited references are either for problem statements (i.e. WHO report) or data sheets. It is unclear what is new in this paper compared to previous literature. Therefore, I recommend that a major revision is warranted. Below are the major and minor comments of my concerns in detail. I ask that the authors specifically address each of my comments.

Major comments:

1. Line 29-31, p.10 – The accuracy of temperature control should not be justified with just this one sentence. Please put proper results for this. Switching on/off between 4-

- 5 C° is just a setting.
2. Fig. 6 and Fig. 8 – temperature measurements look to be taken from random points within the cooling unit. This is not fair. The temperature used here should be either average temperature or the one that is furthest away from desired temperature.
3. Line 3-10, p.2 – this paragraph is just the repetition of page 1 content. Replace here with appropriate scientific literature background.
4. Line 11, p.2 – “most of the alternative solutions...” please describe what they are and how your approach differs from them.
5. Section 3 – this section could potentially be shortened to make relevant information clearer. Some information from the tables in this section are not necessary to deliver the main points of this paper. I suggest that the authors move them to a supplementary material.
6. References – include recently published academic works.
7. Title – The word “Intelligent” should be removed as it is misleading that the authors use soft computing methods (e.g. GA optimisation). “heuristic” is more appropriate from what can be read. Or an emphasis on energy management may reflect on the contents better.

Minor comments:

1. Line 15 p. 1 – no need of abbreviation caption
2. Line 12 p.1 – Delete the sentence “The most important aspect that is...” as this is repeated exactly in line 4 p.2.
3. Line 13 p.1 – Delete the sentence “According to the WHO, keeping vaccines...” as this is repeated exactly in line 5 p.5.
4. Line 29, p.2 – “If the funds are available...” this does not make sense to me.
5. Line 8 p.7 – “in the previous sections” should be “in the subsequent sections”
6. Captions – both figure and table captions should be more descriptive such that they are stand-alone.