

# Review of: "Experimental Behavior of Solar Still Using Mixed Oxides Mn-Fe/Silicone Resin Composite as Selective Solar Absorber"

Filipe Fernandes<sup>1</sup>

<sup>1</sup> Universidade de Coimbra

Potential competing interests: No potential competing interests to declare.

The authors presented an interesting idea about constructing a solar still for water distillation using solar thermal energy. They used hybrid materials as a selective coating in the still, which corresponds to 2.3% Mn-Fe mixed oxides, exhibited a solar absorbance of 91.82%, and an infrared thermal emission of 57.22%, as well as good stability in the corrosive and hot environment of the solar still. However, **I don't recommend this research for publication in your journal** for the following reasons:

- 1- The overall emittance of the system (57.22%) is high, which causes a high percentage of energy losses for the whole system and decreases its efficiency.
- 2- The authors claimed that the design has good stability in the corrosive and hot environment of the solar still, but they did not provide any tests to prove their conclusion in the article.
- 3- The overall discussion of the results is very poor except in the last section of the article. For example, they only mentioned the main results of the crystal structure, optical properties, and morphological properties without any discussion or comparison with the literature.
- 4- The mathematical equations should be written carefully in a better way.