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

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Potential competing interests: No potential competing interests to declare.

This manuscript reports the results of an experimental investigation to characterize and apply the properties of mixed oxides as a coating to solar stills, as a proposed method for improving distilled water collection efficiency. The methods of preparation, analysis, and interpretation are appropriate for the assessment of the materials. However, although the results show the performance obtained for the films and materials, the paper would benefit from details of predicted simulations to compare experimental data, or determination of thin film optical constants. The paper also needs to describe differences between these materials and other alternatives.

There is some disorganization of paragraphs that needs separating into more detailed section titles, examples being section 2, which describes transmission properties, then crystal properties, and back to reflection. This section needs separation between method and analysis. The section on results and discussion should also be separated between measurements obtained and a more detailed discussion of interpretation of results to summarise the compromises or limitations of the materials.

The manuscript is generally written in good English but with many grammatical errors. A concise and logical sequence and illustrations support the dialogue. However, the following amendments should be applied as revisions to the manuscript.

Abstract: This section contains many grammatical errors that should be re-written.

- First sentence is a statement but is missing a verb to say it is an experimental investigation.
- In the sentence ‘Regarding the pigments,’ should be more concise (i.e., too many were and was statements).
- The term ‘previous information’ should not be used in describing a summary of the paper.
- The term ‘real operating conditions' should either have a reference or definition.
- The term ‘current official standard needs a reference or definition of which standards.
- The term ‘very pure’ in the introduction needs a reference.
- The term ‘As noted above’ in the introduction is unnecessary.
- The term ‘has been the concern’ should be ‘the goal of engineers.’
- The formula for Sodium Hydroxide is incorrectly shown as Ammonia Hydroxide (NH_4OH).

I consider the subject of this article to be of interest to readers and practitioners involved with the materials and design of solar absorbers. As far as I am aware, this material has not been published previously elsewhere. The paper is worthy of publication with the applied amendments.