Review of: "Effect of daylight and air oxygen on nanozymatic activity of unmodified silver nanoparticles: Shelf-stability"

Abelardo Chávez Montes[1]

1 Universidad Autónoma de Nuevo León

Potential competing interests: No potential competing interests to declare.

Very interesting article.

I would recommend the following:

The methodology used to determine the NPs' µM concentration should be described.

Stability Assays were not included in the Experimental Section

Please check the wrong enumeration of figures

The caption for Figure 3 (page 5) must be corrected: a) The figure shows some absorption spectra but the caption refers to a nanozymatic assay, a better description should be included; b) check the redaction of the phrase: HP is represented to hydrogen peroxide; c) it would be recommendable to include a control spectrum (no NPs); d) the y-axis must be labeled as Absorbance or just A, and units should be added (AU?).

NPs concentration in graphs from Figures 3 (page 6) and 4 (page 7) should be stated. Also, a brief mention of the experimental conditions in the caption for both graphs would be desirable.

The caption for Figure 5 (page 8) does not correspond to the graph, it should be modified to make it clearer and a better explanation should be given. Half-lives are not provided.

The results section must be reassessed: it's not clear if the ambient temp was tested with and without air oxygen exposition. The evaluation of the 3 conditions at room temperature would be recommended: light control only, air oxygen exposition only, and the combination of both variables

In the discussion of the results, a possible explanation could be suggested as to why experimental conditions affect catalytic activity.