

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

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**Potential competing interests:** No potential competing interests to declare.

In this manuscript, unmodified silver nanoparticles were synthesized by a simple and cost-efficient method and then characterized by TEM imaging and UV-Vis. spectroscopy. Thereafter, their nanozymatic activity was investigated by catalyzing the oxidation of 3,3',5,5'-tetramethyl-benzidine (TMB) as the standard peroxidase substrate. It's a pretty interesting work, but there are some issues should be revised before be accepted by Qeios.

(1) In the article, the authors mention information about the nano-enzyme and its applications, but the literature cited is incomplete. It is recommended to refer to the following relevant recent experimental literature or reviews.

Coordination Chemistry Reviews, 2022, 454: 214327. Journal of Agricultural and Food Chemistry, 2022, 70(12): 3785-3794.

(2) As mimic enzyme, the properties and catalytic performances of silver nanoparticles should be compared with bio-enzyme ( Peroxidase). Please add some according data and discussion.

(3) Samely, using the activity of bio-enzyme ( Peroxidase) to caculate the residual of relative activity of mimic enzyme.