

Review of: "Determining kinetics parameters of bovine serum albumin-protected gold nanozymes toward different substrates"

Fiona F. Hager-Mair¹

1 Universität für Bodenkultur Wien

Potential competing interests: No potential competing interests to declare.

The article titled "Determining kinetics parameters of bovine serum albumin-protected gold nanozymes toward different substrates" by Saeed Reza Hormozi Jangi describes the kinetic measurements of BSA-gold nanozymes towards TMB and DAB as substrates. The author provides numerous examples from current literature on the topic. However, no specific details are given, necessitating a broader background to support the research question. This would enable the evaluation of the novelty and significance of the study to the scientific community.

Additionally, the following improvements are suggested for the current manuscript:

- 1. Proofreading to correct spelling, grammar, and typographical errors.
- 2. Addition of references for the synthesis of BSA-protected nanozymes.
- 3. Mentioning the abbreviations used beforehand, e.g., HP for hydrogen peroxide.
- 4. Adding a statement explaining how the Michaelis-Menten kinetics were calculated, such as using program XY.
- 5. Stating the number of reactions per data point and providing the necessary standard deviation.
- 6. Using a dot (.) instead of a comma (,) as the decimal point in the figures.
- 7. "nM sec-1" is not the standard SI unit used in enzymology. The x-axis and y-axis should have the same unit (e.g., nM sec-1 vs. mM). The kinetic results of the Michaelis-Menten calculation are missing.

Overall, in its current state, I do not recommend the publication of this manuscript as it is too preliminary and lacks sufficient depth.