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

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Potential competing interests: No potential competing interests to declare.

The kinetics of BSA-gold nanozymes were studied using DAB and TMB as substrates. The Vmax (maximum velocity) for TMB oxidation was higher than that for DAB oxidation, indicating greater catalytic efficiency for TMB. The Km (Michaelis constant) for DAB was much higher than for TMB, showing a higher affinity for TMB. These differences can be attributed to the varying reactivity and oxidation mechanisms of DAB and TMB. Overall, BSA-gold nanozymes exhibit higher efficiency and affinity towards TMB. However, this manuscript has some limitations. Firstly, the authors did not compare the proposed nanozymes with those previously reported nanozymes in terms of Km and Vmax. Secondly, the authors should have shown the practical applications of the proposed nanozymes in real-world samples. Finally, the quality of the TEM images corresponding to the proposed nanozyme still has room to be improved. Thus, I recommend that this paper is unsuitable to be published.