# 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.

Review on paper of Saeed Reza Hormozi Jangi's article (Geios)

Authors have calculated the kinetic parameters, $V_{max}$ and $K_m$ of Michaelis–Menten kinetics using the linear plot of Lineweaver–Burk graphical method. They have prepared BSA-gold nanozymes using as catalyst and DAB or TMB for substrate and measured the reaction rate as a function of substrate concentration. At the end of the paper, authors have plotted 1/V vs. 1/S function.

Some remarks to be reflected in the paper:

1. The linear plots given in Fig. 3 do say nothing on the values of the $V_{max}$ and $K_m$ values of the M-M kinetics, why? Please give the intersection points on the abscissa and on the horizontal axis, as well. From these points, please give the values of $K_m$ and $V_{max}$. (Unfortunately, authors don't show how these M-M constants have obtained! How these parameters were obtained if you did not used the Lineweaver-Burk graphical method to them?)
2. Please give the Michaelis-Menten plot: substrate concentration (from zero value) vs. reaction rate (to $V_{max}$), and give the $V_{max}$ and the $K_m$ values from the curve.
3. Please give (if you can do it?) the error of the predicted data.
4. Please give quantitative evaluation of results considering the values of the two substrates, comparing them with the literature data.
5. Did not you find measured data on this oxidation process published in the literature before 2000?
6. Please give it precisely: concentration = 0.3 M; pH=0.4, see e.g. page 3, line 1; page 3 line 4;

I do not recommend to publish this paper in the presented form. This article should be improved, completed according to the reviewer's remarks. It needs major revision for publication.