

Review of: "Forecasting of the influence of physical fields on the metabolic nanocurrent in proteins"

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This article investigates a metabolic mechanism that involves transferring electrons to mitochondria through the primary structure of protein molecules to complete the ATP synthesis process. In addition, the paper theoretically considers the possibility of the influence of magnetic fields on metabolic transfer processes. Discovering the threshold of the magnetic field, exceeding these values may cause ATP synthesis to be hindered. The model developed and proposed in this article can serve as a consultation basis for determining the magnetic field size to achieve the best therapeutic effect. In the future, this will be the foundation for addressing the possibility of regulating electron metabolism transfer, which is important in clinical practice.

This paper still has the following shortcomings, and can be published in your journal with appropriate modifications.

- 1 The paper needs further polishing to improve its readability.
- 2 The formula labeling in this paper is unconventional, starting from page 7 to label the first formula. The formula on page six is not labeled, and the meaning represented by D in the formula is not explained.
- 3 The formula writing in the paper is chaotic and has poor readability, requiring re editing.
- 4 "The medium-oxygen-electronic structure makes it possible to apply a model in which a protein nanowire has 5 energy bands, one of which is a conduction band, and the other is a valence band."Is there a basis for the five models that can be carried in this sentence?
- 5 The result obtained by using formula (1) is incorrect and the factor V^3 is missing.
- 6 "The calculations show that the electron, which is transferred by the residual field, creates micro currents in the range from 23 to 205 pA depending on the length of the protein-like nanowire (respectively, from 300 to 100 amino acid residues) and temperature in the physiologically relevant range: 33-41oC."

The current value in the above sentence appears in the abstract, introduction, and conclusion, but it is not mentioned in the main text how it was calculated, so it needs to be supplemented.