

Review of: "Electron Tunneling in Ferritin and Its Potential Influence on Myelin and Cardiomyocytes"

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Potential competing interests: No potential competing interests to declare.

Electron tunneling in biological compounds, in general, and in ferritin in particular, is an overwhelmingly interesting phenomenon. This work requires biologists to develop a firm understanding of the physics involved; this work is multidisciplinary in that sense. The article is well-written, nicely pointing out the various studies where the hypothesized phenomenon might be at work. It's a decent effort to bring something novel into notice and worth checking. It, however, puts a lot of burden on the shoulders of the experimentalists. To bring credibility to the hypothesis, electron tunneling has to be checked and verified experimentally around body temperatures. Theoretically speaking, the ferritin layers in neurons can be assumed to be finite potential wells, and the entire neuron, in that case, can be modelled as a superlattice in order to further support the phenomenon of quantum tunneling.