Review of: "Critical Review on Carbon Nanomaterial Based Electrochemical Sensing of Dopamine the Vital Neurotransmitter"

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Potential competing interests: No potential competing interests to declare.

This review provides the state of the arts and latest developments in quantitative dopamine sensing platforms based on carbonaceous nanomaterials. The authors summarize the properties of dopamine and the significance of dopamine sensing. It also discusses the fundamental features of carbonaceous nanomaterials and their advantages in electrochemical sensing. The authors also state the limitations and critical challenges in dopamine sensors and provide prospects.

However, the following suggestions would be beneficial to further improve this review:

1. Provide a figure explaining the properties of carbonaceous materials (CNTs and graphene) to be used as electrochemical sensors.
2. Providing the general mechanism of the electrochemical sensor, similar to the graphical abstract, would be helpful to the reader.
3. How might the inclusion of recent case studies or examples enhance the discussion on the commercialization potential of these techniques?
4. Can you suggest specific sections where more detailed analysis of the limitations and challenges could be incorporated to provide clearer guidance for future research?

Overall, I am satisfied with the review. The authors managed to review thoroughly and discuss in depth the subject matter.