

## 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.

Dear editor,

The paper entitled "Critical Review on Carbon Nanomaterial Based Electrochemical Sensing of Dopamine, the Vital Neurotransmitter" describes studies that include carbonaceous nanomaterial-modified electrochemical sensors for the detection of dopamine. In contrast to the title, the paper is a simple review devoid of complicated descriptions and critical discussions. This review can be considered for publication after major revision and addressing the following comments:

- 1- The introduction should be improved, and some information about different methods of detection and the importance of electrochemical sensors for the detection of dopamine must be added.
- 2- The contents of the review are simple, and the studies and literature are just listed. It can be suggested to add some critical discussions that include the advantages or disadvantages of the introduced sensors.
- 3- Please add more figures from the literature, considering the copyright of the publisher.
- 4- It seems some literature was not referred to. For example:
- Facile and green synthesis of graphene oxide by electrical exfoliation of pencil graphite and gold nanoparticle for non-enzymatic simultaneous sensing of ascorbic acid ...
- A novel non-enzymatic dopamine sensor based on NiO-reduced graphene oxide hybrid nanosheets.
- 5- In some studies, dopamine is used for the modification of the electrode. It can be suggested to mention these studies in a separate section.
- 6- It is highly suggested to compare the designed sensors in terms of linear range, LOD, and feasibility in real samples.
- 7- The lateral flow and microfluidic-based sensors can be discussed.