

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

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Title: Critical Review on Carbon Nanomaterial Based Electrochemical Sensing of Dopamine, the Vital Neurotransmitter.

In this review, the authors have discussed **carbon nanomaterials-based** electrochemical sensors for the determination of dopamine. The review looks interesting, and it can be accepted at **Qeios** after the following revisions.

Comments to Author

1. The authors should discuss the advantage of non-enzymatic electrochemical sensing over enzymatic electrochemical sensing for dopamine detection.
2. Kindly discuss in detail the advantages of voltammetric techniques (SWV and DPV) for dopamine analysis.
3. What are the advantages of carbon nanomaterial-modified electrodes compared to other modified electrodes? Discuss.
4. Discuss in detail the properties, synthesis, functionalization, and advantages of CNTs.
5. Discuss the main challenges in developing carbon nanomaterial-modified electrodes and how to overcome these challenges.
6. Discuss in detail the synthesis of graphene and its derivatives (reduced graphene oxide and graphene oxide).
7. Compare and contrast the methods (electrochemical, chemical, and thermal methods) used for the reduction of graphene oxide.