

We would like to thank the editor and reviewers for their comments and time. We believe that their input has strengthened the manuscript as well.

1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues.

We have proofread the manuscript.

2. Please obtain explicit copyright permission to reuse any figures from a previous publication. Explicit permission can be expressed in the form of a letter from the editor or a link to the editorial policy that allows re-prints. Please upload this information as a .doc or .docx file to your Editorial Manager account. The Figure must be cited appropriately in the Figure Legend, i.e. "This figure has been modified from [citation]."

We have not utilized any figures that were previously published.

3. JoVE cannot publish manuscripts containing commercial language. This includes company names before an instrument or reagent. Please remove all commercial language from your manuscript and use generic terms instead. All commercial products should be sufficiently referenced in the Table of Materials and Reagents.

We have removed any commercial language.

4. Please remove the titles and Figure Legends from the uploaded figures. The information provided in the Figure Legends after the Representative Results is sufficient.

We have removed the Figure legends.

5. Please use h, min, s for time units.

We now use these units.

6. Please upload each Figure individually to your Editorial Manager account as a .png or a .tiff file. Please combine all panels of one figure into a single image file.

We have uploaded each figure individually into the editorial manager.

7. For steps that are done using software, a step-wise description of software usage must be included in the step. Please mention what button is clicked on in the software, or which menu items need to be selected to perform the step.

We have now included a stepwise description of the software.

8. Step 5.1.6: Please write this step in the imperative tense.

We have now written this step in the imperative tense.

9. 5.2.11: Please write this step in the imperative tense.

We have now written this step in the imperative tense.

10. 5.2.12: Please write this step in the imperative tense.

We have now written this step in the imperative tense.

11. 5.2.15: Please write this step in the imperative tense.

We have now written this step in the imperative tense.

Reviewers' comments:

Reviewer #1:

Manuscript Summary:

The manuscript summarize an interesting modification Carbon Fiber Microelectrodes using Gold Nanoparticles that show a very peculiar enhancement of the performance in voltammetry studies. The title and the long abstract describe very well the principles and the utility of the method introduced using the modified electrodes. The experimental protocol is very readily and deeply illustrated showing the potential application with dopamine and other neurotransmitters that could be studied and monitored in the future applications. Materials (chemicals and apparatus) are very well identified and the description of the equipment is fully satisfiyg. The authors explain very clearly all the technical protocols and procedures and I consider that this manuscript could be really an interesting subject for a visual experiment.

Reviewer #2:

Manuscript Summary:

This manuscript describes a protocol to modify carbon fiber microelectrodes (CFME) with gold nanoparticles (AuNP-CFME). The authors demonstrate the use of AuNP-CFMEs for fast scan cyclic voltammetry (FSCV). The protocol for coating the CFME should be useful and is appropriate material for

JoVE. I think this is a good fit for the JoVE and recommend publishing.

Major Concerns:

No major concerns identified.

Minor Concerns:

The protocol for imaging the electrodes via SEM seems too instrument specific. I don't think this needs to be included in the JoVE video.

Yes, we agree that the SEM information is specific. That is why we did not highlight the text in yellow to include in the video. We did feel it was important, though.