Dear Editor,

We thank the referees for their constructive comments as we have addressed each point. Where appropriate, additions have been made to our revised manuscript to help clarify the points raised. Also, we have corrected all the issues described by the Editorial comments. In addition to the aforementioned corrections, the manuscript was proofread and properly revised. Signalled in blue are the parts we believe describe best the protocol so we suggest them to be filmed upon acceptance.

Yours sincerely,

Daniel de Sa Pereira, Prof. Andrew P. Monkman and Dr Przemyslaw Data

**Editorial comments:**

**“1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues. The JoVE editor will not copy-edit your manuscript and any errors in the submitted revision may be present in the published version.”**

The manuscript was proofread and all grammar/spelling issues fixed.

**“2. Please respond to all previous Editorial’s comments.”**

All editorial’s comments have been read and answered.

**“3. Title: Please avoid using abbreviations in the Title.”**

The abbreviation in the title was removed.

**“4. Long Abstract: Please define all abbreviation before use. Please attention that in the final form, Long Abstract will be used as the Abstract. The Short Abstract will be used as Highlights of the manuscript for the databases.”**

All abbreviations were defined.

**“5. Please remove the embedded figure(s) and Table(s) from the manuscript. All figures should be uploaded separately to your Editorial Manager account. Each figure must be accompanied by a title and a description after the Representative Results of the manuscript text.”**

All images and tables were removed from the manuscript.

**“6. Please define all abbreviations before use.”**

All abbreviations were corrected.

**“7. Please highlight 2.75 pages or less of the Protocol (including headings and spacing) that identifies the essential steps of the protocol for the video, i.e., the steps that should be visualized to tell the most cohesive story of the Protocol. Remember that non-highlighted Protocol steps will remain in the manuscript, and therefore will still be available to the reader.”**

The areas necessary to be filmed are highlighted in blue.

**“8. Please ensure that the highlighted steps form a cohesive narrative with a logical flow from one highlighted step to the next. Please highlight complete sentences (not parts of sentences). Please ensure that the highlighted part of the step includes at least one action that is written in imperative tense.”**

It's corrected.

**“9. Please include all relevant details that are required to perform the step in the highlighting. For example: If step 2.5 is highlighted for filming and the details of how to perform the step are given in steps 2.5.1 and 2.5.2, then the sub-steps where the details are provided must be highlighted.”**

It's corrected.

**“10. Please convert centrifuge speeds to centrifugal force (x g) instead of revolutions per minute (rpm).”**

Given that the equipment we use (and most spinners used in spin-coating processes) do not show the centrifugal force in SI but in rpm, we believe that, for practical reasons, this should be kept in rpm. Therefore, no change was performed on this point.

**11. Please use SI units, e.g. please use “µL”.**

It was changed if that made sense from the practical point of view, e.g. rpm.

**12. Please add more details to your protocol steps. Please ensure you answer the “how” question, i.e., how is the step performed? Alternatively, add references to published material specifying how to perform the protocol action.**

It was checked and corrected.

**“13. Protocol: 1.5: How? Please describe the step clearly or refer to an appropriate reference or protocol.”**

This point was clarified and more information was added. It can now be read: “Carefully rinse for about 10 s the substrate with a wash bottle containing DI water, holding the substrate with tweezers. Dry the remaining water with an air gun”

**14. Protocol: 2.2: What are the conditions of the ultrasonic bath? Which power is used? Frequency?**

The information was added.

**“15. Protocol: 2.4: Remove from “IPA bath” or “ultrasonic bath”? At the end of 2.3 it was still in a “ultrasonic bath”! Inspect how? Using what?”**

Points 2.3 and 2.4 were clarified so it is not confusing with the terms. Both baths are to be used (substrates inside the IPA container and container inside US bath). It can now be read: “2.3. Now submerge the substrates into a container with Isopropyl alcohol (IPA, 2-propanol). Put the container in the ultrasonic bath for another 15 min.”

“2.4. Remove the container from the ultrasonic bath and then the substrates from the IPA bath and dry with a nitrogen gun. Visually inspect the substrates to see if there are no solid residues or smudges. If not, repeat from point 2.1.”

**“16. Protocol: 4.10: “Pre-heat the Al” How?”**

This is a software related tool. By pre-heating, we mean switch on the temperature controller of the system that allows for the Joule effect in the crucible. Therefore, because this was mentioned earlier, point 4.3. was revised and rewritten to “Pre-heat the NPB crucible, by switching on the temperature controller of the system and open its’ shutter. This can be done using the VTE software at the disposal of the user. Start the evaporation (open deposit shutter) when the rate stabilizes at around 1 Å/s. Evaporate 40 nm thickness layer, close the shutter, wait till the crucible will cool down to start next process.”

**“17. Protocol: 5.3: How to run a pre-programmed recipe? Please explain it or refer to an appropriate reference or protocol.”**

The automated part of the encapsulation was replaced with a manual encapsulation. This makes the procedure simpler to those who read it.

**18. Please include at least one paragraph of text to explain the Representative Results in the context of the technique you have described, e.g., how do these results show the technique, suggestions about how to analyze the outcome, etc. The paragraph text should refer to all of the figures. Data from both successful and sub-optimal experiments can be included.**

Such information’s are present.

**19. Please discuss all figures in the Representative Results. However, for figures showing the experimental set-up, please reference them in the Protocol.**

The information’s were added.

**20. As we are a methods journal, please revise the Discussion to explicitly cover the following in detail in 3-6 paragraphs with citations:**

**a) Critical steps within the protocol**

**b) Any modifications and troubleshooting of the technique**

**c) Any limitations of the technique**

**d) The significance with respect to existing methods**

**e) Any future applications of the technique**

I think we covered this information.

**21. Please include a title and a description of each figure and/or table. All figures and/or tables showing data must include measurement definitions, scale bars, and error bars (if applicable). Please include all the Figure Legends together at the end of the Representative Results in the manuscript text.**

It's added.

**22. Please revise the table of the essential supplies, reagents, and equipment. The table should include the name, company, and catalogue number of all relevant materials in separate columns in an xls/xlsx file.**

It’s revised.

**“23. Please indicate the track of any change in the text based on the reviewers’ comments. For example, you respond to the second comment of Reviewer #2 as following;**

**A more complete point 4.3. was written with an explanation to why we need such low evaporation rates.  
“4.3. Pre-heat the NPB, start the evaporation (open shutter) when the rate will stabilize around 1 Å/s, don’t exceed the evaporation rate 2 Å/s as this results in increased roughness hence decreasing the uniformity of the layers. To a certain point, this may result in non-uniform emissions and even shorts. Evaporate 40 nm thickness layer, close the shutter, wait till the crucible will cool down to start next process.”**

We have looked for a new version of this point but it must have gotten lost. Nevertheless, point 4.3. was updated according to what is said in comment number 16.

**Reviewers comments:**

**• Step 1.1: Please add more details on the ITO substrate used in your studies. What size?**

It’s added to step 1.1 24x24 mm2 ITO substrates

**• 1.3: Please add details on the mask used in your studies. How is the resin added?**

The information about mask was added (mask with 4 mm stripes), information about resin is in the point 1.1

**“2.2: Which tow substrates? Please mention the ultrasonic bath conditions and settings.”**

Point 2.2. now contains the details at which the bath is done. It can be read “Using tweezers, fully submerge the substrates into a container with acetone. Put it into an ultrasonic bath (320 W, 37 kHz) for 15 min. Please ensure that the bath is at least 3/4 full of DI water to ensure a good spread of the ultrasounds.”

**“2.5: Please add more details on how to clean using the oxygen plasma cleaner.”**  
More details have been added to point 2.5. It can be read “Open the flow in the oxygen tank to a rate of around 50 units. Use an oxygen plasma cleaner (100 W, 40 kHz) to clean the ITO substrates for 6 min at a 2.5 l/h oxygen flow being sure the ITO faces upward.”

**“1.9: For how long?**

It’s added. 10s.

**2.1: Please add more details. Wash for how long? Clean how?”**

An estimated time has been added to this point.

“5.1: Encapsulate how? Please add details.

It’s added.

**5.2: Clean how?**

It’s added to the point 6.1

**5.3: Please add details.”**

As described in point 17 of the editorial comments, the automated part of the encapsulation was replaced with a manual encapsulation.

**5.4: Please mention how to place the contacts correctly.**

There is nothing to add here, square substrate fits square holder.

**5.6: Please add details on how to measure the I-V curve and obtain the spectra.**

It’s described in point 6.4 and reference 15.

**5.7: Please add more details on how to plot.”**

To make this part simpler, figure 1 was updated and the connections to the voltage supplier were drawn on one of the pixels. Regarding the plotting procedure, we believe that point 6.5. clarifies everything that needs to be thought of (what to plot, axis, and scale).