Dear reviewers:

We’d like to thank you for your kind and constructive comments. They were very useful to enhance the quality of our work. Below you will find the responses to your suggestions and queries.

**Comments from Editor**

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

**Response:** Done, manuscript has been revised by a native English speaker in order to improve the grammar and syntax.

**Comment 2:** Please add more details to your protocol steps. There should be enough detail in each step to supplement the actions seen in the video so that viewers can easily replicate the protocol. 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.

**Response:** Done, more details have been supplied to the description of the protocol, and references, if any, have been added.

**Comment 3:** Please specify what is used in the filtration system and write the text in the imperative tense.

**Response:** Done

**Comment 4:** In 2.4, 4.6, 4.7: Please write the text in the imperative tense.

Done

**Comment 5:** In 3.2-3.4: Please describe how these experiments/measurements are done including sample preparation.

**Response:** Done, explanations on the measurements and details regarding the sample preparations are given in the new version of the manuscript.

**Comment 6:** In 4.1: Please specify the organic compound used.

**Response:** We used ciprofloxacin in this experiment. This detail is now provided in several parts of the protocol.

**Comment 7:** In 4.6: What is the distance between the light source and sample? What container is used to hold the sample?

**Response:** The lamp was allocated 5 cm above the reactor, and samples are contained in amber vials until analysis. This information is given in the new version of the manuscript.

**Comment 8:** In 4.8: How to analyze the TOC in liquid samples? Please mention how to calculate mineralization rate.

**Response:** Done, this information, as well as the equations used to calculate the mineralization yield is given in the new version of the manuscript.

**Comment 9:** Please combine some of the shorter Protocol steps so that individual steps contain 2-3 actions and maximum of 4 sentences per step.

**Response:** This modification has been done in order to make the protocol clearer and succinct.

**Comment 10:** Please include single-line spaces between all paragraphs, headings, steps, etc.

**Response:** Done.

**Comment 11:** After you have made all the recommended changes to your protocol (listed above), 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.

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.

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.

**Response:** Done.

**Comment 12:** Figure 3 legend: Please remove the panel labels because they are not in the figure.

**Response:** Done.

**Comment 13:** Figures 3 and 4: Please define error bars in the figure legend.

**Response:** Done, error bars are now defined in the figure legend.

**Comment 14:** In Table 1, the number “2” in the unit of BET area should be a superscript. Please revise. What does 4-Dec refer to?

**Response:** The reviewer is right, the number 2 appears as superscript. Regarding the 4-Dec, this was a mistake in the Excel table, as the program converted the number 4.38 to the date format.

**Reviewers' comments**

**Reviewer #1**

**Manuscript Summary:** The paper is probably publishable after major revisions. The paper reports "A Facile Synthesis Method to Obtain Bismuth Oxyiodide Microspheres Highly Functional in the Photocatalytic Processes to Clean Water". The experiments are feasible and the results presented are possible. No faults of logic were detected in the interpretation of the experimental data. By its content the manuscript belongs well to JoVE Produced Video. Overall, I do believe that the manuscript should be published. There is the major revision is necessary.

**Major Concerns:** Here are some specific comments:

**Comment 1:** Suggestion There are more recent papers involving BiOI/g-C3N4-assisted photodegradation of dye that could be included in manuscript (RSC Advances, 2016, 6, 33478-33491)

**Response:** We have included this manuscript in the list of references.

**Comment 2:** Suggestion: There are more recent papers involving BiOI/GO-assisted photodegradation of dye that could be included in manuscript. (Journal of Colloid and Interface Science, 2019, 533, 319-332; RSC Advances, 2016, 6, 82743-82758) RSC Advances, 2016, 6, 40664-40675; RSC Advances, 2015, 5, 23450-23463; RSC Advances, 2016, 6, 2323-2336

**Response:** We have included some of these articles in the list of references.

**Comment 3:** Suggestion: There are more recent papers involving bismuth Bismuth Oxyiodide-assisted photodegradation of dye that could be included in the manuscript. (Journal of Colloid and Interface Science, 2018, 526, 322-336; Journal of Colloid and Interface Science, 2018, 532, 375-386; Molecular Catalysis, 2017, 432, 196-209;RSC Advances, 2015, 5, 30851-30860; Journal of Hazardous Materials, 2015, 283).

**Response:** We have included some of the articles in the list of references.

**Comment 4:** Authors provided the results of XPS or BET for BiOI. It would be great to tell us the characterization of catalysts.

**Response:** Done, more information on the physical characterization of the materials is given in the new version of the manuscript, such as the isotherms obtained in BET analysis (Figure 3). However, we were unable to characterize by XPS. Instead of XPS, we are providing the compositional characterization of the microspheres obtained by EDS analysis (Table 2). Some discussion is given in this respect in the new version of the manuscript.

**Reviewer #2**

**Comment 1:** The control factor temperature 'T' was important to obtain BiIO microspheres. The statement showed that T > 120 ºC was necessary, but the basis for this conclusion was insufficient.

**Response:** The reviewer is right, in the new version of the manuscript this point is profoundly explained and supported with references.

**Comment 2:** Since 'a very slow dipping of KI solution is crucial', the suitable speed should be pointed out.

**Response:** The reviewer is right, the optimal flow to add the KI solution to the bismuth solution (1 mL/min) is now provided in the protocol as well as in the discussion section.

**Comment 3:** Only Fig.3 explained the TOC results, so the photocatalytic activity of the products was not clear.

**Response:** Thank you for your kind comment. The photocatalytic activity of the materials was in fact assessed by the mineralization of the antibiotic ciprofloxacin in water (now in Figure 4). We selected to assess the mineralization as the evidence of the complete oxidation of the organic molecule via photocatalysis using the BiOI microspheres. In the light of such results, it is possible to assert that the synthesized BiOI microspheres are photocatalytically active. Additionally, we observed that washing with the ethanol/water mixture was the best treatment of the materials to obtain a better photocatalytic activity.