Submission Confirmation from Materials Letters

From: Materials Letters (eesserver@eesmail.elsevier.com)

To: uyi1973@yahoo.com; uyi_sulaeman@yahoo.com

Date: Saturday, August 10, 2019, 05:04 PM GMT+7

*** Automated email sent by the system ***

Dear Dr. Sulaeman,

Your submission entitled "The surface modification of Ag3PO4 using anionic platinum complexes for enhanced visible light photocatalytic activity" belonging to Short Communication has been received by Materials Letters.

You will be able to check on the progress of your paper by logging on to Elsevier Editorial System as an author. The URL is https://ees.elsevier.com/mlblue/.
Your username is: uyi1973@yahoo.com
Your password is: *******

Your will be e-mailed with the manuscript reference number shortly.

Thank you for submitting your work to this journal.

Kind regards,

Materials Letters

Your Submission: MLBLUE-D-19-03534

From: A.F.W. Willoughby (eesserver@eesmail.elsevier.com)

To: uyi1973@yahoo.com; uyi_sulaeman@yahoo.com

Date: Sunday, September 15, 2019, 06:10 PM GMT+7

Dear Dr. Sulaeman,

The reviewer(s) and editor have evaluated your manuscript "The surface modification of Ag3PO4 using anionic platinum complexes for enhanced visible light photocatalytic activity" (Dr. Uyi Sulaeman). As you will see from the comments below and on https://ees.elsevier.com/mlblue/, moderate revision has been requested. Given that the requested revisions are moderate the new version is required within Oct 15, 2019.

To submit a revision, go to https://ees.elsevier.com/mlblue/ and log in as an Author. You will find your submission record under Submission(s) Needing Revision. Please note that resubmissions not received within Oct 15, 2019 may be withdrawn, unless you contact me to extend the deadline.

With your resubmission, explain how and where each point of the reviewer's comments has been incorporated. For this, use submission item "Revision
Notes" when uploading your revision. Also, indicate the changes in an annotated version of the revised manuscript (submission item "Revision, changes marked"). Should you disagree with any part of the reviews, please explain why. To facilitate further review, add line numbers to the text of your manuscript.

Please present any figures, tables etc. as separate files. See the Artwork Guidelines on the home page right menu for further file naming conventions, referencing and format issues. Please upload source files (e.g. Word or LaTeX) of the text and figures. PDF files of the text cannot be handled by the typesetters.

Please strictly follow the formatting requirements as presented in the Guide for Authors at http://www.elsevier.com/locate/mlblue. As regards the figures: The cost for colour printing should be met by the author. In order to reduce the cost you may choose to redraw those figures where colour can be substituted by using different graphical shapes.

I hope that you will find these comments to be of use to you and am looking forward to receiving your revision.

Thank you for submitting your work to this journal.

PLEASE NOTE: Materials Letters or its open access mirror would like to enrich online articles by displaying interactive figures that help the reader to visualize and explore your research results. For this purpose, we would like to invite you to upload figures in the MATLAB .FIG file format as supplementary material to our online submission system. Elsevier will generate interactive figures from these files and include them with the online article on SciVerseScienceDirect. If you wish, you can submit .FIG files along with your revised submission.

Please note that this journal offers a new, free service called AudioSlides: brief, webcast-style presentations that are shown next to published articles on ScienceDirect (see also http://www.elsevier.com/audioslides). If your paper is accepted for publication, you will automatically receive an invitation to create an AudioSlides presentation.

Materials Letters or its open access mirror features the Interactive Plot Viewer, see:
http://www.elsevier.com/interactiveplots. Interactive Plots provide easy access to the data behind plots. To include one with your article, please prepare a .csv file with your plot data and test it online at
http://authortools.elsevier.com/interactiveplots/verification before submission as supplementary material.
MethodsX file (optional)
We invite you to submit a method article alongside your research article. This is an opportunity to get full credit for the time and money you have spent on developing research methods, and to increase the visibility and impact of your work. If your research article is accepted, your method article will be automatically transferred over to the open access journal, MethodsX, where it will be editorially reviewed and published as a separate method article upon acceptance. Both articles will be linked on ScienceDirect. Please use the MethodsX template available here when preparing your article: https://www.elsevier.com/MethodsX-template. Open access fees apply.

Kind regards,

A.F.W. Willoughby
Editor
Materials Letters or its open access mirror
Data in Brief (optional):

We invite you to convert your supplementary data (or a part of it) into an additional journal publication in Data in Brief, a multi-disciplinary open access journal. Data in Brief articles are a fantastic way to describe supplementary data and associated metadata, or full raw datasets deposited in an external repository, which are otherwise unnoticed. A Data in Brief article (which will be reviewed, formatted, indexed, and given a DOI) will make your data easier to find, reproduce, and cite.

You can submit to Data in Brief via the Materials Letters or its open access mirror submission system when you upload your revised Materials Letters or its open access mirror manuscript. To do so, complete the template and follow the co-submission instructions found here: www.elsevier.com/dib-template. If your Materials Letters or its open access mirror manuscript is accepted, your Data in Brief submission will automatically be transferred to Data in Brief for editorial review and publication.

Please note: an open access Article Publication Charge (APC) is payable by the author or research funder to cover the costs associated with publication in Data in Brief and ensure your data article is immediately and permanently free to access by all. For the current APC see: www.elsevier.com/journals/data-in-brief/2352-3409/open-access-journal

Please contact the Data in Brief editorial office at dib-me@elsevier.com or visit the Data in Brief homepage (www.journals.elsevier.com/data-in-brief/) if you have questions or need further information.

Note: While submitting the revised manuscript, please double check the author names provided in the submission so that authorship related changes are made in the revision stage. If your manuscript is accepted, any authorship change will involve approval from co-authors and respective editor handling the submission and this may cause a significant delay in publishing your manuscript.

.....
Important note: If a reviewer has provided a review or other materials as attachments, those items will not be in this letter. Please ensure therefore that you log on to the journal site and check if any attachments have been provided.

COMMENTS FROM EDITORS AND REVIEWERS

Reviewer #1: REVIEW REPORT
Sept 14, 2019
Manuscript Number: MLBLUE-D-19-03534
Title: The surface modification of Ag3PO4 using anionic platinum complexes for enhanced visible light photocatalytic activity
In this work authors have demonstrated the surface modification of Ag3PO4 using anionic platinum complexes and reported its photocatalytic activity..
The work is interesting but there are number of points to be clarified before accepting it for publication in Mat. Lett.
Recommendation: Minor revision (re-evaluation)
Comments:
1. Author should highlight novelty and new achievements in the work in better way.
2. Absorption characteristics of the sample should be shown and how the bandgap energy has been calculated that also should be included in the manuscript.
3. Author should provide the percentage dye removal efficiency and they should compare their work with other published work to have wide acceptability of the work vis-a-vis already reported work in other standard nanomaterial's for removal of Rh of other dye, such as MB etc. in ZnS and ZnO and nanocomposites. Some references are cited below. (i) J Hazard Mater. 2018 Oct 15;360:193-203. doi: 10.1016/j.jhazmat.2018.07.103. Epub 2018 Jul 29., "In-situ synthesis of rGO-ZnO nanocomposite for demonstration of sunlight driven enhanced photocatalytic and self-cleaning of organic dyes and tea stains of cotton fabrics", (ii) Native Defects in ZnO: Effect on Dye Adsorption and Photocatalytic Degradation, J. Phys. Chem. C20131172312218-12228, (iii) Observation of high photocatalytic activity by tuning of defects in chemically synthesized ethylene glycol capped ZnO nanorods, Optik 154, 303-314, (2013).

4. Author's should compare their work with this work, "CNT/Ag3PO4 composites with highly enhanced visible light photocatalytic activity and stability", The Chemical Engineering Journal 241:35-42, (2014).
5. The language of the manuscript should be corrected properly. There are several mistakes.

An Itemized List of the Changes in the Revised Manuscript

Journal : Materials Letters

Manuscript Number : MLBLUE-D-19-03534

Title : The surface modification of Ag_3PO_4 using anionic platinum complexes for enhanced visible light photocatalytic activity

Authors : Uyi Sulaeman, Richo Dwi Permadi, Dian Riana Ningsih, Hartiwi Diastuti, Anung Riapanitra, Shu Yin.

The authors greatly appreciate the reviewer's favorable comments. Here are the replies to each point. The response is in **brown font**, and the changes in the manuscript are in blue font.
Please take some time to review this revised manuscript again, thank you very much!

Reviewers' comments:
Reviewer #1:

In this work authors have demonstrated the surface modification of Ag_3PO_4 using anionic platinum complexes and reported its photocatalytic activity. The work is interesting but there are number of points to be clarified before accepting it for publication in Mat. Lett.

Comments:

1. Author should highlight novelty and new achievements in the work in better way.

According to the comment, I added some descriptions about the novelty in the Introduction at last paragraph.

Up to now, there is no report of incorporating the Ag_3PO_4 by platinum complexes, and the result is very significant for the improvement of Ag_3PO_4-based photocatalyst. The rate of catalytic increased up to 5.8 times higher compared to the pure Ag_3PO_4. The RhB can be degraded to 99.36% for only 6 minutes under the blue LED irradiation of 3 watts.

2. Absorption characteristics of the sample should be shown and how the bandgap energy has been calculated that also should be included in the manuscript.

According to the comment, the absorptions of sample were included (Fig.2), and how the bandgap energy calculated were also included.

The absorption of samples is presented in Fig.2, and the bandgap energies were determined by the following formula (1):

$$(Ahv)^2 = hv - E_g \qquad (1)$$

where A, h, v, and E_g were absorbance, Planck constant, light frequency and bandgap energy [9]. The calculations derived from the DRS data are shown in Fig. S1 (Supplementary Material), the bandgap energy of 2.40 eV, 2.41 eV, 2.44 eV, and 2.44 eV were gained for AP, DAP, AP/Pt and DAP/Pt, respectively.

3. Author should provide the percentage dye removal efficiency and they should compare their work with other published work to have wide acceptability of the work vis-a-vis already reported work in other standard nanomaterial's for removal of Rh of other dye, such as MB etc. in ZnS and ZnO and nanocomposites. Some references are cited below.

(i) J Hazard Mater. 2018 Oct 15;360:193-203. doi: 10.1016/j.jhazmat.2018.07.103. Epub 2018 Jul 29., "In-situ synthesis of rGO-ZnO nanocomposite for demonstration of sunlight driven enhanced photocatalytic and self-cleaning of organic dyes and tea stains of cotton fabrics", (ii) Native Defects in ZnO: Effect on Dye Adsorption and Photocatalytic Degradation, J. Phys. Chem. C20131172312218-12228, (iii) Observation of high photocatalytic activity by tuning of defects in chemically synthesized ethylene glycol capped ZnO nanorods, Optik 154, 303-314, (2013).

According to the comment, the percentage of RhB removal efficiency was calculated, I referred to Ref. 12: J. Hazard. Mater. 360 (2018)193–203.

It is very nice comments to have wide acceptability. For this manuscript, I have only used RhB as standard due to a limitation of space description. The RhB could represent the catalytic activity. Previous results, we also used phenol (Ref. 6: Appl. Surf. Sci. 428 (2018) 1029–1035.) as a model of standard pollutant to ensure the catalytic activity, the result is consistent with the RhB.

The percentage of RhB removal efficiency (η in %) was calculated by the following equation (2).

$$\eta = \left(\frac{C_0 - C}{C_0}\, x\, 100\right)\% \qquad (2)$$

Where C_0 and C are the concentration at the starting time and after some time t of photocatalytic reaction, respectively [12]. The degradation percentage of 50.80%, 71.93%, 88.77%, and 99.38% has been achieved after 6 min irradiation for the samples of AP, DAP, AP/Pt, and DAP/Pt, respectively.

4. Author's should compare their work with this work, "CNT/Ag_3PO_4 composites with highly enhanced visible light photocatalytic activity and stability", The Chemical Engineering Journal 241:35-42, (2014).

According to the comment, I learned the article ref. 9: Chem. Eng. J. 241 (2014) 35–42. It is very nice finding, and I compared my work to this result.

The sample of DAP/Pt possessed the highest catalytic activity. The catalytic rate enhanced significantly up to 5.8 times higher compared to the pure Ag_3PO_4, and RhB completely degraded after 6 min. This result was even higher compared to other works utilized the CNT to modify Ag_3PO_4, in which RhB dye was degraded after 12 min [9].

5. The language of the manuscript should be corrected properly. There are several mistakes.

According to the comment, the language was corrected by professional English editing

Your Submission: MLBLUE-D-19-03534R1

From: A.F.W. Willoughby (eesserver@eesmail.elsevier.com)

To: uyi1973@yahoo.com; uyi_sulaeman@yahoo.com

Date: Tuesday, October 15, 2019, 10:53 PM GMT+7

Dear Dr. Sulaeman,

The reviewer(s) and editor have evaluated your manuscript "The surface modification of Ag3PO4 using anionic platinum complexes for enhanced visible-light photocatalytic activity" (Dr. Uyi Sulaeman). As you will see from the comments below and on https://ees.elsevier.com/mlblue/, moderate revision has been requested. Given that the requested revisions are moderate the new version is required within Nov 14, 2019.

To submit a revision, go to https://ees.elsevier.com/mlblue/ and log in as an Author. You will find your submission record under Submission(s) Needing Revision. Please note that resubmissions not received within Nov 14, 2019 may be withdrawn, unless you contact me to extend the deadline.

With your resubmission, explain how and where each point of the reviewer's comments has been incorporated. For this, use submission item "Revision
Notes" when uploading your revision. Also, indicate the changes in an annotated version of the revised manuscript (submission item "Revision, changes marked"). Should you disagree with any part of the reviews, please explain why. To facilitate further review, add line numbers to the text of your manuscript.

Please present any figures, tables etc. as separate files. See the Artwork Guidelines on the home page right menu for further file naming conventions, referencing and format issues. Please upload source files (e.g. Word or LaTeX) of the text and figures. PDF files of the text cannot be handled by the typesetters.

Please strictly follow the formatting requirements as presented in the Guide for Authors at http://www.elsevier.com/locate/mlblue. As regards the figures: The cost for colour printing should be met by the author. In order to reduce the cost you may choose to redraw those figures where colour can be substituted by using different graphical shapes.

I hope that you will find these comments to be of use to you and am looking forward to receiving your revision.

Thank you for submitting your work to this journal.

PLEASE NOTE: Materials Letters or its open access mirror would like to enrich online articles by displaying interactive figures that help the reader to visualize and explore your research results. For this purpose, we would like to invite you to upload figures in the MATLAB .FIG file format as supplementary material to our online submission system. Elsevier will generate interactive figures from these files and include them with the online article on SciVerseScienceDirect. If you wish, you can submit .FIG files along with your revised submission.

Please note that this journal offers a new, free service called AudioSlides: brief, webcast-style presentations that are shown next to published articles on ScienceDirect (see also http://www.elsevier.com/audioslides). If your paper is accepted for publication, you will automatically receive an invitation to create an AudioSlides presentation.

Materials Letters or its open access mirror features the Interactive Plot Viewer, see:
http://www.elsevier.com/interactiveplots. Interactive Plots provide easy access to the data behind plots. To include one with your article, please prepare a .csv file with your plot data and test it online at
http://authortools.elsevier.com/interactiveplots/verification before submission as supplementary material.
MethodsX file (optional)
We invite you to submit a method article alongside your research article. This is an opportunity to get full credit for the time and money you have spent on developing research methods, and to increase the visibility and impact of your work. If your research article is accepted, your method article will be automatically transferred over to the open access journal, MethodsX, where it will be editorially reviewed and published as a separate method article upon acceptance. Both articles will be linked on ScienceDirect. Please use the MethodsX template available here when preparing your article: https://www.elsevier.com/MethodsX-template. Open access fees apply.

Kind regards,

A.F.W. Willoughby
Editor
Materials Letters or its open access mirror
Data in Brief (optional):

We invite you to convert your supplementary data (or a part of it) into an additional journal publication in Data in Brief, a multi-disciplinary open access journal. Data in Brief articles are a fantastic way to describe supplementary data and associated metadata, or full raw datasets deposited in an external repository, which are otherwise unnoticed. A Data in Brief article (which will be reviewed, formatted, indexed, and given a DOI) will make your data easier to find, reproduce, and cite.

You can submit to Data in Brief via the Materials Letters or its open access mirror submission system when you upload your revised Materials Letters or its open access mirror manuscript. To do so, complete the template and follow the co-submission instructions found here: www.elsevier.com/dib-template. If your Materials Letters or its open access mirror manuscript is accepted, your Data in Brief submission will automatically be transferred to Data in Brief for editorial review and publication.

Please note: an open access Article Publication Charge (APC) is payable by the author or research funder to cover the costs associated with publication in Data in Brief and ensure your data article is immediately and permanently free to access by all. For the current APC see: www.elsevier.com/journals/data-in-brief/2352-3409/open-access-journal

Please contact the Data in Brief editorial office at dib-me@elsevier.com or visit the Data in Brief homepage (www.journals.elsevier.com/data-in-brief/) if you have questions or need further information.

Note: While submitting the revised manuscript, please double check the author names provided in the submission so that authorship related changes are made in the revision stage. If your manuscript is accepted, any authorship change will involve approval from co-authors and respective editor handling the submission and this may cause a significant delay in publishing your manuscript.

.....
Important note: If a reviewer has provided a review or other materials as attachments, those items will not be in this letter. Please ensure therefore that you log on to the journal site and check if any attachments have been provided.

COMMENTS FROM EDITORS AND REVIEWERS

Reviewer #2: Revisions satisfactory.

Editor: Fine, but it is not clear how you prepared defect-free Ag3PO4. Please make this clear and also how this preparation differed from the preparation of defect-Ag3PO4, and why defect-Ag3PO4 is likely to contain Ag vacancies.

The Changes in the Revised Manuscript

Journal : Materials Letters

Manuscript Number : MLBLUE-D-19-03534

Title : The surface modification of Ag_3PO_4 using anionic platinum complexes for enhanced visible-light photocatalytic activity

Authors : Uyi Sulaeman, Richo Dwi Permadi, Dian Riana Ningsih, Hartiwi Diastuti, Anung Riapanitra, Shu Yin.

The authors greatly appreciate the reviewer's and editor's favorable comments. The response is in **purple font**, and the changes in the manuscript are **bold of the brown font.**

Please take some time to evaluate this revised manuscript again, thank you very much!

Reviewer #2: Revisions satisfactory

Thank you very much!

Editor Comments:

Fine, but it is not clear how you prepared defect-free Ag_3PO_4. Please make this clear and also how this preparation differed from the preparation of defect-Ag_3PO_4, and why defect-Ag_3PO_4 is likely to contain Ag vacancies.

Based on the comments, I have revised the procedure. The defect-free Ag_3PO_4 was prepared with starting material of $AgNO_3$ dissolved in 200 ml of water (without ethanol). The synthesis was based on the previous report (Appl. Surf. Sci. 428, 2018,1029–1035).

To prepare the defect-Ag_3PO_4, the starting material of…

The Ag_3PO_4 (defect-free sample) as a control was prepared similar to the defect-Ag_3PO_4 preparation but using only 200 mL of water to dissolve the starting material of $AgNO_3$, without addition of ethanol.

The defect-Ag_3PO_4 contain Ag vacancies because the result from XPS measurement showed that the ratio of Ag/P in defect-Ag_3PO_4 (DAP) is lower than that of Ag_3PO_4 (AP). The ratio of Ag/P in DAP=2.49, whereas the ratio of Ag/P in AP=2.80.

The Ag/P atomic ratio of DAP (2.49) was lower than that of AP (2.80), implying that the DAP contained silver vacancy defect sites.

Your Submission MLBLUE-D-19-03534R2

From: Materials Letters (eesserver@eesmail.elsevier.com)

To: uyi1973@yahoo.com; uyi_sulaeman@yahoo.com

Date: Sunday, October 20, 2019, 01:37 PM GMT+7

Ref.: Ms. No. MLBLUE-D-19-03534R2
The surface modification of Ag3PO4 using anionic platinum complexes for enhanced visible-light photocatalytic activity
Materials Letters

Dear Dr. Sulaeman,

I am pleased to inform you about the acceptance of the manuscript entitled:

"The surface modification of Ag3PO4 using anionic platinum complexes for enhanced visible-light photocatalytic activity" by Uyi Sulaeman, Ph.D.; Richo Dwi Permadi; Dian Riana Ningsih; Hartiwi Diastuti; Anung Riapanitra; Shu Yin

Your accepted manuscript will now be transferred to our production department and work will begin on creation of the proof. If we need any additional information to create the proof, we will let you know. If not, you will be contacted again in the next few days with a request to approve the proof and to complete a number of online forms that are required for publication.

You can track accepted articles at http://www.elsevier.com/trackarticle. You can also check our Author FAQs at http://www.elsevier.com/authorFAQ and/or contact Customer Support via http://help.elsevier.com/app/answers/list/p/7923

With kind regards

A.F.W. Willoughby
Editor
Materials Letters or its open access mirror

Comments from the Editor and Reviewers:

Revisions completed satisfactorily.