

Nanofibrous cosmetic face mask for transdermal delivery of nano gold: synthesis, characterization, release and Zebra fish employed toxicity studies

D. C. Manatunga, V. U. Godakanda, H. M. L. P. B. Herath, Rohini M. De Silva, Chen-Yu Yeh, Jiann-Yeu Chen, A. A. Akshitha De Silva, S. Rajapaksha, Renuka Nilmini and K. M. Nalin De Silva

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Review timeline

Original submission: 18 July 2020
Revised submission: 16 August 2020
Final acceptance: 24 August 2020

Note: Reports are unedited and appear as submitted by the referee. The review history appears in chronological order.

Review History

RSOS-201266.R0 (Original submission)

Review form: Reviewer 1 (Yumin Leng)

Is the manuscript scientifically sound in its present form?

Yes

Are the interpretations and conclusions justified by the results?

Yes

Is the language acceptable?

Yes

Do you have any ethical concerns with this paper?

No

Have you any concerns about statistical analyses in this paper?

No

Recommendation?

Accept as is

Comments to the Author(s)

1. The notes in Figure 1 need to be enlarged.
2. The literature needs to be updated, and it may be helpful for the article to be quoted the literature (Microchimica Acta 2019, 186, 803; Langmuir 2017, 33, 6398; Scientific Reports 2016, 6, 28900; Talanta 2015, 139, 8990; Langmuir 2013, 29, 7591) in appropriate places.

Review form: Reviewer 2**Is the manuscript scientifically sound in its present form?**

Yes

Are the interpretations and conclusions justified by the results?

Yes

Is the language acceptable?

Yes

Do you have any ethical concerns with this paper?

No

Have you any concerns about statistical analyses in this paper?

No

Recommendation?

Accept with minor revision (please list in comments)

Comments to the Author(s)

In the conclusion, the authors state that "In-vivo studies on Zebra fish embryo model further demonstrated that these Au NPs have promising non-toxic profile". However, the results in Fig.6 clearly showed that the high concentration of prepared gold nanoparticles could impact on embryo in a negative way. Therefore, it is important to state that the suitable concentration of designed gold nanoparticles is needed to avoid any adverse effect induction.

Decision letter (RSOS-201266.R0)

We hope you are keeping well at this difficult and unusual time. We continue to value your support of the journal in these challenging circumstances. If Royal Society Open Science can assist you at all, please don't hesitate to let us know at the email address below.

Dear Professor Nalin De Silva:

Title: Nanofibrous cosmetic face mask for transdermal delivery of nano gold: Synthesis, characterization, release and Zebra fish employed toxicity studies
Manuscript ID: RSOS-201266

Thank you for submitting the above manuscript to Royal Society Open Science. On behalf of the Editors and the Royal Society of Chemistry, I am pleased to inform you that your manuscript will

be accepted for publication in Royal Society Open Science subject to minor revision in accordance with the referee suggestions. Please find the reviewers' comments at the end of this email.

The reviewers and handling editors have recommended publication, but also suggest some minor revisions to your manuscript. Therefore, I invite you to respond to the comments and revise your manuscript.

Because the schedule for publication is very tight, it is a condition of publication that you submit the revised version of your manuscript before 22-Aug-2020. Please note that the revision deadline will expire at 00.00am on this date. If you do not think you will be able to meet this date please let me know immediately.

To revise your manuscript, log into <https://mc.manuscriptcentral.com/rsos> and enter your Author Centre, where you will find your manuscript title listed under "Manuscripts with Decisions". Under "Actions," click on "Create a Revision." You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript and upload a new version through your Author Centre.

When submitting your revised manuscript, you will be able to respond to the comments made by the referees and upload a file "Response to Referees" in "Section 6 - File Upload". You can use this to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the referees.

When uploading your revised files please make sure that you have:

- 1) A text file of the manuscript (tex, txt, rtf, docx or doc), references, tables (including captions) and figure captions. Do not upload a PDF as your "Main Document".
- 2) A separate electronic file of each figure (EPS or print-quality PDF preferred (either format should be produced directly from original creation package), or original software format)
- 3) Included a 100 word media summary of your paper when requested at submission. Please ensure you have entered correct contact details (email, institution and telephone) in your user account
- 4) Included the raw data to support the claims made in your paper. You can either include your data as electronic supplementary material or upload to a repository and include the relevant doi within your manuscript
- 5) All supplementary materials accompanying an accepted article will be treated as in their final form. Note that the Royal Society will neither edit nor typeset supplementary material and it will be hosted as provided. Please ensure that the supplementary material includes the paper details where possible (authors, article title, journal name).

Supplementary files will be published alongside the paper on the journal website and posted on the online figshare repository (<https://figshare.com>). The heading and legend provided for each supplementary file during the submission process will be used to create the figshare page, so please ensure these are accurate and informative so that your files can be found in searches. Files on figshare will be made available approximately one week before the accompanying article so that the supplementary material can be attributed a unique DOI.

Once again, thank you for submitting your manuscript to Royal Society Open Science. The chemistry content of Royal Society Open Science is published in collaboration with the Royal Society of Chemistry. I look forward to receiving your revision. If you have any questions at all, please do not hesitate to get in touch.

Kind regards,
Dr Laura Smith
Publishing Editor, Journals

Royal Society of Chemistry
Thomas Graham House
Science Park, Milton Road
Cambridge, CB4 0WF
Royal Society Open Science - Chemistry Editorial Office

On behalf of the Subject Editor Professor Anthony Stace and the Associate Editor Dr Chaohua Cui.

RSC Associate Editor:
Comments to the Author:
(There are no comments.)

RSC Subject Editor:
Comments to the Author:
(There are no comments.)

Reviewer comments to Author:
Reviewer: 1

Comments to the Author(s)
1. The notes in Figure 1 need to be enlarged.
2. The literature needs to be updated, and it may be helpful for the article to be quoted the literature (Microchimica Acta 2019, 186, 803; Langmuir 2017, 33, 6398; Scientific Reports 2016, 6, 28900; Talanta 2015, 139, 8990; Langmuir 2013, 29, 7591) in appropriate places.

Reviewer: 2

Comments to the Author(s)
In the conclusion, the authors state that "In-vivo studies on Zebra fish embryo model further demonstrated that these Au NPs have promising non-toxic profile". However, the results in Fig.6 clearly showed that the high concentration of prepared gold nanoparticles could impact on embryo in a negative way. Therefore, it is important to state that the suitable concentration of designed gold nanoparticles is needed to avoid any adverse effect induction.

Author's Response to Decision Letter for (RSOS-201266.R0)

See Appendix A.

Decision letter (RSOS-201266.R1)

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Dear Professor Nalin De Silva:

Title: Nanofibrous cosmetic face mask for transdermal delivery of nano gold: Synthesis, characterization, release and Zebra fish employed toxicity studies
Manuscript ID: RSOS-201266.R1

It is a pleasure to accept your manuscript in its current form for publication in Royal Society Open Science. The chemistry content of Royal Society Open Science is published in collaboration with the Royal Society of Chemistry.

The comments of the reviewer(s) who reviewed your manuscript are included at the end of this email.

Thank you for your fine contribution. On behalf of the Editors of Royal Society Open Science and the Royal Society of Chemistry, I look forward to your continued contributions to the Journal.

Yours sincerely,
Dr Laura Smith
Publishing Editor, Journals

Royal Society of Chemistry
Thomas Graham House
Science Park, Milton Road
Cambridge, CB4 0WF
Royal Society Open Science - Chemistry Editorial Office

On behalf of the Subject Editor Professor Anthony Stace and the Associate Editor Dr Chaohua Cui.

RSC Associate Editor
Comments to the Author:
(There are no comments.)

Reviewer(s)' Comments to Author:

Appendix A

We would like to thank both the reviewers. Changes made on the manuscript are highlighted in yellow.

Reviewer	Reviewer comment	Response
Reviewer 1	<ol style="list-style-type: none">1. The notes in Figure 1 need to be enlarged2. The literature needs to be updated, and it may be helpful for the article to be quoted the literature (Microchimica Acta 2019, 186, 803; Langmuir 2017, 33, 6398; Scientific Reports 2016, 6, 28900; Talanta 2015, 139, 8990; Langmuir 2013, 29, 7591) in appropriate places	<ol style="list-style-type: none">1. Addressed2. Addressed (highlighted in yellow)
Reviewer 2	<ol style="list-style-type: none">1. In the conclusion, the authors state that "In-vivo studies on Zebra fish embryo model further demonstrated that these Au NPs have promising non-toxic profile" . However, the results in Fig.6 clearly showed that the high concentration of prepared gold nanoparticles could impact on embryo in a negative way. Therefore, it is important to state that the suitable concentration of designed gold nanoparticles is needed to avoid any adverse effect induction	<p>Addressed and the statement was changed to- “ In-vivo studies further demonstrated that selecting Au NPs below the concentration of 208.32 ppm from GtAu NPs and 166.67 ppm from pAu NPs have a promising non-toxic profile on Zebra fish embryo model”. (Highlighted in yellow)</p>