



REVIEWER GUIDELINES

Make sure you know Nanophotonics

Visit the [Nanophotonics homepage](#) to get a sense of the journal's content and house style. This will assist you when deciding whether the paper you have been asked to reviewing is suitable.

Refer to Nanophotonics [Instructions for Authors](#) to check if the paper meets the journal's submission requirements.

Writing your review report

The two main factors you should provide advice on are:

- the paper's unique or original content, its presentation, and its relevance to the journals audience and the community it serves.
- the accuracy of the methodology shown.

Please consider the following when reading the manuscript:

- Is the paper's message clearly communicated?
- Is it an original research article or is it another type? How does this affect your report?
- What contribution does the article make to the research area?
- Is the overall study design and approach appropriate?
- Are you concerned about the language? Are revisions needed to make it possible to review?

Please consider the different sections of the paper giving thought to:

Title

- Does it express clearly and concisely what the article is about?
- Does it highlight the importance of the study?
- Does it contain any unnecessary description?
- Are unnecessary acronyms used?

Abstract

- Is it a short and clear summary of the aims, key methods, important findings and conclusions?
- Is there enough information for it to stand alone?
- Is there any unnecessary information? A clear and concise abstract is required.

Introduction

- Does it clearly summarize the current state of the topic?
- Does it address the limitations of current knowledge in this field?
- Does it clearly explain why the study was necessary?
- Does it clearly define the aim of the study and is this consistent with the rest of the manuscript?
- Is the research question clear and appropriate?

Methods

- Are the study design and methods appropriate for the research question?
- Is there enough detail to repeat the experiments?
- Is it clear how samples were collected or how participants were recruited?
- Is there any potential bias in the sample or in the recruitment of participants?
- Are the correct controls/ validation included?
- Are any potential confounding factors considered?
- Has any randomization been done correctly?
- Is the time-frame of the study sufficient to see outcomes?
- Is there sufficient power and appropriate statistics?
- Do you have any ethical concerns?

Results

- Are the results presented clearly and accurately?
- Do the results presented match the methods?
- Have all the relevant data been included?
- Is there any risk of patients or participants being identified?
- Is the data described in the text consistent with the data in the figures and tables?

Discussion and conclusion

- Do the authors logically explain the findings?
- Do the authors compare the findings with current findings in the research field?
- Are the implications of the findings for future research and potential applications discussed?
- Are the conclusions supported by the data presented?
- Are any limitations of the study discussed?
- Are any contradictory data discussed?

Tables and figures

- Are data presented in a clear and appropriate manner?
- Is the presentation of tables and figures consistent with the description in text?
- Do the figure legends and table headings clearly explain what is shown?
- Do the figures and tables include measures of uncertainty, such as standard error or confidence intervals, where required as well as the sample size?
- Do you have any concerns about the manipulation of data?

References

- Are there any key references missing?
- Do the authors cite the initial discoveries where suitable?
- Are there places where the authors cite a review but should cite the original paper?
- Do the cited studies represent current knowledge?

Final checks – before you submit your report

- Have you given a brief summary of the article and highlighted the key messages?
- Have you given positive feedback as well as constructive criticism?
- Have you made it clear which of your concerns are major (significant points, essential for publication) or minor (smaller issues, may not be essential for publication)?
- Are your concerns specific, with examples where possible?
- Have you numbered your comments and referred to page/ line numbers in the article to make it easy for the authors to address your points?
- Is your feedback constructive, and focused on the research?
- If you were the authors, would you understand how to improve the manuscript?
- If you were the Editor, would the comments be detailed enough to help you make a decision?
- Have you checked the spelling and grammar in your report?
- Have you included your comments in the correct places in the online system – checking that any confidential comments for editors are in the right place – and have you answered all the questions?

Peer review of non-research articles

Many questions will be relevant to all types of articles. However, those which do not present original research are unlikely to have a methods section and results but may be more focused on the discussion of a topic. Check the article type and journal requirements if you are unsure.

Here are some questions to consider for some non-research article types.

Systematic reviews

- Are the search terms and inclusion/ exclusion criteria clearly described?
- Are the search terms and criteria correct to ensure all the relevant articles are included?
- If a meta-analysis has been done, were previous studies combined appropriately?

Case reports

- Does the diagnosis appear to be correct?
- Was the treatment reasonable for the diagnosis?
- Are the treatment and outcomes clearly described?
- As far as possible, is the patient anonymous?
- Are the conclusions reasonable and not attempting to generalize to wider population?

Methodology articles

- Is the new method clearly described?
- Is it possible to replicate the new method?
- Is there a rationale for why the new method is needed?
- Is the new method compared to existing approaches?
- Usually there should not be any experimental results, other than to demonstrate the utility of the methods.

Review articles

- Is there any content which has been previously presented in a review?
- Does it focus on recent advances in research?
- Is it a balanced and unbiased overview of current understanding?
- Are any recent or important references missing?
- Is it too focused on the author's own research?
- Is the interpretation and presentation of results of previous studies accurate and precise?
- Has it a valuable contribution to the research field?
- Is it understandable for non-expert readers?

Opinion articles (also called Editorials or Commentaries)

- Does the article add to the discussion on a research topic?
- Is the opinion of the author well-argued?
- Is the opinion based on current knowledge, or if it makes a big leap from current knowledge then is this logical? What supports the opinion presented?

Provide detailed comments

- These should be suitable for sending to the author. Use these comments to make constructive suggestions, seek clarification on any unclear points, and ask for further elaboration.
- Make suggestions on how the author can improve clarity, succinctness, and the quality of presentation.
- Confirm whether you feel the subject of the paper is sufficiently interesting to justify its length. If you recommend shortening, show specific areas where you think it's required.
- It's not the reviewer's job to edit the paper for English, but it is helpful if you correct the English where the technical meaning is unclear.
- A referee may disagree with the author's opinions, but should allow them to stand, provided their evidence supports it.
- Remember that authors will welcome positive feedback as well as constructive criticism.

Being critical whilst remaining sensitive to the author isn't always easy. Comments should be carefully worded so the author understands what actions they need to take to improve their paper. Avoid generalized or vague statements as well as any negative comments which aren't relevant or constructive.

Sample comments

Please note that these are just examples of how you might provide feedback on an author's work. You should, of course, always tailor your review to the paper in question and the specific requirements of the journal and the editor.

Positive comments

- *The manuscript is well written in an engaging and lively style.*
- *The level is appropriate to our readership.*
- *The subject is very important. It's currently something of a "hot topic", and is one to which the author has made significant contributions.*
- *This manuscript ticks all the boxes we have in mind for an X paper. I have no hesitation in recommending that it be accepted for publication after a few typos and other minor details have been attended to.*
- *Given the complexity involved, the author has produced many positive and welcome outcomes. The literature review offers a useful overview of current research and policy, and the resulting bibliography provides a very useful resource for current practitioners.*
- *This is a well-written article that identifies an important gap.*

Constructive criticism

- *In the "Discussion" section I would have wished to see more information on...*
- *I don't think that this article contains enough robust data to evidence the statement made on page X, lines Y-Z.*

- *I would strongly advise the author to rewrite their introduction, analysis, and discussion to produce a more contextualized introduction to...*
- *There is an interesting finding in this research about.... However, there is insufficient discussion of exactly what this finding means and its implications.*
- *This discussion could be expanded to explain...*
- *The author could strengthen the paper by...*
- *The paper would be significantly improved with the addition of more details about...*
- *The abstract is very lengthy and goes into detailed accounts that are best suited for the article's main discussion sections. As such, I suggest the author reduces this section to keep only the most important elements.*
- *To make this paper publishable, the author needs to respond to the following substantive points...*

Linguistic alterations

- *This paper would benefit from some closer proofreading. It includes many linguistic errors (e.g. agreement of verbs) that at times make it difficult to follow. It may be useful to engage a professional English language editor following a restructure of the paper.*
- *The paper would benefit from stylistic changes to the way it has been written for a stronger, clearer, and more compelling argument.*
- *There are a few sentences that need rephrasing for clarity.*

Making a recommendation

Once you've read the paper and have assessed its quality, you need to make a recommendation to the editor about publication. The specific decision types used by a journal will vary, but the key decisions are:

- **Accept.** The paper is suitable for publication in its current form.
- **Minor revision.** The paper will be ready for publication after light revisions. Please list the revisions you would recommend the author makes.
- **Major revision.** The paper needs substantial changes such as expanded data analysis, widening of the literature review, or rewriting sections of the text.
- **Reject.** The paper isn't suitable for publication with this journal, or the revisions are too fundamental for the submission to continue being considered in its current form.

Revisions

When authors make revisions to their article, they're asked to submit a list of changes and any comments for the reviewers. The revised version is usually returned to the original reviewer if possible. The reviewer is then asked to affirm whether the revisions are satisfactory.