

### Review Form 3

|                          |   |
|--------------------------|---|
| Journal Name:            | <a href="#">Advances in Research</a>  |
| Manuscript Number:       | Ms_AIR_128927   |
| Title of the Manuscript: | Study on process parameter optimization and strength failure mode of 3D printing board structure lattice material |
| Type of the Article      | Opinion Article   |

#### **General guidelines for the Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

#### **Important Policies Regarding Peer Review**

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

#### **PART 1: Comments**

|   | <b>Reviewer's comment</b>  | <b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
|---|--|--|
| <b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b> | <b>The topic is interested and it is used for many industrial applications, however, for clarity, the authors could emphasize novelty (and advancement elements) more concerning other research available in the literature.</b> |  |
| <b>Is the title of the article suitable?<br/>(If not please suggest an alternative title)</b>   | <b>Yes</b>   |  |

**Review Form 3**

|   |   |  |
|---|---|--|
| <p><b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b></p> | <ol style="list-style-type: none"> <li><b>1. The abstract should present the research problem, the way of solving it, and what is new for this article concerning other studies of this type.</b></li> <li><b>2. Some crucial results should be included in the abstract</b></li> </ol>   |  |
| <p><b>Is the manuscript scientifically, correct? Please write here.</b></p>   | <ol style="list-style-type: none"> <li><b>1. In terms of the originality of the paper, "Study on process parameter optimization and strength failure mode of 3D printing board structure lattice material" the subject is not new, please see, for example:<br/><a href="https://doi.org/10.3390/ma16093392">https://doi.org/10.3390/ma16093392</a><br/><br/><a href="https://doi.org/10.1002/adem.202201780">https://doi.org/10.1002/adem.202201780</a><br/><br/><a href="https://doi.org/10.3390/polym13193218">https://doi.org/10.3390/polym13193218</a><br/><br/><a href="https://doi.org/10.3390/polym15163419">https://doi.org/10.3390/polym15163419</a><br/><br/><a href="https://doi.org/10.1371/journal.pone.0291021">https://doi.org/10.1371/journal.pone.0291021</a></b></li> </ol>  |  |
| <p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>                         | <ol style="list-style-type: none"> <li><b>1. The literature review should discuss more recent works, as the number of references mentioned in the introduction are very few. It is essential to include more recent references published in the last two years to cover all related studies.</b></li> </ol>   |  |
| <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>   | <p><b>There are some grammatical errors throughout the paper that need correction</b></p>   |  |
| <p><b><u>Optional/General</u> comments</b></p>  | <ol style="list-style-type: none"> <li><b>1. The introduction should be logical and include a paragraph outlining the paper's organization.</b></li> <li><b>2. For research conducted by others, it is recommended that the authors provide a comprehensive analysis and summary, identifying the resolved and unresolved problems while highlighting the contributions and innovations of the current research.</b></li> <li><b>3. The paper should include the background of the application, the composition of the material and its advantages, preparation methods, a performance analysis of other studies, and the authors' research findings.</b></li> <li><b>4. What are the details of standards specification used for conducting tests?</b></li> <li><b>5. What about the porosity issue in the designed models?</b></li> <li><b>6. The resolution of all figures should be improved and the results should be discussed well.</b></li> <li><b>7. The conclusion needs more detail to summarize the document's most important points and results comprehensively. Also, it is noticed that some expressions are extensively repeated.</b></li> <li><b>8. What is the optimum value of the compression test results relative to applied load in table 7 and 8.</b></li> <li><b>9. The results must be supported by scanning electron microscope (SEM) images of the samples.</b></li> <li><b>10. What are the limitations of the current study?</b></li> <li><b>11. The results obtained require more specific and extensive scientific explanations, which should be supported by relevant research. No noteworthy study explains the observed improvements or deteriorations in the researched attributes.</b></li> <li><b>12. Finally, the manuscript should adhere to the journal's formatting guidelines.</b></li> </ol> <p><b>Reviewer's decision: These amendments will enhance the overall clarity and impact of the document.</b></p> |  |

**Review Form 3**

**PART 2:**

|   | <b>Reviewer's comment</b>  | <b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
|---|--|---|
| <b>Are there ethical issues in this manuscript?</b> | <i>(If yes, Kindly please write down the ethical issues here in details)</i> |   |

**Reviewer Details:**

|                                  |                     |
|----------------------------------|---------------------|
| Name:                            | <b>Emad K. Njim</b> |
| Department, University & Country | <b>Iraq</b>         |