Title

Firstname Lastname 1, Firstname Lastname 2 and Firstname Lastname 2,\*

1 Full Affiliation 1;

2 Full Affiliation 2;

**\*** Correspondence: [correspondingauthor@e-mail.com](mailto:correspondingauthor@e-mail.com);

**Keywords**

keyword 1; keyword 2; keyword 3; keyword 4; keyword 5; (Up to five keywords)

|  |
| --- |
| **Abstract**  A single paragraph of about 150-250 words maximum. For research articles, abstracts should give a pertinent overview of the work. We strongly encourage authors to use the following style of structured abstracts, but without headings: (1) Background: Place the question addressed in a broad context and highlight the purpose of the study; (2) Methods: briefly describe the main methods or treatments applied; (3) Results: summarize the article’s main findings; (4) Conclusions: indicate the main conclusions or interpretations. The abstract should be an objective representation of the article and it must not contain results that are not presented and substantiated in the main text and should not exaggerate the main conclusions. |

Highlights:

* Up to 80 characters.
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0. How to Use This Template

The template outlines the manuscript sections, each associated with a specific style accessible in the Word "Styles" menu. Sections marked as optional are indicated as such. The provided section titles are primarily for articles; review papers and other article types may adopt a more adaptable structure.

Remove this paragraph and start section numbering with 1. For any questions, please contact the editorial office of the journal.

1. Introduction

The introduction section serves as the gateway to your study, setting the stage within a broader context and emphasizing its significance. In doing so, delineate the study's purpose and underscore its profound importance (XXXX, 2023). This narrative necessitates a meticulous examination of the existing research landscape in the study’s domain, punctuated with references to pivotal publications (XXXXX et al., 2023).

Furthermore, it is incumbent to provide a glimpse into the primary objective of your work, its essence, and potential implications. Ensure that this section is accessible to fellow scientists or readers from other fields of expertise. In summary, clarify the path of the current study and the relevance of its key findings.

2. Literature Review

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3. Materials and Methods

The Materials and Methods should be described with sufficient details to allow others to replicate and build on the published results. Please note that the publication of your manuscript implies that you must make all materials, data, computer code, and protocols associated with the publication available to readers. Please disclose at the submission stage any restrictions on the availability of materials or information. New methods and protocols should be described in detail while well-established methods can be briefly described and appropriately cited.

Research manuscripts reporting large datasets that are deposited in a publicly available database should specify where the data have been deposited and provide the relevant accession numbers. If the accession numbers have not yet been obtained at the time of submission, please state that they will be provided during review. They must be provided prior to publication.

Interventionary studies involving animals or humans, and other studies that require ethical approval, must list the authority that provided approval and the corresponding ethical approval code.

4. Results

This section may be divided by subheadings. It should provide a concise and precise description of the results, their interpretation, as well as the conclusions that can be drawn.

4.1. Subsection

4.1.1. Subsubsection

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Bulleted lists look like this:

* First bullet;
* Second bullet;
* Third bullet.

Numbered lists can be added as follows:

1. First item;
2. Second item;
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4.2. Figures, Tables and Schemes

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All figures and tables should be cited in the main text as Figure 1, Table 1, etc.



**Figure 1.** This is a figure. Schemes follow the same formatting.

**Table 1.** This is a table. Tables should be placed in the main text near to the first time they are cited.

|  |  |  |
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| **Title 1** | **Title 2** | **Title 3** |
| entry 1 | data | data |
| entry 2 | data | data 1 |

1 Tables may have a footer.

The text continues here. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ip-sum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum. (XXXXXXX, 2024).

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| (**a**) | (**b**) |

**Figure 2.** This is a figure. Schemes follow another format. If there are multiple panels, they should be listed as: (**a**) Description of what is contained in the first panel; (**b**) Description of what is contained in the second panel. Figures should be placed in the main text near to the first time they are cited.

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**Table 2.** This is a table. Tables should be placed in the main text near to the first time they are cited.

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\* Tables may have a footer.

4.3. Formatting of Mathematical Components

The text continues here (Figure 2 and Table 2). Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ip-sum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum. (XXXXXXX, 2017).

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This is example 1 of an equation:

|  |  |
| --- | --- |
| a = 1, | (1) |

the text following an equation need not be a new paragraph. Please punctuate equations as regular text.

This is example 2 of an equation:

|  |  |
| --- | --- |
| a = b + c + d + e + f + g + h + i + j + k + l + m + n + o + p + q + r + s + t + u + v + w + x + y + z | (2) |

the text following an equation need not be a new paragraph. Please punctuate equations as regular text.

The text continues here (Figure 2 and Table 2). Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ip-sum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum. (XXXXXXX, 2024).

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5. Discussion

Authors should discuss the results and how they can be interpreted from the perspective of previous studies and of the working hypotheses. The findings and their implications should be discussed in the broadest context possible. Future research directions may also be highlighted.

6. Conclusions

Remember to keep your conclusion clear, concise, and directly related to the objectives and findings of your study. It should provide a satisfying sense of closure while leaving the reader with a clear understanding of the study's contributions and implications.

**Supplementary Materials:** The following supporting information can be downloaded at: https://www., Figure S1: title; Table S1: title; Video S1: title.

**Funding:** Please add: “This research received no external funding” or “This research was funded by NAME OF FUNDER, grant number XXX” and “The APC was funded by XXX”. Check carefully that the details given are accurate and use the standard spelling of funding agency names at https://search.crossref.org/funding. Any errors may affect your future funding.

**Data Availability Statement:** We encourage all authors to share their research data. In this section, please provide details regarding where data supporting reported results can be found, including links to publicly archived datasets analyzed or generated during the study. Where no new data were created, or where data is unavailable due to privacy or ethical restrictions, a statement is still required.

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**Appendix A**

The appendix is an optional section that can contain details and data supplemental to the main text—for example, explanations of experimental details that would disrupt the flow of the main text but nonetheless remain crucial to understanding and reproducing the research shown; figures of replicates for experiments of which representative data is shown in the main text can be added here if brief, or as Supplementary data. Mathematical proofs of results not central to the paper can be added as an appendix.

**Appendix B**

All appendix sections must be cited in the main text. In the appendices, Figures, Tables, etc. should be labeled starting with “A”—e.g., Figure A1, Figure A2, etc.

References

All authors should apply the **APA Style 7th Edition**. Click [here](https://apastyle.apa.org/instructional-aids/reference-guide.pdf) to open the reference guide.

References must be in alphabetical order (including citations in tables and legends) and listed individually at the end of the manuscript. We recommend preparing the references with a bibliography software package, such as EndNote, ReferenceManager or Zotero to avoid typing mistakes and duplicated references. Include the digital object identifier (DOI) for all references where available.

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