**Title of the Paper**

**Author 1 Name and Surname** [**🖂**](mailto:hampojohnpaul@gmail.com)**[![Icon

Description automatically generated]()](https://orcid.org/0000-0002-4249-1624)**

Institutional Affiliation (Department, Faculty, University, Country)

**Author 2 Name and Surname [![Icon

Description automatically generated]()](https://orcid.org/0000-0002-4249-1624)**

Institutional Affiliation (Department, Faculty, University, Country)

**Author 3 Name and Surname [![Icon

Description automatically generated]()](https://orcid.org/0000-0002-4249-1624)**

Institutional Affiliation (Department, Faculty, University, Country)

|  |  |  |  |
| --- | --- | --- | --- |
| Article history | Received  20 August 2024 | Accepted  02 December 2024 | Publishing  15 January 2024 |
| **ABSTRACT:**  A concise and factual abstract is required (200-250 words). The abstract should state briefly the purpose of the research, the principal results and major conclusions. References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself. The author should be very clear about the purpose and outcome of the research and describe it succinctly in the abstract. Moreover, author should entice the readers by attracting their interest in the research and ensure that he clearly states author’s key argument or main findings in the abstract. As a primary goal, the abstract should make the general significance and conceptual advance of the work clearly accessible to a broad readership. The abstract should avoid unnecessary wordiness and focus on quickly and concisely summarizing the major points of the work. An abstract is not an introduction; author is not trying to capture the reader's attention with timeliness or to orient the reader to the entire background of your study. When readers finish reading the abstract, they should have a strong sense of the article’s purpose, approach, and conclusions. | | | |
| **Keywords:** keyword 1, keyword 2, keyword 3, keyword 4, keyword 5. | | | |

**INTRODUCTION**

The introduction should lay the ground-work for why the article is worth reading, and describe where the work fits within the existing literature. Introduce the novel elements of the paper in the introduction, thus providing motivation for the reader to penetrate the main text. Do not over-burden the reader by making the introduction too long. Get to the key parts of the paper sooner rather than later. Introduction should have no more than 15 lines.

**MATERIALS AND METHODS**

This section should be detailed enough that readers can replicate your research, and assess whether the methods justify the conclusions. It’s advisable to use the past tense – it’s about what you did – and avoid using the first person. Ultimately, you should explain how you studied the problem, identify the procedures you followed, and structure this information as logically as possible.

If your methods are new, you’ll need to explain them in detail. If they’ve been published before, cite the original work, including your amendments if you’ve made modifications. Identify the equipment and the materials you used, specifying their source. State the frequency of observations and what types of data were recorded.

Give precise measurements, stating their strengths and weaknesses when necessary. Name any statistical tests, so your quantitative results can be judged.

If your research involved human participants, you’ll need to include certain information in the ethics statement, such as committee approvals and permission to publish. You should also explain your criteria for selecting participants.

**Figures** should be inserted in the text nearest their first references (**For example:** see Figure 1). Figures can be included in the text or not – depending on their number and size. If you have a lot of figures, then should be supplied in a separate electronic file in bitmap formats (JPEG, PNG, GIF, etc.). Bitmap images should be of 300 dpi resolution. We prefer colour images instead of black and white. Beware that figure captions should be included within the main text. If your article contains a small number of figures, they can be inserted into the text – then you do not need to attach a separate bitmap files.

**Sample:**

1. **b) c)**

**Figure 1.** Microstructure of the alloy after homogenisation at: a) 100 °C, b) 200 °C, c) 300 °C. **Note:** Comments or notes here.

**Tables** should be numbered sequentially in the text (**For example:** see Table 1). The tables must have a title, centralized above. Displayed tables are to be centered on the page width.

**Sample:**

**Table 1. Example of full column size table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sample** | **Starting parameters** | | | **Results** | |
| A | B | C | X | Y |
| 1 | 1909.4 | 90 | 4.13·10-7 | 0.13–0.35 | 25.048 |
| 2 | 1660.5 | 110 | 2.68·10-8 | 0.23–0.45 | 15.907 |
| 3 | 1378.1 | 80 | 8.03·10-7 | 0.33–0.55 | 12.789 |
| 4 | 1129.3 | 120 | 6.11·10-7 | 0.43–0.65 | 10.388 |

**Note:** Comments or notes here.

Please note that all tables and figures must be cited in the main text. Citations should be inserted well in advance, as follows: “Results shown in Table 1…”, “Table 1 provides a summary of the results…”, “The agreement between the measured pressure and the model results were observed (Table 1).”, “The samples were illustrated in Figure 1.”, “Figure 1 shows the construction of device”, “A comparison between the model and simulation results (Fig. 1) shows...”.

**Mathematical Expressions** should be numbered consecutively, with the number set in right sight and enclosed in parentheses. Equations should be referred to in abbreviated form, e.g. Equation (1), (2), … (n). in multiple/line equations, the number should be given on the last line. Symbols for physical quantities in formulae and in the text should be in italics. Algebraic symbols are printed in upright type.

*Displayed equation* (1)

where: *a* – physical quantity, *b* – constant, ….

**RESULTS**

This section should present your findings objectively, explaining them largely in text. It’s where you show how your results contribute to the body of scientific knowledge, so be clear and logical. And it’s important not to interpret your results – that comes in the Discussions and Conclusions and Further Research sections.

You can base the sequence of this text on the tables, figures and graphs that best present your findings. Emphasize any significant findings clearly. Tables and figures must be numbered separately; figures should have a brief but complete description – a legend – that reveals how the data was produced.

**DISCUSSION**

Readers need to know what they have read and why it was significant. Remind the reader why this article was worth reading and publishing. This is where you describe the meaning of your results, especially in the context of what was already known about the subject. You can present general and specific conclusions, but take care not to summarize your article – that’s what the abstract is for.

You should link this section back to the introduction, referring to your questions or hypotheses, and cover how the results relate to your expectations and cited sources. Do the results support or contradict existing theories? Are there any limitations? You can also suggest further experiments, uses and extensions.

Above all, the discussion should explain how your research has moved the body of scientific knowledge forward.

**CONCLUSION**

Conclusions must have wider perspective-implications for other broader areas and domains. Future work and outstanding questions must arise from conclusions. Concluding sections also provide a venue to set the stage for future research directions. Your conclusions must be supportable and not extend beyond your results, so avoid undue speculation and bold judgments about impact. This is also a good place to suggest practical applications for your results, and to outline what the next steps in your research will be.

**ACKNOWLEDGEMENT**

Keep acknowledgements brief, naming those who helped with your research; contributors, or suppliers who provided free materials. You should also disclose any financial or other substantive conflict of interest that could be seen to influence your results or interpretations.

**CONFLICT OF INTERESTS**

No conflict of interest.

**REFERENCES**

Authors are requested to follow [**IEEE Referencing Style**](https://ieeeauthorcenter.ieee.org/wp-content/uploads/IEEE-Reference-Guide.pdf).

The IEEE Referencing Style is a numeric style, where citations are numbered [1] in the order of appearance. Each citation number should be enclosed in square brackets on the same line as the text, before any punctuation, with a space before the bracket [2]. Once a source has been cited, the same number is re-used for all subsequent citations to the same source. All references should be cited in the text. Multiple citations should be avoided, by limiting to a maximum of two items in one sentence. References list should contain the newest positions (last 10–15 years). References list should be in English. Other languages of papers should be marked e.g. (in Polish), (in Spanish), etc. Two or more articles in the same year and by the same author(s) should be indicated by the letters: a, b, c. If applicable, add DOI number to each cited source.

Here are some examples of IEEE style in-text citations:

“... as shown by Brown [4], as previously stated.”

"The theory was first put forward in 1987 [1]".

“For example, see [7].”

"Several recent studies [3, 4, 15, 16] have suggested that..."

The example above may also be formatted as:

“Several recent studies [3], [4], [15], [16] have suggested that…”

Page numbers are required within citations where material is directly quoted or you refer to a specific part of the source, such as a detail difficult to find. Give page numbers within the square brackets, for example [1, p. 3].

**Citations/references with multiple authors**

If you choose to mention the author(s) of a source whilst citing it in the text of your work, if there are three or more you can abbreviate them using ‘et al.’ e.g. During their research, Fan, et al. [4] discuss lasers in detail. However, in general you do not need to mention the authors by name, just use the numeric citation in square brackets. In your full reference list at the end however, you always give the authors’ names. In the reference list you can only abbreviate these using ‘et al.’ if there are six or more authors.

**Reference examples**

**Book**

[1] I.A. Glover and P.M. Grant, Digital Communications, 3rd ed. Harlow: Prentice Hall, 2009.

**Book chapter**

[2] C. W. Li and G. J. Wang, "MEMS manufacturing techniques for tissue scaffolding devices," in Mems for Biomedical Applications, S. Bhansali and A. Vasudev, Eds. Cambridge: Woodhead, 2012, pp. 192-217.

**Electronic Book**

[3] W. Zeng, H. Yu, C. Lin. (2013, Dec 19). Multimedia Security Technologies for Digital Rights Management [Online]. Available: <http://goo.gl/xQ6doi>

**Journal article**

[4] F. Yan, Y. Gu, Y. Wang, C. M. Wang, X. Y. Hu, H. X. Peng, et al., "Study on the interaction mechanism between laser and rock during perforation," Optics and Laser Technology, vol. 54, pp. 303-308, Dec 2013.

**Conference papers**

[6] S. Adachi, T. Horio, T. Suzuki. "Intense vacuum-ultraviolet single-order harmonic pulse by a deep-ultraviolet driving laser," in Conf. Lasers and Electro-Optics, San Jose, CA, 2012, pp.2118-2120.

**Theses/Dissertations**

[10] J. O. Williams, “Narrow-band analyser,” Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.

**Websites**

[13] BBC News. (2013, Nov. 11). Microwave signals turned into electrical power [Online]. Available: <http://www.bbc.co.uk/news/technology-24897584>

[14] M. Holland. (2002). Guide to citing internet sources [Online]. Available: <http://www.bournemouth.ac.uk/library/using/guide_to_citing_internet_sourc.html>