### *Nano Materials Science* Manuscript Preparation

***General:*** Use the manuscript template to prepare your paper following the instructions for the use of the template. Make sure all parts of your paper meet the requirements stated below.

***Text:*** Follow this order when typing manuscripts: title, author(s), affiliation(s), abstract, keywords, and main text with figures and tables put where they are referred, acknowledgements, conflicts of interest, appendix and references.

***Title:*** The title should clearly, and concisely describes the content of the paper. Use descriptive words that you would associate strongly with the content of your paper. Do not use abbreviations or acronyms.

***Authors’ names:*** Author names include in the byline all those who have made substantial contributions to the work, even if the paper was actually written by only one person. Use full names. Do not include professional or official titles or academic degrees. At least one author must be designated as the corresponding author to whom correspondence should be addressed. Author address should be the institution where the work was conducted.

***Abstract:*** A self-contained abstract of about 200 words (no more than 350 words) is required to tersely and clearly describe the **purpose of the work**, the **scope of the effort**, the **methods used to execute the work**, and the **major findings**. Jargons, abbreviations, acronyms and referencing are discouraged. The Abstract should be only text. Write your Abstract using concise, but complete sentences, and get to the point quickly. Use the active voice when possible.

***Keywords:*** At least 3 keywords should be given and separated with a semicolon. Abbreviations or acronyms are not allowed.

***Quantities and units:*** Only SI quantities and units and those acceptable in SI are to be used for all scientific and laboratory data; if, in certain cases, it is necessary to quote other units, these should be added in parentheses following the SI units. The full stop should not be included in abbreviations for units, e.g. m (not m.); “%” and “/” should be used in preference to ‘per cent’ and ‘per’; negative exponents are recommended to indicate units in the denominator (e.g. kN m−2 s−1). A value range is preferably presented in a form like 20 mg L−1 to 100 mg L−1. Authors should consult **SI Unit Rules and Style Conventions** for proper use.

***Symbols:*** All symbols must be defined in the text where they first appear. The style of symbols for scalar quantities and variables is italic; for vectors and matrices is boldface italic; for tensors is sans-serif bold italic; and for units and descriptive terms is roman.

***Equations*** are encouraged to be typed with MathType in 10-point full size, and if necessary be numbered consecutively with Arabic numbers within parentheses. The following is an example:

 (1)

***Figures:*** Photographs, charts and diagrams are all to be referred to as “Figure(s)”, and should be numbered with Arabic numerals consecutively in the order to which they are referred and be positioned properly in the text**.**

Each figure must have a caption that includes the figure number and a brief description, preferably one or two sentences. The caption should immediately follow the figure with the format “**Fig. X.** Figure caption.” The caption should be understandable without reference to the text. It is preferable to place the keys to symbols used in the figure in the caption, not in the artwork.

Ensure that the symbols and abbreviations inthe caption agree with those in the figure itself and in the text and that the figure is already sized appropriately. If there are coordinates in a figure, their measures and corresponding units must be identified in the form like *C*/(mol L−1).

Figures should be submitted in final width: maximally 75 mm for single-column ones and 150 mm for double-column ones (with 300 dpi), and with symbols legible in final size, preferably 7.5 points in Times New Roman style for all letters and numbers. Cardinal lines in a figure should be 0.75 point wide and auxiliary ones 0.25 point.

*Single-column figures*

0

2

4

6

8

10

9.999 0

9.999 2

9.999 4

9.999 6

9.999 8

10.000 0

*x*/m

*U*/V

*R*L=50 kΩ

*R*L= *R*C

*R*L=10 kΩ

**(a)**

Fig. 2 Sketch..: (a) three-zone model; and (b) five- zone model

*Double-column figures*



Fig. 4 Sensor primary layout

***Tables:*** Use tables when the data cannot be presented clearly as narrative, when many precise numbers must be presented, or when more meaningful interrelationships can be conveyed by the tabular format. Tables should supplement, not duplicate, text and figures. Tables should be simple and concise.

Tables should be numbered consecutively and each given a descriptive caption. The title should follow the format “**Table X** Table Title”. The title should be understandable without reference to the text. Put details in footnotes, not in the title. Define nonstandard abbreviations in footnotes.

A table should have at least the following three horizontal rules: one under the title and above the column headings; one between the column headings and the body of the table; and one at the bottom of the table. No vertical rules or other lines may be used unless they indicate the structure of the data. Footnotes to a table should be right under it.

*Single-column tables*

Table 1 Atomic attributes, chemical bonds and relative distance (*d*) in organic molecules

|  |  |  |
| --- | --- | --- |
| Atom | Attribute | *d* |
| C1 | sp3 Carbon in a single bond | 1.000 0 |
| C2 | sp2 Carbon in a double bond | 0.870 1 |
| CC | sp2 Carbon in a conjugated system | 0.935 1 |
| S1 | sp3 Sulfur in a single bond | 1.181 8 |

***Acknowledgements*** of financial support, advice or other kinds of assistance should be made at the end of the main text under the heading “Acknowledgements”.

***Conflicts of interest***: Declare conflicts of interest or state “The authors declare no conflict of interest.” Authors must identify and declare any personal circumstances or interest that may be perceived as inappropriately influencing the representation or interpretation of reported research results. Any role of the funders in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript, or in the decision to publish the results must be declared in this section. If there is no role, please state “The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results”.

*Double-column tables*

Table 1 Main control parameters of the composite columns where *α* is the position coefficient, *D*× *t* is specification of the steel tubes, and *ξ*bis eccentricity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Loading condition | Composite column No. | *α* | *D*× *t*/mm | *ξ*b |  |
| Axial compression | Z-0.6-0.67-0 | 0.67 | 200 × 3 | 0.0 |  |
| Z-0.6-0.50-0 | 0.50 | 150 × 3 | 0.0 |  |
| Z-0.6-0.33-0 | 0.33 | 100 × 3 | 0.0 |  |
| Eccentric compression 1 | Z-0.6-0.67-0 | 0.67 | 200 × 3 | 0.1 |  |
| Z-0.6-0.50-3 | 0.50 | 150 × 3 | 0.1 |  |
| Z-0.6-0.33-3 | 0.33 | 100 × 3 | 0.1 |  |
| Eccentric compression 2 | Z-0.6-0.67-6 | 0.67 | 200 × 3 | 0.2 |  |
| Z-0.6-0.50-6 | 0.50 | 150 × 3 | 0.2 |  |
| Z-0.6-0.33-6 | 0.33 | 100 × 3 | 0.2 |  |

### *Nano Materials Science* Manuscript Template

Type of the Paper (Article, Review, Communication, Perspective, Editorial, etc.)

Title

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

1 Affiliation 1

2 Affiliation 2

**\*** Correspondence: e-mail@e-mail.com

**Abstract:** The Abstract is one-paragraph short paper. It must contain the (1) Background: Place the question addressed in a broad context and highlight the purpose of the study; (2) Methods: Describe briefly the main methods or treatments applied; (3) Results: Summarize the article's main findings; and (4) Conclusions: Indicate the main conclusions or interpretations. The Abstract consists of no more than 350 words (preferably within 250 words).

**Keywords:** At least 3 keywords should be given here and separated with a semicolon. Abbreviations or acronyms are not allowed.

1. Introduction

The Introduction should 1) establish the context of the work being reported through discussing the relevant [primary research literature](http://abacus.bates.edu/~ganderso/biology/resources/writing/#introliterature) (with [citations](http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWcitations.html)) and summarizing the current understanding of the problem (before the study reported here), and 2) clearly indicate the purpose of the study and briefly describe the study's approach and how it addresses the questions or hypotheses posed.

Use the active voice as much as possible. Appropriate use of first person is encouraged.

2. Materials and Methods

This section is variously called Methods or Methods and materials or other similar terms to explain clearly how you carried out your study. Remember to use the **past tense** when you were describing the conduct of the experiment. You may use the active voice to a certain extent, although this section requires more use of third person, passive constructions than others.

Materials and equipment utilized during the experiment should be mentioned throughout the procedure as they are used. Enough detail should be included in the description of the materials so that the experiment can be reproduced.

3. Results

Present the results of your experiment(s) in a sequence that will logically support (or provide evidence against) the hypothesis, or answer the question stated in the Introduction, using both illustrative materials (Tables and Figures) and text. Important negative results should be reported, too. Write the text of the Results section concisely and objectively. Use the active voice as much as possible. Avoid repetitive paragraph structures.

3.1. Subsection

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3.2 Quantities and units

Only SI quantities and units and those acceptable in SI are to be used for all scientific and laboratory data; if, in certain cases, it is necessary to quote other units, these should be added in parentheses following the SI units. The full stop should not be included in abbreviations for units, e.g. m (not m.); “%” and “/” should be used in preference to ‘per cent’ and ‘per’; negative exponents are recommended to indicate units in the denominator (e.g. kN m-2 s-1). A value range is preferably presented in a form like (20 to 100) mg L-1 or 20 mg L-1 to 100 mg L-1.

3.3 Symbols and equations

All symbols must be defined in the text where they first appear. The style of symbols for scalar quantities and variables is italic; for vectors and matrices is boldface italic; for tensors is sans-serif bold italic; and for units and descriptive terms is roman.

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 (1)

3.4 Figures

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3.5 Tables

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Use tables when the data cannot be presented clearly as narrative, when many precise numbers must be presented, or when more meaningful interrelationships can be conveyed by the tabular format. Tables should supplement, not duplicate, text and figures. Tables should be simple and concise.

4. Discussion

The discussion is to interpret and describe the significance of your findings in light of what was already known about the research problem being investigated, and to explain any new understanding or fresh insights about the problem after you've taken the findings into consideration.

5. Conclusion/ Summary and Outlook

Conclusion is not merely a summary of your points or a re-statement of your research problem but a synthesis of key points, they provide clarity and insight into the topic.

**Acknowledgments:** Generally the last paragraph of the paper is the place to acknowledge people, organizations, and financing (you may state grant numbers and sponsors here. Use “we (or I) thank”.

**Conflicts of Interest:** Declare conflicts of interest or state “The authors declare no conflict of interest.” Authors must identify and declare any personal circumstances or interest that may be perceived as inappropriately influencing the representation or interpretation of reported research results. Any role of the funders in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript, or in the decision to publish the results must be declared in this section. If there is no role, please state “The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results”.

Supplementary Materials/ Appendix A

The appendix is an optional section that can contain details and data supplemental to the main text. All appendix sections must be cited in the main text.

References

All references cited in the text must be referred by an Arabic numeral in square brackets on the line and in the order to which they are referred in the text. A numerical list of the full references should be given at the end of the paper. 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.

Citations and References in Supplementary files are permitted provided that they also appear in the reference list here.

In the text, reference numbers should be placed in square brackets [ ], and placed before the punctuation; for example [1], [1–3] or [1,3].

Author 1, Author 2, Author 3,(list all the authors). Title of the article, *Abbreviated Journal Name* Volume (Year) page range.

**Graphic Abstract** (5cm×7.5cm) The graphic abstract should representative of your entire work and not be a duplicate of a graphic already used in the manuscript. Color structures, graphical images, photographs, or reaction schemes are typically good choices. Which may be chosen as cover picture.