How to Prepare a Manuscript for International Journals

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My background in publishing

- I’m researcher in a Spanish private foundation (AZTI), since 1985
- My main topic of investigation is marine ecology
- Since 2000, I have published:
  - 37 peer-reviewed papers (in 18 different journals)
  - 13 chapters of books
  - 4 books
  - 28 non-reviewed papers
- I review on average 20-25 papers per year
- I have reviewed papers for more than 25 scientific journals
- I’m member of the Editorial Boards of Marine Pollution Bulletin and Continental Shelf Research
- I’m member of several scientific associations: ASLO, ERF, ECSA, etc.
1.- Introduction: Why do we publish?

We are doing scientific research. Publishing is one of the necessary steps embedded in the scientific research process...

- To present new, original results or methods
- To rationalize (refine, reinterpret) published results
- To review the field or to summarize a particular subject
- To obtain more funds for research
- Ego (‘Your work is your epitaph’: Martin Welch)
1.- Introduction: Why do we publish?

At least we should provide something that advances, not repeats, knowledge and understanding in a certain scientific field.

- We are not supposed to create garbage...
  - Reports of no scientific interest
  - Work out of date
  - Duplications of previous-published work
  - Incorrect/unacceptable conclusions
  - ...

1.- Introduction: Why do we publish?

Important publishing advice

- Submit to the right journal (scope and prestige)
- Submit to one journal only
- Submit only one manuscript, not a series
- Check the English!
- Pay attention to structure
- Pay attention to journal requirements
- Be honest!
1.- Introduction: Why do we publish?

Be honest!

Source: China Daily, 15 March 2006

- Chinese authorities take strong measures against scientific dishonesty
- Plagiarism and stealing work from colleagues can lead to serious consequences

Plagiarism, fake research plague academia

Wenfeng, a professor at Peking University's law school, told China Daily. He is also an activist in fighting what he called academic corruption.

Some 100 Chinese professors plan to publish an open letter calling for the establishment of a national supervision mechanism to root out academic plagiarism. The move follows a series of academic scandals. A biomedicine professor at Shandong University, was last year accused of publishing fraudulent research in the November 2003 issue of Nature Biotechnology.

Publish or perish!

Thomas H. Adair
(University of Mississippi)

"Surely you were aware when you accepted the position, Professor, that it was publish or perish."
1.- Introduction: Why do we publish?

What makes a good research paper?

- **Good science:**
  - Novel – new and not resembling something formerly known or used (can be novel but not important)
  - Mechanistic – testing a hypothesis - determining the fundamental processes involved in or responsible for an action, reaction, or other natural phenomenon
  - Descriptive – describes how things are but does not test how things work – hypotheses are not tested.

- **Publication in good journals**
  - Impact factor – average number of times published papers are cited up to two years after publication
  - Immediacy Index – average number of times published papers are cited during year of publication.

- **Good writing**

  Thomas H. Adair  
  (University of Mississippi)

1.- Introduction: Why do we publish?

- Content is essential
- Presentation is critical

You need a GOOD manuscript to present your contributions to the science community!
2.- What is a good manuscript?

- Contains a scientific message that is clear, useful, and exciting.
- Conveys the authors’ thoughts in a logical manner such that the reader arrives at the same conclusions as the author.
- Is constructed in the format that best showcases the authors’ material, and written in a style that transmits the message clearly.

A good manuscript makes readers (especially reviewers and editors) grasp the scientific significance as EASILY as possible.

Writing a good manuscript is NOT easy! Be prepared to work hard on it!
In the following section, you will learn how to raise your chances of getting accepted, including...

- Basic principles that should always be kept in mind
- What editors and reviewers love, and what they hate

Remember:

- **Cherish your own work** – if you do not take care, why should the journal?
- **There is no secret recipe** for success – just some simple rules, dedication and hard work.
- Editors and reviewers are all busy scientists, just like you – make things easy to save their time!

### 3.1. Prepare a good manuscript – *Before start*

1. **Think about WHY** you want to publish your work. *(Actually, you should check the originality of the idea at the very beginning of your research)*
   - Have you done something new and interesting?
   - Is there anything challenging in your work?
   - Is the work related directly to a current hot topic?
   - Have you provided solutions to some difficult problems?

   - If all answers are “yes”, then start preparations for your manuscript
2. Decide on the type of the manuscript

- Full articles/Original articles: the most important papers. Often substantial completed pieces of research that are of significance.
- Letters/Rapid Communications/Short communications: usually published for the quick and early communication of significant and original advances. Much shorter than full articles (usually strictly limited).
- Review papers/perspectives: summarizing recent developments on a specific topic. Highlighting important points that have previously been reported and introduce no new information. Often submitted on invitation.

3.1. Prepare a good manuscript – Before start

2. Decide on the type of the manuscript

- Self-evaluate your work. Is it sufficient for a full article? Or are your results so thrilling that they should be shown as soon as possible?
- Ask your supervisor and your colleagues for advice on manuscript type. Sometimes outsiders can see things more clearly than you.
3. Choose the target journal

- Choose one right journal for your work. DO NOT gamble by scattering your manuscript to many journals. Only submit once!
- You must get help from your supervisor or colleagues!!! The supervisor (who is probably the corresponding author) has responsibility for your work. You are encouraged to chase your supervisor if necessary.
- Articles in your references will likely lead you to the right journal.
- Rejection rates are high: Nature and Science, 90%; MPB, 67%;...
- Read recent publications (at least go through the abstracts) in each candidate journal. Find out the hot topics, the accepted types of articles, etc.
3.1. Prepare a good manuscript – **Before start**

4. Two more things before typing your manuscript...

**Read the ‘Guide for Authors’ of the target journal! Again and again!**

- Apply the Guide for Authors to your manuscript, even to the first draft (text layout, paper citation, nomenclature, figures and tables, etc.). It will save your time, and the editor’s.
- All editors hate wasting time on poorly prepared manuscripts. They may well think that the author shows no respect.
3.1. Prepare a good manuscript – *Before start*

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“Write” the paper in your head before writing it in the computer

3.2. Prepare a good manuscript – *Construction*

The general structure of a full article

- Title
- Authors
- Abstract
- Keywords
- Main text
  - Introduction
  - Methods
  - Results
  - Discussion
  - Conclusions
- Acknowledgements
- References
- Supplementary materials

Make them easy for indexing and searching! (informative, attractive, effective)

Journal space is precious. Make your article as brief as possible. If clarity can be achieved in $n$ words, never use $n+1$. 
The general structure of a full article follows the IMRAD format (introduced as a standard by the American National Standards Institute in 1979)

- **Introduction**: What did you/others do? Why did you do it?
- **Methods**: How did you do it?
- **Results**: What did you find?
- **And**
- **Discussion**: What does it all mean?

However, we often use the following order when writing:

- Topic to be studied (including review of literature)
- Figures and tables
- Methods, Results and Discussion
- Conclusions and Introduction
- Abstract and title

Finalize Results & Discussion before you write the introduction. If the discussion is insufficient, how can you objectively demonstrate the scientific significance of your work in the introduction?
3.2.1 Prepare a good manuscript – **Title**

- Each section has a definite purpose

### 1. Title – what is the paper broadly about?

- Your opportunity to attract the reader’s (mainly Editor and referees) attention. Remember: readers are the potential authors who will cite your article and the first impression is powerful.
- Reviewers will check whether the title is specific and whether it reflects the content of the manuscript. Editors hate titles that make no sense or fail to represent the subject matter adequately.
- So, keep it informative and concise (clear, descriptive, not too long);
- Avoid technical jargon and abbreviations if possible. You wish to have a readership as large as possible, right?
- Discuss with your co-authors.

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### Original vs Revised Title Examples

<table>
<thead>
<tr>
<th>Original</th>
<th>Revised</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary observations on the effect of salinity on benthic community distribution within a estuarine system, in the North Sea</td>
<td>Effect of salinity on benthic distribution within the Scheldt estuary (North Sea)</td>
<td>Long title distracts readers. Remove all redundancies such as “studies on”, “the nature of”, etc. Be precise.</td>
</tr>
<tr>
<td>Action of antibiotics on bacteria</td>
<td>Inhibition of growth of <em>Mycobacterium tuberculosis</em> by streptomycin</td>
<td>Titles should be specific. Think about “how will I search for this piece of information” when you design the title.</td>
</tr>
<tr>
<td>Fabrication of carbon/CdS coaxial nanofibers displaying optical and electrical properties via electrospinning carbon</td>
<td>Electrospinning of carbon/CdS coaxial nanofibers with optical and electrical properties</td>
<td>“English needs help. The title is nonsense. All materials have properties of all varieties. You could examine my hair for its electrical and optical properties! You MUST be specific. I haven't read the paper but I suspect there is something special about these properties, otherwise why would you be reporting them?” – the Editor-in-chief</td>
</tr>
</tbody>
</table>

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*azti* tecnalia  
**ELSEVIER**
2. Abstract – tell the prospective readers what you did and what were the important findings

- This is the advertisement of your article. Make it interesting, and easy to be understood without reading the whole article (Avoid using jargon, uncommon abbreviations, and references)
- You must be accurate! Use words which reflect the precise meaning
- Provides short description of perspective and purpose of the paper. Does not overemphasize perspective by providing a literature review
- Gives key results (recall that abstract is what is readily seen in electronic searching) but minimizes experimental details.
- Offers a short description of the interpretation/conclusion
- A clear abstract will strongly influence whether or not your work is further considered;
- Keep it as BRIEF as possible!!! (<250 words)
- All the draft should be numbered (both in pages and lines)
In recent years, several benthic biotic indices have been proposed to be used as ecological indicators in estuarine and coastal waters. One such indicator, the AMBI (AZTI Marine Biotic Index), was designed to establish the ecological quality of European coasts. The AMBI has been used also for the determination of the ecological quality status within the context of the European Water Framework Directive. In this contribution, 38 different applications including six new case studies (hypoxia processes, sand extraction, oil platform impacts, engineering works, dredging and fish aquaculture) are presented.

The results show the response of the benthic communities to different disturbance sources in a simple way. Those communities act as ecological indicators of the ‘health’ of the system, indicating clearly the gradient associated with the disturbance.

What has been done
What are the main findings

Relationship between the lability of sediment-bound metals (Cd, Cu, Zn) and their bioaccumulation in benthic invertebrates

4. Corresponding author
J.-C. Amiard a, A. Geoffard a, C. Amiard-Triquet a, C. Crouzet b

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b BROM, DR/PCI, F-40090 Orleans Cedex 2, France

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Abstract
The present study has investigated metal contamination at nine sites (10 sampling stations) from the English Channel to the Mediterranean Sea, including low level and highly contaminated sediments. Both total and free metal concentrations were determined in superficial sediments. The influence of different pHs was tested and metal lability at pHs encountered in the field was determined. The blue mussel Mytilus edulis, the Japanese oyster Crassostrea gigas, and the new worm Neris diversicolor were exposed to various metal concentrations. Cd showed the highest lability and Cu the lowest, whereas Zn lability was intermediate. Metal concentrations were determined in bivalves at six sites and in worms at three sites. Cd in living organisms and labile Cd in sediments increased in proportion over the gradient of contamination. The relationship between labile Cd and Cd in worms is better explained by the metal lability in sediments. The bioaccumulation of Cd, Cu, and Zn by worms increases with increasing metal lability, whereas bioaccumulation of metals at physiological pHs, seems to be a significant improvement of the existing methodologies of risk assessment.

1. Short description (>250 words)
2. Gives key results
3. Short description of the conclusion
4. Corresponding author
5. Keywords

Keywords: sediment-bound metals; lability; bioavailability; bioaccumulation; bivalves; worms
### 3.2.2. Prepare a good manuscript – Abstract

<table>
<thead>
<tr>
<th>Original</th>
<th>After Reviewing</th>
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<tbody>
<tr>
<td>Conversely, applying M-AMBI the explained variability reaches until 43.4%, for linear regression, and 53.8% for logarithmic regression, and the highest explained variability was found in high and low mesohaline and polyhaline areas (53-63%), whilst the lowest explained variability was in the oligohaline area (6%). The mismatch in the comparison of both methods in terms of degraded-undegraded equivalences is 16.4% of the cases in M-AMBI, and 12.7% in B-IBI, with a high spatial level of agreement.</td>
<td>Using the M-AMBI, the explained variability increased to 43% for linear regression, and 54% for logarithmic regression. By salinity regime, the highest explained variability was found in high mesohaline and low polyhaline areas (53-63%), while the lowest explained variability was in the oligohaline and tidal freshwater areas (6-17%). The total disagreement between methods, in terms of degraded-undegraded classifications, was 28%, with high spatial levels of agreement. Our study suggests that different methodologies in assessing benthic quality can provide similar results even though these methods have been developed within different geographical areas.</td>
</tr>
</tbody>
</table>

### 3.2.3. Prepare a good manuscript – Keywords

3. Keywords – mainly used for indexing

- It is the label of your manuscript. Avoid words with a broad meaning.

  E.g., *Soil Biology & Biochemistry* requires that the word “soil” should not be selected as a keyword.

- Only abbreviations firmly established in the field are eligible (e.g., TOC, CTD).

- Check the Guide for Authors! (Number, label, definition, thesaurus, range, and other special requests)
3.2.4. Prepare a good manuscript – *Introduction*

4. Introduction – to convince readers that you clearly know why your work is useful

- What is the problem? Are there any existing solutions? Which is the best? What is its main limitation? And what do you hope to achieve?
- Editors like to see that you have provided a perspective consistent with nature of the journal. You need to introduce the main scientific publications on which your work is based (Cite a couple of original and important works, including recent review articles)
- However, they hate improper citations of too many references irrelevant to the work, or inappropriate judgments on your own achievements. They will think that you have no sense of purpose at all!

Watch for the following:

- Never use more words than necessary (be concise and to-the-point). Never make this section into a history lesson. Long introductions put readers off. Introductions of Letters are even shorter.
- We all know that you are keen to present your new data. But do not forget that you need to give the whole picture at first.
- The introduction must be organized from the global to the particular point of view
- States purpose of paper and research strategy adopted to answer the question, but do not mix introduction with results, discussion, and conclusion. Always keep them separate to ensure that the manuscript flows logically from one section to the next.
- Hypothesis and objectives must be clearly remarked
- Expressions such as “novel”, “first time”, “first ever”, “paradigm-changing” are not preferred. Use them sparingly.
3.2.4. Prepare a good manuscript – Introduction

1. Be concise

2. Cite original works

3. Minimize references

4. Go from the global to the particular

3.2.5. Prepare a good manuscript – Methods

5. Methods – how was the problem studied

- For new methods include detailed information, so that a knowledgeable reader can reproduce the experiment.
- However, use references and Supporting Materials to indicate the previously published procedures. Do not repeat the details of established methods. Broad summaries or key references are sufficient.
- Reviewers will criticize incomplete or incorrect descriptions (and may recommend rejection).
5. Methods – how was the problem studied

- All chemicals must be identified. Do not use proprietary, unidentifiable compounds. For nomenclature use the conventions of the International Union of Pure and Applied Chemistry and the official recommendations of the IUPAC–IUB Combined Commission on Biochemical Nomenclature
- Use accepted taxonomical nomenclature (ERMS, ITIS, etc.), and write it always in italics
- Give all units following the International System of Units (SI)
- Present proper control experiments and statistics used
- List the methods in the same order as they appear in the Results section
- Avoid adding comments, results, and discussion (common error)
- Write in the past tense, passive voice

2. Materials and methods

2.1. Sediment sampling

The sampling sites are shown in Fig. 1. The intertidal sediments were collected from Boulogne harbour (BL), the Seine estuary (SE), the bay of Bourgneuf (BB), the Gironde estuary (GR), the bay of La Rochelle (LR), the bay of Aiguillon (BA), Fier d’Arès (Ré island) (FA), the Thau lagoon (T4 away from shellfish-farming installations and T5 under these

2.2. Desorption tests

All desorption tests were carried out in triplicate. For sediments originating from the Seine estuary, Boulogne harbour and Rostanguet Creek, each sample (500 mg) was dispersed into one of a series of buffers at different pHs (20 ml; prepared with 1% acetic acid and adjusted to appropriate pHs by adding suprapure ammonia). For all other sediments, pH 4 only was tested. The samples were shaken gently for 2 h at ambient
Relationship between the lability of sediment-bound metals (Cd, Cu, Zn) and their bioaccumulation in benthic invertebrates

J.-C. Amiard a,b, A. Geffard a,1, C. Amiard-Triquet a, C. Crouzet b

2.3. Metal partitioning among geochemical fractions

All the monthly samples from the lower part of the Gironde estuary (GR) preserved by freezing were then thawed and extracted concomitantly at the end of the experiment after removing the oxidized surface layer. Sequential chemical extractions were used to estimate the distribution of metals in various operationally defined metal–solid associations. A combination of chemical extractions was used in order to distinguish:

1. easily exchangeable + carbonate-associated metal (NH₄ COOCH₃, 1 M) (Tessier et al., 1979)
2. metal associated with Fe or Mn oxyhydroxides (NH₄OH–HCl, 0.04 M in 25% CH₃COOH) (Tessier et al., 1979)
3. metal bound to organic matter (HNO₃, 0.02 M and COOCH₃, 3.2 M) (Tessier et al., 1979)

2.4. Metals in sediments

Contrary to the more conventional method based on the <63 μm fraction, bulk sediments were analysed for metals. This procedure was chosen because the <63 μm fraction was strongly predominant in all samples (Table 1) and because values obtained using the total determination. The percentages of recovery reached 105% for cadmium (SD = 11), 111% for copper (SD = 18) and 98% for zinc (SD = 11).

2.5. Metals in organisms

Organisms were collected at the same locations and at the same dates as sediments. The mussels (Mytilus edulis) and oysters (Crassostrea gigas) were collected from the bay of Bourgneuf (BB), the Gironde estuary (GR), La Rochelle harbour (LR), the bay of Aiguillon (BA), Fier d’Ars (Ré island) (FA) and the Thau lagoon (TH). The ragworms Neris diversicolor were collected from Boulogne harbour (BL), the Seine estuary (SE) and Restormel Creek (RC) (Fig. 1). Animals were transported from the field to the laboratory in isothermic containers in wet seaweed or sediment from the site of origin without seawater. They were then placed for 24 h in clean aerated water from the site of origin to allow them to eliminate their gut contents, since it has been shown that the presence of sediment is responsible for an overvaluation of weight and metal content (Pare et al., 1989). Animals were then frozen at −20 °C until analysis.

At each site and at each date, eight bivalves were analysed individually whereas worms were pooled (about 2 g total wet weight). Soft tissues of bivalves and the whole bodies of worms were heated with suprapure concentrated nitric acid (Carlo Erba). After digestion, metal levels in these different acid
3.2.6. Prepare a good manuscript – **Results**

6. Results – What have you found?

- Only representative results should be presented. The results should be essential for discussion. Use Supporting Materials freely for data of secondary importance.
- Do not attempt to “hide” data in the hope of saving it for a later paper. You may lose evidence to reinforce your conclusion.
- Use sub-headings to keep results of the same type together – easier to review and read. Number these sub-sections for the convenience of internal cross-referencing. Decide on a logical order of the data that tells a clear and easy to understand story.
- Do not include references in this section. Do not discuss results.

“A figure is worth a thousand words…”

Illustrations, including figures and tables, are the most efficient way to present the results. Your data are the “driving force of the paper”. Therefore, your illustrations are critical!
3.2.6. Prepare a good manuscript – *Results*

- Generally, tables give the actual experimental results (Note: never include vertical lines in a table).
- Graphs are often used for comparison of experimental results with those of previous works, or with calculated/theoretical values.
- No illustrations should duplicate the information described elsewhere in the manuscript.

<table>
<thead>
<tr>
<th>ECOLOGICAL GROUP</th>
<th>Station</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75U</td>
<td>91.3</td>
<td>5.3</td>
<td>3.2</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
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<td>6.1</td>
<td>3.6</td>
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<tr>
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<td>4.5</td>
<td>0.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Illustrations should be used for ESSENTIAL data only.

Á. Borràs et al. / Estuarine, Coastal and Shelf Science 66 (2006) 84–96

3.2.6. Prepare a good manuscript – *Results*

- Illustrations should be used for ESSENTIAL data only.

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Fig. 1. Location of each of estuarine (*, black colour) and coastal (**, grey colour) water bodies, within the Basque Country. Note: dotted line shows the Basque coastal baseline. Inner and external parts of the Nervión and Oka estuaries are separated by a straight line.
3.2.6. Prepare a good manuscript – **Results**

**Appearances count!**

- Un-crowded plots: 3 or 4 data sets per figure; well-selected scales; appropriate axis label size; symbols clear to see and data sets easy to discriminate.
- Each photograph must have a scale marker of the professional quality on one corner.
- Use color ONLY when necessary. If different line styles can clarify the meaning, never use colors or other thrilling effects.
- Do not include long boring tables! (e.g., chemical compositions of emulsion systems)

An example of an unreadable figure with the unnecessary usage of color

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**Fig. 1** TEM image of purified MWNTs  
**Fig. 2** FTIR spectra of purified MWNTs
3.2.6. Prepare a good manuscript – **Results**

An example of an unreadable figure with the unnecessary usage of color

![Unreadable figure](image)

**Fig. 4 Result of vibration acceleration at end of bonding tool**
3.2.6. Prepare a good manuscript – **Results**

A figure with small fonts
3.2.6. Prepare a good manuscript – Results

<table>
<thead>
<tr>
<th>Depth</th>
<th>Gravel (%)</th>
<th>Sand (%)</th>
<th>Mud (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 m</td>
<td>3.42%</td>
<td>81.41%</td>
<td>15.17%</td>
</tr>
<tr>
<td>50 m</td>
<td>2.5%</td>
<td>58.42%</td>
<td>39.08%</td>
</tr>
<tr>
<td>100 m</td>
<td>0.0%</td>
<td>32.5%</td>
<td>67.5%</td>
</tr>
</tbody>
</table>

Revision of the table

<table>
<thead>
<tr>
<th>Water depth (m)</th>
<th>Gravel (%)</th>
<th>Sand (%)</th>
<th>Mud (%)</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>3.4</td>
<td>81.4</td>
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</tr>
<tr>
<td>50</td>
<td>2.5</td>
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<td>39.1</td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>32.5</td>
<td>67.5</td>
</tr>
</tbody>
</table>

3.2.7. Prepare a good manuscript – Discussion

7. Discussion – What the results mean

- Probably the easiest section to write, but the hardest section to get right (Martin Welch)
- It is the most important section of your article. Here you get the chance to sell your data! A huge numbers of manuscripts are rejected because the Discussion is weak.
- Make the Discussion corresponding to the Results. But do not reiterate the results.
- You need to compare the published results with yours (using some of the references included in the Introduction). DO NOT ignore work in disagreement with yours – confront it and convince the reader that you are correct or better.
3.2.7. Prepare a good manuscript – **Discussion**

**Watch out for the following:**

- Statements that go beyond what the results can support
- Unspecific expressions such as “higher temperature”, “at a lower rate”, “highly significant”. Quantitative descriptions are always preferred (35ºC, 0.5%, p<0.001).
- Sudden introduction of new terms or ideas
- Speculations on possible interpretations are allowed. But these should be rooted in fact, rather than imagination.

**Watch out for the following:**

- How do these results relate to the original question or objectives outlined in the Introduction section?
- Do the data support your hypothesis?
- Are your results consistent with what other investigators have reported?
- Discuss weaknesses and discrepancies. If your results were unexpected, try to explain why
- Is there another way to interpret your results?
- What further research would be necessary to answer the questions raised by your results?
- Explain what is new without exaggerating
3.2.7. Prepare a good manuscript – *Discussion*

**Ask your colleagues to read Results and Discussion before you go further!**

- Check the organization, number and quality of illustrations, the logic and the justifications.
- Revision of Results and Discussion is not just paper work. You may do further experiments, derivations, or simulations. Sometimes you cannot clarify your idea in words because some critical items have not been studied substantially.

3.2.8. Prepare a good manuscript – *Conclusion*

**8. Conclusion – How the work advances the field from the present state of knowledge**

- Without a clear conclusion section reviewers and readers will find it difficult to judge the work, and whether or not it merits publication in the journal.
- DON’T REPEAT THE ABSTRACT, or just list experimental results. Trivial statements of your results are unacceptable in this section.
- You should provide a clear scientific justification for your work in this section, and indicate uses and extensions if appropriate. Moreover, you can suggest future experiments and point out those that are underway.
3.2.8. Prepare a good manuscript – Conclusion

- Present global and specific conclusions, in relation to the objectives
- Suggest future experiments and indicate those that are underway
- Do not summarize paper (abstract is for that purpose)
- Avoid judgments about impact

3.2.9. A good manuscript – Acknowledgements

9. Acknowledgements

- You can thank people who have contributed towards the MS, but not to the extent where they might justify authorship, e.g., technical help, English revision, ...
- You should thank your funding agency.
- Don’t forget to include the grant number or reference.
10. References

Typically, there are more mistakes in the references than any other part of the manuscript. It is one of the most annoying problems, and causes great headaches among editors...

- Cite the main scientific publications on which your work is based
- Do not over-inflate the manuscript with too many references – it doesn’t make a better manuscript!
  - Avoid excessive self-citations
  - Avoid excessive citations of publications from the same region.
  - Use any software, such as End-Note, to format and include your references

Make the reference list and the in-text citation conform strictly to the style given in the Guide for Authors!!!

Presentation in the correct format is the responsibility of the author, not the Editor!

Checking the format is normally a large job for the editors. Make their work easier and they will appreciate the effort.

Check the following:
- spelling of author names, year of publications
- Usages of “et al.”, and punctuations.
- If all references are included
3.2.10. Prepare a good manuscript – *References*

**Comments from a frustrated editor: (Learn from them...)**

- Your list of references is a total mess!! Take a very careful look at articles in our journal and print your references accordingly. Thus, do not use the word 'and' between names of authors. Do not use a comma after the name of the journal. Do never use et al. in a reference. You MUST mention all authors!!! Do not mention the last page of an article; the first page is sufficient in our journal. And so on, and so on!!

- You are using the abbreviation *et al.* in the wrong way. Et al. stands for et alii and means others (plural!!). This means that referring to ref. 13, with two authors, cannot be done with et al., but must be done by Hu and Ruckenstein. Similarly, referring to ref. 17 should be done as Zhdanov and Kasemov. Ref. 20 should be referred to as Latkin et al., always mention the FIRST author and then add et al.

- Please check the in text citation of references. For three or more authors you must use the surname name of the first author and add 'et al.' and for two authors you cannot use et al., but must mention both family names. For one author, you must mention the family name.

3.2.11. Prepare a good manuscript – *Cover Letter*

**11. Cover letter – your chance to speak to the Editor directly**

- Do not summarize your manuscript, or repeat the abstract, but mention what makes it special to the journal. This is also the place to remark special requirements, for instance if you do not wish your manuscript to be reviewed by certain reviewers.

- Many editors won’t reject a manuscript only because the cover letter is bad. However, a good cover letter may accelerate the editorial process of your paper.
3.3. Technical and additional aspects

Length of the manuscript:
- 25-35 pages is the ideal length for a submitted manuscript, including ESSENTIAL data only.
  - Title: Short and informative
  - Abstract: 1 paragraph (<250 words)
  - Introduction: 1.5-2 ms pages
  - Methods: 2-3 ms pages
  - Results: 6-8 ms pages
  - Discussion: 4-6 ms pages
  - Conclusions: 1 ms page
  - Figures: 6-8 (one per page)
  - Tables: 1-3 (one per page)
  - References: 20-50 papers (2-4 pages)

- Letters or short communications have a stricter limitation of the length. For example, 3,000 words with no more than 5 illustrations.

Make use of supporting material
- Supporting material will be available online to readers if the paper is eventually published. The supporting materials section should be referred to in the main manuscript to direct reader, as appropriate.
  - It helps to keep the main manuscript clear and concise.
  - You can put as much material as you wish in this section. However, all the information should be related and supportive to your article.
3.3. Technical and additional aspects

Text layout:

- Keep consistent throughout the manuscript: use the same font (usually Times New Roman), font size, etc.
- Double line spacing and 12 font is preferred: make it convenient for reviewers to make annotations.
- Margins of 3 cm are also useful for reviewers
- It is useful to number each row in the text (this makes easier the review process)
- Number all pages!!!!

Abbreviations

- Abbreviations should be defined on the first use in BOTH abstract and the main text. Some journals even forbid the usage of abbreviations in the abstract. Refer to the Guide for Authors to see the requirements for abbreviations.
- Look at the following 2 pieces of information from two journals in materials science.

1. Abbreviations for instruments (e.g., SEM and TEM) should not be used for methodology (e.g., scanning electron microscopy and transmission electron microscopy). -- Materials Characterization
2. There is no need to define the commonly used abbreviations such as SEM, TEM, etc. -- Carbon
Suggest potential reviewers

- Your suggestions will help the Editor to pass your manuscript to the review stage more efficiently.
- You can easily find potential reviewers and their contact details by mentioning authors from articles in your specific subject area (e.g., your references). The reviewers should represent at least two regions of the world. And they should not be your supervisor or close friends.
- Generally you are requested to provide 3-6 potential reviewers.

Authorship

- Anyone who writes the paper / contributed substantially to the work / can defend the entire paper / is responsible for at least part of the paper.
- Learn from this comment from an Editor:
  I really believe that your manuscript carries too many authors. You should seriously consider reducing the number. Persons who just helped with minor items can be thanked in an Acknowledgement. People who 'do some work' should not be called co-authors, testing of a catalyst is not something scientific as such, even four months does not make it more scientific, and making 'a contribution' is not enough. If you want to publish a scientific article, you should use scientific arguments. Again, in all other cases mention the help of these people in an Acknowledgment.
3.3. Technical and additional aspects

Order of authorship

- The first author is primarily responsible for collecting and analyzing data, and writing
- The last one, an established investigator, assumes the overall responsibility for the study
- The middle authors are listed according to their order of importance to the study

Author names

- Keep consistent in the style of writing your full name and the abbreviation for all your publications – for the efficiency of indexing and searching.

E.g., 欧阳钟灿

Standard:

Ouyang Zhongcan (Ouyang Z.), GB/T 16159-1996, 汉语拼音正词法基本规则

or OUYANG Zhong-can (Ouyang Z.C.), 中国学术期刊(光盘版)检索与评价数据规范

Following are also found in literature: Ou-yang Zhong-can, Ouyang Zhong-can, Ou-Yang Zhongcan, Ouyang, Z.C, Zhongcan Ouyang, Zhong-can Ou-Yang, ……
3.3. Technical and additional aspects

First draft:
- Think about the topic you want to present
- Make figures and tables
- Write as quickly as possible
- As if thinking out loud
- Get everything down
- Ignore spelling, grammar, style
- Skip troublesome words
- Correct and rewrite only when the whole text is on paper
- Do not split the manuscript among the co-authors

3.4. Language

- Attention! If the language prevents reviewers from understanding the scientific content of your work, the possibility of acceptance will be lowered greatly.
- At the minimum, you should provide the best English you can manage along with your high quality science. Please have a skilled writer or someone fluent in English help to check your manuscript before submission.
3.4. Language

- Save your readers the trouble of guessing what you mean!

Complaint from an Editor: “[This] paper fell well below my threshold. I refuse to spend time trying to understand what the author is trying to say. Besides, I really want to send a message that they can’t submit garbage to us and expect us to fix it. My rule of thumb is that if there are more than 6 grammatical errors in the abstract, then I don’t waste my time carefully reading the rest.”

3.4. Language

Clarity, objectivity, accuracy, brevity

- Make your writing scientific.
- Practice writing English at any moment you can. Maybe keep records in English during the research?
- Pay attention to the common problems.
  - Consistency of the sentences
  - Logic of expression
  - Accuracy of the grammar
  - Spelling mistakes and typos
Simplify:
- a majority of = most
- at the present time = now
- give rise to = cause
- in some cases = sometimes
- is defined as = is
- it is believed that = I think
- on the basis of = by
- pooled together = pooled
- subsequent to = after
- with the result that = so that
- a considerable amount = much
- On account of = because
- A number of = several
- Referred to as = called
- In a number of cases = some
- Has the capacity to = can
- It is clear that = clearly
- It is apparent that = apparently
- Employ = use

Simplify (an example):
- Numerous studies in recent years, such as those by Miller (1995) and Smith (1998), have shown that low salinities enhance oyster recruitment.
- Low salinities enhance oyster recruitment (Miller, 1995; Smith 1998).
Direct and short sentences are preferred!

- Long sentences will not make the writing more professional. They only confuse readers.
  - Nowadays, the average length of sentences in scientific writing is about 12-17 words.
  - It is said that we read one sentence in one breath. Long sentences choke readers.
  - The Chinese language can express more complicated meaning with fewer words than English. You have to change your style when writing in English. One idea or piece of information per sentence is sufficient. Avoid multiple statements in one sentence.

- See the 80-word long sentence below. Even the editor found it incomprehensible.

The luminous efficiency of MOLED device drawn down faster than PLED, which may be caused by different fabrication process, i.e., the distribution of (tpbi)2Ir(acac) dye in host is more uniform in liquid polymer from spin coating method than thermal deposition of solid organic small molecules, so that the quenching phenomena in small molecular device are more critical than in polymer device, even the doping concentration of phosphor dye in MOLED (2 wt%) is lower than that in PLED (4 wt%).
3.4. Language – long sentences

- Another awful example (with 78 words):
- Conversely, applying M-AMBI the explained variability reaches until 43.4%, for linear regression, and 53.8% for logarithmic regression, and the highest explained variability was found in high and low mesohaline and polyhaline areas (53-63%), whilst the lowest explained variability was in the oligohaline area (6%), being the mismatch in the comparison of both methods in terms of degraded-undegraded equivalences of 16.4% of the cases in M-AMBI, and 12.7% in B-IBI, with a high spatial level of agreement.

3.4. Language – long sentences

Problems with long sentences:

- Inappropriate use of passive voice or dummy clauses (e.g., “It has been found that there had been many …”) makes sentences complex.
- Bad structure of sentences with wrongly used conjunctive words or dangling modifiers. (e.g., “because…, so…”, “Although…, but…”, “considering…, it is…”)
- Excessive use of subordinate clauses in one sentence. (e.g., “It has already been found that when…there would be … which…while…”)
- Mixing different levels of parallelisms connected by “and” in one sentence. (e.g., “…investigates the grain size of sediments in coastal areas and discusses the grain size and the coastal sedimentation based on grain size”)
3.4. Language – **Redundancies**

- Overusing conjunctive words or phrases such as “However”, “in addition”, “Moreover”. Keep the usage of these words to a minimum!

- Phrases without meaning. Learn from the following comments from an Editor:
  - Never say "and references therein" - as in [1] and [25]. Any intelligent reader knows to look at the references in a paper in order to get even more information.
  - Delete "In present paper". It is impossible for it to be in a different paper! You start the conclusions "In this paper, we have prepared....." This is nonsense. The samples were prepared in the laboratory!

- Repeating words such as “Schematic diagram”, “research work”, etc

3.4. Language – **Wrong use of words and phrases**

- Passive voice used for intransitive verbs
- The 3rd singular form of verbs used for plural subjects
- Subject of the main clause is not the doer of the dangling modifier
  e.g., “To improve the results, the experiment was done again.” – the experiment cannot improve the results itself. It should be “We did the experiment again to improve the results”.
- Never use spoken abbreviations: “it’s”, “weren’t”, “hasn’t”
- Never begin a sentence with a numeral: “5 mg of sediment were analyzed...”, use: “Sediment (5 mg) was analyzed...”
- One-digit numbers should be spelled out; numbers of two or more digits should be expressed as numerals (you can write “four samples” or “25 samples”).
- In a sentence containing a series of numbers, at least one of which is more than one digit, all of the numbers should be expressed as numerals (Of the 21 samples, 1 was muddy, 6 gravel, and 14 sandy).
3.4. Language – Grammar, spelling, etc.

- You are encouraged to have an English expert proof reading your manuscript. At least you should make use of the spelling and grammar checking tool of your word processor.

- Be sparing when using unfamiliar words or phrase. Do not just rely on electronic dictionaries or translating software, which may bring out ridiculous results (often Chinglish...). You should understand the meaning of every single word you type in the manuscript.

- Never let Editors find such a word in your manuscript! (Distinguish zero from the letter “O”)

Finally, you should use English throughout the manuscript...

“Obviously”
4.- Revision

1. Revision after review

- Accompany the resubmission a letter of responds to the reviewers’ comments. Address the comments for each reviewer and the Editor point by point.
- Cut and paste each comment, answer it directly below. Do not miss any point
- Identify where on the manuscript changes have been made (page and line number: this is important!)
- You are encouraged to provide a convincing, solid and polite answer if you think a reviewer is wrong!
- Be tactful: thank the reviewers
- Never call the editor
- Get help from other authors

4.- Revision

- Remember: editors and reviewers hate to see the same mistake twice!
- If you want to submit the rejected manuscript to a different journal, begin as if you are going to write a new article. Please re-evaluate your work according to the comments from the reviewers. And you MUST read the Guide for Authors of the new journal, again and again...
  
  Do not resubmit the rejected manuscript directly to another journal without any significant revision!!! It won’t save any of your time and energy...
4.- Revision

2. Revision before submission

- One of the MOST important things before submission. You should make every attempt to make the manuscript as good as possible before submission.
- After you complete the first draft, take several days of rest. Refresh your brain with different things. And come back with critical eyes.
- Ask your colleague and supervisors review your manuscript first.
- Generally, taking enough time to revise your manuscript before submission will bring you an early decision in return.

Which procedure do you prefer?

1. Send out a sloppily prepared manuscript → get rejected after 4-6 months → send out again only a few days later → get rejected again → … → sink into despair
2. Take 3-4 months to prepare the manuscript → get the first decision after 4 months → revise carefully within time limitation → … → accepted

You are SUBMITTING your manuscript to a scientific journal, not THROWING it out. Please cherish your own achievements!
5.- Conclusion: what leads to Acceptance?

- Attention to detail
- Check and double check your work
- Consider the reviews
- English must be as good as possible
- Presentation is important
- Take your time with revision
- Acknowledge those who have helped you
- New original and previously unpublished
- Critically evaluate your own manuscript
- Ethical rules must be obeyed

And finally...

“There is no way to get experience except through experience”

“Scientists are rated by what they finish, not by what they attempt”

Thomas H. Adair
(University of Mississippi)
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- http://china.elsevier.com

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