

How to disseminate your research results: Essentials of effective publishing

SMC CLS FuJen Catholic University, Taiwan, 14 April 2014

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Agenda

- Writing a quality manuscript
 - Preparation
 - Constructing the paper
 - Language
 - Technical details
- Revisions and response to reviewers
- Ethical issues
- Conclusions

Preparation

Originality

Key objectives

Nature of study (fundamental, experimental, case study, etc.)

Possible submission vis-à-vis scope of journal and potential impact of work

Article structure

- Title
- Authors
- Abstract
- Keywords



Need to be *accurate* and *informative* for effective indexing and searching

- Wain text
 - Introduction
 - Methods
 - Results
 - <u>D</u>iscussion (Conclusion)
- Acknowledgements
- References
- Supplementary material (optional)



Each has a distinct function

Title

A *good* title should contain the **fewest** possible words that **adequately** describe the contents of a paper

DO

Convey main findings of research

Be specific

Be concise

Be complete

Attract readers

Title

A *good* title should contain the **fewest** possible words that **adequately** describe the contents of a paper

DON'T

Use unnecessary jargon

Use uncommon abbreviations

Use ambiguous terms

Use unnecessary detail

Focus on part of the content only

Title

Slower learning in multilayer neural networks is correlated with numerous inputs of diversified ranges, high level of noise, and nonstationary nature of data





Relationships between data preprocessing and learning in multilayer neural networks



Authors and affiliations

Be consistent with spelling, full versus short names, full versus short addresses

Surnames:

Middle Initial: Use consistently or not at all

First Names: e.g., Mike/ Michael

Affiliation:

Abstract

The quality of an abstract strongly impacts the editor's decision

A good abstract:

- •Is precise and honest
- Stand alone entity
- Uses no technical jargon
- Is brief and specific
- •Cites no references

Keywords

Keywords are important for indexing: they enable your manuscript to be more easily identified and cited

Check the Guide for Authors for journal requirements

- Keywords should be specific
- Keep the number of keywords small
- Avoid uncommon abbreviations and general terms

Introduction

Provide the necessary background information to put your work into context

It should be clear from the introduction:

- Why the current work was performed
 - -aims
 - -significance
- What has been done before
- What was done (in brief terms)
- What was achieved (in brief terms)

Introduction

DO

- Consult the Guide for Authors for word limit
- •"Set the scene"
- Outline "the problem" and hypotheses
- Ensure that the literature cited is balanced, up to date and relevant
- Define any non-standard abbreviations and jargon

Introduction

DON'T

- Write an extensive review of the field
- •Cite disproportionately your own work, work of colleagues or work that supports your findings while ignoring contradictory studies or work by competitors
- Describe methods, results or conclusions other than to outline what was done and achieved in the final paragraph
- •Overuse terms like "novel", "highly original" and "for the first time"

Mathematics

Avoid "dry" formulas; explain them

Explain all symbols before using them

Avoid misuse of symbols

Use standard notation (say, vectors)

Results

The main findings of the research

DO

- Use figures and tables to summarize data
- •Show the results of statistical analysis
- •Compare "like with like"

Results

The main findings of the research

DON'T

- Duplicate data among tables, figures and text
- Use graphics to illustrate data that can easily be summarized with text

Figures and tables are the most effective way to present results

BUT:

- Captions should be able to stand alone, such that the figures and tables are understandable without the need to read the entire manuscript
- The data represented should be easy to interpret
- •Colours should only be used when necessary; not to be overused

Table 2. Colour codes and notations of the soil layers

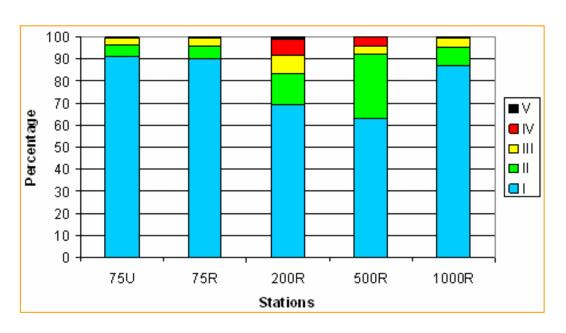
Habitat	Depth (cm)	Colour codes	Colour notation		
Woodland	0-5	10YR4/2	Dark grayish brown		
	5-10	2.5Y5/3	Light olive brown		
	10-15	2.5Y6/3	Light yellowish brown		
	15-20	2.5Y6/4	Light yellowish brown		
	20-30	2.5Y6.5/3	Light yellowish brown -Light olive brown		
	30-40	2.5Y5/3	Light olive brown		
	40-50	2.5Y5/3	Light olive brown		
	50-60	2.5Y6/3	Light yellowish brown		
	60-70	2.5Y5/4	Light olive brown		
	70-80	2.5Y6.5/3	Light yellowish brown -Light olive brown		
	80-90	2.5Y6.5/3	Light yellowish brown -Light olive brown		
	90-100	2.5Y5/3	Light olive brown		
Wetland	0-5	2.5Y4/2	Dark grayish brown		
	5-10	2.5Y5.5/2	Grayish brown -Dark grayish brown		
	10-15	2.5Y5/2	Grayish brown		
	15-20	2.5Y4/1.5	Dark gray -Dark grayish brown		
	20-30	2.5Y4/2.5	Dark grayish brown -Olive brown		
	30-40	2.5Y4/2.5	Dark grayish brown -Olive brown		
	40-50	2.5Y4/2	Dark grayish brown		
	50-60	2.5Y4/2	Dark grayish brown		
	60-70	2.5Y4/2	Dark grayish brown		
	70-80	2.5Y4/2	Dark grayish brown		
	80-90	2.5Y4/2	Dark grayish brown		
	90-100	2.5Y4/2	Dark grayish brown		
Grassland	0-5	2.5Y4/2	Dark grayish brown		
	5-10	5Y5/2	Olive gray		
	10-15	5Y6/2	Light olive gray		
	15-20	5Y6/2	Light olive gray		
	20-30	5Y6/2	Light olive gray		
	30-40	5Y6.5/2	Light olive gray -Olive gray		
	40-50	5Y6/2	Pale olive		
	50-60	5Y6/2	Pale olive		
	60-70	5Y6/2	Light olive gray -Pale olive		
	70-80	5Y6/2	Light olive gray -Pale olive		
	80-90	5Y6/2	Pale olive		
	90-100	5Y6/2	Pale olive		

Illustrations should only be used to present essential data

The information in the table can be presented in one sentence:

'The surface soils were dark grayish brown, grading to light olive brown (woodland), dark grayish brown (wetland), and pale olive (grassland) at 100 cm.'

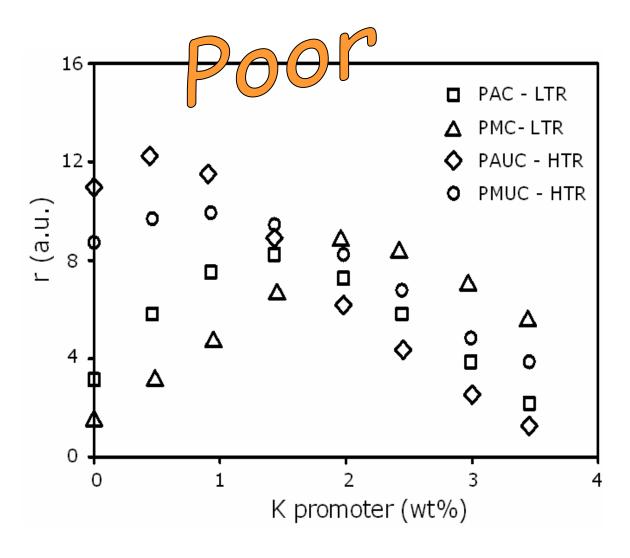
Summarize results in the text where possible



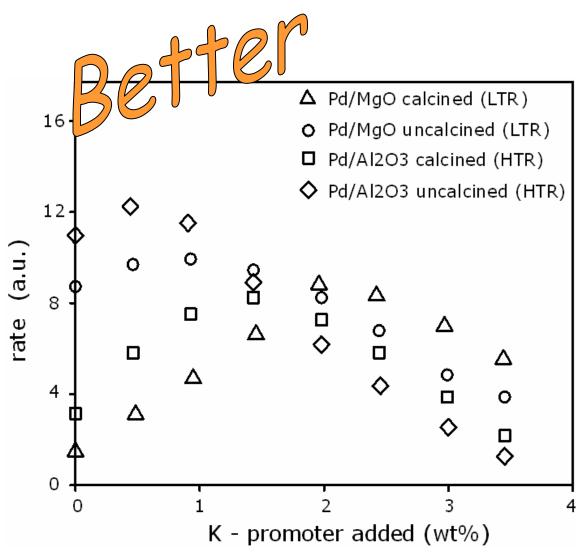
The figure and table show the same information, but the table is more direct and clear

ECOLOGICAL GROUP							
Station	I	II	III	IV	V		
75U	91.3	5.3	3.2	0.2	0.0		
75R	89.8	6.1	3.6	0.5	0.0		
200R	69.3	14.2	8.6	6.8	1.1		
500R	63.0	29.5	3.4	4.2	0.0		
1000R	86.7	8.5	4.5	0.2	0.0		

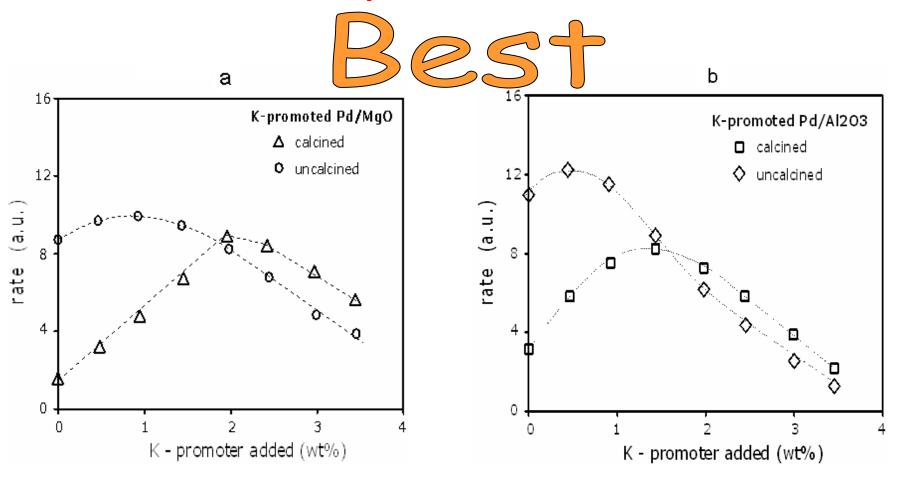




- Legend is poorly defined
- •Graph contains too much data
- No trend lines



 Legend is well defined but there is still too much data and no trendlines



- Legend is clear
- Data is better organized
- Trend lines are present

Discussion

Describe

- •How the results relate to the study's aims and hypotheses
- •How the findings relate to those of other studies
- •All possible interpretations of your findings
- Limitations of the study

Discussion

Avoid

•Making "grand statements" that are not supported by the data

Example: "This novel optimization method will enormously reduce the learning time"

Introducing new results or terms

Conclusion

Put your study into **CONTEXT**

Describe how it represents an advance in the field Suggest future works

BUT

Avoid repetition with other sections

Avoid being overly speculative

Do not over-emphasize the impact of your study

Acknowledgements

Acknowledge anyone who has helped you with the study, including:

- •Researchers who supplied materials or software,
- •
- Anyone who helped with the writing or English, or offered critical comments about the content
- Anyone who provided technical help

State why people have been acknowledged and ask their permission

Acknowledge sources of funding, including any grant or reference numbers

References

Check the Guide for Authors for the correct format

Check

- Spelling of author names
- Punctuation
- •Number of authors to include before using "et al."
- •Reference style

References

Check the Guide for Authors for the correct format

Avoid

- Personal communications, unpublished observations and submitted manuscripts not yet accepted
- Outdated papers
- Citing articles published only in the local language
- Excessive self-citation and journal self-citation

References

Check the style and format as required – it is not the editor's job to do so for you

Harvard System (alphabetical by author/date)

APA (American Psychological Association) System (alphabetical)

Vancouver System (numbered in order or citation)

Note: there are a number of other systems in use and variations for all systems

Supplementary material

Information related to and supportive of the main text, but of secondary importance

- Data
- •Code
- Video data

Will be made available online when the manuscript is published

The three "C"s (C3) principle

Good writing possesses the following three "C"s:

- •Clarity
- Conciseness
- <u>C</u>orrectness (accuracy)

The key is to be as brief and specific as possible without omitting essential details

Common traps

Good writing avoids the following traps:

- Repetition
- Redundancy
- Ambiguity
- Exaggeration

These are common annoyances for editors

Repetition and redundancy

Vary the sentences used when writing the abstract or describing findings at the end of the introduction

Don't copy from other sections verbatim!

Avoid words with the same meaning

In addition, there were also modifications to the learning rule dealing with...

Ambiguity

Compare apples to apples...

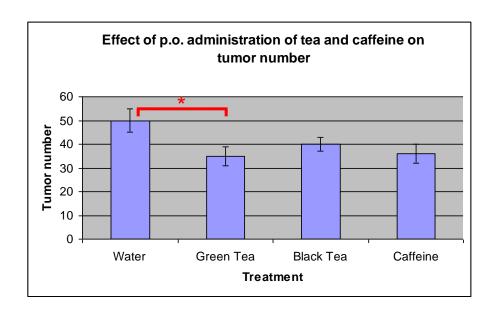
The <u>results</u> produced by the fuzzy model are compared with several <u>neural networks</u>



The <u>results</u> produced by the fuzzy model are compared with <u>those</u> produced by several neural networks



Exaggeration



"There was a massive decrease in the number of tumors following p.o. administration of green tea"

Beware of exaggeration but do indicate significance

Other common traps

Incorrect use of etc. / and so on

"The two groups of data were compared using a variety of statistical methods including a t-test, chi squared analysis, etc."

It is important here to define the tests used as they are particular to the paper, not part of a natural series and not obvious to the reader

Language Editing Services

Your manuscript is precious, invest in it

 Specialist scientific and engineering editing services are commercially available to polish the language in your manuscript prior to journal submission

Layout

- Keep line spacing, font and font size consistent throughout – double-spaced 12-point Times New Roman is preferred
- Use consistent heading styles throughout and no more than three levels of heading
- Number the pages
- Number lines if journal requires check the Guide for Authors
- Order and title sections as instructed in the Guide for Authors – Figure and Table sections are normally together following References

Length

Consult the Guide for Authors for word and graphic limits

Check available categories: full paper, brief paper, communication

Letters or short communications have stricter limits on the length. For example, 3,000 words with no more than five illustrations.

Abbreviations

- Define non-standard abbreviations on first use in both the abstract and the main text
- Check the Guide for Authors for a list of standard abbreviations that don't need defining
- Don't abbreviate terms used only once or twice in the entire manuscript – spell these out in full
- Acronyms: capitals not required in the definition unless a proper noun or start of a sentence

Cover letter

- This is your chance to speak to the editor directly
- Keep it brief, but convey the particular importance of your manuscript to the journal
- Suggest potential reviewers

This is your opportunity to convince the journal editor that they should publish your study, so it is worth investing time at this stage

Revisions and Response to Reviewers

Final checks

Revision before submission can prevent early rejection What can I do to ensure my paper is in the best possible state prior to submission?

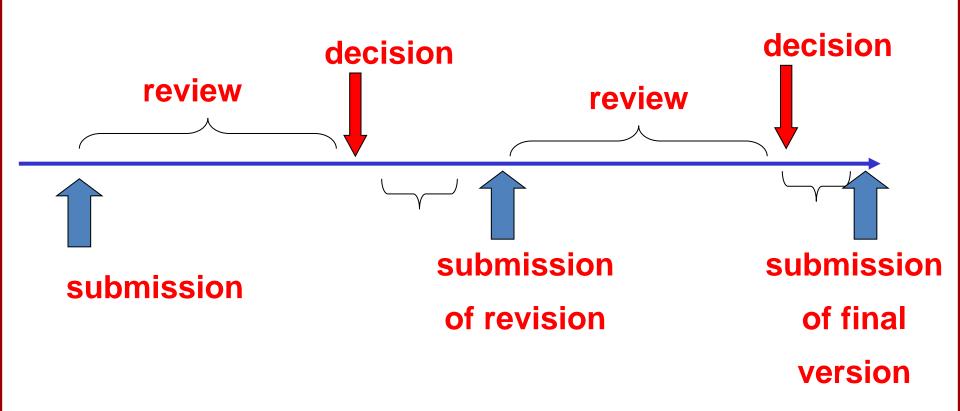
- Ask colleagues to take a look and be critical
- •Check that everything meets the requirements set out in the Guide for Authors – again!
- •Check that the scope of the paper is appropriate for the selected journal change journal rather than submit inappropriately

Final checks

Revision before submission can prevent early rejection What can I do to ensure my paper is in the best possible state prior to submission?

- •If necessary, get a colleague or approved editing service to improve the language and ensure that the manuscript adheres to the requirements
- •Ensure that the literature cited is balanced and that the aims and purpose of the study, and the significance of the results, are clear
- Use a spellchecker

Manuscript submission: milestones



Post-referee revision

Carefully study the reviewers' comments and prepare a detailed letter of response

- •Respond to all points; even if you disagree with a reviewer, provide a polite, scientifically solid rebuttal rather than ignore their comment
- Provide page and line numbers when referring to revisions made in the manuscript
- •Perform additional calculations, computations, or experiments if required; these usually serve to make the final paper stronger

Post-referee revision

The reviewer is clearly ignorant of the work of



Thank you for your comment. However, we feel that the assumption in our model is supported by recent work by ...



Post-referee revision

- •State specifically what changes you have made to address the reviewers' comments, mentioning the page and line numbers where changes have been made
- •Avoid repeating the same response over and over; if a similar comment is made by multiple people explain your position once and refer back to your earlier response in responses to other reviewers or the editor

Accepting rejection

Don't take it personally!

- Try to understand why the paper has been rejected
- •Evaluate honestly will your paper meet the journal's requirements with the addition of more data or is another journal more appropriate?
- •Don't resubmit elsewhere without significant revisions addressing the reasons for rejection and checking the new Guide for Authors

Accepting rejection

Suggested strategy for submitting elsewhere:

- •In your cover letter, declare that the paper was rejected and name the journal
- Include the referees' reports and show how each comment has been addressed
- •Explain why you are submitting the paper to this journal; is there a more appropriate journal?

Ethical Issues

Ethical Issues

http://www.ieee.org/web/publications/rights/p lagiarism_FAQ.html

Unethical behavior includes:

- Multiple submissions
- Redundant publications
- Plagiarism
- Data fabrication and falsification
- •Improper use of human subjects and animals in research
- Improper author contribution

Multiple submissions

Multiple submissions save your time but waste editors'

The editorial process of your manuscripts will be completely stopped if the duplicated submissions are discovered

Multiple submissions

Competing journals constantly exchange information on suspicious papers

You should not send your manuscripts to a second journal UNTIL you receive the final decision from the first journal

DON'T DO IT!!

Redundant publication

An author should not submit for consideration in another journal a previously published paper

- Published studies do not need to be repeated unless further confirmation is required
- •Previous publication of an abstract during the proceedings of conferences may not preclude subsequent submission for publication, but full disclosure should be made at the time of submission

Plagiarism

"Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit, including those obtained through confidential review of others' research proposals and manuscripts"

Federal Office of Science and Technology Policy, 1999

Plagiarism

Plagiarism is a serious offence that could lead to paper rejection, academic charges and termination of employment. It will seriously affect your scientific reputation

DON'T DO IT!

Plagiarism-levels

Uncredited verbatim copying of a full paper or verbatim copying within more than one paper by the same author(s)

Uncredited verbatim copying of large portion (20-50%) or verbatim copying within more than one paper by the same author(s)

Uncredited verbatim copying of individual elements (paragraphs, sentences, illustrations) resulting in a significant portion (up to 20%) within a paper

Uncredited improper paraphrasing of pages or paragraphs

Credited verbatim copying of a major portion of a paper without clear delineation (quotes or indents)



Available online at www.sciencedirect.com



Organic Electronics 8 (2007) iii



www.elsevier.com/locate/orgel

Retraction Notice

Retraction notice to: "Properties of organic light-emitting diodes by aluminum cathodes modification using Ar⁺ ion beam" [Org. Electron. 6 (4) (2005) 149–160]

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This article is retracted at the request of the editors as it is a duplication of a paper that has already appeared in at least nine other publications. As such this article represents a severe abuse of the scientific publishing system. It has wasted the time of many reviewers and also wastes costly journal space which is explicitly reserved for pub-

lishing original, not self-plagiarized work. *Organic Electronics* takes a very strong view on this matter. The editors want to inform our readership and authors, that those who publish multiple copies of their papers in *Organic Electronics* and elsewhere will lose their rights to further publication in this journal.



Contents lists available at ScienceDirect

Nuclear Instruments and Methods in Physics Research B

BEAM INTERACTIONS WITH MATERIALS AND ATOMS

journal homepage: www.elsevier.com/locate/nimb

Retraction notice

Retraction notice to Interaction of laser on some textile properties of poly(ethylene terephthalate) [NIMB 266 (1) (2008) 79–85]

C.W. Kan*

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China

This article has been retracted at the request of the Editors and Author. Please see Elsevier Policy on Article Withdrawal (http://www.elsevier.com/locate/withdrawalpolicy).

Reason: The author has plagiarized most of a paper that had already appeared in *Opt. Laser Technol.*, 40 (2008) 113–119, doi:10.1016/j.optlastec.2007.03.005. One of the conditions of submission of a paper for publication is that authors declare explicitly that their work is original and has not appeared in a publication elsewhere. Re-use of any data should be appropriately cited. As such this article represents a severe abuse of the scientific publishing system. The scientific community takes a very strong view on this matter and we apologize to readers of the journal that this was not detected during the submission process.



Journal of Mechanical Science and Technology

Journal of Mechanical Science and Technology 23 (2009) 3485

www.springerlink.com/content/1738-494x DOI 10.1007/s12206-009-1152-3

Notice of Retraction

Retraction of "Penetrator strength effect in long-rod ricochet angle"

[JMST 22 (2008) 2076 - 2089][†]

K. Daneshjou* and M. Shahravi

Dep. of Mechanical Eng., Iran University of Science and Technology, Tehran, Iran

Published online: 23 January 2009

The article "Penetrator strength effect in long-rod ricochet angle" (J. of Mech. Sci. and Tech. 22 (2008) 2076-2089) has been retracted because it contains significant parts plagiarizing another publication: "Ricochet of a tungsten heavy alloy long-rod projectile from deformable steel plates" (J. Phys. D: Appl. Phys. 35 (2002) 2676-2686).

Data fabrication and falsification

 Fabrication is making up data or results, and recording or reporting them

 Falsification is manipulating research materials, equipment, processes; or changing / omitting data or results such that the research is not accurately represented in the research record

Unethical research

- Experiments on human subjects or animals should follow related ethical standards, namely, the Helsinki Declaration of 1975, as revised in 2000 (5)
- If doubt exists concerning the compliance of the research with the Helsinki Declaration, authors must explain the rationale for their approach and demonstrate approval from the institutional review body

Conclusion: Getting Accepted