

Editorial Practices in Sciences

Doctoral training session in science and engineering

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General statement

- Publication strategy should always be discussed with the team (and promoter of the PhD thesis)

- All the following slides should be read with this statement in mind!



Strategies to Publish in Science





Should I write the article from the first day I am starting my experiments?

- **No, but read the literature in your domain to focus the scientific questions (hypothesis)**
- **Keep you notes updated (daily base) and build up the structure of your paper as you go**





To write an article, is it preferable to first choose an important journal in its field and then a way to value its work or, on the contrary, to have an argument and an idea for an article and then find the review that allows to publish it?

...to have an argument and an idea for an article and then find the review that allows to publish it? Of course !





What should be my priority in deciding which scientific journal to publish my work?

The content will guide the choice of the journal and the format of the paper:

- **1. extremely novel material with global implications**
- **2. extremely novel material with specific implications**
- **3. another study in a domain where they are scarce**
- **4. another study in a domain where they are abundant**
- **5. Methodological paper**
- **6. Review**

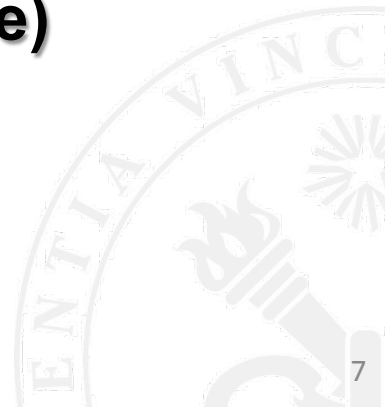


Is it a valued exercise to publish with others?

Yes !! Too many papers alone can be badly perceived.

Is the order of the authors relevant, and in this case, how are the authors ordered?

**Yes ! First and last (co-authorship possible)
Could be alphabetic order in big groups**





At the beginning of your career, during the PhD, do you find it interesting to start with publications in less prestigious journals that publish faster? Does this make it possible to learn to write with less pressure and publish unfinalized results? Or do you think it is better to publish directly in a high IF magazine?

- **Impact factor prioritized**
- **Fast publication can be achieved with original important data**





Strategies to Publish in Science

Publish on the heart of your thesis topic or publish on peripheral topics so as not to divulge the data of your thesis in advance?

- **Priority should be given to the valorization of your “core” data**
- **Writing takes time (time should not be invested in peripheral topics)**





How to effectively include the writing of scientific articles in research agenda ?

- **You should not write research articles without new input. Main criteria for journals is originality**
- **Learn that perfection is rarely achieved and remember that the thesis requires 2 accepted papers (within 4 years)**



Which are the informations necessary to be included in a publication and which are the non useful ones?

- **When the journal is chosen, read author instructions and examples of articles in this journal to guide you**
- **State of the art (incl. global perspective)/ unanswered question(s) that you will address / methods with precisions, errors and bias/results/discussion/ conclusion with key points and perspectives**





What are the conditions to be met before sending a new article to a scientific journal?

- **Original data**
- **Original method**
- **New interpretation of old data**
- **Connecting existing data (not connected before)**
- **Absence (or obsolete) good review in your domain of expertise**



How many times an article must take an internal review (by the writers) before sending it to the journal?

- **As many times as required for reaching full agreement of all your co-authors (at least 2)**





Is it interesting to publish when the results are « worse » than the state of the art?

- **If the results are of bad quality: forget about it !**
- **If the results contradict current hypothesis and your methodology is secured and the data interpretation well argued: DO it !! This is how science progresses..**





In science, should an article be published before the end of the PhD? if so, in what type of journal (is the impact factor important)?

- In science (ULB) the rule is a minimum of 2 accepted papers in journal with reviewing committee before submission
- Yes the IF is important (main criteria to evaluate your CV)





Is the practice of thesis articles widespread in science?

Yes





The Cryosphere

An interactive open-access journal of the European Geosciences Union

EGU logo | Copernicus Publications

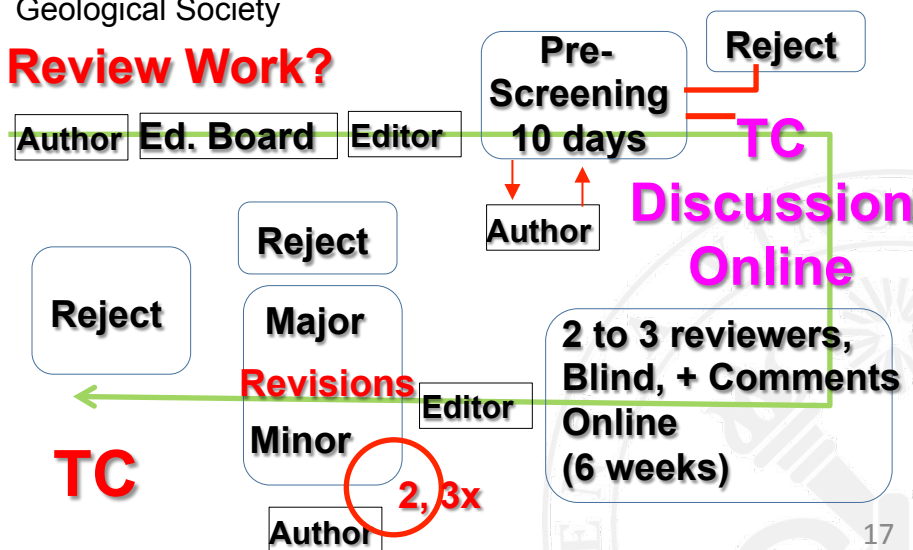
The Cryosphere (Open Access)

IF: 4.7

Reviewer for: Nature Communication, Plant Cell, Plant Journal, FEBS, Journal of Experimental Botany, Physiologia Plantarum, Plant Cell and Environment, Plant Physiology, Plant Science, Journal of Plant Physiology, Plant Molecular Biology, Molecular Plant, Biochimie, Ecotoxicology and Environmental Safety, Environmental and Experimental Botany

Reviewer for: Journal of Glaciology, Journal of Geophysical Research, Geophysical Research Letters, Annals of Glaciology, Nature, Earth and Planetary Sciences Letters, Biogeosciences, Sedimentology, Polar Biology, Deep Sea Research, Antarctic Science - **Books:** AGU Special Publications, John Wiley and Sons, London Geological Society

- **First selection by the editorial board, double blind (2 referees), if contrasting evaluation, a 3rd referee is requested**
- **Rejection/major revision/minor revision**
- **Revision: 1 month to send a revised version (possibility to ask for an extension)**
- **Second round etc....**





About the Journal you are Editor

What are the delays between submission of the manuscript and the return of the evaluators? between manuscript submission and publication?

- **1 month for the first round of evaluation**
- **Depends on the revision (> 6 months)**





What are the most common reasons why you refuse articles? What are the common mistakes to avoid?

- **Lack of originality, little progress in the field**
- **Conclusion not supported by data**
- **flawed methodology**
- **plagiarism**
- **Major revision: up-to-date references, clarity of text-figures and tables, redundancy**



About the Journal you are Editor

How to adress the reviews from the reviewers?

- **Answer to every single concern**
- **Majority of answers should lead to changes in the manuscript**
- **Be humble !**





About the Journal you are Editor

Why are lower quality papers often accepted while higher quality ones are rejected?

- **Presentation matters!**
- **Imperfect peer-review: non-expert reviewers, difficult to find reviewers (on a volunteer basis), lobbying , problem of competition**
- **Remark: if you disagree , write to the editor with proper scientific argumentation**



How to guarantee the acceptance of a paper in a journal?

- **No guarantee!**
- **Even if your paper is of excellent quality and original you remain at the mercy of unfair referees**
- **Some topics are easier to publish than others**





About the Journal you are Editor

Research data: should they be attached to the manuscript for the evaluators? do you recommend publishing them?

The recent trend is to provide original data set in data bases



Scientific Communication & Digital Visibility





Scientific Communication & Digital Visibility

What is the place and role of journals in scientific life in general, and in comparison with other means of communication, and how does this role evolve with the multiplication of communication media?

- **Papers (in journal with IF) remain the main criteria of the CV evaluation**
- **Recent trend towards communication via social network (fast message)**



Scientific Communication & Digital Visibility

Is it interesting to develop an academic or popular science blog?

Yes to increase science visibility and accessibility for the general public (more and more requested by funding agencies)





Scientific Communication & Digital Visibility

Is it interesting or requested that researchers be present on social networks? and personally, are you present and / or active on social networks like Research Gate, Academia.edu and Twitter? For what reasons, what are your uses of this (these) network(s) ?

- **Yes**
- **Time consuming**
- **Research Gate, Linkedin, Twitter**





Scientific Communication & Digital Visibility

Is our image on the internet important? Do evaluators take this into account when evaluating articles (are we "googled")?

- **Yes, but priority is to publish in good journals and be recognized by your pairs**
- **Fast messages should only attract attention but not override hard data and scientific argumentation**

If you had only one piece of advice to give,
what would it be?

- Be passionate about your science !
- Be a good scientist!!

