How to write a Great Research Paper and Get it Accepted by a Good Journal

From title to references

From submission to revision

Presented by: Anthony Newman
Elsevier, Amsterdam

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What will we cover?

- Who are publishers and what do we do?
- Practical tips before you write
- What makes a good manuscript?
- The article structure
- The review and editorial process
- Author ethics

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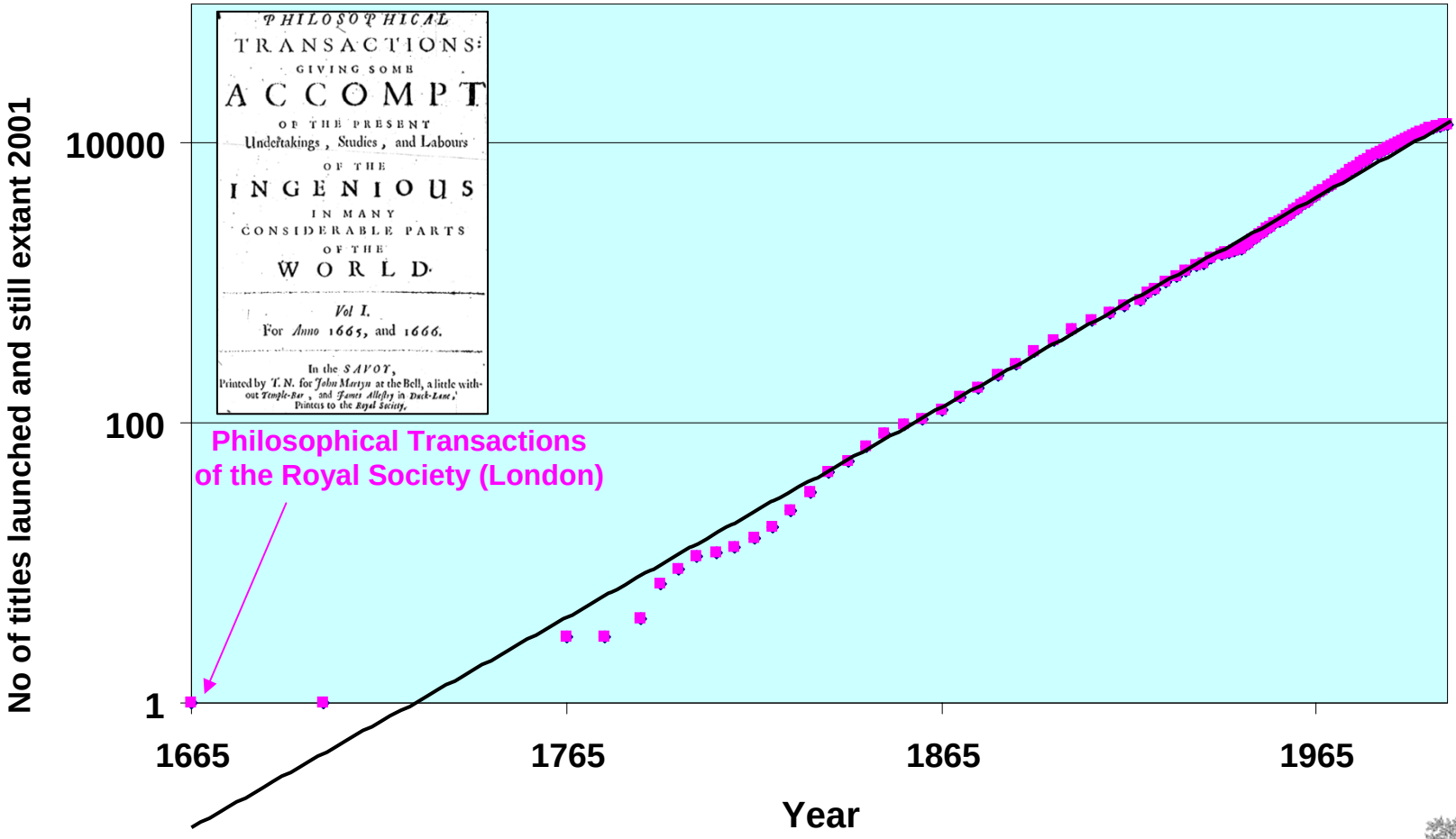
Peer-Reviewed Journal Growth 1665-2001



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M A Mabe The number and growth of journals
***Serials* 16(2).191-7, 2003**

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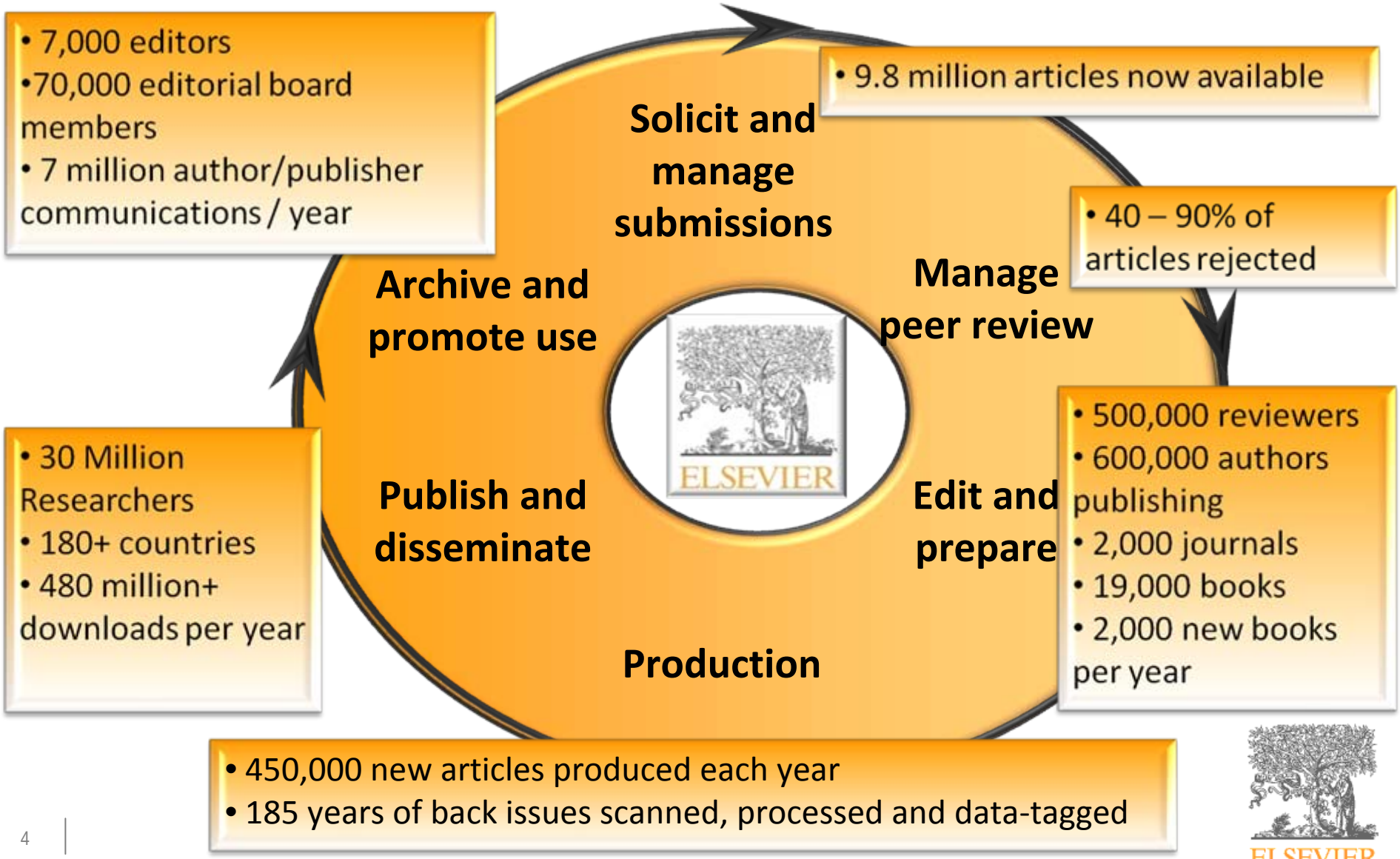
Elsevier and Publishing



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Why publish?

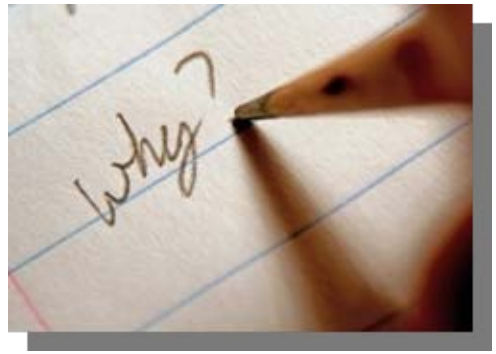
Publishing is one of the necessary steps **embedded in the** scientific **research process**. It is also necessary for graduation and career progression.

What to publish:

- **New and original results or methods**
- **Reviews or summaries of** particular subject
- **Manuscripts that advance** the **knowledge** and understanding in a certain scientific field

What NOT to **publish**:

- Reports of no scientific interest
- Out of date work
- **Duplications** of previously published work
- Incorrect/unacceptable conclusions



You need a GOOD manuscript to present your contributions to the scientific community

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The Process

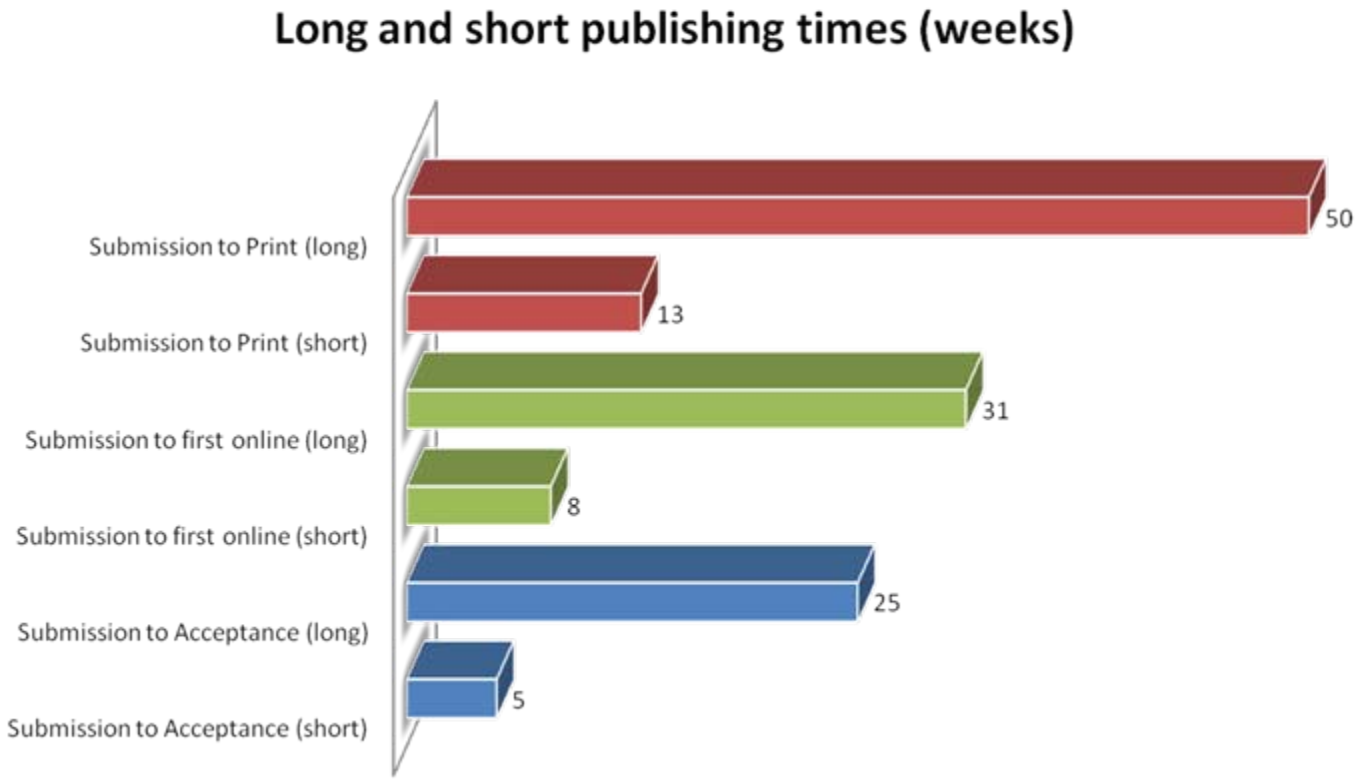
More submissions
→ STRESS for editors and reviewers..

Editors and reviewers are the most precious resource of a journal!

- Editors and reviewers are practicing scientists, even leaders in their fields. They are not professional journal staff – they do journal work on top of their own research, writing and teaching.
- They are busy people who work for journals to contribute to science.
- Editors may receive a small payment, but reviewers are UNPAID.
- Every manuscript takes up their precious time!
  Nowadays they are working even harder!

Publishing speed

Time to publish is important.



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2

1

Many journals have now introduced a "Fast Rejection" process by the journal Editor

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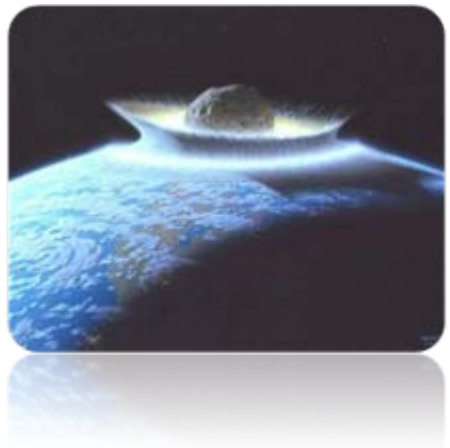
What is the Impact Factor (IF)?

Impact Factor

[the average annual number of citations per article published]

- For example, the 2008 impact factor for a journal is calculated as follows:
  - *A* = the number of times articles published in 2006 and 2007 were cited in indexed journals during 2008
  - *B* = the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2006 and 2007
  - 2008 impact factor = *A*/*B*
  - **e.g. 600 citations = 2**

    150 + 150 articles



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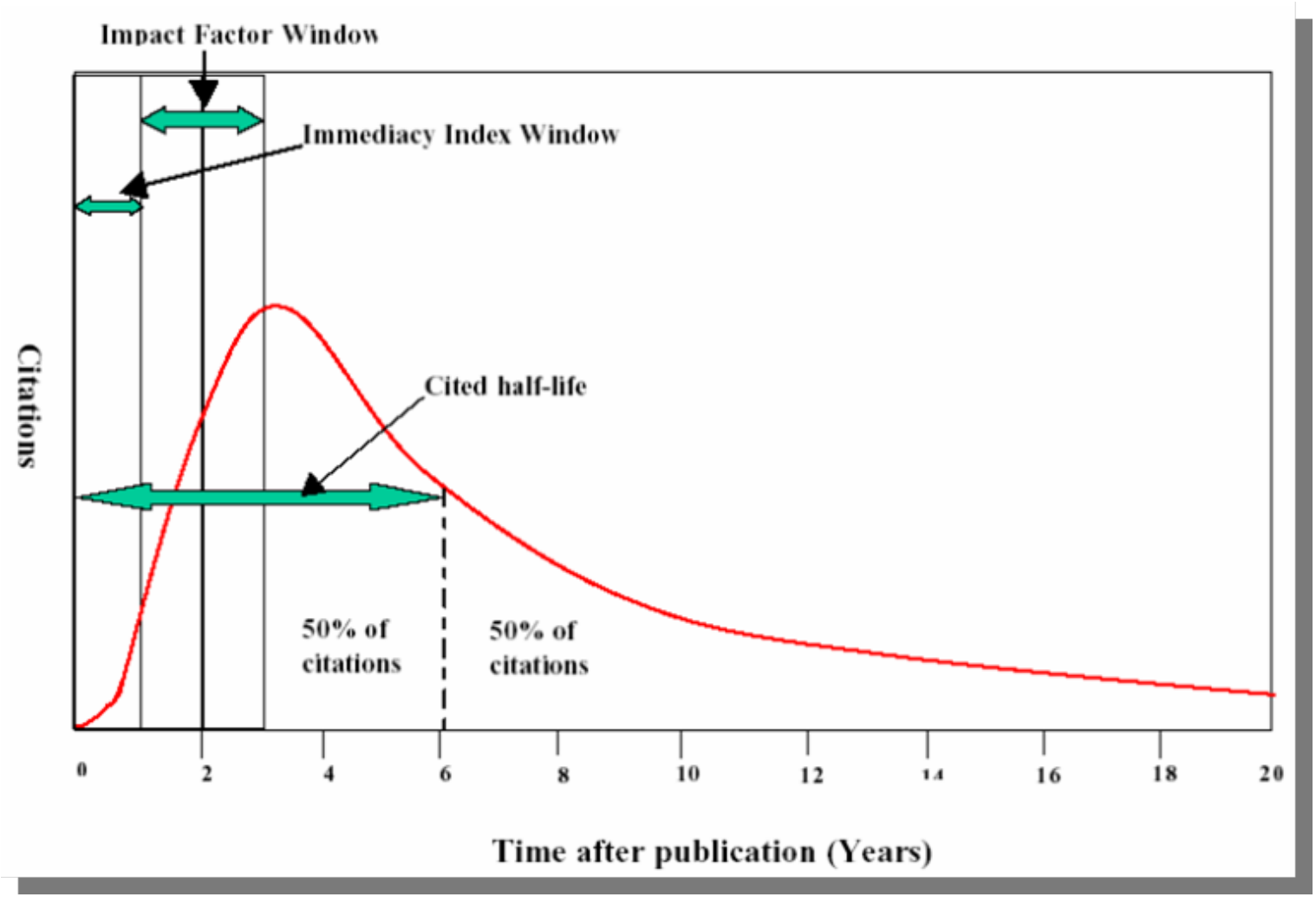
Impact Factor and other bibliometric parameters



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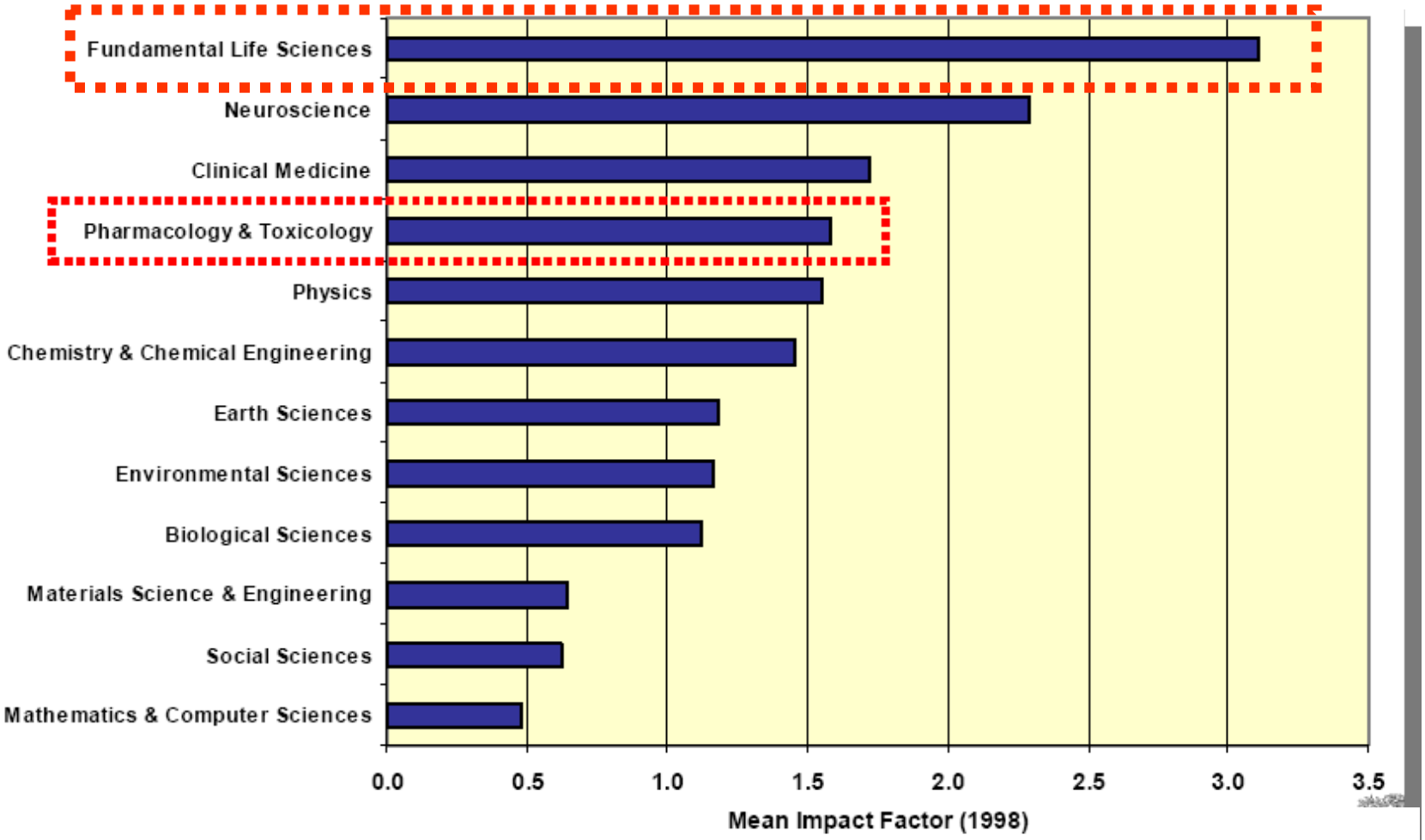
Subject Area Influence on Impact Factors



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How To Get Your Article Published

Before you start

Before you start…..

Don’t Panic!

The Hitchhiker's Guide To The Galaxy

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Questions to answer before you write

Think about **WHY you want to publish your work**.

- Is it **new and interesting**?
- Is it a current **hot topic**?
- Have you **provided solutions** to some difficult problems?
- Are you **ready** to publish at this point?

If **all answers are "yes", then start preparations for your manuscript**

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What type of manuscript?

- **Full articles** / Original articles: the most important papers. Often substantial and significant **completed pieces of research**.
- **Letters** / Rapid Communications/ Short communications: **quick and early communication of significant and original advances**. Much shorter than full articles (check limitations).
- **Review papers** / perspectives: summarize recent developments on a specific topic. Highlight important previously reported points. Not the place to introduce new information. **Often invited**.

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.

Identify the right audience for your paper

- **Identify the audience**
- **Verify their interest in the topic**
  - "Knock-down of mdr-1 activity in transiently transfected HEK cells" in *Pharmazeutische Industrie?*
- **Determine the range of interest - local vs international?**
  - "A bioequivalence study of ibuprofen tablets marketed in Southern Kosovo"

Select the best journal for submission

- Look at **your references –** these will help you narrow your choices.

- **Review** recent publications in **each candidate journal**. Find out the hot topics, the accepted types of articles, etc.

- Ask yourself the following questions:
  - Is the journal **peer-reviewed**?
  - Who is this journal's **audience**?
  - What is the **average time to print**?
  - What is the journal's **Impact Factor**?

- Decide on **one** journal. DO NOT submit to multiple journals.

An international editor says…

"The following problems appear much too frequently"

- *Submission of papers which are clearly out of scope*
- *Failure to format the paper according to the Guide for Authors*
- *Inappropriate (or no) suggested reviewers*
- *Inadequate response to reviewers*
- *Inadequate standard of English*
- *Resubmission of rejected manuscripts without revision*

– Paul Haddad, Editor, *Journal of Chromatography A*

What makes a good manuscript?

- Contains a clear, useful, and exciting **scientific message.**
- Flows in **a logical manner** that the reader can follow.
- Is formatted to best **showcase the material.**
- Is written in a style that **transmits the message clearly.**

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A Word about Your Words

This is NOT creative writing class.

Journal space is precious.

Be concise.

If clarity can be achieved in *n* words,
never use *n+1*.

More difficult than you imagine!

What makes a good manuscript?

It is all about the reader. (Remember editors and reviewers are in this group!)

- **Writing** a good manuscript **is NOT easy**. Be prepared to work hard on it.
  - **Cherish your 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!**

Presentation is critical!

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The general structure of a full article

- **Title**
- **Authors**
- **Abstract**
- **Keywords**
- **Main text (IMRAD)**
  - Introduction
  - Methods
  - Results
  - And
  - Discussion (Conclusions)
- **Acknowledgements**
- **References**
- **Supplementary material**

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Write Backwards!

- **Write in the following order:**
  - Figures and tables
  - Methods, Results and Discussion
  - Conclusions and Introduction
  - Abstract and title

- **Each section has a definite purpose.**

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Developing Your Title

- This is your opportunity to attract the reader's attention.
  - Remember: readers are the potential authors who will cite your article
- Keep it informative and concise.
  - 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.
- Avoid technical jargon and abbreviations.
  - You wish to have a readership as large as possible, right?
- Discuss with your co-authors.

The Abstract

- Should stand alone!
- Consider it the advertisement of your article. Should tell the prospective reader what you did and highlight the key findings.
  - Avoid using jargon and uncommon abbreviations.
- You must be accurate and specific!
  - Use words which reflect the precise meaning

- A clear abstract will strongly influence whether or not your work is further considered.
- Follow word limitations (50-300 words)!!!

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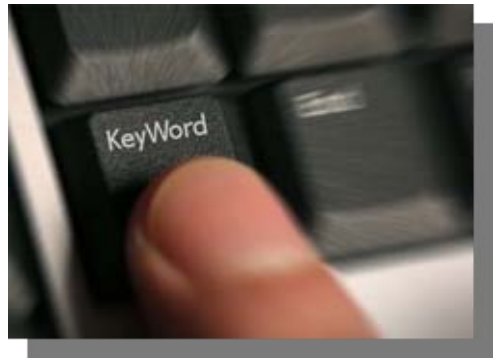
Keywords

- These are the labels of your manuscript and critical to correct indexing and searching.
  - Shouldn't be too broad or too narrow (think Google …)
- Use only those abbreviations that are firmly established in the field.
  - e.g. DNA



- Check the Guide for Authors!
  - Number, label, definition, thesaurus, range, and other special requests

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The Introduction

- Your chance to convince readers of the importance of your work.
- Describe the problem. Are there any existing solutions? What are their main limitations? And what do you hope to achieve?
- Provide a perspective consistent with the nature of the journal.
- Introduce the main scientific publications on which your work is based.
  - Cite a couple of original and important works, including recent review articles

- Editors hate references irrelevant to the work, or inappropriate judgments on your own achievements.
  - They will think that you have no sense of purpose at all!

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Pitfalls of The Introduction

- Too wordy
  - Never use more words than necessary.
  - Do not turn this section into a history lesson. Readers loose interest.

- A mixed bag of introduction with results, discussion, and conclusion thrown in for good measure.
  - Always keep sections separate to ensure the manuscript flows logically from one section to the next.

- Has the “used-car salesman feel” of oversell

- Excessive use of expressions such as “novel”, “first time”, “first ever”, “paradigm-changing” (use these sparingly!)

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The Methods Section

- Details, details, details - a knowledgeable reader should be able to reproduce the experiment.

- However, use references and Supplementary Materials for previously published procedures.
  - Do not repeat the details of established methods.
  - A general summary with reference is sufficient.

- Reviewers will criticize incomplete or incorrect descriptions.
  - and may even recommend rejection

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Results

3. Results

3.1. Factors affecting entrapment efficiency of flurbiprofen in niosomal formulations

3.1.1. Effect of surfactant structure

To investigate the influence of surfactant structure on flurbiprofen entrapment efficiency, niosomal formulations of different spans were prepared from proniosomes with the same total lipid concentration (100 μmol/ml). Results listed in Table 3 show that Sp 60 has significant higher entrapment efficiency than other span types ($P < 0.05$). This could be due to the surfactant chemical structure. All span types have the same head group and different alkyl chain. Increasing the alkyl chain length is leading to higher entrapment efficiency (Hao et al., 2002). The entrapment efficiency followed the

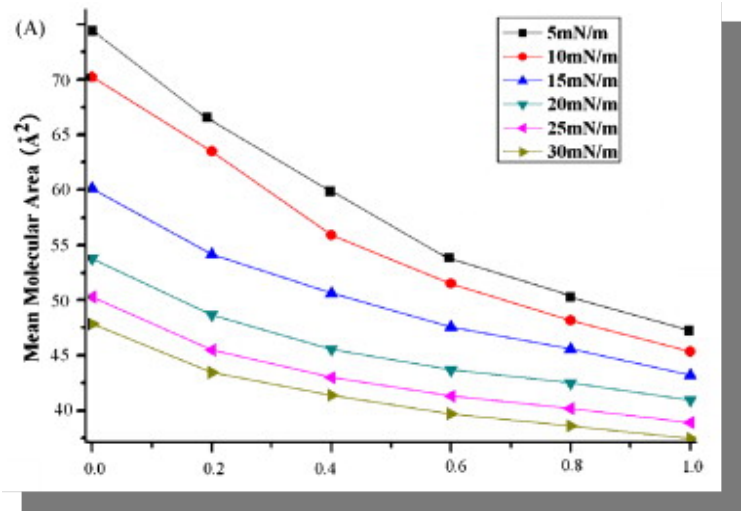

Table 1.

Performance of our approach compared with Kruithof's approach

PDB code	No. of atoms	Kruithof's approach			MetaMol		
		No of triangles	Computing time (s)	FPS (1024 × 1024)	No of triangles	Computing time (s)	FPS (1024 × 1024)
7tmn	33	23,424	1.1	800	7,116	0.02	200
1grm (*Gramicidin A*)	272	310,488	16.1	130	73,416	1.7	50
1g6x	509	481,856	28.7	95	146,476	3.6	25
1cbs	1091	1,664,184	93.1	30	325,076	8.2	12
1j4n	1852	2,165,268	137.4	25	558,372	15.4	7

Results

- Only representative results, essential for the Discussion, should be presented.
  - Show data of secondary importance in Supplementary Materials.
- Do not “hide” data in the hope of saving it for a later paper.
  - You may lose evidence to support your conclusion.
- Use sub-headings to keep results of the same type together
  - Easier to review and read.
- Tell a clear and easy-to-understand story.

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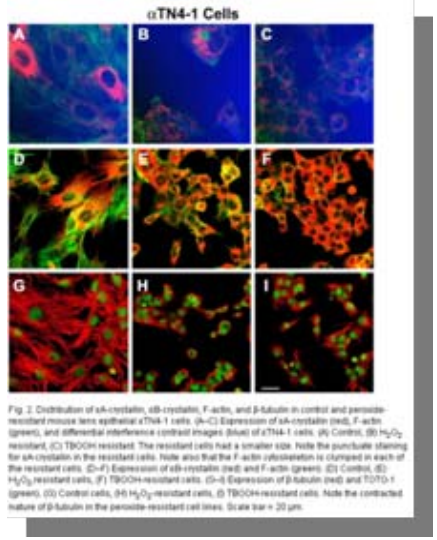
Appearance counts!

- Un-crowded plots: 3 or 4 data sets per figure; well-selected scales; appropriate axis label size; symbols clear to read and data sets easy to discriminate.
- Each photograph must have a scale marker of 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.
- Color needs to be visible and distinguishable when printed out in black & white.
- Do NOT ‘selectively adjust’ any image to enhance visualization of results.
- Do not include long boring tables!



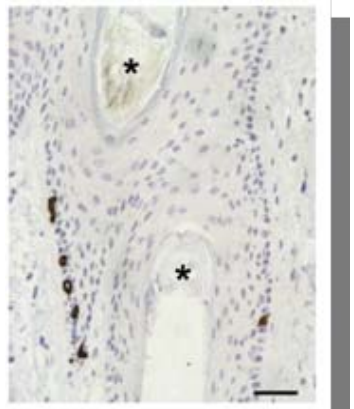


Fig. 5. Immunoperoxidase staining (adult scalp hair follicle using a monoclonal antibody selective for cytokeratin 20 (clone IT-K_{20}10, Progen, Heidelberg, Germany). Merkel cells clustered within deep infundibulum are decorated. (*) Hair shaft. Bar 20 μm.

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Discussion – What the results mean

- It is the most important section of your article. Here you get the chance to SELL your data!
  - Many 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.
  - Do NOT ignore work in disagreement with yours – confront it and convince the reader that you are correct or better

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More Pitfalls to be Aware of:

- Statements that go beyond what the results can support
- Unspecific expressions such as “higher temperature”, “at a lower rate”.
  - **Quantitative descriptions are always preferred.**
- Sudden introduction of new terms or ideas
- Speculations on possible interpretations are allowed. But these should be rooted in fact, rather than imagination.
- 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 need to do further experiments, derivations, or simulations.

  Sometimes you cannot clarify your idea in words because some critical items have not been studied substantially.

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Scientific Language - Tenses

- **Present tense for known facts and hypotheses:**
  "The average life of a honey bee is 6 weeks"

- **Past tense for experiments you have conducted:**
  "All the honey bees **were** maintained in an environment with a consistent temperature of 23 degrees centigrade…"

- **Past tense when you describe the results of an experiment:**
  "The average life span of bees in our contained environment **was** 8 weeks…"

Conclusions

In summary, we have demonstrated that the mercapto-acetamide-based HDACIs possess favorable solubility, lipophilicity, permeability and plasma stability features as compared to recently FDA approved drug Vorinostat (SAHA). Based on these findings, we assume that these compounds could sufficiently be absorbed by the intestinal tract. However, further studies are needed in order to determine the pharmacokinetic disposition of these compounds.

Conclusions

- **Tells how your work advances the field from the present state of knowledge!**

- Without clear Conclusions, reviewers and readers find it difficult to judge the work, and whether not it merits publication in the journal.

- Do NOT repeat the Abstract, or just list experimental results.
  - Trivial statements of your results are unacceptable in this section.

- Provide a clear scientific justification for your work, and indicate possible applications and extensions.
  - You should also suggest future experiments and/or point out those that are underway.

Acknowledgements

Recognize those who helped in the research (you want them to help again, don't you?)

Include individuals who have assisted you in your study:

- Advisors
- Financial supporters
- Proofreaders
- Typists
- Suppliers who may have given materials

References

- **More mistakes are found 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 inflate the manuscript with too many references – it doesn't make it a better manuscript!
  - Avoid excessive self-citations
  - Avoid excessive citations of publications from the same region

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Cover letter – your chance to speak to the Editor directly

- View it as a job application letter; you want to “sell” your work…
- WHY did you submit the manuscript to THIS journal?
  - Do not summarize your manuscript, or repeat the abstract
  - Mention what would make your manuscript special to the journal
- Mention special requirements, e.g. if you do not wish your manuscript to be reviewed by certain reviewers, and any conflicts of interest.
- Albeit that most editors will not reject a manuscript only because the cover letter is bad, but a good cover letter may accelerate the editorial process of your paper.

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Suggest potential reviewers

- Your suggestions will help the Editor to move your manuscript to the review stage more efficiently.
- You can easily find potential reviewers and their contact details 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.
- Be prepared to suggest 3-6 potential reviewers.

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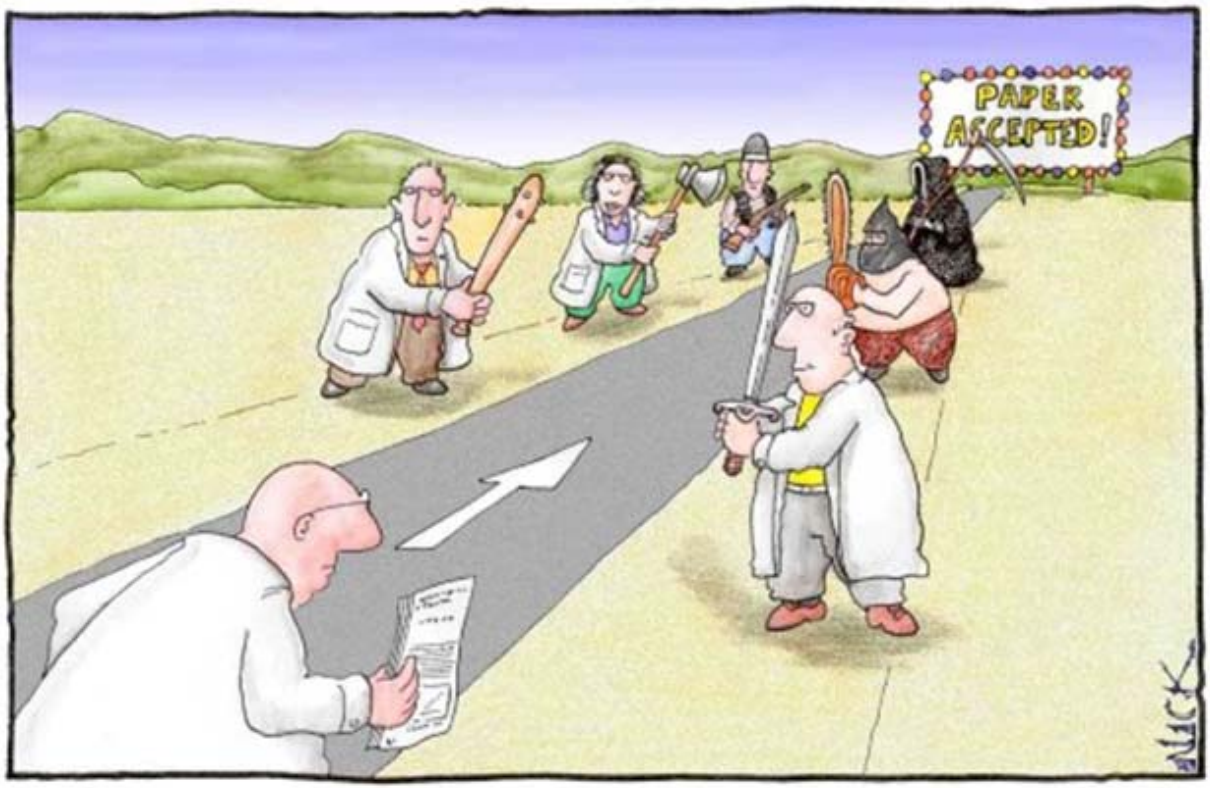
The review and editorial process



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

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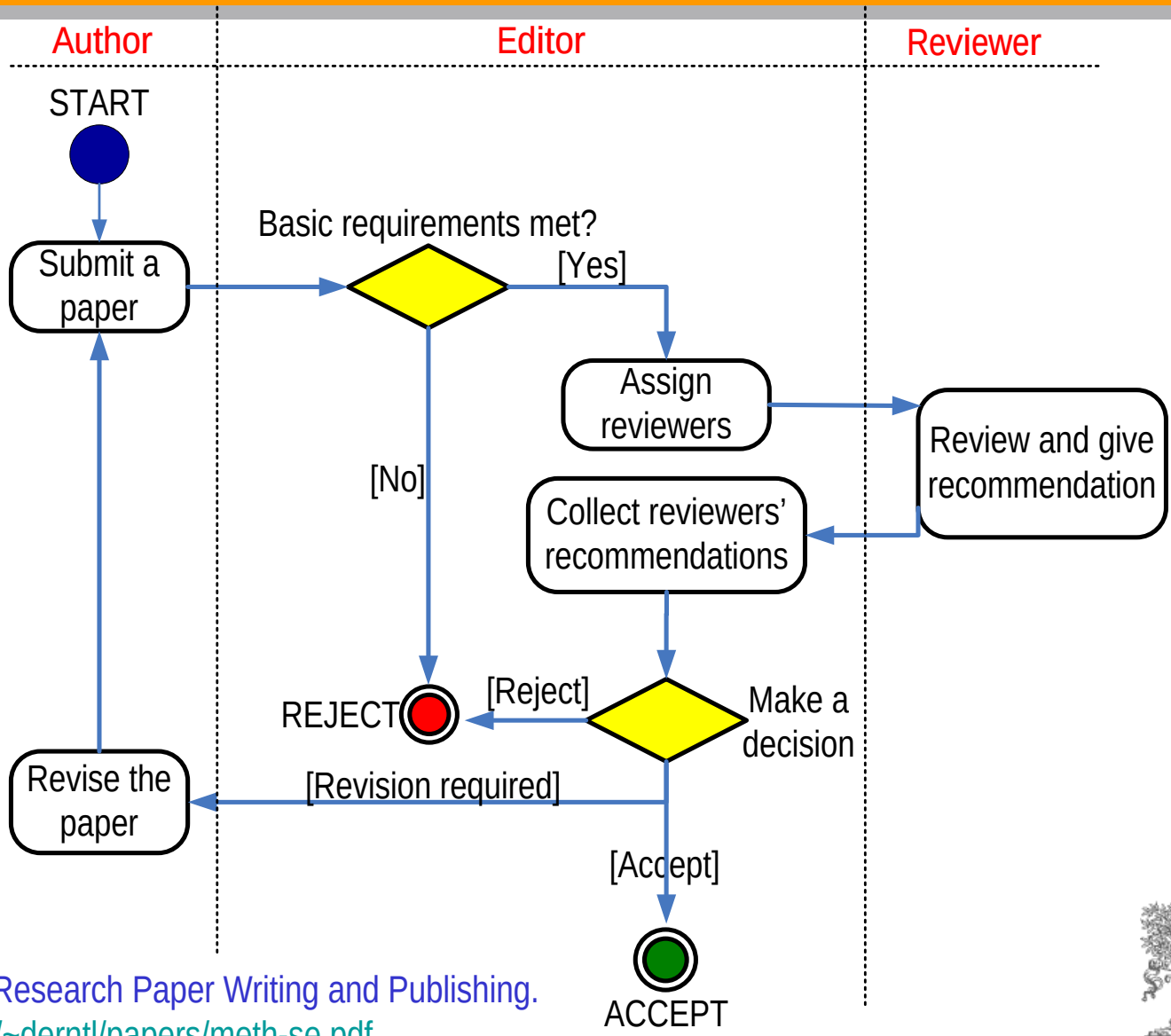
Submission is not a “black hole”



Michael Derntl. Basics of Research Paper Writing and Publishing.
http://www.pri.univie.ac.at/~derntl/papers/meth-se.pdf

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Initial Editorial Review

Many journals use a system of initial editorial review. Editors may reject a manuscript without sending it for review

Why?

- The peer-review system is grossly overloaded and editors wish to use reviewers only for those papers with a good probability of acceptance.

- It is a disservice to ask reviewers to spend time on work that has clear and evident deficiencies.

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Revision before submission – *checklist*

Reasons for early rejection: content (aims and scope)

- Paper is of limited interest or covers local issues only (sample type, geography, specific product, etc.).
- Paper is a routine application of well-known methods
- Paper presents an incremental advance or is limited in scope
- Novelty and significance are not immediately evident or sufficiently well-justified

What should you check?

- Is your work of interest to an international audience?
- Does the work add significant value to an existing method?
- Is the perspective consistent with the journal?
- Are the right conclusions drawn from the results?
- Does your work add to the existing body of knowledge? – Just because it has not been done before is no justification for doing it now. And just because you have done the study does not mean that is very important!

Revision before submission – *checklist*

Reasons for early rejection:
Preparation

- Failure to meet submission requirements
- Incomplete coverage of literature
- Unacceptably poor English

What should you check?

- Read the Guide for Authors again! Check your manuscript point by point. Make sure every aspect of the manuscript is in accordance with the guidelines. (Word count, layout of the text and illustrations, format of the references and in-text citations, etc.)
- Are there too many self-citations, or references that are difficult for the international reader to access?
- Did the first readers of your manuscript easily grasp the essence? Correct all the grammatical and spelling mistakes.

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Reviewing is a procedure

- **Consider reviewing as a procedure in which several peers discuss your work. Learn from their comments, and join the discussion.**
- **Nearly every manuscript requires revision.**
- **Bear in mind that editors and reviewers mean to help you improve your article**
  - Do not take offence.
- **Minor revision does NOT guarantee acceptance after revision.**
  - Do not count on acceptance, but address all comments carefully
- **Revise the whole manuscript**
  - not just the parts the reviewers point out

Revision after submission

Carefully study the comments and prepare a detailed letter of response.

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A second round of reviews is common

- **A second review of the revised manuscript is common. Cherish the chance of discussing your work directly with other scientists in your community. Please prepare a detailed letter of response.**
- **Cut and paste each comment by the reviewer. Answer it directly below. Do not miss any point.**
- **State specifically what changes (if any) you have made to the manuscript. Give page and line number.**
  - *A typical problem – Discussion is provided but it is not clear what changes have been made.*
- **Provide a scientific response to the comment you accept; or a convincing, solid and polite rebuttal to the point you think the reviewer is wrong.**
- **Write in a way that your responses can be given to the reviewer.**

Do NOT resubmit elsewhere without revision!

- **Never treat publication as a lottery by resubmitting a rejected manuscript directly to another journal without any significant revision!!! It will not save any of your time and energy…**
- **The original reviewers (even editors) may eventually find it, which can lead to animosity towards the author.**
- **A possible strategy**
  - In your cover letter, declare that the paper was rejected and name the journal.
  - Include the referees' reports and a detailed letter of response, showing how each comment has been addressed.
  - Explain why you are resubmitting the paper to this journal, e.g., this journal is a more appropriate journal; the manuscript has been improved as a result of its previous review; etc.

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Important to remember

- Preparation is important but **do not spend too much time on your preparations**
- Submit to **the right journal** (scope and prestige)
- Submit to **one journal only**
- Check **the English**
- Pay attention to **structure**
- Pay attention to **journal requirements**
- **Be honest**

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Questions?

Or for questions later, please contact a.newman@elsevier.com

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APPENDIX – not part of presentation

Publishing Ethics

Literature searching suggestions

Links

References

Publishing Ethics

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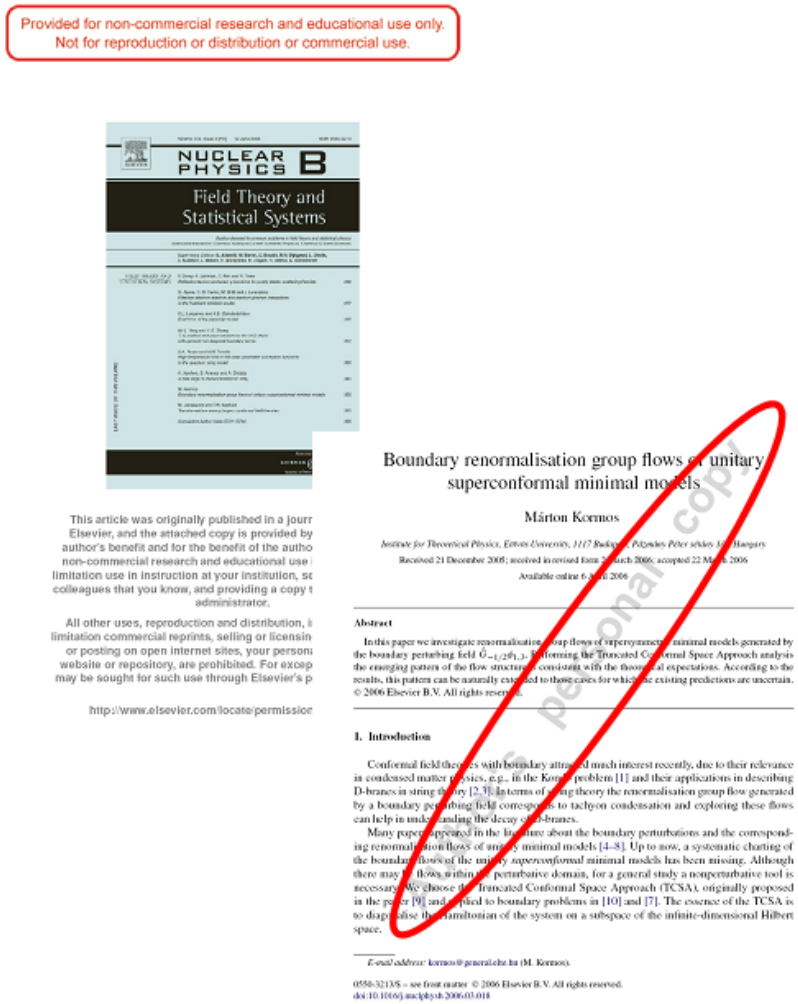
Copyright Issues in Publishing

Journal Authors retain the following rights:

- **make copies (e-copies if e-offprint is used) for their own personal use, own classroom teaching use**
- **make copies of articles and distribute them to research colleagues for non-commercial purposes**
- **Post pre-print versions of the article on internet websites**
- **post an author manuscript of the article on the author's personal website or on his or her institutional website**
- **present the article at a meeting or conference and give copies to the meeting delegates**
- **include journal articles, in full or part, in the author's thesis or dissertation**
- **extend the article into book length format, or re-use portions in other works with full acknowledgement ot its original publication in the journal**

Example for e-offprint



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Publish *AND* Perish! – if you break ethical rules

- International scientific ethics have evolved over centuries and are commonly held throughout the world.
- Scientific ethics are not considered to have national variants or characteristics – there is a *single ethical standard* for science.
- Ethics problems with scientific articles are on the rise *globally*.

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ScienceDirect

doi:10.1016/j.sigpro.2005.07.019 Cite or Link Using DOI

RETRACTED: Matching pursuit-based approach for

N. Ruiz-Reyes[a], P. Vera-Candeas[a], J. Curpián-Alonso[a], J.C. Cuevas

Available online 24 August 2005.

the echoes issuing from the flaws to be detected. Therefore, it cannot be cancelled by classical time averaging or matched band-pass filtering techniques.

Many signal processing techniques have been utilized for signal-to-noise ratio (SNR) improvement in ultrasonic NDT of highly scattering materials. The most popular one is the split spectrum processing (SSP) [1–3], because it makes possible real-time ultrasonic test for industrial applications, providing quite good results. Alternatively to SSP, wavelet transform (WT) based denoising/detection methods have been proposed during recent years [4–8], yielding usually to higher improvements of SNR at the expense of an increase in complexity. Adaptive time-frequency analysis by basis pursuit (BP) [9,10] is a recent technique for decomposing a signal into an optimal superposition of elements in an over-complete waveform dictionary. This technique and some other related techniques have been successfully applied to denoising ultrasonic signals contaminated with grain noise in highly scattering materials [11,12], as an alternative to the WT technique, the computational cost of the BP algorithm being the main drawback.

In this paper, we propose a novel matching pursuit-based signal processing method for improving SNR in ultrasonic NDT of highly scattering materials, such as steel and composites. Matching pursuit is used instead of BP to reduce the complexity. Despite its iterative nature, the method is fast enough to be real-time implemented. The performance of the proposed method has been evaluated using both computer simulation and experimental results, even when the input SNR (SNRin) is lower than 0dB (the level of echoes with respect to noise structures is above the level of the echoes).

2. Matching pursuit

Matching pursuit was introduced by Mallat and Zhang [13]. Let us suppose an approximation of the ultrasonic backscattered signals $x[n]$ as a linear expansion in terms of functions $g_i[n]$ chosen from an over-complete dictionary. Let $\mathbf{H}$ be a Hilbert space. We define the over-complete dictionary as a family $D = \{g_i;\ i = 0, 1, \ldots, L\}$ of vectors in $\mathbf{H}$, such as $\|g_i\| = 1$.

The problem of choosing functions $g_i[n]$ that best approximate the analysed signal $x[n]$ is computationally very complex. Matching pursuit is an iterative algorithm that offers sub-optimal solutions for decomposing signals in terms of expansion functions chosen from a dictionary, where l^2 norm is used as the approximation metric because of its mathematical convenience. When a well-designed dictionary is used in matching pursuit, the non-linear nature of the algorithm leads to compact adaptive signal models.

In each iteration of the matching procedure, vector $g_i[n]$ which gives the largest inner product with the analysed signal is chosen. The contribution of this vector is then subtracted from the signal and the process is repeated on the residual. At the mth iteration the residue is

$$r^m[n] = \begin{cases} x[n], & m = 0, \\ r^{m-1}[n] + a_{g_{m(n)}}[n], & m \neq 0, \end{cases} \quad (1)$$

where $a_{g_{m(n)}}$ is the weight associated to optimum atom $g_{m(n)}[n]$ at the mth iteration.

The weight a_i^m associated to each atom $g_i[n] \in D$ at the mth iteration is introduced to compute all the inner products with the residual $r^m[n]$:

$$a_i^m = \frac{\langle r^m[n], g_i[n] \rangle}{\langle g_i[n], g_i[n] \rangle} = \frac{\langle r^m[n], g_i[n] \rangle}{\|g_i[n]\|^2} = \langle r^m[n], g_i[n] \rangle. \quad (2)$$

The optimum atom $g_{m(n)}[n]$ (and its weight $a_{g_{m(n)}}$) at the mth iteration are obtained as follows:

$$g_{m(n)}[n] = \arg\max_{g_i[n] \in D} |r^{m-1}[n]|^2 = \arg\max_{g_i[n] \in D} |a_i^m|^2 = \arg\max_{g_i[n] \in D} |a_i^m|. \quad (3)$$

The computation of correlations $\langle r^m[n], g_i[n] \rangle$ for all vectors $g_i[n]$ at each iteration implies a high computational effort, which can be substantially reduced using an updating procedure derived from Eq. (1). The correlation updating procedure [13] is performed as follows:

$$\langle r^{m+1}[n], g_i[n] \rangle = \langle r^m[n], g_i[n] \rangle - a_{g_{m(n)}} \langle g_{m(n)}[n], g_i[n] \rangle. \quad (4)$$

This article has been retracted at the request of the Editor-in-Chief and Publish

http://www.elsevier.com/locate/withdrawalpolicy.

Reason: This article is virtually identical to the previously published article "N algorithm for SNR improvement in ultrasonic NDT", *Independent Nondestruc International*, volume 38 (2005) 453 – 458 authored by N. Ruiz-Reyes, P. Vera-Candeas, J. Curpián-Alonso, F. Mata-Campos and J.C. Cuevas-Martínez.

The article of which the authors committed plagiarism: it won't be removed from ScienceDirect. Everybody who downloads it will see the reason of retraction…

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Ethics Issues in Publishing

Scientific misconduct

- Falsification of results

Publication misconduct

- Plagiarism
  - Different forms / severities
  - The paper must be original to the authors
- Duplicate submission
- Duplicate publication
- Lack of acknowledgement of prior research and researchers
- Inappropriate identification of all co-authors
- Conflict of interest

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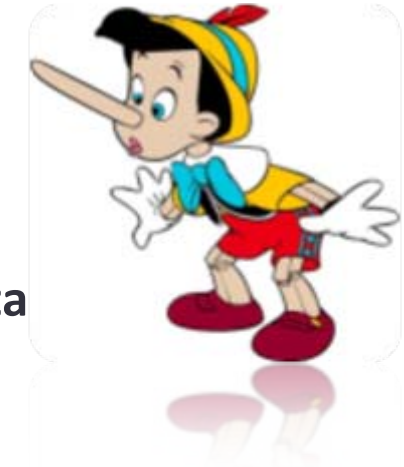
Data fabrication and falsification

"The most dangerous of all falsehoods is a slightly distorted truth."

G.C.Lichtenberg (1742-1799)

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

"… the fabrication of research data … *hits at the heart of our responsibility to society*, the reputation of our institution, the trust between the public and the biomedical research community, and our personal credibility and that of our mentors, colleagues…"



"It can *waste the time of others*, trying to replicate false data or designing experiments based on false premises, and can lead to therapeutic errors. It can never be tolerated."

Professor Richard Hawkes

Department of Cell Biology and Anatomy, University of Calgary

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- **A short-cut to long-term consequences!**
- **Plagiarism is considered a *serious offense* by your institute, by journal editors, and by the scientific community.**
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"It is considered to be unethical…We have thrown out a paper when an author was caught doing this. I believe that the other journal did the same thing. "

James C. Hower

Editor, *the International Journal of Coal Geology*

- **Do not send your manuscript to a second journal UNTIL you receive the final decision of the first journal**

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Duplicate Publication

- **Two or more papers, without full cross reference, share the same hypotheses, data, discussion points, or conclusions**

- **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 does not preclude subsequent submission for publication, but full disclosure should be made at the time of submission.
  - Re-publication of a paper in another language is acceptable, provided that there is full and prominent disclosure of its original source at the time of submission.
  - At the time of submission, authors should disclose details of related papers, even if in a different language, and similar papers in press.
  - This includes translations

On literature searching:

"Many studies have reported that researchers are overwhelmed by the amount of material to review and feel that they do not find all the information on the topic for which they are searching … with one study finding that a third of physicians "felt they could not cope with the information flow" … only 10% of the researchers responding that they are very confident they are finding everything"

Information seeking behavior of academic scientists, Hemminger, B.M., D.Lu, K.T.L. Vaughan, and S.J. Adams, J. Am. Soc. Information Sc. and Tech., 58(14):2205-2225, 2007

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Search Methodology of Researchers

- "The search methodology of the researchers can be characterized by "trial and error." They have no planned search strategy, but start at random, experimenting both with the actual words and sources to use.
- … they never use manuals, etc., for instructions. The idea of contacting the library for help does not occur to them. They have little or no knowledge of the finer points of many information sources
- … researchers seldom use the library Web page as starting point … , and instead use bookmarks/shortcuts added by themselves …
- … researchers have difficulties in identifying correct search terms. Searches are often unsuccessful."

(Haglund and Olson, 2008)

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Practical Advice

- Find out what's Hot
  - http://info.scopus.com/topcited/
  - http://top25.sciencedirect.com/
- Find the trends of the subject area
  - Search tips (including alerts)
  - Journals, authors, publications per year (Scopus)
- Evaluate which journal is right for your article
  - Impact Factor
  - Subject Specific Impact Factor (http://tinyurl.com/scopusimpact)
  - SCImago Journal & Country Ranking (http://scimagojr.com/)
  - Journal Analyzer
  - *h*-Index
- Find out more about the journals
  - Who are the editors?
  - Guide for authors
  - Article of the future

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Use databases to find if your results are new and original

- "For many researchers, especially in the sciences, Google is the first choice for information-all kinds of information."
- "Some [researchers] even state having moved from subject specific databases to Google."

The impact on university libraries of changes in information behavior among academic researchers: a multiple case study, L. Haglund and P. Olson, J. Acad. Librarianship, 34(1):52-59, 2008

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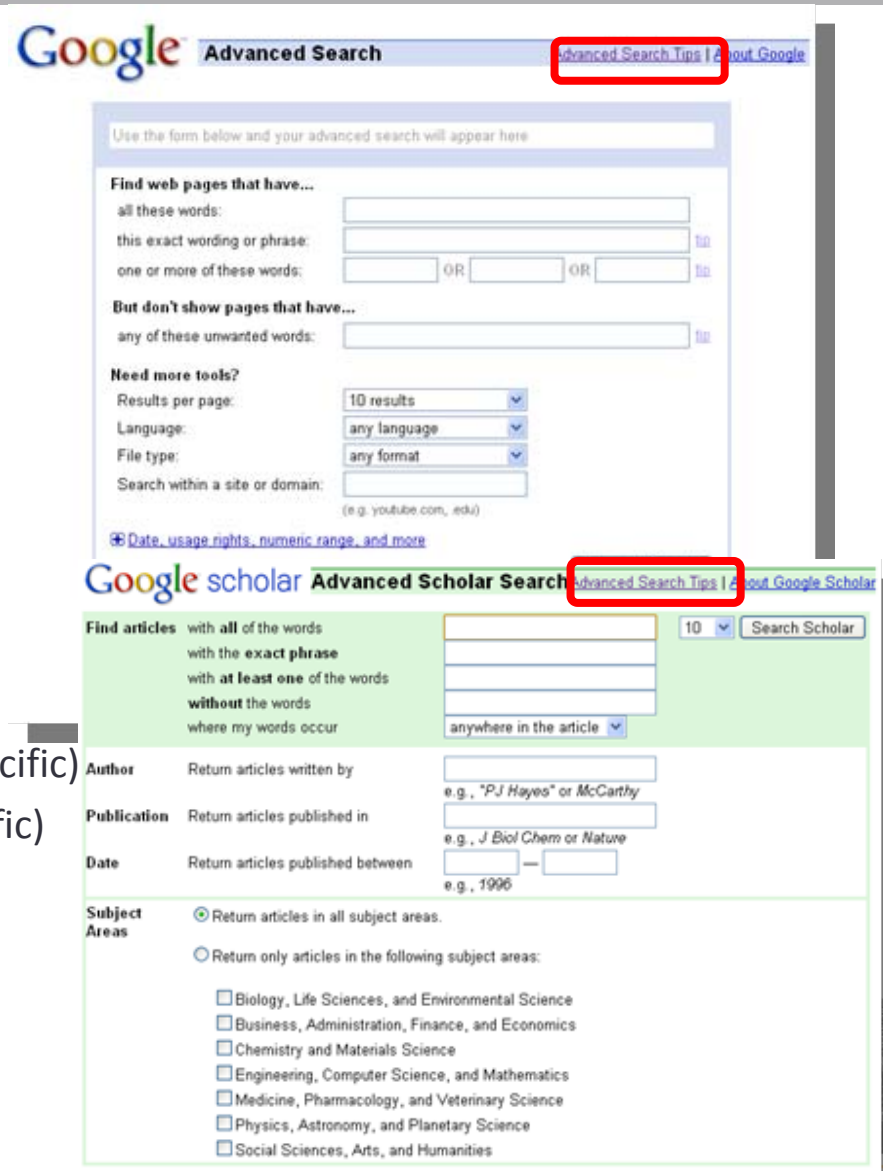
Use the advanced search options

- Within Google and Google Scholar use the advanced searches and check out the Search Tips.

- In ScienceDirect and Scopus, use proximity operators:
  - w/n ← Within - (non order specific)
  - pre/n ← Precedes - (order specific)

E.g. wind w/3 energy



Practical Advice Continued

- Find out what's Hot
  - http://info.scopus.com/topcited/
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- Find the trends of the subject area
  - Search tips (including alerts)
  - Journals, authors, publications per year
- Evaluate which journal is right for your article
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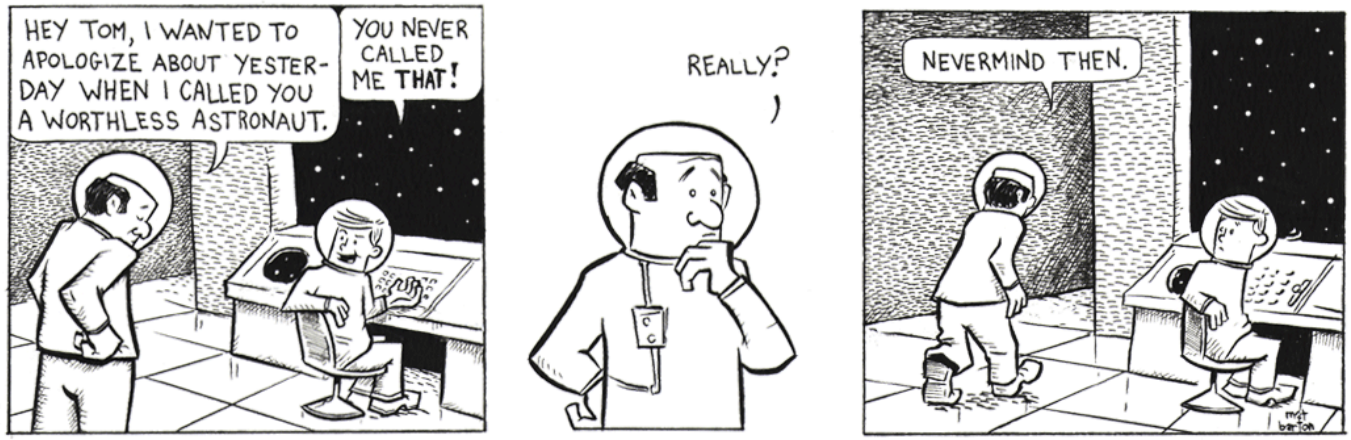
Your paper is worthless if no one reads, uses, or cites it



A research study is meaningful only if…

- it is clearly described, so
- someone else can use it in his/her studies
- it arouses other scientists' interest and
- allows others to reproduce the results.

By submitting a manuscript you are basically trying to sell your work to your community…

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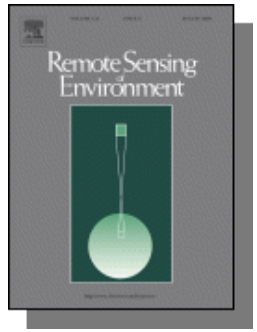
Journal publishers and editors want to bring down the number of uncited articles as much as possible



Editors now regularly analyze citations per article.

"The statistic that 27% of our papers were not cited in 5 years was disconcerting. It certainly indicates that it is important to maintain high standards when accepting papers... nothing would have been lost except the CV's of those authors would have been shorter…"

– Marv Bauer, Editor, *Remote Sensing of Environment*

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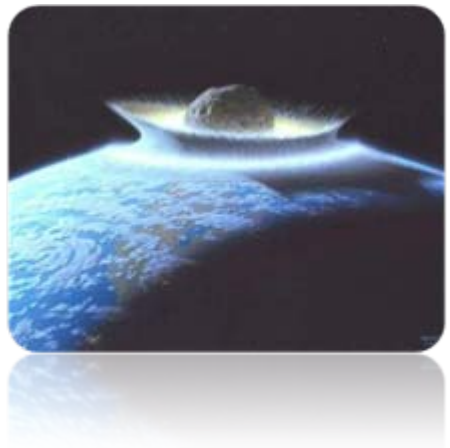
Is this a prestigious journal?

Impact Factor

[the average annual number of citations per article published]

- For example, the 2008 impact factor for a journal would be calculated as follows:
  - *A* = the number of times articles published in 2006 and 2007 were cited in indexed journals during 2008
  - *B* = the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2006 and 2007
  - 2008 impact factor = *A*/*B*
  - **e.g. 600 citations = 2**

    150 + 150 articles



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Also a prestigious journal publishes non cited articles

However, not all articles in high impact journals (e.g. about 20% im Nature, Impact Factor= 32.2) are cited!

3.	**South Africa doubles budget for medical research and AIDS.** Abstract + Refs View at Publisher	[No author name available]	1999 *Nature* 402 (6764), pp. 850	0
4.	**Top BSE official forced to step down in UK** Abstract + Refs View at Publisher	Dickson, D.	1999 *Nature* 402 (6764), pp. 849	0
5.	**Japan to bring in mandatory tests for GM foods** Abstract + Refs View at Publisher	Uozum, Y.	1999 *Nature* 402 (6764), pp. 846	0
6.	**Threat to research in Spanish universities [3]** Abstract + Refs View at Publisher	Vazquez-Boland, J.A.	1999 *Nature* 402 (6764), pp. 852	0
7.	**NSF under fire in survey of customer satisfaction** Abstract + Refs View at Publisher	Smaglik, P.	1999 *Nature* 402 (6764), pp. 846	0
8.	**Concern as Germany cuts funds to agricultural research centres** Abstract + Refs View at Publisher	Schlermeier, Q., Dalton, R., MacIlwain, C.	1999 *Nature* 402 (6764), pp. 845-846	0
9.	**Spain's universities split over merits of performance table** Abstract + Refs View at Publisher Full Text	Bosch, X.	1999 *Nature* 402 (6764), pp. 848	0
10.	**Geophysics union entices biologists with new section** Abstract + Refs View at Publisher	Dalton, R.	1999 *Nature* 402 (6764), pp. 847	0
11.	**Green light for neutrino beam to pass below the Alps** Abstract + Refs View at Publisher	Abbott, N.	1999 *Nature* 402 (6764), pp. 847	0
12.	**Scientists rally to defend schools against creationists** Abstract + Refs View at Publisher	Dalton, R.	1999 *Nature* 402 (6764), pp. 847-848	0
13.	**Suffering for one's science** Abstract + Refs View at Publisher	Whitfield, J.	1999 *Nature* 402 (6764), pp. 857	0
14.	**Latecomers welcome? [2]** Abstract + Refs View at Publisher	Davies, D.	1999 *Nature* 402 (6764), pp. 852	0
15.	**Dissection banned in Israeli schools** Abstract + Refs View at Publisher	Watzman, H.	1999 *Nature* 402 (6764), pp. 845	0
16.	**Erratum: Saccharomyces cerevisiae telomerase is an Sm small nuclear ribonucleoprotein particle (Nature (1999) 401 (177-180))** Abstract + Refs View at Publisher	Seto, A.C., Zaug, A.J., Sobel, S.G., Wolin, S.L., Cech, T.R.	1999 *Nature* 402 (6764), pp. 898	0

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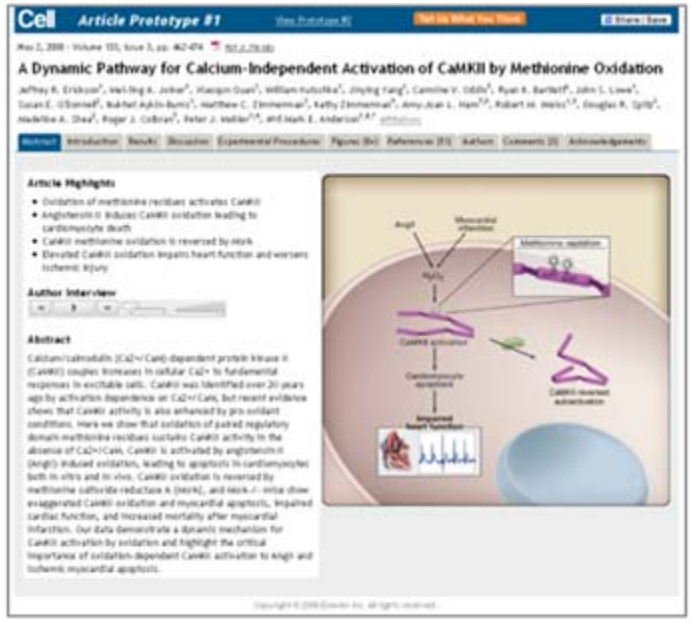

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  - Impact Factor
  - Subject Specific Impact Factor (http://tinyurl.com/scopusimpact)
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