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

From title to references
From submission to revision

Presented by:

Anthony Newman Elsevier, Amsterdam







Workshop Outline

How to get Published

- Before you begin
- Select your audience
- The article structure
- The review and editorial process

What not to do... (author ethics)



Elsevier Journal publishing volume

- 1,000 new editors per year
- 20 new journals per year
 - Organise editorial boards
 - Launch new specialist journals
 - 11 million articles now available
 - 11 million researchers
 - 5,000+ institutions
 - 180+ countries
 - 400 million+ downloads per year
 - 3 million print pages per year

600,000+ article submissions per year

Solicit and manage submissions

ELSEVIER

Production

200,000 reviewers

1 million reviewer reports per year

Manage peer review

40%-90% of articles rejected

Publish and disseminate

Archive and promote

Edit and prepare

- 7,000 editors
- 70,000 editorial board members
- 6.5 million author/publisher communications /year
- 280,000 new articles produced per year
- 190 years of back issues scanned, processed and data-tagged

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- Out of date work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 STRONG manuscript to present your contributions to the scientific community



What is a strong manuscript?

- Has a <u>novel</u>, <u>clear</u>, <u>useful</u>, and <u>exciting</u> message
- Presented and constructed in a <u>logical</u> manner
- Reviewers and editors can grasp the scientific significance <u>easily</u>

Editors and reviewers are all busy scientists – make things easy to save their time



Always keep in mind that ...

.... your paper is your passport to your community!



How To Get Your Article Published

Before you start



Refine your Search strategies

Too many researchers have abandoned all the value of libraries when they stopped going there physically!



Learn what online resources are available at your institute, and learn to search in a clever way.



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."
- "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."

(Haglund and Olson, 2008)

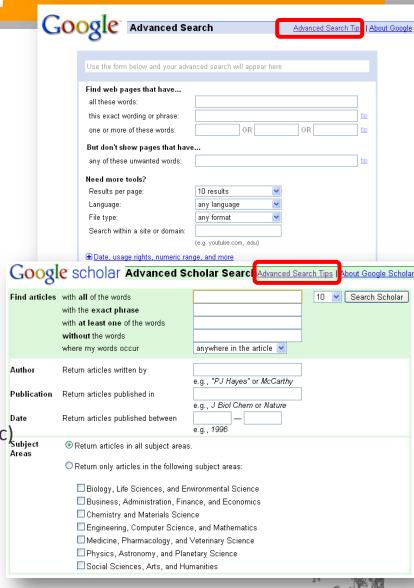




Use the advanced search options

- Within Google and Google Scholar use the advanced searches and check out the Search Tips.
- In ScienceDirect, Scopus, WoS/WoK and other databases use proximity operators:
 - W/n ← Within (non order specific) Subject

E.g. wind w/3 energy



Practical Advice

Find out what's Hot

- http://info.scopus.com/topcited/
- http://top25.sciencedirect.com/
- http://www.scitopics.com/

Find the trends of the subject area

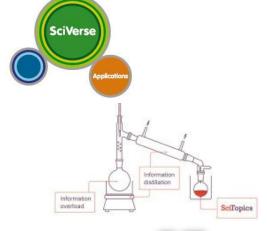
- Search tips (including alerts)
- Journals, authors, publications per year (Scopus)

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
- SNIP (using Scopus)
- h-Index

Find out more about the journals

- Who are the editors?
- Guide for authors

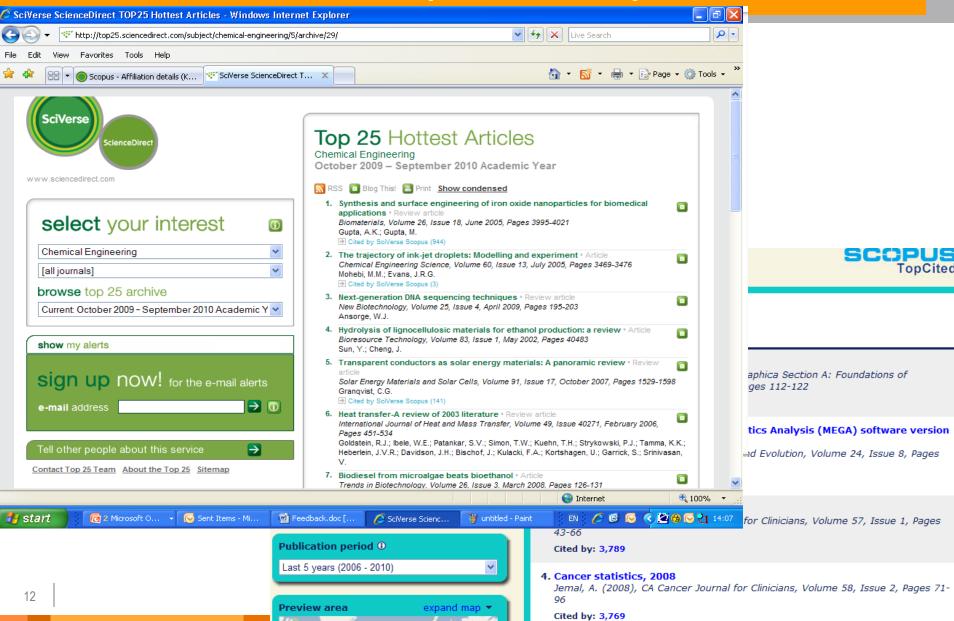








Find out what's Hot (downloads)



Hybrid

Find out what is being cited

Effects of buried charged groups on cysteine thiol ionization and reactivity in

Escherichia coli thioredoxin: Structural and functional characterization of mutants L.L., Slaby, I., Lindell, M., Cui, D.-S.,

Author Name

Kumar, T.K.S.

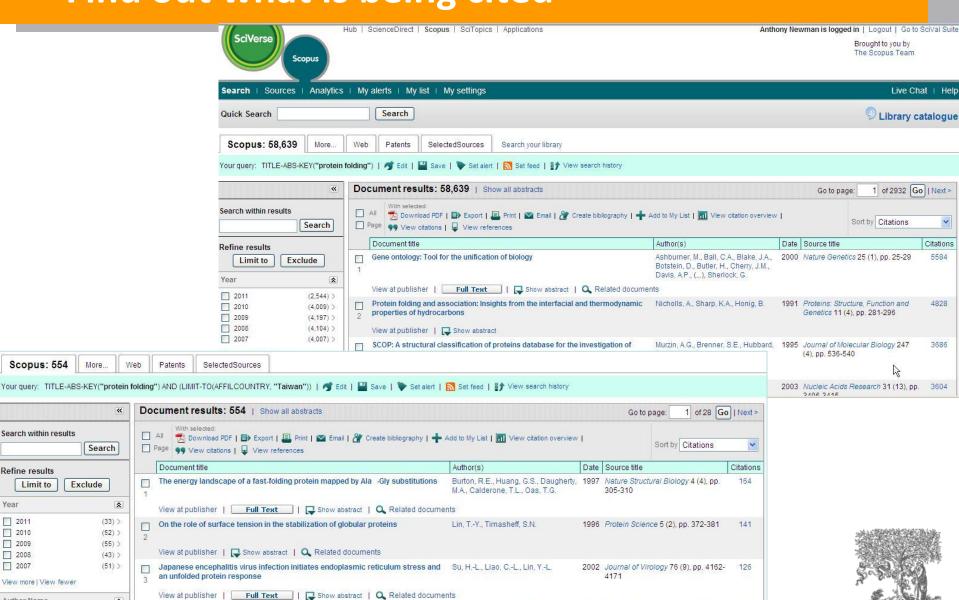
Yu, C.

*

of Asp 26 and Lys 57

(40) >

(28) >

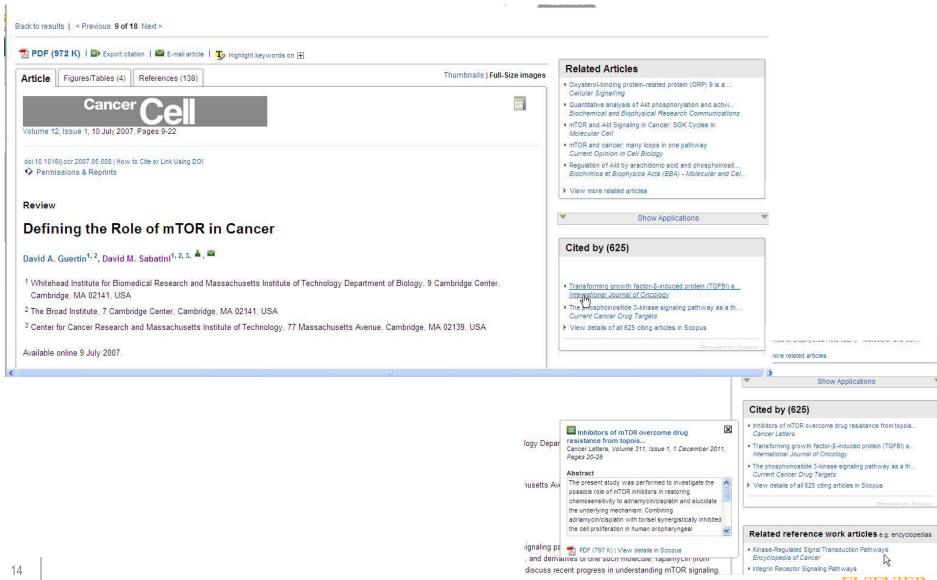


Dyson, H.J., Jeng, M.-F., Tennant,

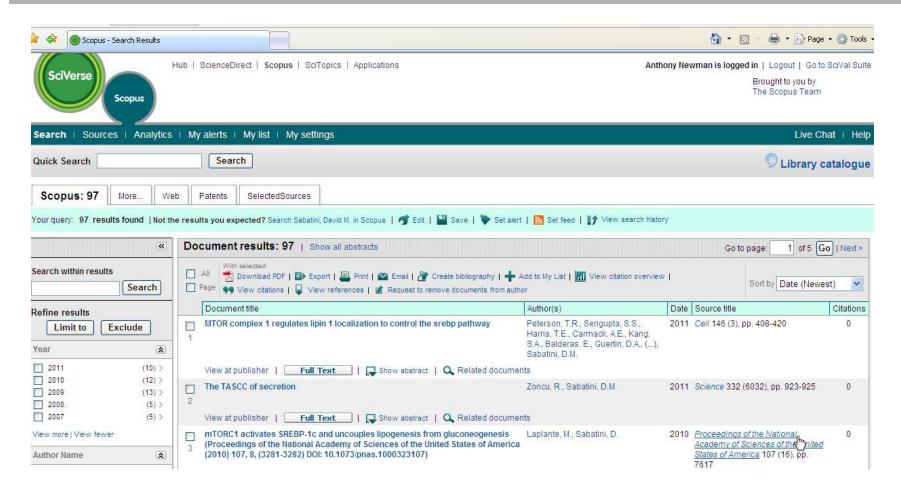
Kuprin, S., Holmgren, A.

1997 Biochemistry 36 (9), pp. 2622-2636

Find out who is being cited

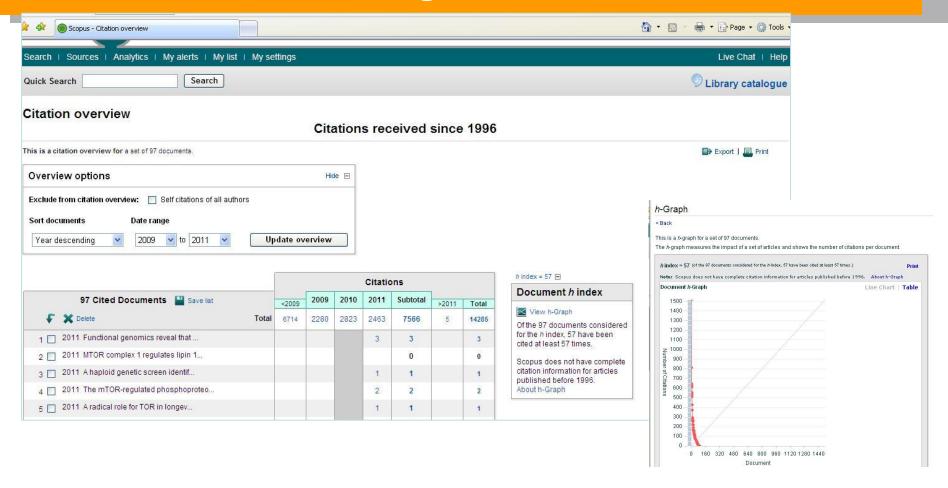


Find out who is being cited





Find out who is being cited





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 <u>all</u> answers are "<u>yes</u>", then start preparations for your manuscript





What type of manuscript?

- Full articles/Original articles;
- Letters/Rapid Communications/Short communications;
- Review papers/perspectives;
- Poster to present at conference special case

Self-evaluate your work: Is it sufficient for a full article? Or are your results so thrilling that they need to be shown as soon as possible?

Ask your supervisor and colleagues for advice on manuscript type. Sometimes outsiders see things more clearly than you.



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 journal's Impact Factor?
- DO NOT gamble by submitting your manuscript to more than one journal at a time.
 - International ethics standards prohibit multiple/simultaneous submissions, and editors DO find out! (Trust us, they DO!)

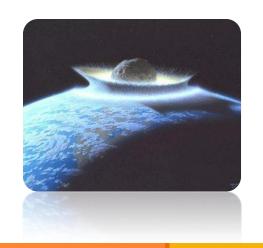


What is the Impact Factor (IF)?

Impact Factor

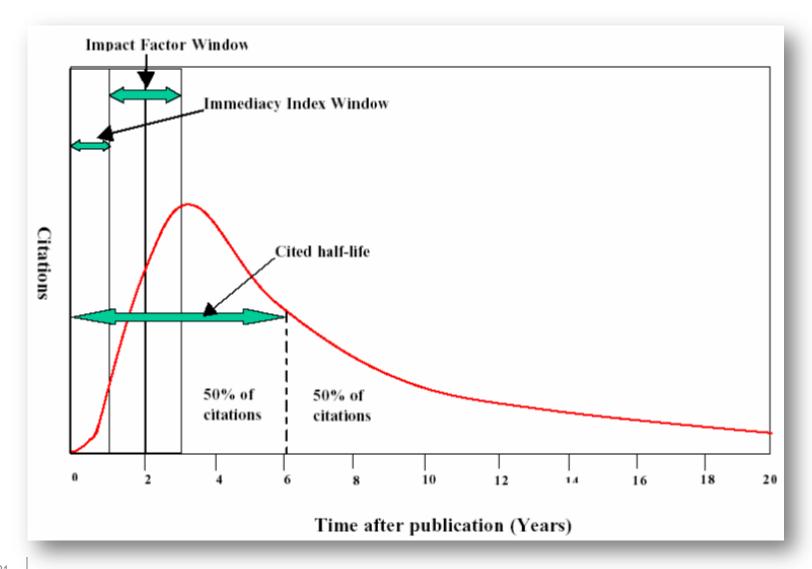
[the average annual number of citations per article published]

- 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. <u>600 citations</u> = 2
 150 + 150 articles



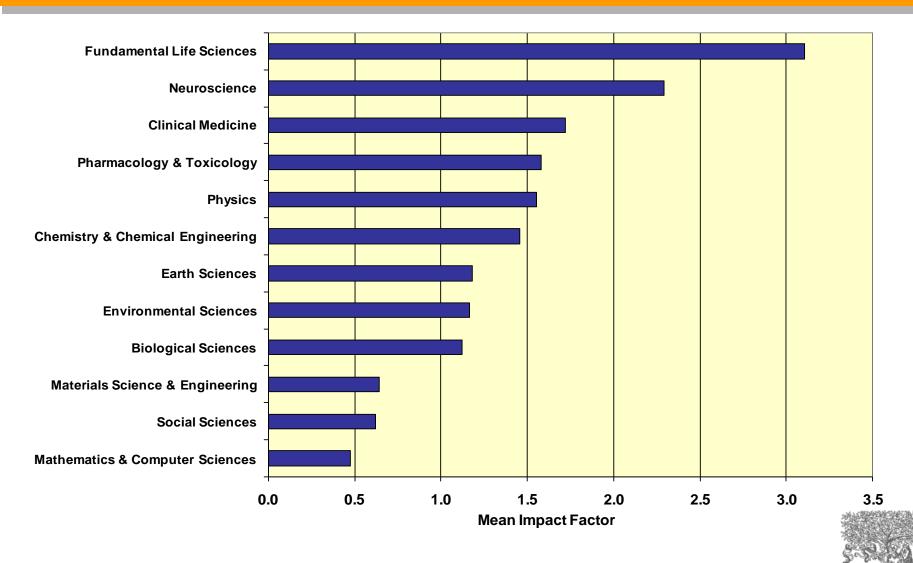


Impact Factor and other bibliometric parameters





Influences on Impact Factors: Subject Area



Identify the right audience for your paper

 Identify the sector of readership/community for which a paper is meant



- Identify the interest of your audience
- Is your paper of local or international interest



Biochemical

Pharmacology

Choose the right journal



- Aims and scope
- Accepted types of articles
- Readership
- Current hot topics
 - go through the abstracts of recent publications)



al information

emical nacology

ription nation

BIOCHEMICAL PHARMACOLOGY

Editor-in-Chief: S.J. Enna

See editorial board for all editors information

Sign up for the Pharmacology Newsletters Sign up here!

BCP Special Issues: Published and Future issues

January 2008: Addictions Special Issue Edited by David Weinshenker

Description

Biochemical Pharmacology is an international journal devoted to publishing original work on the interaction of drugs and nontherapeutic xenobiotics with biological systems. While particular emphasis is placed on reporting findings that relate to the actions and metabolism of drugs and toxic substances at the biochemical and molecular levels, submissions in the areas of behavioral and physiological pharmacology and toxicology are also encouraged if they describe studies directed at defining mechanisms of action. All areas of the field are represented in the journal including, but not limited to, cancer chemotherapy, neuropharmacology, inflammation/immunopharmacology, antimicrobials, behavioral, respiratory, gastrointestinal, cardiovascular, and endocrine pharmacology and toxicology. Submissions relating to either pharmacodynamics or pharmacokinetics are considered. Reports based on experiments conducted with mixtures, plant or animal extracts will not be considered for publication unless the chemical structures and concentrations of all substances are known. Submissions to the journal must be in English.

The journal publishes the following types of reports:

- (1) Full-length Research Papers. These contain the results of original research on an issue of relevance to the field of pharmacology.
- (2) Commentaries. These are commissioned articles that provide the author's view on a selected topic of

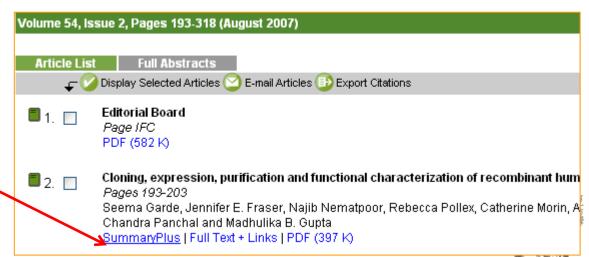
al-related nation

ort & contact

t Elsevier

t your view

SummaryPlus |



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



Read the 'Guide to Authors'- Again and again!

- Stick to the Guide for Authors in your manuscript, even in the first draft (text layout, nomenclature, figures & tables, references etc.).
 In the end it will save you time, and also the editor's.
- Editors (and reviewers) do not like wasting time on poorly prepared manuscripts. It is a sign of disrespect.



Related Publications Editorial Board □→ Login to Editorial System: Pharmaceutics Subject Advertisers Media Information Readers Order Journal B→ Access Full-Text ➡ Free Sample Issue ➡ Volume/Issue Alert ➡ Free Tables of contents and abstracts Authors Authors Home B Submit an Article Track Your Accepted Articles: Guide for Authors Artwork instructions Authors Rights Funding Bodies Compliance

Additional Information

General Structure of a Research Article

- Title
- Abstract
- Keywords

Main text (IMRAD)

- Introduction
- Methods
- Results
- And
- Discussions
- Conclusion
- Acknowledgement
- References
- Supplementary Data

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

Journal space is not unlimited.

Your reader's time is also scarce.

Make your article as concise as possible - more difficult than you imagine!.



Why Is Language Important?

Save your editor and reviewers the trouble of guessing what you mean

Complaint from an editor:

"[This] paper fell well below my threshold. I refuse to spend time <u>trying</u> to understand what the author is trying to say. Besides, I really want to send a message that they can't <u>submit garbage</u> 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 <u>I don't waste my time</u> carefully reading the rest."



Scientific Language – Overview

Write with clarity, objectivity, accuracy, and brevity.

- Key to successful scientific writing is to be alert for common errors:
 - Sentence construction
 - Incorrect tenses
 - Inaccurate grammar
 - Not using English

Check the <u>Guide for Authors</u> of the target journal for language specifications



Scientific Language – Sentences

- Write direct and <u>short</u> sentences
- One idea or piece of information per sentence is sufficient
- Avoid multiple statements in one sentence

An example of what **NOT** to do:

"If it is the case, intravenous administration should result in that emulsion has higher intravenous administration retention concentration, but which is not in accordance with the result, and therefore the more rational interpretation should be that SLN with mean diameter of 46nm is greatly different from emulsion with mean diameter of 65 nm in entering tumor, namely, it is probably difficult for emulsion to enter and exit from tumor blood vessel as freely as SLN, which may be caused by the fact that the tumor blood vessel aperture is smaller."

The process of writing – building the article





Authorship

- Policies regarding authorship can vary
- One example: the International Committee of Medical Journal Editors ("Vancouver Group") declared that an author must:
 - substantially contribute to conception and design, or acquisition of data, or analysis and interpretation of data;
 - draft the article or revise it critically for important intellectual content; and
 - 3. give their approval of the final full version to be published.
 - 4. <u>ALL three</u> conditions must be fulfilled to be an author!

All others would qualify as "Acknowledged Individuals"



Authorship - Order & Abuses

- General principles for who is listed first
 - First Author
 - Conducts and/or supervises the data generation and analysis and the proper presentation and interpretation of the results
 - Puts paper together and submits the paper to journal
 - Corresponding author
 - The first author or a senior author from the institution
 - Particularly when the first author is a PhD student or postdoc, and may move to another institution soon.
- Abuses to be avoided
 - Ghost Authors: leaving out authors who should be included
 - Gift Authors: including authors who did not contribute significantly



Acknowledged Individuals

Recognize those who helped in the research, but do not qualify as authors (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



Title

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

Effective titles

- Identify the main issue of the paper
- Begin with the subject of the paper
- Are accurate, unambiguous, specific, and complete
- Are as short as possible
 - Articles with short, catchy titles are often better cited
- Do not contain rarely-used abbreviations
- Attract readers Remember: readers are the potential authors who will cite your article



Title: Examples

| Original Title | Revised | Remarks |
|--|---|--|
| Preliminary observations on the effect of Zn element on anticorrosion of zinc plating layer | Effect of Zn on anticorrosion of zinc plating layer | Long title distracts readers. Remove all redundancies such as "observations on", "the nature of", etc. |
| Action of antibiotics on bacteria | Inhibition of growth of mycobacterium tuberculosis by streptomycin | Titles should be specific. Think to yourself: "How will I search for this piece of information?" when you design the title. |
| Fabrication of carbon/CdS coaxial nanofibers displaying optical and electrical properties via electrospinning carbon | Electrospinning of carbon/CdS coaxial nanofibers with optical and electrical properties | "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 |

Abstract

Tell readers what you did and the important findings

- One paragraph (between 50-300 words) often plus Highlight bullet points
- Advertisement for your article
- A clear abstract will strongly influence if your work is considered further

Graphite intercalation compounds (GICs) of composition $CxN(SO2CF3)2 \cdot \delta F$ are prepared under ambient conditions in 48% hydrofluoric acid, using K2MnF6 as an oxidizing reagent. The stage 2 GIC product structures are determined using powder XRD and modeled by fitting one dimensional electron density profiles.

A new digestion method followed by selective fluoride electrode elemental analyses allows the determination of free fluoride within products, and the compositional x and δ parameters are determined for reaction times from 0.25 500 h.

What has been done

What are the main findings

Keywords

In an "electronic world, keywords determine whether your article is found or not!



Avoid making them

- too general ("drug delivery", "mouse", "disease", etc.)
- too narrow (so that nobody will ever search for it)

Effective approach:

Look at the keywords of articles relevant to your manuscript Play with these keywords, and see whether they return relevant papers, neither too many nor too few

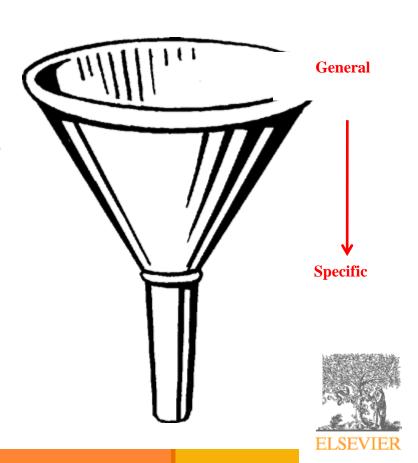


Introduction

The place to convince readers that you know why your work is relevant, also for them

Answer a series of questions:

- What is the problem?
- Are there any existing solutions?
- Which one is the best?
- What is its main limitation?
- What do you hope to achieve?



Pay attention to the following

- Before you present your new data, put them into perspective first
- Be brief, it is not a history lesson
- Do not mix introduction, results, discussion and conclusions. Keep them separate
- Do not overuse expressions such as "novel", "first time", "first ever", "paradigm shift", etc.
- **Cite only relevant references**
 - Otherwise the editor and the reviewer may think you don't have a clue where you are writing about



Methods / Experimental

- Include all important details so that the reader can repeat the work.
 - Details that were previously published can be omitted but a general summary of those experiments should be included
- Give vendor names (and addresses) of equipment etc. used
- All chemicals must be identified
 - Do not use proprietary, unidentifiable compounds without description
- Present proper control experiments
- Avoid adding comments and discussion.
- Write in the past tense
 - Most journals prefer the passive voice
- Consider use of Supplementary Materials
 - Documents, spreadsheets, audio, video,

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



Ethics Committee approval

- Experiments on humans or animals must follow applicable ethics standards
 - e.g. most recent version of the Helsinki Declaration and/or relevant (local, national, international) animal experimentation guidelines
- Approval of the local ethics committee is required, and should be specified in the manuscript
- Editors can make their own decisions as to whether the experiments were done in an ethically acceptable manner
 - Sometimes local ethics approvals are way below internationally accepted standards



Results – what have you found?

- The following should be included
 - the main findings
 - Thus not all findings
 - Findings from experiments described in the Methods section
 - Highlight findings that differ from findings in previous publications, and unexpected findings
 - Results of the statistical analysis

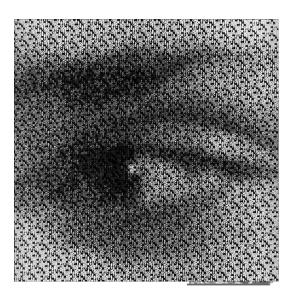


Results – Figures and tables

Illustrations are critical, because

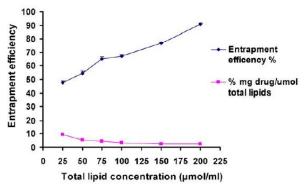
- Figures and tables are the most efficient way to present results
- Results are the driving force of the publication

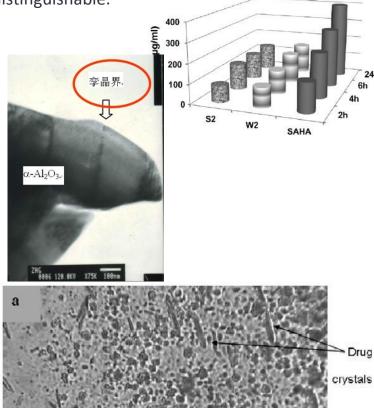
"One Picture is Worth a Thousand Words" Sue Hanauer (1968)



Results – Appearance counts!

- Un-crowded plots
 - 3 or 4 data sets per figure; well-selected scales; appropriate axis label size; symbols clear to read; data sets easily distinguishable.
- Each photograph must have a scale marker of professional quality in a corner.
- Text in photos / figures in English
 - > Not in French, German, Chinese, ...
- Use color ONLY when necessary.
 - If different line styles can clarify the meaning, then never use colors or other thrilling effects.
- Color must be visible and distinguishable when printed in black & white.
- Do not include long boring tables!





Discussion – what do 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

Check for the following:

- How do your results relate to the original question or objectives outlined in the Introduction section?
- Do you provide interpretation for each of your results presented?
- Are your results consistent with what other investigators have reported? Or are there any differences? Why?
- Are there any limitations?
- Does the discussion logically lead to your conclusion?

Do not

- Make statements that go beyond what the results can support
- Suddenly introduce new terms or ideas



Conclusions

- Present global and specific conclusions
- Indicate uses and extensions if appropriate
- Suggest future experiments and indicate whether they are underway
- Do not summarize the paper
 - The abstract is for that purpose
- Avoid judgments about impact



Avoid non-quantitative words, if possible

e.g. low/high, extremely, enormous, rapidly, dramatic, massive, considerably, exceedingly, major/minor, ...

Quantitative descriptions are always preferred



References: get them right!

- Please adhere to the Guide for Authors of the journal
- It is your responsibility, not of the Editor's, to format references correctly!
- Check
 - Referencing style of the journal
 - The spelling of author names, the year of publication
 - Punctuation use
 - Use of "et al.": "et al." translates to "and others",
- Avoid citing the following if possible:
 - Personal communications, unpublished observations, manuscripts not yet accepted for publication
 - Editors may ask for such documents for evaluation of the manuscripts
 - Articles published only in the local language, which are difficult for international readers to find



Supplementary Material

- Data of secondary importance for the main scientific thrust of the article
 - e.g. individual curves, when a representative curve or a mean curve is given in the article itself
- Or data that do not fit into the main body of the article
 - e.g. audio, video,
- Not part of the printed article
 - Will be available online with the published paper
- Must relate to, and support the article



Suggested length of a full article

- Not the same for all journals, even in the same field
- "...25- 30 pages is the ideal length for a submitted manuscript, including ESSENTIAL data only."
 - Title page
 - Abstract 1 paragraph
 - Introduction
 1.5-2 manuscript pages (double-spaced, 12pt)
 - Methods
 2-4 manuscript pages
 - Results & Discussion 10-12 manuscript pages
 - Conclusions
 1-2 manuscript pages
 - Figures 6-8
 - Tables 1-3
 - References 20-50
 - Letters or short communications usually have a stricter size limitation, e.g.
 3,000 words and no more than 5 figures/tables.



Abbreviations

- Abbreviations must be defined on the first use in both abstract and main text.
- Some journals even forbid the use of abbreviations in the abstract.
- Abbreviations that are firmly established in the field do not need to be defined, e.g. DNA.
- Never define an abbreviation of a term that is only used once.
- Avoid acronyms, if possible
 - Abbreviations that consist of the initial letters of a series of words
 - Can be typical "lab jargon", incomprehensible to outsiders



Cover Le

Professor H. D. Schmidt School of Science and Engineering Northeast State University College Park, MI 10000 USA

Your d

January 1, 2008

Final approval from all authors

Explanation of

importance of research

Submitt

Dear Professor Schmidt,

Mention to the join

Enclosed with this letter you will find en electronic submission of a manuentitled "Mechano-sorptive creep under compressive loading – a micrommodel" by John Smith and myself. This is an original paper which previously nor simultaneously in whole or in part been submitted hywhere else Both authors have read and approved the final version submitted.

Mechano-sorptive is sometimes denoted as accelerated creep. It has been experimentally observed that the creep of paper accelerates if it is subjected to a cyclic moisture content. This is of large practical importance for the paper industry. The present manuscript describes a micromechanical model on the fibre network level that is able to capture the experimentally observed behaviour. In particular, the difference between mechano-sorptive creep in tension and compression is analysed John Smith is a PhD-student who within a year will present his doctoral thesis. The present paper will be a part of that thesis.

Note <u>sp</u>
 conflicts

Three potential independent reviewers who have excellent expertise in the this paper are:

Dr. Fernandez, Tennessee Tech, email1@university.com

Dr. Chen, University of Maine, email2@university.com
Dr. Singh, Colorado School of Mines, email3@university.com

I would very much appreciate if you would consider the manuscript for publication in the International Journal of Science.

Suggested reviewers

ely yours,



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, based on the Guide to Authors.



Make every attempt to make your first submission a success

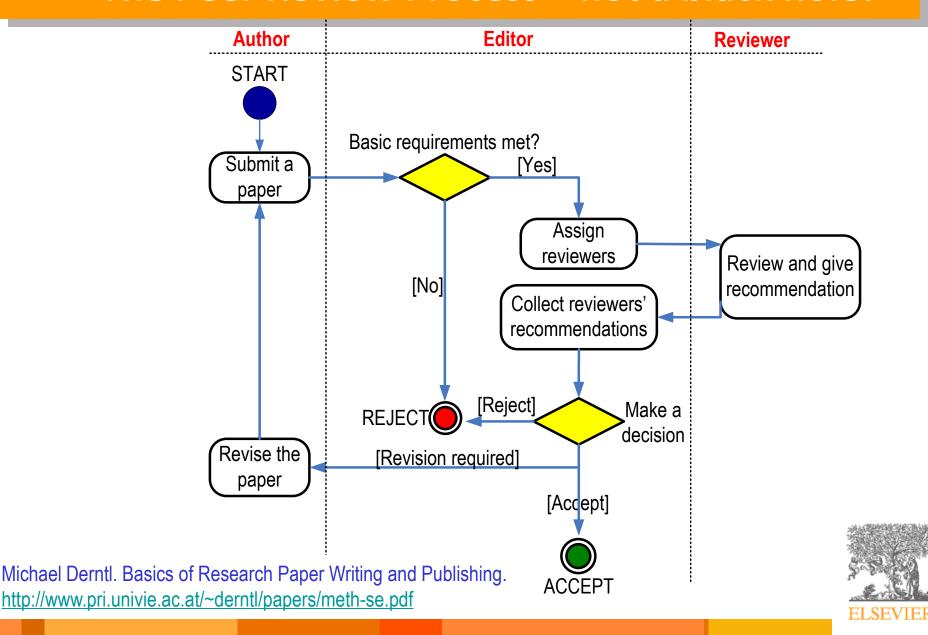
- No one gets it right the first time!
 - Write, and re-write

Suggestions

- After writing a first version, take several days of rest.
 Come back with a critical, fresh view
- Ask colleagues and supervisor to review your manuscript. Ask them to be highly critical, and be open to their suggestions.



The Peer Review Process – not a black hole!

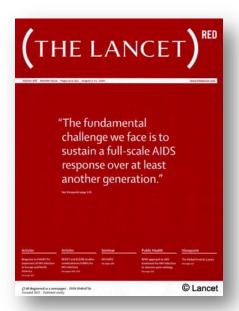


Initial Editorial Review

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.

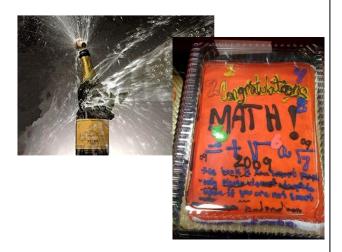




First Decision: "Accepted" or "Rejected"

Accepted

Very rare, but it happens



- Congratulations!
 - Cake for the department
 - Now wait for page proofs and then for your article to be online and in print

Rejected

- Probability 40-90% ...
- Do not despair
 - It happens to everybody
- Try to understand WHY
 - Consider reviewers' advice
 - Be self-critical
- If you submit to another journal, begin as if it were a new manuscript
 - Take advantage of the reviewers' comments
 - They may review your manuscript for the other journal too!
 - Read the Guide for Authors of the new journal, again and again.



First Decision: "Major" or "Minor" Revision

Minor revision

- Basically, the manuscript is worth to be published
- Some elements in the manuscript must be clarified, restructured, shortened (often) or expanded (rarely)
- Textual adaptations
- "Minor revision" does NOT guarantee acceptance after revision!

Major revision

- The manuscript may be worth to be published
- Significant deficiencies must be corrected before acceptance
- Involves (significant) textual modifications and/or additional experiments



Revision: a great learning opportunity!

- 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. Identify the 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.



Manuscript Revision

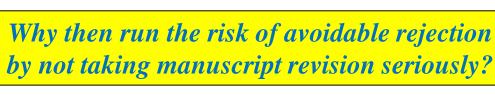
Prepare a detailed Response Letter

- Copy-paste <u>each</u> reviewer comment, and type your response below it
- State specifically which changes you have made to the manuscript
 - Include page/line numbers
 - No general statements like "Comment accepted, and Discussion changed accordingly."
- Provide a scientific response to comments to accept,
- or a convincing, solid and <u>polite</u> rebuttal when you feel the reviewer was wrong.
- Write in such a manner, that your response can be forwarded to the reviewer without prior editing

Do not do yourself a disfavour, but cherish your work

You spent weeks and months in the lab or the library to do the research

It took you weeks to write the manuscript





Rejection: not the end of the world

- Everyone has papers rejected do not take it personally.
- Try to understand why the paper was rejected.
- Note that you have received the benefit of the editors and reviewers' time; take their advice seriously!
- Re-evaluate your work and decide whether it is appropriate to submit the paper elsewhere.
- If so, begin as if you are going to write a new article.
 Read the Guide for Authors of the new journal, again and again.



Poster Presentations

- Title
- Abstract
- Keywords

Main text (IMRAD)

- Introduction
- Methods
- Results
- And
- Discussions
- Conclusion
- Acknowledgement
- References (minimal)

Clear, readable, well thought out. Stands out from the other posters as conference delegates walk past.

Poster space is very limited. Do NOT be tempted to reduce your typesize to get more text on the poster!

Make your poster as concise as possible - more difficult than you imagine!



Writing a Poster Abstract – the similarities

All of the above points for writing a paper still apply:

Tell readers what you did and the important findings

- One paragraph (often between 200-300 words) check!
- You must not just state your results but also why your work is important, and your interpretation of what the results imply.
- A clear abstract will strongly influence if your work is considered further, and if you will be invited to speak or present a poster.
- Presenting a poster is a great springboard in your research career.

Writing a Poster Abstract – the differences

Your abstract will be evaluated by the conference committee and, they will either accept it as a Poster presentation, a short Oral Presentation, or Reject it!

The drawback: Often you have not written the poster/article when you submit your abstract to the meeting!

- Use the structure above to gather your results, methods, etc.
- Write a brief outline of what your poster would contain
- Use this to make a clear, strong, abstract to submit.
- Keep your notes hopefully you will need them to make a poster shortly!

What NOT to do (Publishing Ethics)

When it comes to publishing ethics abuse, the much used phrase "Publish or Perish" has in reality become "Publish AND Perish"!





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.

M. Errami & H. Garner A tale of two citations Nature 451 (2008): 397-399



Plagiarism

- A short-cut to long-term consequences!
- Plagiarism is considered a serious offense by your institute, by journal editors, and by the scientific community.
- Plagiarism may result in academic charges, but will certainly cause rejection of your paper.
- Plagiarism will hurt your reputation in the scientific community.



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 <u>do not need to be repeated</u> 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 <u>full and prominent disclosure of its original source</u> 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



Plagiarism Detection Tools

- Elsevier is participating in 2 plagiarism detection schemes:
 - TurnItIn (aimed at universities)
 - IThenticate (aimed at publishers and corporations)



Manuscripts are checked against a database of 20 million peer reviewed articles which have been donated by 50+ publishers, including Elsevier.

All post-1994 Elsevier journal content is now included, and the pre-1995 is being steadily added week-by-week

- Editors and reviewers
- Your colleagues
- "Other" whistleblowers
 - "The walls have ears", it seems ...





Publication ethics – How it can end

"I deeply regret the inconvenience and agony caused to you by my mistake and request and beg for your pardon for the same. As such I am facing lot many difficulties in my personal life and request you not to initiate any further action against me.

I would like to request you that all the correspondence regarding my publications may please be sent to me directly so that I can reply them immediately. To avoid any further controversies, I have decided not to publish any of my work in future."

A "pharma" author December 2, 2008

ВВС **NEWS** EUROPE



Home | UK | Africa | Asia-Pac | Europe | Latin America | Mid-East | South Asia | US & Canada | Busines:

🖪 😉 🥰 🖾 🔒

24 February 2011 Last updated at 11:38 GMT

German minister loses doctorate after plagiarism row

Germany's defence minister has been stripped of his university doctorate after he was found to have copied large parts of his work from others.

Karl-Theodor zu Guttenberg, an aristocrat who lives in a Bayarian castle, admitted breaching standards but denied deliberately cheating.

Analysis revealed that more than half of his thesis had long sections lifted word-for-word from the work of others.



Mr Guttenberg failed to name sources for parts of his PhD thesis

So far the German Chancellor, Angela Merkel, has stood by the minister.

The University of Bayreuth decided that Mr Guttenberg had "violated scientific duties to a considerable extent".

It deplored the fact that he had lifted sections of text without attribution.

Last week Mr Guttenberg said he would temporarily give up his PhD title while the university investigated the charges of plagiarism. He admitted that he had made "serious mistakes".

His thesis - Constitution and Constitutional Treaty: Constitutional Developments in the US and EU - was completed in 2006 and published in 2009.

Chancellor Merkel insisted on Monday that she was standing by her defence minister, who was seen as something of a rising star in her conservative coalition

Related Stories

Germany's Baron without a title

Plagiarism row minister drops PhD

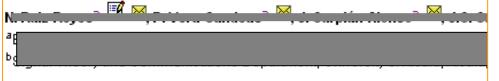
German minister denies plagiarism





doi:10.1016/j.sigpro.2005.07.019 ② Cite or Link Using DOI Copyright © 2005 Elsevier B.V. All rights reserved.

RETRACTED: Matching pursuit-based approach t



Available online 24 August 2005.

This article has been retracted at the request of the Editor-in-Chief and P http://www.elsevier.com/locate/withdrawalpolicy.

Reason: This article is virtually identical to the previously published article algorithm for SNR improvement in ultrasonic NDT", *Independent Nonde International*, volume 38 (2005) 453 – 458 authored by N. Toiz Toyoga.

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 sigmal-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 secent technique for decomposing a signal into an optimal superposition of elements in an overcomplete waveform dictionary. This technique and some other related techniques have been successfully applied to denoising ultrasonic signals og taminated with grain noise in highly scatteri materials [11,12], as an alternative to the W technique, the computational cost of algorithm being the main drawback

In this paper, we propose a used morning pursuit-based signal processin methods or improving SNR in ultrascal NDT of highly scattering materials, such a set and coet seates. Matching pusuit is used instead in BP to reduce the complexity. Desire its item to mature, the method is fast earligh to be real-time implemented. The performance of the proposed method has been evaluated us to both out puter simulation and exposite all rolls, i.e. when the input SNR NRin) is lower an 0dB (the level of echoel catter incorporateurs 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 $g_x[n]$ chosen from an over-complete dictionary. Let H be a Hilbert space. We define the over-complete dictionary as a family $D = \{g; i = 0, 1, ..., L\}$ of vectors in 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 persuit is an iterative algorithm that offers sub-optimal solutions for decomposing states betterms of expansion functions chosen from a discountry, where l' norm is used as the approximation metric because of its mathematical confinience. When a well-designed dictionery is used in contain pursuit, the non-linear enture of the algorithm leads to compact advisive that model?

In each set of the interior procedure, vector $g_i[n]$ which give the largest oner product with the analysed signal is cosen. The contribution of this vector then subtracted from the signal and the process is repeated on the residual. At the with iteration the bidue is

$$r^{m}[n]$$

$$\begin{cases}
x[a] + \alpha_{\text{div}(\hat{\mathbf{x}}) \mapsto \hat{\mathbf{x}}}[n], & m \neq 0, \\
\end{array}$$
(1)

where $\alpha_{(m)}$ is the weight associated to optimum atom $q_{(m)}[n]$ at the with iteration.

The weight q^{μ} associated to each atom $g_{\mu}[n] \in D$ at the with iteration is introduced to compute all the inner products with the residual $r^{\mu}[n]$:

$$a_i^m = \frac{(r^m[a], g_i[a])}{(g_i[a], g_i[a])} = \frac{(r^m[a], g_i[a])}{\|g_i[a]\|^2}$$

 $= \psi^m[a], g[a]).$ (2

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

$$g_{dm}[n] = \arg\min_{\mathbf{q} \in \mathcal{Q}} \|\mathbf{r}^{m+1}[\mathbf{q}]\|^2$$

 $= \arg\max_{\mathbf{q}} \|\mathbf{a}_i^m\|^2 = \arg\max_{\mathbf{q}} \|\mathbf{a}_i^m\|.$ (3)

The computation of correlations $(r^{\mu}[n], g_{\mu}[n])$ for all vectors $g_{\mu}[n]$ 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:

$$(r^{m+1}[n], g[n]) = (r^{m}[n], g_{i}[n]) - \alpha_{i(n)}(g_{j(n)}[n], g_{i}[n]).$$
 (4)

An article in which the authors committed plagiarism: it will not be removed from ScienceDirect. Everybody who downloads it will see the reason for the retraction...

Figure Manipulation

As long as they don't obscure or eliminate info present in the original image



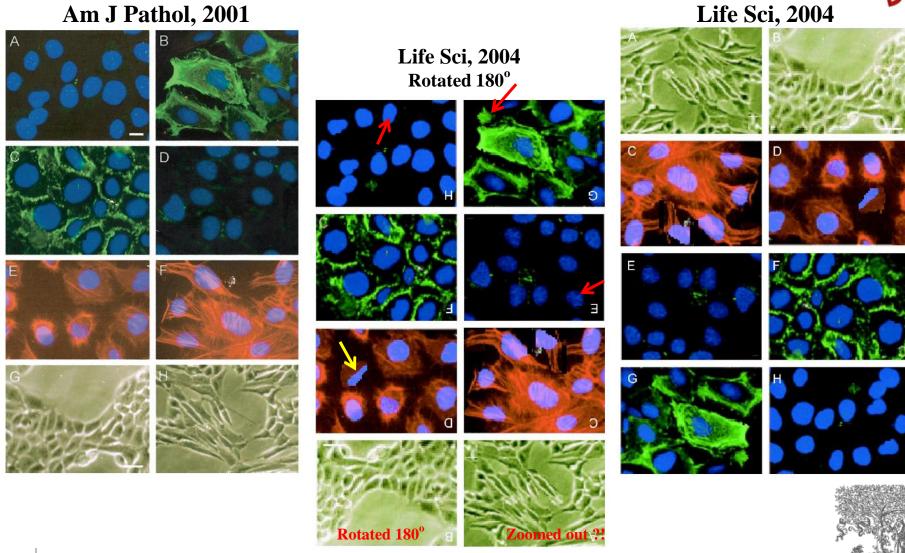
Must be disclosed in the figure legend

Enhanced
Obscured
Moved
Removed
Introduced



Figure Manipulation

Example - Different authors and reported experiments



Data fabrication and falsification

Fabrication: 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

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

G.C.Lichtenberg (1742-1799)



What leads to acceptance?

- Attention to details
- Check and double check your work
- Consider the reviewers' comments
- 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
- <u>E</u>thical rules must be obeyed

- Nigel John Cook Editor-in-Chief, *Ore Geology Reviews*



References and Acknowledgements

- Guide for Authors of Elsevier journals.
- http://owl.english.purdue.edu/owl/
- http://www.physics.ohio-state.edu/~wilkins/writing/index.html
- Petey Young. Writing and Presenting in English. The Rosetta Stone of Science. Elsevier 2006
- EDANZ Editing training materials. 2006
- Jullian Eastoe. Co-editor, Journal of Colloid and Interface Science
- Peter Thrower. Editor-in-chief, Carbon
- Roel Prins. Editor-in-chief, Journal of Catalysis
- Nigel Cook. Editor-in-chief, Ore Geology Reviews.
- Frans P. Nijkamp, Journal of Ethnopharmacology
- Wilfred CG Peh. Editor, Singapore Medical Journal
- Malcolm W. Kennedy. Professor, Institue of Biomedical and Life Sciences, University of Glasgow, UK



Questions?



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



Further reading for you

- Mark Ware Consulting Ltd, Publising and E-learning Consultancy. Scientific publishing in transition: an overview of current developments. Sept., 2006.
 - www.stm-assoc.org/storage/Scientific Publishing in Transition White Paper.pdf
- Ethical Guildlines for Journal Publishing, Elsevier.
 - http://www.elsevier.com/wps/find/intro.cws home/ethical guidelines#Duties%20of%20Authors
- International Committee of Medical Journal Editors. Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication. Feb. 2006
- http://www.publicationethics.org.uk/guidelines
- http://www.icmje.org/index.html#ethic
- http://www.onlineethics.org/
- http://owl.english.purdue.edu/owl/
- http://www.physics.ohio-state.edu/~wilkins/writing/index.html
- George D. Gopen, Judith A. Swan. The science of Scientific Writing. American Scientist (Nov-Dec 1990), Vol. 78, 550-558.
- Michael Derntl. Basics of Research Paper Writing and Publishing.
 http://www.pri.univie.ac.at/~derntl/papers/meth-se.pdf
- Thomas H Adair. Professor, Physiology & Biophysics Center of Excellence in Cardiovascular-Renal Research, University of Mississippi Medical Center. http://dor.umc.edu/ARCHIVES/WritingandpublishingaresearcharticleAdair.ppt
- Bruce Railsback. Professor, Department of Geology, University of Georgia. Some Comments on Ethical issues about research.
 www.gly.uga.edu/railsback/11111misc/ResearchEthics.html
- Peter Young. Writing and Presenting in English. The Rosetta Stone of Science. Elsevier 2006.
- Philip Campbell. Editor-in-Chief, Nature. Futures of scientific communication and outreach. June 2007.
- Yaoqi ZHOU. Recipe for a quality Scientific Paper: Fulfill Readers' and Reviewers' Expectations. http://sparks.informatics.iupui.edu
- EDANZ Editing training materials. 2006 http://www.edanzediting.com/english.html