# How to write great papers and get them accepted in good journals

From title to references

From submission to acceptance

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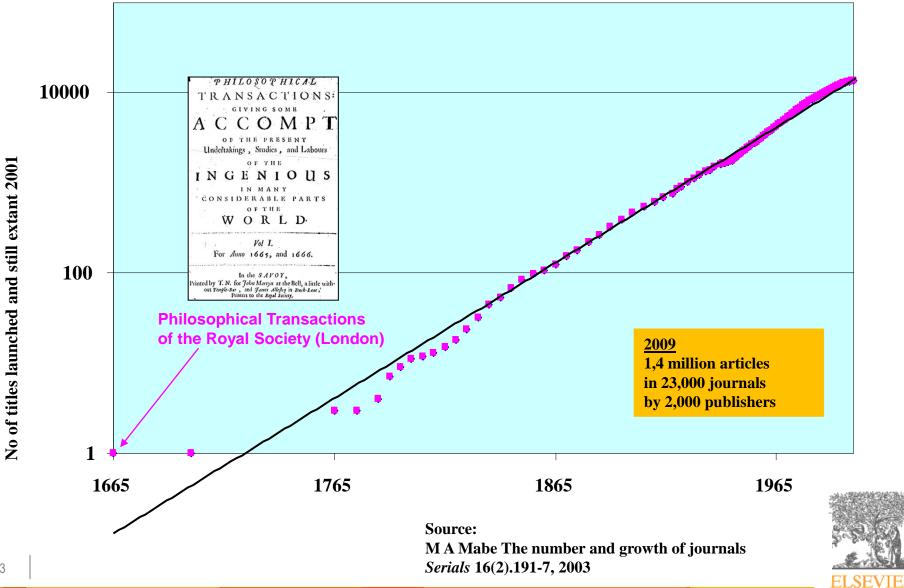
### **Workshop Outline**

### How to get Published

- Before you begin
- Select your audience
- The article structure
- The review and editorial process
- What not to do... (author ethics)



### Peer -Reviewed Journal Growth 1665-2001



# 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

200,000 reviewers

1 million reviewer reports per year

Manage peer review

40%-90% of articles rejected

Publish and disseminate

Archive and promote

Production

ELSEVIER

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



### Trends in publishing

Rapid conversion from "print" to "electronic"

• 1997: print only

2009: 55% e-only (mostly e-collections)

25% print only

20% print-plus-electronic

2013: 95+% electronic access

- Changing role of "journals" due to e-access
- Increased usage of articles
  - at lower cost per article
- Electronic submission
  - Increased manuscript inflow
- Experimentation with new publishing models
  - E.g. "author pays" models (open access), "delayed open access" (open archiving), etc.



# Elsevier open access journal portfolio includes:

### Some of the latest additions Full Gold:

- Applied & Translational Genomics
- Cell Reports
- FEBS Open Bio
- Gynecologic Oncology Case Reports
- International Journal for Parasitology: Drugs and Drug resistance
- International Journal of Surgery Case Reports
- Medical Mycology Case Reports
- Metabolic Engineering Communications
- Physics of the Dark Universe
- Redox Biology
- Results in Immunology
- Results in Pharma Sciences
- Results in Physics
- Trials in Vaccinology
  - And over 1200 journals have an OA option (Gold)
  - Delayed OA (Over 70 journals: e.g. Cell)
  - Green OA (Pre Print)



# Your personal reason for publishing



 However, editors, reviewers, and the research community don't consider these reasons when assessing your work.



# Always keep in mind that ...

.... your published papers, as a permanent record of your research,

are your passport to





# 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



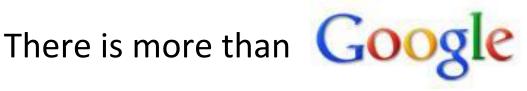
# **How To Get Your Article Published**

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.

Haglund and Olson, 2008:

... researchers have difficulties in identifying correct search terms. Searches are often unsuccessful."



### **Practical Advice - Information**

### Find out what's Hot

- http://info.scopus.com/topcited/
- http://top25.sciencedirect.com/
- Almetrics Application



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



- Impact Factor
- Journal Analyzer (Scopus)
- SNIP & SJR (<u>www.journalmetrics.com</u>)
- h-Index



- Who are the editors?
- Guide for authors

### IF & SNIP & SJR





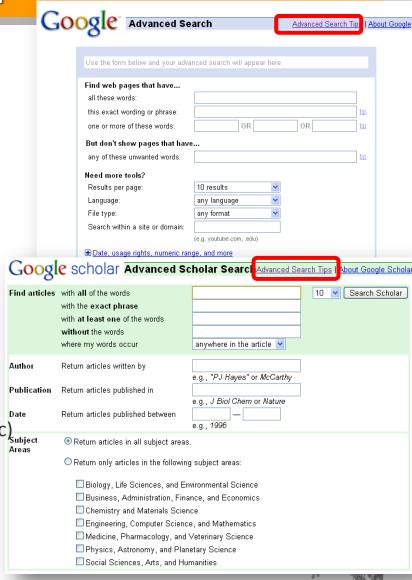




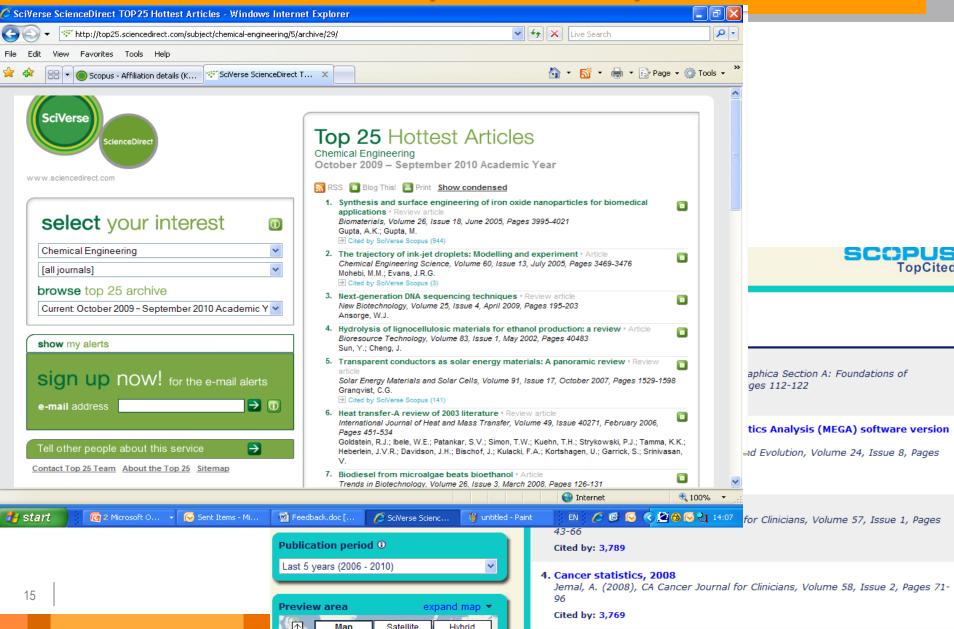
### Use the advanced search options

- 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



# Find out what's Hot (downloads)



# Find out what is being cited

an unfolded protein response

of Asp 26 and Lys 57

View at publisher | Full Text | Show abstract | Q Related documents

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

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

View more | View fewer

\*

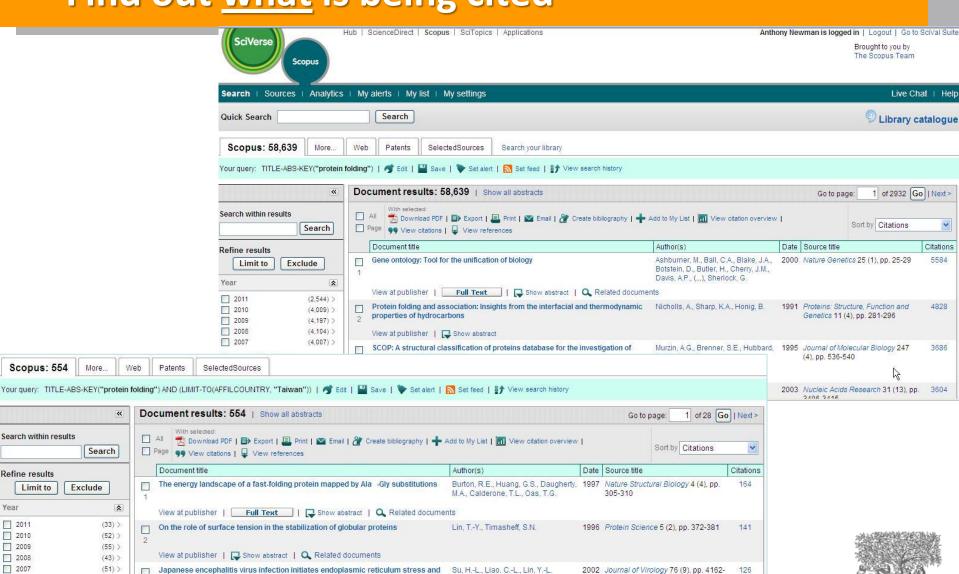
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Author Name

Kumar, T.K.S.

Yu, C.

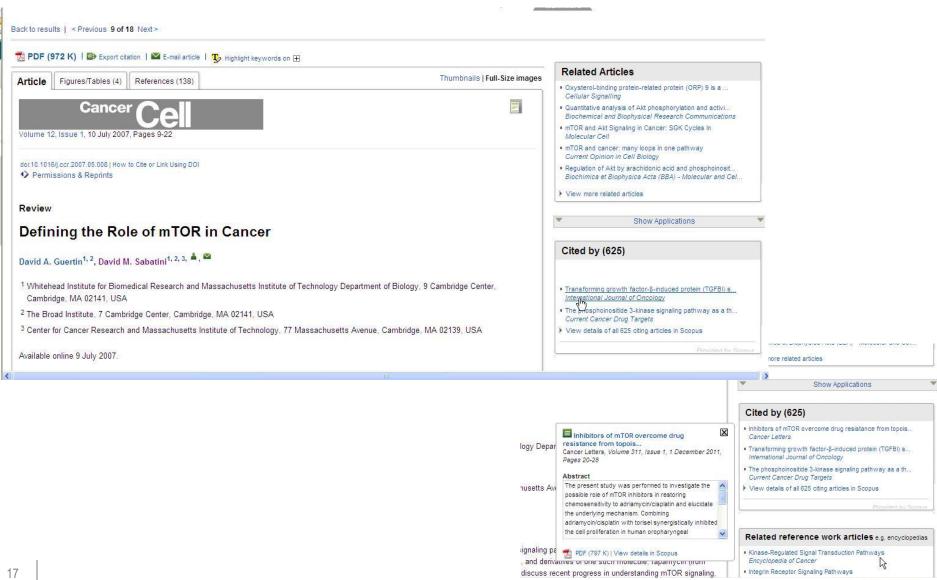


Dyson, H.J., Jeng, M.-F., Tennant,

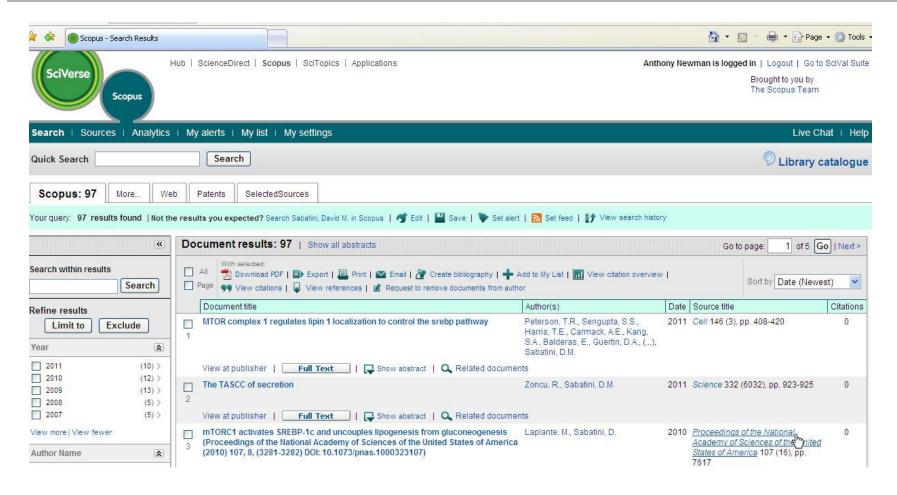
Kuprin, S., Holmgren, A.

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

# Find out who is being cited

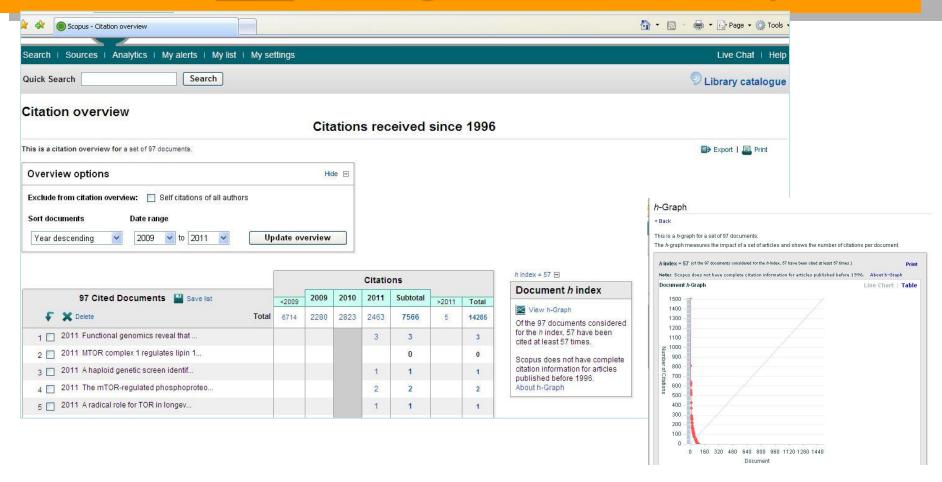


# Find out who is being cited





# Find out who is being cited – in more depth





### 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;

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 to the right level?
  - Who is this journal's audience?
  - What is the journal's Impact Factor?
  - Does it really exist or is dubious? (Beall's List of Predatory Open Access Publishers)
- 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!)



# **Choose the right journal**



Do not just "descend the stairs"

**Top journals** 

Nature, Science, Lancet, NEJM, .....



Field-specific top journals



Other field-specific journals



**National journals** 



# 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



ucts

### nacology al information

### ription nation

### al-related

nation

### ort & contact

t Elsevier

t your view

### 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

### **Investigate all candidate** journals to find out

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

SummaryPlus |



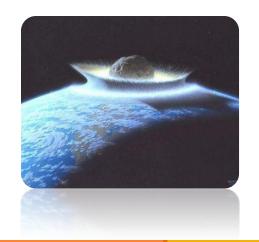


# What is the Impact Factor (IF)?

### **Impact Factor**

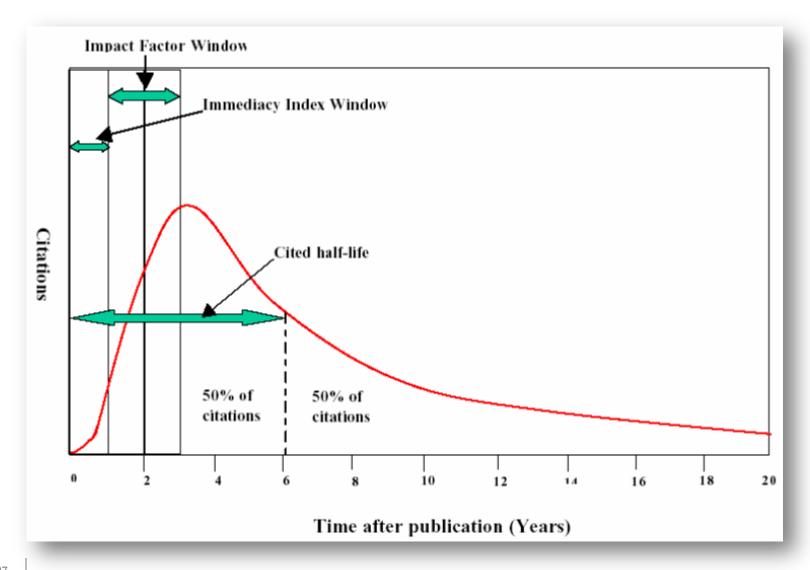
[the average annual number of citations per article published]

- For example, the 2011 impact factor for a journal is calculated as follows:
  - A = the number of times articles published in 2009 and 2010 were cited in indexed journals during 2011
  - B = the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2009 and 2010
  - 2011 impact factor = A/B
  - e.g. <u>600 citations</u> = 2.000
     150 + 150 articles



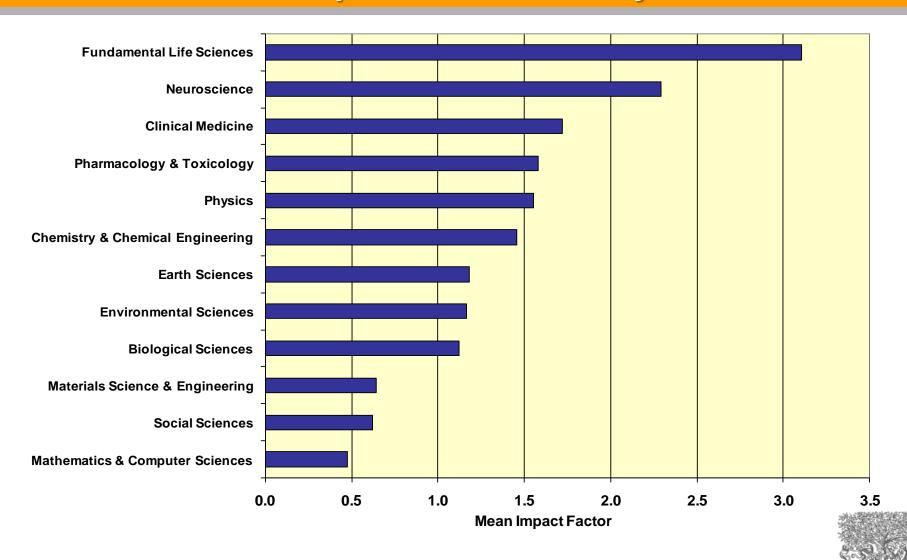


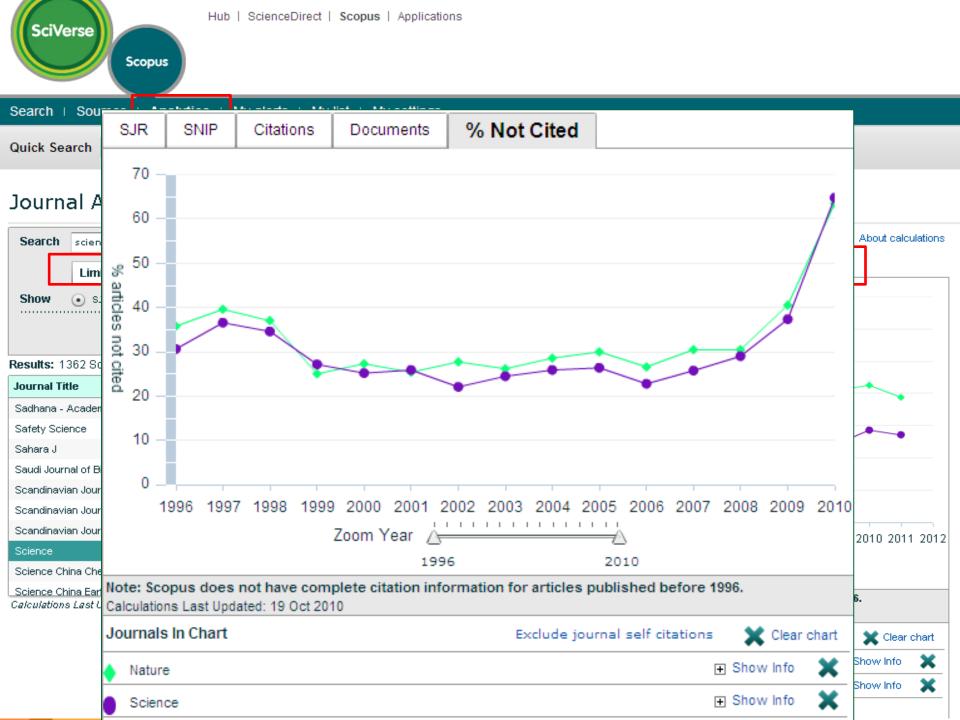
# Impact Factor and other bibliometric parameters





# Influences on Impact Factors: Subject Area





# Your Journals list for this manuscript

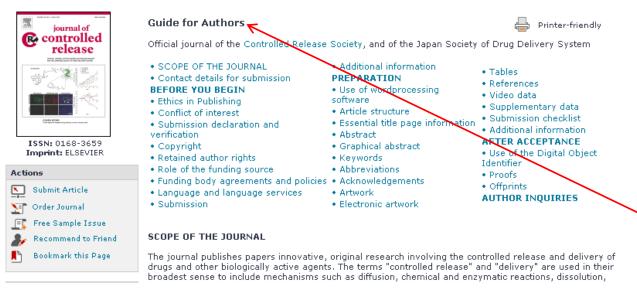
So you now have a sequence list of candidate journals for your manuscript?

Write your draft as if you are going to submit to the first on your list. Use its Guide to Authors from this point onwards.



### 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

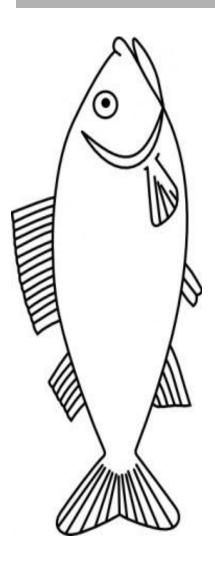
### An international editor says...

### "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



### **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 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 Authorship: leaving out authors who should be included
- Gift Authorship: 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



# **Author names: common problems**

### Different Spellings

- Järvinen / Jarvinen
- Lueßen / Luessen
- van Harten / Vanharten / Van
- First/Last Names
  - Asian names often difficult for Europeans or Americans
- What in case of marriage/divorce?

#### Be consistent!

If you are not, how can others be?



### **Author Profiles...be consistent!**



VS.



- Group of files/data
- Associated with one name
- "Computed"

Soon: ORCID (≡ SCOPUS ID)

- Unique
- Associated with one person
- "Asserted"



### **ORCID: Author Profile 2.0**



Connecting Research and Researchers

- Open
- Researcher &
- Contributor

ID

### The Challenge:

- The scholarly record is broken
- Name ambiguity is an issue

#### The Solution:

• Establish a researcher identifier registry (partnership between Univs, Publishers, funding bodies...)!

#### The Benefits:

- Current authors can claim already published work
- New authors can establish unique identifier

ORCID Launches Registry October 16, 2012

ORCID (Open Researcher and Contributor ID) is excited to announce the launch of its Registry (http://orcid.org), where researchers can distinguish themselves by creating a unique personal identifier.

"ORCID addresses a problem shared by individuals and organizations across the research community: reliably connecting Launche Garc 6th Octoberaur 20k recutive Director of...

Read more >



### **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 <u>short, catchy titles</u> 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

# 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



### **Abstract**

# Tell readers what you did and the important findings

- One paragraph (between 50-250 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  $\delta$  parameters are determined for reaction times from 0.25 500 h.

What has been done

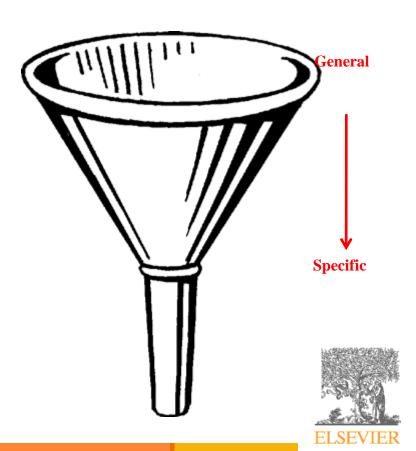
What are the main findings

### 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 <u>not</u> 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, some the active.
- 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



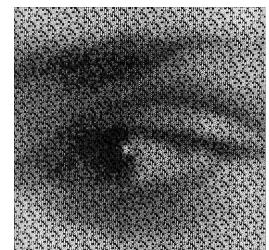


# Results – Figures and tables

### Illustrations are critical, because

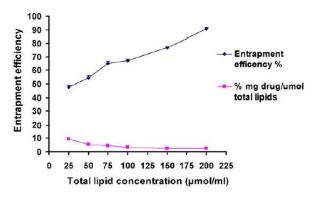
- Figures and tables are the most efficient way to present results
- Results are the driving force of the publication
- Captions and legends must be detailed enough to make figures and tables self-explanatory
- No duplication of results described in text or other illustrations

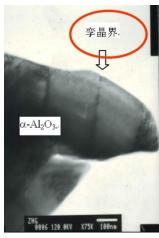
"One Picture is Worth a Thousand Words" Sue Hanauer (1968)

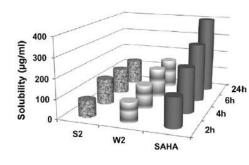


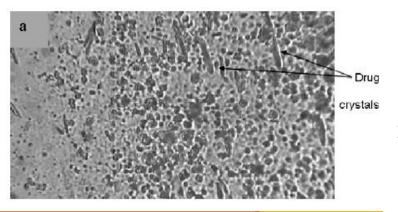
# **Results – Appearance counts!**

- 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, Korean, ...
- 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 <u>rejected</u> 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

#### Avoid e.g.

- low/high
- extreme
- enormous
- rapid/slow
- dramatic,
- massive
- considerable
- exceedingly
- major/minor
- hot/cool

# Quantitative descriptions are <u>always</u> preferred



# References: get them right!

- Please adhere to the Guide for Authors of the journal
- It is <u>your</u> 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



### References – changes are coming with some journals



There was a Pilot Project called **Your Paper Your Way**, started with the journal Free Radical Biology & Medicine in 2012.

This was a new service designed to save authors time during the submission process. "Simply submit your paper in the way you want to submit it. Don't worry about references

or formatting - our editors and reviewers will assess the paper on its content". During revision, your paper has to be put into final format for reader ease and conformity of layout. So only papers that are likely to be accepted have to have final formatting, saving authors hours of time.

This pilot project was enlarged to 45 journals in late 2012, and is now being rolled out to the vast majority of Elsevier journals (around 1200 or so) in summer 2013!

But as not all publishers and journals have this service — check first! The Guide to Authors is always your first "Go To" place for information.

# **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



# Typical 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)
  - Methods2-4 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 do not allow 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

Submitt

Dear Professor Schmidt,

Mention to the jo Enclosed with this letter you will find en electronic submission of a manual entitled "Mechano-sorptive creep under compressive loading - a microme model" by John Smith and myself. This is an original paper which previously nor simultaneously in whole or in part been submitted 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, th 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 sp conflicts

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

**Explanation of** importance of research

- 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.



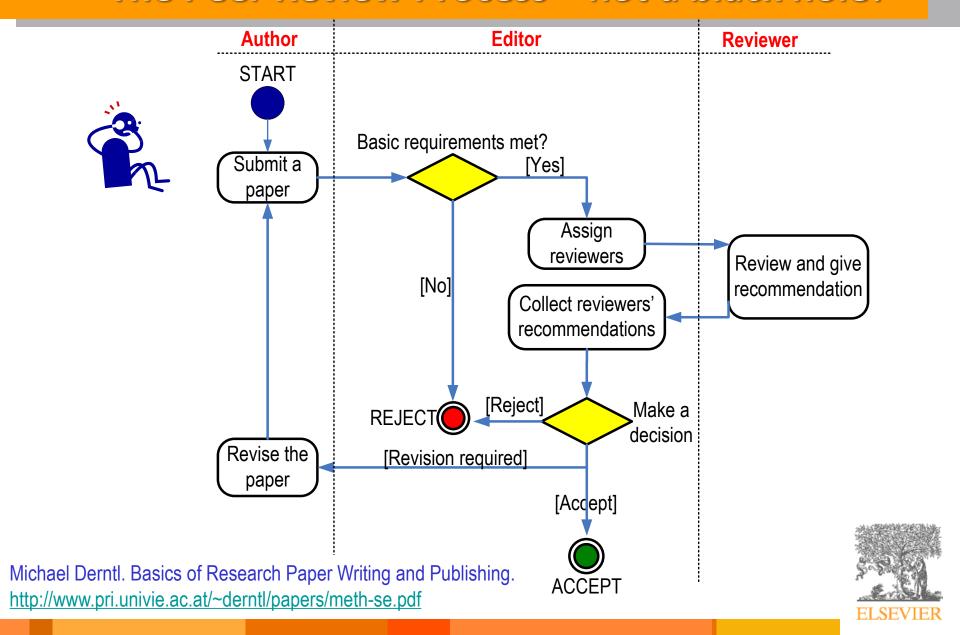
# Do everything to make your submission a success

- 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.
  - Make changes to incorporate comments and suggestions. Get all co-authors to approve version to submit.

Then it is the point in time to submit your article!



### 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.

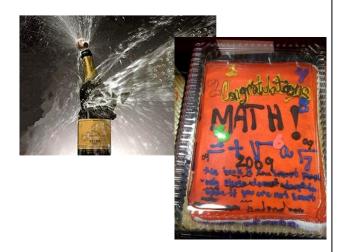




# First Decision: "Accepted" or "Rejected"

### **Accepted**

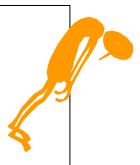
Very rare, but it happens



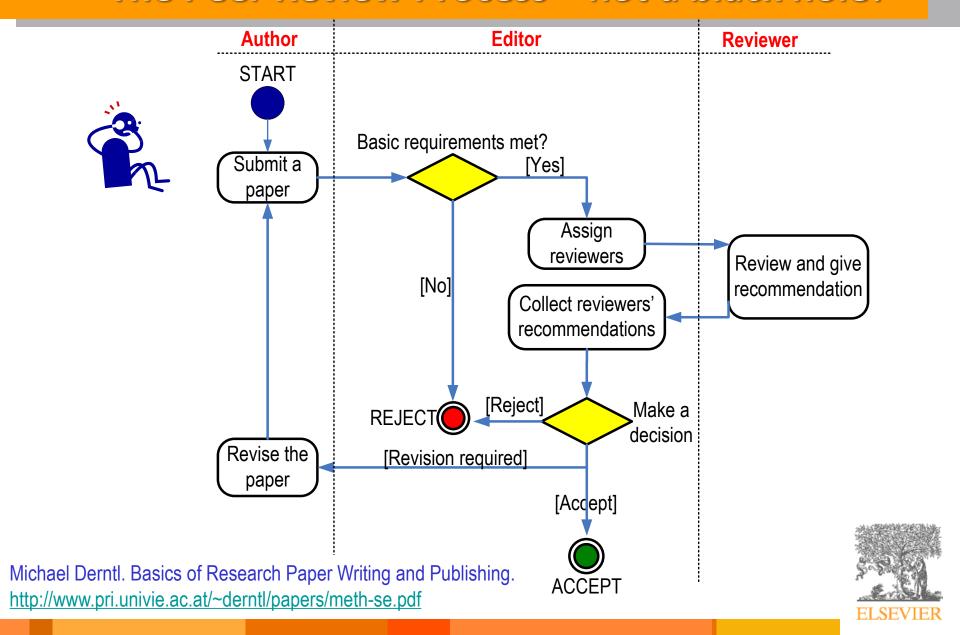
- Congratulations!
  - Cake for the department
  - Now wait for page proofs and then for your article to be online and in print

### 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.



### The Peer Review Process – not a black hole!



# First Decision: "Major" or "Minor" Revision

### Major revision

- The manuscript may finally be published in the journal
- Significant deficiencies must be corrected before acceptance
- Usually involves (significant) textual modifications and/or additional experiments

#### Minor revision

- Basically, the manuscript is worth being 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!



# **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......



.....Why then run the risk of avoidable rejection by not taking manuscript revision seriously?

# Rejection: not the end of the world

- Everyone has papers rejected do not take it personally.
- You are allowed to get angry for a few minutes. Then move on!
- Try to understand why the paper was rejected and what you need to do to improve it.
- As you have received the benefit of the editor's and reviewers' time, take their advice seriously and use it!
- Re-evaluate your work and decide whether it is appropriate to submit the paper elsewhere – perhaps to the next journal on your 'candidate journals' list.
- Be persistent!





# Increasing the likelihood of acceptance

#### All these various steps are not difficult

You have to be consistent.

You have to check and recheck before submitting.

Make sure you tell a logical, clear, story about your findings.

Especially, take note of referees' comments. They improve your paper.

This should increase the likelihood of your paper being accepted, and being in the 30% (accepted) not the 70% (rejected) group!



# 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* 



# 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"!





# **Ethics Issues in Publishing**

#### Scientific misconduct

Falsification of results

#### **Publication misconduct**

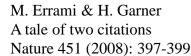
- Plagiarism
  - Different forms / severities
  - The paper must be original to the authors
- Duplicate publication
- Duplicate submission
- Appropriate acknowledgement of prior research and researchers
- Appropriate identification of all co-authors
- Conflict of interest



#### 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.





#### 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)



#### Data fabrication and falsification

#### Falsification:

- Manipulation of research materials, equipment, processes
- Changes in / omission of data or results such that the research is not accurately represented in the research record

#### "Select data to fit a preconceived hypothesis:

- We do not include (data from) an experiment because 'it did not work', or
- We show 'representative' images that do not reflect the total data set, or
- We simply shelve data that do not fit."

Richard Hawkes



#### Data Fabrication & Falsification - often go hand in hand

A Massive Case Of Fraud Chemical & Engineering News February 18, 2008

Journal editors are left reeling as publishers move to rid their archives of scientist's falsified research William G. Schulz

A CHEMIST IN INDIA has been found guilty of plagiarizing and/or falsifying more than 70 research papers published in a wide variety of Western scientific journals between 2004 and 2007, according to documents from his university, copies of which were obtained by C&EN. Some journal editors left reeling by the incident say it is one of the most spectacular and outrageous cases of scientific fraud they have ever seen. ...

#### Plagiarism and fake publications of

Anwar Tumur (University of Xinjiang, Urumqi, People's. from the Swiss Federal Commission for Scholarships ft Switzerland from July 2003 to July 2004. From July to Octol in Fribourg (Switzerland) and then worked as visiting scie Ecology (University of Bern, Switzerland) from October 200 had free access to our infrastructure and contributed to a smammals (rodents) in set aside areas under my supervisic (November 2003 to May 2004) A. Tumur did field work (2 collected was barely sufficient for a publication. He wrote depth to correct the poor English and weed out many flaw China, he asked me whether I would agree to have this repot the text would not be modified. Anwar Tumur only sent

#### $rac{identical\ to}{study\ was}$ Plagiarism and fake publications of Anwar Tumur

copy of the Anwar Tumur (University of Xinjiang, Urumqi, People's Republic of China) received a is included on the same July 2003 to July 2004. From July to October 2003 he attended a French course in Fribourg Incidentally Switzerland) from October 2003 to July 2004. During this time, he had free access to our infrast supervision (J.-P. Airoldi). During 7 months (November 2003 to May 2004) A. Tumur did fie report, which had to be edited in depth to correct the poor English and weed out many flaws agreed, assuming that the text would not be modified. Anwar Tumur only sent me the abstract, The study was published in Acta Theriologica Sinica (25: 254-260, 2005). Anwar never sent me All the information gathered by Anwar Tumur during his stay in Switzerland is included in the abo Incidentally we detected quite recently 5 other publications which were never authorized by me published or unpublished results of our scientific work, but they also contain data which are comauthorship. This is completely unacceptable since the publication of fake data will damage my sci I would not agree to co-author a publication based on data already published elsewhere or which to the editors and reviewers. Anwar Tumur intentionally misled and fooled the scientific comm published with our agreement, and we examined it in more details. To our astonishment, we reali:

The incriminated publications:

#### Chinese scientists dismissed after 70 suspect papers

[BEIJING] Two Chinese university lecturers have been dismissed after 70 papers they published in an international journal were revoked because of alleged

Hua Zhong and Ta University in south the papers in 2001 "Although the Chinese government declares zero tolerance on academic fraud, in practice, few researchers are seriously punished for their misconduct. Universities tend to cover for those offenders with high academic status for fear of their power and the reputation of the school" said Fang

Chinese scientists dismissed after 70 suspect papers [SciDev.Net - 01/13/2010]

"A researcher is rewarded and promoted largely based on the number of published papers, which poses dangerous incentives for researchers to commit fraud" he said



### **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 ...





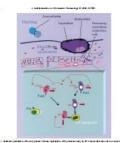
# Publication ethics – Self-plagiarism

#### 2003

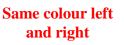








#### 2004

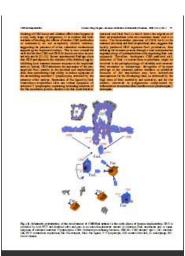


Same text









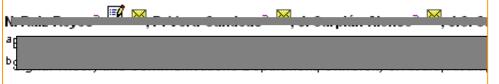






doi:10.1016/j.sigpro.2005.07.019 ② Cite or Link Using DOI Copyright © 2005 Elsevier B.V. All rights reserved.

#### RETRACTED: Matching pursuit-based approach



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. Tolo Tologo,

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 cold morning pursuit-based signal processin men relation improving SNR in ultrasor. NDT of highly scattering materials, such a set and coen setts. Matching pusuit is used instead of BP to reduce the complexity. Desire its itema a nature, the method is fast earligh to be real-time implemented. The performance of the proposed method has been evaluated as to both computer simulation and experience of the proposed method has been evaluated as to both computer simulation and experience of the set when the input SNR NRin) is lower and 0dB (the level of echecic catter in increasurements is above the level of the echecs).

#### 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  $\|g\| = 1$ .

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 states in terms of expansion functions chosen from a disconstry, where  $l^i$  norm is used as the approximation metric because of its mathematical confusioner. When a well-designed dictionery is used in containing 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  $g_i^{ij}$  the largest over product with the analysed signal is cosen. The contribution of this vector when subtracted from the signal and the process is repeated on the residual. At the with iteration the bidue is

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

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

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

The weight  $q^{\mu}$  associated to each atom  $g_{\nu}[n] \in D$ 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[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:

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

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

#### Publication ethics – How it can end .....





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 Bavarian 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



# Figure Manipulation – <u>some</u> things are allowed

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



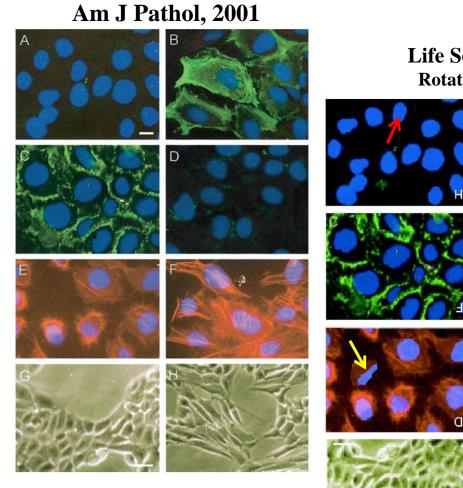
Must be disclosed in the figure legend

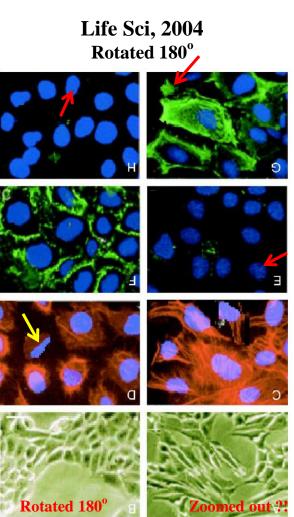
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Obscured
Moved
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Introduced

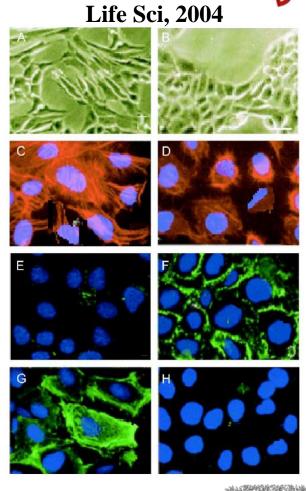


### **Figure Manipulation**

#### **Example - Different authors and reported experiments**







### 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



# Further reading for you

- Mark Ware Consulting Ltd, Publising and E-learning Consultancy. Scientific publishing in transition: an overview of current developments. Sept., 2006. <a href="https://www.stm-assoc.org/storage/Scientific Publishing in Transition White Paper.pdf">www.stm-assoc.org/storage/Scientific Publishing in Transition White Paper.pdf</a>
- Ethical Guildlines for Journal Publishing, Elsevier.
   <a href="http://www.elsevier.com/wps/find/intro.cws">http://www.elsevier.com/wps/find/intro.cws</a> 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.
   <a href="http://www.pri.univie.ac.at/~derntl/papers/meth-se.pdf">http://www.pri.univie.ac.at/~derntl/papers/meth-se.pdf</a>
- Thomas H Adair. Professor, Physiology & Biophysics Center of Excellence in Cardiovascular-Renal Research, University of Mississippi Medical Center. <a href="http://dor.umc.edu/ARCHIVES/WritingandpublishingaresearcharticleAdair.ppt">http://dor.umc.edu/ARCHIVES/WritingandpublishingaresearcharticleAdair.ppt</a>
- 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.
- http://scholarlyoa.com/2012/12/06/bealls-list-of-predatory-publishers-2013/
- http://www.youtube.com/watch?v=kges3mN5rDk&feature=youtube\_gdata\_player
- Yaoqi ZHOU. Recipe for a quality Scientific Paper: Fulfill Readers' and Reviewers' Expectations. <a href="http://sparks.informatics">http://sparks.informatics</a>
- EDANZ Editing training materials. 2006 <a href="http://liwenbianji.com">http://www.edanzediting.com/english.html</a>
- Anthony Newman, Ethics White Paper <a href="http://www.ifcc.org/media/161822/IFCC%20Ethics%20in%20Science.pdf">http://www.ifcc.org/media/161822/IFCC%20Ethics%20in%20Science.pdf</a>

# **Questions?**



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

