How to Write a World-Class Paper

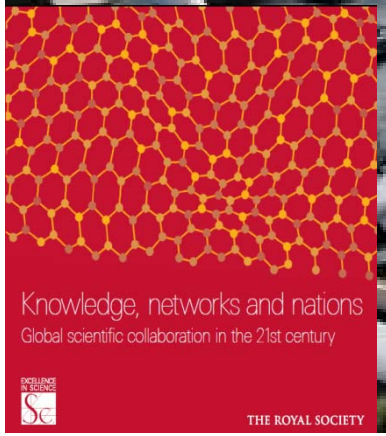
….and get it successfully published

Tsinghua University
November 2011

Clare Lehane
Executive Publisher,
Energy and Planetary journals, Elsevier,
Oxford, UK c.lehane@elsevier.com

Each year

- 3 million articles submitted
- 1.5 million articles published
- 30 million readers
- 2 billion digital article downloads
- 30 million article citations

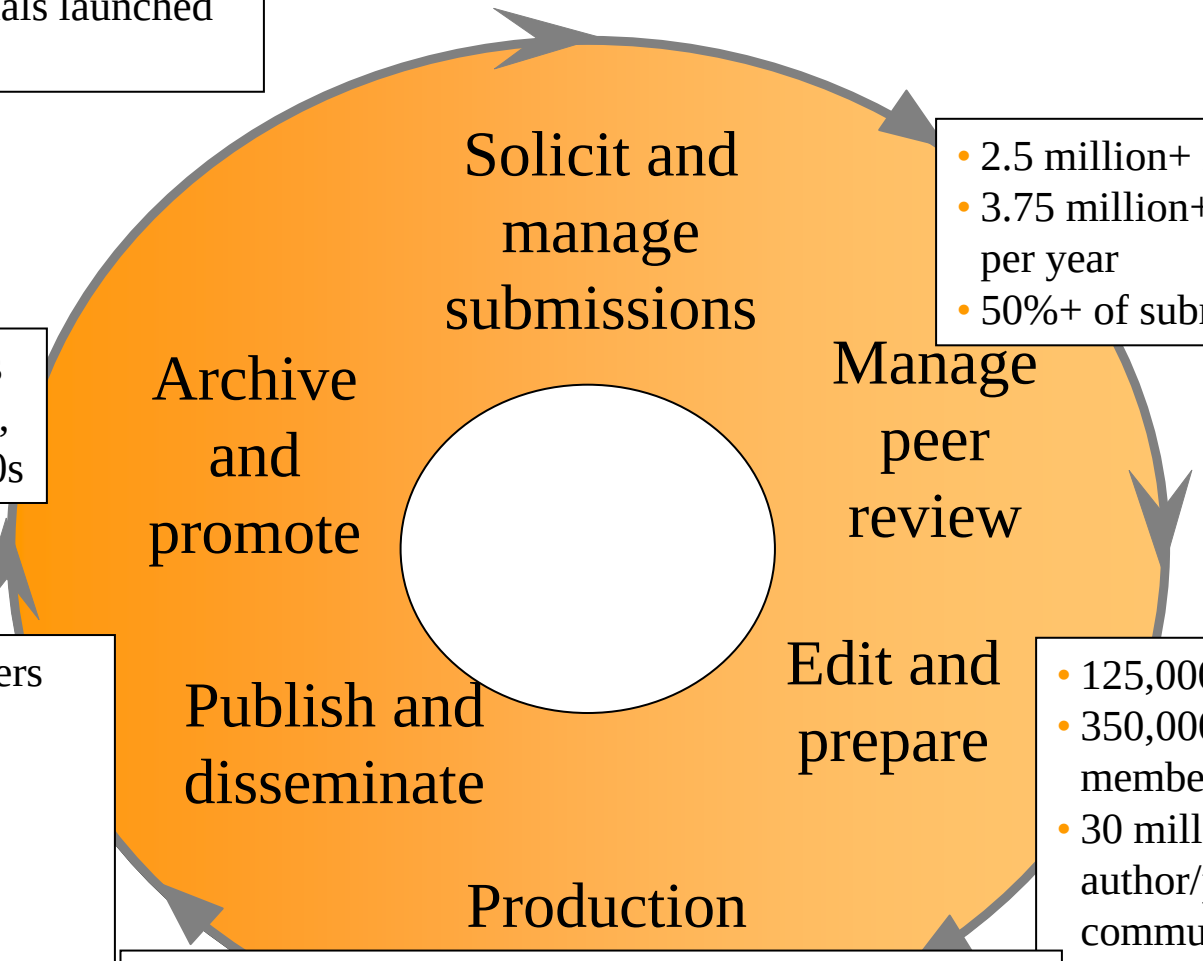


Source: Knowledge Networks and Nations:
Royal Society 2011
http://royalsociety.org/uploadedFiles/Royal_Society_Content/Influencing_Policy/Reports/2011-03-28-Knowledge-networks-nations.pdf

Publishing landscape

- 5,000 new editors per year
- 500 new journals launched per year

- 3 million+ article submissions per year



- 2.5 million+ referees
- 3.75 million+ referee reports per year
- 50%+ of submissions rejected

- 40 million articles available digitally, back to early 1800s

- 12 million researchers
- 4,500+ institutions
- 180+ countries
- 1 billion+ downloads/year
- 10 million+ printed pages/year

- 125,000 editors
- 350,000 editorial board members
- 30 million+ author/publisher communications per year

- 1.5 million new articles produced per year
- 350 years of back issues scanned, processed and data-tagged

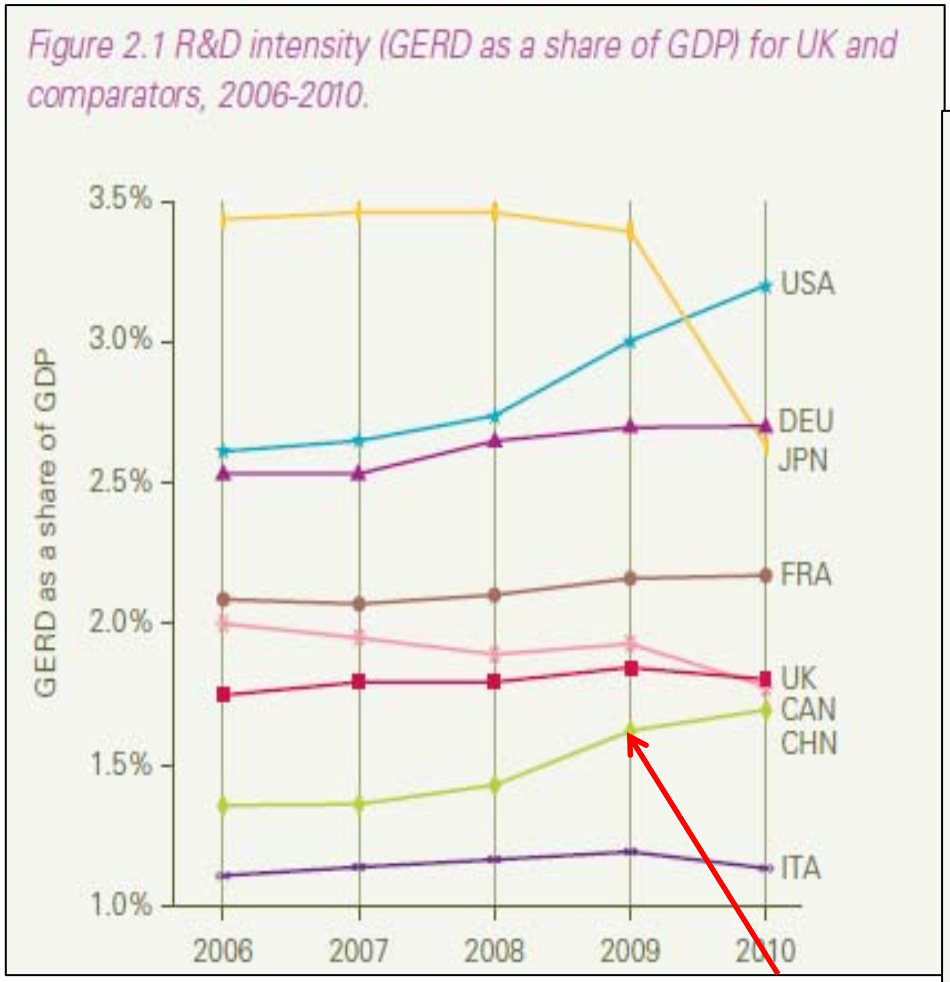
Note: industry estimates based on known numbers for a subset of the industry that are then scaled to 100% based on the article share of the known subset.

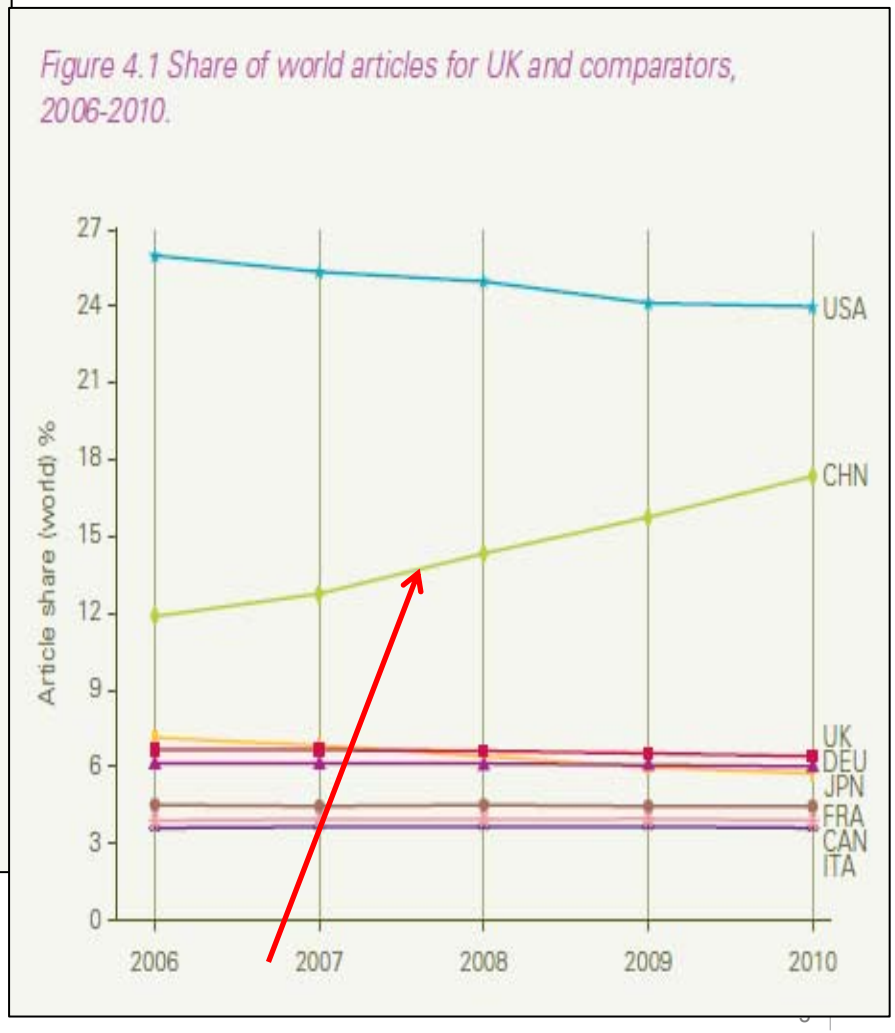
Chinese research

		UK				China				Germany				Japan				US			
Counts		2006	2010	Change	CAGR	2006	2010	Change	CAGR	2006	2010	Change	CAGR	2006	2010	Change	CAGR	2006	2010	Change	CAGR
Counts	Population	60.6m	62.3m	1.7m	0.7%	1.32b	1.35b	33.4m	0.6%	82.4m	82.8m	0.5m	0.1%	127.8m	127.2m	-0.6m	1.0%	298m	310m	11.8m	1.0%
	Researchers	249k	256k	7.5k	0.7%		1.15m			272k	312k	39k	3.4%	681k	659k	-22k	1.3%	1.38m	1.45m	72k	1.3%
	GERD (US$)	31.2b	32.2b	1.0b	0.8%	75.0b	144b	68.6b	17.6%	54.6b	62.4b	7.8b	3.4%	120b	94.7b	-25.7b	6.1%	299b	379b	80.2b	6.1%
	Articles	110k	124k	13k	2.9%	198k	331k	133k	13.7%	102k	118k	15k	3.6%	117k	112k	-5k	1.9%	432k	465k	34k	1.9%
	Usage	40m	100m	60m	25.9%	25m	105m	80m	43.5%	29m	70m	41m	25.0%	29m	62m	33m	25.4%	132m	327m	195m	25.4%
	Citations	2.62m	3.46m	0.84m	7.2%	0.94m	2.43m	1.49m	26.9%	2.31m	2.97m	0.65m	6.4%	1.91m	2.08m	0.17m	4.4%	11.1m	13.2m	2.10m	4.4%
	Highly-cited articles	9.1k	12.5k	3.4k	8.4%	1.5k	4.4k	3.0k	31.4%	7.7k	10.3k	2.6k	7.5%	4.7k	5.4k	0.7k	4.0%	42.7k	49.9k	7.2k	4.0%
	Competencies		418				885				396				398				1817		
	Patents	40.5k	37.6k	-2.9k	-1.8%	97.6k	240.3k	142.7k	25.3%	125.7k	118.4k	-7.2k	-1.5%	524.4k	423.3k	-101.1k	-1.9%	366.3k	339.5k	-26.8k	-1.9%
World share		2006	2010	Change	CAGR	2006	2010	Change	CAGR	2006	2010	Change	CAGR	2006	2010	Change	CAGR	2006	2010	Change	CAGR
World share (%)	Population	0.9%	0.9%	0.0%	-0.5%	20.0%	19.6%	0.0%	-0.5%	1.2%	1.2%	-0.1%	-1.0%	1.9%	1.8%	-0.1%	-1.3%	4.5%	4.5%	0.0%	-0.2%
	Researchers	4.4%	4.2%	-0.2%	-0.9%		18.9%			4.8%	5.1%	0.3%	1.7%	11.9%	10.8%	-1.1%	-2.4%	24.1%	23.8%	-0.4%	-0.4%
	GERD (US$)	3.7%	3.0%	-0.7%	-5.4%	8.9%	13.3%	4.3%	10.4%	6.5%	5.8%	-0.7%	-2.9%	14.3%	8.8%	-5.6%	-11.6%	35.5%	35.0%	-0.5%	-0.4%
	Articles	6.7%	6.4%	-0.3%	-1.1%	11.9%	17.1%	5.1%	9.4%	6.2%	6.1%	-0.1%	-0.4%	7.1%	5.8%	-1.3%	-4.9%	26.1%	24.0%	-2.0%	-2.0%
	Usage	10.0%	9.4%	-0.6%	-1.4%	6.2%	9.9%	3.7%	12.3%	7.1%	6.6%	-0.6%	-2.1%	7.3%	5.9%	-1.4%	-5.3%	33.1%	30.7%	-2.3%	-1.8%
	Citations	10.5%	10.9%	0.4%	0.9%	3.8%	7.6%	3.9%	19.4%	9.3%	9.3%	0.1%	0.1%	7.7%	6.6%	-1.1%	-3.8%	44.4%	41.4%	-3.0%	-1.7%
	Highly-cited articles	12.3%	14.0%	1.7%	3.3%	2.0%	5.0%	3.0%	25.3%	10.4%	11.5%	1.1%	2.5%	6.4%	6.0%	-0.4%	-1.4%	57.6%	55.8%	-1.7%	-0.8%
	Competencies		6.8%				14.4%				6.5%				6.5%				29.7%		
	Patents	2.4%	2.2%	-0.2%	-1.8%	5.8%	14.3%	8.5%	25.3%	7.5%	7.0%	-0.4%	-1.5%	31.1%	25.1%	-6.0%	-5.2%	21.8%	20.2%	-1.6%	-1.9%

Source: International Comparative Performance of the UK Research Base 2011. A report prepared for the Dept, of Business, Information and Skills. Available at http://www.bis.gov.uk/policies/science/science-innovation-analysis/uk-research-base

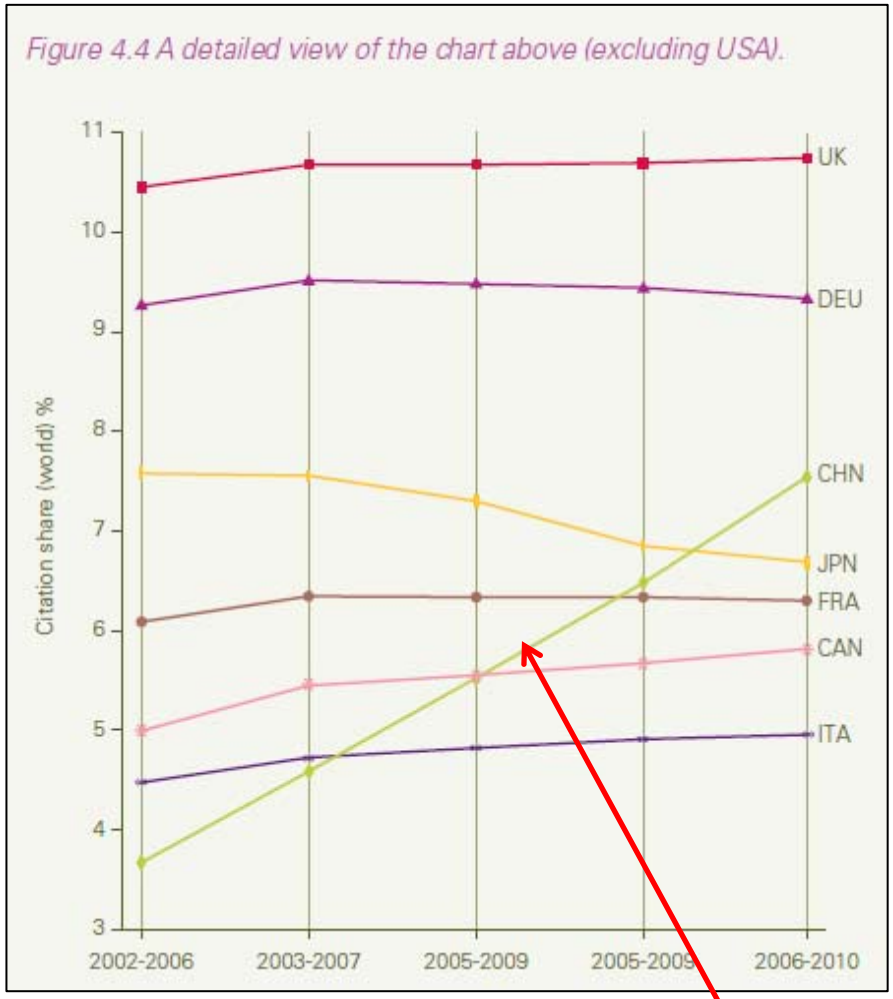
% R&D spend and article share

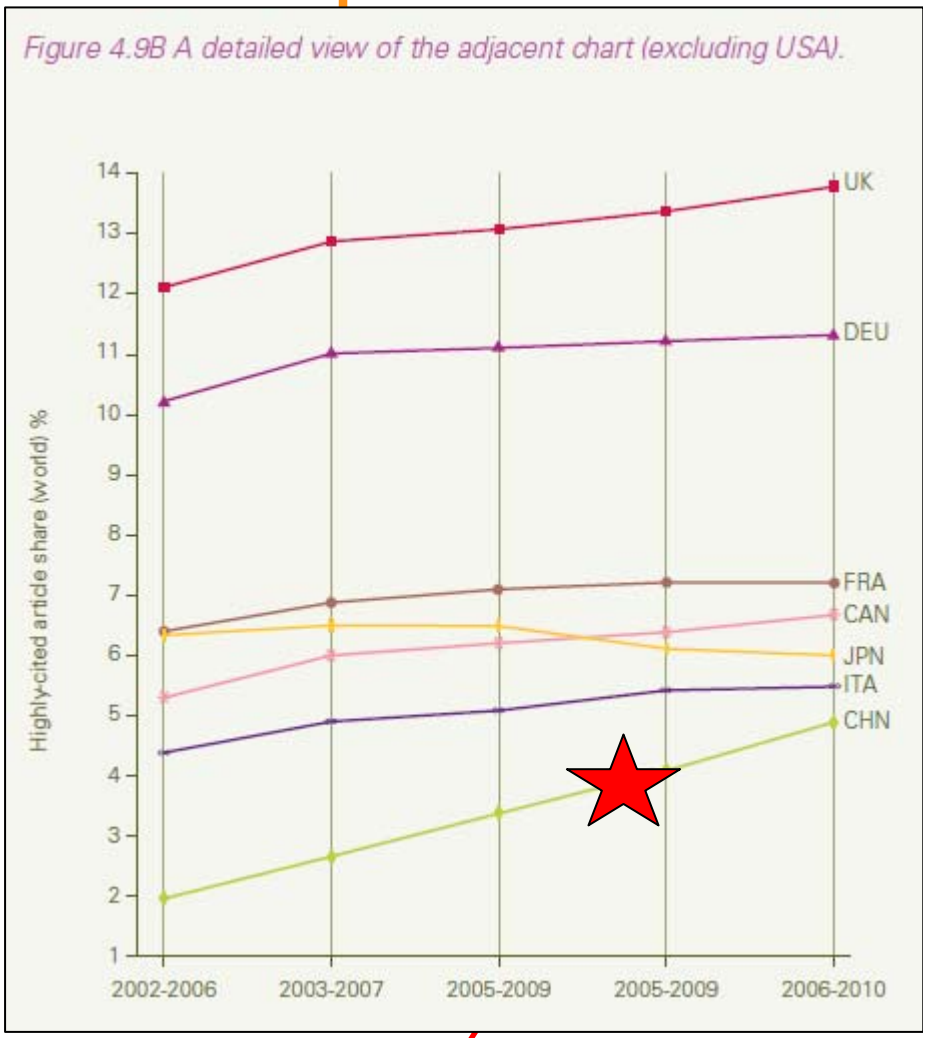




Source: International Comparative Performance of the UK Research Base 2011. A report prepared for the Dept, of Business, Information and Skills. Available at http://www.bis.gov.uk/policies/science/science-innovation-analysis/uk-research-base

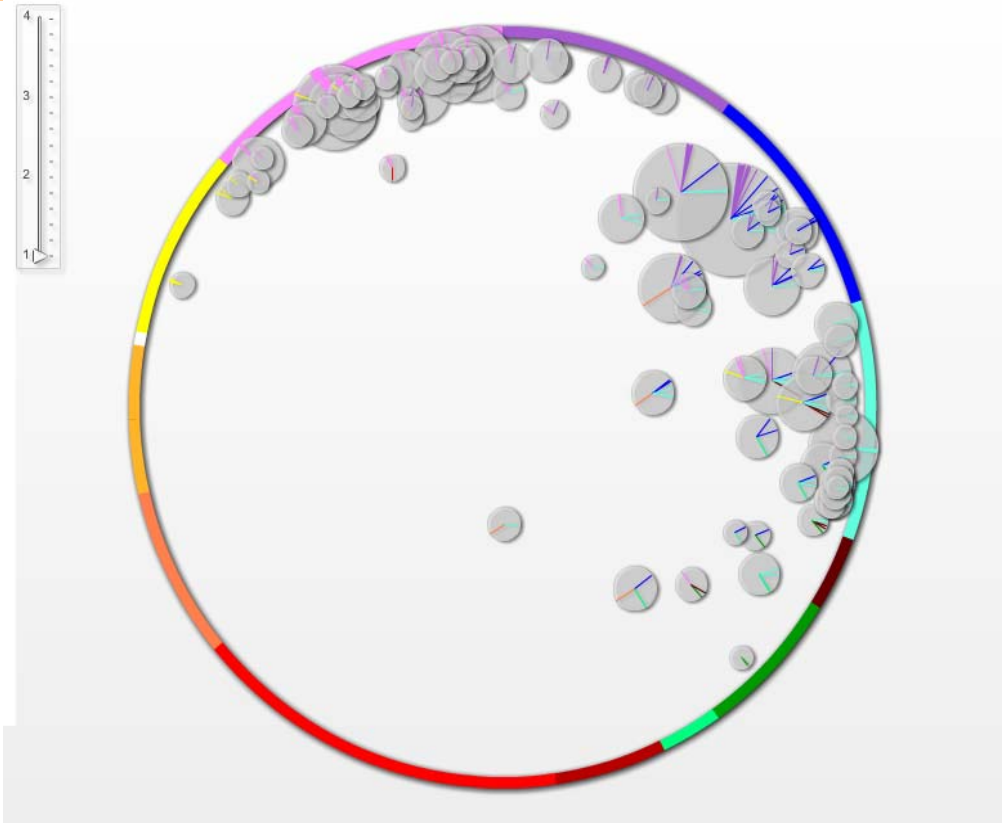
Citation share and Citation per article





Source: International Comparative Performance of the UK Research Base 2011. A report prepared for the Dept, of Business, Information and Skills. Available at http://www.bis.gov.uk/policies/science/science-innovation-analysis/uk-research-base

What subjects is Tsinghua a leader in?

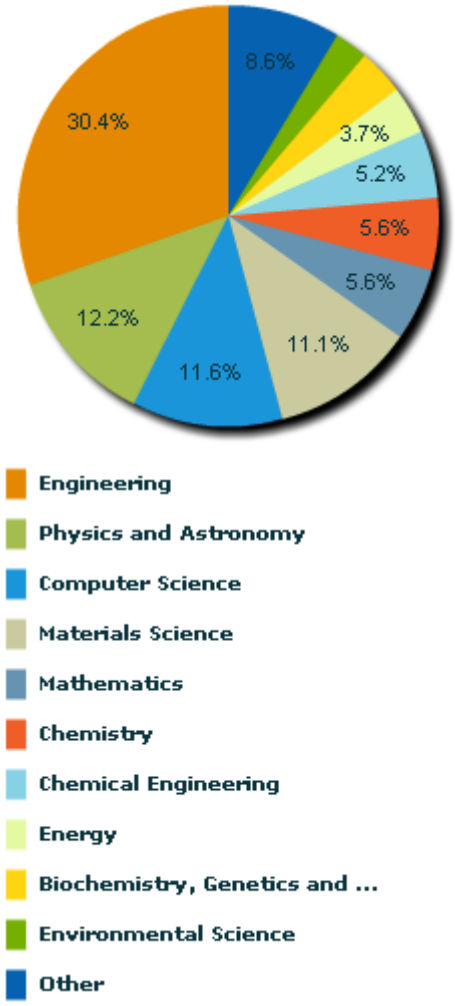


Subject areas

- Math & Physics
- Chemistry
- Engineering
- Earth Sciences
- Biology
- Biotechnology
- Infectious Diseases
- Medical Specialities
- Health Sciences
- Brain Research
- Humanities
- Social Sciences
- Computer Science
- Other

243 competencies or areas of excellence have been identified for Tsinghua These competencies are highly specific research areas where Tsinghua has obtained a leading position relative to its peers.

Publication output



Research

Documents	89,692	Add to my list | Set alert | Set feed
Authors	32,738	
Web results	145	
Patent results	1,406	
Sources	6,168	Qinghua Daxue Xuebao Journal of Tsinghua University
	1,668	Proceedings of SPIE the International Society for Optical Engineering
	1,458	Lecture Notes in Computer Science Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics
	836	Key Engineering Materials
	702	Tsinghua Science and Technology
	View more...	

Find potential affiliation matches

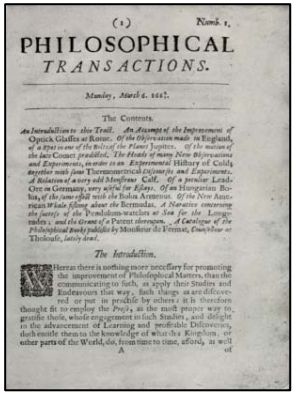
Collaborating affiliations

Affiliation name	Documents
Peking University	1,149
University of Science and Technology Beijing	889
Beijing University of Aeronautics and Astronautics	703
Beijing Institute of Technology	652
Chinese Academy of Sciences	625

View more...

Tsinghua publishing collaborations

Why do people publish?


(1) Numb. 1.

PHILOSOPHICAL
TRANSACTIONS.

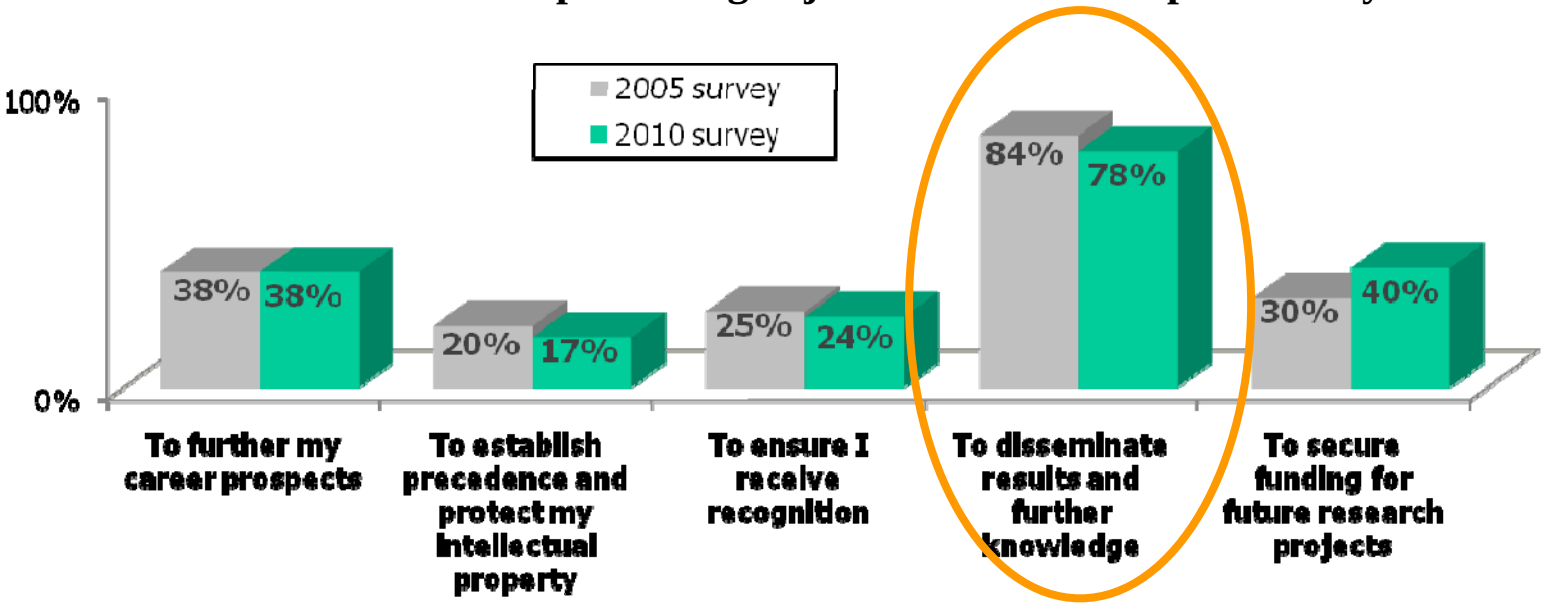
Monday, March 6. 1665.

The Contents.

The Introduction.

- First peer-reviewed journal founded in 1665 by Royal Society
- Journal publishing has evolved dramatically since, but its core functions remain:
  - **Registration** of new research findings
  - **Quality assurance** through peer review
  - **Dissemination** globally
  - **Archiving** in perpetuity

Researchers: which publishing objectives are most important to you?



Sources: NOP/Elsevier surveys 2005 and 2010

First question to ask: Can I publish this?????

- Have you done something new and interesting?
- Have you checked the latest results in the field?
- Have the findings been verified?
- Have the appropriate controls been performed?
- Do you need to do more research?
- Is the work directly related to a current hot topic?
- Have you provided solutions to any difficult problems?

If all answers are “yes”, a good, strong manuscript is what is needed next

What is a good manuscript?

- A good manuscript makes readers grasp the scientific significance **easily**
- It has a **clear**, **useful** and **exciting** message
- It is presented and constructed in a **logical** manner

FEBS 29081 FEBS Letters 579 (2005) 859–862

Minireview

Telomeres and telomerase: their mechanisms of action and the effects of altering their functions

Elizabeth H. Blackburn*

Department of Biochemistry and Biophysics, University of California, San Francisco, Box 2200, San Francisco, CA 94143-2200, USA

Received 22 October 2004; revised 25 October 2004; accepted 2 November 2004

Available online 26 November 2004

Edited by Gunnar von Heijne and Anders Liljas

Abstract The molecular features of telomeres and telomerase are conserved among most eukaryotes. How telomerase and telomeres function and how they interact to promote the chromosome-stabilizing properties of telomeres are discussed here.

Keywords: Telomere; Telomerase

1. Introduction

Telomeres, the DNA-protein complexes at the ends of

essential conserved domains, and the RNA component, TER. By copying a short template sequence within its intrinsic RNA moiety, telomerase synthesizes the telomeric DNA strand running 5′ to 3′ toward the distal end of the chromosome, thereby extending it. Regulated extension of the chromosomal DNA termini occurs to compensate for shortening that results from nuclease action and incomplete terminal DNA replication. A multi-component "telomere homeostasis" system prevents, on the one hand, the over-extension of telomeres. Protein–protein interactions among the telomere-associated proteins are important for this function, which acts in *cis* on a telomere [2].

Conversely, the telomeric homeostasis system acts to promote telomeric extension whenever a telomere becomes shortened, thereby keeping the tract of telomeric repeats within a

2009 Nobel Prize for Physiology or Medicine awarded to Elizabeth Blackburn

Your article should be of value…

- To the research community

A research study is meaningful only if it is clear/understood/reproducible….. and USED

- To yourself

Your article is your passport to your scientific community

How to write a good manuscript:

Preparations before starting

Decide which type of paper is most appropriate

- Full articles/original articles/research articles
- Review papers/perspectives
- Letters/rapid communications/short communications

Full articles

- Standard for disseminating completed research findings
- Typically 8-10 pages, 5 figures, 25-35 references
- Draft and submit the paper to appropriate journal
- Good way to build a scientific research career

Review Paper

- Critical synthesis of a specific research topic
- Typically 10+ pages, 5+ figures, 80 references
- Typically solicited by journal editors
- Good way to consolidate a scientific research career

Short Communications

- **Letters / Rapid Communications / Short Communications** are usually published for the quick and early communication of significant and original advances; much shorter than full articles (usually strictly limited).
- there are also short communication or “letters” journals in some fields where authors can present short preliminary findings and then usually follow up with a full length paper

Journal Selection

Selection of a journal will depend on many factors in addition to journal metrics

- The aims and scope of the journal
- The type of manuscript you have written (review, letter, articles)
- The specific subject area
- The significance of your work
- The prestige/quality of the journal
- The respect of the editors in the field
- The editorial and production speed of the journal
- The community and audience associated with the journal
- The coverage and distribution (regional, international)

“Never submit work to a journal that you do not read yourself. If you do, the chances are your work will be rejected. This is because you will not have the necessary ‘feel’ about what is appropriate. You won’t have the necessary sense of the ‘culture’. “(Prof Michael Curtis)

Preparations before starting:

Read the Guide for Authors

Apply the Guide for Authors to your manuscript, even to the first draft (text layout, paper citation, nomenclature, figures and table, etc.). It will save your time, and the editor's.

Constructing your article

Each section of a paper has a definite purpose

- Title
- Abstract
- Keywords

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

- Main text (IMRAD)
  - Introduction
  - Methods
  - Results
  - And
  - Discussions

Journal space is precious. Make your article as brief as possible. If clarity can be achieved in *n* words, never use *n+ 1*

- Conclusion
- Acknowledgement
- References
- Supporting Materials

The Title

nature International weekly journal of science

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | For Auth

Archive > Volume 477 > Issue 7364 > Letters > Abstract

ARTICLE PREVIEW

view full access options ▸

NATURE | LETTER

◂ previous abstract next abstract ▸

Geometrical enhancement of low-field magnetoresistance in silicon

Caihua Wan, Xiaozhong Zhang, Xili Gao, Jimin Wang & Xinyu Tan

Affiliations | Contributions | Corresponding author

Nature **477**, 304–307 (15 September 2011) | doi:10.1038/nature10375
Received 28 April 2011 | Accepted 18 July 2011 | Published online 14 September 2011

Inhomogeneity-induced magnetoresistance (IMR) reported in some non-magnetic semiconductors[1, 2, 3, 4, 5, 6, 7, 8], particularly silicon[1, 6, 7, 8], has generated considerable interest owing to the large magnitude of the effect and

日本語要約

print

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*

The Abstract

- This is the **advertisement** of your article. Make it interesting, and easy to be understood without reading the whole article.
- You must be **accurate** and **specific**!
- A clear abstract will strongly influence whether or not your work is further considered.
- Keep it as **brief** as possible!!!

Keywords

Used by indexing and abstracting services

- They are the labels of your manuscript.
- Use only established abbreviations (e.g. DNA)
- Check the “Guide for Authors”

Article Title	Keywords
“Silo music and silo quake: granular flow-induced vibration”	Silo music, Silo quake, stick-slip flow, resonance, creep, granular discharge
“An experimental study on evacuated tube solar collector using supercritical CO2”	Solar collector; Supercritical CO2; Solar energy; Solar thermal utilization

Introduction – convince readers you know why your work is useful

Most of the previous investigations of emulsion stabilization by protein–polysaccharide conjugates have been concerned with model systems based on hydrocarbon oils or triglyceride oils under nearly ideal aqueous solution conditions. The present paper aims to demonstrate the potential of this type of conjugate for making and stabilizing more challenging and complex emulsion systems of low pH and raised ionic strength. The compositional conditions are focused here towards carbonated beverage systems based on an emulsified flavour oil in the presence of a commercial colouring agent.

What is the problem?
Are there any existing solutions?
What are the main limitations?
What do you hope to achieve?

Do NOT mix introduction with results, discussion and conclusion

Methods – how was the problem studied?

Include detailed information so that a knowledgeable reader can reproduce the experiment

However, use references and supplementary materials to indicate the previously published procedures

composite materials raised the thermal conductivities of materials compared to pure PEG materials, the thermal conductivity still need improved further.

In this paper, high conductivity polyethylene glycol (PEG)/Silica dioxide (SiO_2) composites with β-Aluminum nitride (β-ALN) as an additive were prepared. The structure and thermal properties of the blends were investigated by scanning electronic microscope (SEM), polarization optical microscope (POM), Fourier transformation infrared spectrophotometer (FTIR) and different scanning calorimeter (DSC). The conductivity of composites improved due to high conductivity of β-Aluminum nitride powder.

2. Experimental

2.1. Materials

Reagent grade polyethylene glycol with molecular weights (1000) was purchased from Guangzhou Chemical Agent Company (Guangzhou, China). Silicon gel was purchased from Guangzhou People's Chemical Company (Guangzhou, China). β-Aluminum nitride was obtained form Foshan Jingshi Company, imported from Japan. All the chemicals were analytical reagents and they don't need further purification.

2.2. Preparation of the composite PCMs

Firstly, Silicon gel and polyethylene glycol with the mass ratio 15/85 was dissolved in water while stirring for 12 h. After that, the prepared solutions were added with β-Aluminum nitride at different ratios ranging from 5 wt.% to 30 wt.% and then mixed at room temperature for 2 h Afterward, the mixed solution was put into an oven and heated at 100 °C for 24 h. Finally, the solid composite was obtained by heating in a vacuum oven at 70 °C for 24 h.

2.3. Characterization of the composite PCMs

The melting point and heat of fusion of the solid composite were determined using a differential scanning calorimeter (Perkin–Elmer DSC-2C) calibrated with an indium standard in the range from −30 °C to 120 °C. The velocity for scanning was at 10 °C/min. The surface morphology of sample was examined using a scanning electron microscope (Philips Scanning Electron Micro-

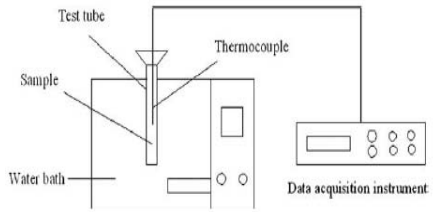


Fig. 2. Experimental instrument for heat storage and release test.

2.4. Experiment of heat storage and release performance

Fig. 2 shows the experimental instrument for heat storage and release test. Polyethylene glycol and the composite PCM sample were put into two identical tubes, respectively. One thermocouple was placed in the middle of each tube. Firstly, the two test tubes were put inside the water at the room temperature at the beginning. Later, the two tubes were put into the water bath at the constant temperature of 80 °C immediately. After the temperature of sample reached 80 °C for a while, the two tubes was put into the water at the same temperature again. The temperature measured by thermocouple was recorded automatically by using Agilent data acquisition instrument.

3. Results and discussion

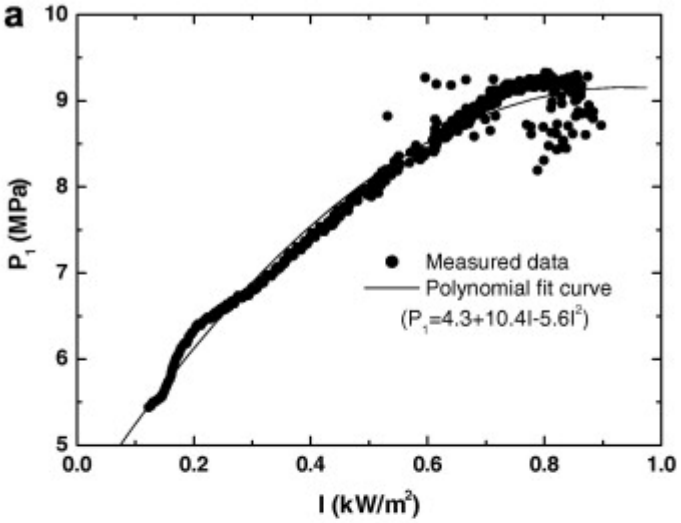
3.1. Morphology characterization

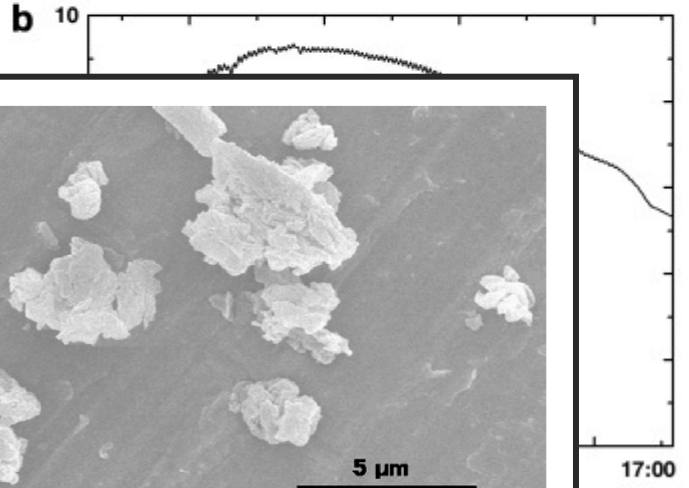
Fig. 3 represents the SEM images of the composite PCM with no leakage of polyethylene glycol. From Fig. 3, it can be observed that the light area presents polyethylene glycol as phase change materials and the dark area represents silicon dioxide as supporting materials, respectively. Because silicon dioxide is a multi-pore material, polyethylene glycol was hold by porous supporting materials due to the capillary force and the surface tension force. The structure can be accounted for the great association of polyethylene glycol encapsulated by silicon dioxide, which helped to prevent leakage during the melting and freezing cycling. If there were no interaction between them, the composite PCM would not be able to keep the form.

Results

What have you found

- Present essential/primary results
- Use sub-headings
- Use figures/illustrations
  - Graphs
  - Tables
  - Photos





Type of attack	Classica
Echo addition	0
Noise addition	1.20
Band equalization	2.31

Fig. 1. A photograph of SEM of PTFE polymerized in solid state at 77 K with a dose of 700 kGy.

Ikeda, S., Tabata, Y., Suzuki, H., Miyoshi, T., Katsumura, Y. "Formation of crosslinked PTFE by radiation-induced solid-state polymerization of tetrafluoroethylene at low temperatures " *Radiation Physics and Chemistry* © Elsevier

collector using supercritical CO_2" *Applied Thermal Engineering* © Elsevier

Discussion – what the results mean

Describe

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

Avoid

- Making "grand statements" that are not supported by the data
- Introducing new results or terms

Don't ignore work in disagreement with yours – confront it and convince the reader you are correct

Conclusions – how the work advances the field – don't repeat the abstract!

What have you shown?

4. Conclusions

A high conductivity form-stable phase change material was prepared by blending polyethylene glycol, silica gel, and aluminum nitride powder. The composite PCMs exhibit desirable the properties including desirable heat latent and thermal conduct

Thermal conductivity of the composite PCMs was improve using β-Aluminum nitride additive with great conductivity heat transfer promoter. The value of thermal conductivity cha from 0.3847 W m^{-1} K^{-1} to 0.7661 W m^{-1} K^{-1} with the increa mass ratio of β-AlN from 5% to 30%. Correspondingly, the heat of various composite decreased in this case. Howeve properties of the composite PCM were not affected too m the additive of high conductivity powder.

As the thermal conductivity enhanced by adding β-AlN additive, and the heat latent of fusion keep suitable value, the composite PCMs can be considered as a promising PCMs candidate for energy storage.

What does it mean for the field?

Indicate possible applications and extensions

W. Wang et al. / Applied Energy 86 (2009) 1196–1200

Acknowledgements

- Acknowledge anyone who has helped you with the study, including:
  - Researchers who supplied materials or reagents, *e.g.* vectors or antibodies
  - Anyone who helped with the writing or English, or offered critical comments about the content
  - Anyone who provided technical help
- State why people have been acknowledged and ask their permission
- Acknowledge sources of funding, including any grant or reference numbers

References

Typically, there are more mistakes in the references than any other part of the manuscript.

It is one of the most annoying problems, and causes great headaches among editors…

- Cite the main scientific publications on which your work is based
- Do not inflate the manuscript with too many references
- Avoid excessive self-citations
- Avoid excessive citations of publications from the same region
- 30-40 references are appropriate for a full text article

Who is the first author?

- General principles for who is listed first
  - First Author:
    - Conducts and/or supervises the data analysis and the proper presentation and interpretation of the results
    - Puts paper together and submits the paper to journal
  - Co-Author(s):
    - Makes intellectual contributions to the data analysis and contributes to data interpretation
    - Reviews each paper draft
    - Must be able to present the results, defend the implications and discuss study limitations
- Abuses to be avoided
  - Ghost Authors: leaving out authors who should be included
  - Gift Authors: including authors when they did not contribute significantly

Conflicts of interest

These all present potential conflicts

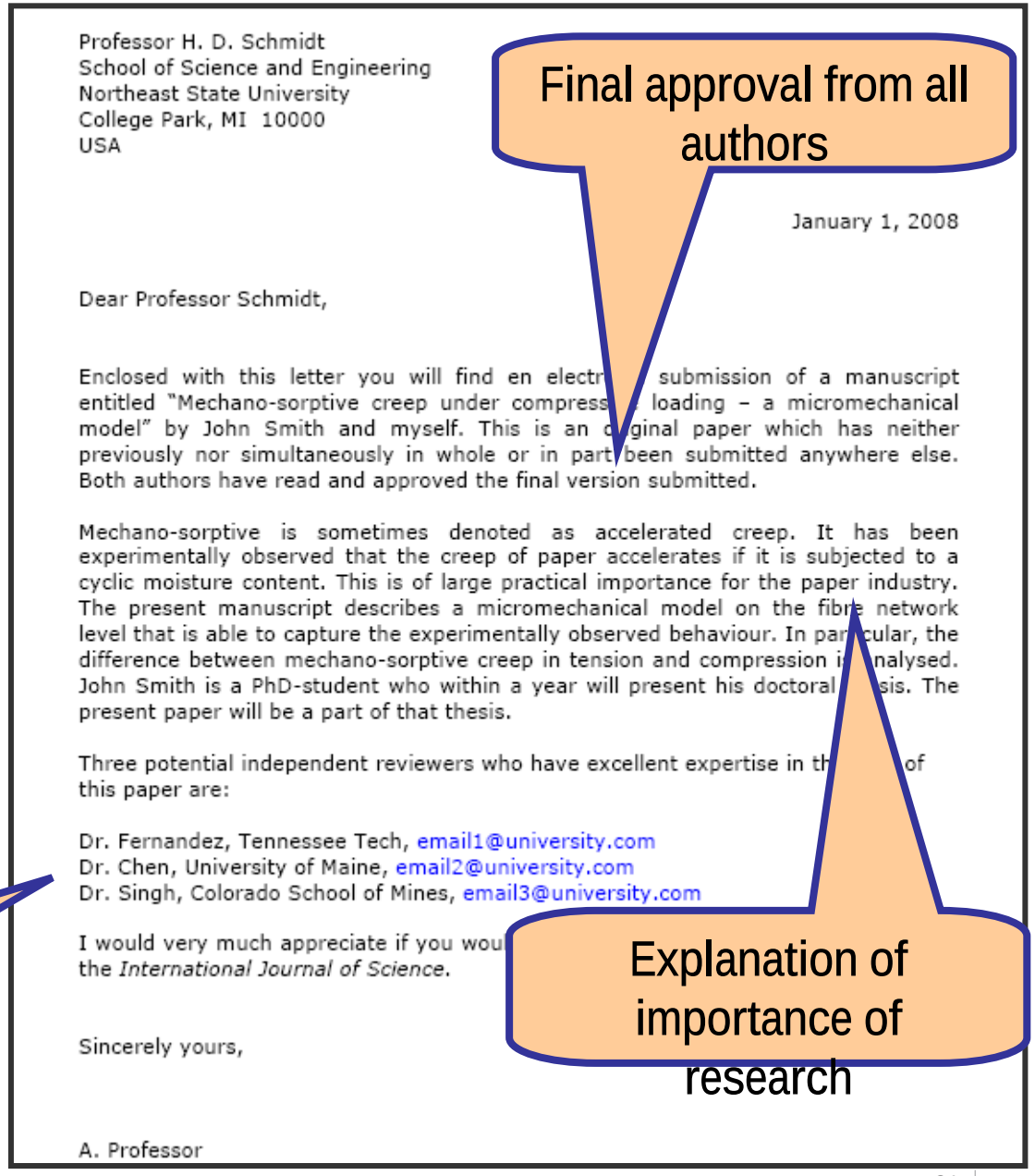
- Conflicts of interest can take many forms:
  - Direct financial
    - Employment, stock ownership, grants, patents
  - Indirect financial
    - Honoraria, consultancies, mutual fund ownership, expert testimony
  - Career & intellectual
    - Promotion, direct rival
  - Institutional
  - Personal belief

- The proper way to handle potential conflicts of interest is through transparency and disclosure
- At the journal level, this means disclosure of the potential conflict in your cover letter to the journal editor

Cover letter

This is your chance to speak to the editor directly

- Submitted along with your manuscript
- Mention what would make your manuscript special to the journal
- Note special requirements (reviewers, conflicts of interest)
- Indicate approval of all authors for submission



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

January 1, 2008

Dear Professor Schmidt,

Enclosed with this letter you will find en electr submission of a manuscript entitled "Mechano-sorptive creep under compress loading – a micromechanical model" by John Smith and myself. This is an ginal paper which has neither previously nor simultaneously in whole or in part been submitted anywhere 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 par cular, the difference between mechano-sorptive creep in tension and compression i nalysed. John Smith is a PhD-student who within a year will present his doctoral sis. The present paper will be a part of that thesis.

Three potential independent reviewers who have excellent expertise in th of 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 wou
the *International Journal of Science*.

Sincerely yours,

A. Professor

Final approval from all authors

Suggested reviewers

Explanation of importance of research

Some technical details

- Pay attention to length of manuscript
- Consider supplying data as supplementary material
- Text layout
- Always number the pages, and number lines if required
- Abbreviations
- Names of potential reviewers – authors in your subject area, not collaborators or friends, international

Check the Guide for Authors of the selected journal for specific instructions – not all guides are the same!

Language – Why is it important?

Correct use of language saves 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 trying to understand what the author is trying to say. Besides, I really want to send a message that they can't submit garbage 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 I don't waste my time carefully reading the rest."

Do publishers correct language?

- Yes…
  - Publishers often provide resources for authors who are less familiar with the conventions of international journals , but these are generally author-pays services. Traditional copyediting by the publisher is rare.
  - Some publishers may perform technical screening prior to peer review
- But…
  - It is the author's responsibility to use proper language prior to submission
  - Copyediting is only done after an article is accepted and is done by typesetters, not editors

Final checks before submission

- Ask colleagues to read and be critical
- All requirements from Guide for Authors are met
- Scope of paper is appropriate for journal
- Have your manuscript checked for language, either by a native English speaker or an editing service
- Ensure that the literature cited is balanced and that aims, purpose and significance of results are clear
- Use a spellchecker!

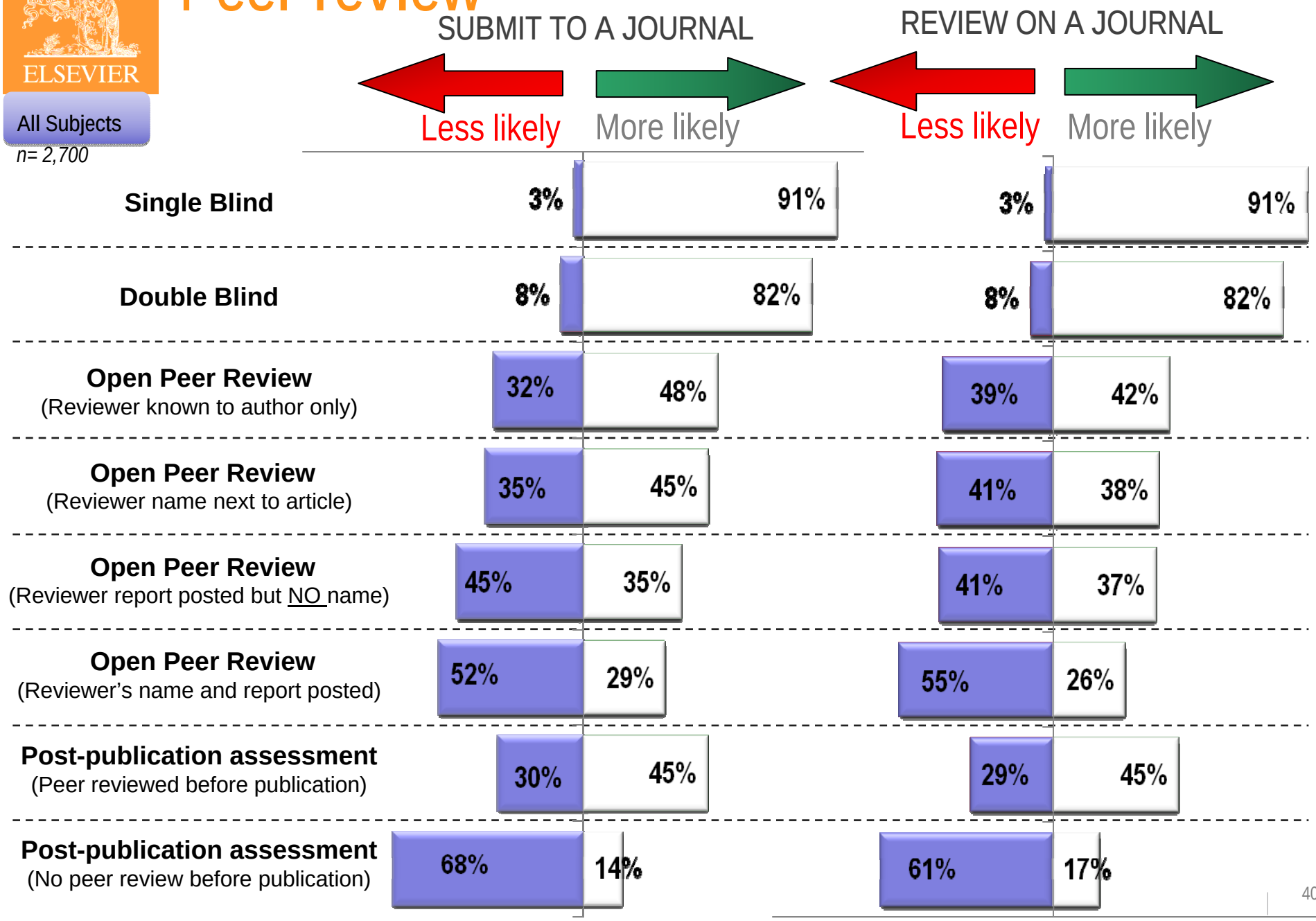
Submission and review

Peer review

Source: Elsevier report 2011

All Subjects

n= 2,700



Review process

Many journals adopt a system of initial review by the editor. Editors may reject a manuscript without sending it for review.

Why?

The paper may not be of sufficient quality to go forward for peer review: reviewers are limited resources!

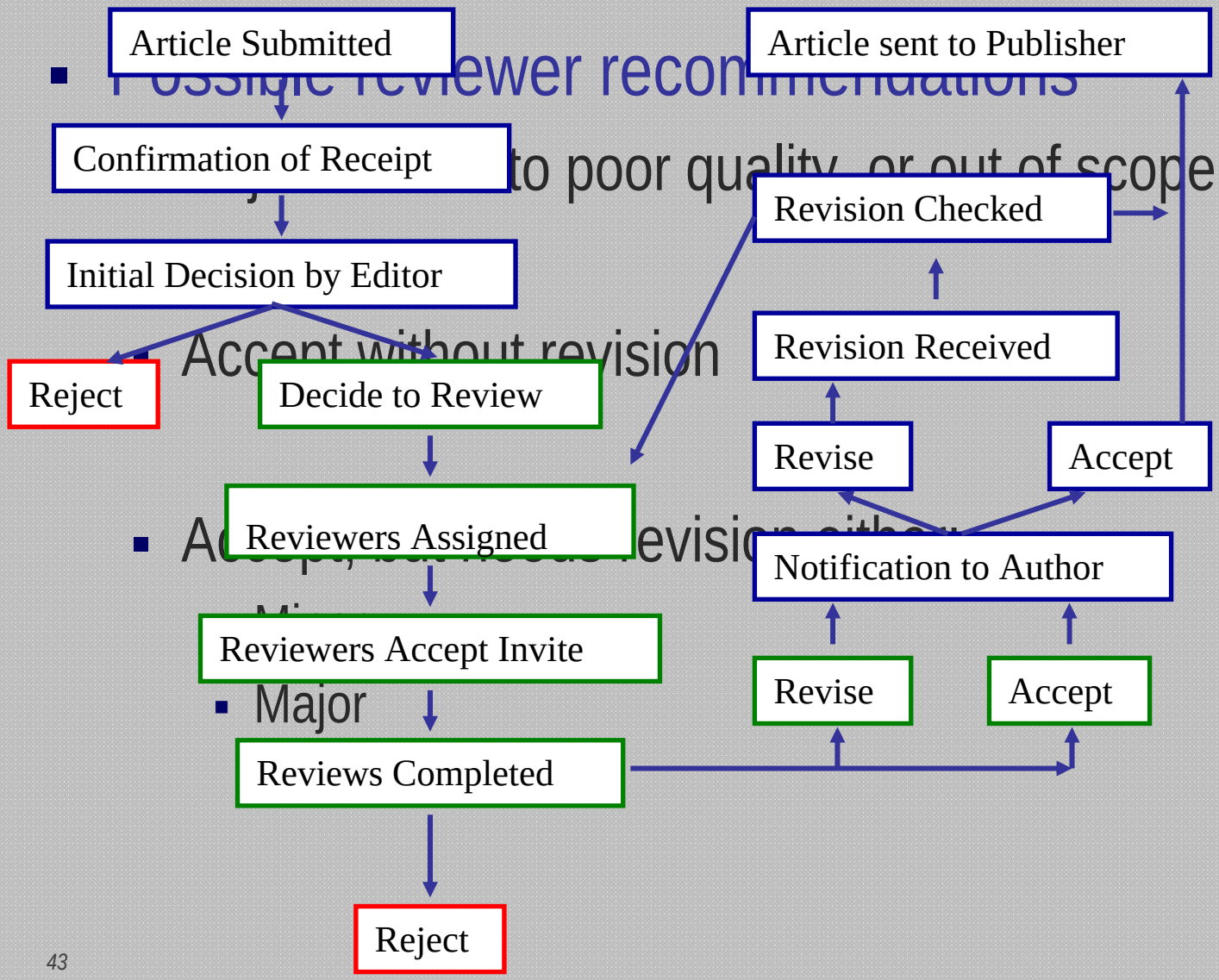
Example from one journal's Guide for Authors

"…..The Editor-in-Chief and Editors **have the right to decline formal review of the manuscript** when it is deemed that the manuscript is 1) on a topic outside the scope of the Journal, 2) lacking technical merit, 3) focused on foods or processes that are of narrow regional scope and significance, 4) fragmentary and provides marginally incremental results, or 5) is poorly written."

Make sure your manuscript does not fall in any of these categories or it will fall at the first hurdle!

Overview of Peer Review Process

- Possible reviewer recommendations
  - Reject due to poor quality, or out of scope
  - Accept without revision
  - Accept, but needs revision either:
    - Minor
    - Major



Reviewer comments and revisions

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

Consider reviewing as a **discussion of your work.**

Learn from the comments, and join the discussion.

How to respond to a request to revise your paper

- **Prepare a detailed letter of response**

Copy-paste reviewer comments and address one by one. Don't miss any point.

- **State specifically what changes you have made to the manuscript.**

Give page and line number.

A typical problem–Discussion is provided but it is not clear what changes have been made.

- **Provide a scientific response to the comment you accept; or a convincing, solid and polite rebuttal to the point you think the reviewer is wrong.**
- **Revise the whole manuscript** not just the parts the reviewers point out
- **Minor revision does NOT guarantee acceptance after revision.** Do not count on acceptance, but address all comments carefully

…and if your paper is rejected

- Don’t despair – it happens to everybody
- Try to understand WHY, consider reviewers advice
- Be self-critical
- If you want to submit to another journal, begin as if you are going to write a new article. Read the Guide for Authors of the new journal, again and again.

Accepting rejection

Suggested strategy for submitting elsewhere:

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

Ethics in Publishing

"Copy from one, it's plagiarism; copy from two, it's research"
Wilson Mizner 1876-1933 Playwright

"One journal reported rejecting 23% of accepted submissions after checking for plagarism"
Nature 466, 167 (2010) online July 5th

Elsevier deals with over 400 suspected ethics case per year

Ethics in publishing

Unethical behaviour can earn rejection and even a ban from publishing in some journals. Unethical behaviour includes:

- Scientific misconduct
  - Falsification of results
- Publishing misconduct
  - Plagiarism
  - Different forms / severities
  - The paper must be original to the authors
  - Duplicate/multiple submission
  - Redundant publication
  - Failure to acknowledge prior research and researchers
  - Inappropriate identification of all co-authors
  - Conflict of interest

Data fabrication and falsification

- **Fabrication** is making up data or results, and recording or reporting them
- **Falsification** is manipulating research materials, equipment, processes, or changing/omitting data or results such that the research is not accurately represented in the research record

Plagiarism

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

Federal Office of Science and Technology Policy, 1999

"Presenting the data or interpretations of others without crediting them, and thereby gaining for yourself the rewards earned by others, is theft, and it eliminates the motivation of working scientists to generate new data and interpretations"

Bruce Railsback, Professor, Department of Geology, University of Georgia

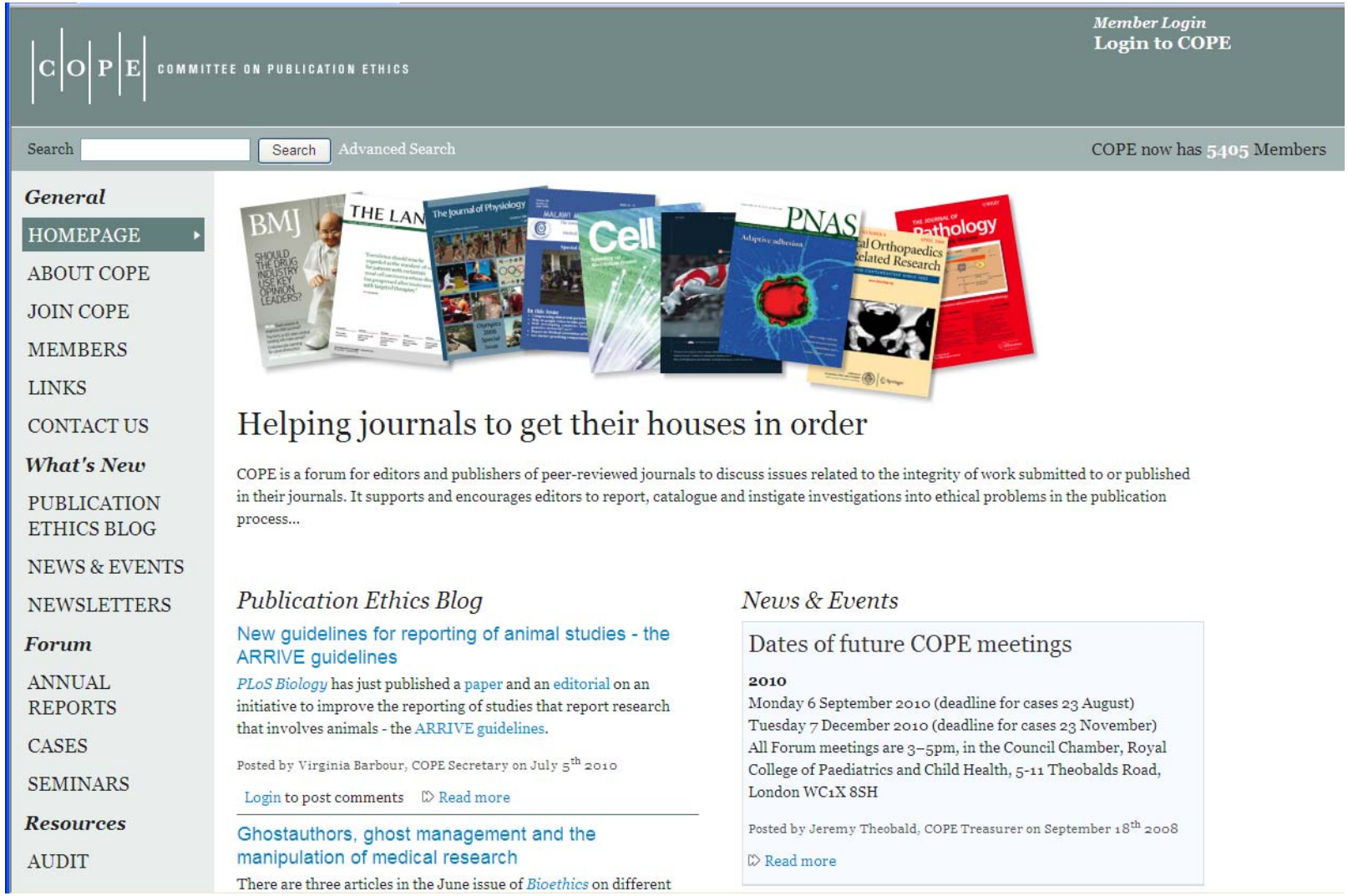
Multiple submissions

- Multiple submissions waste editor and reviewer time
- The editorial process of your manuscripts will be completely stopped if the duplicated submissions are discovered
- Competing journals constantly exchange information on suspicious papers
- DO NOT send your paper to a second journal until you receive the final decision from the first

Redundant publication

- An author should not submit for consideration in another journal a previously published paper
- Re-publication of a paper in another language is acceptable provided there is full and prominent disclosure of its original source
- At the time of submission authors should disclose details of related papers, even if in a different language, and similar papers in press
- Avoid **salami slicing** - the practice of creating several papers out of material that could have been published in a single paper or review.

Committee on Publication Ethics



http://publicationethics.org/

Case study: duplicate submission

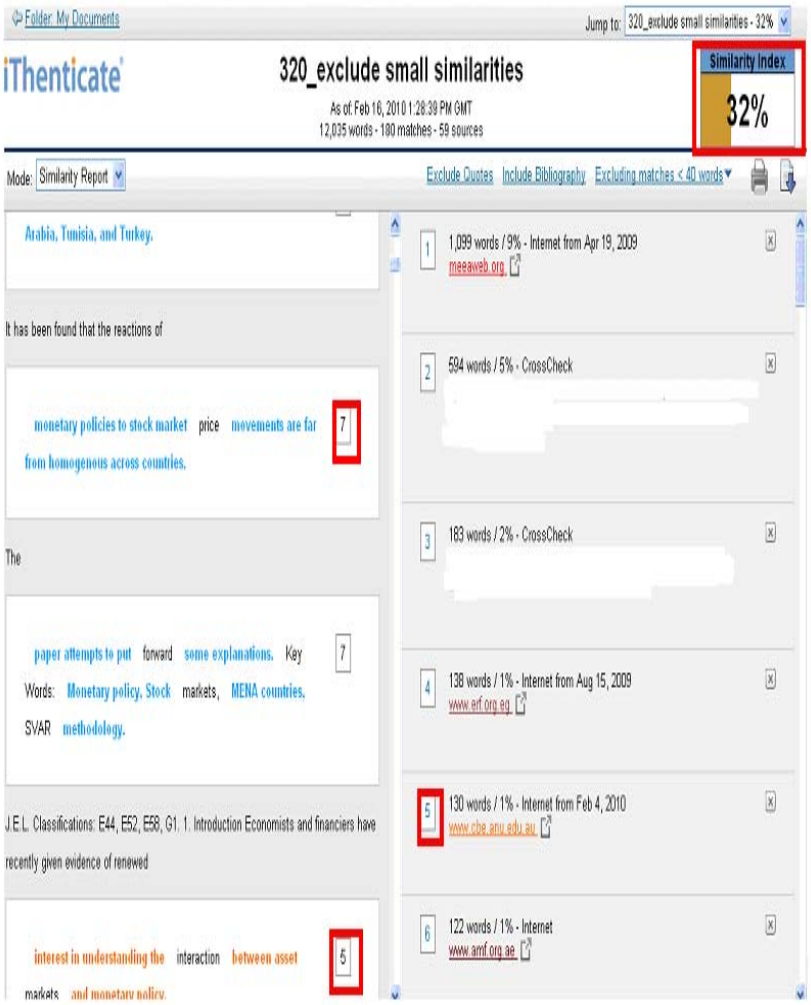
May 2009
We rejected the article and the author said he learned an important lesson. The editorial board met and it was unanimous that the situation should be reported to the author's university academic integrity committee for review.

February 2010
The case is now closed. The author self-reported within his university and did a faculty workshop about the issue. He submitted some information to the editor that will be incorporated into their editorial on duplicate publication.

http://publicationethics.org/case/duplicate-publication-11

CrossCheck from CrossRef

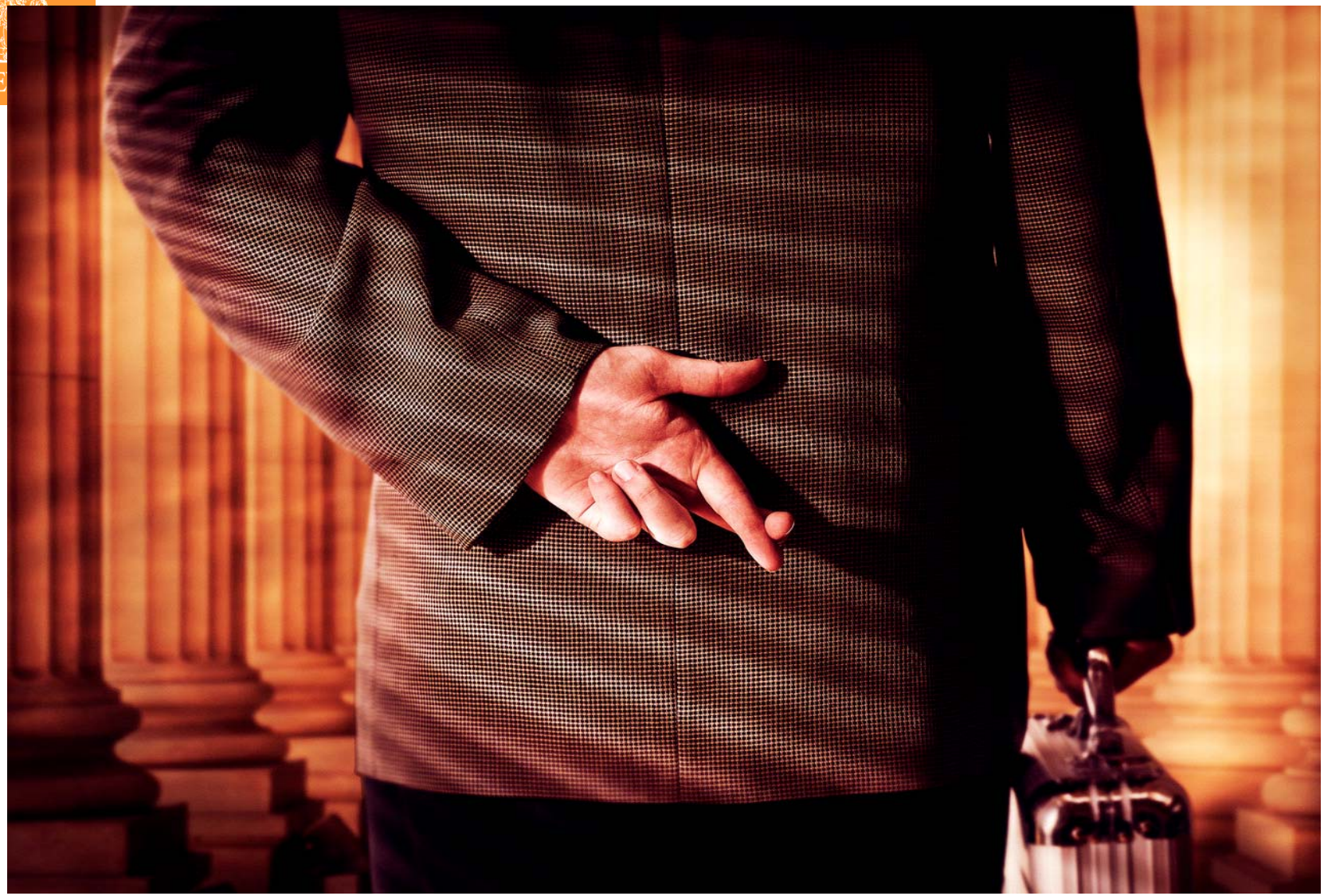
- 83 publishers
- 25.5 million articles
- 48157 journals, books, conference proceedings
- Papers are run through iThenticate which matches the document against the Crosscheck database and major data providers and the open web
- Get a report displaying degree of similarity to other documents and a link to the fulltext of the matching documents
- Cannot detect plagarism but can identify a manuscript of concern



http://www.crossref.org/crosscheck/index.html

Summary

- Make sure you have something new to publish
- Pick the right journal to submit to
- Follow the guide for authors
- Get feedback before you submit
- Only submit to one journal
- Cite and acknowledge correctly



祝你好运！