



## Elsevier Publishing Campus Publishing Connect

## **Successful Scholarly Publishing**

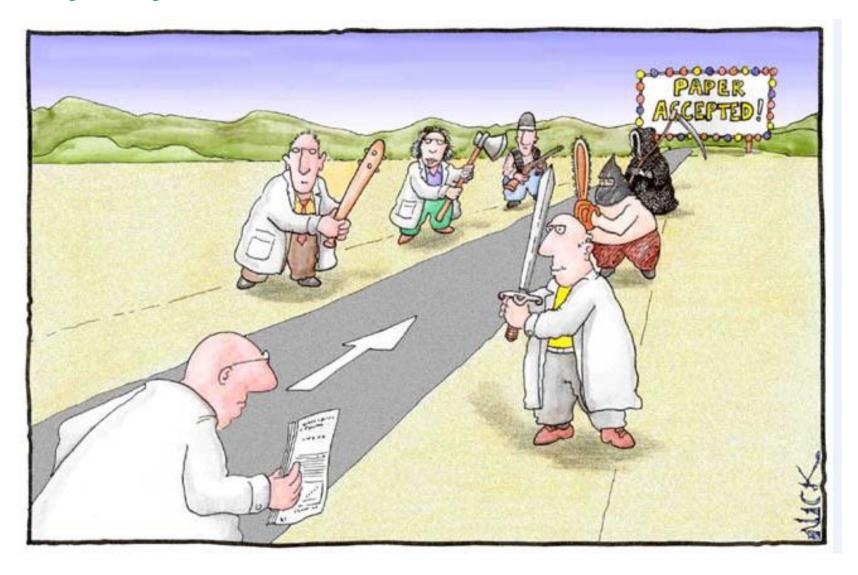
**Christian Schulz** 

**Senior Publisher** 



Xiamen, 27.5.2018

## Why are you here?



## AGENDA

Preparing and submitting a manuscript

Responsibilities and ethics

**Peer review** 

Promoting your research and measuring its importance

# Introducing Researcher Academy

A new and free e-learning platform designed to unlock the full potential of early and mid-career researchers



## Did you know?

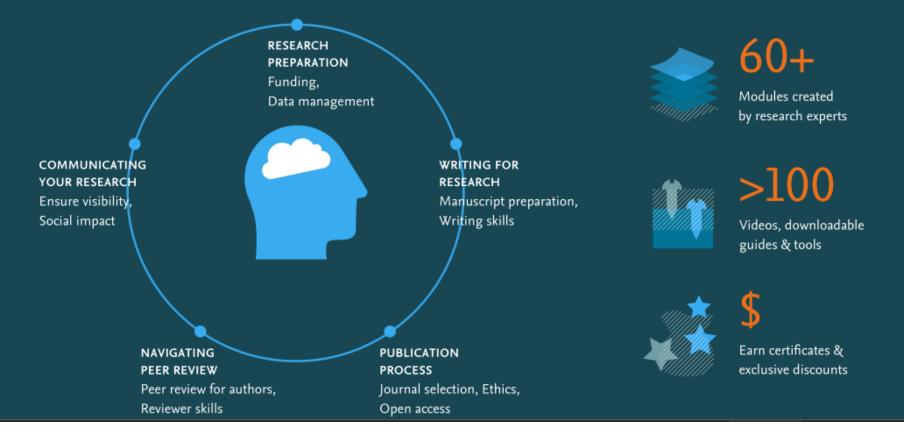
- Over 225,000 academics join the research community yearly \*
  - 43% of PhD's don't have a job at graduation \*

- Between 30-50% of papers get rejected before review \*
- $\Im$  Only 18.3% of grant applications are successful \*

To stay ahead of the game, researchers need skills that cut across disciplinary lines and teach them how to succeed.

## Discover a wealth of knowledge

Researcher Academy supports researchers throughout their research journey



## Join a global community

Researcher Academy is unlocking the potential of thousands of researchers around the world ନ୍ନ 140,000+

Registered users

190 Countries © 40,000

Monthly unique visitors

Certificates awarded

## Visit researcheracademy.com

\* Source: www.researcheracademy.com/infographic/refs

## **Origins of scholarly publishing**

**1439** Gutenberg and moveable type



Henry Oldenburg (1618- 1677) Founding Editor and Commercial Publisher of the first scientific journal



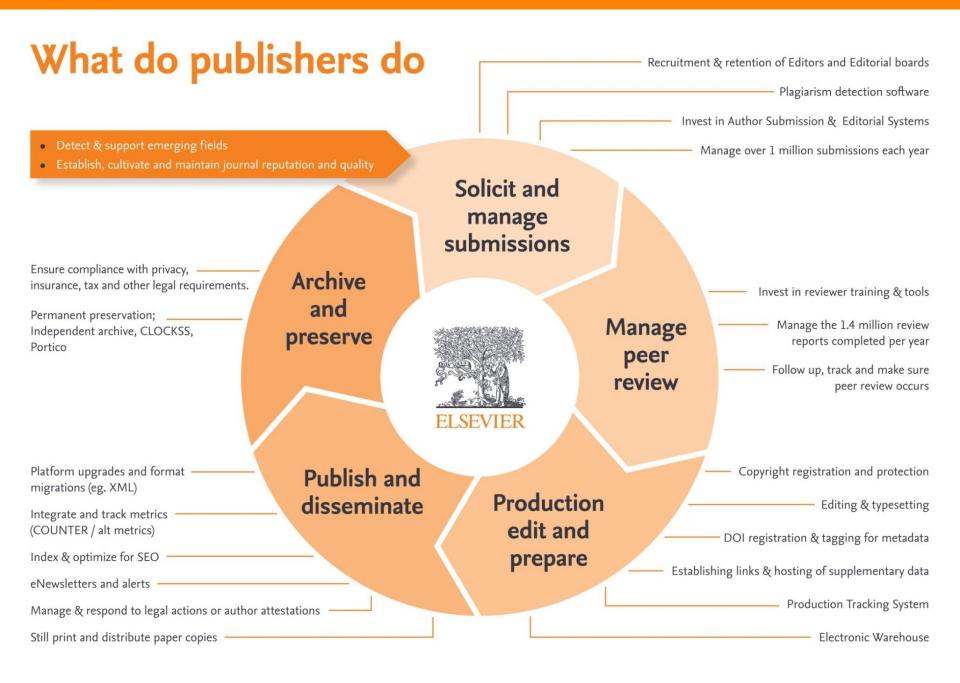


#### March 6,1665

Philosophical Transactions of the Royal Society

First true scholarly journal





## **Role of scientific publications**

#### Registration

The timestamp to officially note who submitted scientific results first

#### Certification

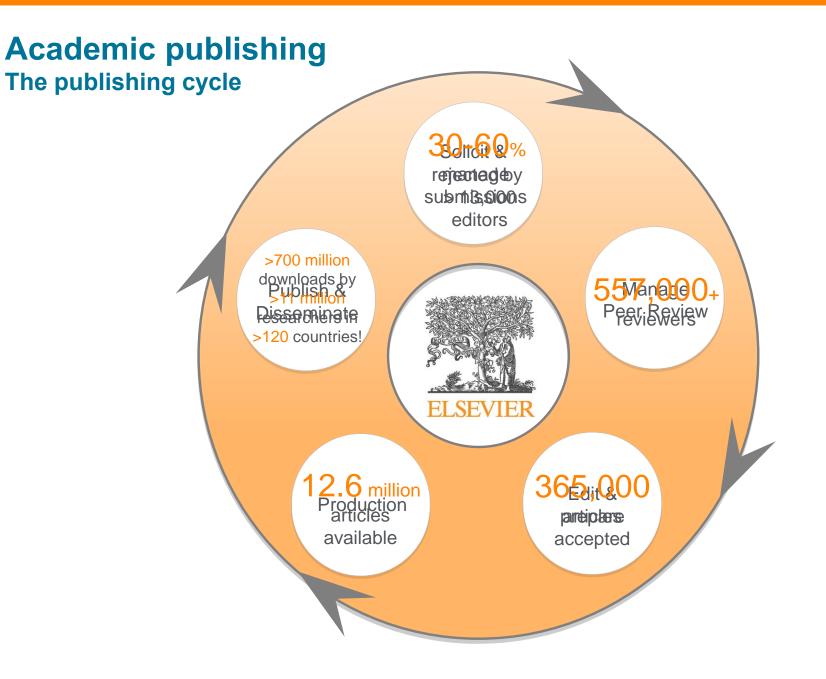
Perform peer-review to ensure the validity and integrity of submissions

#### Dissemination

Provide a medium for discoveries and findings to be shared

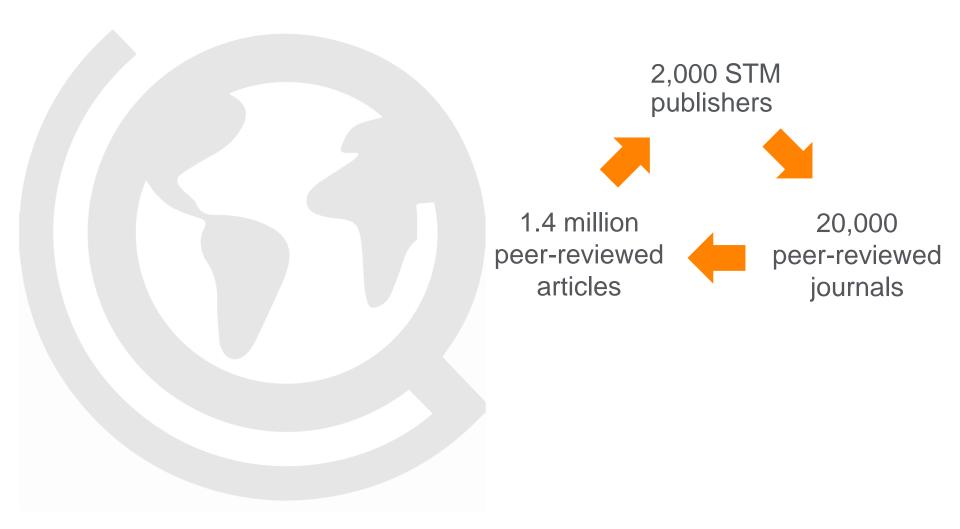
#### Preservation

Preserving the minutes and record of science for posterity



## Scholarly publishing today

Scientific, technical and medical (STM) publishing

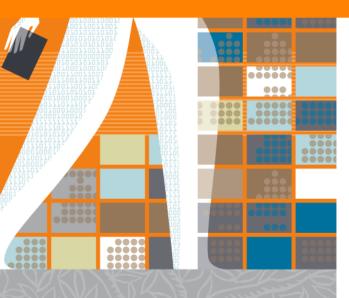




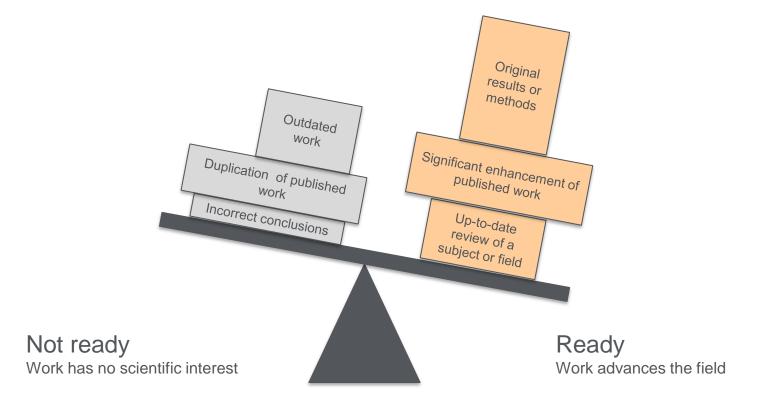


## Elsevier Publishing Campus Publishing Connect

# **Preparing your manuscript**



#### Planning your article Are you ready to publish?





#### **Planning Your Article** What makes a strong manuscript?

- Clear and useful message
- A logical manner
- Readers grasp the research

Editors, reviewers and readers all want to receive well presented manuscripts that fit within the aims and scope of their journal.

#### Planning your article Types of manuscripts



## Full articles

Substantial, complete and comprehensive pieces of research Is my message sufficient for a full article?



#### Letters or short communications

• Quick and early communications Are my results so thrilling that they should be shown as soon as possible?



#### **Review papers**

- Summaries of recent developments on a specific topic
- Often submitted by invitation

Your supervisor or colleagues are also good sources for advice on manuscript types.

#### Planning your article Types of manuscripts



## Full articles

Substantial, complete and comprehensive pieces of research Is my message sufficient for a full article?



#### Letters or short communications

• Quick and early communications Are my results so thrilling that they should be shown as soon as possible?

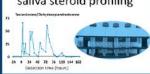


#### **Review papers**

- Summaries of recent developments on a specific topic
- Often submitted by invitation

Your supervisor or colleagues are also good sources for advice on manuscript types.







Potential of saliva steroid profiling for the detection of endogenous steroid abuse: Reference thresholds for oral fluid steroid concentrations and ratios

Michael Polet, Laurie De Wilde, Pieter Van Renterghem, Wim Van Gansbeke, Peter Van Eenoo (Published in pages 1-12 of this issue)



ScienceDirect

## **Review papers**

- Summaries of red
- Often submitted k

Your supervisor or concagues are also good s advice on manuscript types.

ticle

C

tł



volume 102

May 2018

S

ISSN 2214-1588





#### Choosing the right journal Best practices

- Aim to reach the intended audience for your work
- Choose only one journal, as simultaneous submissions are prohibited
- Supervisor and colleagues can provide good suggestions
- Shortlist a handful of candidate journals, and investigate them:
  - Aims
  - Scope
  - Accepted types of articles
  - Readership
  - Current hot topics

Articles in your reference list will usually lead you directly to the right journals.



## Your Journals list for this manuscript

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

- $\checkmark$  All authors of the submission agree to this list and the sequence of journals
- ✓ Write your draft as if you are going to submit to the first journal on your list.
  Use <u>its</u> Guide for Authors these differ per journal

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!

#### Choosing the right journal The Impact Factor

- It indicates how many times the more recent papers in a journal are cited on average in a given year
- It is influenced by editorial policies of journals and turnover of research

The impact factor can give you a general guidance, but it should NOT be the sole reason to choose a journal.

## What is the Impact Factor (IF)?

#### **Impact Factor**

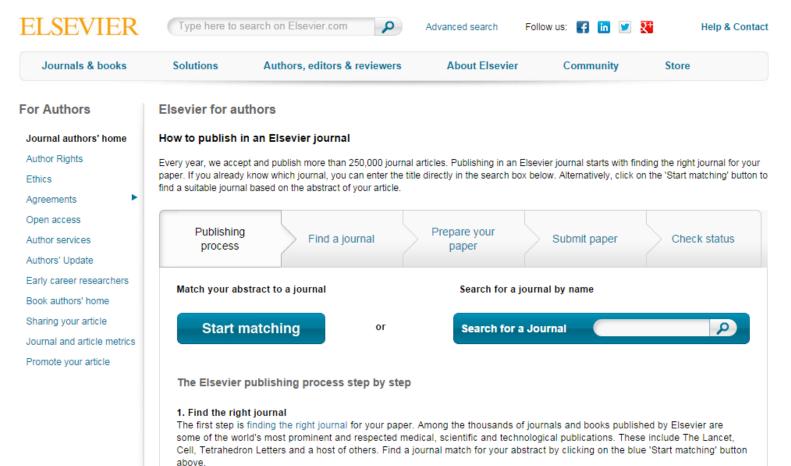
[the average annual number of citations per article published]

For example, the 2014 impact factor for a journal is calculated as follows:

- A = the number of times articles published in 2014 and 2015 were cited in indexed journals during 2016
- B = the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2014 and 2015
- 2016 impact factor = A/B
- e.g. <u>1.000 citations</u> = 10.000
  50 + 50 articles



#### Choosing the right journal Journal Finder Tool



#### **Elsevier Publishing Campus**

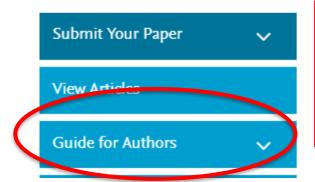
#### **Preparing your manuscript** Guide for Authors

- Find it on the journal homepage of the publisher, e.g. Elsevier.com
- Keep to the Guide for Authors in your manuscript
- It will save your time

Home > Journals > Analytica Chimica Acta



ISSN: 0003-2670



## Analytica Chimica Acta

An International Journal Devoted to All Branches of Analytical Chemistry

> Supports Open Access

Editors: Richard Baldwin, Neil Barnett, Wolfgang Buchberger, Lutgarde M. C. Buydens, Paul Francis, Ulrich Krull, James Landers, Liang Li, Yuehe Lin, Janusz Pawliszyn, Paul Worsfold, Review Editor: Manuel Miró

> View Editorial Board

*Analytica Chimica Acta* provides a forum for the rapid publication of original research, and critical reviews dealing with all aspects of fundamental and applied modern **analytical science**. The journal welcomes the **submission** of research papers which report studies concerning the development of new and...

#### Read more

Most Downloaded Recent Articles Most Cited Open Access Articles

<u>a</u> 🖂

## **Common problems with submissions:**

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, former Editor, Journal of Chromatography A

#### **Recap** Before writing your paper

Determine if you are ready to publish your work

Decide on the best type of manuscript

Choose the target journal

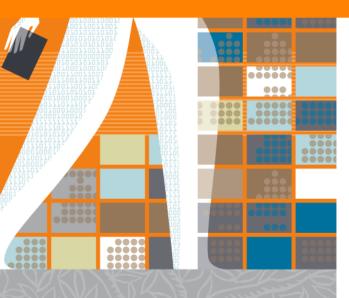
Check the Guide for Authors





## Elsevier Publishing Campus Publishing Connect

# Writing your manuscript



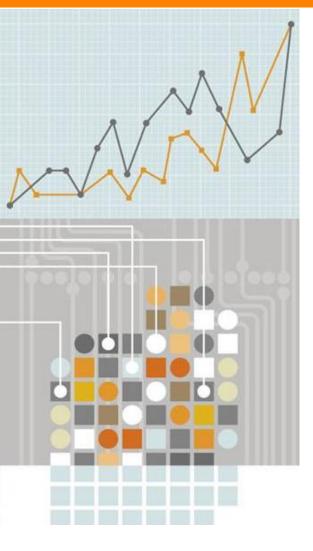
#### PEANUTS

by Charles Schulz



© United Feature Syndicate, Inc. Reprinted with permission.

#### ELSEVIER



## **General structure of a research article**

- Title
- Abstract
- Keywords
- Introduction
- Methods
- Results and Discussion
- Conclusion
- Acknowledgements
- References
- Supporting Materials

Read the Guide for Authors for the specific criteria of your target journal.

#### Authorship: Who is allowed to be an Author?

- Policies regarding authorship can vary
- Most common example: the International Committee of Medical Journal Editors ("Vancouver Group") declared that an author must:
  - 1. **substantially contribute** to conception and design, or acquisition of data, or analysis and interpretation of data;
  - 2. 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. agreement to be accountable for all aspects of the work in ensuring that questions related to accuracy or integrity of any part of the work are appropriately investigated and resolved.

ALL four conditions must be fulfilled to be an author!

All others would qualify as "Acknowledged Individuals"

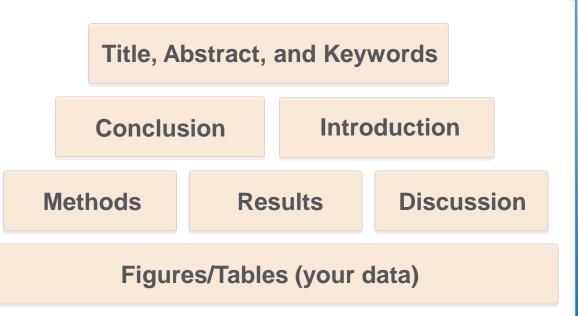
## **Authorship - Sequence & Abuses**

- 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
  - <u>Corresponding author</u>
    - 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:
  - **<u>K</u>** Ghost Authorship: leaving out authors who should be included
  - **<u>Gift Authorship</u>**: including authors who did not contribute significantly

ELSEVIER

# The process of writing – building the article





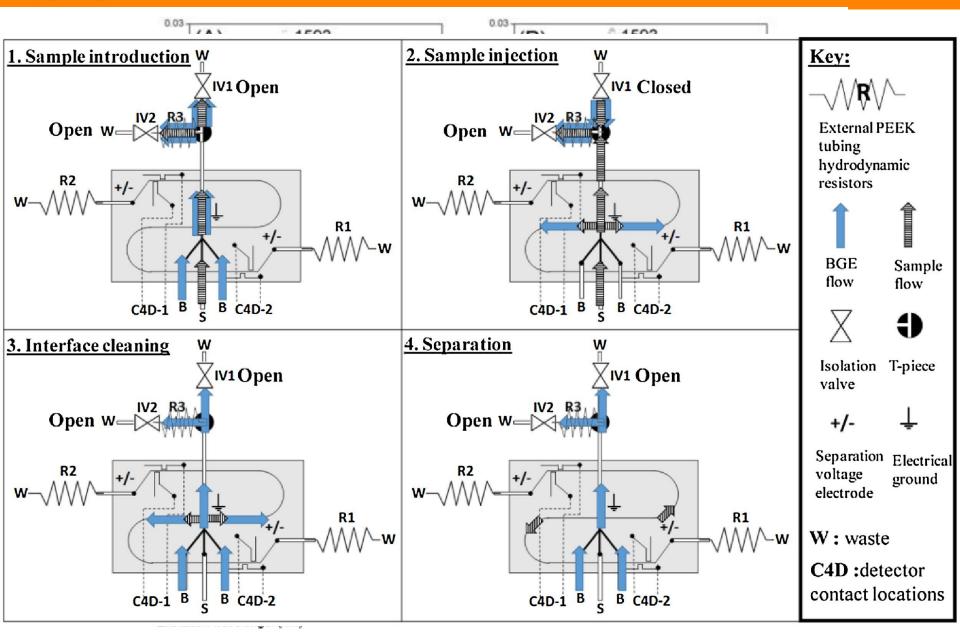


Fig. 6. Convolution (full line) of the simulated spectra of isolated tyrosine (a), P1 in compact form (b), P1 in extended form with helices preserved (c) and P1 in extended form (d). Transitions are shown by bars.

To accomplish this	Choose one of these
To present exact values, raw data, or data which do not fit into any simple pattern	Table, list
To summarize trends, show interactions between two or more variables, relate data to constants, or emphasize an overall pattern rather than specific measurements	Line graph
To dramatize differences or draw comparisons	Bar graph
To illustrate complex relationships, spatial configurations, pathways, processes, or interactions	Diagram
To show sequential processes	Flowchart
To classify information	Table, list, pictograph
To describe parts or electric circuits	Schematic
To describe a process, organization, or model	Pictograph, flowchart, block diagram
To compare or contrast	Pictograph, pie chart, bar graph
To describe a change of state	Line graph, bar graph
To describe proportions	Pie chart, bar graph
To describe relationships	Table, line graph, block diagram
To describe causation	Flowchart, pictograph
To describe an entire object	Schematic, drawing, photograph
To show the vertical or horizontal hierarchy within an object, idea, or organization	Flowchart, drawing tree, block diagram

#### Table 3.1. Choosing the most effective type of illustration for a given goal

From: Matthews and Matthews (2008), Successful scientific writing, 3<sup>rd</sup> ed., Cambridge University Press

## Legends

Too vague: Fig. 1. Graph of relevant data

*Over-specified:* Fig. 1. Outcome of multifactorial analysis of the variation of temperature, pressure and additive on the yield of nanoparticles using the Fields-method for assembly.

*Better:* Fig. 1. Comparison of reaction conditions for optimal nanoparticle production.

## **Methods**

O In O Do pr Idus

Describe how the problem was studied

Include detailed information

Do not describe previously published procedures rather refer to them

Identify the equipment and materials used

## Results

Include only data of primary importance

Use sub-headings to keep results of the same type together

Be clear and easy to understand

Highlight the main findings

Feature unexpected findings

Provide statistical analysis

Include illustrations and figures

## **Discussion**

Interpretation of results

Most important section

Make the discussion correspond to the results and complement them

Compare published results with your own

#### Be careful not to use the following:

- Statements that go beyond what the results can support
- Non-specific expressions
- New terms not already defined or mentioned in your paper
- Speculations on possible interpretations based on imagination

## Conclusion

- Be clear
- Provide justification for the work
- Explain how your work advances the present state of knowledge
- Suggest future experiments



## Introduction

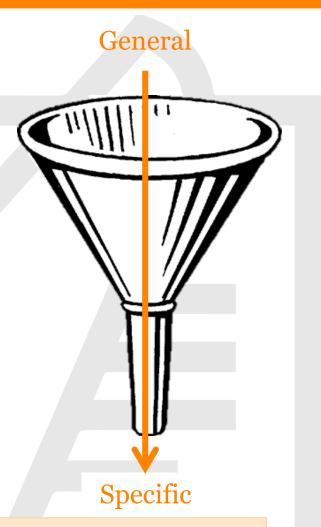
Provide a brief context to the readers

Address the problem

Identify the solutions and limitations

Identify what the work is trying to achieve

Provide a perspective consistent with the nature of the journal



Write a unique introduction for every article. DO NOT reuse introductions.

## **Keywords**

- Are the labels of the manuscript
- Are used by indexing and abstracting services
- Should be specific
- Should use only established abbreviations (e.g. DNA)

Check the Guide for Authors for specifics on which keywords should be used.

Article title	Keywords
"An experimental study on evacuated tube solar collector using supercritical $CO_2$ "	Solar collector; supercritical CO <sub>2</sub> ; solar energy; solar thermal utilization

## **Acknowledgements**

- Co-workers
- As a courtesy, ask consent for anyone you name



## **Ethical & financial declarations**

- Patient consent
- Funding: Provide the relevant funding details. If none, include the following statement: "No funding or grant support."
- Conflict of interest: Provide the details about potential conflicts. If none, include the following statement: "The following authors have no financial disclosures: (Authors initials)."



## Abstract

- Summarize the problem, methods, results, and conclusions in a single paragraph
- Make it interesting and understandable
- Make it accurate and specific
  - A clear abstract will strongly influence whether or not your work is considered
- Keep it as brief as possible

Take the time to write the abstract very carefully. Many authors write the abstract last so that it accurately reflects the content of the paper.

## **Effective manuscript titles**

- Attract reader's attention
- Contain fewest possible words
- Adequately describe content
- Are informative but concise
- Identify main issue
- Do not use technical jargon and rarely-used abbreviations

Editors and reviewers do not like titles that make no sense or fail to represent the subject matter adequately. Additionally, if the title is not accurate, the appropriate audience may not read your paper.

#### **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, ....
- Original figure before color correction or trimming for clarity
- Not part of the printed article
  - Will be available online with the published paper
- Must relate to, and support, the article

#### **Reference Management Software helps**

- Many journals are helpful in formatting the journal reference style for you (e.g. Elsevier's Your Paper Your Way service).
- If the publisher is not offering this service it is <u>your</u> responsibility to format references correctly!

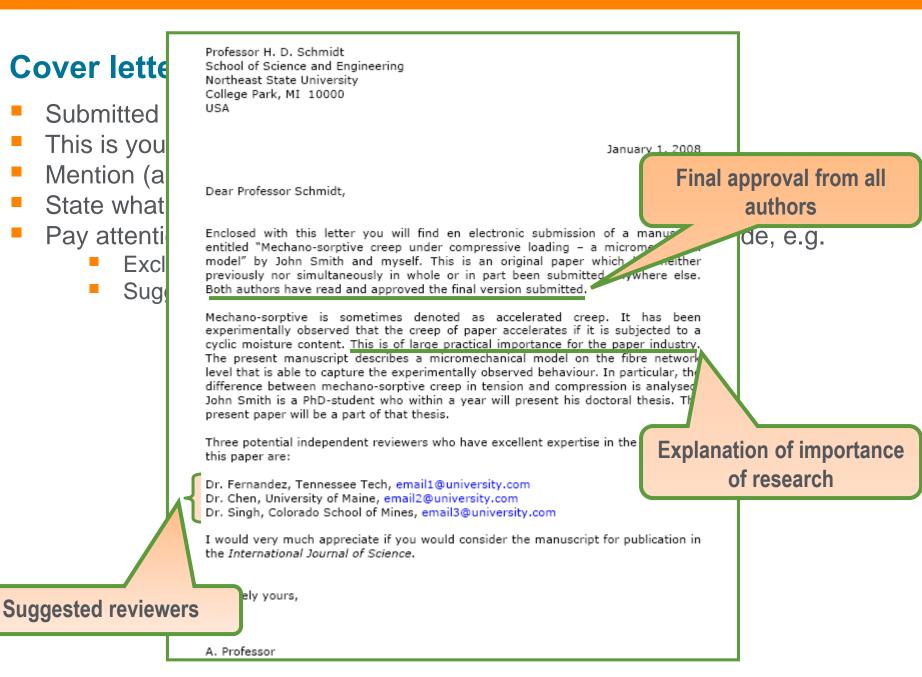


en.wikipedia.org/wiki/Comparison\_of\_reference\_management\_software

## **Final Check List - Manuscript**

- Is the title accurate, succinct, and effective?
- Does the abstract represent all the content within the allowed length?
- Does the introduction set the stage adequately but concisely?
- Is the rest of the text in the right sequence?
- Is all of the text really needed?
- Is any needed content missing?
- Do data in the text agree with data in the tables/ figures?
- Should any of the tables of figures be omitted, restructured, or combined?
- Are the correct references included?

#### ELSEVIER



## What leads to acceptance ?

- $\checkmark$  <u>A</u>ttention to details
- ✓ <u>Check and double check your work</u>
- $\checkmark$  <u>C</u>onsider the reviewers' comments
- $\checkmark$  English must be as good as possible
- ✓ **P**resentation is important
- $\checkmark$  Take your time with revision
- ✓ Acknowledge those who have helped you
- $\checkmark$  New, original and previously unpublished
- ✓ <u>C</u>ritically evaluate your own manuscript
- $\checkmark$  Ethical rules must be obeyed

– Nigel John Cook Former Editor-in-Chief, Ore Geology Reviews





## Elsevier Publishing Campus Publishing Connect

# Scientific and ethical misconduct



#### **Please note**

While the following slides offer guidance and general principles of responsibilities that Authors should consider, different aspects of publishing ethics can vary greatly by discipline and journal.

It is recommended that all Authors consult their peers, advisors and journal Editors to learn the specific Author responsibilities in their discipline.

## The most serious issues to avoid

These are the 3 most common forms of ethical misconduct that the research community is challenged with:

1. Fabrication

Making up research data

#### 2. Falsification

Manipulation of existing research data

3. Plagiarism

Previous work taken and passed off as one's own

## What may be plagiarised?

Work that can be plagiarised includes...

- Words (language)
- Ideas
- Findings
- Writings
- Graphic representations
- Computer programs
- Diagrams

Graphs

- Illustrations
- Information
- Lectures
- Printed material
- Electronic material
- Any other original work

Higher Education Academy, UK

## **Correct citation is key**

Crediting the work of others (including your advisor's or your own previous work) by citation is important for at least three reasons:

- To place your own work in context
- To acknowledge the findings of others on which you have built your research
- To maintain the credibility and accuracy of the scientific literature



#### Can you plagiarise your own work? Text re-cycling/selfplagiarism

A grey area, but best to err on the side of caution: always cite/quote even your own previous work

**For example** You publish a paper and in a later paper, copy your Introduction wordfor word and perhaps a figure or two without citing the first paper

Editors may conclude that you intentionally exaggerated your output

## Who is really responsible for Ethics?

All Stakeholders

Authors

Institutions/Companies/Agencies/Funding Bodies

Publishers/Journal Editors

All Elsevier journals are members of:

 $\mathbf{C} \left| \mathbf{O} \right| \mathbf{P} \left| \mathbf{E} \right|$  committee on publication ethics



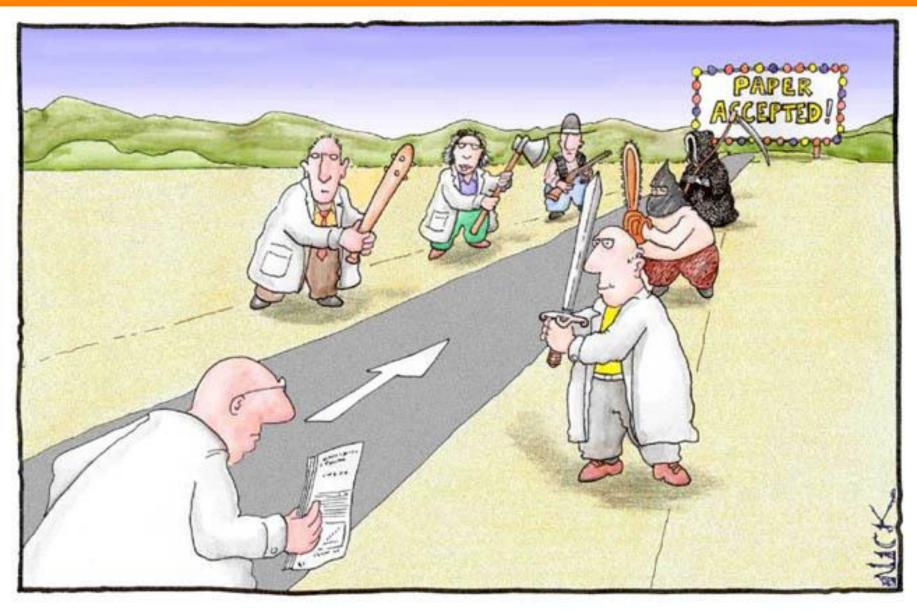


#### Elsevier Publishing Campus

## **The Peer Review Process**



**Publishing Connect** 

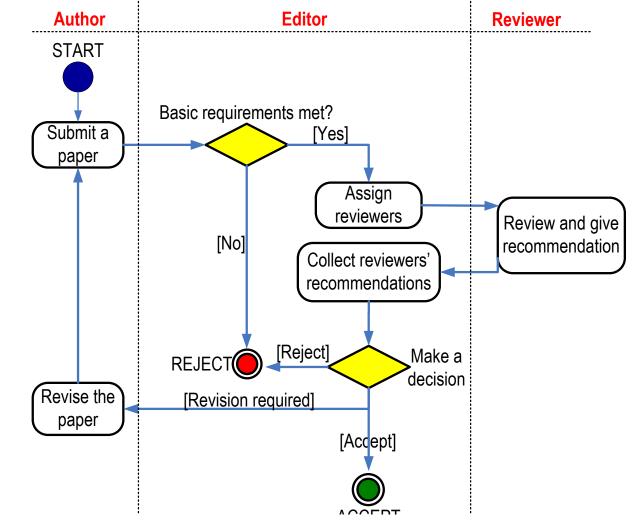


#### **Peer review**

- Helps to determine the quality, validity, significance, and originality of research
- Helps to improve the quality of papers
- Publishers are outside the academic process and are not prone to prejudice or favour
- Publishers facilitate the review process by investing in online review systems and providing tools to help Editors and Reviewers

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





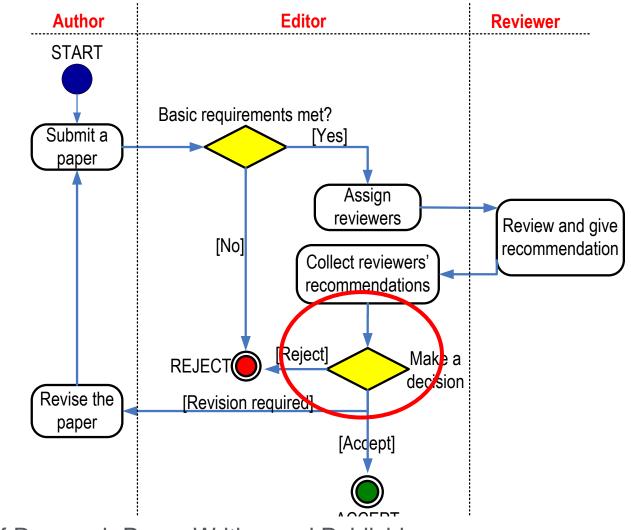
Michael Derntl. Basics of Research Paper Writing and Publishing. http://dbis.rwth-aachen.de/~derntl/papers/misc/paperwriting.pdf

#### **Rejection without external review**

- The Editor-in-Chief evaluates submissions and determines whether they enter into the external review process or are rejected
- English language inadequate
- Prior publication of the data
- Multiple simultaneous submissions of the same data
- Out of the scope of the journal
- Manuscript quality (also scientific) not sufficient for the journal (the higher the reputation of the journal the more important this becomes)

#### **The Peer Review Process – revisions**



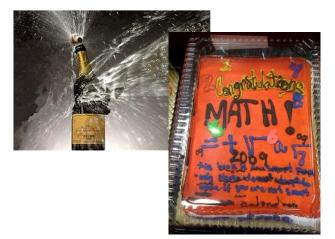


Michael Derntl. Basics of Research Paper Writing and Publishing. http://dbis.rwth-aachen.de/~derntl/papers/misc/paperwriting.pdf

## First Decision: "Accepted" or "Rejected"

## Accepted

• Very rare, but it happens

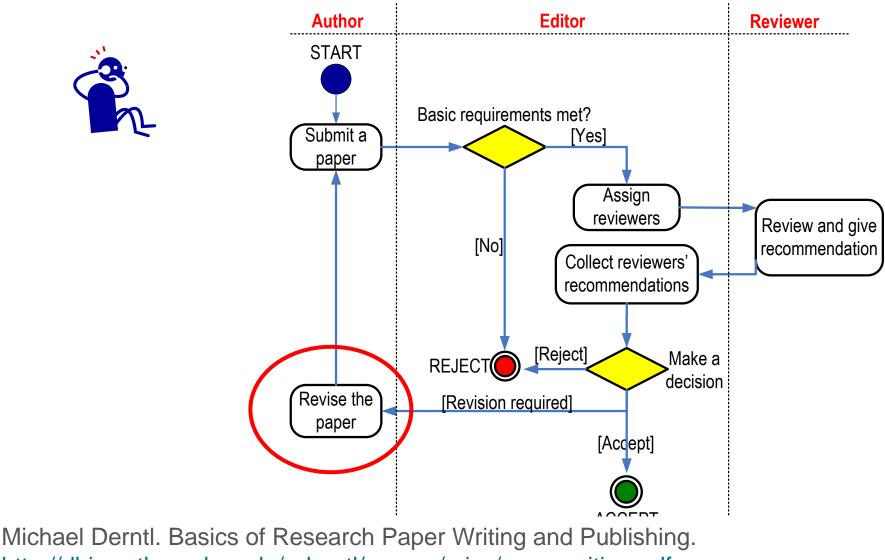


- Congratulations!
  - Cake for the department
  - Now wait for page proofs and then for your article to be online and in print

## 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 and revise accordingly
  - They may review your manuscript for the next journal too!
  - Read the Guide for Authors of the new journal, again and again.

#### **The Peer Review Process – revisions**



http://dbis.rwth-aachen.de/~derntl/papers/misc/paperwriting.pdf

#### **Review process – considerations**

Reviewers must not communicate directly with authors

All manuscripts and materials must be treated confidentially by Editors and reviewers

The aim is to have a first decision to the authors by 4-6 weeks (depending on the field) after submission

Meeting the schedule objectives requires a significant effort by all involved

Reviewers should treat authors as they themselves would like to be treated

## Why do reviewers review?

- Value from mentoring young researchers
- Enjoyment in reviewing
- General interest in the area
- Awareness of new research and developments before their peers
- Career development
- Help with own research or new ideas
- Association with journals and Editors
- Keep updated with latest developments
- Are you interested? Have a look at: <u>http://www.elsevier.com/reviewers/becoming-a-reviewer-how-and-why</u>

## 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, but often it is accepted if all points are addressed!

## **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

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

## **Increasing the likelihood of acceptance**

All these various steps are not difficult.

 $\checkmark$  You have to be consistent.

 $\checkmark$  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!

## A systematic approach for reviewing

Article section	Description
Writing	Clear and concise English
Title	Specific and reflecting the content of the manuscript
Abstract	Brief and describing the purpose of the work, not overstating the significance
Methodology	Full explained and relevant to the study
Figures	Justified and clear with fonts proportionate to the size of the figure
Tables	Can they be simplified or condensed? Should any be omitted?
Results	Show results match the results described in the text and are properly controlled?
Discussion	Discussion of the findings relating back to the study aims, based on the results and not on speculation
Conclusion	Implications of the results obtained, and their place in a broader research context; not a summary of findings.
Trade Names/ Abbreviations/Symbols	Properly used where indicated
References	Are all previously published sources properly referenced?

## **General impression and abstract**

- Look at the manuscript as a whole
  - General comprehension of the manuscript
  - Language/style/grammar
  - Structure
  - Reviewer's general level of enthusiasm
- Is the Abstract included?
  - Is it a real summary of the paper?
  - Does it include the key results
  - Does it contain unnecessary information?
  - Is it too long? Journals set a limit for the number of words

#### Introduction

- Is it effective, clear, and well organized?
- Does it really introduce and put into perspective what follows?
- Suggest changes in organization and point authors to appropriate citations if necessarily
- Be as specific as possible when giving feedback
  - Don't just write "the authors have done a poor job"



# **Assessing the methodology**

- Can a colleague reproduce the experiments and get the same outcomes?
- Is the description of new methodology complete and accurate?
- Did the authors include proper references to previously published methodology?
- Is the sample size large enough and was it selected in an appropriate way?
- Was the data collected in accordance with accepted practice?
- Could or should the authors have included supplementary material?

# **Results and discussion (I)**

- Suggest improvements in the way data is shown
- Comment on general logic and on justification of interpretations and conclusions
- Are the results reflecting the raw data appropriately?
- Are the results well controlled?
- Comment on the number of figures, tables, and schemes
- Write concisely and precisely which changes you recommend

# **Results and discussion (II)**

- List suggested style/grammar changes and other small changes separately
- Suggest additional experiments or analyses that would be necessary to support the claim of the manuscript
- Make clear the need for changes/updates
- Ask yourself whether the manuscript is worth being published



# **Assessing the conclusions**

- Comment on importance, validity, and generality of conclusions
- Request toning down of unjustified claims and generalizations
- Request removal of redundancies and summaries
- The Abstract, not the Conclusion, summarizes the study

# **References**, tables, and figures

- Check accuracy, number, and appropriateness of citations
- Comment on tables and figures, and their quality and readability
- Comment on any footnotes
- Assess completeness of legends, headers, and axis labels
- Comment on need for color in figures
- Check presentation consistency

# Editors' view: what makes a good reviewer?

- Provides an objective, thorough, and comprehensive report
- Provides well-founded comments for authors
- Gives constructive criticism
- Provides a clear recommendation to the Editor
- Submits the report on time

# **Comments to the editors**

Comment on novelty and significance

Recommend whether the manuscript is suitable for publication



Remember that confidential comments will not be disclosed to the author(s)

# **Comments to the authors**

- Provide specific comments on the design
- Comment on the presentation of data, results and discussion
- Ensure comments to the author(s) are consistent with your recommendation to the Editors

"When reviewing, try to remember that you are an author too and be professional and constructive in your approach. That can be hard but don't let your inner nitpicker get the upper hand. Leave 24 hours between reading the manuscript and writing your review, to allow time for your reasonable self to rise to the fore." Stephen Curry, Professor of Structural Biology, Imperial College London

Accept/ Revise/ reject suggestions without any comments.

Comments purely about language, typos or formatting

Offensive comments

The article may be accepted after carrying out the following minor corrections:

- 1. The abstract and concussion may be improved.
- 2. Fig. 5, X-axis unit should be mentioned.
- 3. Thickness of the crystal should be mentioned in UV-Vis. studies.
- 4. particle size should be mentioned in Kurtz Powder technique.

This is a comprehensive study and I recommend publication in this journal. The author needs to proof read this manuscript well and also I recommend figure 1 which concerns with synthesis to be moved to the supplemental part of the journal.

To reduce the number of tables and figures, Tbls. 3 & 6 and Figs. 2 & 4 should be placed in supplemental materials.

I find it difficult to compare the experimental spectra in fig. 5 to their predicted ones. The authors should offset/stack the spectra on one another or covert the experimental spectra into absorbance.

- References are incorrect formatted and need to be redone according to Journal's format.

- Figures 4 and 5 should be placed in supplementary materials.
- Stay consistent with labeling...either x or U/mL.

After these minor corrections I recommend publication of this manuscript.

- Comments on the substance of the submission
- Correlating text and figures and checking that conclusions made are based on data
- Comments on how easy it is to read & understand the paper
- See submission in light of the scope of the journal

The manuscript examines structures of peptides that are known to form amyloid-type assemblies by mass spectrometry. The main point of the paper is that beta-strand assembly is observed for the peptides. The topic of the paper is of interest for the audience of IJMS. However, there a couple of shortcomings of the current manuscript that I would like to see addressed before re-reviewing the paper. My major concerns are as follows:

1. The paper is based on the notion that it is possible to determine the secondary structure of peptides and their assemblies by MS/MS. It is not clear to me how that could be done.

2. In this respect, I also note that the authors heat the capillary to 200 degrees Celcius. Proteins and their assemblies can be structurally denatured by elevated temperatures. **Can it be reasonably expected that any conformations observed in the MS/MS experiments contain any information on the solution-phase assembly structure (which is what's important)?** 

3. At several parts throughout their investigation, the authors emphasize the significance of the charge on the beta-sheet formation pathway. Why would the charge state observed in a mass spectrum be relevant for the peptide assembly formation mechanism in the solution phase.

4. XYZ and co-workers noted a conformational transition for NNQQNY and VEALY oligomers. Can the authors reproduce such conformational changes by their MS/MS approach?

5. In this respect I find it particularly important to add a peptide system to the study that can serve as a negative control to the study. XYZ and co-workers used YGGFL to that end. Can the authors observe such a difference between the oligomers of YGGFL and those of the beta-assembling systems ? Minor points:

1. Page 4 top paragraph: this paragraph is based on reference 28 not 25. Please change [25] to read [28].

2. **The paper is often hard to read due to many abbreviations and jargon**, especially when discussing the fragmentation patterns.

3. There are too many display items. At least some of the MS spectra in Figures 4-8 can be placed to the SI as well as Table 2 and Figure 3.

The resolution and sensitivity enhancement in this experiment are solely due to a elegant band-selective homonuclear decoupling scheme during data acquisition (HOBS). The HOBS technique, applied to 1D and 2D 1H experiments, has just been accepted for publication elsewhere by the same authors.

To some extend, therefore, the current manuscript cannot be advertised as novel.

It is just a new application/implementation of their technique, but I must say that it is a very nice application, that allows/facilitates quantitative measurements of long range 13C-1H scalar couplings in small molecules.

I think it is publishable after minor modifications.

The resolution and sensitivity enhancement in this experiment are solely due to a elegant band-selective homonuclear decoupling scheme during data acquisition (HOBS). The HOBS technique, applied to 1D and 2D 1H experiments, has just been accepted for publication elsewhere by the same authors.

To some extend, therefore, the current manuscript cannot be advertised as novel.

It is just a new application/implementation of their technique, but I must say that it is a very nice application, that allows/facilitates quantitative measurements of long range 13C-1H scalar couplings in small molecules.

I think it is publishable after minor modifications.

Now, for biosynthesis, the authors made very good observations but they **didn't carry enough experiments to warrant the conclusion made in this paper.** For instance, the fact that the isomers responded differently to the different lights is not indication that there exist different routes for the synthesis of different isomers. Here, I think the authors speculated beyond the data could allow. The results as present here are still in their early stages to warrant a reasonable publication. As such, I would recommend that the authors do other experiments (transcriptomics and proteomics) and combine with the metabolite data and submit in relevant journal such as plant physiology and biochemistry.

unfortunately my recommendations are that the paper needs major redone before it could be considered in another journal even.

# **Confidential document**

- Manuscripts are confidential documents where the data is and remains exclusive property of the author(s)
- Must be destroyed after the final decision from the Editor
- Shared responsibility for the review of the manuscript with a colleague must be disclosed to the Editors

sense about science





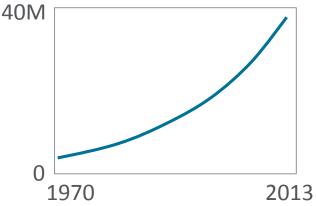
# Elsevier Publishing Campus Publishing Connect

# Get noticed Promoting your researcher for maximum impact



# You want to make sure your research gets the attention it deserves

- The volume of research articles is growing at an accelerated pace
- For most researchers, it's a real challenge to keep up with the literature
- Your job: make sure your research doesn't fall through the cracks!



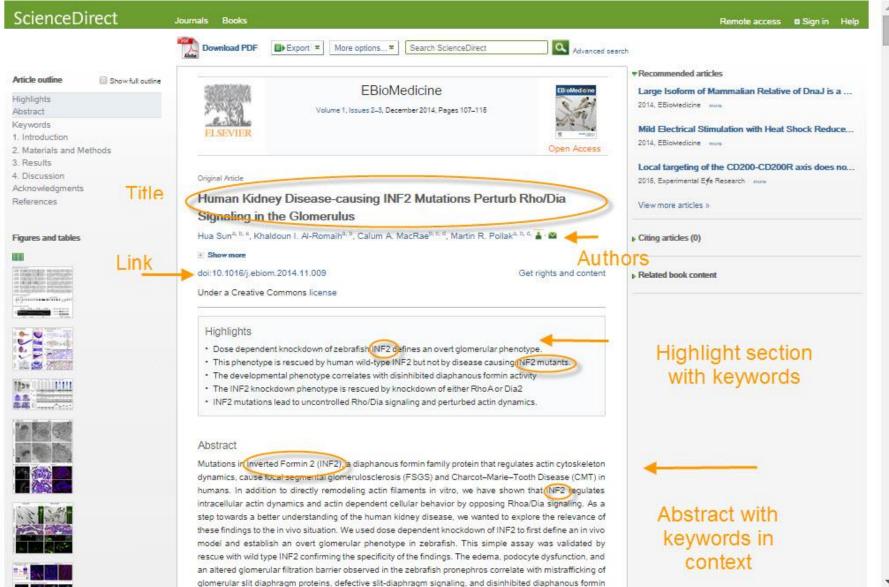
7 hrs/week average time spent on literature

# **Promoting your work**

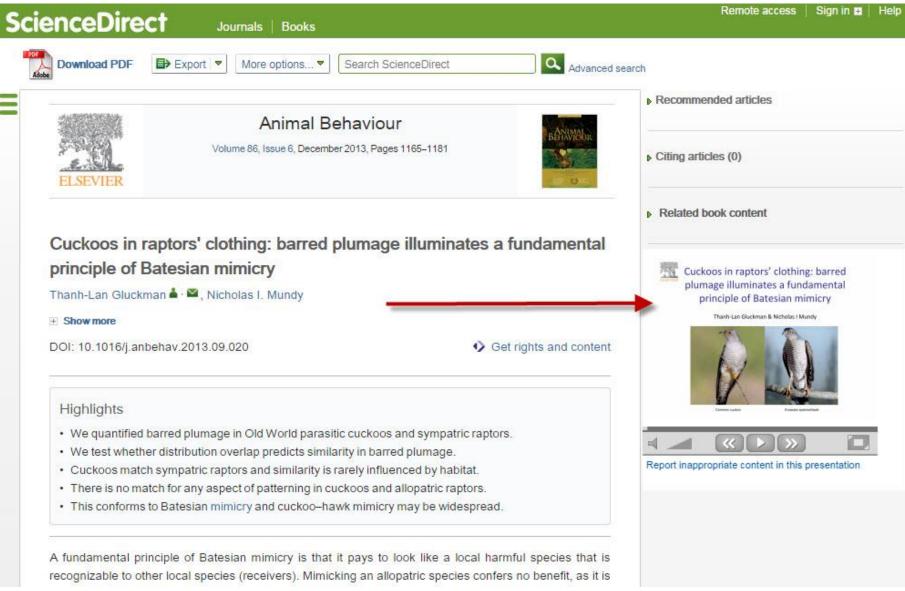
- Write the best possible article
- If you are invited to feature the cover of a journal: provide an amazing design
- Make sure that search engines can find it easily
- Have appealing eye-catcher visuals
- Work with your institution's press office for a press release
- Talk about your work at conferences and social media
- Make use of ShareLinks



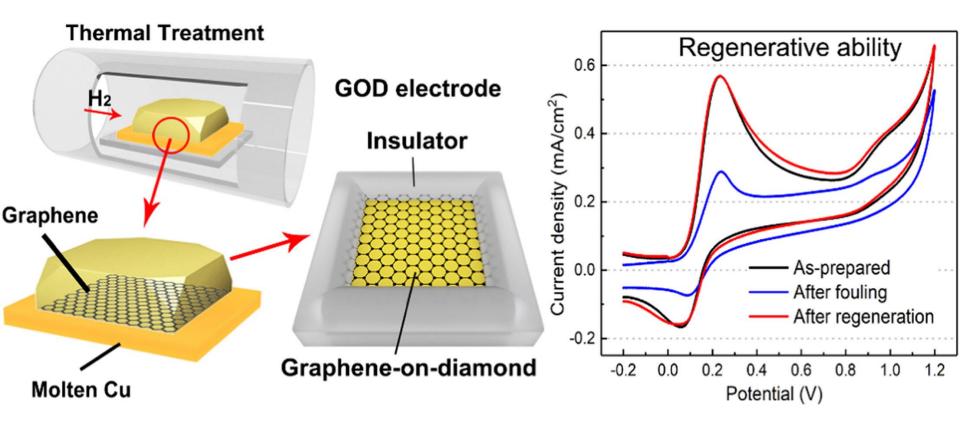
# **Search Engine Optimization (SEO)**



# **AudioSlides**



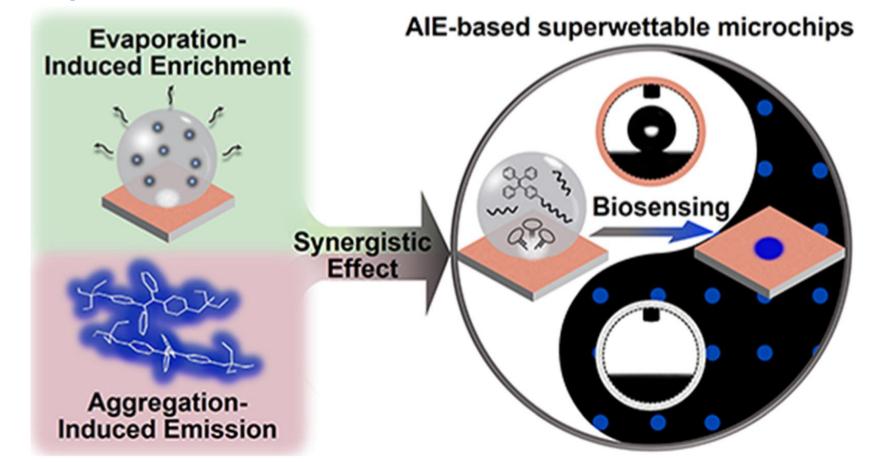
# **Graphical Abstracts**



Highly stable and regenerative graphene–diamond hybrid electrochemical biosensor for fouling target dopamine detection

Yuan et al., Biosensors and Bioelectronics, Volume 111, 15 July 2018, Pages 117-123

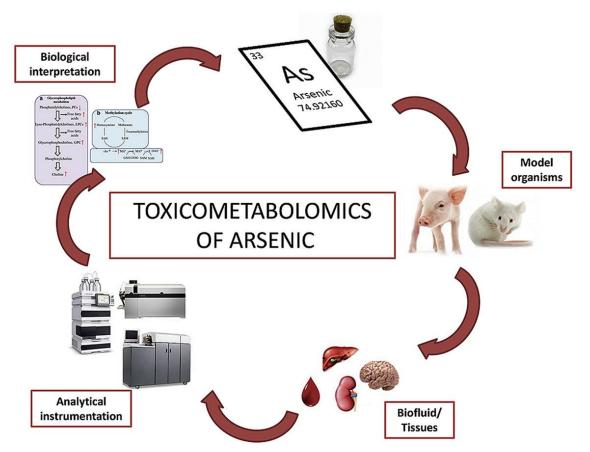
### **Graphical Abstracts**



AIE-based superwettable microchips for evaporation and aggregation induced fluorescence enhancement biosensing

Chen et al., Biosensors and Bioelectronics, Volume 111, 15 July 2018, Pages 123-130

# **Graphical Abstracts**



Mass spectrometry based analytical approaches and pitfalls for toxicometabolomics of arsenic in mammals: A tutorial review

Garcia-Barrera et al., Analytica Chimica Acta, Volume 1000, 13 February 2018, Pages 41-66

# **Promoting your article**

# 1. Conferences

- Prepare to network
- Also connect online
- Online poster

# 2. Media relations

- Research statement
- Your institution's communication's channels
- Contact your editor or you can send an email to: researchcomm@elsevier.com



# Promoting your article Fentanyl Can Sicken First Responders. Here's a Possible Solution.

#### NIST researche opioids.

May 09, 2017

Dan Kallen, a detectiv southern New Jersey, searching a home with fellow officers in Augu 2015, when they foun of white powder. Kalle removed a scoop of p for testing. When he w done, he closed the b a bit of air escaped, ca a puff of powder with was enough to send K and a fellow officer to emergency room.

The drugs in the bag had been spiked with fentanyl, a synthetic drug that, like



exposure to synthetic

IA CONTACT

<u>@nist.gov</u>≡ )1

was enough to send K NIST researchers explain how first responders and evidence examiners can use screening technologies to reduce the risk of and a fellow officer to accidental exposure to synthetic opioids.

A lethal dose of heroin compared to a lethal dose of fentanyl. This is just an illustration—the substance actually shown in this photo is an artificial sweetener. *Credit: Bruce A. Taylor/NH State Police Forensic Lab* 

heroin, is an opioid. But it is 50 times more potent than heroin, and accidentally inhaling even a tiny amount can be extremely dangerous. Kallen described his experience in <u>a Drug Enforcement Agency</u> <u>video</u> @ that warns first responders of the dangers of handling unknown powders.

ANIZATIONS

asurement Laboratory Materials Measurement Science Division Surface and Trace Chemical Analysis Group

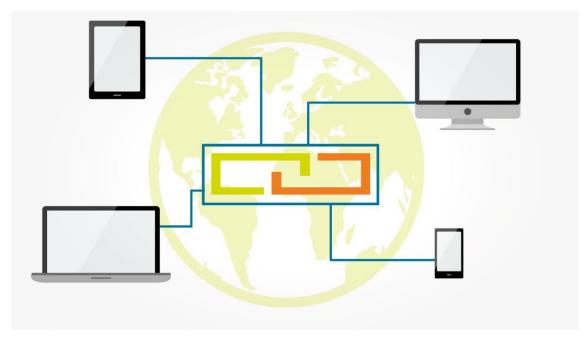
#### **RELATED NEWS**

Sniffing Like a Dog Can Improve Trace Detection of Explosives

# **Promoting your article**

# 3. Share links to your article

- Customized short link with free access
- Link from university website to boost search engines



# **Promoting your article**

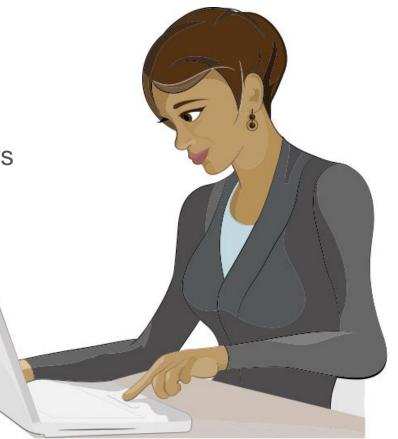
# 4. Online CV



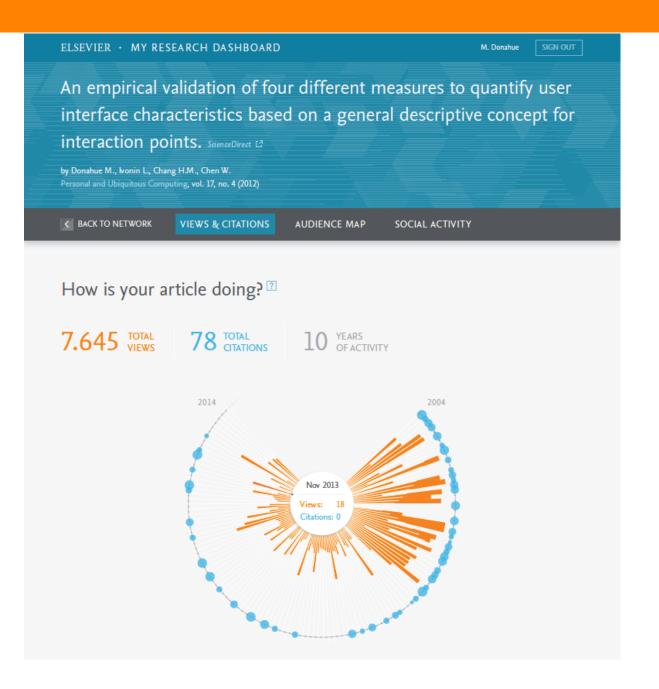
# **Monitoring your article**

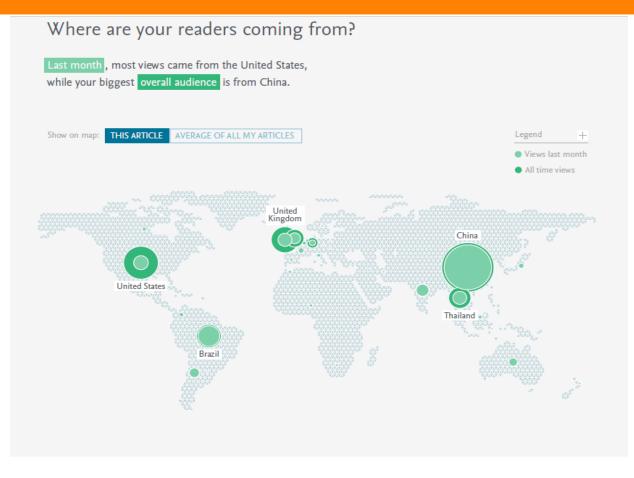
# **My Research Stats on Mendeley**

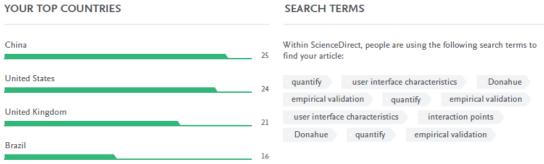
- Early feedback on downloads, shares and citations
- Data about the geographic locations and research disciplines of your readers
- Search terms used in ScienceDirect to find your publications
- A comparison of the performance of your article with other people's articles











# Monitoring your article – article level metrics

Rapid detection of fentanyl, fentanyl analogues, and opioids for on-site or laboratory based drug seizure screening using thermal desorption DART-MS and ion mobility spectrometry.

Citation data: Forensic chemistry, ISSN: 2468-1709, Vol: 4, Page: 108-115 Publication Year: 2017

# CS Freedom of the second secon

#### Explore PlumX Metrics

What are PlumX Metrics? How can they help tell the story about this research? How can I use them?

Learn more

CAPTURES 🗸	27	MENTIONS 🗸	12	SOCIAL MEDIA 🗸	26	CITATIONS 🗸	2
Readers o	26	News Mentions o	11	Tweets 👁	17	Citation Indexes o	2
Exports-Saves o	1	Blog Mentions o	1	Shares, Likes & Comments	° 9		

# Discover a wealth of knowledge

Researcher Academy supports researchers throughout their research journey



# Join a global community

Researcher Academy is unlocking the potential of thousands of researchers around the world Registered users

**③** 40,000

X

60,000

Monthly unique visitors

Certificates awarded

190 Countries

# Visit researcheracademy.com

\* Source: www.researcheracademy.com/infographic/refs





# Thank you

Researcher Academy www.researcheracademy.elsevier.com

Information about publishing in journals <u>www.elsevier.com/authors</u>

If you have more questions, contact me: c.schulz@elsevier.com

# **Elsevier Publishing Campus**