How to Write and Submit a World-class Paper

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Elsevier Science & Technology

China papers published in international journals

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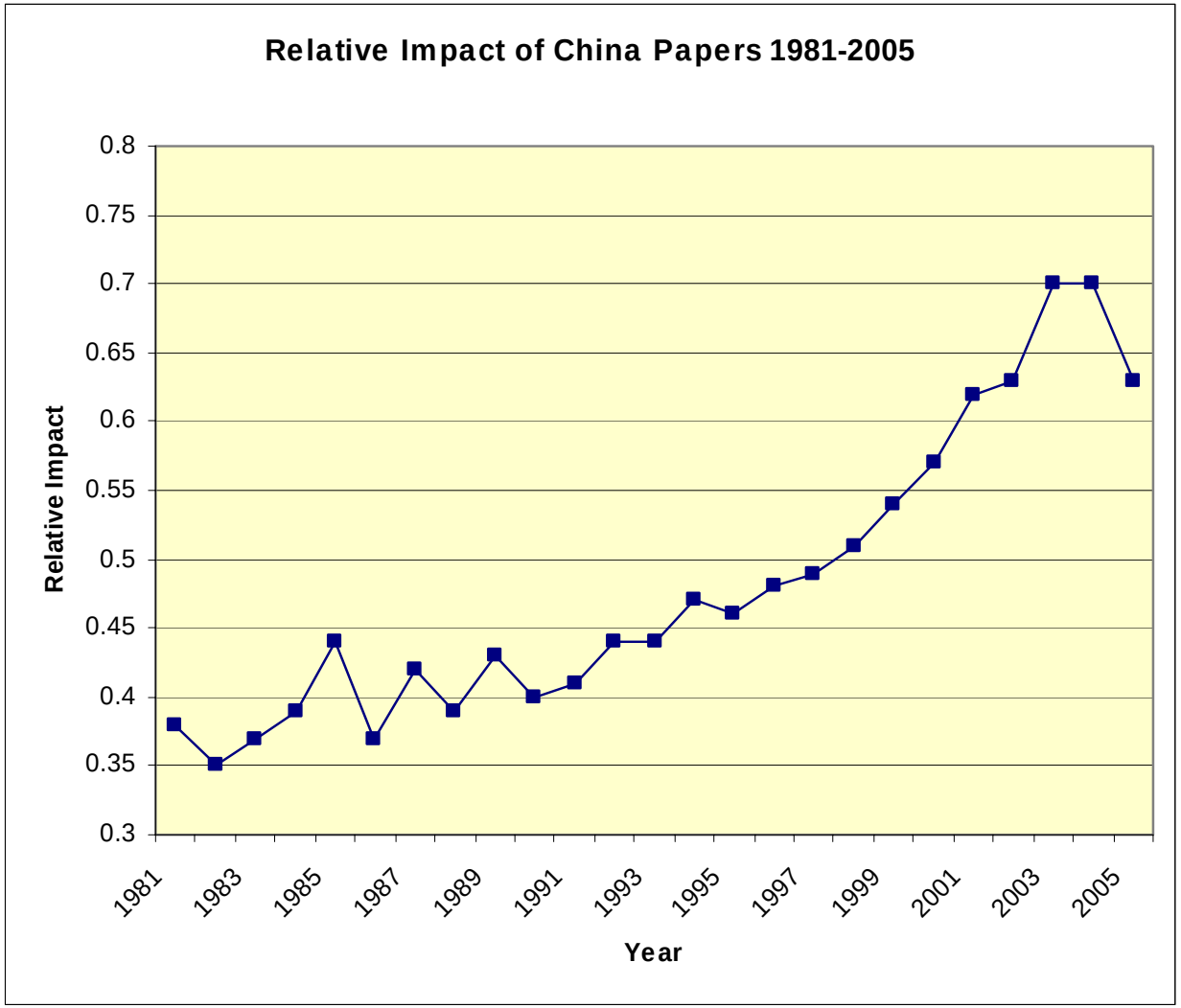
Relative impact of China papers



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Overview

- **Publishing process** 出版流程
- **Check the originality of your ideas** 检查科研思想原创性
- **Use sources properly and avoid plagiarism** 如何合理运用资源避免与前人重复
- **Write the manuscript** 怎样写作科技论文
- **Main complaints of Editors** 论文写作的常见问题
- **Submit your manuscript to Elsevier** 如何给爱思唯尔期刊投稿

Publishing process

Who is reviewing your paper?同行专家评议

'Peer' means 'someone like you'

'Peer review': a review by another scientist in your field

Who is judging your paper? 主编做最后决定

Editor-in-Chief: an internationally famous scientist who decides on each manuscript

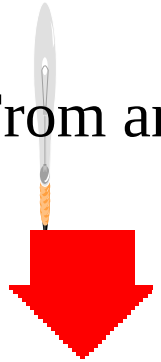
These are busy scientists, just like you!

Please prepare well, so you don't waste their time

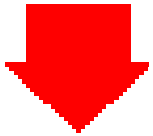
认真准备稿件，不要浪费他们的时间！

Contents

From an idea



by help of rules



to the published paper

- scientific idea 科研思想
  - be original---the importance of developing new methodologies
- paper organization 论文组织
  - Introduction/Methods/
  - Results/Discussion
- paper submission 论文提交

1. How to Check the Originality of Your Ideas

- Originality of idea ⇨ key words search

  科研思想原创性 “关键字”检索

- Originality of writing ⇨ editors use **SCOPUS** to check

  论文写作原创性 编辑使用**SCOPUS**检索

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2. How to Use Sources and Avoid Plagiarism

首先，从一个宽泛的 检索 开始，

对课题进行研究获取文献全文

Start from a broad search to get

the full list of articles on a topic

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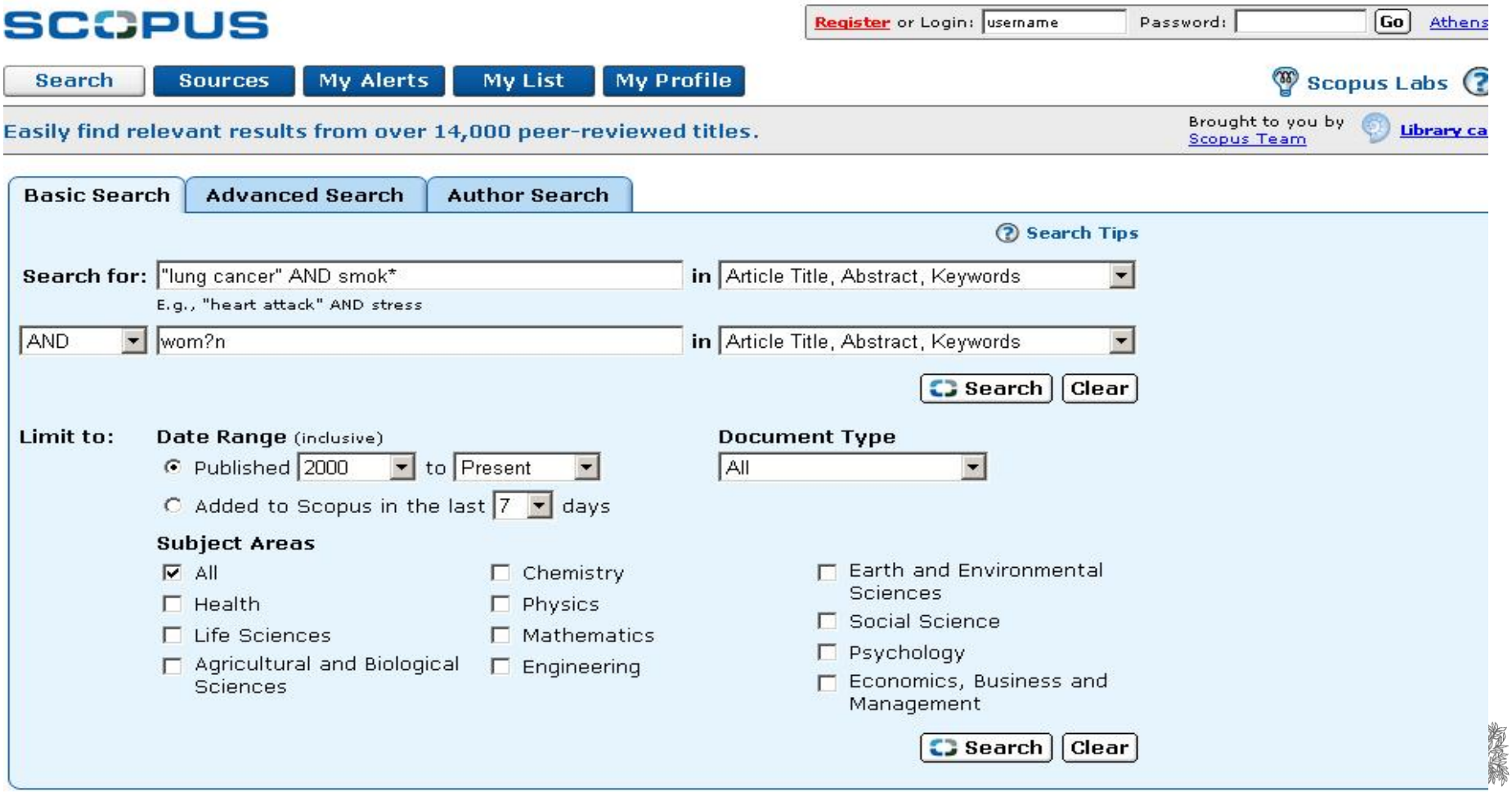
Homepage of *SCOPUS*



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Look into the ‘basic research’

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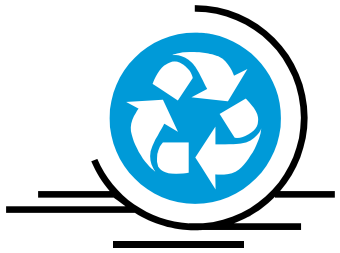
Web page of abstract and reference list

Track the latest literature on a subject

随时追踪研究课题



的最新文献

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3. How to write a manuscript

For a World-class Paper

- ***Content is essential*** 内容是基础
- ***Presentation is critical*** 表达是关键

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Planning a manuscript

- Write your manuscript so that it tells a clear story –it must have a purpose 论文目的清楚明确
- You want people to learn about your work –make it easy for them 论文内容通俗易懂
- Make it easy for reviewers and editors 论文格式便于编辑和审稿人阅读评审
- Use the spell checker and grammar checker 使用拼写检查和语法检查来避免拼写和语法错误
- Make neat breaks between pages and sections 合理使用分页和分节

Give the document a professional look

How to write a manuscript

Structure of a scientific paper 科技论文常见结构

- **Title + subtitle (**论文题名+副标题 **)**
- **Authors + correspondence address** (作者姓名+通讯地址)
- **Abstract + Keyword** (摘要+关键词)
- **Introduction** (引言)
- **Materials and methods** (材料与方法)
- **Results & Discussion**(结果与讨论)
- **Conclusion** (结论)
- **Acknowledgement** (致谢)
- **Reference** (参考文献)

Writing an Abstract and Title

Title: concise and clear 题目简洁明了

- Simple straightforward title 单标题

Protein association studied by NMR diffusometry

Current Opinion in Colloid & Interface Science Volume 11, Issue 1 , April 2006, Pages 19-23

- Two-part title 双标题

Biosynthesis of the Terpene Phenalinolactone in Streptomyces sp. Tü6071: Analysis of the Gene Cluster and Generation of derivatives

Chemistry and Biology Volume 13, Issue 4 April 2006, Pages 343-460

Title

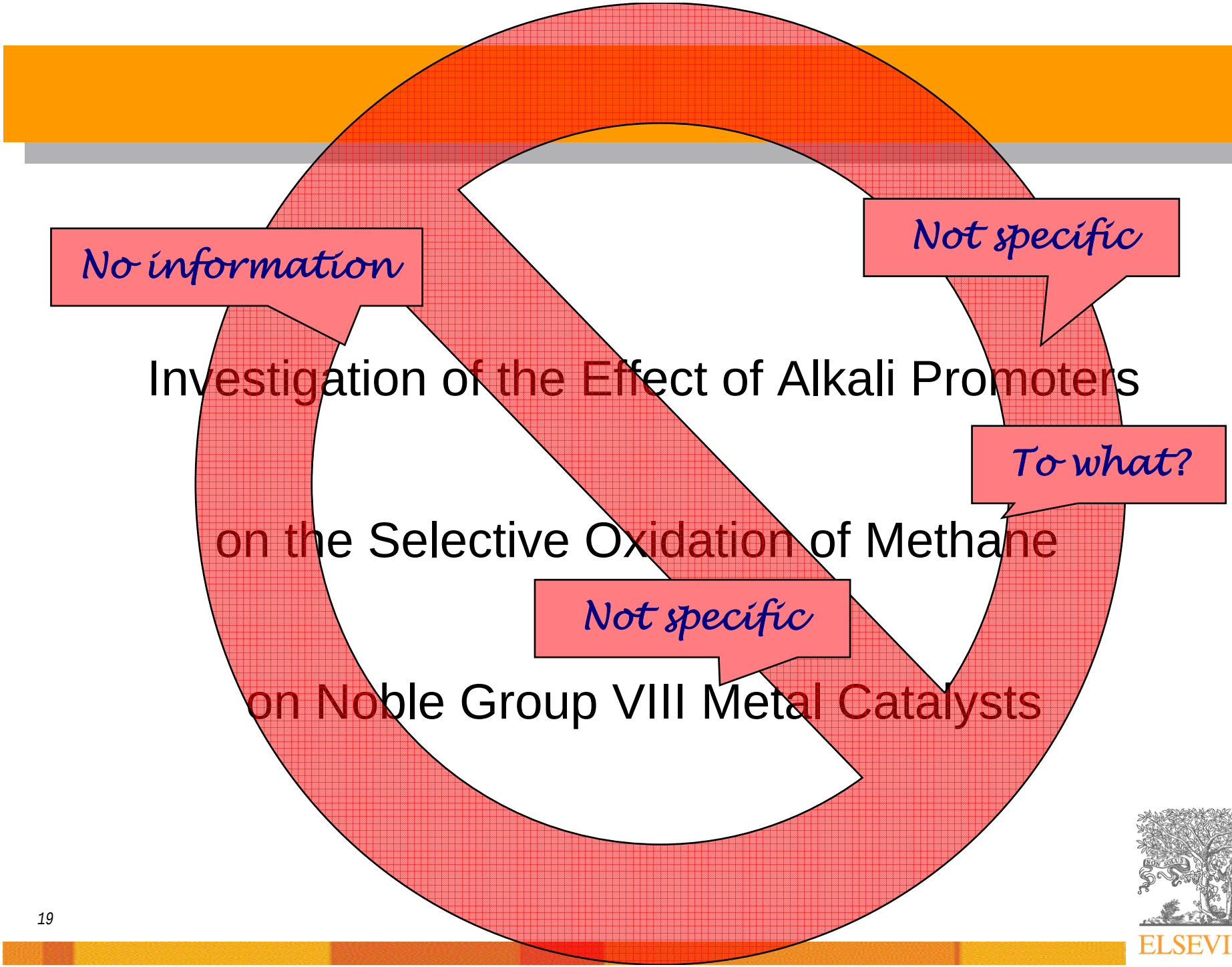
- Short 简洁
- Specific 明确
- Eye-catching 醒目
- Descriptive words 描述性语言

Example:

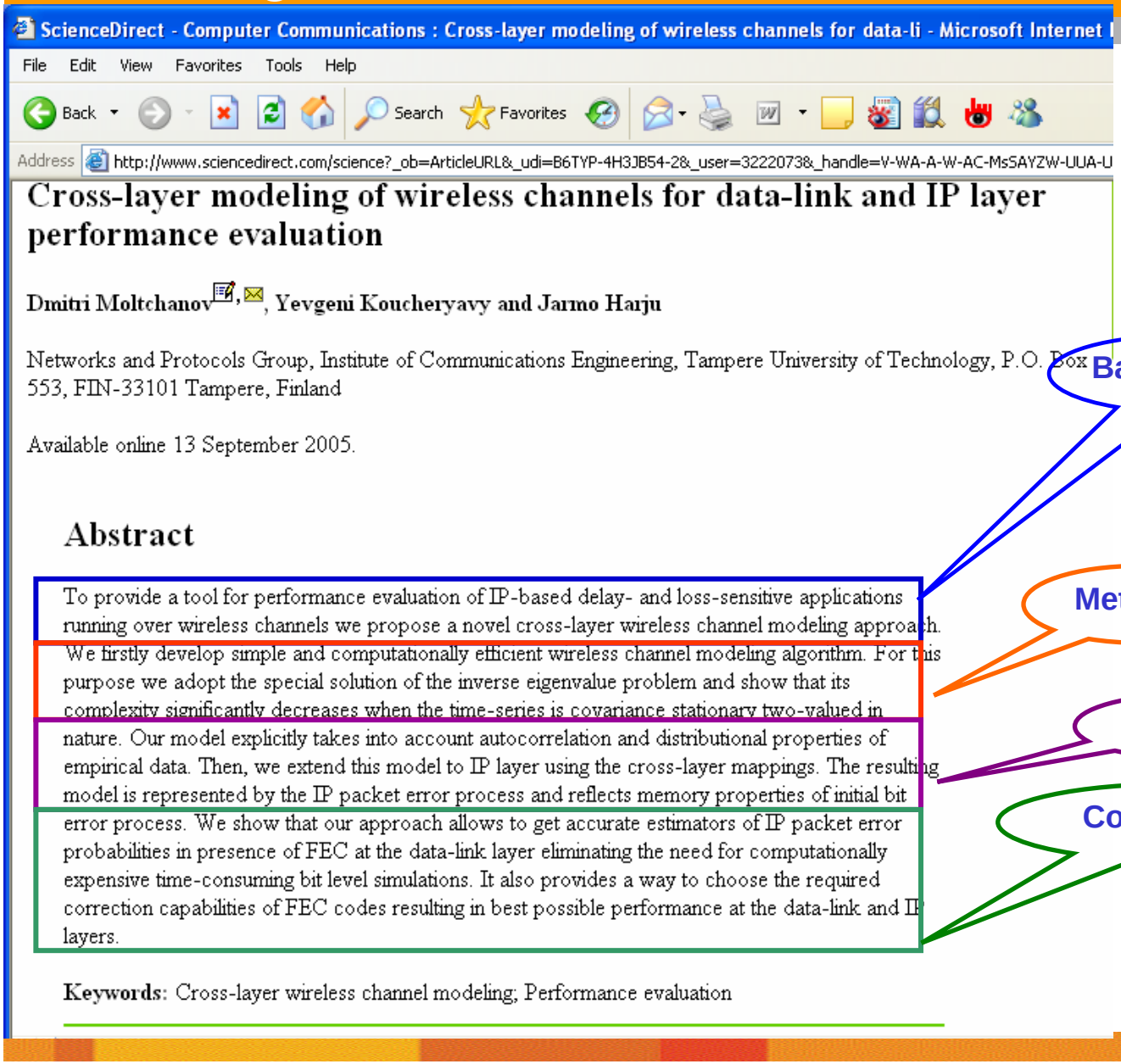
Investigation of the Effect of Alkali Promoters

on the Selective Oxidation of Methane

on Noble Group VIII Metal Catalysts


No information
Not specific
Investigation of the Effect of Alkali Promoters
To what?
on the Selective Oxidation of Methane
Not specific
on Noble Group VIII Metal Catalysts

Writing an Abstract and title



Background

Methods

Results

Conclusions

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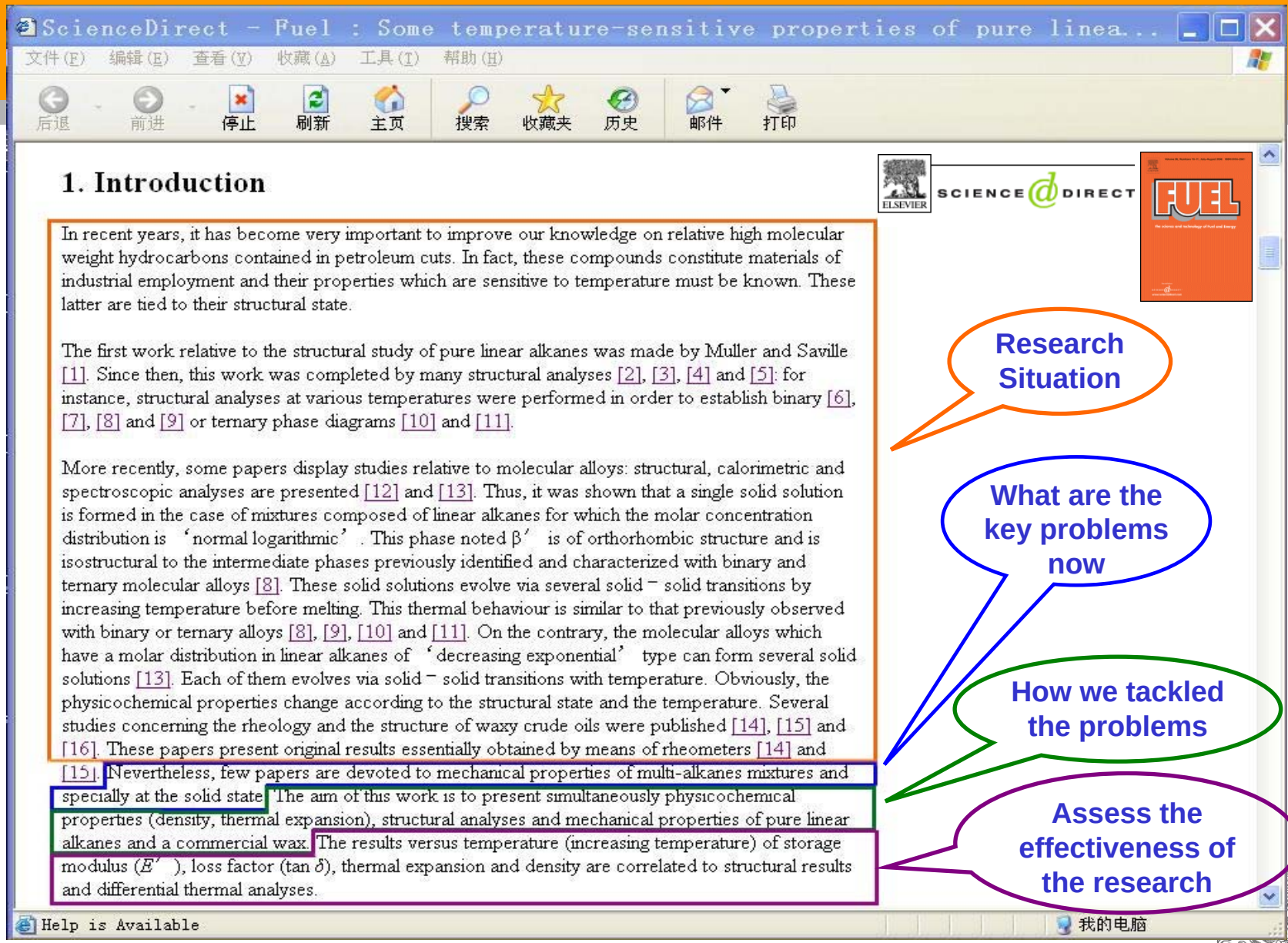
Writing an Introduction

- Research Situation 科研现状
- What are the key problems now 目前的关键问题
- How we tackled the problems 如何解决问题
- Assess the effectiveness of the research 评估研究成果



D. Petitjean, J.F. Schmitt, J.M. Fiorani et.al, *Some temperature-sensitive properties of pure linear alkanes and n-ary mixtures*
FueL Volume 85, Issues 10-11 **, July-August 2006, Pages 1323-1328**

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Material and Methods

- Enough information must be given so that the experiments could be reproduced 必须给出足够信息确保实验结果可以重复
- Avoid adding comments and discussion 避免加入实验结果、评论或讨论
- Usually with subheadings 必要时使用小标题

Results

- Clarity and brevity: display of data with logical development showing how your findings satisfy your objectives 简明扼要，合理展示数据，并能证明研究结果与目的一致
- Number should be meaningful (where possible give illustrative examples and compare those with known results from literature) 数据要有意义，如必要可与文献中数据做对比
- Use appropriate statistics, error analysis, check for accuracy and internal consistency 合理运用统计，误差分析；检察数据的准确性和一致性
- Pay considerable attention to best way to present data (use tables and figures) 合理运用图表

How to Write a Discussion

- Be rigorous about conclusions 结论需严格客观
  - ➢'Suggests' vs. 'Proves'; 'may be' instead of 'is'
- Summarize evidence supporting each conclusion 总结实验结果支持结论
- Discuss problems, uncertainties regarding your work 讨论该研究存在的问题及不确定性
- Compare your findings with other studies 对比其他人的研究结果
- Theoretical or practical implications, importance 理论或实际的应用及其重要性

Discussion content

- Background for understanding the discussion 必要背景阐述
- What you did, found, thought and what it means for the discipline 实验过程、结果及意义
- Comment 给出评论
- Comparison to previous research 与前人工作对比
- How your results were unique or different from previous research 与前人工作相比有何独特之处
- Limitations 局限性

How to Write a Conclusion

- Summary of the research findings 实验结果总结
- Recommendation of Applications 讨论可能的应用
- Contribution 贡献
- Limitations 局限性

How to Write a Conclusion

7. Conclusion

The requirements of a representation scheme that act as an adapter for the communication of geometric tolerances information is presented. Such a representation is required to meet the needs of the modern manufacturing enterprise for unambiguous communication via the Internet among different application domains. We refer to this communication of geometric tolerances information on a need-to-know basis as Integrated Measurement Processes.

To develop IMP, we present a new layered conformance level data model. This data model has a solid foundation layer by abstracting most geometric tolerances information that appear in the feature control frame and notes from ASME Y14.5-1994 standard. This data model is further extended to form a DMIS layer by incorporating geometric tolerances information from DMIS 04.0 standard and an IMP layer by incorporating geometric tolerances information from STEP standard. Thus, different application domains can take different layer's information to meet their requirements. XML Schema is chosen to represent our layered conformance level data model since a robust XML instance file needs to have a schema file as its skeleton and XML is a preferred data exchange medium throughout the Internet. Such an XML file is web-applicable, computer-interpretable and human-understandable. Finally, an example is presented to illustrate the geometric tolerances modeling and representation process of our approach. Additionally, the example provides a brief explanation of the XML Schema and XML instance file construction.

The current development focus of XML and XML Schema at W3C provides data representation and data structure, respectively, to meet data integration requirement, with limited constraints that can be applied to primitives. Thus, they are not appropriate to be used for reasoning and deduction. Neither do they support ontology representation. A separate application is usually required to meet those requirements after parsing data from XML instance file. If W3C supports these functionalities in the future, the XML schema developed here can be extended.

This work provides a near complete model. However, certain informal information that designers tend to use as notes is not addressed. This model does not attempt to interpret design intent and, similar to the case with actual drawings, interpretation deviations can occur.

Place the research in the field

Research Findings

Contributions

Limitations

Acknowledgments

- Technical assistance 技术支持
- Financial Assistance 资金支持
- Helpful discussions 有益的讨论
- Critical reading of manuscript 建设性的意见

References

- Include the main scientific publications on which your work is based typically 20-50 papers, include review articles as appropriate
  引用主要文献，一般20–50篇，适当引用综述文献
- Make sure the list is up to date 保证所引文献的前沿性
- Check the format 根据期刊要求调整格式

References

- **Chinese Sci Bull**

  Ren, S. L., Rousseau, R., International visibility of Chinese scientific journals, Scientometrics, 2002, 53: 389–405

- **Nature**

  Ren, S. & Rousseau, R. International visibility of Chinese scientific journals. Scientometrics, 2002, 53(3): 389–405

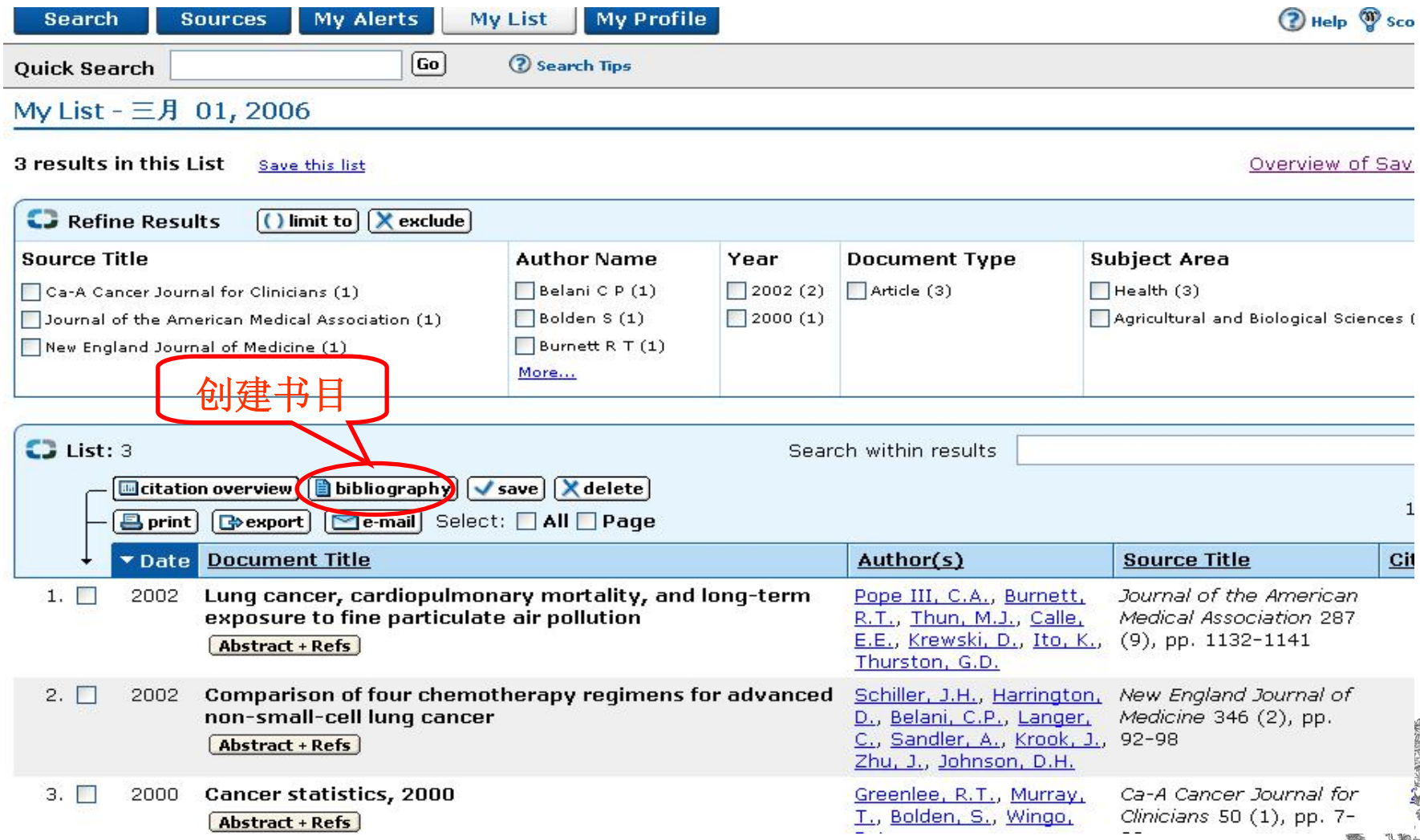
- **Science**

  S. Ren, R. Rousseau, Scientometrics 53, 389 (2002)

- **Proc Natl Acad Sci USA**

  Ren, S. & Rousseau, R. (2002) Scientometrics 53, 389–405

Create the ref list in “My List”



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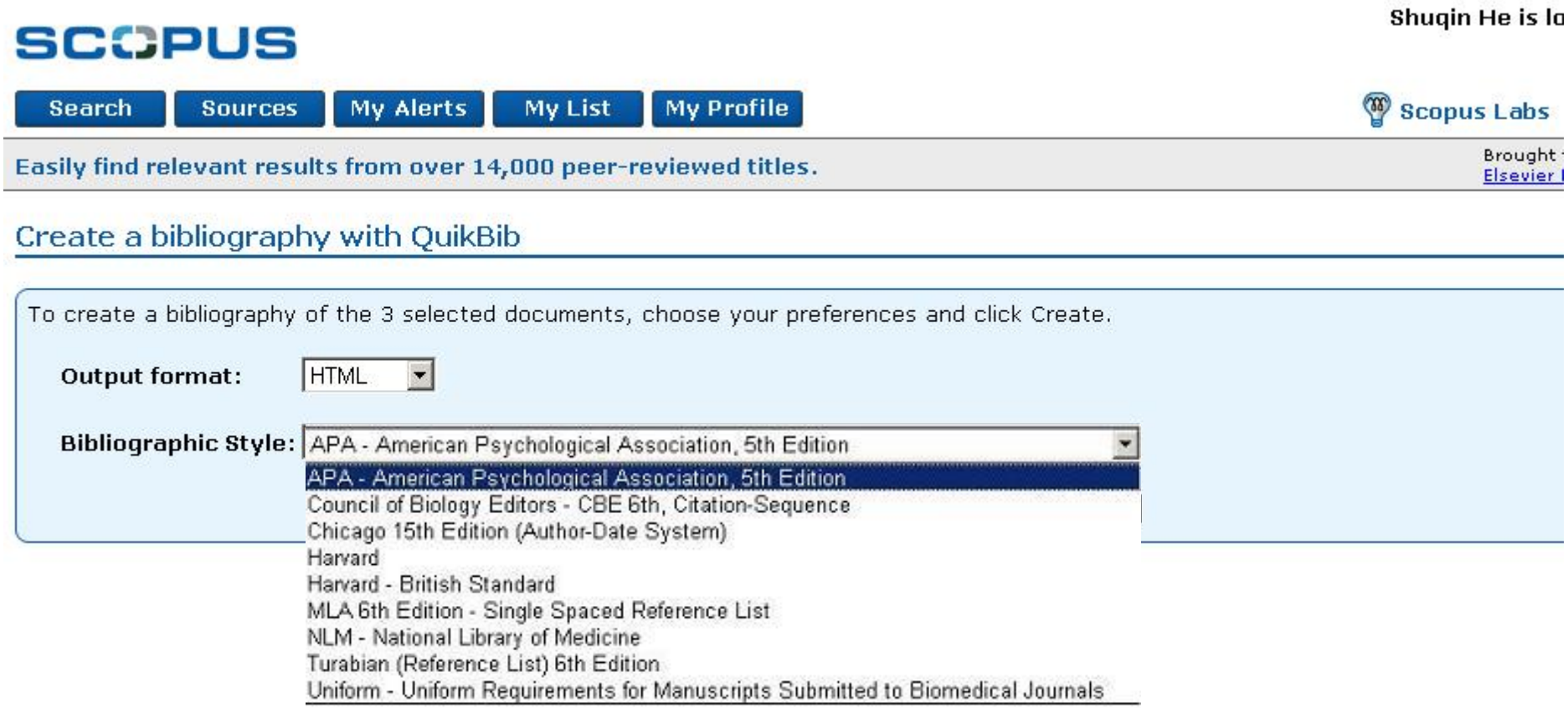
Use QuikBib to create your ref list



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What the references looks like

QuikBib **Status:** Bibliography Created in **APA - American Psychological A...** style Print Save

Always check your references for accuracy. Click here for more information.

References

Dresler, C. M., Fratelli, C., Babb, J., Everley, L., Evans, A. A., & Clapper, M. L. (2000). Gender differences in genetic susceptibility for lung cancer. *Lung Ca* *30*(3), 153-160. Retrieved July 29, 2005, from Scopus database.

Simonato, L., Agudo, A., Ahrens, W., Benhamou, E., Benhamou, S., & Boffeta, P. et al. (2001). Lung cancer and cigarette smoking in europe: An update estimates and an assessment of inter-country heterogeneity. *International Journal of Cancer, 91*(6), 876-887. Retrieved July 29, 2005, from Scopus database.

Toyooka, S., Maruyama, R., Toyooka, K. O., McLerran, D., Feng, Z., & Fukuyama, Y. et al. (2003). Smoke exposure, histologic type and geography-relate differences in the methylation profiles of non-small cell lung cancer. *International Journal of Cancer, 103*(2), 153-160. Retrieved July 29, 2005, from database.

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4. Main complaints of Editors

- Language 语言
  - Clarity & objectivity & accuracy & brevity清楚、客观、准确、简洁
- Journal criteria ignored 期刊投稿指南
  - Scope & Audience 范围和对象
  - Format (“Instruction for Authors” or “Guide for authors”) 格式
    - *double spacing* 双倍行距
    - *Location of figures, tables*图表位置
    - *reference style*参考文献格式
    - *copyright transfer*版权转移
- Cover letter 投稿信
  - Significant advance & Suggested referees强调研究的重要意义、推荐评审人

Main complaints of Editors

- Abstracts, titles vague/unscientific 摘要、题目不明确
  - *ABSTRACT is the most-read part of a paper*
  - *TITLE is main attention-getter*
- Keywords missing, or not according to journal specifications 关键字缺失/不符合期刊要求
  - *KEYWORDS is essential for finding your paper*
- Reference lists limited/outdated 参考文献选择不合理不充分/不具有前沿性
  - *not too many; avoid excessive self-citation*
- Low quality figures and meaningless Captions 图表质量低、图表标题对图表解释不充分
  - *Figure + Caption tell a complete story, be specific*

Language issue

Grammatical and spelling mistakes语法与拼写错误

- The results **showed** that the MWCNTs **are**…
- **0**bviously <-> **O**bviously

Wrong usage of words 用词不当

- The **MWCNTs** morphology was characterized with a Scanning electron **microscopy**.

  In English we do not use the plural noun as an adjective (check ‘MWCNTs morphology’). Also, in this sentence, technique is wrongly used as instrument.

Language issue

Badly constructed sentences 句子结构错误

- **Because** the sawdust derivative showed very good self-adhering ability, **so** it could be mold-pressed into shaped bulk material.
- **Although** the leakiness may be more sufficient to allow the infflux of smaller particles from the vascular space into the interstitial space. (This is a fragment, not a sentence!)

Long sentences 不必要的长句

- 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 sentence is 91 words long.

What is Scientific English

- **Style:** Clarity & objectivity & accuracy & brevity

文体特点: 词义明确、结构严谨、文风朴素

- **Common problems for non-English speaker**非英语母语作者的表达问题:

  — **Consistency of the sentences** 句子内容的连贯性

  — **Logic of the discussion** 论述的逻辑性

  — **Accuracy of the grammar** 语法的正确程度

  — **Ability to use the language to express ideas freely** 作者熟练使用语言表达论点的能力

7. How to Submit the Manuscript to *Elsevier*

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Preparation before submission

The last check
最后的检查

- **Read carefully the manuscript (including the cover letter)**

  一定要仔细阅稿件（包括投稿信）

- **Ask one or more colleagues to read your paper before submission (to check the spelling mistakes or inaccurate expression)**

  投稿前请一位或多位同事阅读稿件（ 检查稿件中是否有拼写错误或表达不够明白的地方）

Preparation before submission

How to write a cover letter

- **Concise and clear, less than one page.** 简短明了、重点突出, 最好不要超过一页;
- **What to include?** 投稿信的基本内容:

  Article type 稿件的栏目类型;

  Significance of your research 文章内容的重要性本研究意义

  Reviewers推荐的审稿人或需回避的审稿人;

  Corresponding author contact details 通讯作者详细的联系地址、电话号码、传真号码、**E-mail**地址

Ethics on submission------- Common misconduct

(In order of appearance按出现的顺序)

- Duplicate publication 重复发表
- Authorship issues 著作权问题
- Lack of ethics approval, inadequate informed consent 缺乏道德许可
- Falsification of data 伪造数据
- Plagiarism 剽窃
- Unethical experimentation 进行不道德实验
- Conflicts of interest 利益冲突

Ethics on submission ------ Duties of authors

- Represent authorship truthfully (not too much, not too little, and justify if needed) 合理的添加作者
- Declare all source material陈述所有的原始资料
- Submit article to one journal only只投稿给一个期刊
- Submit only relevant material (no 'salami' publications)只提供相关的资料
- Declare potential conflicts of interest 揭示潜在的利益冲突
- Be prepared to hand over research data for verification 保留数据以备检验

Ethics on submission ------- Plagiarism

Editors use *SCOPUS* to check

You can use *SCOPUS* too

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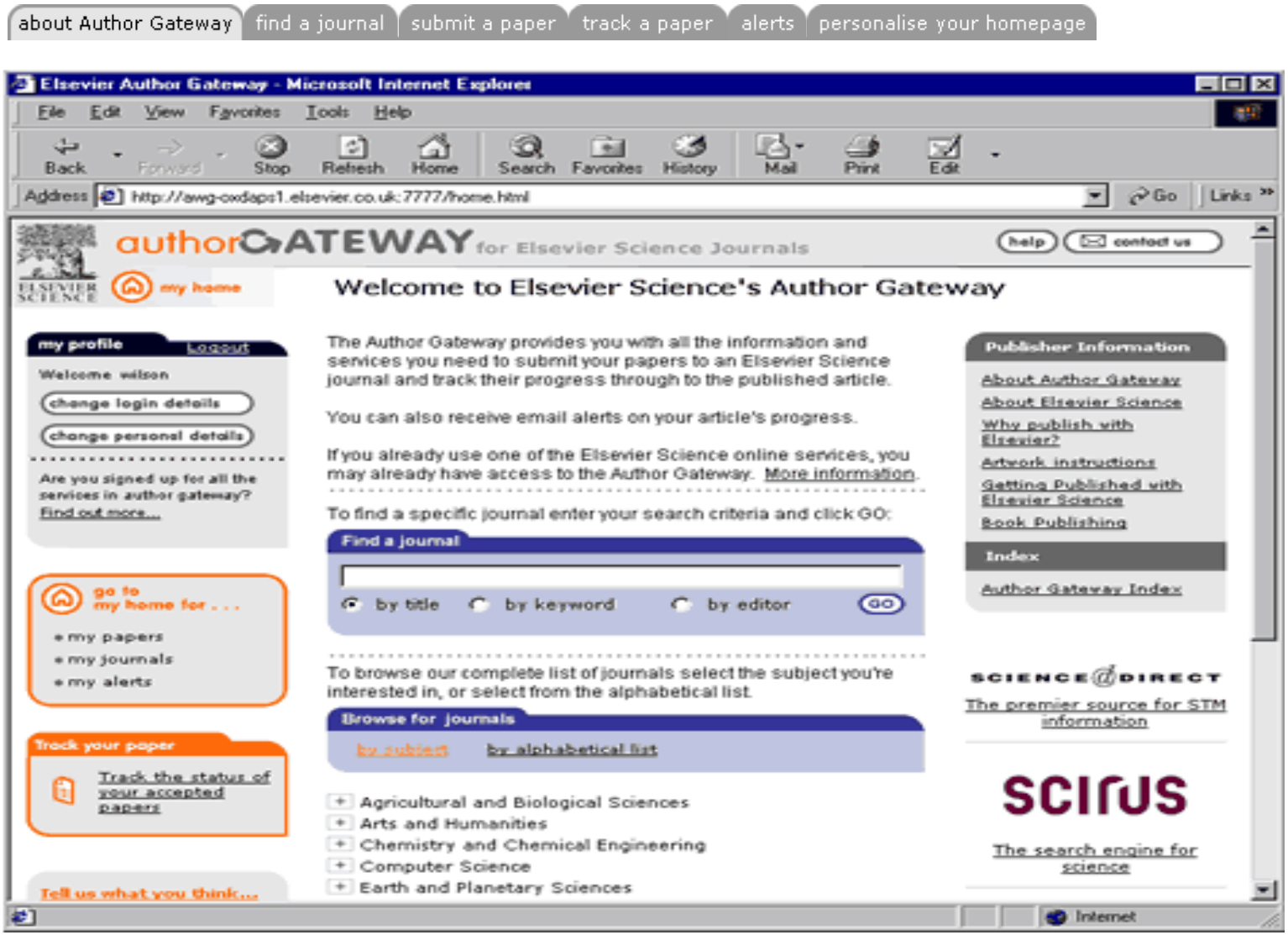
How to pick a journal: http://authors.elsevier.com



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Publishing with Elsevier – Tools for Authors

http://authors.elsevier.com

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Take-home-message

- **Conform strictly to the Guide for Authors严格遵循“作者须知”的规定**
  - **Respect the article structure of the interested journal尊重拟投稿期刊所惯用的论文结构**
  - **Select and design of Fig./Tab. necessarily and elegantly图表的选择和设计应必要、美观**
  - **Cite and update references properly and correctly参考文献的引用应准确、适当**
  - **Get grammatically correct, and use number and unit properly文法正确、量和单位的使用妥当**

! ***Content is essential*** 内容是基础

! ***Presentation is critical*** 表达是关键

Thank you for your attention!

Arnout Jacobs

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