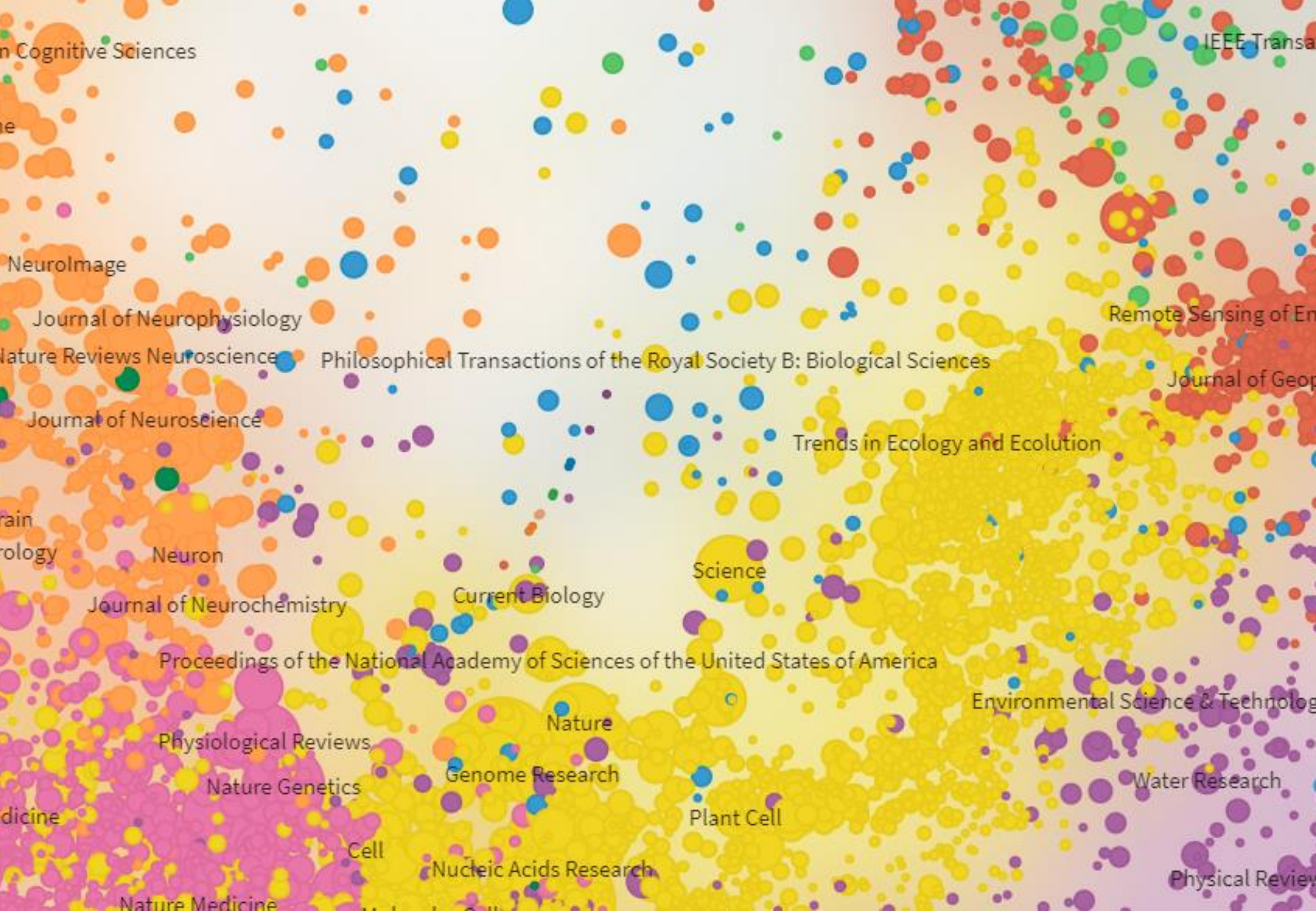




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生物技术和应用微生物学领域排名第一的研究型期刊，收录范围涵盖生物学、生物医学、农业及环境科学领域相关的商业、政治、伦理、法律和社会等方面的研究。

- 超分辨率成像
- 介绍ANNA-PALM，一种使用人工神经网络快速定位宽视野图像重建超分辨率视图的计算策略.

<https://www.nature.com/nbt/>

An aerial photograph of the Five-hundred-meter Aperture Spherical radio Telescope (FAST) nestled in a lush, green mountainous region. The large, circular dish of the telescope is the central focus, surrounded by dense vegetation and supported by a complex network of steel cables and towers. In the background, rolling hills and mountains are visible under a blue sky with scattered white clouds.

FAST正式投用后，获得的数据量将大幅增长，由每天20TB至80TB增长到500TB左右。数据量激增意味着工作量也成倍增长。

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Of Nature trusts the mind that builds for aye." - WORDSWORTH

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1927：发现电子的波动性——电子显微镜的基石

1932：破解原子由质子、中子和电子组成——原子能时代的开端

1953：发现DNA的双螺旋结构——开启生物学的黄金时代

1958：首次确定蛋白质结构——蛋白质组学

1961：破解DNA到蛋白质的编码过程

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1991：纳米碳管的合成——开启新材料时代

1992：发现30万年前的尼安德特人头骨残骸

1994：首次合成强力抗癌新药——紫杉醇

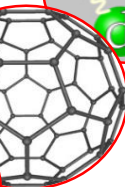
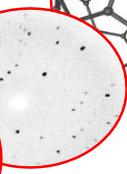
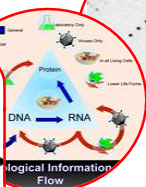
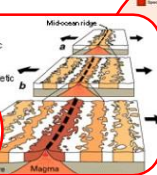
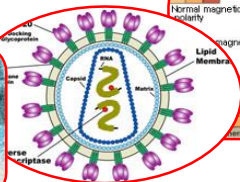
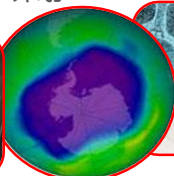
1995：首次发现太阳系外的行星

1997：克隆羊多莉诞生

2001：人类基因组计划

2006：破解安提基特拉机械装置

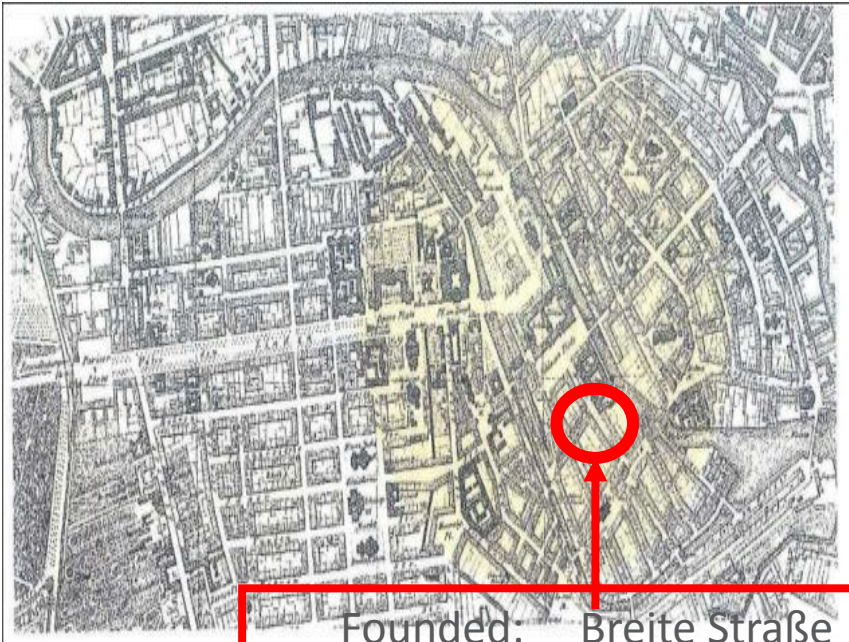
2012：ENCODE计划



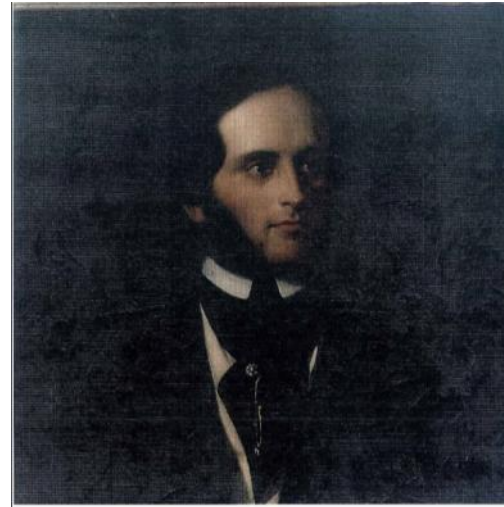
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A Decade of Research @ Xerox PARC reprint of **Sept 1977 Scientific American Article on Xerox Alto** **"Microelectronics and the Personal Computer"** pp. 230-244, by Alan Kay

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Microelectronics and the Personal Computer

*Rate of progress in microelectronics suggests that in about a decade
every person will possess a nondescript computer with the capacity
of a super computer of today. What might such a system do for them?*

By Alan Kay

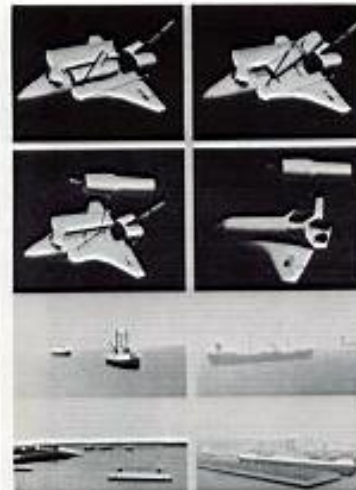
The rate of progress in microelectronics suggests that in about a decade every person will possess a nondescript computer with the capacity of a super computer of today. What might such a system do for them?

In the past decade, the rate of progress in microelectronics has been extraordinary. The number of transistors on a single chip has doubled every year, and the size of the chips has shrunk by a factor of two every year. This has led to a dramatic increase in the power of microcomputers, which are now capable of performing tasks that were once the domain of mainframe computers. The rate of progress in microelectronics is so rapid that it is difficult to keep up with the changes. In the next decade, we will see the emergence of a new generation of microcomputers that will be even more powerful than the ones we have today. These computers will be able to perform tasks that were once the domain of supercomputers. They will be able to handle large amounts of data, and they will be able to perform complex calculations. They will be able to do everything that a supercomputer can do, but they will be much smaller, cheaper, and easier to use. This is the future of microelectronics, and it is exciting to think about it.

Microelectronics is the key to the future of computing. It is the technology that will enable us to build computers that are as small as a wristwatch, as powerful as a supercomputer, and as easy to use as a typewriter. This is the future of computing, and it is exciting to think about it.

118

119



alto-2.jpg



alto-3.jpg

alto-1.jpg

CRISPR-baby scientist fails to satisfy critics

He Jiankui gives talk about controversial genome-edited baby claim, but ethical questions remain.



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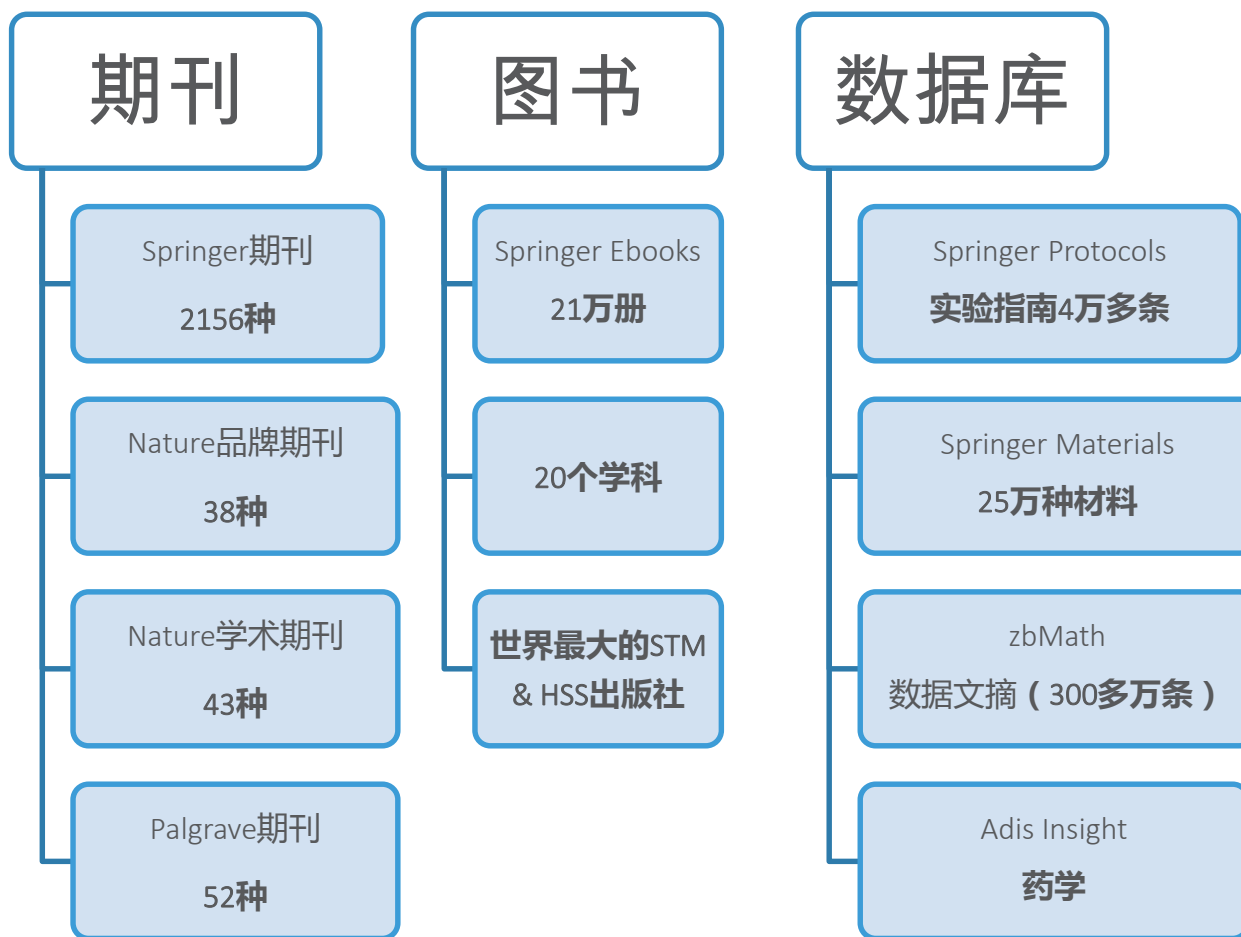
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	Engineering	工程学
	Mathematics and Statistics	数学和统计学
	Physics and Astronomy	物理学和天文学
Medicine and Life Science 生物医学专辑	Biomedical and Life Sciences	生物医学和生命科学
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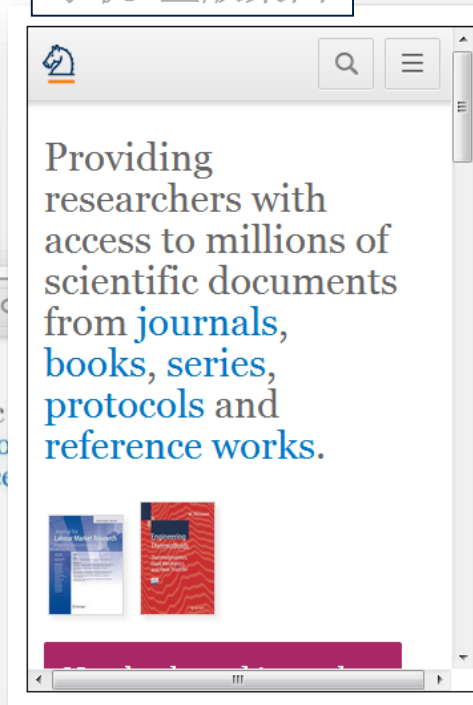
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The screenshot shows the SpringerLink homepage. A red box highlights the search bar at the top left, with a red arrow pointing to it from the label "检索" (Search). Another red box highlights the "Sign up / Log in" link at the top right, with a red arrow pointing to it from the label "注册, 免费推送" (Register, free delivery). A third red box highlights the "Browse by discipline" list on the left, with a red arrow pointing to it from the label "学科浏览" (Subject browsing). The main content area features a large banner with the text "Providing researchers with access to millions of scientific documents from journals, books, series, protocols and reference works." Below this are sections for "Featured Journals" and "Featured Books", each displaying several book covers. A purple box on the right side of the banner states "New books and journals are available every day."

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- » Biomedical Sciences
- » Business & Management
- » Chemistry
- » **Computer Science**
- » Earth Sciences & Geography
- » Economics
- » Education & Language
- » Energy
- » Engineering
- » Environmental Sciences
- » Food Science & Nutrition
- » Law
- » Life Sciences
- » Materials
- » Mathematics
- » Medicine
- » Philosophy
- » Physics
- » Psychology
- » Public Health
- » Social Sciences
- » Statistics

Browse 9,290,088 resources

Articles	5,507,835
Chapters	3,258,726
Reference Work Entries	483,313
Protocols	40,214

Providing researchers with access to millions of scientific documents from journals, books, series, protocols and reference works.

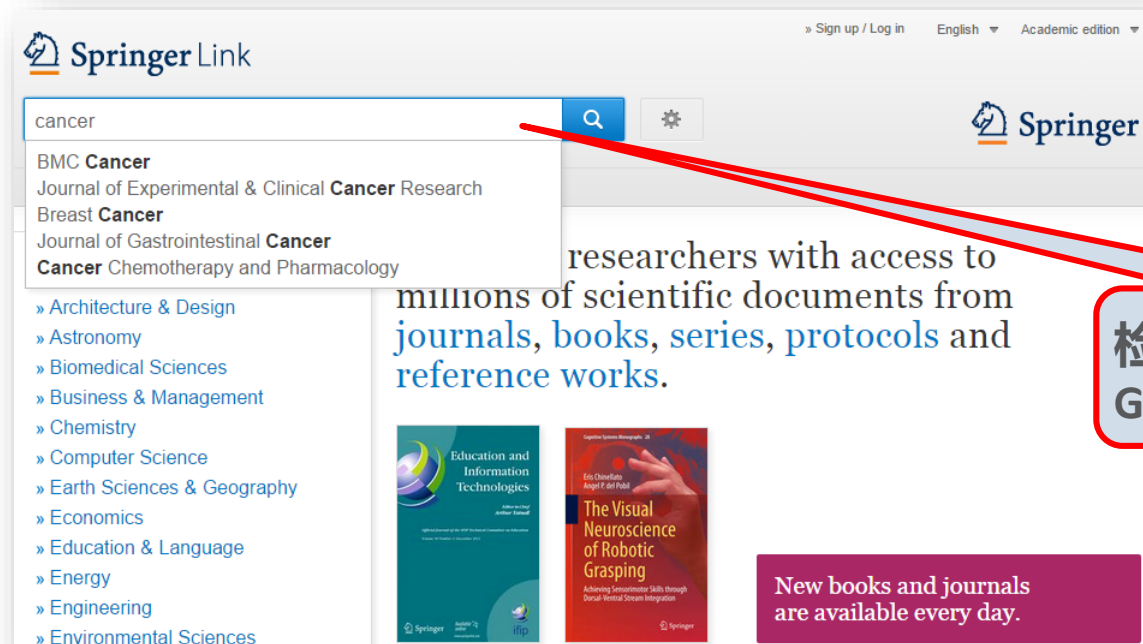
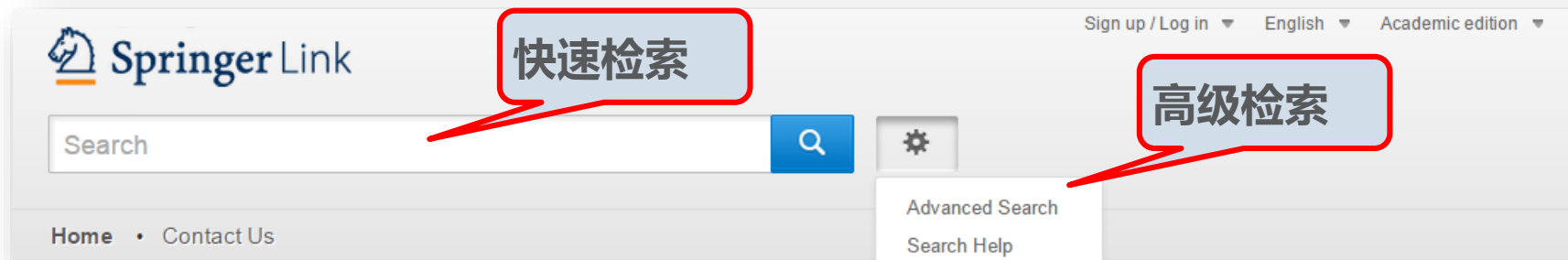
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内容类型

学科

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语言

cryptology

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Springer

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72,137 Result(s) for 'cryptology'

Sort By

Relevance

Newest First

Oldest First

Show details

is

between

1955

and

2011

Refine Your Search

Content Type

Chapter43,436

Article25,576

Reference Work Entry1,675

Book1,427

Journal23

Reference Work2

Discipline

see all

Computer Science70,945

Mathematics13,938

Engineering5,380

Business & Management3,041

Physics2,775

Subdiscipline

see all

Security and Cryptology67,083

Theoretical Computer Science36,295

Communication Networks28,788

SWE24,870

Database Management & Information Retrieval21,018

Language

English66,921

German5,093

Italian64

French58

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Black-Box Models of Computation

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72,108 Result(s) for 'cryptology'

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Chapter43,409

Article25,576

Reference Work Entry1,675

Book1,425

Journal23

Reference Work2

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OR: 或

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The image shows the SpringerLink Advanced Search interface. At the top, there is a search bar with a magnifying glass icon and a settings gear icon. Below the search bar, the Springer logo is visible. The main heading is "Advanced Search". Underneath, there is a section titled "Find Resources" with several search options, each with a corresponding input field:

- with all of the words**: This option is linked to the annotation "AND: 与".
- with the exact phrase**: This option is linked to the annotation "“” : 词组检索".
- with at least one of the words**: This option is linked to the annotation "OR: 或".
- without the words**: This option is linked to the annotation "NOT: 非".
- where the title contains**: This option is linked to the annotation "标题检索". It includes an example: "e.g. 'Cassini at Saturn' or Saturn".
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PCD and Strychnine

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Refine Your Search

Content Type

Article ☒

Discipline

Biomedicine	9
Medicine & Public Health	3
Life Sciences	1
Psychology	1

Subdiscipline

[see all](#)

Neurology	8
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14 Result(s) for 'PCD and Strychnine'

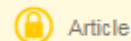
within **Article** ☒

Sort By

Newest First ▼



Date Published

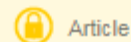


Article

Does D-Cycloserine Augmentation of CBT Improve Therapeutic Homework Compliance for Pediatric Obsessive–Compulsive Disorder?

Clinical studies in adults and children with obsessive–compulsive disorder (OCD) have shown that d-cycloserine (DCS) can improve treatment response by enhancing fear extinction learning during exposure-based psyc...

Jennifer M. Park, Brent J. Small, Daniel A. Geller... in *Journal of Child and Family Studies* (2014)



Article

Browse by discipline

- » Biomedicine
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- » Mathematics
- » Medicine & Public Health
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- » Philosophy
- » Physics
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Discipline	
Medicine & Public Health ×	
Subdiscipline see all	
Internal Medicine	303,138
Medicine/Public Health, general	283,721
Oncology	270,326
Pharmacology/Toxicology	221,584
Cardiology	163,418



Discipline	
Medicine & Public Health	

Subdiscipline	see all
Internal Medicine	303,138
Medicine/Public Health, general	283,721
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Pharmacology/Toxicology	221,584
Cardiology	163,418



Refine by Subdiscipline			Close
		◀	Page 1 of 34 ▶
Internal Medicine	303,138		
Medicine/Public Health, general	283,721		
Oncology	270,326		
Pharmacology/Toxicology	221,584		
Cardiology	163,418		
Surgery	162,075		
Drug Safety and Pharmacovigilance	160,779		
Pediatrics	152,596		
Imaging / Radiology	148,354		
Neurology	146,325		
Gastroenterology	134,311		
General Practice / Family Medicine	131,058		
Orthopedics	121,757		
Public Health	121,484		
Psychiatry	118,004		
Gynecology	111,490		
Intensive / Critical Care Medicine	107,808		
Pathology	100,775		
Neurosurgery	100,437		
Abdominal Surgery	87,296		



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content ☒

Refine Your Search

Content Type

Conference Paper ☒

Chapter 121,556

Discipline

Computer Science ☒

Subdiscipline

see all

Algorithm Analysis and Problem Complexity ☒

Artificial Intelligence (incl. Robotics) 54,276

Computer Communication Networks 47,988

Information Systems Applications (incl. Internet) 38,019

Computation by Abstract Devices 36,334

Language

English ☒

121,556 Result(s)

within English ☒ Computer Science ☒ Algorithm Analysis and Problem Complexity ☒
Conference Paper ☒



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► Date Published



Page

1

of 6,078



Chapter and Conference Paper

Early Performance Evaluation of the Hybrid Cluster with Torus Interconnect Aimed at Molecular-Dynamics Simulations

In this paper, we describe the Desmos cluster that consists of 32 hybrid nodes connected by a low-latency high-bandwidth torus interconnect. This cluster is aimed at cost-effective classical molecular dynamics...

Vladimir Stegailov, Alexander Agarkov... in *Parallel Processing and Applied Mathematics* (2018)



Chapter and Conference Paper

Automatic Creation of a Large and Polished Training Set for Sentiment Analysis on Twitter

Within the field of sentiment analysis and emotion detection applied to tweets, one of the main problems related to the construction of an automatic classifier is the lack of suitable training sets. Considerin...

Stefano Cagnoni, Paolo Fornacciari... in *Machine Learning, Optimization, and Big Da...* (2018)



Chapter and Conference Paper

Using Differential Evolution with a Simple Hybrid Feature for Personalized Recommendation



[International Workshop on Machine Learning, Optimization, and Big Data](#)

MOD 2017: [Machine Learning, Optimization, and Big Data](#) pp 146-157 | [Cite as](#)

Automatic Creation of a Large and Polished Training Set for Sentiment Analysis on Twitter

Authors

[Authors and affiliations](#)

Stefano Cagnoni, Paolo Fornacciari, Juxhino Kavaja, Monica Mordonini, Agostino Poggi, Alex Solimeo,
Michele Tomaiuolo 

Conference paper

First Online: 21 December 2017

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13 Quantum Cryptography

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Volume 1 / 1989 - Volume 29 / 2016

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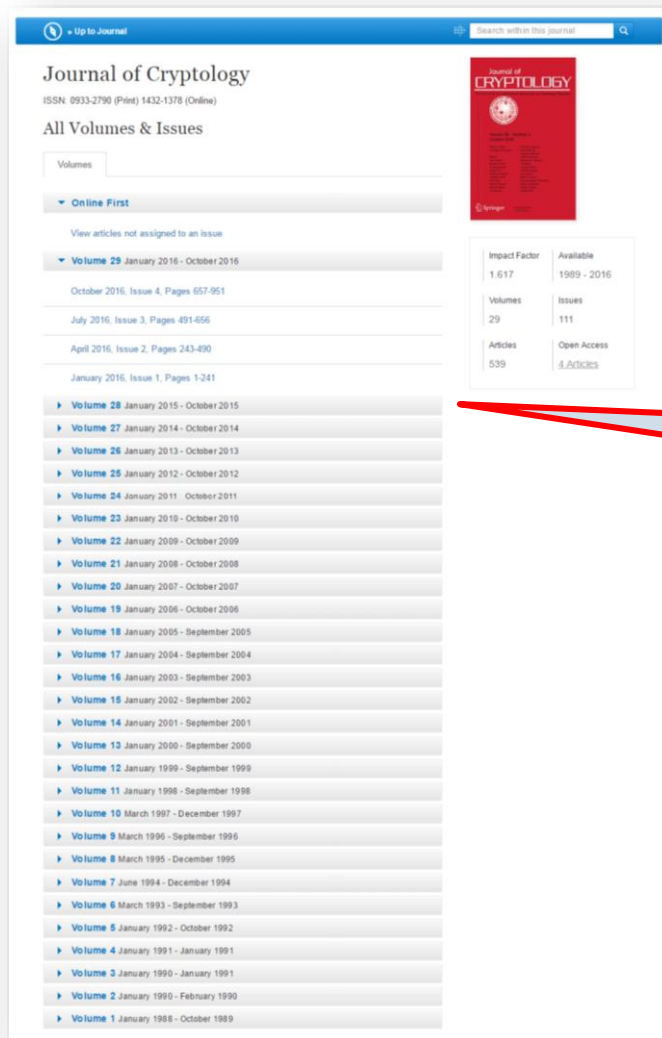
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Journal of Cryptology
October 2016, Volume 29, Issue 4, pp 657–696

New Second-Preimage Attacks on Hash Functions

Elena Andreeva, Charles Bouillaguet, Orr Dunkelman, Pierre-Alain Fouque, Jonathan Hoch, John Kelsey, Adi Shamir, Sébastien Zimmer

Article
First Online: 23 June 2015
DOI: 10.1007/s00145-015-9206-4

Cite this article as:
Andreeva, E., Bouillaguet, C., Dunkelman, O. et al. J Cryptol (2016) 29: 657. doi:10.1007/s00145-015-9206-4

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Abstract

In this work, we present several new generic second-preimage attacks on hash functions. Our first attack is based on the herding attack and applies to various Merkle–Damgård-based iterative hash functions. Compared to the previously known long-message second-preimage attacks, our attack offers more flexibility in choosing the second-preimage message at the cost of a small computational overhead. More concretely, our attack allows the adversary to replace only a few blocks in the original target message to obtain the second preimage. As a result, our new attack is applicable to constructions previously believed to be immune to such second-preimage attacks. Among others, these include the dithered hash proposal of Rivest, Shoup's UOWHF, and the ROX constructions. In addition, we also suggest several time-memory-data tradeoff attack variants, allowing for a faster online phase, and even finding second preimages for shorter messages. We further extend our attack to sequences stronger than the ones suggested in Rivest's proposal. To this end we introduce the *kite generator* as a new tool to attack any dithering sequence over a small alphabet. Additionally, we analyse the second-preimage security of the basic *tree hash* construction. Here we also propose several second-preimage attacks and their time-memory-data tradeoff variants. Finally, we show how both our new and the previous second-preimage attacks can be applied even more efficiently when multiple short messages, rather than a single long target message, are available.

Keywords

Cryptanalysis Hash function Dithering sequence Second-preimage attack Herding attack Kite Generator

Communicated by Antoine Joux.

A preliminary version of this paper appeared in [2].

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Key-Alternating Ciphers and Key-Length Extension: Exact Bounds and Multi-user Security

Viet Tung Hoang , Stefano Tessaro



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Abstract

The best existing bounds on the concrete security of key-alternating ciphers (Chen and Steinberger, EUROCRYPT '14) are only *asymptotically* tight, and the quantitative gap with the best existing attacks remains numerically substantial for concrete parameters. Here, we prove exact bounds on the security of key-alternating ciphers and extend them to XOR cascades, the most efficient construction for key-length extension. Our bounds essentially match, for any possible query regime, the advantage achieved by the best existing attack.

Our treatment also extends to the multi-user regime. We show that the multi-user security of key-alternating ciphers and XOR cascades is very close to the single-user case, i.e., given enough rounds, it does not substantially decrease as the number of users increases. On the way, we also provide the first explicit treatment of multi-user security for key-length extension, which is particularly relevant given the significant security loss of block ciphers (even if ideal) in the multi-user setting.

The common denominator behind our results are new techniques for information-theoretic indistinguishability proofs that both extend and refine existing proof techniques like the H-coefficient method.

Keywords

Symmetric cryptography – Block ciphers – Provable security – Tightness – Multi-user security



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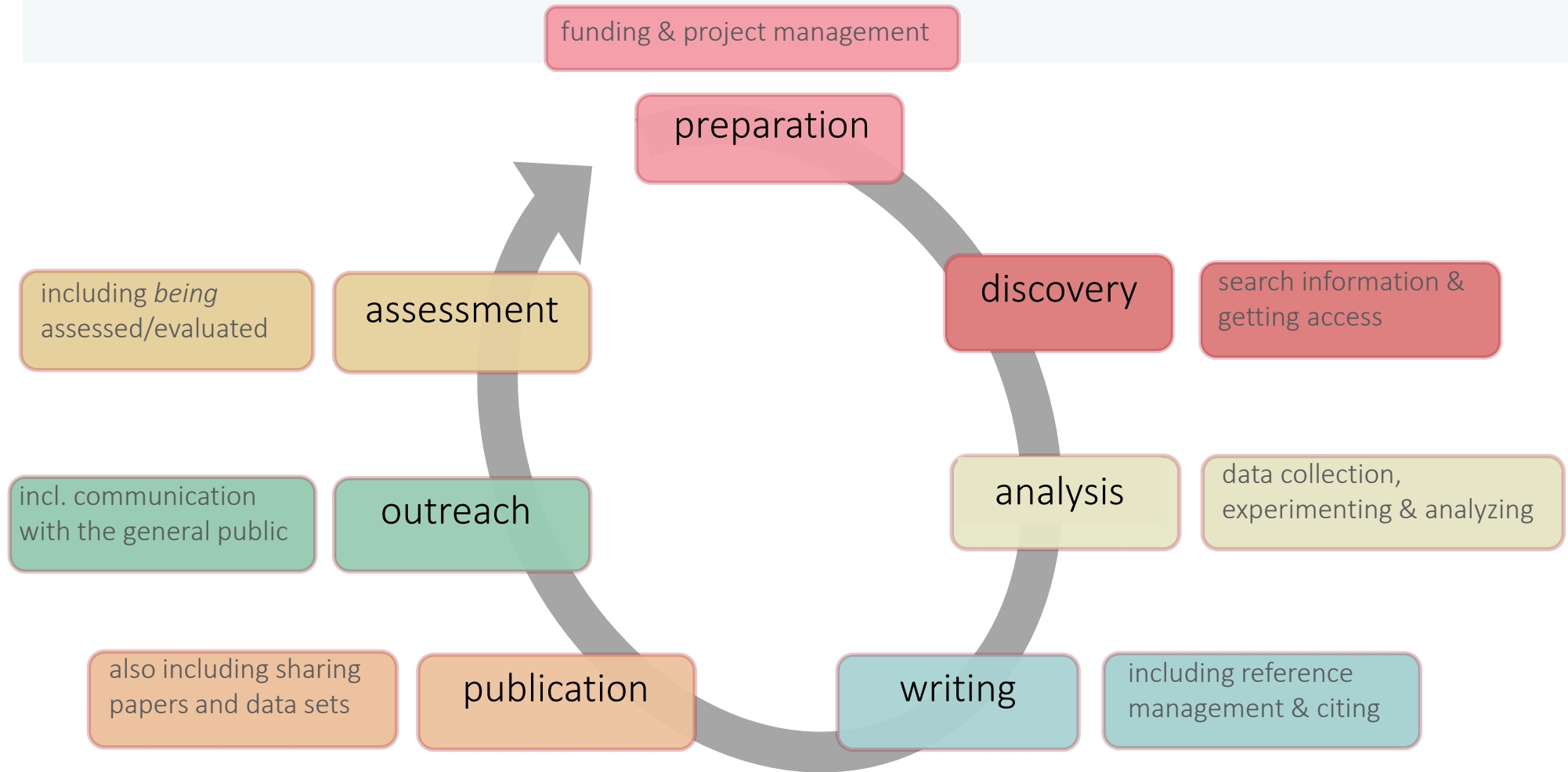
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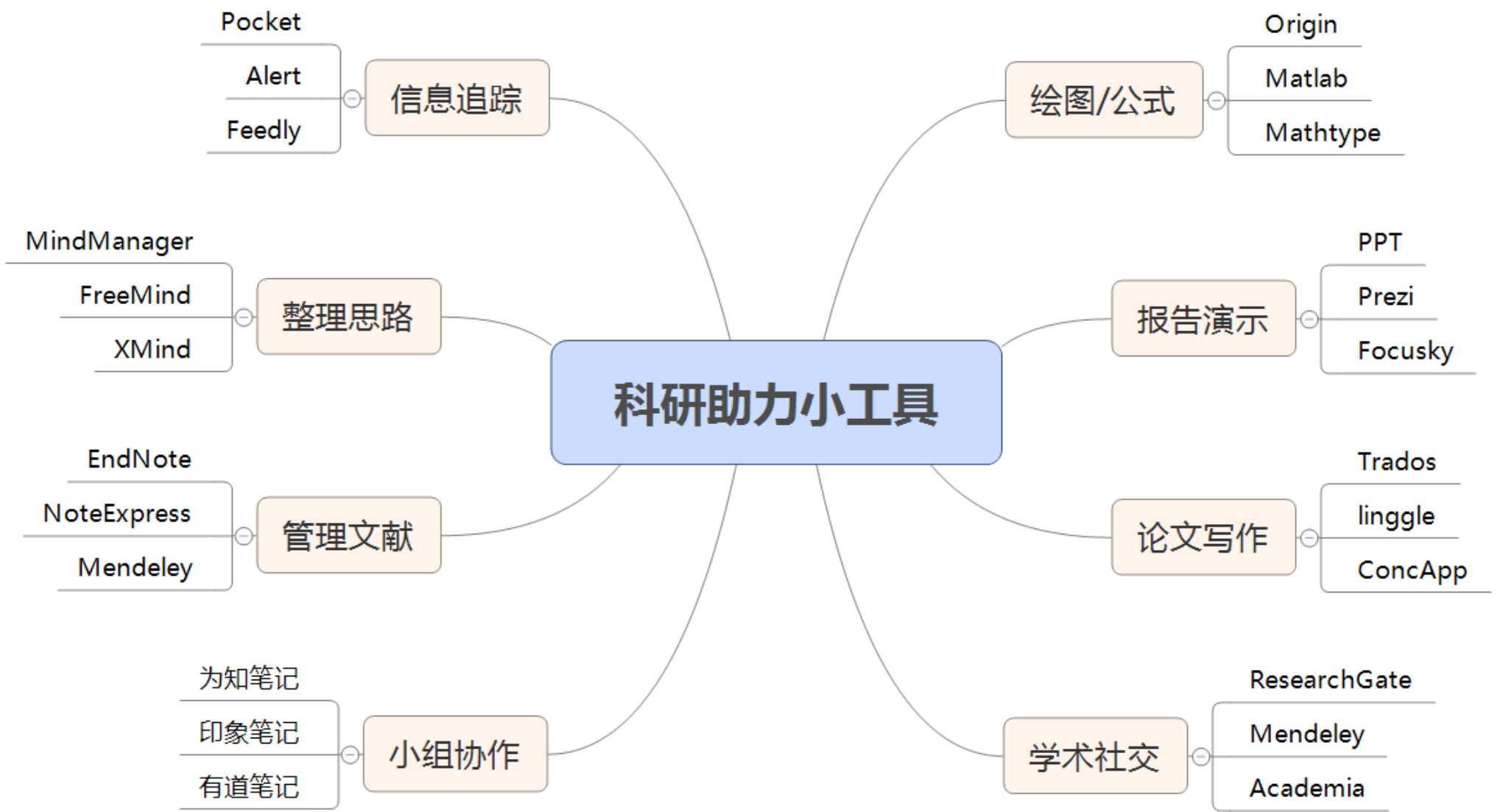


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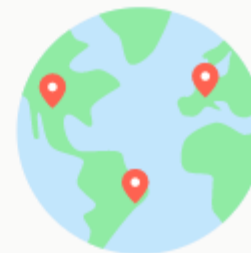
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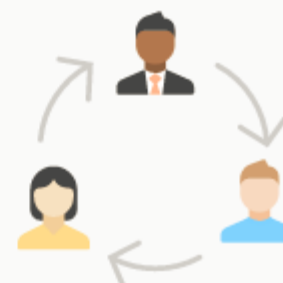
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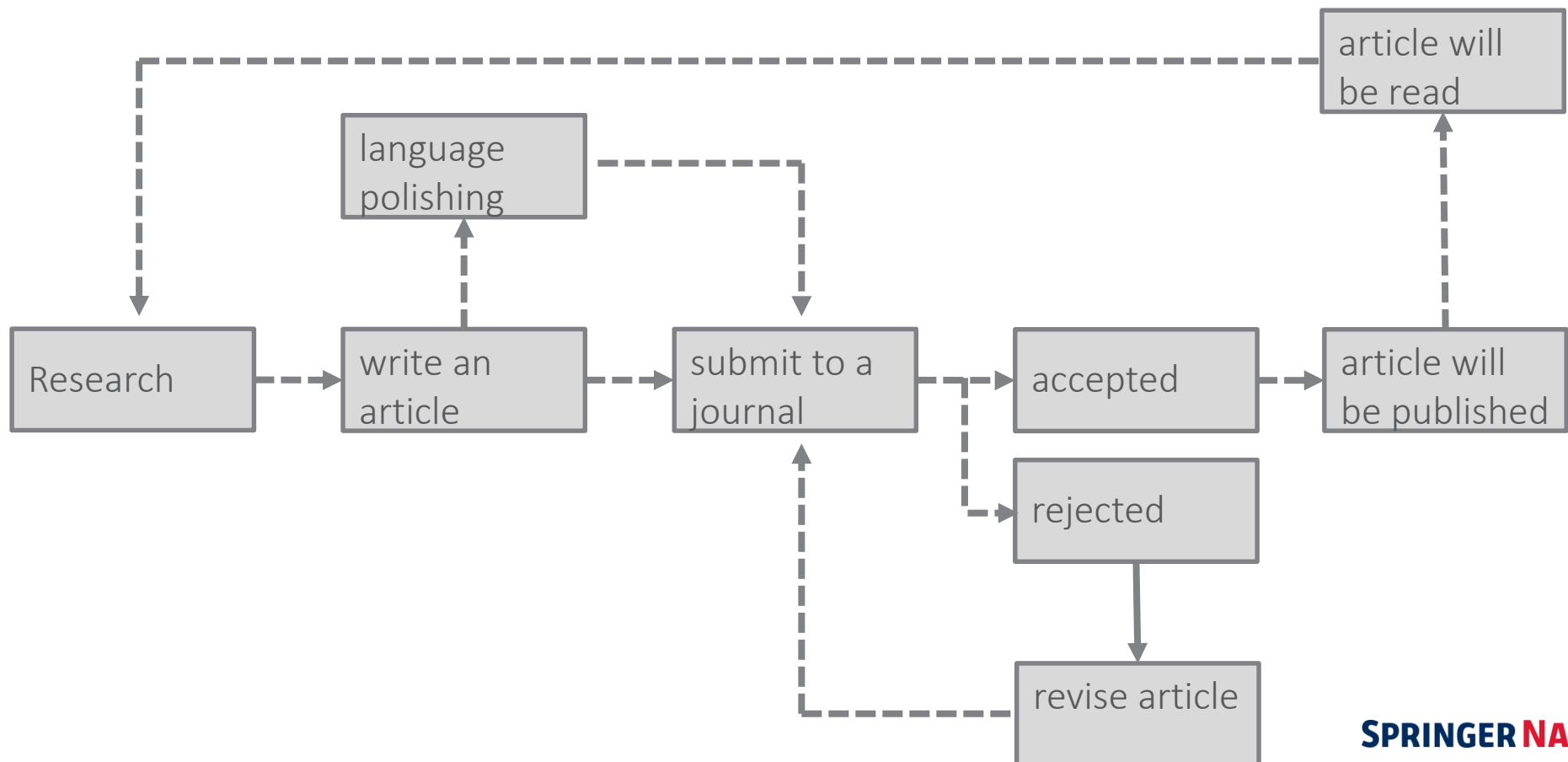
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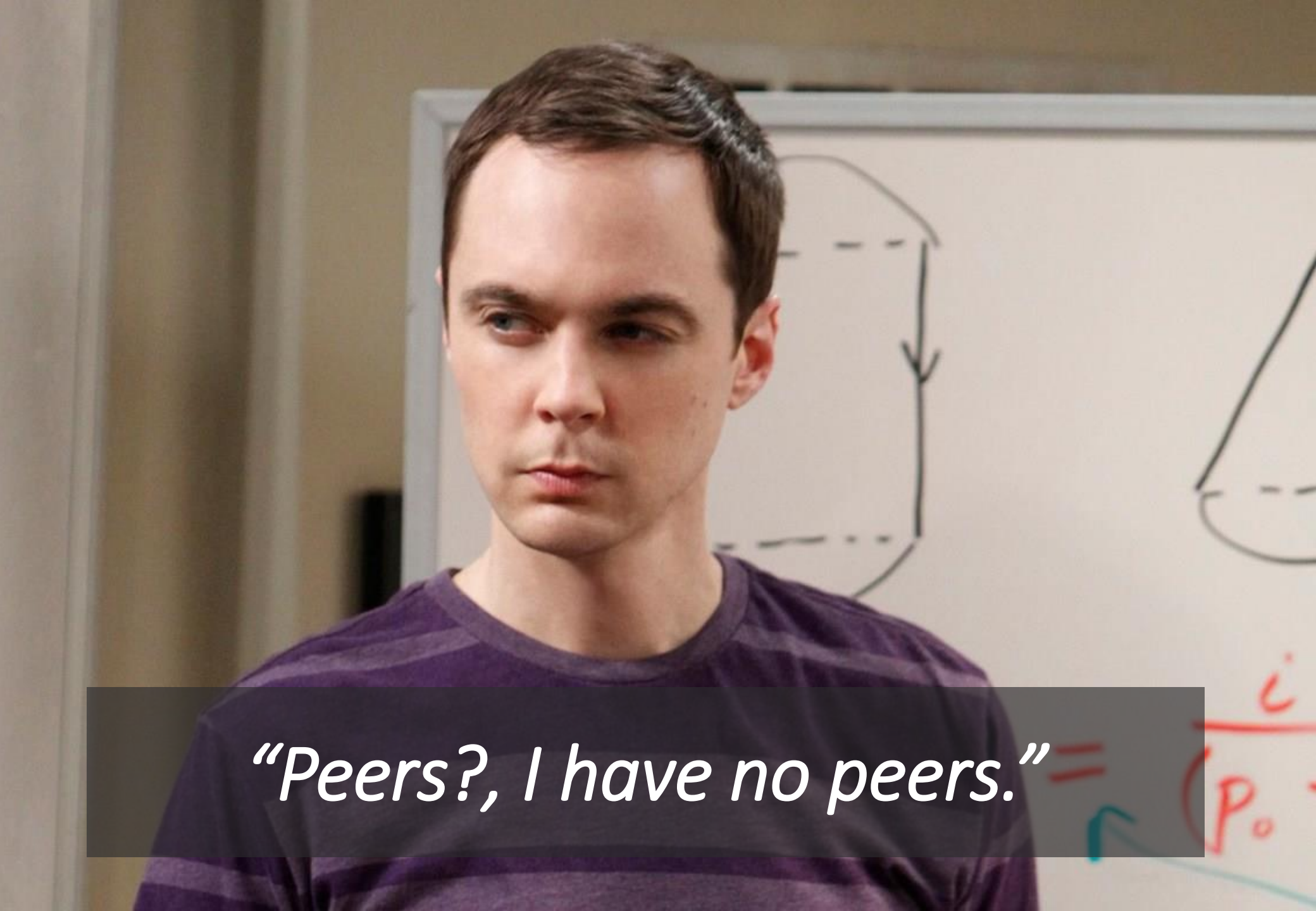


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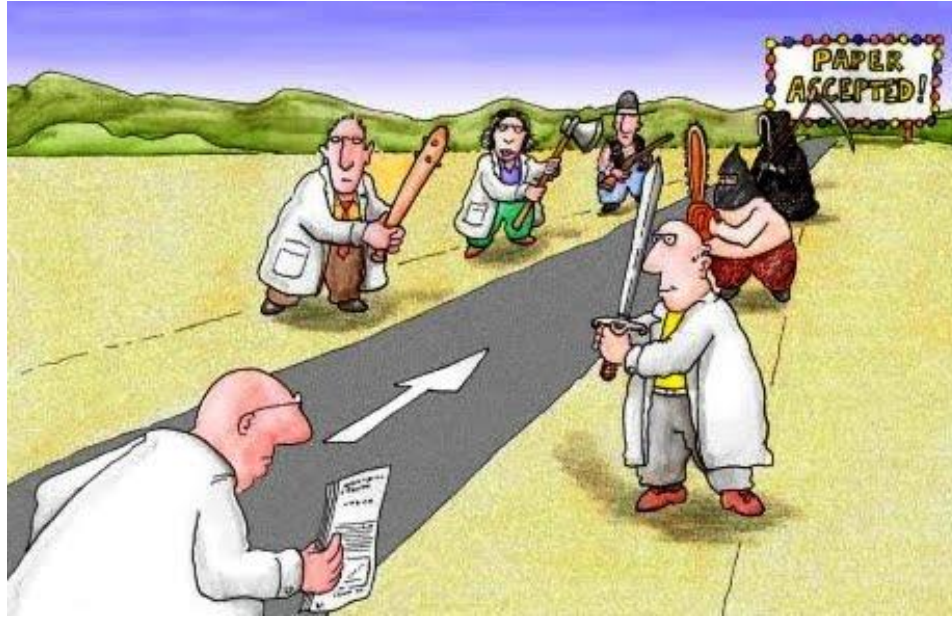
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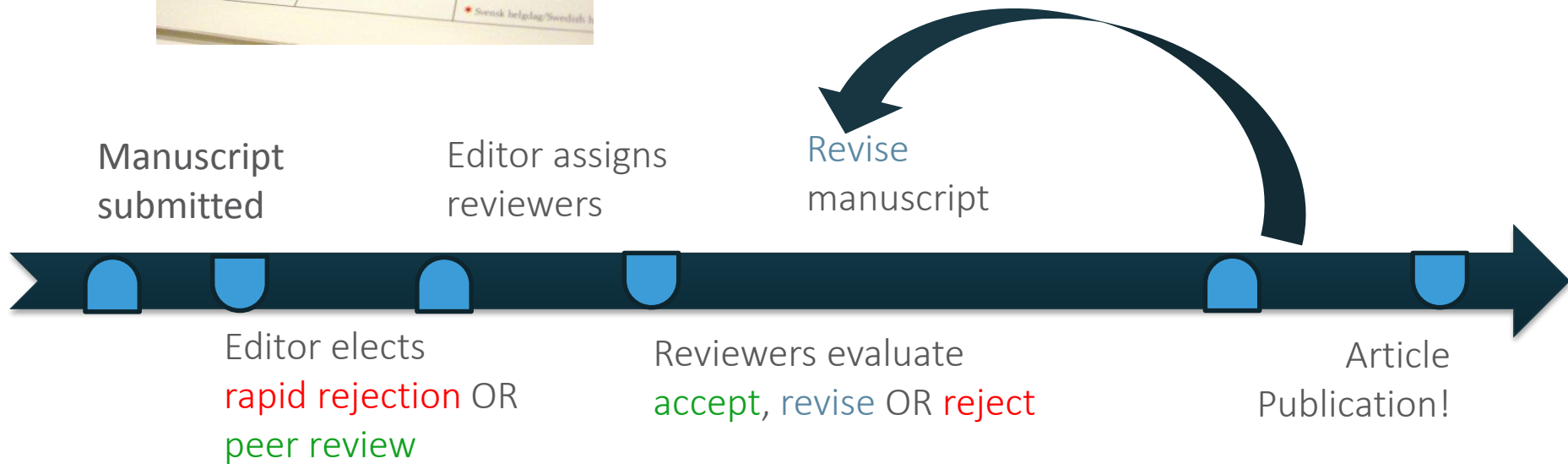
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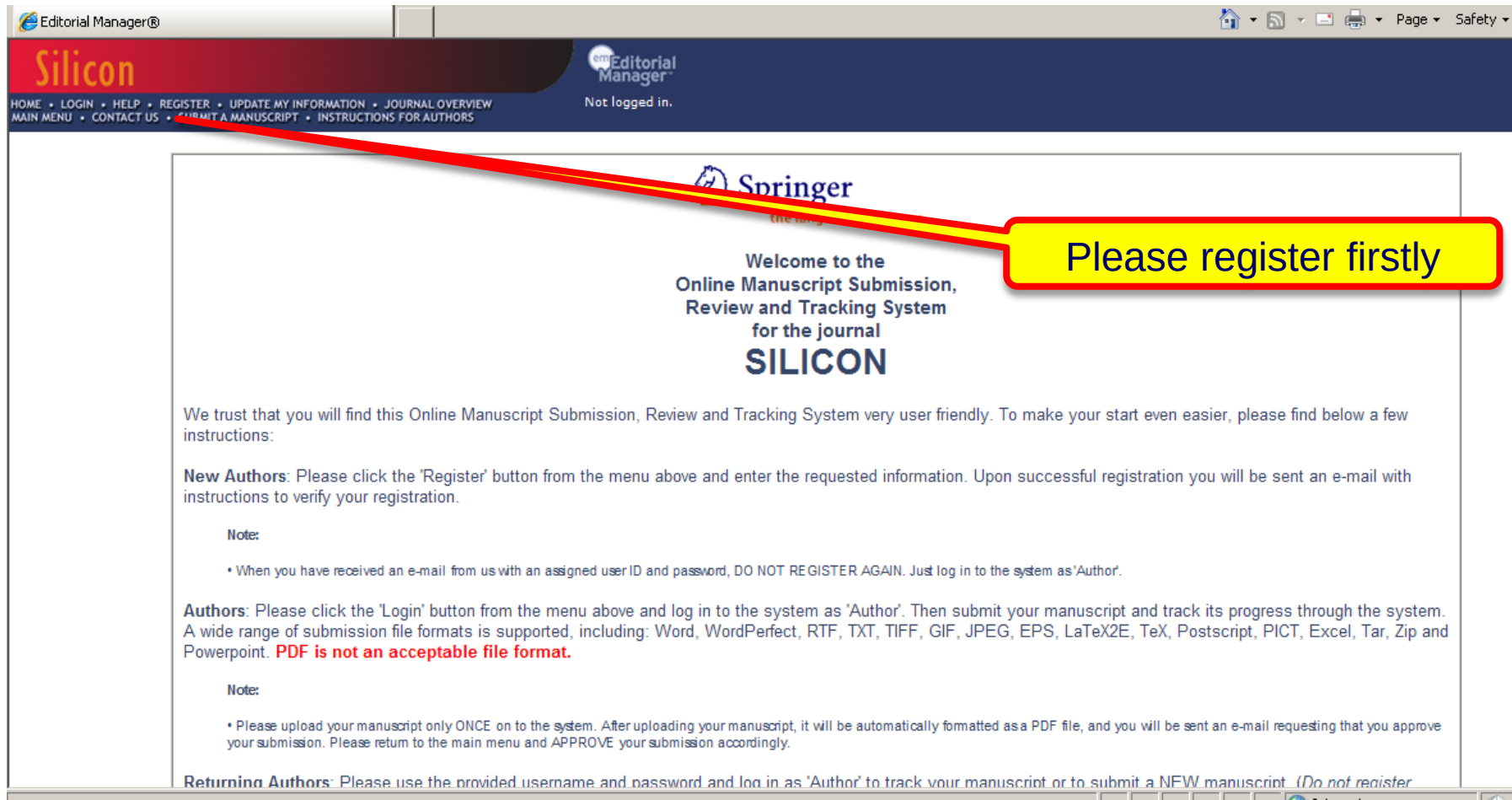
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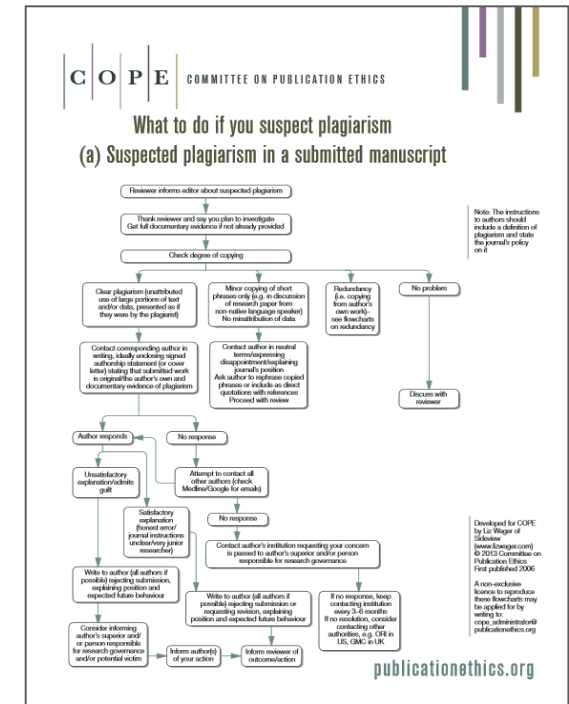
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RETRACTED ARTICLE: Who are they to judge? Overcoming anthropometry through fat bodybuilding

Richard Baldwin

Department of History, Gulf Coast State College, Panama City, Florida, USA

ABSTRACT

While fat activism has disrupted many dominant discourses that causally contribute to negative judgments about fat bodies, it has not yet penetrated the realm of competitive bodybuilding. The author introduces fat bodybuilding as a means of challenging the prevailing assumptions of maximally fat-exclusionary (sports) cultures while raising fundamental ontological questions about what it means to “build a body.” Specifically, he advocates for imagining a new classification within bodybuilding, termed *fat bodybuilding*, as a fat-inclusive politicized performance and a new culture to be embedded within bodybuilding.

KEYWORDS

Fat activism; fat bodybuilding; sport; anthropometry

People who inhabit fat bodies are constantly judged—morally, aesthetically, physically, emotionally, economically, and in other ways that undermine their dignity. Most of all, people inhabiting fat bodies are judged for visual and superficial reasons: for the bodies they inhabit. Fat activism stands in opposition to the social stigma associated with fat, and, more generally, fatphobic attitudes throughout culture, and it has had considerable successes even though these attitudes are hegemonic and entrenched.

Particularly, anthropometric (body measuring) and ever more refined judgments of bodies and forms of physicality are commonplace in sports, reaching their zenith in the cultural space of competitive bodybuilding. Within the bodybuilding arena, bodies defy the “thin” ideals of anthropometry, yet they are respected because of their association with strength, fitness, and health. A paradox of anthropometry thus arises: bodybuilders’ bodies exist outside anthropometric expectations yet are still afforded social

8 Tips for writing a good paper

Before you begin

Research topics can be identified by exploiting opportunities



一开始时，你可以查阅本领域的文献。最初可以先看一些大家都感兴趣的期刊，看一些优秀的综述；当然，不要把自己的关注点局限在期刊里，看一本该领域内的书籍也是很有必要的，可以让你对该课题的历史及发展状况做一个全面的了解。



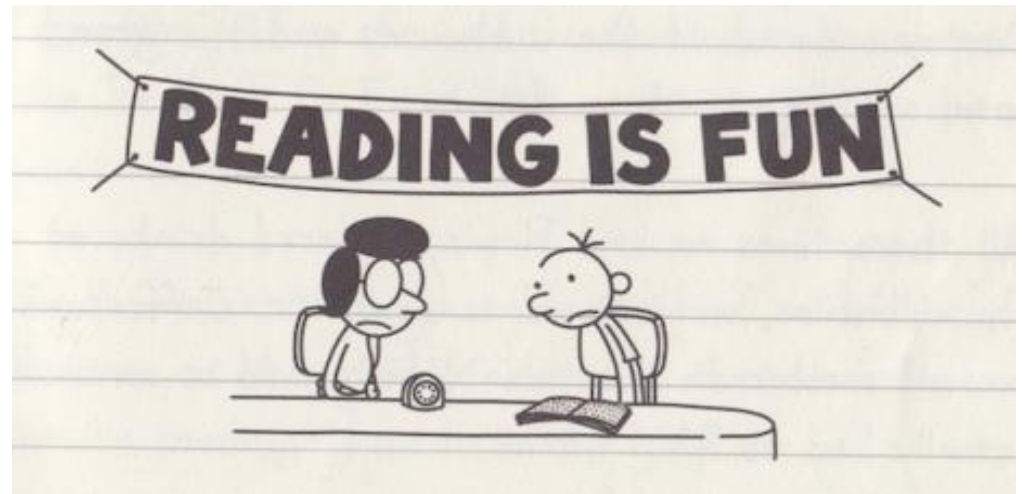
随着知识的积累，开始寻找一些令人困惑的现象，关于世界的未解之谜，新技术，亟需更佳解决方案的问题等。



带着准备好的问题与导师，师兄师姐交流，更可以参加一些学术会议，与该领域内某篇重要文献的作者直接进行交流。

Tip 1

- **Read many papers 多读文章**
 - Know the field
 - Join a journal club
 - Read outside of your area to develop broad scope – think about quality of work
- 阅读自己研究领域以外的文献，拓宽知识面——注重研究质量
- Be aware of reporting guidelines



Tip 2

- Be objective about your work
客观对待自己的研究



.....Editors and reviewers will be 😊

Tip 3

- **Write in good English 用英语好好写**
- Complex language is not needed. Best science is where complex ideas are expressed in a way that people not in that field can understand
用非专业人士也能看懂的方式来表述复杂的想法
- Poorly written manuscripts get rejected – reviewers or editors lose patience or can't 'see' the results or advance
表述不明的文章会被拒稿——审稿人和编辑会对该研究的结果丧失兴趣
- Use a professional copy-editing service

The ABC of writing style



accurate



brief



clear

Be accurate (准确)

- **Tell your readers what they need to know**

Original

Of the 16.9-fold genome coverage, the majority was from 454 sequencing by synthesis of paired and unpaired reads, with the remaining coverage from Sanger dye primer sequencing of paired reads.

Improved

Of the 16.9-fold genome coverage, 74% was from 454 sequencing by synthesis of paired and unpaired reads. Sanger dye primer sequencing of paired reads was used for the remaining 26% (Supplementary Table 1 and Supplementary Note).

Be brief (简要)

- Keep to the point
- Avoid redundancy

Original

Based on these results, we hypothesized that vaccinated control individuals would show similar cytokine profiles to those treated with compound X. To assess this hypothesis, we compared the cytokine profiles of the vaccinated control individuals with those of treated patients. We found a higher frequency of...

Improved

Based on these results, we hypothesized that vaccinated control individuals would show similar cytokine profiles to those treated with compound X. By contrast, we found a higher frequency of...

Brevity (简短)

Difficulty was experienced in obtaining the isolate in an extremely purified state.

The isolate was difficult to purify completely.

Be clear (清晰)

- Break up long sentences
- Put closely related ideas together

Original

Whereas chimpanzees are widespread across equatorial Africa, bonobos, which have a relatively small and remote habitat, which also meant that they were the last ape species to be described, live only south of the Congo River (Fig. 1a) and are the rarest of all apes in captivity.

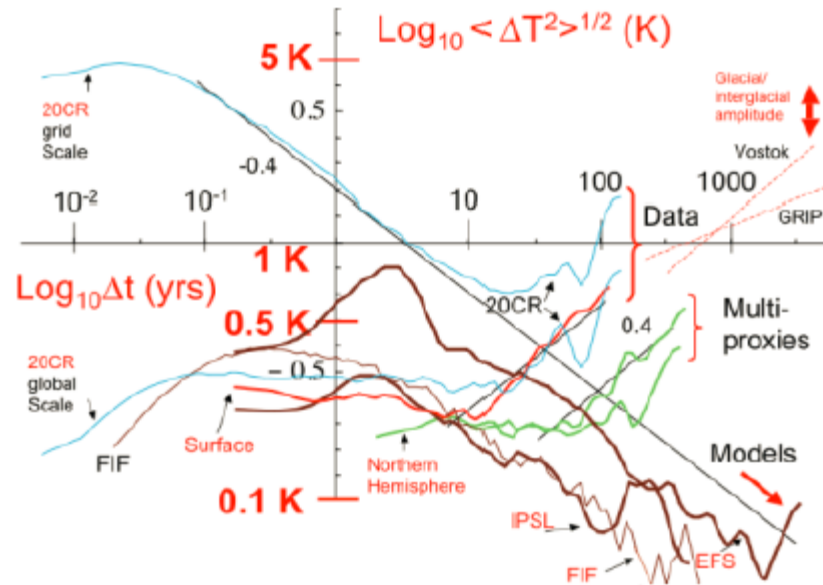
Improved

Whereas chimpanzees are widespread across equatorial Africa, bonobos live only south of the Congo River (Fig. 1a). As a result of their relatively small and remote habitat, bonobos were the last ape species to be described and are the rarest of all apes in captivity.

Be clear (清晰)

- Use simple words (but be specific)
-
- ✗ We found that the technique that we utilized had a relatively high accuracy in comparison with absorption spectroscopy (fig. 2).
 - ✓ Our technique was more accurate than absorption spectroscopy (fig. 2).

Be clear (清晰)



Earth Syst. Dynam. Discuss., 3, 1259-1286, 2012

- Too much information!
- Difficult to pull the main claim of the paper out from the jumble of information provided. We need to be able to glance at the figures and understand them
- The axes labels of this graph can't be understood without referring to the text
- Trend lines: add more information to an already busy graphic
- Reference to a previous graphic ('Vostock' and 'GRIP')

Tip 4

Decide early on where to publish 提前决定投哪本期刊

- This will help shape your study, based on the goals needed for publication in your target journal. Will help define the form of study and advance required.

针对期刊对文章的要求进行研究，有助于把握研究方向和创新性。

- Look at journal's aims and scopes page

仔细阅读该期刊所涵盖领域及对文章的要求

- Think about how you will structure your papers when you design your experiment

在设计实验时就开始思考文章架构

- What controls and statistical tests are needed?

设置哪些对照组，使用何种统计方法

- What collaborators / co authors should you work with to complete study?

需要和哪些共同作者合作才能完成该研究

- What is your aim with study? What are you trying to show / prove?

研究目的是什么？想要表现或证明什么？

Tip 5

Quality is everything 质量决定一切

- Try to publish in as high a quality journal as you can.
尽可能发表在质量最高的期刊上
- One great study is better than several lesser quality ones
一篇高质量的文章 > 多篇内容相似的一般文章
- Avoid trying to publish lots of research papers that provide small amounts of new data from a single research project.
切勿将一项完整的研究分割成若干篇文章发表

Tip 6

Become a reviewer! 珍惜审稿的机会！

- Get used to how to critically assess science – it will help you to assess your own study

了解如何批判地评估科研成果，有助于准确评估自己的工作

- Ask your supervisor if you can help with the next review they do

向导师申请帮其完成下一次的审稿工作

- You' ll become familiar with issues that reviewers raise as you see other reports

看别人的审稿报告，熟悉审稿人如何提问



Tip 7

• Respond to reviewers and editors 如何回复编辑和审稿人

- Ensure you understand what reviewers and editors are asking for (if unsure make an informal query to the editor prior to submitting your response).

明白评审和编辑提出什么要求

- Provide a full, and concise point-by-point response to the reviewers and editors.

提交完整的回复，将评审和编辑的要求逐点说明

- If you disagree with an issue, provide a clear rationale for your argument within the response. Back up with references where possible.

如果对评审提出的问题有异议，需在回复中提供详细的论证，最好附有参考文献

- Give clear indication where revisions in the manuscript have been made (tracked changes, highlighted etc).

指明对文章的哪些部分进行了修改

We thank the reviewers for their detailed and insightful evaluations of our submitted manuscript. We address these point by point.

Reviewer 1

The primary outcome measure is described as both 'proportion corrected severe anaemia in <24 hr' AND time to correction. One is a straightforward comparison to two proportions and the second a more complex time-dependent function. Since sampling was 'only' 8 hourly, do we really gain much from using the more complex analyses? Suggest separating out the two ways of describing this end point in the text and table 3.

In the protocol the primary outcome is "Correction of severe anaemia (to a Hb > than 6g/dl) at 24 hours"; before analysis was done, a decision was made to analyse this using time-to-event methods because of the potential for a child to abscond from hospital before 24 hours and for missing Hb measurements at 24 hours to lead to censored observations. The analysis of time from randomisation also indicates when this correction most commonly occurred. We have amended the main text to make this clearer. Because the decision was made on this primary analysis method before starting the analysis, we do not think that this should be changed now. (Note: Figure 3(a) presents the mean haemoglobin at 24 hours in children still alive in each group.)

A related issue is given that sampling Hb values was 8 hourly - how can figure 2 have been generated in which the probability of Hb correction is described as a continuous variable?

Although measurements were 8 hourly in the protocol there was some variation around this in practice. Figure 2 does show 'jumps' clearly indicating the 8 hourly measurements but it also provides additional information about when correction occurred as some jumps are larger than others. The title and y axis label have been changed to clarify that this shows the time to the first haemoglobin measurement >6g/dl.

Typos: methods Extra full stop 1st sentence in screened procedure and extra underscore from penultimate paragraph; "Furthermore, there is evidence indicating SMA has a"

We thank the reviewer for noting the grammatical errors- in the revised manuscript these have been corrected.

Reviewer 2

1. Provide comment on baseline differences particularly the greater proportion on patients in T30 with sickle cell anaemia and convulsions compared to T20; and the greater proportion of patients with "prostration" in the T20 group.

Tip 8

Learn to live with rejection! 正确看待被拒稿

- All scientific careers are faced with rejection
被拒稿是每个研究人员的必经之路
- Take reviewers advice and improve the study / manuscript
根据审稿人的意见进行修改
- If you are invited to resubmit, do the revisions that the reviewers request.
Don' t argue for the sake of it
如果有重投的机会，一定要根据审稿人的意见进行修改，切勿进行过多争论
- There are other journals
选择其他期刊
- Try not to resent negative comments
不要给出负面回应和评论
 - You can appeal If there has been an error 如果有事实错误可以申诉
 - If you have new data to support your findings 用新数据来支持发现



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Thank you

乔昆鹏

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