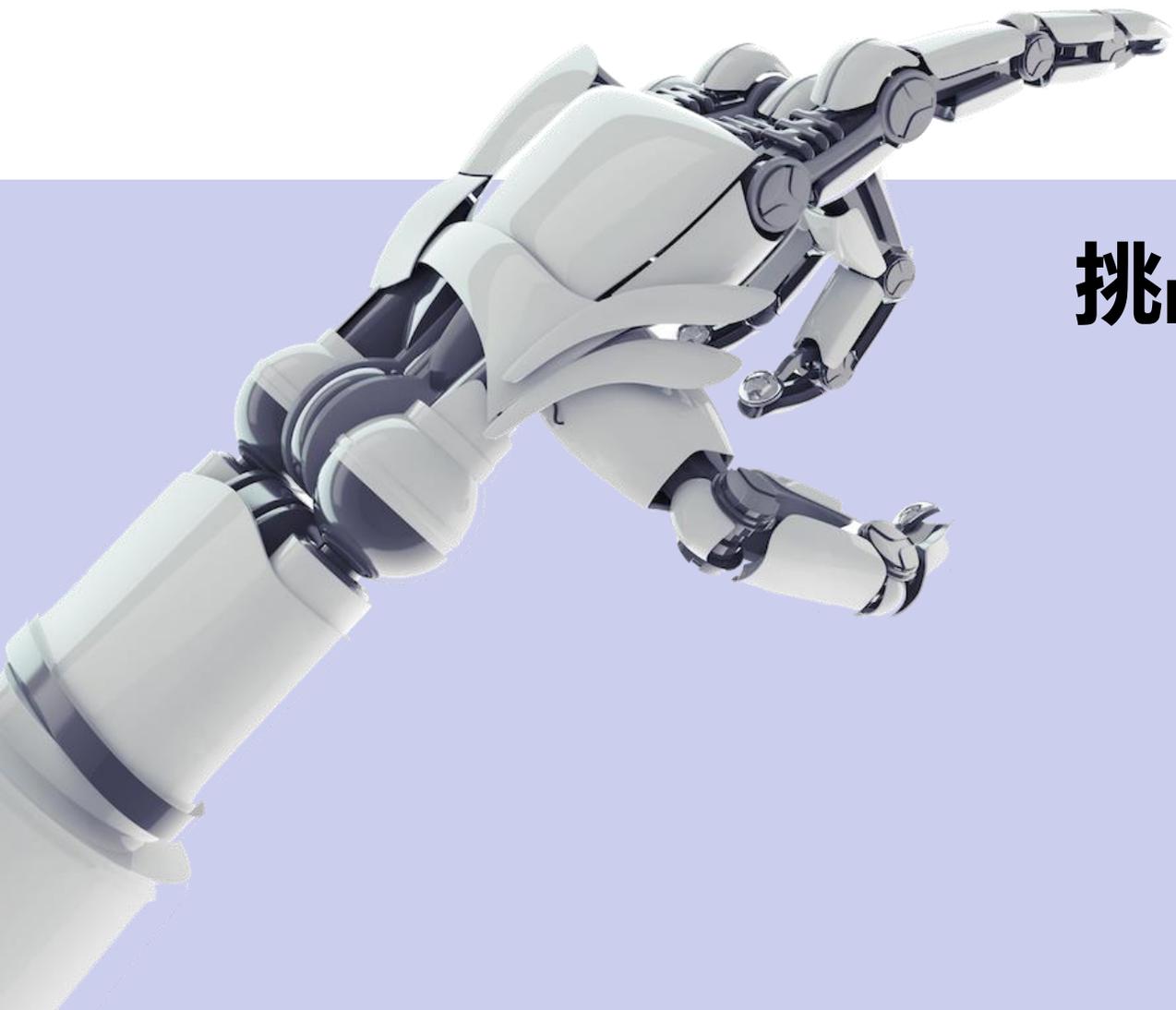




清华大学  
Tsinghua University

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# 挑战和创新

—— AI与学术出版的未来

清华大学 AI+工作坊

胡启华  
开科思 Cactus Communications  
2024年12月11日

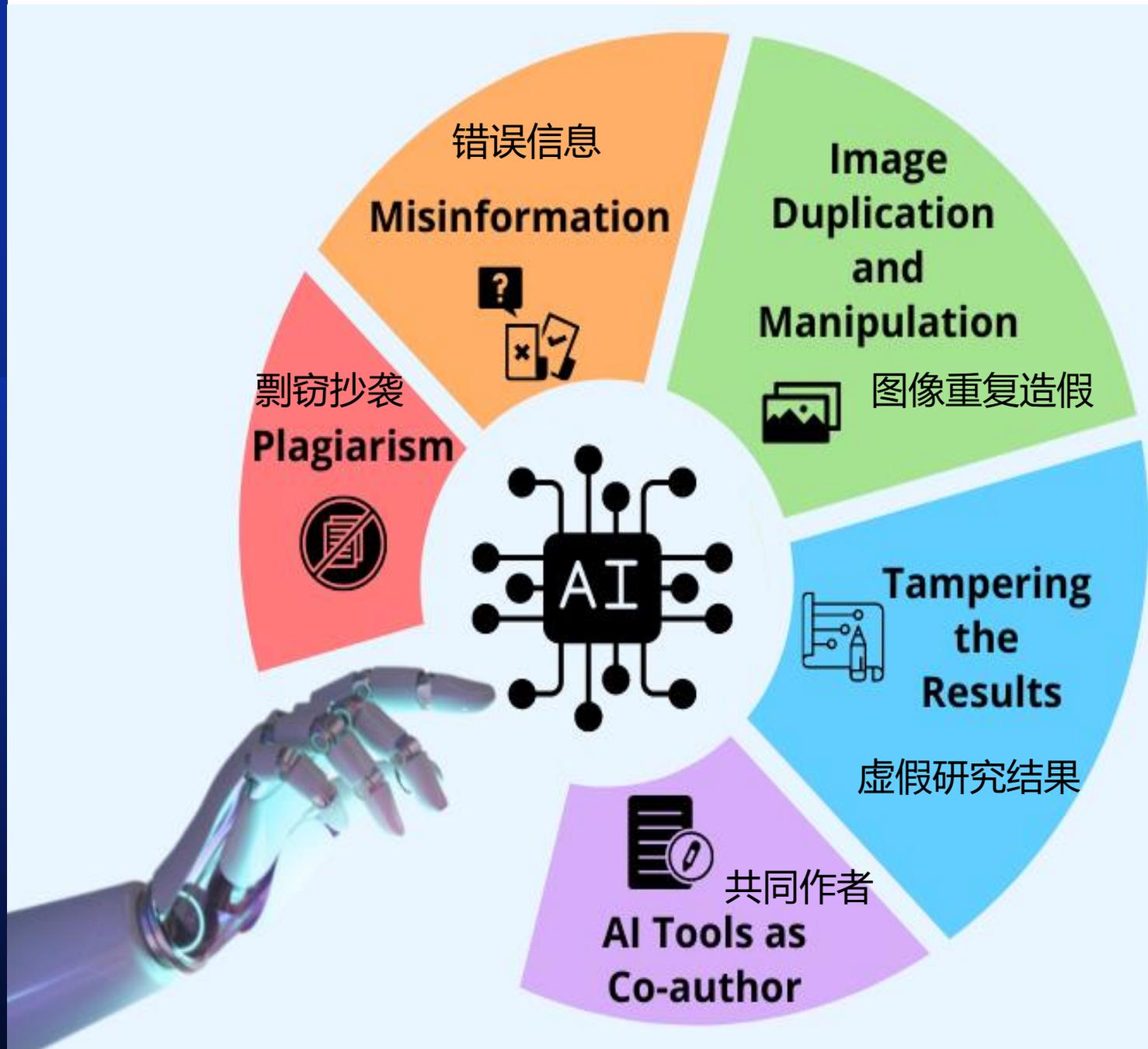
*“Never trust anything that can think for itself if you can't see where it keeps its brain.”*

-- 亚瑟·韦斯莱《哈利·波特与密室》告诫他的女儿关于存在于一个充满魔法和巫术的虚构世界中的一本具有邪恶意识的日记

*“We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run.”*

-- 计算机科学家罗伊·阿玛拉 (Roy Charles Amara) 阿玛拉定律

# Ai技术突破带来的风险



# Ai技术突破带来的新挑战

## The New York Times

### *Here's What Happens When Your Lawyer Uses ChatGPT*

A lawyer representing a man who sued an airline relied on artificial intelligence to help prepare a court filing. It did not go well.

May 27, 2023  
New York Times

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## nature

### ChatGPT generates fake data set to support scientific hypothesis

Eye surgeons in Italy published an article in JAMA Ophthalmology showing how they used GPT-4 with other tools to create a fake clinical trial data set.

Nov 22, 2023  
Nature



Canada

### Canada lawyer under fire for submitting fake cases created by AI chatbot

Feb 29, 2024  
The Guardian

# 出版社对生成式 AI 和 AI 辅助技术的使用政策

Elsevier, Springer Nature 和 Wiley 在政策方面的**相同点**。

## ➤ 生成式 AI 的辅助角色：

一致强调生成式 AI 只能用作辅助工具，不能被列为论文的作者。

## ➤ 披露要求：

要求透明披露使用 AI 工具的具体信息，包括工具名称、用途以及对稿件的具体贡献。

## ➤ 学术诚信与责任：

作者需对提交内容的准确性和完整性承担责任，确保 AI 工具不会影响研究数据和结论的可靠性。

## ➤ 人工验证：

生成内容必须经过作者的校正与验证，避免错误信息或伪造引用。

# 出版社对生成式 AI 和 AI 辅助技术的使用政策

Elsevier, Springer Nature 和 Wiley 在政策方面的侧重点。

## 出版社

## 侧重政策

### Elsevier

要求**使用标准声明模板**，特别强调披露工具的使用目的和作者的校正责任，内容审查程序相对简化。

### Springer Nature

**强调详细的披露**，尤其是在方法部分描述 AI 工具的作用；禁止 AI 参与研究设计和数据分析，确保人类主导科学过程。

### Wiley

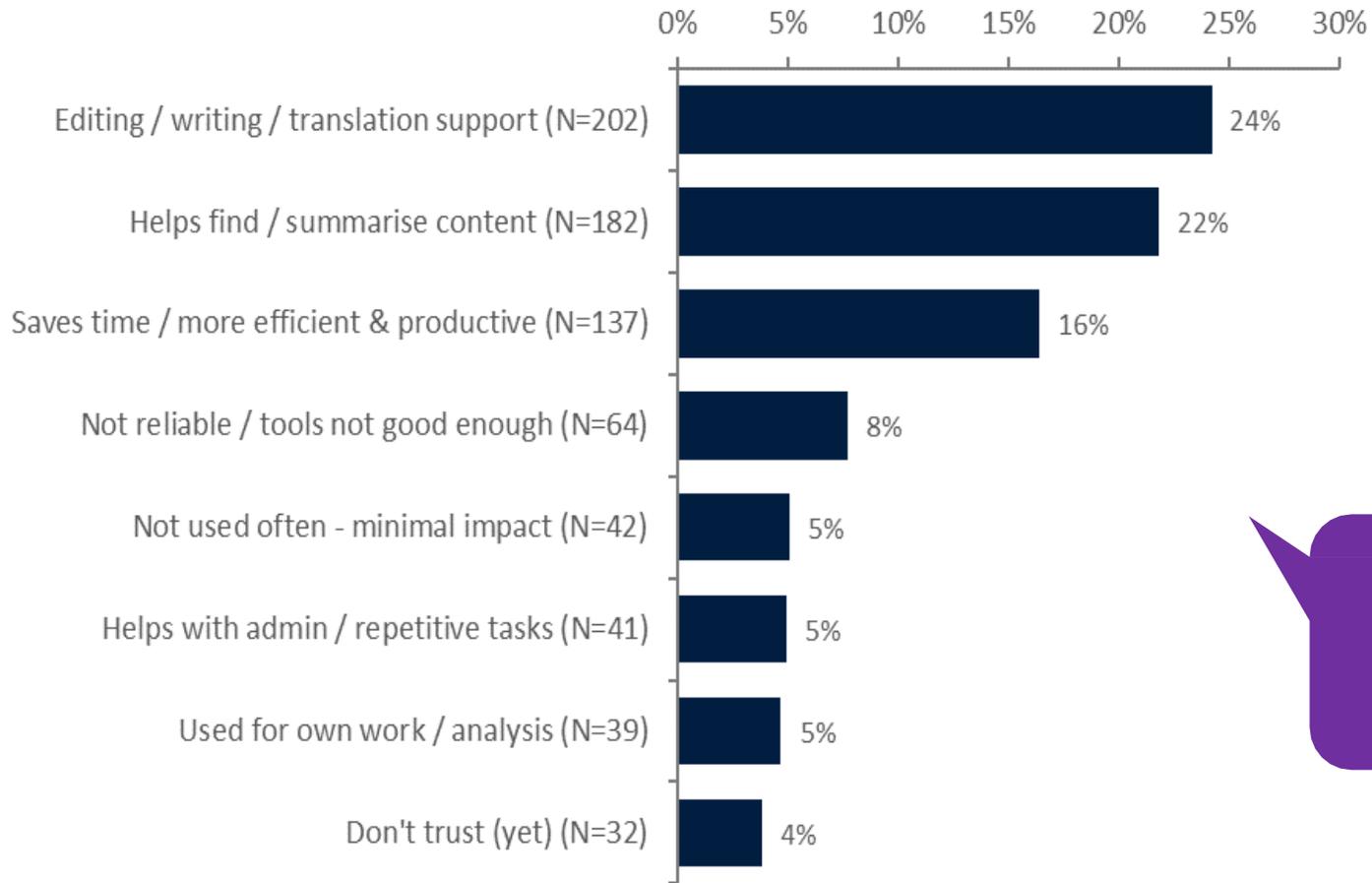
**特别关注引用的真实性验证**，严格限制 AI 工具仅用于写作辅助，不得直接生成核心研究内容；对生成内容贡献范围的披露有明确要求。

参考链接: [生成式 AI 政策 – Elsevier](#), [Springer Nature AI 原则](#), [Wiley AI 原则](#)

# Researchers and AI: Survey Findings

## 根据调研，研究人员最常通过编辑、写作或翻译支持的功能上从人工智能中受益

Top themes from those who have benefitted:



研究人员解释他们认为在研究中使用人工智能对他们有益或无益。

所有公开回复都被系统地分类为不同主题方向。该图表显示了受益的前8个方向。

*"I use it to revise my writing, to write more polite emails, and to help with developing cool titles for my papers."*  
[Pioneer]

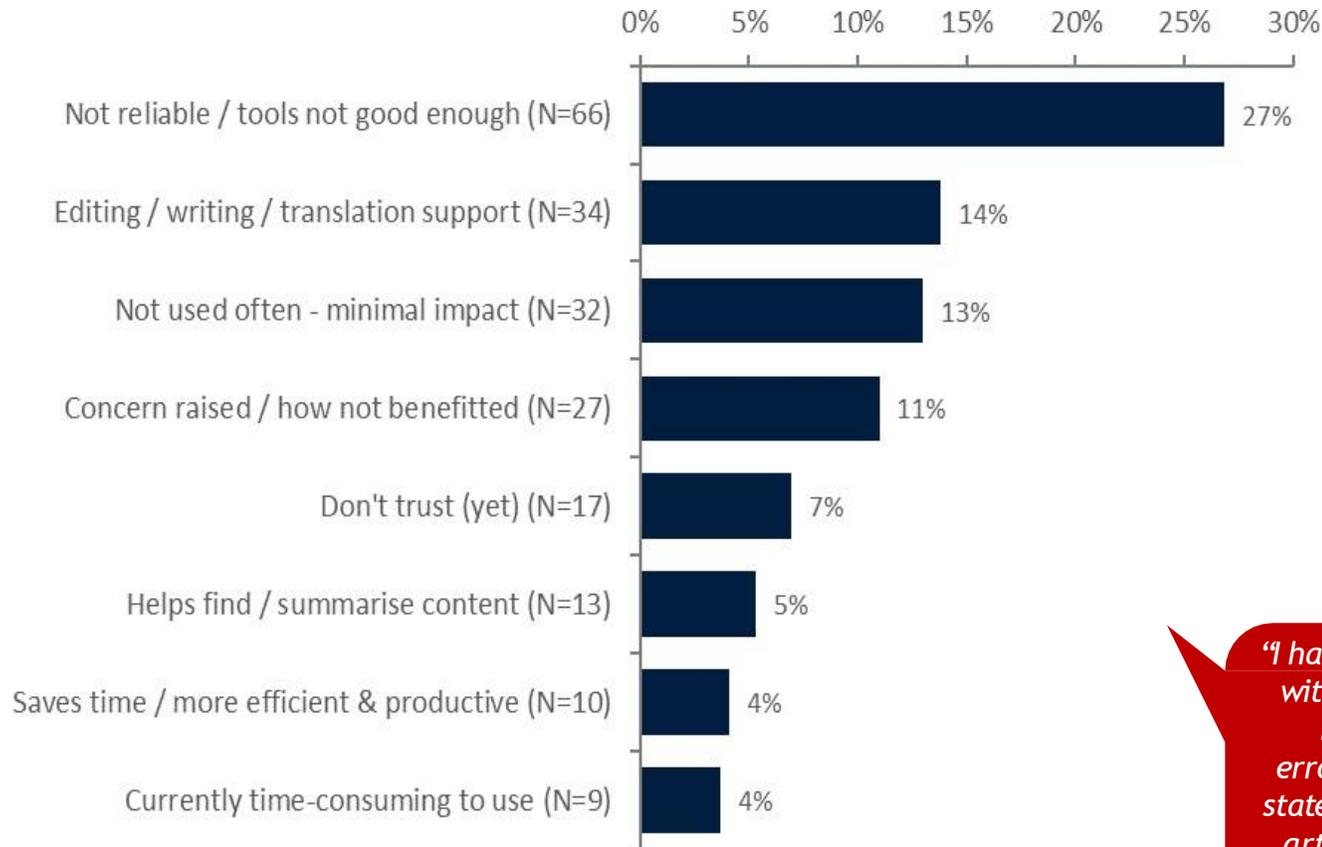
*"I can collect and synthesize much more information than I could do by Google searches."*  
[Pioneer]

*"Because I am not a native speaker, I receive writing and language editing benefits."*  
[Pioneer]

# Researchers and AI: Survey Findings

## 反馈没有从人工智能中受益的研究人员通常提到工具不可靠或不够好

### Top themes from those who have not benefitted:



研究人员解释他们认为在研究中使用人工智能对他们有益或无益。

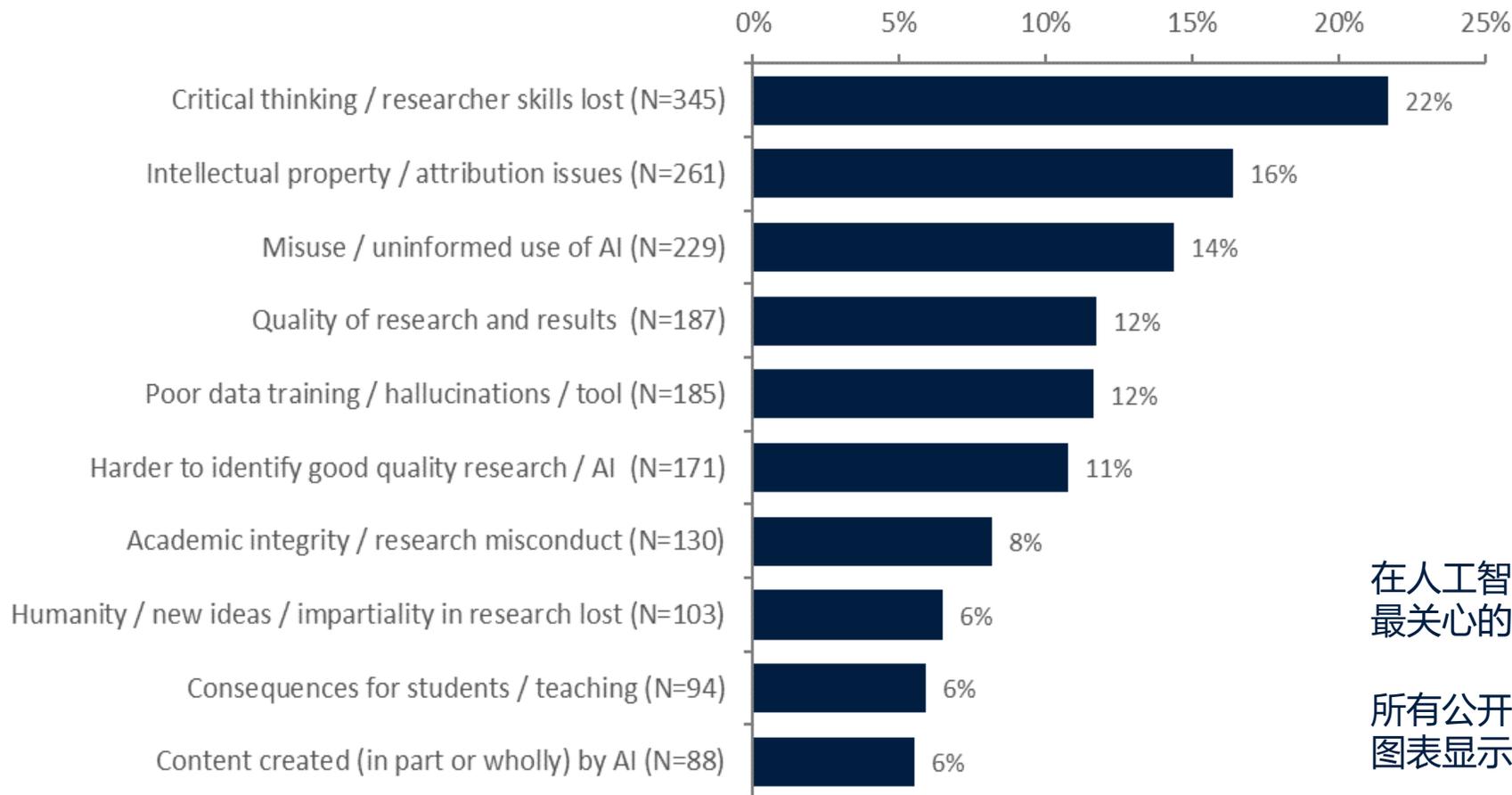
所有公开回复都被系统地分类为不同主题方向。该图表显示了未受益的前8个方向。

*"I have experimented extensively with LLM tools (ChatGPT) and have found them wildly erroneous: fake citations, fake statements about the content of articles, fake historical facts."*  
[Challenger]

*"Garbage in garbage out. The "information" available to an AI content generator is larger in quantity than Wikipedia but not better in quality. AI can generate Simplistic superficial generalizations, or collate the most common "ideas" found on the internet, but this is generally useless."*  
[Concerned pessimist]

# Researchers and AI: Survey Findings

根据调查，研究人员最担心的问题是人工智能可能导致批判性思维的丧失

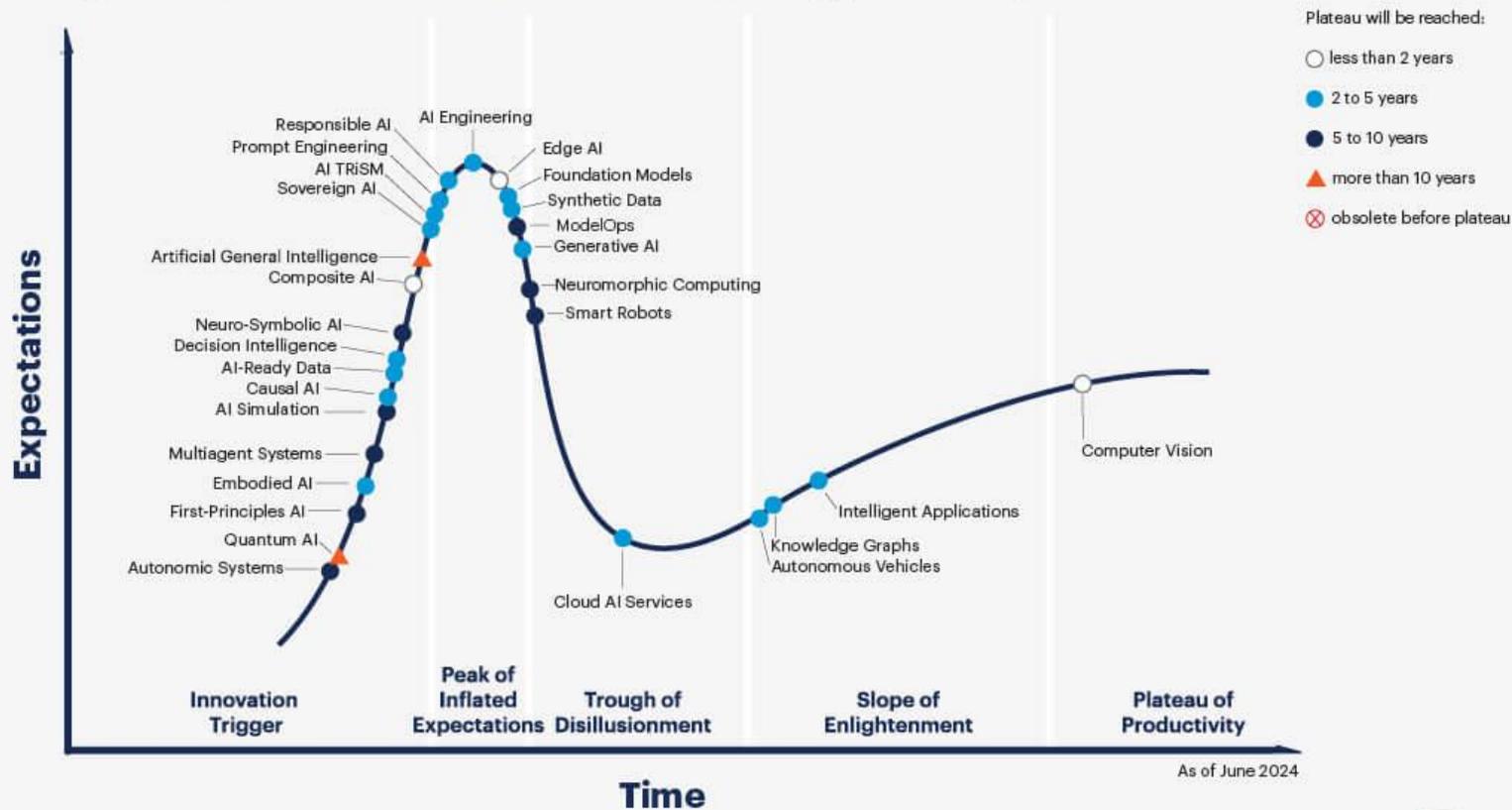


在人工智能与学术研究的关系层面，研究人员最关心的问题

所有公开回复都被系统地分类为不同问题。该图表显示了关注度最高的的前10个问题。

# Gartner 人工智能技术成熟曲线

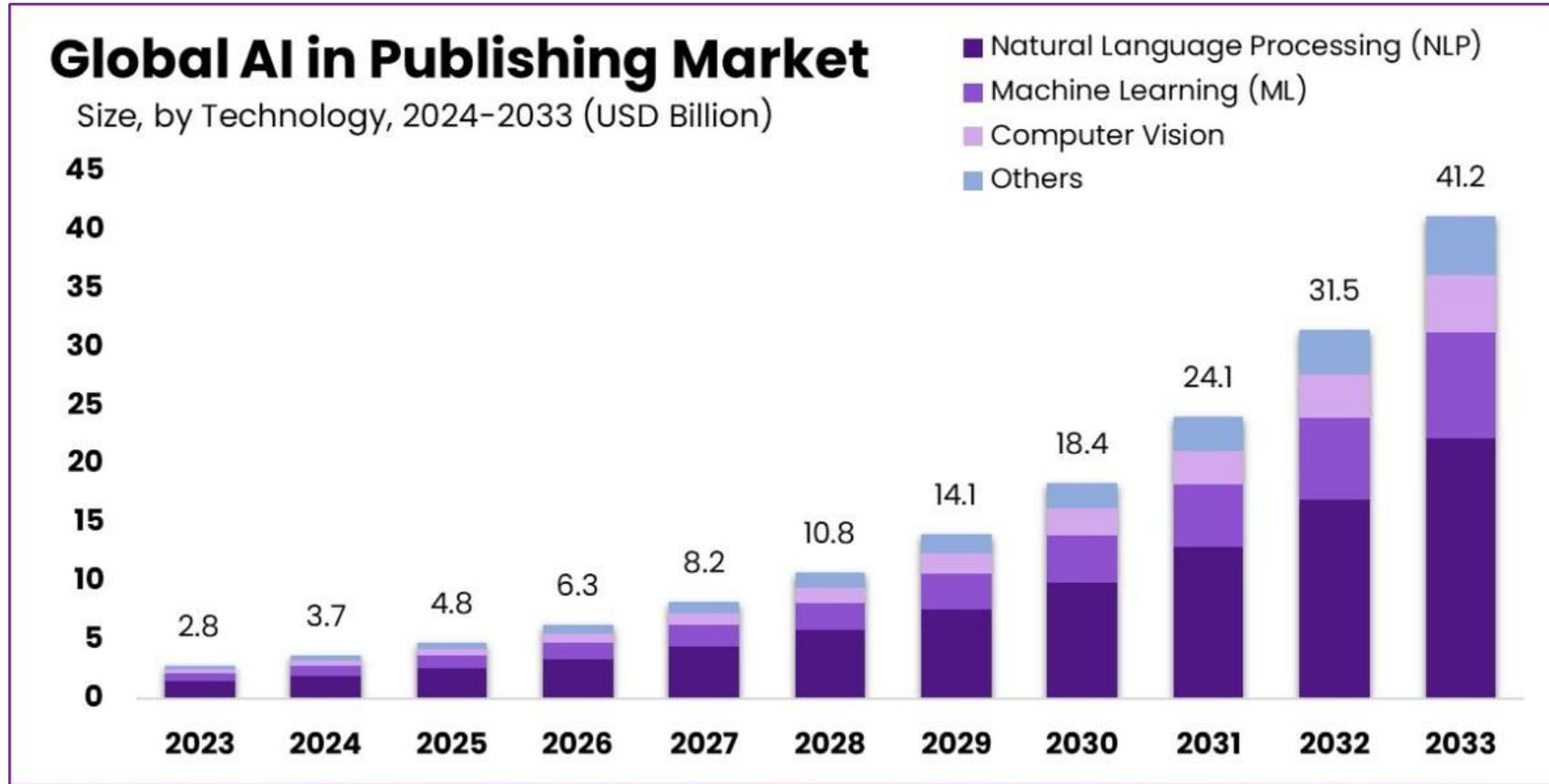
## Hype Cycle for Artificial Intelligence, 2024



Source: Gartner  
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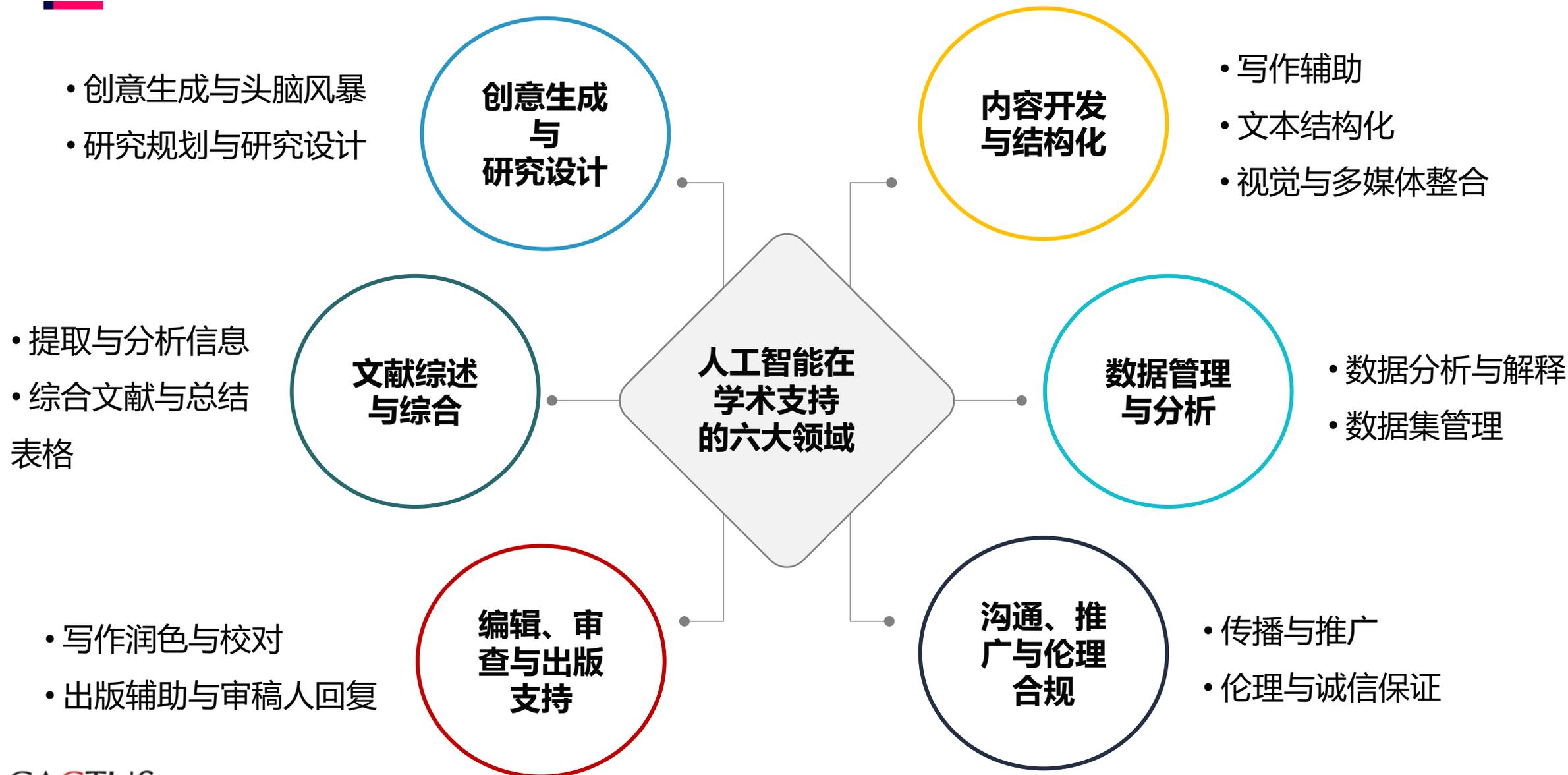
**Gartner**

# Ai技术在出版行业市场前景



- 预计到2033年，出版行业AI技术市场体量将达到412亿美元
- 10年的复合年均增长率将达到30.8%

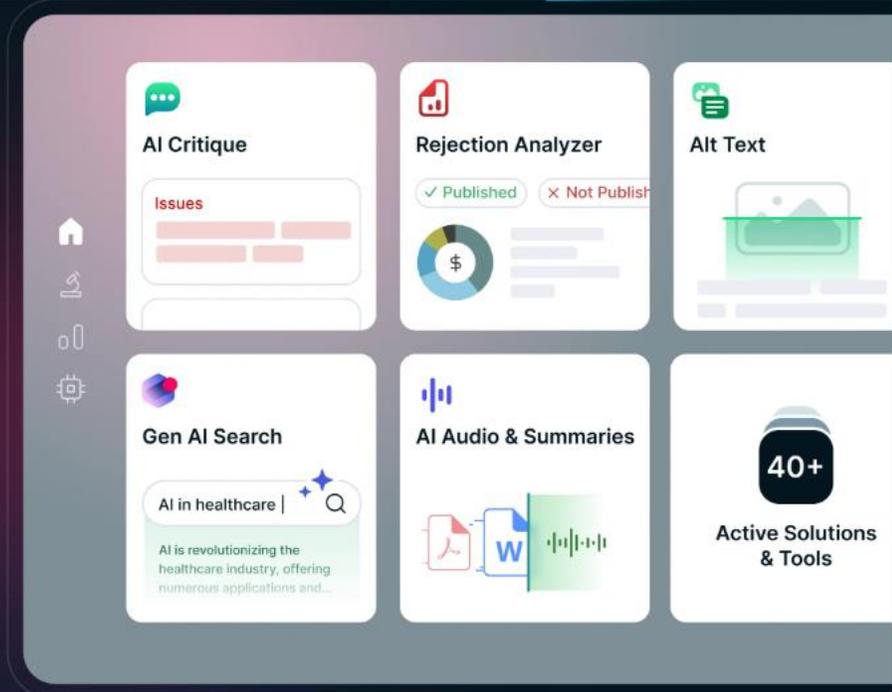
# 人工智能在学术支持的六大领域



# AI solutions for smarter, faster workflows

The AI-powered platform for developers and product tinkerers to build and scale enterprise solutions in academia and life sciences.

Get Started



300+

Technology experts

50+

Linguists and AI Specialists

5M+

Trusted users across 190+ countries

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AI Summary

Concept Extraction

Generative (re)Search

Journal Finder

AI Critique

Image Checks

Similar Papers Widget



# Preflight for Editorial Desk (PPE) 编辑部初审的 人工智能评估方案

## 科研诚信评估

- **论文工厂行为检测** – 作者身份、内容捏造、引用和图像抄袭
- **透明度评估** – 数据可用性声明, 道德声明, 其他披露
- **内容评估** – 文章结构, 学科方向匹配, 不道德用语

## 语言评估 及修改建议

### 语言写作评估及AI修改建议

- 语法和句法
- 结构和风格
- 英语表达与学术用词

## 技术条款评估

与期刊的**稿件技术条款要求** ( submission requirements ) 进行匹配和检查

- 表格和数据
- 基本信息 (关键词, 文章类型等)
- 格式和字数

# 出版：技术与创新紧密交织



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Home > Tech > Cactus Communications joins hands with STM Integrity Hub to bolster STM's suite...

Tech

## Cactus Communications joins hands with STM Integrity Hub to bolster STM's suite of research integrity checks

October 9, 2024



CACTUS, a leading science communication and technology company, today announced a partnership with the prestigious STM Integrity Hub to enhance STM Solutions' suite of research integrity checks, setting the stage for a more robust scholarly publishing ecosystem. Under this partnership, the STM Integrity Hub will pilot the integration of multiple research integrity checks for authorship,

Brought to you by Morgan Healey



Featured Vacancies:

- Journals Publishing Director – France
- VP of Business Development & Sales
- Head of Books (12-Month Contract)
- Account Executive (SaaS / Academic)
- General Manager – Japan

- 开科思与STM Integrity Hub携手加强科研诚信人工智能辅助检测
- 开科思旗下多种人工智能辅助工具支持出版社、学协会发展

<https://www.stm-publishing.com/cactus-communications-joins-hands-with-stm-integrity-hub-to-bolster-stms-suite-of-research-integrity-checks/>



智者不惑  
仁者不忧  
勇者不惧

——《论语·子罕篇》

*The wise are free from  
doubt, the benevolent  
are free from worry, and  
the brave are free from  
fear.*

——*The Analects of  
Confucius*

