

# 科技论文英文摘要的写作规范

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# 大纲

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## 1.英文摘要的意义

- (1) 论文思想的凝练
- (2) 使读者快速了解文章中心思想，以决定是否阅读全文
- (3) 提高论文在国际领域的传播及影响力
- (4) 摘要质量高低直接影响到其是否被期刊录用，也关系到论文能否被转载和引用。影响到论文本身为读者所接受的范围和程度。

## 2.英文摘要的写作特点

### 1. 准确(accuracy)

忠于原文，遵循英语的表达

### 2.精炼(brevity)

简明扼要，不应出现与其他研究工作的对比，举例等

### 3.清晰(clarity)

结构化格式包括：目的、方法、结果和结论

与一般写作不同，莎士比亚的原文指出“*There are a thousand Hamlets in a thousand people's eyes*”，但对于学术论文中的某个问题、方法或结论，不同人的理解是相同的。因为学术写作遵循标准的结构化格式。

### 3. 英文摘要类型

描述型摘要不包括详细的结果信息，一般较为简短(50-100字内)，对于需要获得全文了解具体信息方面来讲，并不是很便利。描述型摘要告诉读者文章在讲什么，但是要知道到底是怎样还需要进一步的阅读文章细节。

#### 描述型摘要

从信息型摘要(常200字左右)能够获取文章的精髓部分。摘要提供文章研究的准确数据，包括结果部分。信息型摘要相当于一个小的科学论文，读者可以从中获取大部分有用的信息甚至因此不必阅读全文。

#### 信息型摘要

非结构化的摘要不会对文章中每个部分提及并进行分别介绍。摘要大概告诉读者文章在讲什么，但是要知道到底是怎样还需要进一步的阅读文章细节。

#### 非结构化摘要

#### 结构化摘要

摘要包括四个部分，目的(Introduction),方法(Materials and Methods),结果(Results)和结论(Conclusion)。中英文结构化摘要基本相同，文辞力求简明有实质内容。摘要结构化使得数据信息化更清晰、明了。

#### 半结构化摘要

半结构化的摘要仅有一个短评，每句对应文中的一部分，摘要并不对每个部分进行分别介绍。摘要告诉大概读者文章在讲什么，但是要知道到底是怎样还需要进一步的阅读文章细节。

描述性摘要 (Descriptive abstract) 常出现在报告中，不介绍内容，仅说明主题思想。



## 4.摘要的结构

### 4.1题名


- 题名的结构

英文题名以短语为主要形式，尤以名词短语(noun phrase)最常见，即题名基本上由1个或几个名词加上其前置和(或)后置定语构成。

- 题名的字数

题名不应过长。国外科技期刊一般对题名字数有所限制。例如，美国医学会规定题名不超过12个词。SCI规定题目字数不超过20个词。

原则：题名应确切、简练、醒目，词数越少越好。



## 4.2 关键词


### 4.2.1 遵循期刊指南

大多数期刊要求作者提供5-8个关键词，不要太多或太少。

### 4.2.2 关键词避免和标题重叠

标题和关键词应围绕研究主题互为补充

### 4.2.3 包含具体研究技术和方法



## 4.3 摘要主体

### 以结构化摘要为例 (Structured abstract)

#### 4 sections:

P=Purpose and Motivation 目的

M=Methodologies 方法

R=Results 结果

C=Conclusion 结论

摘要=目的+方法+结果+结论

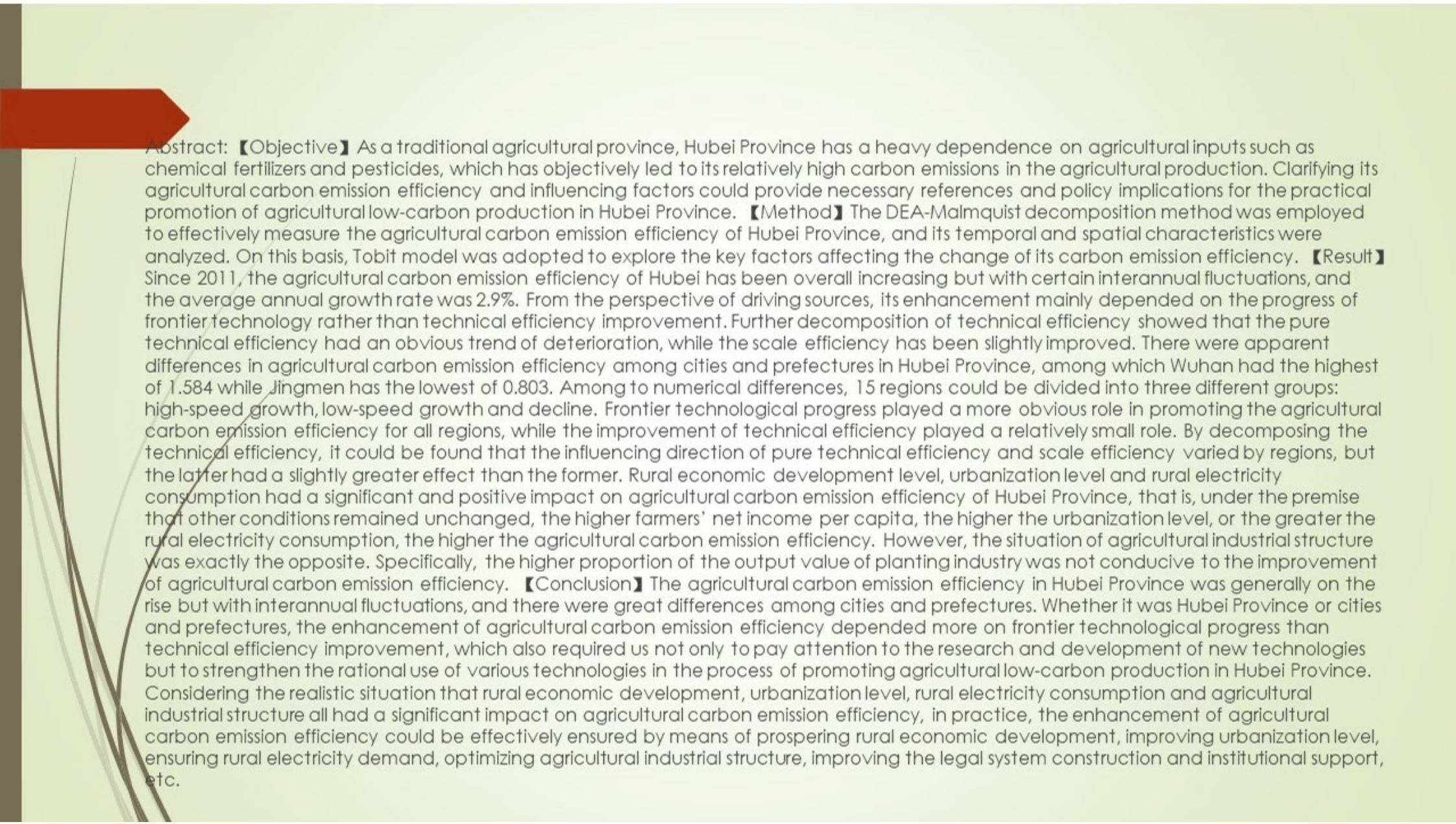
1. Explain the purpose of your study.(目的1-2句)
2. Share your research methods.(方法1句)
3. Demonstrate your results.(结果5-8句)
4. Conclude with the main point and impact of your research.  
(结论1-2句)突破点



# 结构化摘要Structured abstract

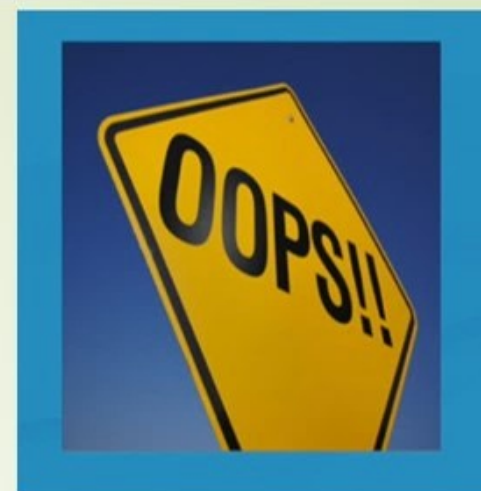
摘要：**【目的】**传统农业大省湖北省对化肥、农药等农用物资的依赖度过高，客观上导致其农业生产相对高碳。本研究**目的**在于厘清其农业碳排放效率及影响因素，为湖北省农业低碳生产的切实推进提供参考依据与政策启示。**【方法】**利用 DEA-Malmquist **分解法**对湖北省农业碳排放效率进行有效测度并分析其时空差异特征；在此基础上运用 Tobit **模型**探究影响其碳排放效率变化的关键因素。**【结果】**2011年以来湖北省农业碳排放效率虽年际间存在一定波动，但总体处于增长态势，年平均增速为 2.9%；从驱动源泉来看其提升主要依赖于前沿技术进步而非技术效率改善，进一步对技术效率分解可知，纯技术效率恶化趋势较为明显而规模效率得到了轻微改善。湖北省各市（州）农业碳排放效率差异明显，其中以武汉最高，达到了 1.584，而荆门最低，仅为 0.803；结合数值差异可将 15 个地区划分为高速增长、低速增长以及下降等 3 个不同组别；**农村经济发展水平、城镇化水平、农村用电量**均对湖北省农业碳排放效率产生了显著的正向影响，即在其他条件维持不变的前提下，农民人均纯收入越高、或者城镇化水平越高、或者农村用电量越大，农业碳排放效率越高；而农业产业结构所处情形正好相反，具体表现为，种植业产值比重越高越不利于农业碳排放效率的提升。**【结论】**湖北省农业碳排放效率总体处于上升态势，但伴随着年际波动各市（州）碳排放效率存在较大差异，无论是湖北省还是各市（州）其农业碳排放效率的提升都更多地依赖于前沿技术进步而非技术效率的改善，这也要求我们在推进湖北农业低碳生产过程中不仅要注重新技术的研发，更需强化对各类技术的合理运用。考虑到农村经济发展、城镇化水平、农村用电量以及农业产业结构均对农业碳排放效率产生了显著影响的现实境况，实践中可以通过繁荣农村经济发展、提升城镇化水平、保障农村用电需求、优化农业产业结构、完善法制建设与制度保障等手段来切实确保农业碳排放效率得到提高。





**Abstract:** **【Objective】** As a traditional agricultural province, Hubei Province has a heavy dependence on agricultural inputs such as chemical fertilizers and pesticides, which has objectively led to its relatively high carbon emissions in the agricultural production. Clarifying its agricultural carbon emission efficiency and influencing factors could provide necessary references and policy implications for the practical promotion of agricultural low-carbon production in Hubei Province. **【Method】** The DEA-Malmquist decomposition method was employed to effectively measure the agricultural carbon emission efficiency of Hubei Province, and its temporal and spatial characteristics were analyzed. On this basis, Tobit model was adopted to explore the key factors affecting the change of its carbon emission efficiency. **【Result】** Since 2011, the agricultural carbon emission efficiency of Hubei has been overall increasing but with certain interannual fluctuations, and the average annual growth rate was 2.9%. From the perspective of driving sources, its enhancement mainly depended on the progress of frontier technology rather than technical efficiency improvement. Further decomposition of technical efficiency showed that the pure technical efficiency had an obvious trend of deterioration, while the scale efficiency has been slightly improved. There were apparent differences in agricultural carbon emission efficiency among cities and prefectures in Hubei Province, among which Wuhan had the highest of 1.584 while Jingmen has the lowest of 0.803. Among to numerical differences, 15 regions could be divided into three different groups: high-speed growth, low-speed growth and decline. Frontier technological progress played a more obvious role in promoting the agricultural carbon emission efficiency for all regions, while the improvement of technical efficiency played a relatively small role. By decomposing the technical efficiency, it could be found that the influencing direction of pure technical efficiency and scale efficiency varied by regions, but the latter had a slightly greater effect than the former. Rural economic development level, urbanization level and rural electricity consumption had a significant and positive impact on agricultural carbon emission efficiency of Hubei Province, that is, under the premise that other conditions remained unchanged, the higher farmers' net income per capita, the higher the urbanization level, or the greater the rural electricity consumption, the higher the agricultural carbon emission efficiency. However, the situation of agricultural industrial structure was exactly the opposite. Specifically, the higher proportion of the output value of planting industry was not conducive to the improvement of agricultural carbon emission efficiency. **【Conclusion】** The agricultural carbon emission efficiency in Hubei Province was generally on the rise but with interannual fluctuations, and there were great differences among cities and prefectures. Whether it was Hubei Province or cities and prefectures, the enhancement of agricultural carbon emission efficiency depended more on frontier technological progress than technical efficiency improvement, which also required us not only to pay attention to the research and development of new technologies but to strengthen the rational use of various technologies in the process of promoting agricultural low-carbon production in Hubei Province. Considering the realistic situation that rural economic development, urbanization level, rural electricity consumption and agricultural industrial structure all had a significant impact on agricultural carbon emission efficiency, in practice, the enhancement of agricultural carbon emission efficiency could be effectively ensured by means of prospering rural economic development, improving urbanization level, ensuring rural electricity demand, optimizing agricultural industrial structure, improving the legal system construction and institutional support, etc.

## 5.英文摘要写作常见问题 (不谈词汇语法, 结构层面)



### 5.1摘要部分实验方法等描述太具体

5.1.1 Length篇幅过长 (150-200words)

5.1.2 摘要中包含文献、数学公式、化学方程式、过多的形容词, 无关的背景资料。

5.1.3 摘要等同于介绍。


注意: 摘要能作为二次文献脱离原文而独立存在



## 5.2 要素不全（缺目的、方法或结论）

- 题目：知识库系统的原理（Principle of knowledge base system）
- Abstract: Based on the analysis on definition, grade, principle of knowledge, the paper explains the principle of knowledge Base System in detail.

本文对知识进行了定义、分级，分析了知识产生的原理，在此基础上，阐述了知识库系统的原理。




## 5.3 繁简不当

论文题目：校园网络信息系统的设计与实现(Design and implementation of information system on campus network)

摘要简单，不应重复题名已有信息

译：The characteristic of information system on campus network is discussed.





## 5.4 对论文内容作自我评论

- This paper will be meaningful and worth reference to advancing...
- The study is of importance to the research of basic geology in...(它的研究对...基础地质研究具有重要意义)

## 6. 英文摘要写作原则

6.1 尽量用短句(use short sentences)

6.2 时态以一般过去时（描述作者的工作）和一般现在时（陈述结论、总结实验结果）为主

6.3 使用动词的主动语态（SCI 和 EI 也要求用主动语态）

如：写成A exceeds B比写成B is exceeded by A更好。

6.4 行文时用第一人称。

EI 提出使用 we，可拉近作者和读者之间的距离。NATURE、CELL等尤其如此

英美 个人主义，中国 集体主义 文章主题多介绍别人观点及与主题相关的社会文化背景

## 7. 英文摘要中的句式表达

### 7.1 引言（研究的背景、目的）

(1) 名词: goal, aim, purpose等


(2) 动词有attempt to, aim at, To describe..., To study..., To investigate..., To assess..., To determine...更简洁, 避免用The paper...

原创成分多时: opens up a new field/introduces/develops/establishes

谦虚的说法: This paper offers a solution to (提供了一种解决办法)/serve as an introduction to

## 7.2 方法

- (1) 表示应用了某个理论、方法、某种材料等，常用的名词有：application, adoption, use 等，比如：这种新理论的应用是...(The application of the new theory is to...); 常用的动词有：apply, use, explore, adopt 等，例如：用卡方检验法评估这次观测...(The observations was assessed using the chi-squared test...)
- (2) 描述实验或试验时，test, observation, sample, experiment 等名词经常出现；observe, test, monitor, conduct, carry out 等动词常被用到。例如：使用...做试验(The test was conducted using...)



## 7.3 结果

- 阐释运用上述方法得到的结果。

描述研究结果常用的名词：findings, results, outcome 等；常用的动词：indicate, suggest, show, provide, demonstrate, present 等。例如：获取数据表明...  
(The data obtained suggested that...)



## 7.4 结论

结论语步的内容是通过对研究成果进行分析、评价进而推出的判断或提出的问题、建议。提出结论常用的名词有：conclusion, summary 等；动词有：conclude, draw, reach, arrive at, come to 等。例如：可以得出以下结论... (The following conclusion can be drawn/reached...)；通过试验我们得出结论... (We concluded by the test that...)。

- 1) The results show that...
- 2) The author suggests or concludes that...
- 3) It recommended that...
- 4) It has been found...
- 5) It concluded to be...

## 8. 机翻常见问题

### 8.1 词序问题

例：井网系统调整灵活性

在线译文：well pattern system adjustment flexibility

建议译文：Flexibility of the well pattern adjustment system

谷歌翻译问题是前置定语太多，应少于2个




## 8.2 词义问题

例：见水

在线译文： See water

建议译文:breakthrough

地质学术语




## 8.3 断句问题

例：注水波及系数

在线译文：water injection wave **and** coefficient 注水/波/及系数

建议译文：water injection sweep coefficient 注水/波及/系数



## 8.4 搭配问题

例： 少量的小段块

在线译文： a small **amount** of small fault blocks

建议译文： a small number of small fault blocks



## 8.5 语篇问题

将时间、地址和原因等置于句子主要内容之前；书面表达的口语化和冗长等。

- 原文：60~90 年代，平均温度和平均盐度都存在逐渐升高的趋势。
- 译文：From 1960s to 1990s, both the mean temperature and mean salinity gradually increased.

分析：中国作者经常将陈述时间、地点、原因 等的语句放在句首，让外国读者认为作者不够直接。

改译：

Both the mean temperature and mean salinity gradually increased from 1960s to 1990s.

## 8.6 专有名词错误

- 原文: 潮流运动以往复流为主。
- 译文: The reciprocal current was the main component of tidal current.

分析: 译文中“往复流”被翻译为 the reciprocal current。

不能擅自“创译”，否则会造成读者的误解，在表述专有名词时参照术语的国家标准，或与国外学界规范表达一致“往复流”是物理海洋专业术语，在《GB15920-2010 海洋学术语物理海洋学》表达为 alternating current.



## 改进

- 参考学术语的国家标准，不能擅自改译
- 多注意汉语和英语两种语言之间的思维差异。使用正确的时态。调整语序，将重点内容优先表达。
- 注意摘要语言的简洁、凝练。表达避免口语化。