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# Exploring the divergence in research focus and trends between domestic and International traditional handicraft studies

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## ABSTRACT

This study aims to compare and contrast the development and trends in traditional handicraft research within domestic and international contexts, offering insights for the future direction of traditional handicrafts in China. By utilizing data from the CNKI and Scopus databases, this research uses various functions in Citespace, including category analysis, institutional analysis, keyword co-occurrence analysis, and burst keyword detection. These analyses provide a comprehensive comparison of spatio-temporal relationships, publishing institutions, research fields, publication journals, research hotspots, and development trends. Notably, China's research exhibits significant enthusiasm in areas such as digital preservation, rural revitalization, and targeted poverty alleviation, while foreign research demonstrates a higher emphasis on commercialization, sustainable products, and user perception. Additionally, China emphasizes cultural preservation and inheritance, whereas foreign research places a greater focus on economic value. In terms of research methods, China's emphasis is on strategic social-level research, while foreign research leans towards technical product and platform research. Combining the insights from both domestic and foreign research highlights two primary characteristics of traditional handicraft application areas: proactive preservation and revitalization efforts in China compared to the commercialization and market orientation emphasis abroad, and a greater focus on cultural preservation in China versus economic value abroad, indicating distinct research content and approaches between the two contexts.

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Culture; Heritage Management & Conservation; Design; Cultural Studies

## 1. Introduction

When traditional handicrafts are regarded as vital legacies of human civilization, they transcend being mere skills passed down through generations. They become vessels that carry culture, history, and wisdom. Functioning as symbols of regional distinctiveness, these handicrafts not only encapsulate the unique cultures of specific areas but also serve as a bridge connecting the past to the future, transcending time and space. In this process, they eloquently showcase the embodiment of human ingenuity and creativity (Li et al., 2019). However, amidst the rapid advancement of modern technology and the influences of globalization, traditional handicrafts are confronting an increasingly severe threat. Many ancient skills are gradually marginalized and even face the risk of extinction. This phenomenon reflects the impact of contemporary societal changes on traditional culture (Li & Jiang, 2019). Faced with this situation, countries around the world have begun to realize the urgency of preserving and revitalizing traditional handicrafts. They are taking action by formulating policies and development strategies to support the inheritance and growth of these traditional crafts. The objective is to ensure the preservation and continuation of this invaluable heritage (Väänänen & Pöllänen, 2020). This focus

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not only highlights the importance of intangible cultural heritage in the cultural realm but also signals a heightened awareness of the intricate connection between these traditional skills and everyday life. It signifies that under the guidance of government initiatives and market-driven efforts, new possibilities for the preservation and inheritance of intangible cultural heritage have emerged (Ma & Wang, 2022).

Based on this research background, this study employs a bibliometric approach, utilizing the Scopus and CNKI databases as its foundation. It primarily engages in a quantitative analysis of traditional handicraft literature published over the past two decades. Through a meticulous review of a substantial body of literature, the research focuses on investigating the developmental trajectory and research hotspots in the realm of traditional handicrafts, as well as the potential future directions.

This research aims to unveil the current state of research and prospective trends in the field of traditional handicrafts, offering valuable guidance for the preservation and development of these cherished traditional cultural skills. Its significance lies in providing essential insights to propel the research process of traditional handicrafts, ultimately contributing to the advancement of this domain.

## 2. Source of data and research method

The data for this study was sourced from the Scopus core collection and the CNKI (China National Knowledge Infrastructure) database. The literature retrieval and processing procedure are illustrated in Figure 1. In the Scopus database, the search was conducted with the topic set as 'Traditional handicraft', covering the years from 2002 to 2022. A total of 807 articles were initially retrieved. Among these, 284 articles that were not journal papers were excluded. Additionally, non-English articles ( $n=16$ ) and irrelevant articles ( $n=32$ ) were removed. As a result, 369 valid articles remained for analysis. The data collection was conducted up until July 19, 2023.

In the CNKI database, for increased specificity, representativeness, and authority, articles from journals indexed by Peiking University Core, EI, SCI, and CSSCI were considered for data retrieval. In the CNKI database, the search topic was set as 'Chinese traditional handicraft', covering the years from 2002 to 2022. A total of 2,015 articles were initially retrieved. After screening and organizing, 75 articles related to reports, 7 articles related to investment, 11 articles related to interviews, and 157 irrelevant articles were excluded. Consequently, a total of 1,765 valid articles were obtained for analysis. The data collection was completed by July 5, 2023.

Finally, the valid literature samples from both databases were exported in Refworks format and imported into Citespace for comprehensive scientific statistical and bibliometric analyses.

Citespace is a scientific literature analysis tool developed by a team led by Professor Chaomei Chen from Drexel University in the United States (Chen et al., 2022). Operating within the Java environment,

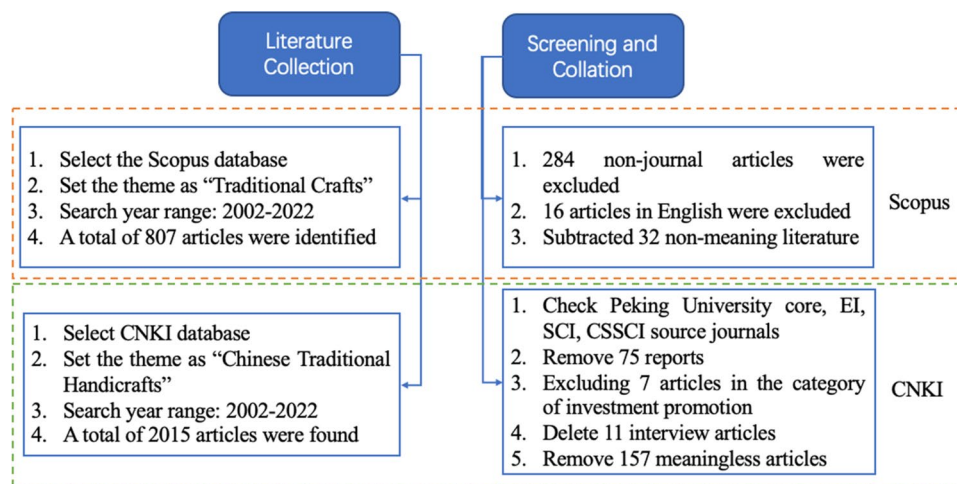


Figure 1. Literature retrieval and processing workflow.

Citespace specializes in bibliometric analysis of specific research fields. It presents the research developmental patterns and trends within a domain in the form of visually intuitive knowledge maps. Through Citespace, researchers can explore the leading research directions in a discipline and anticipate future research trends (Su et al., 2019). By visualizing literature information in the form of a knowledge map, Citespace enables researchers to intuitively grasp the relationships and developmental trajectories between different pieces of literature. As a result, it has become one of the favored tools among scholars for creating knowledge maps.

In this study, a combination of bibliometric analysis, information visualization, and content analysis methods was employed to conduct a statistical analysis of the traditional handicraft literature. The visualization tool utilized for this purpose was Citespace 6.2.R2. This tool provided various functionalities including category analysis, institutional analysis, keyword co-occurrence analysis, and emerging keyword detection. These functionalities allowed for exploration of various aspects of the literature domain, such as themes, authors, and keywords, presented in the form of visual knowledge maps.

The primary parameter settings were as follows: a time slice of 1 year, node type set to keyword, and network pruning method selected as 'Pathfinder, Pruning the Merged Network'. These parameter settings influenced the way the knowledge map was generated and the information it displayed.

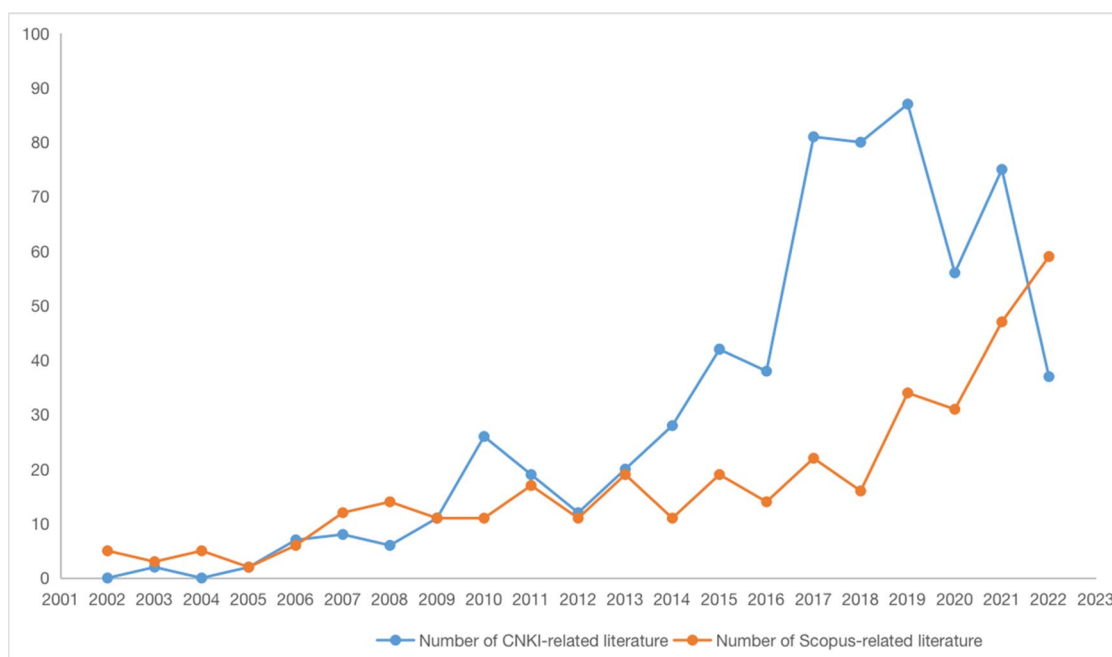
After running the analysis using the Scopus database, 511 nodes and 1230 edges were obtained. Similarly, from the CNKI database, the analysis yielded 598 nodes and 736 edges. These numbers reflect the degree of association and interaction among the literature items. Incorporating these methodologies and tools facilitated a comprehensive exploration of the landscape of traditional handicraft literature, providing insights into the relationships and interconnections between different aspects of the research domain.

Bibliometric analysis and visualization contribute significantly to comprehending the developmental trends, key focal points, and interconnections within the realm of traditional handicraft research. Through the visual presentation of knowledge maps, distinct relationships between various keywords, research domains, and time periods become more evident. This aids in the identification of crucial research directions and developmental trajectories. Such analyses empower researchers to gain a deeper understanding of the literature landscape, providing valuable insights for further research and decision-making. By employing these methodologies, researchers can navigate the intricate network of traditional handicraft research, revealing underlying patterns, trends, and correlations that might not be immediately apparent through traditional textual analysis. This visual and quantitative approach enhances the comprehension of the complex interplay between different elements within the research domain, ultimately contributing to a more informed and insightful perspective on the subject (Sheng & Liu, n.d.).

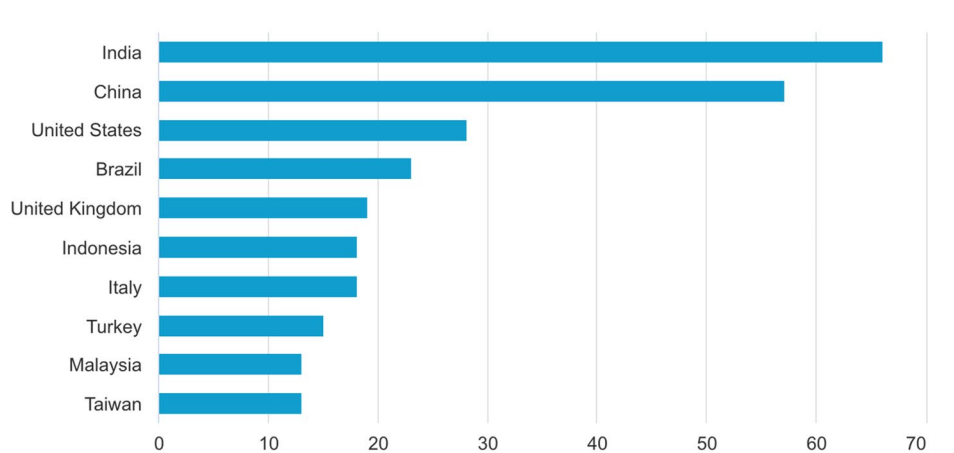
### 3. Domestic and International publication temporal and spatial analysis

From Figure 2, it can be observed that the publication quantity of traditional handicraft research both domestically and internationally shows a clear upward trend. This reflects the increasing attention from scholars and research institutions towards traditional handicraft research. This trend might be attributed to the growing concern for the preservation and inheritance of traditional culture, as well as the heightened recognition of intangible cultural heritage.

In the Scopus database, the publication volume has remained relatively stable, and the top ten countries and regions by publication count are India, China, the United States, Brazil, the United Kingdom, Indonesia, Italy, Turkey, Malaysia, and Taiwan (China). As depicted in Figure 3, by the end of 2022, India holds the first position with 67 publications, followed by China with 57 publications, and then the United States with 28 publications. The number of foreign publications on traditional handicrafts experienced significant growth from 16 articles in 2018-2019 to 34 articles and then rapidly expanded. As shown in Figure 2, 2018 marked a significant turning point for foreign traditional handicraft research, witnessing an explosive growth in total publications from 16 to 59 articles. The research interest of various countries in this field has been continuously rising from 2018 to 2022, indicating a future trend of further growth. This is likely due to a deepening understanding of cultural inheritance, innovation, and protection, motivating more researchers to engage in this domain. Additionally, it reflects the strengthening international consensus on the preservation and inheritance of intangible cultural heritage.



**Figure 2.** Number of published documents on traditional handicrafts in China and international (2002-2022).



**Figure 3.** Top ten countries and regions in terms of published documents on traditional handicrafts.

From the CNKI statistics in [Figure 2](#), it can be seen that the overall trend of the number of articles published on traditional handicrafts research in China is relatively strong, with a rapid increase in the number of articles published each year after 2010, and an overall significant increase compared to the period before 2010. This is related to the Chinese government's encouragement of traditional cultural preservation and innovation, and the faster development of domestic research indicates China's research interest and motivation in the field of traditional handicrafts. Although international research in the field of traditional handicrafts started earlier, the development trend in recent years shows that domestic research has shown rapid growth and even exceeded the development speed of foreign countries. This may be related to the increasing emphasis on Chinese traditional culture and the policy support in preservation, inheritance and innovation (Convention for the Safeguarding of the Intangible Cultural Heritage, 2006).

#### 4. Domestic and international publication institutions analysis

From the Scopus database in [Table 1](#), the various institutions involved in traditional handicrafts research are ranked according to the number of articles published, which shows the degree of research activity of each institution in this field. Half of the top ten institutions in terms of the number of publications

**Table 1.** Top 10 institutions by number of publications in scopus database.

No	Name of institution	Volume of publications
1	Maharakham University(Thailand)	6
2	National Yunlin University of Science and Techenology(Taiwan)	6
3	Chinese Academy of Science(China)	6
4	Universidade Federal Rural de Pernambuco(Brazil)	4
5	Dokuz Eylül Üniversitesi(Turkey)	4
6	Sichuan University(China)	4
7	Kunming Institute of Botany Chinese Academy of Sciences(China)	4
8	Pontificia Universidad Javeriana(Colombia)	4
9	Universidad Nacional de Colombia(Colombia)	4
10	Kazan Federal University(Russia)	4

**Table 2.** Top 10 institutions by number of publications in CNKI database.

No	Name of institution	Volume of publications
1	Nanjing University	19
2	Shandong Academy of Arts and Crafts	18
3	Nanjing Arts Institution	16
4	Sichuan Academy of Fine Arts	15
5	Tsinghua University	13
6	Chinese Academy of Arts	13
7	Suzhou Vocational and Technical College of Arts and Crafts	12
8	Jiangnan University	12
9	Institution of Fine Arts, Chinese National Academy of Arts	12
10	Suzhou University	11

are from China, including National Yunlin University of Science and Technology, Chinese Academy of Sciences, Sichuan University, and Kunming Institute of Botany, Chinese Academy of Sciences, which indicates that China's contribution and influence in the field of traditional handicrafts research is gradually increasing. Chinese institutions have abundant resources and consistent investment in traditional handicrafts research, thus demonstrating a significant position in the international academic arena. The top three institutions in terms of the number of publications are Maharakham University, National Yunlin University of Science and Technology, and the Chinese Academy of Sciences, all of which have six publications, which may mean that they have a relatively balanced contribution to the field of traditional handicrafts research. These institutions may have specialized teams and programs in traditional handicrafts research, as well as a rich experience and resources in traditional handicrafts research, and have made important contributions to the development of the field.

In the domestic CNKI ranking of the number of publications, as shown in [Table 2](#), the top ten institutions with the largest number of publications is Nanjing University, with a total of 39 relevant scholars involved in the research in this field from 2002-2022, and all of them have published their outstanding research results in authoritative journals. Overall, the publication institutions of Chinese traditional handicrafts are mainly art colleges and universities and scientific research institutes occupying 60% of the university research institutes, and these high-level research institutes provide research quality and assurance. However, after further analysis, it is found that the research on Chinese traditional handicrafts is mainly concentrated in the art and design colleges or fine arts colleges of various universities, so it can be seen that the research on traditional handicrafts is more popular in the field of art and design in China. In order to adapt to the development of the current society, Chinese traditional handicrafts also need a multidisciplinary cross-integration of research themes. traditional handicrafts involve not only art, but also culture, technology, society and other fields, and through the strengthening of cooperation and communication between research scholars of various specialties, different disciplines and universities, it can promote the communication of knowledge, the collision of concepts and the generation of innovations (Wu Jue et al., 2022). Professional knowledge in different fields can be referenced to each other to provide more possibilities and opportunities for the study of traditional handicrafts. Crafts research can provide more possibilities and perspectives, and jointly promote the output of more comprehensive and multi-faceted research results on traditional Chinese handicrafts and provide stronger support for the protection, inheritance and innovation of traditional handicrafts (Luyang & Ganli, 2022).

## 5. Domestic and international research field and journal analysis of publications

Table 3 illustrates the distribution across various disciplinary fields within the Scopus database. The social sciences field has the highest frequency of relevant literature occurrences, reaching 146 times. This reflects the attention given to the social, cultural, and economic impact and value of traditional handicrafts. Following closely are the fields of agriculture and biological sciences and arts and humanities, with 81 and 73 occurrences respectively. This indicates the close association of traditional handicrafts with various domains such as agriculture, biological sciences, arts, and humanities. 'Indian Journal of Traditional Knowledge' stands out as the journal with the highest publication count in traditional handicraft research, comprising 26 related articles. The top five journals in terms of publication count also include 'Lecture Notes in Computer Science Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics', 'Journal of Silk', 'Milli Folklor', and 'Advanced Materials Research'. These journals cover diverse aspects related to traditional handicrafts, including technology, materials, culture, and more.

The distribution of traditional handicrafts across different disciplinary fields indicates its interdisciplinary nature. Traditional handicrafts play a role in various disciplines such as social sciences, agriculture and biological sciences, arts and humanities, among others. This interdisciplinary impact contributes to comprehensive research on traditional handicrafts, enabling the exploration of cultural, technological, economic, and other aspects from different perspectives.

Based on the statistical analysis of CNKI database data, as shown in Table 4, research related to Chinese traditional handicrafts spans a wide range of disciplines. Among these, the disciplines of Fine Arts, Calligraphy, Sculpture, and Photography account for the highest proportion at 38.07%. Following this are Light Industry and Handicrafts, Literary Theory, and Culture, accounting for 20.37%, 6.05%, and 5.24% respectively. Additionally, there is involvement from disciplines such as General Industrial Technology, Higher Education, Tourism, and Industrial Economics.

The journal with the highest publication count in research related to Chinese traditional handicrafts is 'Zhonghua Shougong', which has included 27 related articles from 2002 to 2022, constituting 23.28% of the total publications in relevant journals in the field of traditional handicraft research. This journal covers various domains including handicrafts, traditional culture, intangible cultural heritage studies, and more. Following it are journals like 'Dazhong Wenyi', 'Design', 'Art Education', and 'Packaging Engineering'. Journals with higher publication volumes in the traditional handicraft research field tend to possess stronger reputations. Choosing to publish in these journals can enhance the impact of research outcomes. Different journals may focus on various research directions, leading to diverse contributions in different domains of traditional handicraft research.

**Table 3.** Analysis of disciplinary categories for international research.

Scopus subject classification	Frequency
Social Science	146
Agricultural and Biological Sciences	81
Arts and Humanities	73
Environment Science	68
Engineering	57
Business, Management and Accounting	52
Medicine	46
Computer Science	36
Economics, Econometrics and Finance	27
Health Professions	26
Materials Science	19

**Table 4.** Analysis of disciplinary categories for chinese research.

CNKI subject classification	Frequency
Fine Arts Calligraphy Sculpture and Photography	327
Light Industry Handicraft	175
Literary theory	52
Culture	45
Industrial general technology and equipment	40
Higher education	38
Travel	30
Industrial economy	23
Vocational education	19
News and media	14

## 6. Domestic and international research hotspots analysis

Keywords have a special role in an article, they are not only the core vocabulary of the content of the article, but also a tool to highly condense and summarize the content of the article (Zou et al., 2022). By selecting appropriate keywords, readers can quickly grasp the article's main theme and crucial content, while researchers can express their study's focal points through these keywords (Wang & Lu, 2020). If a particular keyword appears in a high frequency in a certain field, it can reflect the research hotspots in that research field to a certain extent (Chen C, 2006). Frequently occurring keywords often indicate widespread attention from researchers in that topic or field, aiding scholars in understanding the current dynamics and trends of their research area.

In this paper, we will further explore the research hotspots and research directions of Chinese traditional handicrafts by analyzing the frequency and clustering of keywords and other indicators. Using Citespace to produce keyword co-occurrence mapping is a visualization method that can help researchers better understand the relationship and structure between keywords. The higher frequency of keyword occurrence indicates the higher research hotness related to the term, and the keywords with higher frequency are located in the center of the graph, while the related keywords are distributed in the surrounding area, and the size of nodes and the density of connecting lines in the graph can reflect the importance and relevance of the keywords. By analyzing the centrality of keywords, the degree of association between a keyword and other keywords can be understood, and the higher the centrality presented by a keyword indicates that there are more keywords associated with the term, which means the stronger the medium function (Yan & Li, 2023). Therefore, an analysis of the word frequency and centrality of keywords related to traditional handicrafts research at domestic and international level can help scholars better understand the hot areas of research (Dang et al., 2021).

### 6.1. Analysis of research hotspots in China

By using the Citespace tool, changing the NodeTypes from 'Author' to 'Keyword' while keeping other values unchanged, we obtained the co-occurrence map of keywords related to Chinese traditional handicrafts (Figure 4) and the table of high-frequency keywords (Table 5). In the co-occurrence map, the size of the colored blocks representing nodes corresponds to the frequency of keywords, and the connections represent relationships between keywords (Geng et al., 2022). The research field of Chinese traditional handicrafts comprises a total of 598 keywords ( $N=598$ ). There are a total of 736 connections (edges) between various keywords ( $E=736$ ), resulting in a network density of 0.0041 ( $Density = 0.0041$ ). Based on the starting years of keywords, it can be observed that Chinese traditional handicrafts were in an exploratory protection phase in 2003. From 2014 to 2019, there was a higher occurrence of research outcomes in the sub-discipline of design. This pattern may reflect the evolving focus of Chinese traditional handicrafts research over different time periods.

Upon statistical analysis, besides 'Chinese traditional handicrafts', other frequently appearing keywords include 'heritage and development', 'rural revitalization', 'productive protection', 'cultural creative product design', and 'industrialization'. These keywords highlight the hot topics and areas of interest within Chinese traditional handicrafts research.

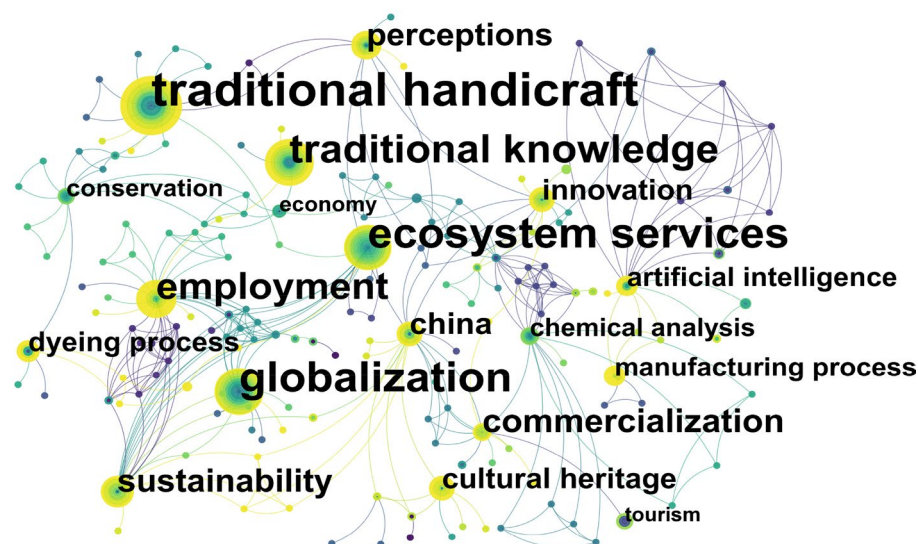
In summary, the co-occurrence map of keywords and the analysis of high-frequency keywords provide us with a comprehensive understanding of the research landscape in the field of Chinese traditional handicrafts. They reveal the relationships and emphasis among different keywords, aiding researchers in better comprehending the trends and focal points within this domain (Chen Chaomei et al., 2009). Indeed, these findings provide valuable insights for further research and development. By identifying the key areas of focus, trends, and relationships among various keywords in the field of Chinese traditional handicrafts, researchers and practitioners can use this information as a foundation to delve deeper into specific topics. The co-occurrence map and high-frequency keyword analysis serve as a roadmap to guide future studies, enabling researchers to address critical questions, explore emerging areas, and contribute to the preservation, innovation, and advancement of Chinese traditional handicrafts.

### 6.2. Analysis of research hotspots in International

Using the Citespace tool, we made changes to NodeTypes from 'Author' to 'Keyword', while keeping other values unchanged. This allowed us to generate a keyword co-occurrence network graph (Figure 5) and



CiteSpace v. 5.2.R2 (64-bit) Advanced  
 July 21, 2023 at 2:10:27 PM CST  
 Scopus: F:\Traditional handicraft\data  
 Timespan: 2002-2022 (Slice Length=1)  
 Selection Criteria: g-index (k=25), LRF=2.0, L/N=10, LBY=5, w=1.0  
 Network: N=211, E=1230 (Density=0.0064)  
 Largest CC: 431 (84%)  
 Nodes Labeled: 1.0%  
 Pruning: Pathfinder  
 Modularity Q=0.823  
 Weighted Mean Silhouette S=0.949  
 Harmonic Mean(Q, S)=0.8815



**Figure 5.** Co-occurrence network of keywords in foreign traditional handicraft research.

**Table 6.** Analysis of the top 20 keywords in foreign traditional handicraft research.

No	Count	Centrality	Year	Keywords	No	Count	Centrality	Year	Keywords
1	114	0.13	2002	Traditional handicraft	11	14	0.04	2007	Dyeing process
2	72	0.26	2002	Ecosystem services	12	13	0.13	2005	Artificial intelligence
3	72	0.12	2004	Globalization	13	12	0.01	2005	Manufacturing process
4	54	0.03	2009	Traditional knowledge	14	11	0.34	2006	Chemical analysis
5	45	0.31	2004	Employment	15	9	0.13	2009	Conservation
6	26	0.18	2006	Commercialization	16	7	0.03	2002	Economy
7	23	0.13	2004	Sustainability	17	6	0	2006	Tourism
8	21	0.13	2003	Perceptions	18	4	0.01	2011	Development sector
9	16	0.13	2011	Cultural heritage	19	4	0.02	2004	Craft production
10	16	0.09	2008	Innovation	20	3	0.01	2005	Competitiveness

a phase of protection and exploration in 2002. This likely indicates that prior to this period, the focus of traditional handicraft research was more centered on protection efforts.

Through statistical analysis, we found that, aside from the keyword 'traditional handicrafts', other high-frequency keywords included 'Ecosystem services', 'Globalization', 'Employment', 'Commercialization', 'Sustainability', 'Perceptions', and 'Innovation'. These keywords reflect the hotspots in foreign research on traditional handicrafts. For instance, 'Globalization' may point to research on traditional handicrafts in the context of globalization, while 'Sustainability' might involve discussions related to sustainability aspects. These keywords not only reveal the primary areas of interest in foreign traditional handicraft research but also provide researchers with directions and possibilities for in-depth exploration of specific topics.

In summary, the keyword co-occurrence network graph and the analysis of high-frequency keywords offer us valuable insights into the field of foreign traditional handicraft research. These visualizations uncover the interrelationships and popularity of various keywords. These findings are instrumental in aiding researchers to gain a deeper understanding of the trends, focal points, and directions within the realm of foreign traditional handicraft research. This understanding can serve as valuable guidance for further research endeavors.

## 7. Analysis of the development trends in domestic and international research hotspots

Utilizing the Burstness feature in CiteSpace allows for the detection of burst keywords. Burst keywords refer to terms that appear frequently within a short period, indicating a sudden surge in research related

to that keyword during that time frame. By conducting research and analysis on burst keywords across different time periods, it helps to clarify the evolving relationships of hotspots (Zou et al., 2022). Additionally, it can predict future research trends, identify directions worth further exploration, and address the limitations of existing research, thereby enhancing the comprehensive understanding of the field (Wang & Lu, 2020). Among them, a total of 22 burst keywords were detected in the Scopus database, and 25 burst keywords were detected in the CNKI database, sorted in descending order of their starting times from distant to recent.

### 7.1. Analysis of development trends in research hotspots in China

A total of 25 burst keywords were identified in the research of Chinese traditional handicrafts (Figure 6), vividly showcasing the forefront of research in the field of Chinese traditional handicrafts. These words can be regarded as keywords that frequently appear in relevant literature and have a profound impact on the research domain. These burst keywords concentrate on the research forefront and focal points of the Chinese traditional handicrafts field. By analyzing these words, we can grasp the themes and issues that researchers are focusing on, thereby outlining the contours of the research field.

In terms of burst strength, the keyword '民间艺术' (folk art) exhibits a relatively high burst value of 3.73, making it an influential research forefront. Keywords with high burst strength may signify their importance and intensity in research. Looking at the burst time, the keyword '民间艺术' (folk art) appeared the earliest, while themes like '乡村振兴' (rural revitalization), '非遗' (intangible cultural heritage), and '发展路径' (development path) began to burst in 2020, with their burst duration continuously strengthening. This suggests that the exploration of concepts like folk art might have started earlier in the research domain, while other themes began to pique researchers' interest more recently, indicating shifting foci in the research field over different time periods. This indicates that the focus of Chinese handicraft research is becoming clearer and has already initiated specific studies.

The primary groups researched in this field include: digital preservation, innovative design, sustainable development, creative transformation, cultural confidence, and new media. These areas of focus reveal researchers' exploration of the status of traditional handicrafts in modern society, development trajectories, and their relationships with other fields.

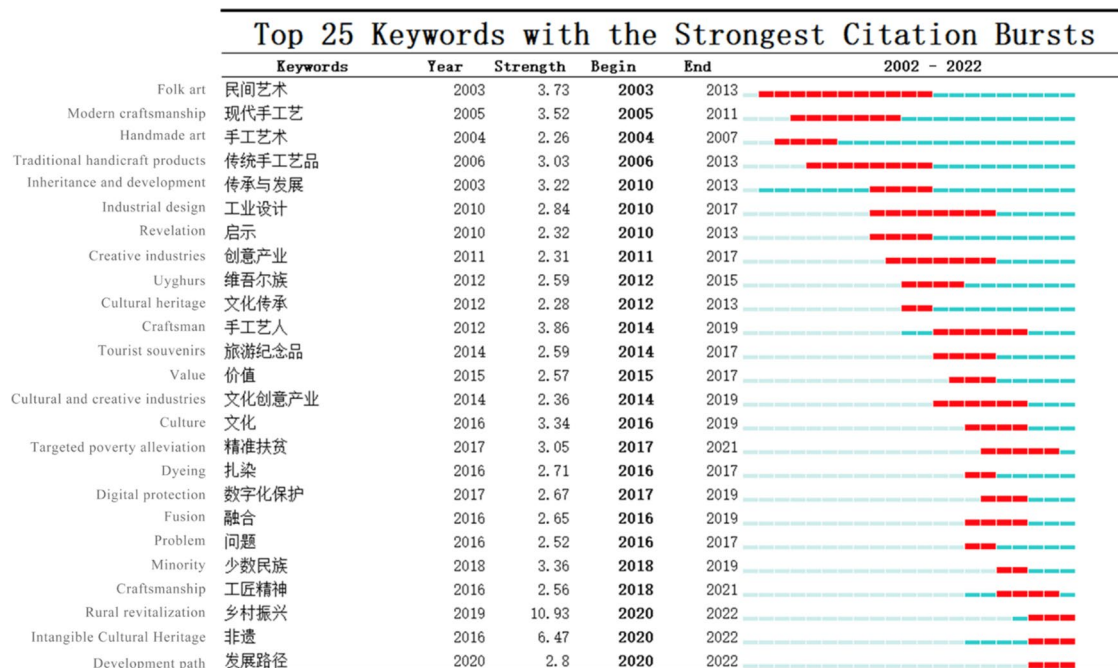


Figure 6. Analysis of the top 25 Burst keywords in Chinese traditional handicraft research.

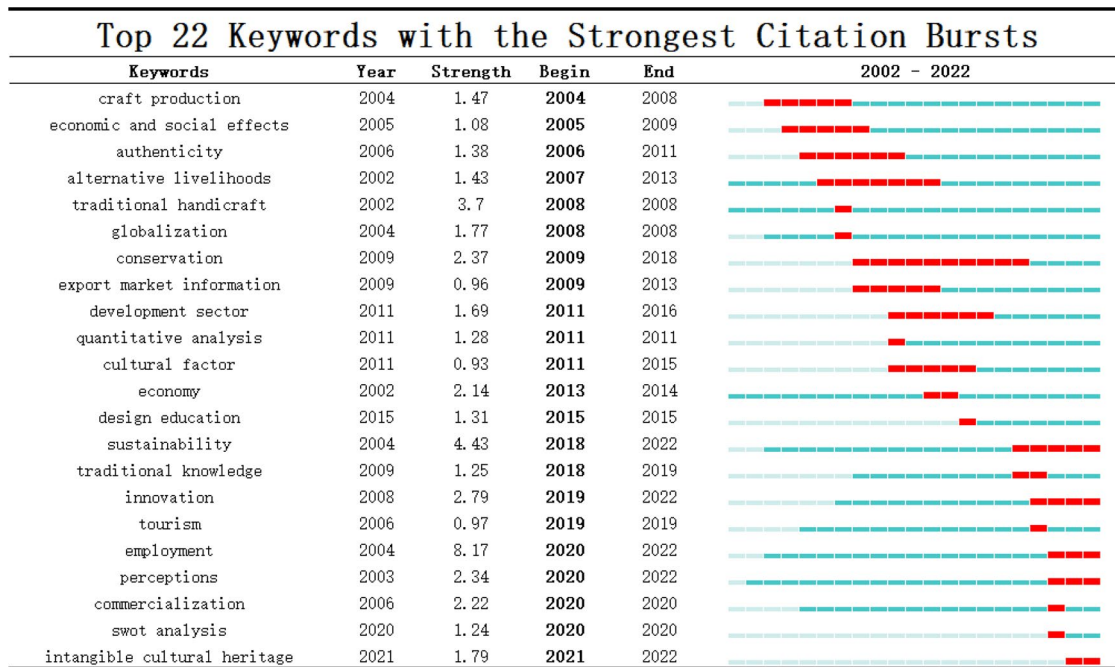


Figure 7. Analysis of the top 22 Burst keywords in foreign traditional handicraft research.

## 7.2. Analysis of the development trends in International research hotspots

For foreign traditional handicraft research, a total of 22 burst keywords have been identified (Figure 7), clearly presenting the frontiers of the traditional handicraft field. These keywords help us understand the core themes and research directions that researchers focus on in foreign studies. In terms of burst intensity, the keyword 'Employment' exhibits a relatively high burst strength, reaching a high value of 8.17, making it a significant research frontier. This indicates that it is widely discussed in relevant literature and holds substantial influence. Keywords with high burst intensity typically signify importance and prominence in research, suggesting that 'Employment' is a pivotal and impactful concept in foreign traditional handicraft studies. Regarding burst timings, the keyword 'Craft production' emerged earliest, while the appearance of themes like sustainability, innovation, employment, perceptions, and others started at different times and has continued up to the present, progressively strengthening. This implies that discussions about 'Craft production' might have commenced earlier in foreign research, while other themes have sustained and deepened over time. It is evident that these concepts have maintained consistent attention and have been progressively explored. This underscores the increasingly clear focus of traditional handicraft research and its transition into specific investigations.

The primary studied groups in this field include augmented reality, art computing, commercial products, SWOT analysis, and databases. These areas of focus reveal how foreign researchers explore the status of traditional handicrafts in modern society, their technological applications, and their connections with commercial and analytical domains.

In summary, this segment of research findings reveals important characteristics, hotspots, and development trends in foreign traditional handicraft research. These insights assist researchers in better understanding the dynamics of foreign research, providing guidance for further research, practices, and policy formulation.

## 7.3. Result and discussion

Combined with the above analysis, the results of the study can be roughly divided into Craft Inheritance and Protection, Market Demand and Consumption Cognition, Innovation and Modernization, Cultural Identity and Dissemination, and Sustainable Development. They are discussed in the following 5 aspects:

	China	International
1.Craft Inheritance and Protection	The inheritance of Chinese traditional handicrafts has made some progress in China, but there are still some problems. For example, there is insufficient interest in traditional handicrafts among the younger generation and insufficient inheritance organizations. Relevant government policies have played a role in promoting this, but more long-term support is still needed.	Some countries have also made efforts to promote the transmission of traditional crafts through schools, museums and community organizations. Compared to China, some countries may focus more on integrating traditional crafts into the education system (Suib et al., 2022).
2.Market Demand and Consumption Cognition	Chinese traditional handicrafts are gradually gaining attention from the younger generation in the domestic market, especially driven by cultural confidence and personalized consumption. Some traditional handicraft brands have expanded their market share through innovative design and online sales.	In the international market, the export of Chinese traditional handicrafts is gradually increasing. However, competition in the international market is high and better branding and market positioning are needed to attract international consumers (Mazur-Kajta, 2020).
3.Innovation and Modernization	Some Chinese traditional handicrafts have made remarkable progress through technological and design innovation, incorporating modern elements to better meet the needs of modern consumers. However, some traditional handicrafts are also facing the problem of how to maintain traditional characteristics in the midst of innovation (Li & Jiang, 2019).	Compared to some Western countries, Chinese traditional handicrafts may be relatively strong in terms of innovation, but more efforts are still needed to increase their visibility and competitiveness in the international market.
4.Cultural Identity and Dissemination	Chinese traditional handicrafts have a high level of cultural recognition in the country and are widely used in festivals, ceremonies and other occasions. A number of related cultural events and exhibitions of traditional handicrafts have also promoted the dissemination of traditional culture.	Although Chinese traditional handicrafts have made some achievements in the international arena, more efforts are still needed to bridge the cultural gap and enhance international consumers' identification with Chinese traditional handicrafts.
5.Sustainable Development	China's traditional handicrafts have made some progress towards sustainable development, including the use of environmentally friendly materials and the protection of the rights and interests of traditional handicraft practitioners (Väänänen & Pöllänen, 2020). However, there is still a need for greater awareness of sustainable development in some places.	Internationally, some countries may be more focused in the sustainable development of traditional crafts on promoting sustainability through certification systems, international cooperation, etc. (Wang et al., 2016).

#### 7.4. Forecasting research development trends in China and international

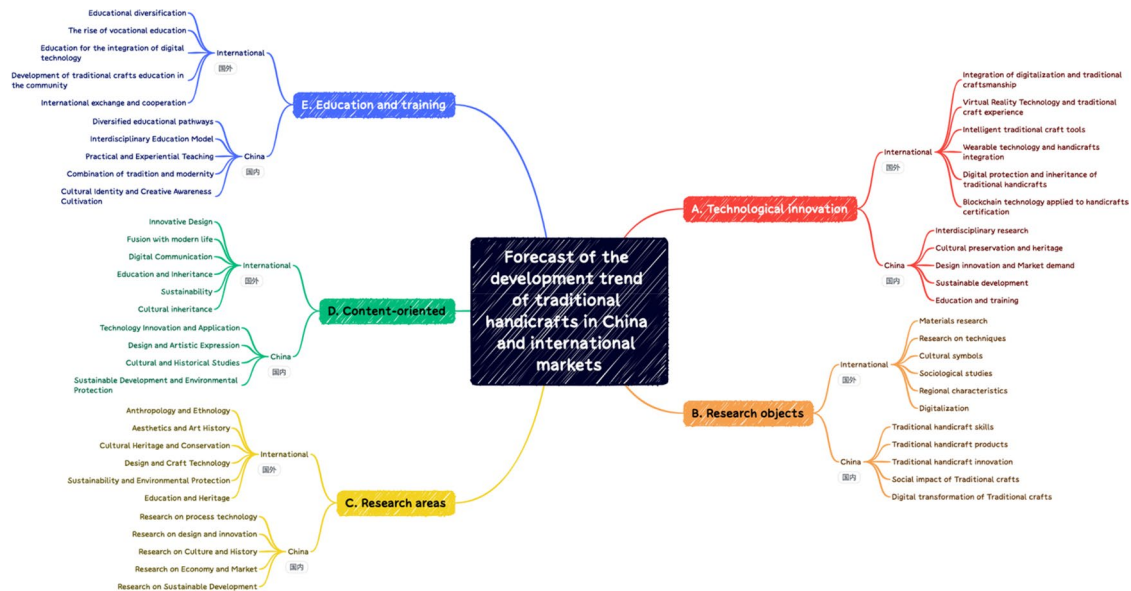
Traditional handicrafts have emerged as a research hotspot in recent years. Its fundamental principle involves the organized integration of cultural, artistic, design, and communicative resources to provide effective support for the protection and development of intangible cultural heritage (Walker et al., 2019). The rapid development of social economy and science and technology has presented opportunities for the inheritance of traditional handicrafts, while also imposing new demands on the research of traditional handicrafts (Mehra et al., 2019). Foreign and domestic trends in the future development of traditional handicrafts can be compared and analyzed from multiple perspectives:

##### China:

1. Digital Preservation and Inheritance: China will continue to enhance its efforts in digitally preserving and inheriting traditional handicrafts. Modern technologies such as virtual reality and artificial intelligence will be employed to infuse new vitality into traditional crafts.
2. Rural Revitalization: Traditional handicrafts play a significant role in rural revitalization. They will continue to contribute to economic and cultural development in rural areas, promoting local industry upgrades and creating employment opportunities.
3. Sustainable Development: Against the backdrop of environmental protection and sustainability, traditional handicrafts are likely to integrate modern design and sustainable materials. This integration will result in more environmentally friendly and sustainable products that meet market demands.
4. Cultural and Creative Industries: Traditional handicrafts will be integrated with the cultural and creative industries, creating products that are fashionable and innovative. This combination will help expand market share and increase economic value.

##### International:

1. Innovation and Modernization: Traditional handicrafts abroad will continue to emphasize innovation by integrating traditional skills with modern design. This approach will lead to the creation of unique and fashionable products that appeal to younger consumers.



**Figure 8.** Forecast of research and development trends in china and international studies.

2. Integration of Technology: The application of technology in foreign handicrafts will continue to drive development. Technologies like 3D printing and smart manufacturing will enhance production efficiency and quality.
3. International Collaboration: Foreign traditional handicrafts will maintain collaborations with other countries, promoting cultural exchange and technological cooperation. This will further the internationalization of traditional handicrafts.
4. Cultural Tourism: Traditional handicrafts will become essential resources for cultural tourism. They will attract tourists to participate in experiences and purchase traditional crafts, thereby stimulating local economic development.

In general, the future development trends of traditional handicrafts both in China and abroad will continue to align with the demands and trends of modern society. This alignment seeks to balance the preservation of traditional culture with meeting market needs and achieving sustainable development. China emphasizes protection, inheritance, and rural revitalization, while foreign approaches focus more on innovation, technological integration, and international collaboration. These development trends will impact the future trajectory of traditional handicrafts to varying degrees.

Based on the aforementioned bibliometric analysis and considering political, economic, and socio-cultural environmental factors, this paper will predict the future trends of traditional handicrafts both domestically and internationally from five aspects: technological innovation, research subjects, research fields, content orientation, and educational cultivation (Figure 8):

## 8. Conclusion

This paper employs scientometric methods and utilizes data from both Scopus and CNKI databases to conduct a visual comparative analysis of domestic and international research on traditional handicrafts. The aim is to provide insights for the further development and research of the traditional handicrafts field in China. Looking at the trajectory of research in the domain of traditional handicrafts, it is evident that foreign research initiated earlier and exhibits more diverse areas of focus.

In terms of research subjects, China has shown significant enthusiasm for areas such as digital preservation, rural revitalization, and targeted poverty alleviation. Conversely, foreign research places higher emphasis on aspects such as commercialization, sustainable products, and user perceptions. Regarding research content, China places greater emphasis on cultural preservation and inheritance, while foreign research often centers around economic value. Methodologically, domestic research tends to prioritize

strategic studies at the social level, whereas foreign research leans towards product and platform studies at the technological level.

This analysis provides a comprehensive understanding of the trends in traditional handicrafts research both domestically and internationally, offering valuable insights for future development and exploration in this field within China.

Taking into account the focal points and developmental trends both domestically and internationally, the application domains of traditional handicrafts exhibit 3 key characteristics:

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Characteristic 1: Integration of cultural inheritance and innovation - Whether in China or international, integration of cultural inheritance and innovation has always been an important characteristic of the application field of traditional handicrafts.	
China	<ul style="list-style-type: none"> <li>In China, respecting tradition and promoting national culture is an important mission, so the research focuses on how to protect and inherit traditional handicrafts in the age of digitalization, and how to combine ancient crafts with modern design to better meet the needs of modern society.</li> </ul>
International	<ul style="list-style-type: none"> <li>In foreign countries, however, traditional handicrafts are often reinterpreted and innovated, focusing on the application of traditional crafts in modern industries and launching products that meet contemporary needs while maintaining their cultural value and uniqueness.</li> </ul>
Characteristic 2: Sustainability and Social Impact - Sustainability is another major characteristic of the application field of traditional handicrafts. Scholars in China and abroad are concerned about how to realize sustainable development in the process of protection and inheritance of traditional handicrafts.	
China	<ul style="list-style-type: none"> <li>In China, goal-oriented projects such as rural revitalization and precision poverty alleviation often involve the training and development of traditional handicrafts to promote the sustainable development of the local economy and society.</li> </ul>
International	<ul style="list-style-type: none"> <li>Foreign studies, on the other hand, focus more on the application of traditional handicrafts in sustainable industries, especially in terms of their impact on community development and environmental protection.</li> </ul>
Feature 3: Technological innovation and marketization - Technological innovation and marketization are prominent features in the field of traditional handicraft applications in China.	
China	<ul style="list-style-type: none"> <li>In China, traditional handicrafts are better presented to the public through digital technology, such as virtual reality and augmented reality, to promote cultural dissemination and education.</li> </ul>
International	<ul style="list-style-type: none"> <li>While abroad put more emphasis on technological innovation to inject new vitality into traditional handicrafts, such as combining traditional crafts with modern technology to create more competitive products. The direction of marketization has also been emphasized, integrating traditional handicrafts into business models to enhance their economic value.</li> </ul>

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By comprehensively considering the focal points and developmental trends from both domestic and international perspectives, it is evident that the application domains of traditional handicrafts serve not only as vessels for cultural inheritance but also as platforms for sustainable development and innovation. Both domestically and internationally, different orientations towards these focal points are collectively striving to rejuvenate traditional handicrafts within today's society, thereby ensuring their sustained development across cultural, economic, and societal dimensions.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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