



## Review article

# Characteristics, hotspots, and prospects of short video research: A review of papers published in China from 2012 to 2022

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## ABSTRACT

In recent years, due to the increase in their global popularity, short video applications have become an important topic of research. The number of users has now exceeded one billion in China; accordingly, Chinese researchers have conducted many studies on short videos. Their findings can serve as important references for both theoretical research on and the practical development of short videos worldwide. In this study, we used bibliometrics method and the CiteSpace application to analyze the content of 2163 representative research papers on short videos published in China from 2012 to 2022. The number of such papers is increasing annually in China; moreover, several core groups of authors and research institutions focusing on short video research have already been formed. Some popular topics of research on these videos include the main characteristics of short videos, phenomenon of media convergence based on short videos, and application scenarios of short videos. Over the years, research on the popular short video application Douyin has been increasing, as well. The research results indicate that issues such as the marketing of short knowledge videos, standardized management of short video platforms, and impact of these videos on the education of college students are expected to become popular subjects of scholarly research in the near future.

## 1. Introduction

The short video is a comprehensive information carrier [1] whose defining characteristic is its short duration. Cheng et al. [2] indicate that the typical duration of traditional long videos is generally 1–2 h. In contrast, the duration of short videos ranges from a few seconds to several minutes [3]. In recent years, short videos have become an essential form of social propagation and entertainment worldwide [4–10]. Globally, the most popular short video platforms are YouTube and Twitter [11]. Further, in China, Douyin and Kuaishou are two of the most popular mainstream short video platforms. Often, short videos encompass all aspects of people's daily lives [12]. As a form of communication, short videos exhibit the inherent advantages of affinity and personalization [13]. With the progress of mobile Internet and terminal technology [14], short videos have rapidly become integrated in social life by combining high sensory impact [6] and low technical thresholds. In the academic community, researchers are particularly interested in the wide variety of short video functions and applications available today. To date, scholars have conducted in-depth research on short video functions such as news communication [15], social interaction, government publicity [16], entertainment and leisure [17], and

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business marketing [18]. The entry of short videos into areas such as video introduction and bullet chat has become a focus of interest, as well.

In China, several factors contribute to the increasing popularity of short videos, including the guarantee of favorable media convergence policies [19], technological assistance in the 5G era [3], user participation in User Generated Content mode [20], and economic benefits [21,22]. According to the 51st Statistical Report on China's Internet Development published by the China Internet Network Information Center (CNNIC), the usage rate of short video users in China reached 94.8 % and the number of users were 1012 million in December 2022. During this period, Chinese researchers studying short videos conducted many studies and produced a large number of findings. China is the world leader in both the number of short video users and that of published research papers on short videos [23]. The findings of Chinese scholars can serve as important references for both the theoretical research on and practical development of short videos worldwide.

CiteSpace is characterized by the intuitive visibility of graphs and deep serialization of spectra, which can reveal the development trends and dynamics of a discipline or knowledge domain for a certain period, it also can clarify the evolution of specific research fields. It is widely used by researchers as a visual literature analysis software. The core document database of the Web of Science was searched with "subject = CiteSpace" to obtain 2707 articles. To date, there have been only a few theoretical summaries of China's research on short videos from an international perspective. For example, a search with "subject = CiteSpace" and "subject = short video" yielded only a single article [23]. Despite the steady increase in the number of Chinese research papers in the field of short videos, the research hotspots and trends remain unclear.

In this study, we used bibliometrics method and the CiteSpace application to analyze the content of representative research papers on short videos. We searched the most authoritative and influential databases in China and analyzed the short video studies that were published between 2012 and 2022. Using the literature analysis function of CiteSpace, we conducted a quantitative analysis of 2163 sample studies. We obtained a graph of the authors of the studies, their research institutions, keywords, and other related visual images. Based on our findings, we established a reference guide for international scholars seeking to clarify the features, hotspots, and trends of short videos created in China.

## 2. Research design

### 2.1. Research method

This study utilized bibliometrics and scientific knowledge graph visualization analysis. Bibliometrics is an interdisciplinary science based on mathematics and statistics to quantitatively analyze documents. Further, as the research tool, we used the CiteSpace software (version 5.8.R1 & 6.2.R3) developed by Professor Chaomei Chen of Drexel University (Philadelphia, Pennsylvania) based on Java. For atlas mapping, we assigned a Year Per Slice value of 1 and a default Top N value of 50. We selected Author, Institution, and Keyword as the Node Types. Based on these parameters, we obtained an Author co-occurrence map, an Institution co-occurrence map, a Keyword co-occurrence map, a cluster map, and an outburst map for research studies on short videos conducted in China between 2012 and 2022. While drawing a keyword-clustering map to identify short video research hotspots, the module value (Q value > 0.3) and average contour value (S value > 0.7) were used as reasonable and significant evaluation criteria for clustering. In this study, we used content analysis to compensate the shortcomings of CiteSpace's focus on data and graphs. After generating an atlas, we carefully analyzed the sample contents sourced from relevant literature to determine the popular topics and frontier trends of the reviewed

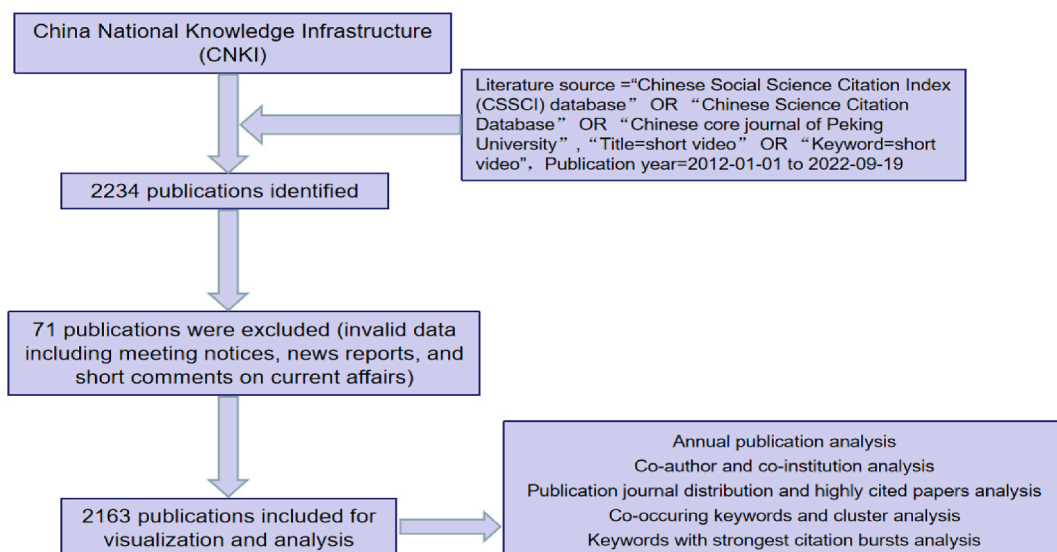


Fig. 1. The flowchart of included publications in this study.

studies on short videos.

## 2.2. Data sources

We conducted an advanced search of the available literature on China National Knowledge Infrastructure (CNKI) data. We used the search term 'short video' for both titles and keywords. Our search was conducted on September 19, 2022 and covered papers published between 2012 and 2022. According to the procedures and principles of a systematic literature review, academic papers published in authoritative journals tend to have high scientific quality [24]. We limited the scope of our search to Chinese Social Sciences Citation Index (CSSCI) journals, China Science Citation Database (CSCD) journals, and the Chinese Core Journal of Peking University to ensure the quality and authority of the data samples. Accordingly, we identified a total of 2234 original papers. Subsequently, we conducted an initial sorting and article screening process and deleted all invalid data (e.g., meeting notices, news reports, and short comments on current affairs) to obtain 2163 papers that had high subject relevance and satisfied our content analysis requirements. We exported these papers in the Refworks format and applied CiteSpace's transformation tool to convert the documents into a format that could be recognized by the software. Subsequently, we conducted various types of data processing based on our research requirements (Fig. 1).

## 3. Research progress and spatiotemporal map

### 3.1. Annual volumes of published papers

An analysis of trend distribution and development over time clarified the changing patterns of research on short videos in China. Fig. 2 depicts the annual trends in publication of 2163 sample papers published in China between 2012 and 2022. After 2012, the number of studies on short videos started showing an upward trend. From 2012 to 2016, short video studies remained in an exploratory stage, and the number of published papers was relatively low. However, after 2016, Chinese scholars started researching short videos extensively. During this period, the number of published papers increased rapidly, and numerous high-level research achievements were reported.

In 2016, Papi Jiang received immense popularity as a comedy blogger; her first short video advertisement sold for 22 million RMB, and her success became a topic of significant debate among the Chinese public. The New York Times reported her success and described her as a maker of short videos. In the same year, the Chinese content platform Toutiao announced its intention to invest 1 billion RMB in subsidizing short video production. Recently, some traditional media in China adopted a new 'media + live' approach, whereby they begin with short video presentations of news contents. Subsequently, the popularity of the short video format increased. In China, 2016 marked the first year of widespread short video creation and first year of livestreaming. In July 2017, China implemented the Development Plan for a New Generation of Artificial Intelligence. Subsequently, modern information technologies (e.g., artificial intelligence, the Internet, and big data) directly promoted the development of short videos.

### 3.2. Core authors and leading institutes

Generally, to disseminate their research ideas, scholars always ensure the regular and consistent publication of research papers. The number of available published papers on a subject typically reflects relevant research achievements and activities. Our analysis of the research papers on short videos published in China (Table 1) indicated that Chuxin Huang, Xiaohong Wang, Jiang Chang, Liang Ma, and Zhian Zhang were the scholars with the most published papers. Recently, many academic institutions published their own short video research results in CSSCI, CSCD, and the Chinese core journals of Peking University. According to Table 1, the Communication University of China is the most prolific publisher of such papers; it is followed by the Chinese Academy of Social Sciences, Renmin University of China, Wuhan University, and Tsinghua University.

Our review imported all relevant original works into CiteSpace and obtained the co-occurrence networks of authors and institutes by using visualization. Using these data, we obtained the following findings: First, whereas most authors conducted their research

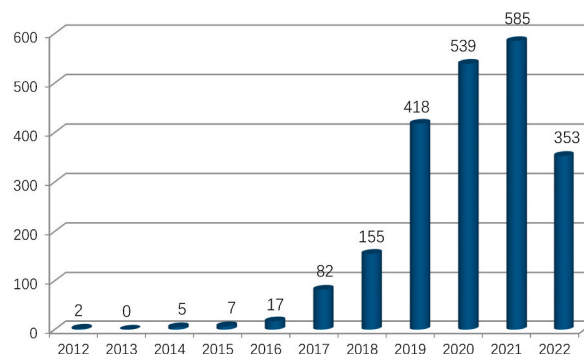


Fig. 2. Annual trends in the publication of short video research papers (data obtained on September 19, 2022).

**Table 1**

Authors with more than five authoritative works published in China and the top 10 institutions in terms of publication volume.

No.	Author	Number of publications (papers)	No.	Institute	Number of publications (papers)
1	Chuxin Huang	19	1	Communication University of China	169
2	Xiaohong Wang	9	2	Chinese Academy of Social Sciences	54
3	Jiang Chang	8	3	Renmin University of China	53
4	Liang Ma	7	4	Wuhan University	53
5	Zhian Zhang	7	5	Tsinghua University	51
6	Song Leng	7	6	Zhengzhou University	35
7	Tian Tan	6	7	Beijing Normal University	33
8	Yiguo Zeng	6	8	Fudan University	31
9	Wei Meng	6	9	Nanjing Normal University	31
10	Dan Wang	6	10	Huazhong University of Science and Technology	25

independently, some others formed research clusters centered on particular authors, such as Chuxin Huang and Xiaohong Wang, and cooperated with other researchers in the field (Fig. 3).

Second, institutions such as the School of Journalism at the Renmin University of China, Television School and School of Journalism at the Communication University of China, and School of Journalism and Communication at Tsinghua University together exhibited high betweenness centrality values (Fig. 4). Currently, these institutions are at the forefront of research on short videos in China.

### 3.3. Subject distribution and highly cited papers

The research papers on short videos published during 2012–2022 had a highly concentrated subject distribution. Among the 2163 sample papers included in our review, more than 70 % involved research on journalism and communications. The same trend was apparent in journals publishing works on short videos, as well. During the review period, journals such as *Youth Journalist*, *Media*, *TV Research*, *China Radio & Television Academic Journal*, *News and Writing*, *Journalism Lover*, and *Modern Communication* published the largest amount of research papers on short videos.

Citation frequency is another important index to assess the influence of published papers in any field of study. To calculate citation frequency, we identified the most influential paper on short videos, which is ‘The Development Status and Trend of Short Video Industry’ published by Xiaohong Wang in 2015. To date, this paper has been cited more than 700 times on CNKI. The paper clarifies the development of short videos in China based on an analysis of five short video apps that have the highest market shares both domestically and internationally. The second most cited paper is ‘Short Video: The Transgenic and Rebred of Video Productivity’ published by Lan Peng in 2019. In general, the top 10 most widely cited papers contained macro studies on short video topics and micro discussions on Douyin, Vlog, and so on (Table 2). Further, we found that the case study was the most commonly applied method for short video research in China during the review period.



Fig. 3. Author collaboration co-occurrence map.

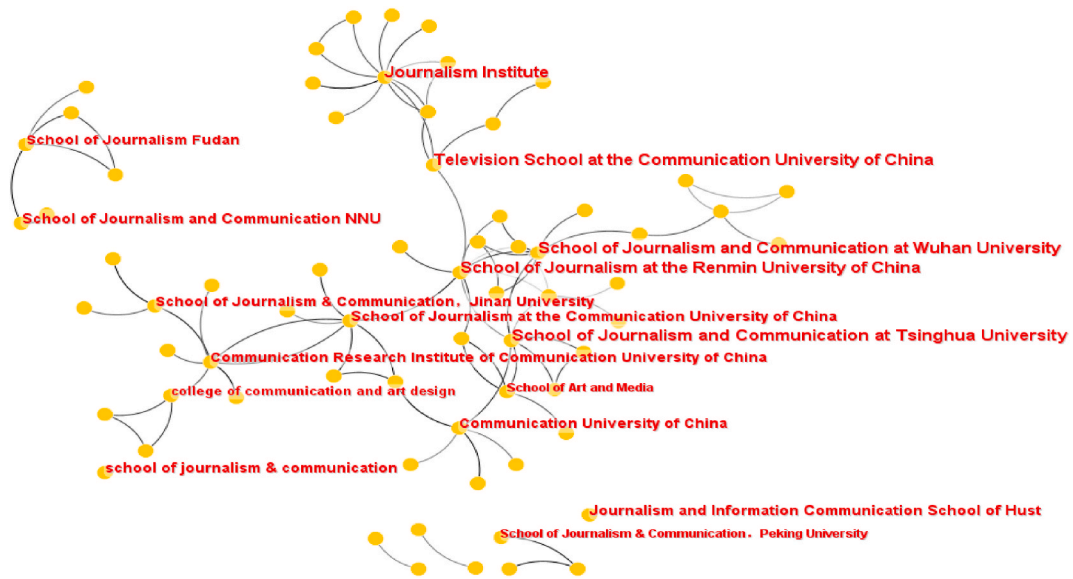


Fig. 4. Institution collaboration co-occurrence map.

Table 2

Ten articles with the highest citation counts.

Article title	Publication year	Citation count
The Development Status and Trend of Short Video Industry	2015	726
Short Video: The Transgenic and Rebred of Video Productivity	2019	665
The Rise and Trend of Mobile Short Video Social Application	2014	431
New Features and Problems of Short Video Production in China	2016	356
Mixed Emotion Communication Mode: Research on Short Video Content Production of Mainstream Media—A Case Study of Douyin Number of People’s Daily	2019	339
From Short to Gain—Domestic Short Video Development Status and Trend Analysis	2017	333
Innovation, Diffusion and Challenge of Mobile Short Video	2018	271
Short Video Culture from the Perspective of Meme Theory: A Case Study Based on Douyin	2018	249
Shake out Positive Energy: The Application of Douyin in Ideological and Political Education of College Students	2019	242
Characteristics and Development Trend of Vlog: From the Perspective of Visual Persuasion	2018	226

#### 4. Popular research topics involving short videos

Keywords are important index tools that assist in literature retrieval and help summarize and refine research topics and core contents. In some research fields, statistical analysis of keywords can assist in clarifying popular topics and trends. Our review of the short video literature revealed ‘short video’, ‘Douyin’, ‘media convergence’, ‘mainstream media’, ‘new media’, ‘content production’, ‘social media’, and ‘5G’ to be the most frequently used keywords (Table 3). Therefore, we propose that these terms constitute the core

Table 3

High-frequency keywords used in Chinese short video studies from 2012 to 2022.

No.	Keyword	Frequency	No.	Keyword	Frequency
1	Short video	1328	13	Artificial intelligence	25
2	Douyin	113	14	Rural revitalization	24
3	Media convergence	101	15	We-Media	23
4	Mainstream media	66	16	Communication effect	22
5	New media	50	17	Social platforms	21
6	Content production	34	18	Vlog	20
7	Social media	34	19	Copyright protection	20
8	5G	32	20	Webcast	19
9	Communication strategy	29	21	Copyright	19
10	Medium convergence	28	22	User Generated Content	18
11	Traditional media	27	23	TV media	17
12	Convergence media	26	24	Fragmentation	17

content of studies on short videos. Further, using CiteSpace, we found that ‘short video’, ‘Douyin’, ‘media convergence’, ‘medium convergence’, ‘traditional media’, and ‘communication mode’ have the highest betweenness centrality values. In the context of the studies on short videos conducted in China, these nodes have a network-bridging role.

We used CiteSpace to apply automatic clustering to all keywords in our literature sample (Fig. 5). The generated cluster map indicated the module value  $Q$  to be 0.4633 (when  $Q > 0.3$ , the divided network structure was significant) and the average contour value  $S$  to be 0.8103 (when  $S > 0.7$ , the clustering results were convincing). In the cluster map, the typical clusters were ‘media convergence’ (#1), ‘book marketing’ (#2), ‘social platform’ (#3), ‘news short video’ (#4), and ‘originality’ (#5). Along with the keyword frequency table and cluster map, popular short video research topics can be summarized into several categories.

#### 4.1. Research on the main characteristics of short videos

As a means of Internet communication, short videos integrate moving images, sounds, pictures, and other forms of content. Typically, a video has a duration of approximately 5 min, and audio-visual works of 1 min or less are the most common type. Based on this reviewed literature, the characteristics of short videos are as follows:

First, a short video is characterized by its use of cutting-edge technology and emphasis on originality. The widespread use of the Internet, increase in smartphone coverage, improvements in filming and editing convenience [25], and developments in other modern media have enhanced the popularity of short videos. In recent years, researchers not only examined the fundamental role of technology in short video development [26], but also considered the mediating role of short videos in the relationship between technological innovation and social governance. Moreover, researchers proposed resolutions based on an information cocoon pertaining to the application of short videos [27,28]. The generation of the ‘originality’ cluster indicates that some researchers focused on the originality of short videos. Further, the inclusion of ‘user-generated content (UGC)’, ‘professional-generated content (PGC)’, ‘professional-generated content + user-generated content (PUGC)’, and Vlogs supported by youth reflects an emphasis on originality and a preference for newer content.

Second, the popularity of short videos is typically characterized by time fragmentation (e.g., video duration), wide spatial participation, and a sense of rhythm [29]. Due to their short durations, short video requires dense creative points to attract users’ attention [30]. The effective utilization of such creative ideas by video makers has a major psychological impact on a video’s audience and enable the latter to empathize with the video content. Hence, in this age of short videos, everyone can simultaneously be a producer, transmitter, and reviewer of video content. Netizens can record and transmit their own lives directly or indirectly to other netizens through means of bullet screens or comments [31]. In particular, since 2016, the boundaries between short videos producers and consumers have become increasingly blurred. Today, most Internet users can participate in the short video phenomenon by creating and commenting on content, anytime and anywhere.

#### 4.2. Research on media convergence based on short videos

Short videos have been adopted as a subversive innovation by traditional media, such as television, radio, and newspapers; furthermore, these videos have gradually developed into an effective tool that can be utilized by mainstream media to promote media convergence. On August 18, 2014, the Central Leading Group for Comprehensively Continuing Reforms approved Guiding Opinions on Promoting the Convergence and Development of Traditional and Emerging Media held its fourth meeting, which established media convergence as a national strategy. The increasing popularity of smartphones and accompanying reductions in network costs enhanced

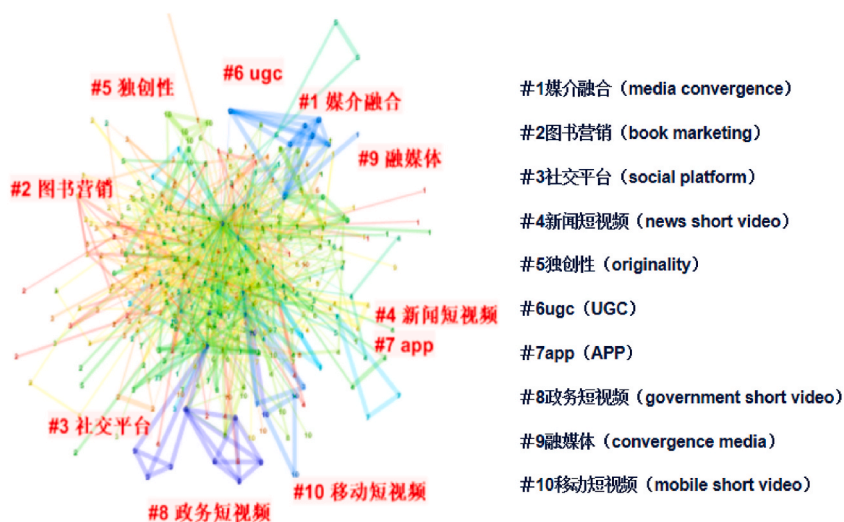


Fig. 5. Keyword clustering of short video research.

short video form production. This simultaneously accelerated content distribution and media convergence promotion. This process infused the traditional media domain with new opportunities and challenges.

To adhere to political orientation and value guidance, an increasing number of mainstream Chinese media established short video platforms and gained convergence dividends. By utilizing existing third-party short video platforms or constructing platforms of their own, mainstream media have created new promotional channels to enable their viewers to watch daily content (e.g., news anchor commentary or special events, such as the Spring Festival Gala) on their mobile phones. Therefore, traditional media sources combined their established authority and credibility with updated program production processes and discourse presentations to achieve profound communication effects. The promulgation of a new governmental guideline on media convergence in 2020 further advanced the process. Therefore, in China, constant emphasis has been placed on the value orientation of media convergence in recent years. Due to the ongoing development of all-media communication systems, short videos have become a mainstream platform for information communication and traffic aggregation. Today, media convergence has achieved all-rounded development in China by combining traditional media with extensive governmental and society-level resources and new media with extensive technological and individual-level resources.

#### 4.3. Research on short video application scenarios

Clusters such as ‘book marketing’, ‘social platform’, ‘news short video’, and ‘government short videos’, with hot phrases such as ‘rural revitalization’ and ‘short video +’, indicate that multi-scenario applications and cross-border cooperation are the basic functions of short videos.

Today, short videos are established communication channels in governance and business marketing. With the promotion of online government services and development of short videos on governmental functions, digital governance capability has become an important promoter of nationwide governance modernization. Governmental institutions are increasingly using short video platforms to release information and interact with people. Researchers indicate that popular short videos on government affairs have similar thematic characteristics (e.g., positive energy dissemination or knowledge popularization). Some such short videos have emotionally resonated with the public.

Many researchers considered the use of short videos in marketing an array of diverse products (e.g., books, agricultural products, and network TV dramas) [32,33]. For instance, short videos on the promoting of public welfare and provision of assistance to farmers highlight their economic role and social value. In China, local officials, such as the director of the Cultural Tourism Bureau, commonly promote local specialties and cultural tourism resources using short video platforms. For example, Jiaolong He, the deputy magistrate of Zhaosu County in Xinjiang, helped farmers recommend local agricultural products through live webcasts and sell 2,568,300 agricultural products in more than 2 years. Her short video helped initiate tourism and rural revitalization in Zhaosu and Yili. Hong Liu, who is the director of the Cultural Tourism Bureau of Ganzu Prefecture and has approximately three million followers in Douyin, is a ‘network celebrity’ among government officials who has made outstanding contributions to local tourism development. Some business owners even present themselves personally on short video platforms to broaden their product sales channels by narrowing the psychological distance between companies and customers [34].

Further, the increase in the numbers of short videos has initiated the development of new social platforms. As a new channel for discourse, short videos help redefine interactions among people globally by emphasizing content sharing and originality over pooling and co-creation [35,36]. For example, research on the so-called ‘silver’ social media personalities reveals how the members of a marginalized and vulnerable group, the elderly, adopted a short video form to regain their sense of value and meaning [37]. Furthermore, research on new farmers (e.g., Li Ziqi in Douyin) and grassroots social media personalities indicate that short videos offer new opportunities to present rural life and local culture [38,39]. In summary, short videos can effectively reveal the features of rural life and help narrow the emotional distance between urban and rural people.

#### 4.4. Research on douyin

In China, some popular short video apps, such as Douyin and Kuaishou, have attracted researchers’ attention [40–42]. Among these apps, the keyword frequency and betweenness value of ‘Douyin’ are second to those of ‘short videos’; this indicates that most researchers value Douyin as a research subject. The overseas version of Douyin, which was developed by ByteDance launched in 2016, is commonly known as TikTok. Currently, the app is used in more than 150 countries and has 3 billion users worldwide. Douyin is a platform where different people can create short videos and interact among themselves. It encourages a shared sense of presence, participation, and substitution, all of which contributes to its immense popularity.

After the COVID-19 outbreak in 2020, many Chinese cities were placed on lockdown. The people who were forced to stay home used Douyin and other similar platforms to learn about the development of the pandemic [43], show long-distance solidarity with the people in seriously affected areas, and focus on various public issues (e.g., the construction of Huoshenshan and Leishenshan hospitals). Such short video-sharing platforms helped alleviate people’s anxiety and reduce emotional distancing among individuals. Consequently, during the pandemic period, Douyin became popular and short video research expanded. In particular, Douyin was adopted by governments, schools, the media, and many official agencies. In 2021, Chinese universities broadcast 14,463 shows on Douyin, and the total viewing time for college and university open classes on the platform was 1.45 million hours, which is equivalent to the class attendance of 240,000 people a day. Further, the rapid development of information technology enables the study of the ecology of super apps, particularly with respect to short videos, from multiple perspectives [44].

## 5. Future of research on short videos

Keywords with strong citation burst refer to words that have suddenly increased in frequency or increased rapidly in a short period of time, and are used to judge the frontier and trend of this field in this period. The CiteSpace software's burst detection facility and embedded algorithm to find burst phrases clarify the frontier evolution of specific research fields. Regarding the development of the short video domain (Fig. 6), a predictive analysis of the published literature suggests that researchers will increasingly focus on the marketing of short knowledge videos, standardized management of short video platforms, and potential role of short videos in university education.

### 5.1. Research on the marketing of short knowledge videos

Due to the continuous increase in capital investment in short video platforms and adoption of innovative marketing methods, the marketing of short videos is attracting significant academic interest [45–47]. An analysis of existing short video marketing content reveals that short video platforms reconstruct aspects such as scientific knowledge, learning experiences, and life skills through live classes and online education modules [48] and, thereby, promote knowledge dissemination through media channels and enhance ubiquitous learning achievements [49].

Today, since short video platform users focus on meaningful learning rather than only novelty [50], short videos on pan-knowledge and pan-culture rapidly become popular among viewers [51,52]. Over the years, the number of short videos on subjects such as history and foreign languages has increased greatly. For instance, data on Kwai indicate that the broadcast pan-knowledge content increased annually by 58.11 % from the 2021 value. Hence, we expect the production and dissemination of short knowledge videos and the interactive mode of knowledge payment on such platforms to become research hotspots in the coming years.

### 5.2. Research on the standardized management of short video platforms

Network security is an important part of national security, and network civilization is a vital indicator of social civilization. The continued widespread use of short videos has increased the frequency of problems such as copyright infringement [53], pseudoscience peddling, and network violence [54,55].

Nowadays, copyright infringement is a serious concern [56]. From January 2019 to May 2021, China's 12,426 Copyright Monitoring Center monitored 13 million original short videos and derivative film and television works and detected multiple infringement accounts. Accordingly, the copyright protection of short videos will become a matter of major concern in the near future.

Similarly, the propagation of pseudoscience is rampant on short video platforms. In recent years, criminals took advantage of regulatory loopholes to peddle pseudoscience and, thereby, gain traffic for capital gains. Finally, the recent increase in cyberviolence necessitates the development of short videos that undermine expressions of violence. Therefore, all short video stakeholders should be encouraged to act as the gatekeepers and supervisors of short video content. Furthermore, the relevant regulators must construct and deliver values for the development of short videos with positive messages in the future. They should focus on problems such as livestreaming of abuses and management of MCNs, as well.

### 5.3. Research on the influence of short video mania on undergraduate education

Nowadays, undergraduates are often called 'E-time undergraduates' or 'Z-time undergraduates'. Contemporary undergraduate groups significantly benefit from short videos because the latter involve quick and simple operational processes, provide massive but comprehensive information, have strong audio-visual impact, and enable strong and instant interaction. We suggest that research be conducted from a multidisciplinary perspective to facilitate the creation of short videos that promote social values in areas such as education and public welfare. Further, researchers should adopt a multidisciplinary perspective to investigate how short videos influence the formation of world view in undergraduate students.

On the one hand, short videos effectively cater to the information needs of undergraduate students, enable the students to achieve emotional resonance with others, and form efficient school education dissemination channels. On the other hand, we must address the harmful effects of uneven or inaccurate information dissemination on short video platforms and clarify how ephemeral entertainment affects undergraduate students and their education. Further, researchers must examine undergraduate students' innovation and entrepreneurship in this short video age. Against the strategic background of mass entrepreneurship and innovation, short video entrepreneurship encourages undergraduate students to pursue their dreams. Therefore, researchers should examine these students' network security awareness and media literacy. Finally, there is an urgent need for detailed research on undergraduate students' coping strategies to manage short video addiction [57–60]. To ensure the effectiveness of higher education training, researchers must address the causes and harmful effects of short video addiction and find potential countermeasures against this addiction among undergraduate students.

## 6. Discussion and conclusions

The rapid dissemination of short videos has made this media form attractive to increasing numbers of users worldwide. On the one hand, short videos provide convenience and enjoyment to many people, introduce new driving forces for media industry development, and help improve governmental functions. On the other hand, the short video boom has caused various global problems, such as



### Top 17 Keywords with the Strongest Citation Bursts

Keywords	Strength	Begin	End	2012 - 2022
social platform	4.4	2014	2018	
mobile Internet	5.26	2015	2019	
traditional media	4.6	2015	2018	
social application	2.17	2015	2018	
business model	1.93	2016	2018	
propagation characteristics	1.9	2016	2019	
app	3.5	2017	2018	
Toutiao	3.01	2017	2018	
News information	2.64	2017	2019	
China Prize for Journalism	2.26	2018	2019	
mobile live broadcasting	2.26	2018	2019	
live broadcasting platform	2.26	2018	2019	
entertainment	2.26	2018	2019	
ugc	1.91	2018	2019	
originator	2.41	2019	2020	
short video marketing	2.32	2020	2022	
college student	1.99	2020	2022	

Fig. 6. Top keywords with the strongest citation bursts.

copyright infringement issues, short video addiction among teenagers, technical use-related problems among older adults, and the creation of new group differences. In addition to Chinese researchers, scholars from the United States, Germany, the United Kingdom, Australia, and so on are interested in short video research.

In this study, we collected 2163 samples of papers published between 2012 and 2022 from the databases of the most widely acclaimed journals in Chinese academia. The visual knowledge graph was used to reveal the cooperation network and popular research topics, which can be utilized by scholars to understand the status of research on short videos in China.

This study yielded the following key conclusions: (1) During 2012–2016, relatively, only a few studies on short videos were published. However, from 2016 onward, the number of published studies on short videos and reports of associated research achievements increased rapidly in China. (2) In recent years, several authors and research institutions formed core groups in this field; the formation of these groups indicates the development of sustained interest in short video research among many research institutions and personnel. (3) There is an obvious ‘head effect’ in the distribution of short video research journals in China, and the highly cited short video research works in China focus on the characteristics, developmental status, and new functions of short videos. (4) The research focused on the characteristics and application scenarios of short videos, media fusion based on short videos, and popular short video apps. (5) Researchers should examine the problems created by the use of short video applications and clarify methods to mitigate such problems.

There are some limitations to this study. (1) We did not consider all the publications of short video studies. Our sample papers were sourced only from the most influential journal databases in China. (2) We considered only those studies on short videos published in China after 2012. Therefore, we excluded the studies that had been published before 2012. Accordingly, to enrich current research results, the authors will expand the database and extend the timeline for future research. We expect this study to benefit scholars who wish to understand the development of short video research in China and generate new ideas based on their findings.

#### Data availability statement

Data included in article/supplementary material/referenced in article.

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#### CRediT authorship contribution statement

Yaozong Yuan: Writing – review & editing, Writing – original draft, Visualization, Resources, Formal analysis. Qiong Wang:

Software, Formal analysis.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.heliyon.2024.e24885>.

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