TADWIN : Jurnal Ilmu Perpustakaan dan Informasi
Availableonline at:
https://jurnal.radenfatah.ac.id/index.php/tadwin
https://jurnal.radenfatah.ac.id/index.php
Copyright ©2020, ISSN: 27232409 print/online 2774-8936
Vol. 6 No. 1, June 2025, pages: 73-83
https://doi.org/10.19109/tadwin.v6i1.28426

Bibliometric Analysis of *Green archives* Research Trend

Fatimah Nur Aisyah[1*], M. Nopri Ramadani Utama Buhri[2]
[1]Universitas Padjadjaran, Indonesia
[2]Institut Pemerintahan Dalam Negeri, Indonesia
* Email correspondence: Fatimah21001@mail.unpad.ac.id

Information

Submited: 24-04-2025
Revised: 16-05-2025
Accepted: 10-06-2025

How to cite: Bibliometric Analysis of Research Trends *Green archives*. (2025). *TADWIN: Jurnal Ilmu Perpustakaan Dan Informasi*, *6*(1), 73-83. https://doi.org/10.19109/tadwin.v6i1.28426

DOI: 10.19109/tadwin.v6i1.28426

First Publication Right:
Tadwin: Jurnal Ilmu Perpustakaan dan Informasi
Program Studi Ilmu Perpustakaan, Fakultas Adab dan Humaniora, UIN Raden Fatah Palembang, Indonesia

ABSTRACT

In recent decades, environmental sustainability issues have become a global concern in various sectors, including the field of archiving. Building archive facilities with environmentally friendly principles is an important step in supporting archive sustainability. This study aims to determine and analyze the growth of publications and temporal trends in research on green archives, as well as to determine the main thematic clusters and shifts in research topics over time. This study was conducted using a literature review of publications on green archives over the past decade from the Google Scholar database. The word "green archives" was used as a keyword to search for relevant publications. Then the researcher used VOSviewer to conduct a bibliometric analysis. Research on Green Archives shows interesting and worrying dynamics. There has been a decrease in the quantity of publications, but these studies have shown significant academic impacts. The results of the analysis suggest that research related to the concept of "green archives" as a comprehensive and integrated approach is still minimal or has not been adequately explored. In fact, the concept of green archives has good potential as an innovative approach to environmentally friendly archive management.

Keywords: *Bibliometric; Green Archive; Google Scholar; VOSViewer*

1. INTRODUCTION

In recent decades, the issue of environmental sustainability has become a global concern in various sectors, including the archival field (Khalid et al., 2021). The main mission of archives as cultural and administrative institutions is to preserve and make available for future generations the collective memory of society recorded in archival materials (Kim 2015). So building archive facilities with environmentally friendly principles is an important step in supporting the sustainability of archives

(Ozoadibe & Obi, 2023). Green archivess emerges as a new paradigm that emphasizes environmentally friendly and sustainable archive management practices (Effa et al., 2023). The implementation of the *Green Archivess* concept focuses not only on reducing the carbon footprint (Dada, 2021), but also on optimizing resource use, operational efficiency, and building environmental awareness among archival staff and the public (Ozoadibe & Obi, 2023).

The initiative is aligned with the global sustainable development agenda, which encourages every sector to contribute to environmental protection and conservation of natural resources for the future (Solemanpharcy & Gaffar, 2023). Thus, *Green Archivess* is not just a trend, but an urgent need to ensure the sustainability of information and the sustainability of the planet simultaneously (Mondejar et al., 2021). This trend is driven by awareness of the negative impacts of conventional archival practices, such as excessive paper use, high energy consumption in digital archive data centers, and waste from chemical preservation materials (Pendergrass et al. 2019). In the digital age, archives and library institutions face new challenges (Onunka et al., 2023). While digitization offers efficiencies in records management, digital records storage can generate considerable emissions if not managed with renewable energy and resource efficiency principles (Mersico et al., 2024).

Furthermore, *Green Archivess* practices can strengthen the role of archives as socially responsible institutions (Niazi et al., 2023). By adopting a sustainable approach, archival institutions not only maintain the integrity and accessibility of archives, but also set an example for other sectors in climate change mitigation efforts and wise environmental management (Schellnack-Kelly & Modiba, 2024). This will enhance the image and relevance of archives in the eyes of the public, demonstrating that preservation of cultural heritage can go hand in hand with a commitment to environmental sustainability (Muthuswamy & Esakki, 2024). In addition to technological aspects, *green* archivess also includes the development of policies that support environmentally friendly practices (Bungau et al., 2022). For example, the National Archives of the Netherlands (NANETH) applies green principles with a focus on recycling archival materials and reducing unused archival waste (Hoek 2023).

However, the application of *green* archives in Indonesia is still limited. In fact, with the growing volume of physical and digital archives, institutions such as the National Archives of the Republic of Indonesia (ANRI) and higher education institutions have a great opportunity to spearhead this initiative (Bawono et al., 2022). Along with the increasing awareness of the importance of sustainable development, research on *green* archivess has also developed, but has not been systematically studied through a bibliometric approach to understand research patterns, academic collaboration, and recent thematic developments. Therefore, this research aims to develop existing research and provide new perspectives by taking data from Google Scholar. Bibliometric analysis was conducted to determine and analyze the growth of publications and the temporal trends of research on *green* archivess so as to provide future topic directions and trends. In addition, the purpose of this study is to determine the main thematic clusters and shifts in research topics over time to help solve problems in the implementation of *green* archivess.

2. RESEARCH METHODS

This research uses the bibliometric method which is a research approach that applies quantitative analysis to scientific publications or relevant literature to identify trends, patterns, and relationships among these bibliographic elements (Dzakkiyah et al. 2023). This method is generally applied to analyze the distribution, quantity, and characteristics of scientific publications, including articles, journals, conferences, or books, as well as the interactions between authors, journals, and

keywords. This bibliometric method also includes collecting bibliographic data from sources such as scientific journal databases, citation indexes, or digital libraries (Pessin et al., 2022). The data collected may include information such as publication title, author, journal, publication year, and citation index. Furthermore, this data is analyzed by statistical methods and other data analysis techniques.

This research applies the bibliometric analysis method, which refers to the analysis of publications related to the scope of the research to identify relevant trends, concepts, and keywords (van Eck and Waltman 2017). In another sense, this literature review will use bibliometric analysis where the research uses large and complex data. In addition, it is also procedurally to present a clear summary of an unlimited number of scientific studies. To analyze the data in this method using two applications, namely Publish or Perish as an engine for searching metadata collected from various sources and VOSViewer to visualize the data that has been obtained.

Bibliometric analysis in principle uses 5 stages) (Ajinegara and Soebagyo, 2022). First, researchers determine keywords according to the topic to be researched and also consider the year of publication from the oldest year to the last or current year. Second, searching articles from databases such as Scopus, Google Scholar, and others, resulting in a varying number of publications each year and allowing restrictions on the total articles displayed. Third, article data is obtained through the Publish or Perish application and stored in RIS and CSV formats. Therefore, CSV files must be converted into xlsx files to facilitate processing in the Microsoft Excel application, while the Mendeley and VOSViewer applications are needed to read RIS files. Fourth, select the data generated and processed as well as other data needed in the analysis. Fifth, visualize the RIS file data using relevant, concrete, and unique graphs based on data analysis by the researcher.
VOSViewer application.

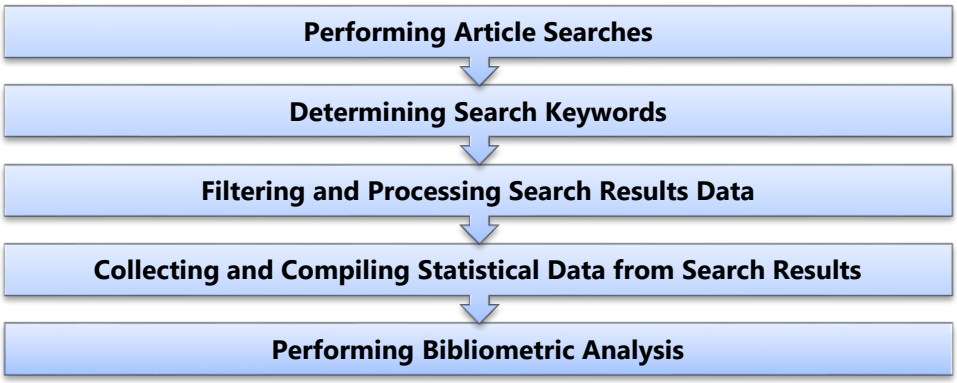

Chart 1. Steps in bibliometric analysis

The purpose of bibliometric methods is to provide an understanding of research trends, scientific domain mapping, author or institutional productivity, and the impact of scientific publications. (Iriyani et al. 2023). This method can be applied in various research disciplines, including education, social science, computer science, and others. This bibliometric method offers a systematic and objective approach in analyzing the existing literature. It can provide a basis for further research, assist in decision-making on policy development, and enhance understanding of the progress and dynamics in a particular field of research.

3. RESULTS AND DISCUSSION

The bibliometric method involves collecting bibliographic data from sources such as scientific journal databases, citation indexes, or libraries. (Effendi and Danang Harito Wibowo, 2023). The data

Tadwin: Jurnal Ilmu Perpustakaan dan Informasi,
Vol. 6 No.1, 2025, Pages. 73-83
DOI: 10.19109/tadwin.v6i1.28426

collected may include information such as publication title, author, publication journal, publication year, and citation index. The data is then analyzed using statistical methods and other data analysis techniques. The data obtained comes from Google Scholar big data by utilizing Publish or Perish software. The metadata search used the Publish or Perish application with the keyword "*Green archives*" and the publication time frame used was the last 10 years, 2014-2024. Data collection includes the number of citations, article author, article title, year of publication, journal publisher, and URL of the article publication.

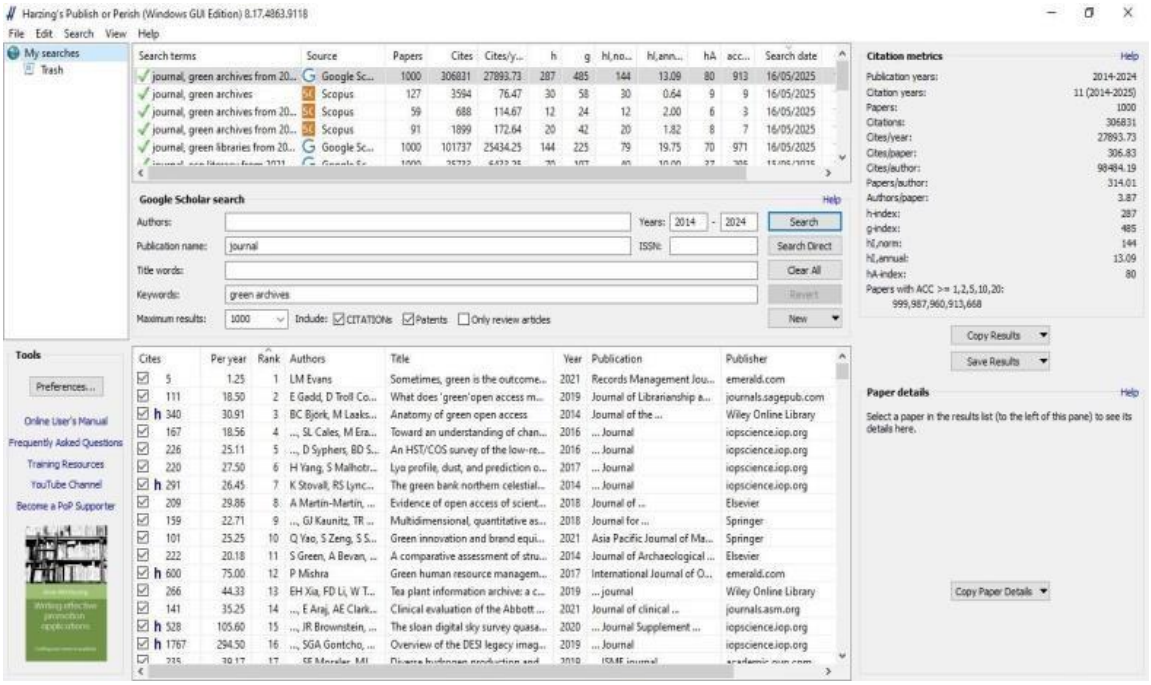

Figure 1. Metadata search using the Publish or Perish application

Based on the search results, 1000 research articles were collected. The articles as a whole have been cited as many as 306,831 citations with an average citation per year of 27,893.73 citations, an average citation in articles of 306.83 citations, an average citation in authors of 98,484.19 citations, an average of all articles in authors of 314.01., and an average author in all articles of 3.87. The level of publication impact in this research topic is high with an h-index of 287 and a g-index of 485, indicating that research on *green* archivess has a significant visibility impact in the archival scientific community.

Tadwin: Jurnal Ilmu Perpustakaan dan Informasi,
Vol. 6 No.1, 2025, Pages. 73-83
DOI: 10.19109/tadwin.v6i1.28426

Figure 2. Number of Publications per year

The data obtained is then processed using the Microsoft excel application to obtain publication statistics based on the year of publication in the last decade in order to represent the number of publications on this topic each year. It was found that research on *green* archivess was most published in 2014 totaling 187 publications and followed by the year after 2015 totaling 186 publications. While the least publications in 2024 amounted to only 12 publications. Based on this data, it can be concluded that there has been a decrease in the number of publications on this topic every year for the last 10 years. This phenomenon indicates that there has been a shift in research priorities in the academic community in the field of *archives* and the integration of the concept of *green* archives into broader research paradigms such as information sustainability or digital archive management in accordance with the concept of environmental sustainability.

To obtain a bibliometric network visualization that is attractive and easy to analyze, the author utilizes VOSViewer software. This tool is used because of its ability to efficiently process large data as well as visualize, analyze, and investigate interestingly (Istiana 2022). In addition, VOSviewer can generate visualizations of publication maps, author maps, or journal maps based on co-citation networks, as well as build keyword maps based on collaborative networks. This network visualization shows the relationship between one keyword and another based on clusters of different colors. The similarity of bubble and network colors within a cluster indicates that the keywords are interrelated, and the larger the bubble in the network visualization, the more use of the keyword in research (Mahmudin et al. 2023).

Tadwin: Jurnal Ilmu Perpustakaan dan Informasi,
Vol. 6 No.1, 2025, Pages. 73-83
DOI: 10.19109/tadwin.v6i1.28426

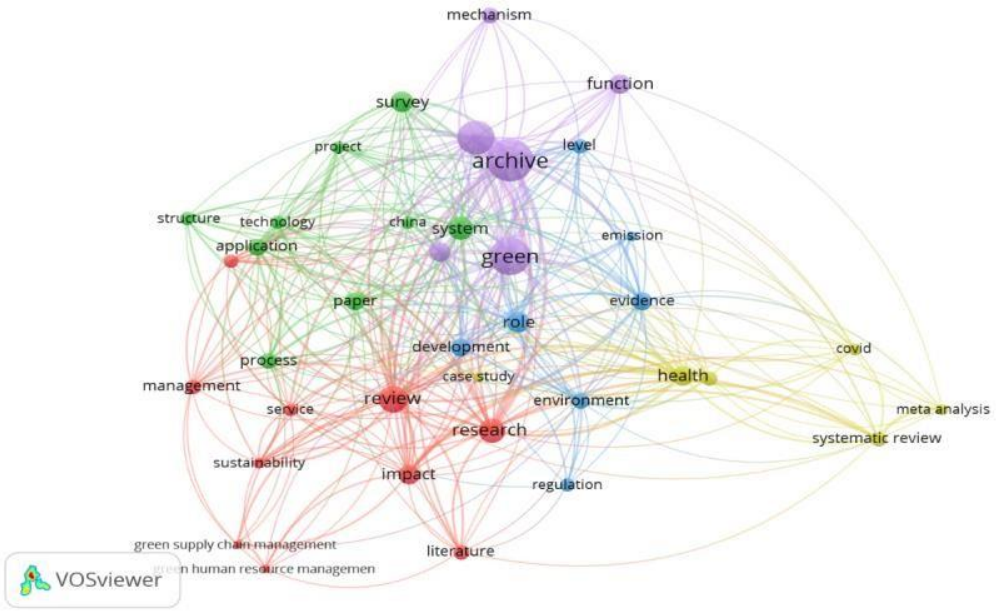

Figure 3. Co-occurance network visualization

Based on the visualization results, 5 clusters and 35 items related to the topic of *green* archivess were obtained. The clusters have different colors and have several related keyword items. Different colors indicate different clusters. The size of the sphere indicates the frequent occurrence of the keyword. Larger spheres indicate that the keyword is used more often. The distance between the circles is connected by a curved line. The closeness of the distance between the circles indicates the co-occurrence of the topic. This means that the closer two or more keywords are, the more likely they are to appear together in an article. Topics or keywords related to the main themes can continue to be expanded and develop research that has not been widely discussed in previous studies.

Table 1. Division of Clusters Based on Network

Cluster	Circle	Keyword
Cluster 1	Purple	Archive, mechanism, function, level
Cluster 2	Green	Survey, project, structure, technology, application, paper, process, china, system
Cluster 3	Red	Review, research, impact, management, service, sustainability, literature, green sustainability, literature, green supply chain management, green human resource management
Cluster 4	Blue	Role, green, evidence, emission, development, regulation
Cluster 5	Yellow	Healt, covid, environment, meta analysis, systematic review, case study

The visualization results show that the domain of this research is centered on the term archive which is seen in the image to have the lightest color and the largest circle. This term has a high degree of connectivity with various concepts throughout the network and is also related to other words in cluster one such as function and mechanism. This network pattern indicates that the focus of the research is on the functional aspects of the archive system which reflects the research orientation towards a mechanistic and procedural approach in the context of *green archives*.

Tadwin: Jurnal Ilmu Perpustakaan dan Informasi,
Vol. 6 No.1, 2025, Pages. 73-83
DOI: 10.19109/tadwin.v6i1.28426

In the green cluster, the keywords process and technology indicate the preference for digital solutions in implementing *green archives* through a series of processes using technology. There is also the word china in this cluster which means that the country of china has contributed to research on this topic. Meanwhile, the keyword *green* is also the central mode in the blue cluster. This keyword also creates a network with the keywords *system, development, regulation, and sustainability*. These keywords network strongly with *green human resource management* and *green supply chain management* in the red cluster. This represents how environmental sustainability practices in archives by building systems and regulations to implement them in the archival field.

In addition to using network visualization, researchers also use density visualization which aims to show the density or density of research on topics with *green archives* keywords. The density of the research theme is presented in bright yellow. The density visualization shows that the brighter the yellow color and the larger the circle surrounding the keyword, the more often the keyword will appear in research articles (Salsabiila and Yuadi 2023). The lighter the color of a theme means that more research has been done. This visualization illustrates the frequency of in-depth discussions related to research publications according to the keywords studied.

The data is explained by paying attention to the colors displayed. The brighter the color displayed, the more and more significant the topics of publications that are relevant or have been discussed by many previous researchers related to the keywords to be studied. But on the contrary, if the color is getting darker fading or not clearly visible, then the number and relevance of topics discussed publications discussed by researchers are increasingly reduced. Therefore, in this visualization it is recommended to pay attention to the fading dark colored circle as a research subject with keywords to be researched. This is due to the lack of use or discussion of the topic.

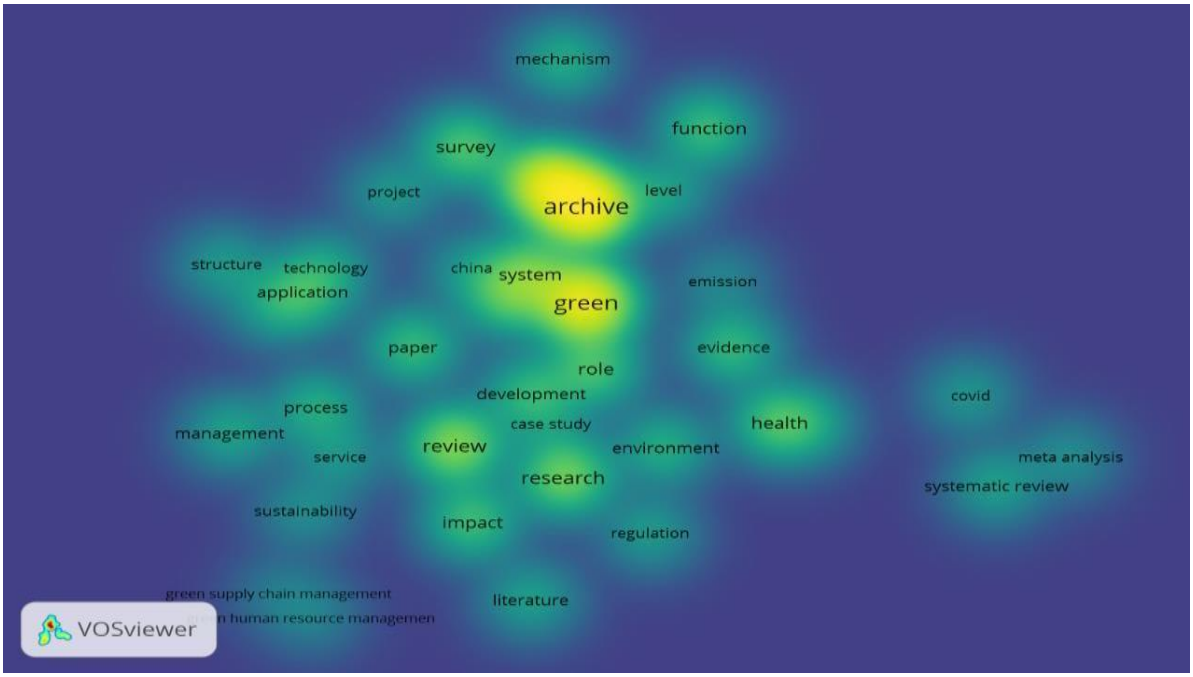

Figure 4. Density Visualization

The areas of highest density, highlighted in bright yellow, are centered on the terms "*archive*" and "*green*". The intensity of this color indicates that these two concepts have the highest frequency of occurrence and the most extensive connectivity in the research network, confirming their position as core constructs in this scholarly domain. Based on the visualization results, it can be seen that the

Tadwin: Jurnal Ilmu Perpustakaan dan Informasi,
Vol. 6 No.1, 2025, Pages. 73-83
DOI: 10.19109/tadwin.v6i1.28426

keywords "*archive*" and "*green*" have the highest density, indicated by the bright yellow areas. This indicates that these two keywords have a dominant frequency of occurrence in the analyzed documents, reflecting the main topics that are the focus of the research. Although the density visualization results show a high density of the keywords "*green*" and "*archive*" separately, there is no indication of a strong relationship between the two concepts in a unified entity, namely "*green* archivess".

This condition indicates that research related to the concept of "*green* archivess" as a comprehensive and integrated approach is still minimal or has not even been adequately explored. In fact, in the current era of sustainability, the concept of *green* archivess has significant potential as an innovative approach to environmentally friendly archive management, including the application of green technology, carbon footprint reduction, energy efficiency, and sustainable document management.

To illustrate the trending topics or research keywords at any given time, an overlay visualization is required. The trend of the theme of writing articles related to this topic from the oldest year to the latest year is marked with purple, blue, tosca, dark green, light green, and yellow colored themes. The blue color indicates keywords that appeared more in the early period of the study (around 2016), while the yellow color indicates more recent keywords (around 2018). Thus, this visualization provides an understanding of the temporal progression of the analyzed research topics. In addition, this visualization not only shows the temporal progression of the research topics, but also helps identify research trends that develop over time (Supinah and Soebagyo 2022).

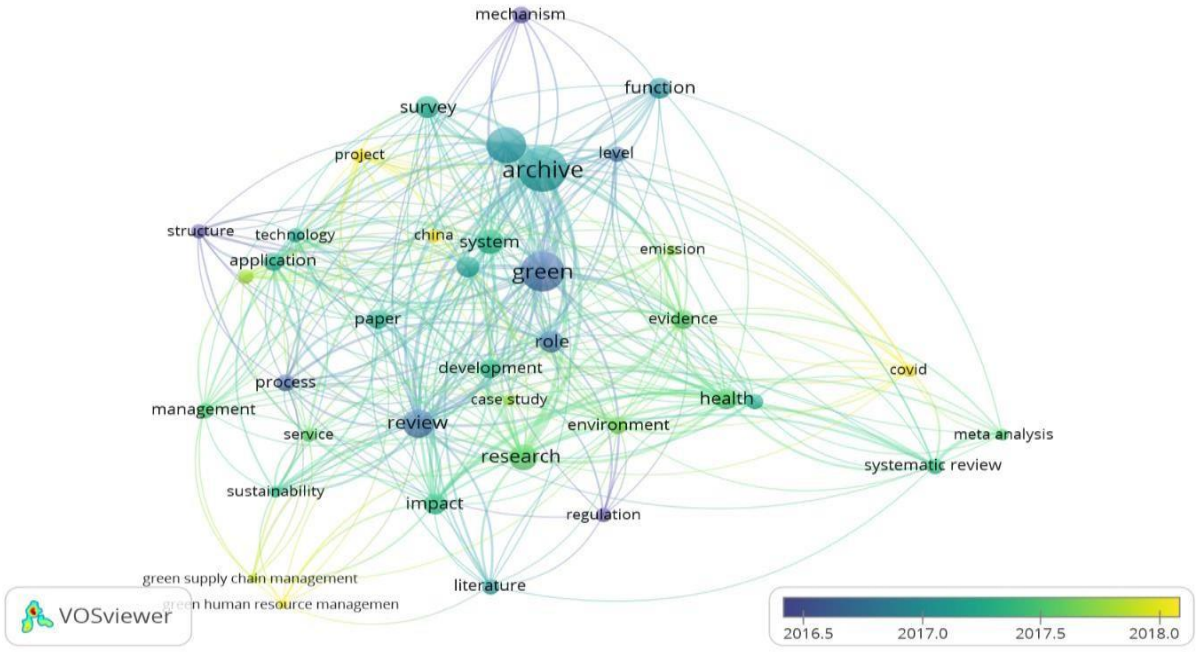

Figure 6. Overlay Visualization

Based on this visualization, keywords such as "*archive*" and "*green*" in the blue to green area indicate that these concepts have been the main focus of research since the initial period of analysis, around 2016 to 2017. This indicates that research related to archiving and the concept of sustainability (green) has been of interest to researchers since that period. The keywords "*review*", "*research*", *and* "*impact*" that have a bluish-green color also indicate that research approaches based on literature review and impact analysis have gained attention. In contrast, keywords such as "covid", "*systematic review*" and "*Meta Analysis*" in the yellow area indicate that these topics are newer and started to gain

attention in the more recent period, around 2018. This is understandable given that the new COVID-19 pandemic occurred in late 2019 to 2020, so the relevance of COVID-19-related research began to increase significantly. The link between COVID-19, *systematic review* and *Meta Analysis* also shows that in pandemic-related research, systematic review-based research methods and Meta Analysis are the dominant approaches.

4. CONCLUSIONS

Based on a bibliometric analysis of 1,000 scientific publications over the last decade, research on *Green Archives* shows both interesting and worrying dynamics. There has been a decline in the quantity of publications but the research has shown significant academic impact with a total of 306,831 citations. This phenomenon illustrates that while research interest is declining, the quality and impact of research on *Green Archives* is maturing. In addition, this phenomenon indicates that there has been a shift in research priorities within the academic community in the field of *archives* and the integration of the concept of *green* archivess into broader research paradigms such as sustainability of information or management of digital archives that correspond with the concept of environmental sustainability.

The results of the analysis suggest that research related to the concept of "*green* archives" as a comprehensive and integrated approach is still minimal or has not even been adequately explored. In fact, in the current era of sustainability, the concept of *green archives* has significant potential as an innovative approach to environmentally friendly archive management, including the application of green technology, carbon footprint reduction, energy efficiency, and sustainable document management. Therefore, it is necessary to develop research that links *green archives* with contemporary issues such as climate change, digital transformation, and the impact of pandemics, so that this topic remains relevant and adaptive to the challenges of the times.

REFERENCES

Ajinegara, Muhamad Wulidasauma, and Joko Soebagyo. 2022. "Analisis Bibliometrik Tren Penelitian Media Pembelajaran Google Classroom Menggunakan Aplikasi VOSViewer." *JNPM (Jurnal Nasional Pendidikan Matematika)* 6(1):193. DOI 10.33603/jnpm.v6i1.5451.

Bawono, H., Darmagara, R., & Parikesit, R. A. (2022). National movement for good recordkeeping awareness and commitment to archiving in Indonesia. *Jurnal Kajian Informasi & Perpustakaan*, *10*(1), 29-46. DOI 10.24198/jkip.v10i1.34644

Bungau, C. C., Bungau, T., Prada, I. F., & Prada, M. F. (2022). Green buildings as a necessity for sustainable environment development: dilemmas and challenges. *Sustainability*, *14*(20), 13121. DOI 10.3390/su142013121

Dada, K. S. J. (2021). Green library: Reducing carbon footprints towards sustainable development in libraries: A case study of Federal College of Education Library, Zaria, Nigeria. *Ciência da Informação em Revista*, *8*(2), 4-15. DOI: 10.28998/cirev.2021v8n2a

Dzakkiyah, Aida Aqliya, Indira Sofy Anggraini, Ratna Anjani, Sinta Chairani, and Esya Anesty Mashudi. 2023. "Analisis Bibliometrik: Penerapan Model Pembelajaran Blended Learning Di PAUD." *Kumarottama : Jurnal Pendidikan Anak Usia Dini* 3(1):21–31. DOI 10.53977/kumarottama.v3i1.1066.

van Eck, Nees Jan, and Ludo Waltman. 2017. "Citation-Based Clustering of Publications Using CitNetExplorer and VOSviewer." *Scientometrics* 111(2):1053–70. DOI 10.1007/s11192-017-2300-7.

Effa, K., Fana, D. M., Nigussie, M., Geleti, D., Abebe, N., Dechassa, N., ... & Berisso, F. E. (2025). The irrigated wheat initiative of Ethiopia: a new paradigm emulating Asia's green revolution in Africa. *Environment, Development and sustainability*, *27*(1), 2161-2186. DOI 10.1007/s10668-023-03961-z

Effendi, Andrey Caesar, and Danang Harito Wibowo. 2023. "Analisis Bibliometrik Arsitektural Digital." *SARGA: Journal of Architecture and Urbanism* 17(2):44–56. DOI 10.56444/sarga.v17i2.783.

Hoek, Sophia van. 2023. "Walking a Tightrope across the Gap of Digital Preservation and Environmental Sustainability: The National Archives of the Netherlands and the Challenge of Achieving a Climate-Neutral Digital Archive Achieve a Balance." (100635515).

Iriyani, Sri Astuti, Heri Sopian Hadi, Marlina Marlina, Elyakim Nova Supriyedi Patty, and Irhas Irhas. 2023. "Analisis Bibliometrik Dengan VOSViewer: Studi Artificial Intelegence Dalam Pendidikan." *Jurnal Simki Pedagogia* 6(2):339–49. DOI 10.29407/jsp.v6i2.287.

Istiana, Purwani. 2022. "Analisis Bibliometrik Perkembangan Penelitian Bidang Ilmu Geografi." *BACA: Jurnal Dokumentasi Dan Informasi* 43(2): 69. DOI 10.14203/j.baca.v43i2.854.

Khalid, A., Malik, G. F., & Mahmood, K. (2021). Sustainable development challenges in libraries: A systematic literature review (2000–2020). *The Journal of academic librarianship*, *47*(3), 102347. DOI 10.1016/j.acalib.2021.102347

Kim, Sarah. 2015. "Green Archives: Applications of Green Construction to Archival Facilities." *The Primary Source* 28:1–8. DOI 10.18785/ps.2801.03.

Mahmudin, Mahmudin, Tatang Herman, Edi Supriyadi, Ratu Sarah Fauziah Iskandar, and Rani Sugiarni. 2023. "Analisis Bibliometrik Literasi Matematika Dalam Database Scopus Menggunakan Vosviewer." *AKSIOMA: Jurnal Program Studi Pendidikan Matematika* 12(3):3213. DOI 10.24127/ajpm.v12i3.6832.

Mersico, L., Abroshan, H., Sanchez-Velazquez, E., Saheer, L. B., Simandjuntak, S., Dhar-Bhattacharjee, S., ... & Saxena, A. (2024). Challenges and Solutions for Sustainable ICT: The Role of File Storage. *Sustainability*, *16*(18), 8043. DOI 10.3390/su16188043

Mondejar, M. E., Avtar, R., Diaz, H. L. B., Dubey, R. K., Esteban, J., Gómez-Morales, A., ... & Garcia-Segura, S. (2021). Digitalization to achieve sustainable development goals: Steps towards a Smart Green Planet. *Science of The Total Environment*, *794*, 148539. DOI 10.1016/j.scitotenv.2021.148539 00

Muthuswamy, V. V., & Esakki, S. (2024). Exploring Sustainable Cultural Preservation: Strategies, Challenges, and Community Engagement in Heritage Conservation Efforts. *Rita Revista Indexada de Textos Academicos*, (21). *DOI 10.24192/2386-7027.2024.v11i21.09*

Niazi, U. I., Nisar, Q. A., Nasir, N., Naz, S., Haider, S., & Khan, W. (2023). Green HRM, green innovation and environmental performance: the role of green transformational leadership and green corporate social responsibility. *Environmental Science and Pollution Research*, *30*(15), 45353-45368. DOI 10.1007/s11356-023-25442-6

Onunka, O., Onunka, T., Fawole, A. A., Adeleke, I. J., & Daraojimba, C. (2023). Library and information services in the digital age: Opportunities and challenges. *Acta Informatica Malaysia*, *7*(1), 113-121. DOI 10.26480/aim.02.2023.113.121

Ozoadibe, C. J., & Obi, H. E. (2023). Exploring renewable energy facility and green building practices for improved archives preservation in public libraries in Rivers state. *J. Environ. Sci. Econ*, *2*(1), 45-54. DOI 10.56556/jescae.v2i1.479

Pendergrass, Keith L., Walker Sampson, Tim Walsh, and Laura Alagna. 2019. "Toward Environmentally Sustainable Digital Preservation." *American Archivist* 82(1):165–206. DOI 10.17723/0360-9081-82.1.165.

Pessin, V. Z., Yamane, L. H., & Siman, R. R. (2022). Smart bibliometrics: an integrated method of science mapping and bibliometric analysis. *Scientometrics*, *127*(6), 3695-3718. DOI 10.1007/s11192-022-04406-6

Salsabiila, Marsaa, and Imam Yuadi. 2023. "Analisis Bibliometrik Pelayanan Publik Untuk Penyandang Disabilitas." *Jurnal Pemerintahan Dan Kebijakan (JPK)* 4(3):171–84. DOI 10.18196/jpk.v4i3.18782.

Schellnack-Kelly, I., & Modiba, M. (2024). Developing smart archives in society 5.0: Leveraging artificial intelligence for managing audiovisual archives in Africa. *Information Development*, 02666669241286224. DOI 10.1177/02666669241286224

Solemanpharcy, M., & Gaffar, S. K. (2023). The Role Of Green Library For Sustainable Development Goals And Environmental Education: A Study On Global Perspective. *International Journal of Knowledge Management & Practices*, *11*(1). http://publishingindia.com/ijkmp

Supinah, Roslani, and Joko Soebagyo. 2022. "Analisis Bibliometrik Terhadap Tren Penggunaan ICT Pada Pembelajaran Matematika." *JNPM (Jurnal Nasional Pendidikan Matematika)* 6(2):276. DOI 10.33603/jnpm.v6i2.6153.