

Post-Pandemic CSR Landscape: A Bibliometric Analysis of Corporate Social Responsibility

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ABSTRACT

The concept of sustainable development implements Corporate Social Responsibility (CSR) develop more intensely. This development triggered the emergence of changes in topic trends regarding CSR. This study aims to map research topics related to CSR by identifying several research variations in terms of keywords, definitions, methodological theories, publication years, and research results. The sample used is a scientific article about CSR. Data collection was carried out by observing scientific articles indexed by Scopus for the 2020-2023 publication year using bibliometric analysis methods. This research produces a mapping of CSR research topics via VOSviewer, which shows the mapping in several clusters.

Keywords: Corporate Social Responsibility; CSR; Bibliometrics

1. Introduction

The COVID-19 pandemic caused by the novel coronavirus SARS-CoV-2 has had profound impacts on global society and economies (Vasenska et al., 2021). Lockdowns, social distancing measures, and public health concerns altered the way businesses operate. Corporate Social Responsibility (CSR) became even more critical during the pandemic (Yoopetch et al., 2023). Many businesses shifted their CSR strategies to address pandemic-related issues such as employee well-being, healthcare support, and community relief efforts (He et al., 2022).

This dynamic environment created a need for research to understand the evolving landscape of CSR in the context of the COVID-19 pandemic (Aristovnik et al., 2020). Scholars and researchers have conducted bibliometric analyses to study publications related to CSR and its response to the pandemic, shedding light on businesses' changing priorities and strategies during this crisis (Yoopetch et al., 2023).

2. Literature Review

2.1. Corporate Social Responsibility (CSR)

The emergence of the COVID-19 pandemic in late 2019 has significantly impacted the landscape of Corporate Social Responsibility (CSR). Several studies have been conducted to explore the effects of the pandemic on CSR initiatives, emphasizing the crucial role of businesses in addressing societal challenges. Meirun et al. (2022) conducted a study to

investigate the impact of employees' perceptions of CSR on job embeddedness, highlighting the importance of CSR in retaining employees during the pandemic. He and Harris (2020) provided some initial insights into how the pandemic has affected the development of CSR and marketing strategies. Additionally, Rahmawati (2023) explored the role of CSR in supporting communities facing economic crises during the pandemic. Dong et al. (2023) focused on care-based CSR communication during the pandemic, comparing the contexts of China and the US, and highlighting cross-cultural differences.

2.2. Bibliometric

The purpose of this study was to conduct a bibliometric analysis of scientific papers linking CSR. It's worth noting that bibliometric analyses have become essential in understanding the research landscape. Bibliometric analysis is the methodology used to identify, organize, extract and analyze metadata from research documents. This helps in examining the changes experienced by a field of knowledge over time (Cobo et al., 2011). Therefore, this methodology makes it possible to present a systematic overview of the scientific literature on the subject under study and to identify trends and levels of interest in the subject (Ellegaard & Wallin, 2015; Keathley-Herring et al., 2016). Additionally, citation network analysis has been employed to identify relationships between various publications and authors, shedding light on collaborative efforts in pandemic-related research (Aristovnik et al., 2020). This approach has enabled researchers to trace the development of influential research articles (Martinez-Perez et al., 2020).

In the analysis, we determine and analyze the main elements of interaction between concepts. We also display metadata and trends in the database that reflect the research path (Zhu & Guan, 2013). To visualize keyword network maps and international cooperation networks, we used statistical software VOSviewer v.1.6.19. We chose this software as it has been widely applied in various research fields (Belmonte-Ureña et al., 2021; van Eck & Waltman, 2010).

3. Research Methodology

3.1 Bibliometric Analysis Procedures

Scopus was chosen as it has the largest volume of information in terms of authors, institutions, and countries in its database (Zhang & Eichmann-Kalwara, 2019). In addition to having the largest volume of information in terms of authors, institutions, and countries, Scopus also has the largest number of articles and reviews that meet the quality requirements of scientific peer review (Mingers & Lipitakis, 2010), broader coverage compared to Web of Science (Archambault et al., 2009). This can be seen from the number of scientific documents available on Scopus. There are 46,445 documents related to the keywords.

The initial filter to be applied is based on the year of publication. Specifically, the period of publication from 2021 to 2023 has been chosen to account for the novelty aspect and to gain insight into the ways in which research topics have developed in the aftermath of the Covid-19 pandemic. The data were downloaded and analyzed in September 2023. These articles were chosen based on their novelty and also met the strict scientific quality requirements of blind peer review (Paul et al., 2021).

To conduct this research, we follow the steps outlined below:

- Each search section uses the “OR” option. Key words in the title section corporate social responsibility, corporate social responsibilities, CSR (n = 46,445 documents)
- Fill in the publication year 2021 – 2023 (n = 12,053 documents)
- Select the Subject Area "Business, Management, and Accounting" (n = 5,885 documents)
- Select Document Type “Article” (n = 4,558 documents)
- Select Top 10 journals (source title), among others Corporate Social Responsibility and Environmental Management, Journal of Business Ethics, Social Responsibility Journal, Journal of Cleaner Production, Journal of Business Research, Business Strategy and The Environment, Business and Society, Cogent Business and Management, Managerial and Decision Economics, and Management Decision (n = 1,148 documents)
- Select the “Final” Publication Stage (n = 992 documents)

Query for advanced search:

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( TITLE-ABS-KEY ( corporate AND social AND responsibility ) OR TITLE-ABS-KEY ( corporate AND social AND responsibilities ) OR TITLE-ABS-KEY ( csr ) ) AND PUBYEAR > 2020 AND PUBYEAR < 2024 AND ( LIMIT-TO ( SUBJAREA , "BUSI" ) ) AND ( LIMIT-TO ( DOCTYPE , "ar" ) ) AND ( LIMIT-TO ( EXACTSRCTITLE , "Corporate Social Responsibility And Environmental Management" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Business Ethics" ) OR LIMIT-TO ( EXACTSRCTITLE , "Social Responsibility Journal" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Cleaner Production" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Business Research" ) OR LIMIT-TO ( EXACTSRCTITLE , " Business Strategy And The Environment" ) OR LIMIT-TO ( EXACTSRCTITLE , "Business And Society" ) OR LIMIT-TO ( EXACTSRCTITLE , "Cogent Business And Management" ) OR LIMIT-TO ( EXACTSRCTITLE , "Managerial And Decision Economics" ) OR LIMIT-TO ( EXACTSRCTITLE , "Management Decision" ) ) AND ( LIMIT -TO ( PUBSTAGE , "final" ) )
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3.2 Identification Stage

A total of 992 sample articles, comprising abstracts and keywords, bibliographic information, citation information, and reference information, were extracted from the Scopus database in Comma Separated Values (CSV) format. It is important to note that data cleaning is a crucial preliminary step towards conducting further analysis in bibliometrics (Ranjbari et al., 2021). In this study, inconsistencies and errors were addressed by cleaning data in Microsoft Excel. This included correcting double spaces to single spaces, homogenizing spelling, and combining keywords (Wahyuningrum et al., 2023). VOSviewer is a popular tool for creating network maps and has been widely applied in various fields of knowledge for bibliometric analysis (Gálvez-Sánchez et al., 2021; Prados-Peña et al., 2022).

3.3 Analysis and Visualization Stage

The study examines a series of bibliometric indicators that include the number of published research articles, authors, institutions, countries, journals, and citations. These indicators provide insights into the development of the research field. The study also analyzes international collaboration networks, identifying authors who collaborate and produce innovative and high-impact scientific work.

Using VOSViewer, we constructed an international collaborative network of authors, institutions, and countries based on the co-authorship method. This allowed us to gain insights into the authors' individual publications, their co-authors, the number of articles produced, and

their collaboration patterns. The network also enables us to define different elements in research groups, such as size, structure, and composition. By analyzing the network of co-authors, with the author as the focal point, we are able to approach the dynamics of scientific research and the research results reflected in the articles.

In addition to the above, we conducted a keyword analysis that helped us identify research topics that have emerged over time and the main trends that will shape the researchers' focus in the coming years. The analysis was based on the co-occurrence method, which considers that keywords represent content and that similar records share the same keywords. By using the VOSviewer tool, researchers are able to analyze the evolution of keywords over time and create an overview of their research path. This is achieved by developing a keyword matrix through extraction and frequency calculations.

3.4 Content Analysis Stage

Content analysis is a qualitative method that aims to identify cognitive schemas and take deep insights from the literature. Based on previous bibliometric studies, content analysis is adopted as a complementary qualitative layer in bibliometric analysis. In this research, we conducted a content analysis of the 10 most influential sections.

The results are displayed based on articles, authors, institutions, scientific journals, countries' international cooperation networks, and based on keywords. In addition, maps are created to establish links between authors, institutions and countries implementing co-authorship methods, with which an international network of cooperation is built when joint publications are created.

4. Results

4.1 Citation Analysis of Journals, Publishers, and Authors

According to Table 1, there has been a 2.95% increase in the number of published articles related to CSR in 2022. However, the overall number of published articles has decreased by 14.80% up until September 2023. Despite this, the Journal of Corporate Social Responsibility and Environmental Management has remained the most productive journal since 2021 and has even seen an increase in publications compared to 2022.

Table 1. Top 10 productive journals

No	Journal Name	2021	2022	2023	Total
1	Corporate Social Responsibility and Environmental Management	93	75	80	248
2	Journal of Cleaner Production	62	44	39	145
3	Journal of Business Ethics	53	46	31	130
4	Social Responsibility Journal	21	57	41	119
5	Journal of Business Research	31	36	34	101
6	Business Strategy and the Environment	43	17	26	86
7	Cogent Business and Management	9	16	26	51
8	Business and Society	17	17	11	45
9	Managerial and Decision Economics	7	24	13	44
10	Management Decisions	3	17	3	23
	Totals	339	349	304	992

Sources: Data Analysis

John Wiley and Sons Ltd emerged as the leading publisher with 378 articles on CSR, while Elsevier Ltd ranked second with only 145 articles (as shown in Figure 1). In addition to managing the Corporate Social Responsibility and Environmental Management journal, John Wiley and Sons Ltd also oversees the Business Strategy and the Environment journal and the Managerial and Decision Economics journal.

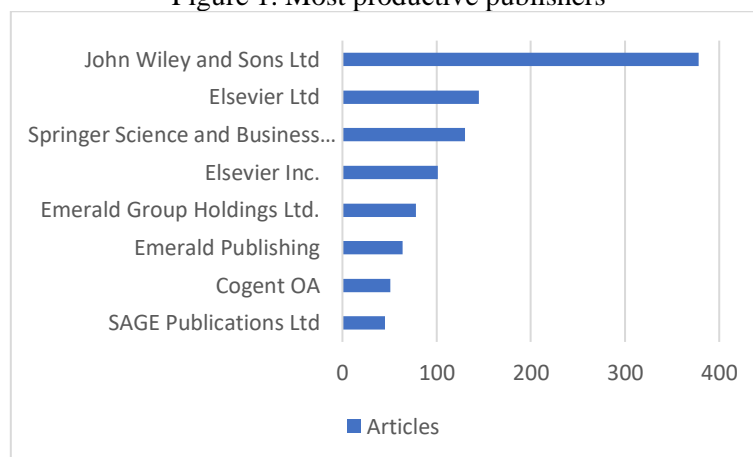
According to Table 2, Corporate Social Responsibility and Environmental Management is the journal with the most citations, with a total of 2,962. However, Business Strategy and the Environment has the highest impact factor among all the journals, with a score of 14,880 in 2022. This is quite surprising considering that the Journal of Corporate Social Responsibility and Environmental Management, which is the most productive journal, only ranks fourth in terms of impact factor.

A comparison of the data presented in Table 1 suggests that the most frequently cited sources are not necessarily the most popular journals. In terms of authors, Samuel Adomako and Mai Dong Tran were the most prolific, having authored four articles each. The article titled "Stakeholder Management, CSR Commitment, Corporate Social Performance: The Moderating Role of Uncertainty in CSR Regulation" was the most cited with 22 references. On the other hand, the article "Board Diversity and Corporate Social Responsibility: Empirical Evidence from France" by Rania Beji, Ouidad Yousfi, Nadia Loukil, and Abdelwahed Omri published in the Journal of Business Ethics is the most cited, with 148 references.

4.2 Analysis of Country Productivity and Collaboration Authors

Bibliometric analysis involves countries as they can connect networks and provide directions for further research. An article can represent more than one country, and Figure 3 shows that most articles were published in multiple countries. The strength of collaboration between countries is reflected by the size of the node in the figure. Further research in this area can highlight each country's understanding of the importance of corporate social responsibility (CSR) carried out by companies.

Figure 1. Most productive publishers



Sources: Data Analysis

Table 2. Journal ranking in citations

No	Journal Name	Number of Citations	Impact Factor	H-Index	Quartile
1	Corporate Social Responsibility and Environmental Management	2,962	10,832	96	Q1
2	Journal of Cleaner Production	2,030	11,896	268	Q1
3	Journal of Business Ethics	1,987	8,107	229	Q1
4	Business Strategy and the Environment	1,860	14,880	131	Q1
5	Journal of Business Research	1,380	13,438	236	Q1
6	Business and Society	802	9,145	90	Q1
7	Social Responsibility Journal	585	4,808	45	Q1
8	Cogent Business and Management	226	3,762	32	Q2
9	Managerial and Decision Economics	206	2,311	57	Q2
10	Management Decisions	174	5,392	116	Q1

Sources: Data Analysis

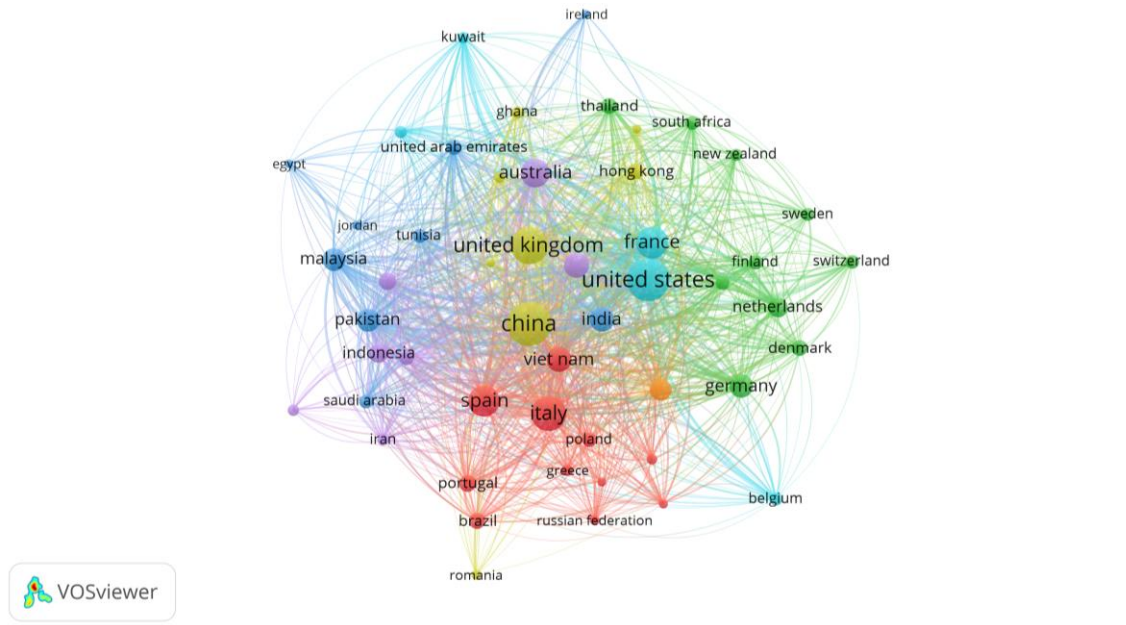
China has published the largest number of articles (with 170 documents) and received 2,351 citations. However, China's strength of relations between countries ranks fourth after the United States, United Kingdom, and Italy. Countries and institutions are crucial in bibliometric analysis as they can connect networks and provide directions for further research. An article may represent more than one country and institution. More research in this field can reflect each country's awareness of the importance of CSR in promoting corporate sustainability.

Table 3. Most Productive Writers

No	Author	Number of Publications	Number of Citations
1	Samuel Adomako; Mai Dong Tran	4	33
2	Thanh Tiep Le	3	44
3	Isabel-María García-Sánchez; Nazim Hussain; Sana-Akbar Khan; Jennifer Martinez-Ferrero	2	88
4	Subba Reddy Yarram; Sujana Adapa	2	80
5	Jose Manuel Diaz-Sarachaga	2	36
6	Olivier Meier; Guillaume Schier	2	30
7	Lee Yeunjae	2	25
8	Megumi Suto; Hitoshi Takehara	2	9
9	Pengyu Chen; Abd Alwahed Dagestani	2	6
10	Yasuhiko Nakamura	2	5

Sources: Data Analysis

Figure 3. Country Productivity and Collaboration Map



According to Table 4, the 10 most productive institutions in terms of article publications and the number of citations are listed below. These universities have a positive impact on researchers in terms of Corporate Social Responsibility (CSR). The most influential institution in Asia is Ho Chi Minh City University of Economics and Finance in Vietnam, with 7 publications and 126 citations. Murray State University in the United States and the University of Turin in Italy complete the top three, with a total of 6 articles and citations of 85 and 42 respectively.

Table 4. Most Productive Institutions

No	Institutions, Countries	Number of Publications	Number of Citations
1	Ho Chi Minh City University of Economics and Finance, Vietnam	7	126
2	Arthur J. Bauernfeind College of Business, Murray State University, United States	6	85
3	Department of Management, University of Turin, Italy	6	42
4	College of Engineering and Technology, American University of The Middle East, Kuwait	5	96
5	School of International Business and Marketing, University of Economics Ho Chi Minh City, Vietnam	5	52
6	Birmingham Business School, University of Birmingham, United Kingdom	5	38
7	Dipartimento Di Scienze Dell'Economia, Università Del Salento, Italy	4	110
8	Faculty of Economics and Business, University of Groningen, Netherlands	4	81
9	Department of Economics, University of Messina, Italy	4	61
10	College of Business, Abu Dhabi University, United Arab Emirates	4	42

Sources: Data Analysis

Figure 5. Co-occurrence of keywords - coloured based on year

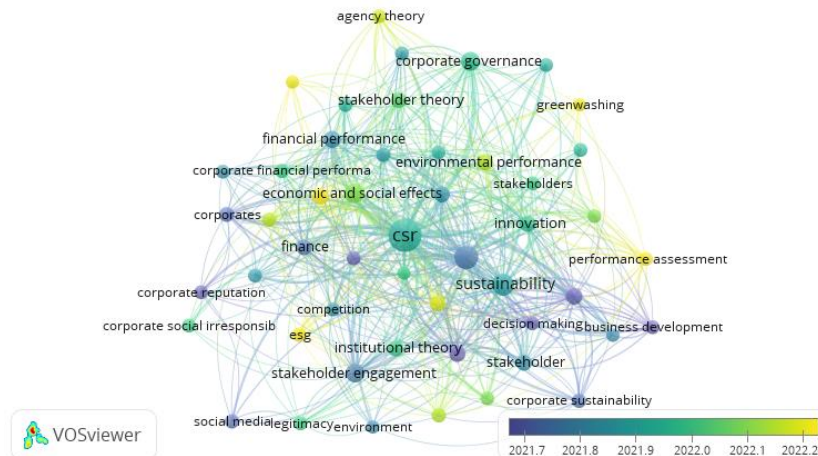


Figure 6. Co-occurrence of keywords - coloured based on density



5. Discussion

5.1 Post-Pandemic CSR Landscape

Through our study, we observed that the oldest topic discussed by researchers is the assessment methods of disclosures using various criteria. Another major issue is developing regulatory frameworks, especially in developing countries. Many countries are attempting to incorporate disclosure initiatives into regulations, which compels corporations to openly report their sustainability practices. With the global reporting and assessment system already well-established, the research area has now shifted towards sustainability issues, specifically the integration of the three dimensions of sustainability into environmental disclosure and the integration of a continuous improvement framework into the reporting systems. We anticipate that this research area will continue to grow in the coming years.

Environmental disclosure and reporting are influenced by various factors, including managerial structure, ownership, educational background and gender differences of the managers, reporting methods, religion, regulatory framework, financial performance, and market structure (Wahyuningrum et al., 2023). These factors have a significant impact on a company's performance and sustainability, making it crucial to consider them in future studies. Therefore, it is essential to evaluate environmental practices while taking all these factors into account.

6. Conclusion

In the aftermath of the Covid-19 pandemic, Corporate Social Responsibility (CSR) has remained a popular topic of conversation. This is evident from the increasing number of publications on this subject over the past three years since 2021. A total of 992 articles on CSR from all around the world have been published in 10 different journals by 8 publishers.

John Wiley and Sons Ltd is the top publisher in CSR studies, with 378 articles published. The Journal of Corporate Social Responsibility and Environmental Management (United Kingdom) is the most cited journal, with 2,962 citations and an impact factor of 10,832 in 2022. A total of 3,043 authors contributed to CSR studies. The article "Board Diversity and Corporate Social Responsibility: Empirical Evidence from France" by Rania Beji, Ouidad Yousfi, Nadia Loukil, and Abdelwahed Omri is the most cited article in CSR studies, with 148 citations. Among productive authors, Samuel Adomako and Mai Dong Tran have published four papers each.

The top frequently used keywords in CSR studies are sustainable development, sustainability, economic and social effects, corporate governance, stakeholder engagement, financial performance, environmental economics, firm performance, environmental policy, and innovation. Sustainable development, sustainability, and stakeholder engagement are widely discussed. Novel topics include agency theory, circular economy, CSR performance, ESG, firm performance, greenwashing, and performance assessment.

References

Journal article

- Archambault, É., Campbell, D., Gingras, Y., & Larivière, V. (2009). Comparing bibliometric statistics obtained from the Web of Science and Scopus. *Journal of the American Society for Information Science and Technology*, 60(7), 1320–1326. <https://doi.org/10.1002/asi.21062>
- Aristovnik, A., Ravšelj, D., & Umek, L. (2020). A bibliometric analysis of covid-19 across science and social science research landscape. *Sustainability (Switzerland)*, 12(21), 1–30. <https://doi.org/10.3390/su12219132>
- Belmonte-Ureña, L. J., Plaza-Úbeda, J. A., Vazquez-Brust, D., & Yakovleva, N. (2021). Circular economy, degrowth and green growth as pathways for research on sustainable development goals: A global analysis and future agenda. *Ecological Economics*, 185, 107050. <https://doi.org/10.1016/j.ecolecon.2021.107050>
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). An approach for detecting, quantifying, and visualizing the evolution of a research field: A practical application to the Fuzzy Sets Theory field. *Journal of Informetrics*, 5(1), 146–166. <https://doi.org/10.1016/j.joi.2010.10.002>
- Dong, C., Huang, Q., Ni, S., Zhang, B., & Chen, C. (2023). Constructing Care-Based Corporate Social Responsibility (CSR) Communication During the COVID-19 Pandemic: A Comparison of Fortune 500 Companies in China and the United States. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-023-05531-9>
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809–1831. <https://doi.org/10.1007/s11192-015-1645-z>

- Gálvez-Sánchez, F. J., Lara-Rubio, J., Verdú-Jóver, A. J., & Meseguer-Sánchez, V. (2021). Research Advances on Financial Inclusion: A Bibliometric Analysis. *Sustainability*, 13(6). <https://doi.org/10.3390/su13063156>
- He, H., & Harris, L. (2020). The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. *Journal of Business Research*, 116, 176–182. <https://doi.org/10.1016/j.jbusres.2020.05.030>
- He, M., Yu, W., & Han, X. (2022). Bibliometric Review on Corporate Social Responsibility of the Food Industry. In *Journal of Food Quality* (Vol. 2022). Hindawi Limited. <https://doi.org/10.1155/2022/7858396>
- Keathley-Herring, H., Van Aken, E., Gonzalez-Aleu, F., Deschamps, F., Letens, G., & Orlandini, P. C. (2016). Assessing the maturity of a research area: bibliometric review and proposed framework. *Scientometrics*, 109(2), 927–951. <https://doi.org/10.1007/s11192-016-2096-x>
- Martinez-Perez, C., Alvarez-Peregrina, C., Villa-Collar, C., & Sánchez-Tena, M. Á. (2020). Citation network analysis of the novel coronavirus disease 2019 (Covid-19). *International Journal of Environmental Research and Public Health*, 17(20), 1–32. <https://doi.org/10.3390/ijerph17207690>
- Meirun, T., Lockey, S., Blenkinsopp, J., Yueyong, H., & Ling, L. (2022). The Impact of COVID-19 Pandemic on Corporate Social Responsibility and Job Embeddedness in China. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.848902>
- Mingers, J., & Lipitakis, E. A. E. C. G. (2010). Counting the citations: a comparison of Web of Science and Google Scholar in the field of business and management. *Scientometrics*, 85(2), 613–625. <https://doi.org/10.1007/s11192-010-0270-0>
- Paul, J., Lim, W. M., O’Cass, A., Hao, A. W., & Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, 45(4), O1–O16. <https://doi.org/https://doi.org/10.1111/ijcs.12695>
- Prados-Peña, M. B., Gálvez-Sánchez, F. J., García-López, A., & Molina-Moreno, V. (2022). Sustainable Crafts: Describing Conceptual Evolution Through a Bibliometric Analysis and Systematic Literature Review. *Frontiers in Environmental Science*, 10. <https://www.frontiersin.org/articles/10.3389/fenvs.2022.949681>
- Rahmawati, P. I. (2023). CSR and Its Impacts on Society during Pandemic Covid-19: Evidence from Bali as a Tourist Destination. *Jurnal Ilmu Sosial Dan Humaniora*, 12(1), 195–201. <https://doi.org/10.23887/jish.v12i1.59630>
- Ranjbari, M., Saidani, M., Shams Esfandabadi, Z., Peng, W., Lam, S. S., Aghbashlo, M., Quattraro, F., & Tabatabaei, M. (2021). Two decades of research on waste management in the circular economy: Insights from bibliometric, text mining, and content analyses. *Journal of Cleaner Production*, 314. <https://doi.org/10.1016/j.jclepro.2021.128009>
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Vasenska, I., Krastev, V., & Koyundzhiyska-Davidkova, B. (2021). Bibliometric analysis of publications on corporate social responsibility and COVID-19. *SHS Web of Conferences*, 129, 07007. <https://doi.org/10.1051/shsconf/202112907007>

- Wahyuningrum, I. F. S., Humaira, N. G., Budihardjo, M. A., Arumdani, I. S., Puspita, A. S., Annisa, A. N., Sari, A. M., & Djajadikerta, H. G. (2023). Environmental sustainability disclosure in Asian countries: Bibliometric and content analysis. In *Journal of Cleaner Production* (Vol. 411). Elsevier Ltd. <https://doi.org/10.1016/j.jclepro.2023.137195>
- Yoopetch, C., Nimsai, S., & Kongarchapatara, B. (2023). Bibliometric Analysis of Corporate Social Responsibility in Tourism. *Sustainability (Switzerland)*, 15(1). <https://doi.org/10.3390/su15010668>
- Zhang, L., & Eichmann-Kalwara, N. (2019). Mapping the Scholarly Literature Found in Scopus on Research Data Management: A Bibliometric and Data Visualization Approach. *Journal of Librarianship and Scholarly Communication*, 7(1). <https://doi.org/10.7710/2162-3309.2266>
- Zhu, W., & Guan, J. (2013). A bibliometric study of service innovation research: based on complex network analysis. *Scientometrics*, 94(3), 1195–1216. <https://doi.org/10.1007/s11192-012-0888-1>