

Article History

Received:
2023-09-12

Revised:
2023-11-02

Accepted:
2023-12-02

DOI: <https://doi.org/10.33367/ijies.v6i2.4276>

Available Online: 2023-12-31

Mapping the Trajectory of Islamic Education Research: A Bibliometric Analysis

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Abstract

This study aims to describe the mapping of the development and direction of research on the development of Islamic education in publications indexed by the Scopus database. This study uses bibliometric analysis techniques to explore all journals indexed in the Scopus database on the development of Islamic education from 1974 to 2022/2023. The data obtained is analyzed using Excel and R/R-Studio. VOSviewer visually analyses the simultaneous occurrence of keywords and document citations. The author found 656 publications that fit the function, subject, and criteria set. The results of this study showed an annual growth rate of 6.69%. The first position is held by the author named Bensaid, B., followed by Avest, I.T., and Nor, M.R.M. The country that produces many scientific publications on Islamic education development is the State of Indonesia, with as many as 198 documents. The bibliometric analysis performed was limited to Scopus data. Other national and international databases should have been considered in the study. This study presents a brief overview of the literature accessible to researchers in developmental fields and provides recommendations for future research.

Keywords: Bibliometric Analysis, Curriculum Development, Educational Development, Islamic Development, Islamic Education.

How to cite this article:

Widyaningrum, Nyimas Esti, Nurul Latifatul Inayati, Muhammad Subhi Apriantoro, Afief El Ashfahany, and Eta Nurlita". Mapping the Trajectory of Islamic Education Research: A Bibliometric Analysis." *Indonesian Journal of Islamic Education Studies (IJIES)* 6 (2), 170-189. <https://doi.org/10.33367/ijies.v6i2.4276>.

Introduction

Everything moves quickly and dynamically from the Industrial Revolution 4.0 to the current Industrial Revolution era (5.0).¹ Adequate access to technology makes many areas

¹ H S Ghafur, "Analysis of ICT Development Supporting the E-Learning Implementation on Nadhatul Ulama Universities in Indonesia," *Journal of Social Studies Education Research* 12, no. 4 (2021): 121–43.

of life develop massively.² The barriers of distance and time can be overcome easily by technology. This development can be seen especially during the COVID-19 pandemic, which forced the world community to innovate rapidly to create more efficiency in vital sectors.³ The inability to adapt to the pace of development of this technology will result in lagging.⁴

The COVID-19 pandemic has developed in all sectors of life, especially in the education sector, which requires collaborating with existing technology, including Islamic education.⁵ Therefore, developments in education, especially in the current industrial era, need a breakthrough to build the quality of Islamic education without losing the existing image or Islamic values. Efforts to reformulate the current curriculum do not seem to have given a reason to recognize that this institution is an important part of a national education system.⁶ The existence of development in social life encourages madrassas to remain popular without sacrificing the Islamic values contained that had been pioneered by the founder of the *madrasah, ulama* (Islamic scholar).⁷

In the current industrial era, the government has made many creative efforts to educate the lives of the nation's children in various ways, such as through the spirit of national development and efforts to even out public welfare and education. That is done because there are still cases of inequality and inequality among the community.⁸ The

² C Clarke et al., “Demographic Correlations for 100 Most-Cited Authors in Ophthalmic Research: A Bibliometric Study,” *Medical Hypothesis, Discovery, and Innovation in Ophthalmology* 9, no. 4 (2020): 215–20, <https://doi.org/10.51329/mehdiophthal1408>.

³ X Ren et al., “A Science Mapping Review of Human and Organizational Factors in Structural Reliability” (Safety and Security Science Group, Faculty of Technology, Policy and Management, Delft University of Technology, Netherlands, 2020), 4724–31.

⁴ A R Arifianto, “The State of Political Islam in Indonesia: The Historical Antecedent and Future Prospects,” *Asia Policy* 15, no. 4 (2020): 111–32, <https://doi.org/10.1353/ASP.2020.0059>.

⁵ K M Al-Khuzaime, N F Al-Zuhair, and D T Al-Mutairi, “The Corona Pandemic Impact on Education: Proposing a Mechanism for Postgraduate Programs at Imam Mohammad Ibn Saud Islamic University (IMSU),” *Journal of Educational and Social Research* 12, no. 4 (2022): 131–45, <https://doi.org/10.36941/jesr-2022-0102>.

⁶ C Surahman, “*Tafsīr Tarbawī* in Indonesia: Efforts to Formulate Qur'an-Based Islamic Education Concept,” *Jurnal Pendidikan Islam* 5, no. 2 (2019): 211–26, <https://doi.org/10.15575/jpi.v5i2.5915>.

⁷ A Cockcroft et al., “Challenging the Myths about Madaris in Pakistan: A National Household Survey of Enrolment and Reasons for Choosing Religious Schools,” *International Journal of Educational Development* 29, no. 4 (2009): 342–49, <https://doi.org/10.1016/j.ijedudev.2008.09.017>; A M Amin et al., “RQANI: A Learning Model That Integrates Science Concepts and Islamic Values in Biology Learning,” *International Journal of Instruction* 15, no. 3 (2022): 695–718, <https://doi.org/10.29333/iji.2022.15338a>; S Tambak et al., “Discussion Method Accuracy in Islamic Higher Education: The Influence of Gender and Teaching Duration,” *Cakrawala Pendidikan* 41, no. 2 (2022): 507–20, <https://doi.org/10.21831/cp.v41i2.40644>.

⁸ M Munadi and Khuriyah, “The Extracurricular Activities and Student Development of Secondary School: Learning from Indonesia,” *International Journal of Education and Practice* 11, no. 1 (2023): 23–34, <https://doi.org/10.18488/61.v1i1.3245>; I K Rahman, N S Rosidah, and A M Tamam, “Development of a Scale for Measuring the Competencies of Islamic Counselors,” *Islamic Guidance and Counseling Journal* 6, no. 1 (2023): 28–44, <https://doi.org/10.25217/igcj.v6i1.3133>.

development of this world continues to run daily, and everything in life also changes, including developments in education. Developments in the world of education will undoubtedly continue to exist because education is an essential thing the world needs to educate the lives of the nation's children. Education development must keep up with the times, including Islamic education, which is also experiencing developments in the current industrial era.⁹

People who are increasingly advanced in progressive and dynamic thinking are increasingly interested in providing knowledge to their children through world knowledge and the hereafter by sending them to Islamic educational institutions collaborating on general and religious materials.¹⁰ Islam is a religion that always teaches Muslims to live dynamically and progressively, always following the development of science and technology, balanced in practicing material and spiritual needs.¹¹ Islamic communities that have advanced thinking in this era of development are getting better at thinking about their children's education by competing to find Islamic educational institutions that have collaborated with Islamic education and education with general material. In addition to their children getting religious knowledge to prepare for the afterlife, they expect their children to acquire broad knowledge for provisions in the world because living in the world also requires knowledge, especially since this world is continuously developing.

Currently, Islamic educational institutions are beginning to experience very fierce competition to compete to promote their institutions by recognizing themselves as a characteristic of Islam with other general education.¹² Islamic educational institutions have a model to carry out planned and systematic activities to develop students' potential based on Islamic religious principles.¹³ Parents place high hopes on Islamic educational institutions so that their children can have personalities that are based on Islamic teachings or can reflect Islamic values.¹⁴ Therefore, a deep understanding of religious moderation from an early age

⁹ H Ainissyifa and A K Nurseha, "Contextualizing Mahmud Yunus' Islamic Education Concept in Madrasah Aliyah," *Jurnal Pendidikan Islam* 8, no. 1 (2022): 87–100, <https://doi.org/10.15575/jpi.v8i1.19117>.

¹⁰ D Sijamhodžić-Nadarević, "Contribution of Islamic Religious Education to Intercultural Values in Pluralistic European Cultures: Insights from Bosnia and Herzegovina," *Religions* 14, no. 4 (2023), <https://doi.org/10.3390/rel14040453>; D Wanto, J A Jamin, and R Ali, "Asserting Religiosity in Indonesian Muslim Urban Communities through Islamic Education," *Journal of Islamic Thought and Civilization* 12, no. 2 (2022): 116–35, <https://doi.org/10.32350/jitc.122.09>.

¹¹ Linna Susanti et al., "The Reality of Tarbiyah, Ta'lim, and Ta'dib in Islamic Education" 35, no. 2 (2023), <https://doi.org/10.23917/suhuf.v35i2.22964>.

¹² S Kenan, "The Formative Period of the Modern University," *Osmanli Arastirmalari - Journal of Ottoman Studies* 2015, no. 45 (2015): 333–67, <https://doi.org/10.18589/oa.570017>.

¹³ Farid Ardyansyah et al., "Pengembangan Lembaga Pendidikan Islam Melalui Pesantren Ekonomi," *Jurnal Pendidikan Dan Konseling* 5, no. 1 (2023): 1349–58.

¹⁴ Ardyansyah et al.

to the millennial generation who follow the times needs to be given a polite attitude and appreciation of differences in Islamic teachings. Islamic religious education will continue to develop with the times without eliminating elements of Islamic teachings.¹⁵ Islamic educational institutions are increasingly upgrading to teach the science of the afterlife and general knowledge to face all challenges in this industrial era and not be left behind by other educational institutions.

Research on education development in the Islamic world is also discussed in previous research. Ahmad Pihar concluded that the industrial era and the development of information technology today demand that the community face all existing challenges, especially in the world of Islamic education. The era of Society 5.0 requires three literacies: data literacy, human literacy, and technological literacy. Even in this industrial revolution era, students can coexist with robots or technology designed to replace the role of educators.¹⁶ Besides, Dodi Ilham concluded: First, take action to review the current Islamic education system while still prioritizing what is taught in Islamic teachings. Second, prepare mature human resources with good quality and comprehensive capabilities. Third, re-clarify the role of all components in education: individuals, families, communities, educational institutions, and the state. Fourth, Islamic teachings should be united with science and technology as a solid basis to face all challenges in the current era.¹⁷

This research uses bibliometric analysis indicators, where bibliometric analysis is one of the tools that play a role in evaluating scientific research results, examining the interaction between science and technology, producing mapping of fields of science, tracing the development of new knowledge in specific fields and is an indicator in the future in making strategic plans.¹⁸ This study aims to determine the development and direction of research on the development of Islamic education in publications indexed by the Scopus

¹⁵ A. Fatah Yasin et al., "Development of Islamic Religious Education Learning in Forming Moderate Muslims," *Tafkir: Interdisciplinary Journal of Islamic Education* 4, no. 1 (2023): 22–36, <https://doi.org/10.31538/tijie.v4i1.227>.

¹⁶ A. Pihar, "Modernization of Islamic Religious Education in the Era of Society 5.0," *Journey-Liasion Academia and Society* 1, no. 1 (2022): 1–12.

¹⁷ Dodi Ilham, "Menggagas Pendidikan Nilai Dalam Sistem Pendidikan Nasional," *Didaktika: Jurnal Kependidikan* 8, no. 3 (August 1, 2019): 109–22, <https://doi.org/10.58230/27454312.73>.

¹⁸ J L Belmonte et al., "Machine Learning and Big Data in the Impact Literature. A Bibliometric Review with Scientific Mapping in Web of Science," *Symmetry* 12, no. 4 (2020), <https://doi.org/10.3390/SYM12040495>; L Boquera et al., "Research Progress and Trends on the Use of Concrete as Thermal Energy Storage Material through Bibliometric Analysis," *Journal of Energy Storage* 38 (2021), <https://doi.org/10.1016/j.est.2021.102562>; L Zheng, K Chen, and W Lu, "Bibliometric Analysis of Construction Education Research from 1982 to 2017," *Journal of Professional Issues in Engineering Education and Practice* 145, no. 3 (2019), [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000412](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000412).

database from 1974 – 2022. The year 1974 was chosen as the year of start based on the findings in the Scopus database that the first two publications on the development of Islamic education were found in that year. From previous research on the development of Islamic education, bibliometric analysis research methods have not been used as a mapping effort for scientific publications in various fields.

Methods

The method used in this study is bibliometric analysis to identify research developments in Islamic education. Bibliometrics is a statistical method that aims to analyze the results of a study in a particular field.¹⁹ Bibliometric analysis is used to review publications related to the scope of research whose purpose is to identify the research direction, concepts, and keywords needed.²⁰ Experts use bibliometric analysis for various reasons: to cover new research trends or directions emerging in articles or journals, collaborative research models, and to explore the literature on the intellectual structure of existing disciplines.²¹

The data in the study was obtained using a Boolean search engine that combed through the Scopus database between 1974 and 2022-2023. A search was conducted on August 15, 2023, at 08:05 W.I.B. Researchers use R and Rstudio, VOSViewer, and Microsoft Excel tools to analyze citations, document content, and networks. R and Rstudio devices version 4.2.2 are used to analyze bibliometric databases.²² VOSViewer is a valuable software for creating network visualizations obtained from general terms used in specific fields that want to be researched.²³ This research uses VOSViewer to analyze, evaluate, and visualize all information that has been collected, such as author bibliography, institution, journal, country, keywords, and others.²⁴

¹⁹ Ilham Muhammad et al., “Analisis Bibliometrik: Penelitian Augmented Reality Dalam Pendidikan Matematika,” *JIPM (Jurnal Ilmiah Pendidikan Matematika)* 11, no. 1 (2022): 141, <https://doi.org/10.25273/jipm.v11i1.13818>.

²⁰ B.M. Gupta and Sujit Bhattacharya, “Bibliometric Approach towards Mapping the Dynamics of Science and Technology,” *DESIDOC Bulletin of Information Technology* 24, no. 1 (2004): 3–8, <https://doi.org/10.14429/dbit.24.1.3616>.

²¹ Yufeng Chen and Biao Zheng, “What Happens after the Rare Earth Crisis: A Systematic Literature Review,” *Sustainability (Switzerland)* 11, no. 5 (2019): 1–26, <https://doi.org/10.3390/su11051288>.

²² Miftahul Jannah, Hakiman, and Syahrul Ramadhan, “Bibliometric Analysis of Islamic Education Research Development in Scopus International Database Publications 2018-2022,” *SHAHIH: Journal of Islamicate Multidisciplinary* 7, no. 2 (2022): 151–68, <https://doi.org/10.22515/shahih.v7i2.6006>.

²³ Nees Jan van Eck and Ludo Waltman, “Software Survey: VOSviewer, a Computer Program for Bibliometric Mapping,” *Scientometrics* 84, no. 2 (2010): 523–38, <https://doi.org/10.1007/s11192-009-0146-3>.

²⁴ David Opeoluwa Oyewola and Emmanuel Gbenga Dada, “Exploring Machine Learning: A Scientometrics Approach Using Bibliometrix and VOSviewer,” *SN Applied Sciences* 4, no. 5 (2022), <https://doi.org/10.1007/s42452-022-05027-7>.

This research was taken through three stages. In the first stage, researchers conduct a literature review of related themes to ensure the research is relevant to the bibliometric topic. Unsustainable scope and purpose will lead to ineffective bibliometric analysis.²⁵ In addition, a literature review helps determine the right keywords and is considered to represent the scope of research.

In the second phase, researchers used boolean operators (TITLE-ABS-KEY (Islamic AND Education) AND TITLE-ABS-KEY (Development) to search Scopus, which yielded 1504 documents. Further filtering is done with boolean operators (LIMIT-TO (DOCTYPE, "ar") AND (LIMIT-TO (LANGUAGE, "English")) to limit only English documents and articles as document types resulting in the final document 656.

The third stage analyzes the final document search using Scopus analysis and R and Rstudio to determine the number of documents per year, documents per year, journals, authors, countries, affiliations, and subjects. Furthermore, network-level analysis of documents with visualization through VOSviewer and Microsoft Excel data processing is carried out. VOSViewer visualization provides data representation in the form of variable maps related to keywords and also has a development opportunity.²⁶

Discussion

Document Analysis

An overview of the collection of 656 documents over 49 years, from 1974 to 2023. The available information includes 656 papers, and the document collection period is 49 years (1974 to 2023). The number of authors involved: 1353 authors; number of single authors: 271 authors; percentage of international authorship collaboration: 11.28%; the total number of references used in such documents is 27,068; average citations per document: 6,032 citations per document. This information provides an overview of the scope, diversity of authors, level of international collaboration, and use of references and citations in document collections over 49 years.

²⁵ Muhamad Subhi Apriantoro, Shafy Garneta Maheswari, and Hudaifah Hudaifah, "At-Taradhi : Jurnal Studi Ekonomi Volume XIII Nomor 2, December 2022 Islamic Financial Research During pandemic: A Bibliometric Analysis Muhamad Subhi Apriantoro Rashifahunnisa 'Mellini Shafy Garneta Maheswari Hudaifa Introduction A Financ" XIII, no. 5 (2022).

²⁶ Fadli Agus Triansyah et al., "Determinants of Teacher Competence in Islamic Education: Bibliometric Analysis and Approach," *Indonesian Journal of Islamic Education Studies (IJIES)* 6, no. 1 (2023): 17–32, <https://doi.org/10.33367/ijies.v6i1.3458>.

Table 1. Primary information about the data

Description	Results
Main information about the data	
Timespan	1974:2023
Sources (Journals, Books, etc)	348
Documents	656
Annual growth rate %	6,96
Document average age	7,01
Average citations per doc	6,032
References	27068
Document contents;	
Keywords plus (id)	684
Author's keywords (de)	2019
Authors	
Authors	1353
Authors of single-authored docs	271
Authors collaboration	
Single-authored docs	281
Co-Authors per Doc	2,23
International co-authorships %	11,28
Document types	
Article	656

Documents by year;

Figure 2 shows a study conducted from year to year. The first study was conducted from 1974 to 1997 and 176 did not experience a specific increase. Research in 2002 had begun to increase but fell again in 2002. From 2004 to 2020, research experienced a definite increase, with a peak in 2020 when the total number of scientific articles produced was 87. Still, from 2020 to 2021, research decreased, although not much, due to factors from the COVID-19 outbreak that hit the entire world and decreased all aspects of human life activities. In 2022, research has increased again, with a total number of scientific articles produced as many as 86, and likewise has decreased very much in 2023 with 26 scientific articles.

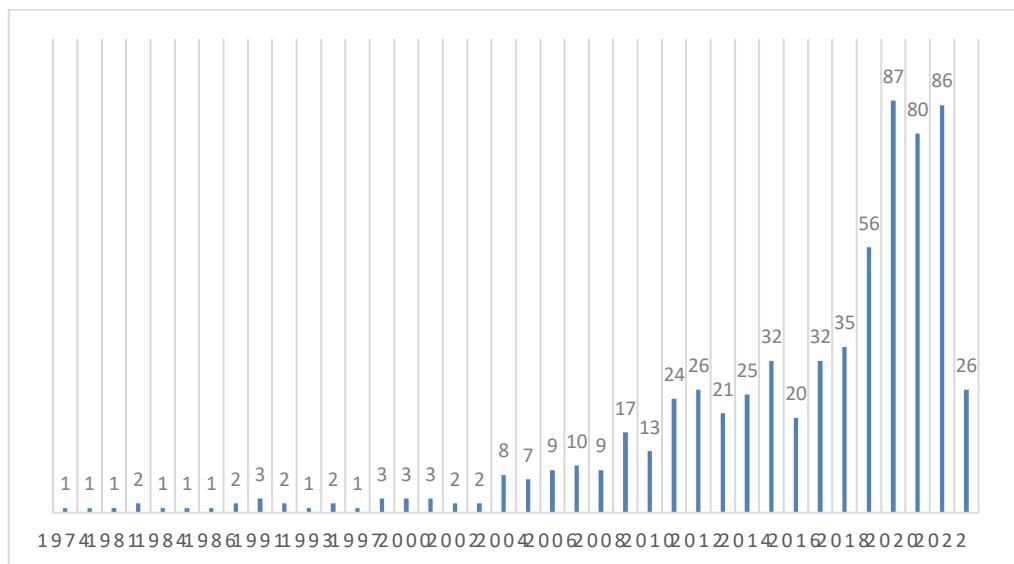


Figure 2. Document by year

The most relevant authors;

Figure 3 shows the top 10 authors most relevant in writing articles about Islamic education development. The first position was held by a writer named Bensaid, B. then followed by Avest, I.T., Nor, M.R.M., Bin Abdulrahman, K.A., Hamzah, M.I., Jamsari, E.A., Kustati, M., Machouche, S., Nemon, N., and Muluk, S occupied the last position.

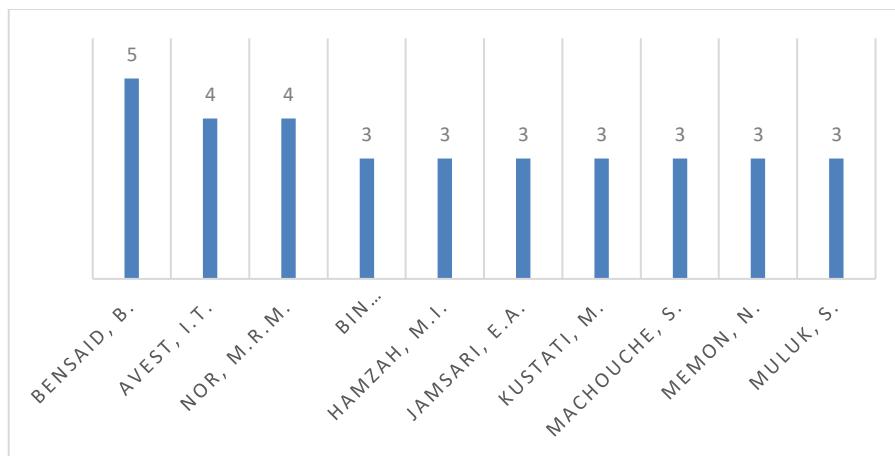


Figure 3. Most relevant authors

Documents by affiliation;

Figure 4 shows the ten institutions that publish the most scientific articles on Islamic education development, where the International Islamic University Malaysia occupies the first place with a total of 23 scientific articles, followed by Universiti Kebangsaan Malaysia and Universiti Malaya with the same number of scientific articles with 21 articles. From the

picture statement below, research that raises the theme of Islamic education development is dominated by the Asian continent.

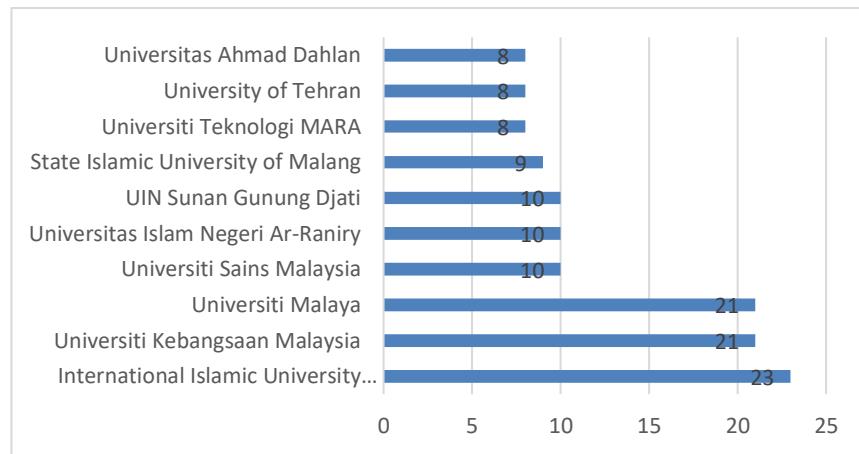


Figure 4. Documents by affiliation

Documents by country;

Figure 5 shows that the country that produces many scientific publications on Islamic education development is the State of Indonesia, with the number of documents produced being as many as 198 documents, followed by the State of Malaysia, which makes as many as 91 documents. From this explanation, it can be seen that Asian countries still hold countries that publish a lot of research on Islamic education development compared to Middle Eastern, Western, and European countries.

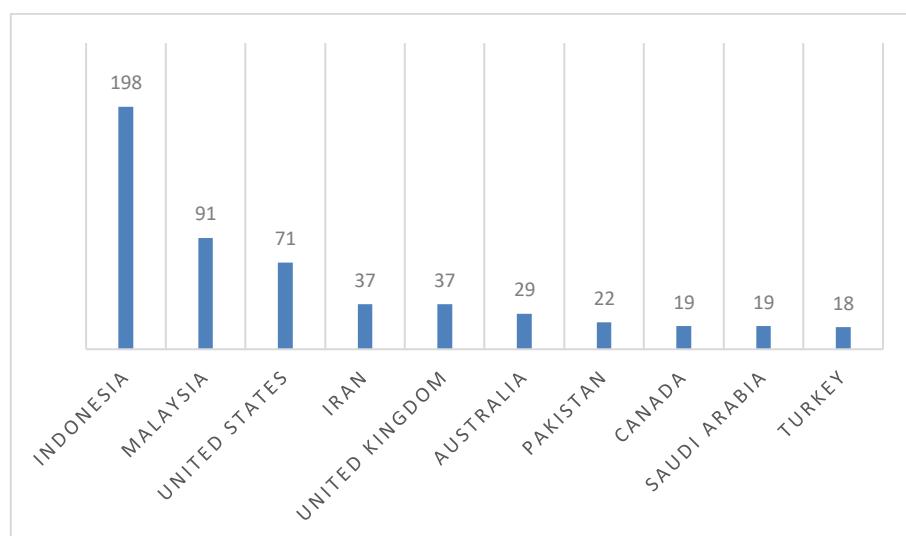


Figure 5. Documents by country

Documents by Source:

Figure 6 shows the most published writing sources on Islamic education development, namely the International Journal of Innovation, Creativity and Change and Religions, with 19 documents, followed by the International Journal of Educational Development, with 12 papers.

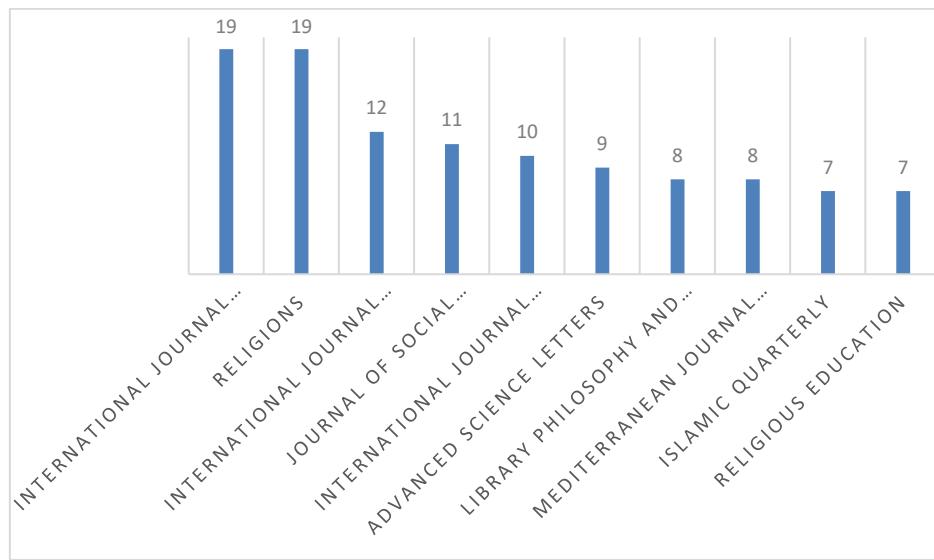


Figure 6. Documents by source

Three-Field Plot:

Figure 7 contains three observed elements: journal publication name, author name, and theme/topic used. The three elements are then connected by gray plot lines that are linked to each other. Based on the journal's name, each journal shows which authors most often contribute to their publications, especially those with the theme of Islamic education development.

The size of the plot shows how much the publication relates to the theme. Based on the picture above, there are three journals. The journal that publishes the most research with the theme of Islamic education development is Religions, displayed in dark red and connected to the author, Avest, I.T. Based on the picture above; there are eight authors. The size of the bar chart shows how many research results were published by each author. Among the seven authors who wrote the most articles on Islamic education development is Nor, M.R.M.

In the third element, each research topic is connected to the author, who publishes many research results on the theme. From the analysis results, there are five keywords:

Islamic education, education, Indonesia, Islam, and curriculum. It shows that the word is closely related to research related to Islamic education development.

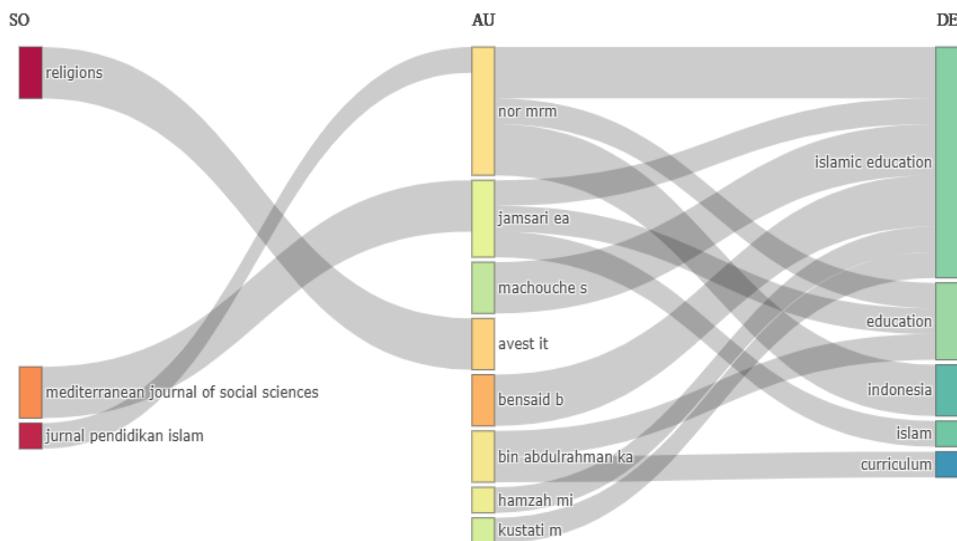


Figure 7. Three field plots

Corresponding Author's Countries;

Figure 8 shows that most Multiple Country Publications come from Indonesia and Malaysia, followed by the U.S.A. Most Single Country Publications come from Indonesia, Malaysia, and the U.S.A. Asian countries mostly dominate the Corresponding Author's Countries in this study.

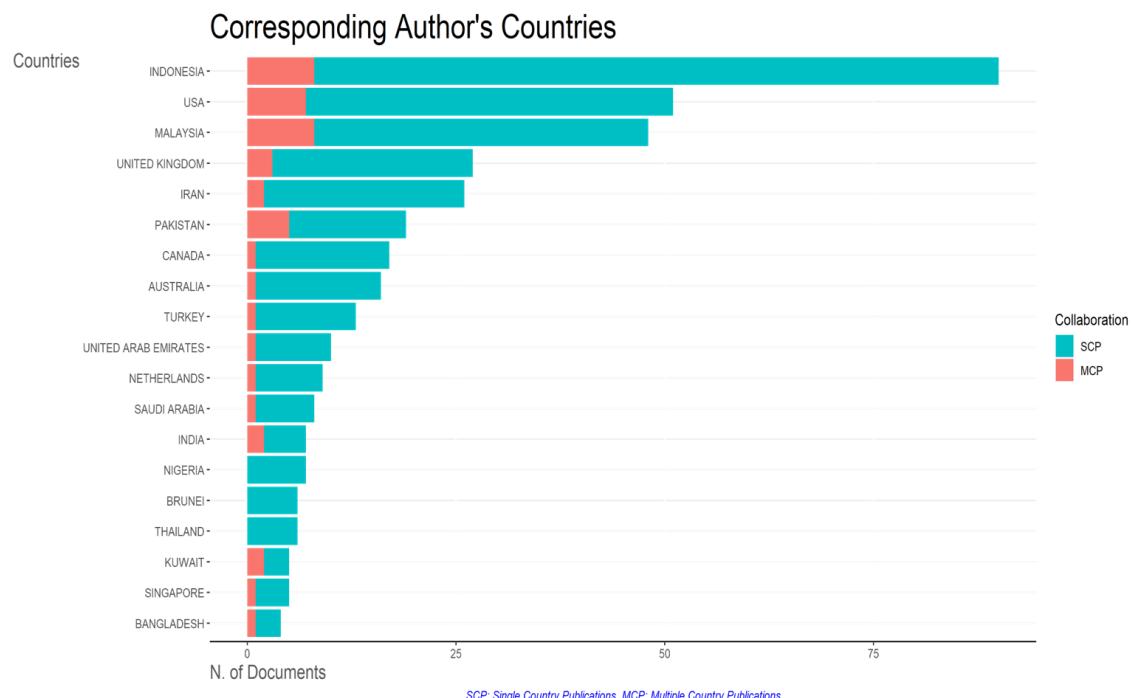


Figure 8. Corresponding author's countries

Most Global Cited Documents;

Table 2 shows that the paper with the most extensive citations is the paper in 2004 with 170 citations. The T.C. per Year of Table 2 above is the largest in Halstead JM, 2004, Comp Educ, which is 8.50. From the table above, it can be concluded that the publication year itself cannot affect T.C. because it can be seen that in the earliest year, 1985, there were 66, and in the current year, 2018, the number of citations only amounted to 49.

Table 2. Most globally cited documents

Paper	Total Citations	T.C. per Year
Halstead Jm, 2004, Comp Educ	170	8,50
Osella F, 2009, J Royal Anthropol Inst	114	7,60
Arat Y, 2010, Third World Q	95	6,79
Somer M, 2007, Third World Q	84	4,94
Sfeir L, 1985, Int Rev Sociol Sport	66	1,69
Jamal Aa, 2006, World Aff	59	3,28
Zine J, 2000, Race Ethn Educ	56	2,33
Richardson Pm, 2004, Int J Educ Dev	55	2,75
Sahin A, 2018, Religions	49	8,17
Thomas Er, 2006, Ethn Racial Stud	49	2,72

Most Local Cited Document;

Table 3 shows that the paper with the largest total local cited was in 2020, with a percentage of 30.00%. The paper that has the most significant ratio is Religions. The table above shows that the year published does not affect the local citation itself because every year, the local citation must always increase and decrease.

Table 3. Most locally cited document

Document	Year	Local Citations	Global Citations	LC/GC Ratio (%)
Halstead Jm, 2004, Comp Educ	2004	19	170	11,18
Sahin A, 2018, Religions	2018	8	49	16,33
Raihani, 2012, Compare	2012	5	19	26,32
Memon N, 2011, Br J Relig Educ	2011	5	24	20,83
Afrianty D, 2012, J Polic Intell Counter Terror	2012	4	27	14,81
Niyozov S, 2011, J Muslim Minor Aff	2011	4	38	10,53
Lafrarchi N, 2020, Religions	2020	3	10	30,00
Tan C, 2007, Educ Citizsh Soc Justice	2007	3	27	11,11
Zuhdi M, 2006, Int J Inclusive Educ	2006	3	21	14,29
Suyadi, 2019, Qudus Int J Islam Stud	2019	2	11	18,18

Network Analytics (Network)

Co Occurents Network Visualization;

Figure 9 shows the occurrence analysis of research related to Islamic Education Development with a minimum cluster of 10. From the picture above, there are 4 clusters formed. In Cluster 1, there are 27 items. In Cluster 2, there are 25 items. In cluster 3, there are 21 items, and in cluster 4, there are 21 items. The picture above shows that the most dominating keyword in Cluster 1 is education, Cluster 2 is Islam, cluster 3 is Islam and Cluster 4 is teaching.

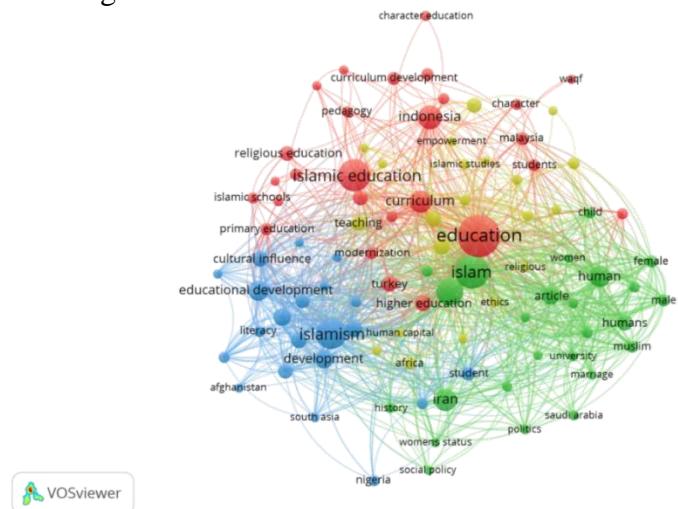


Figure 9. Co-occurrences network visualization

Co-Occurents Overlay Visualization;

Figure 10 shows a keyword network analysis based on an overlay. It can be seen that the keyword curriculum development is being used in the current year. Meanwhile, the keyword development policy has had a relatively long usage since around 2010.

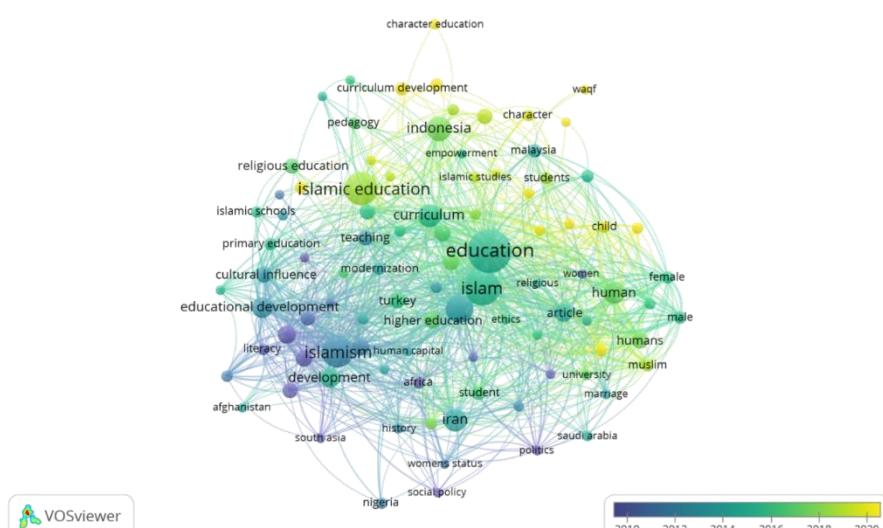


Figure 10. Co-occurrences overlay visualization

Co-Occurrents Density Visualization;

Figure 11 shows that the keywords Islamic education, education, Islam, and religion are often researched. At the same time, rarely explored keywords include character education and *waqf*.

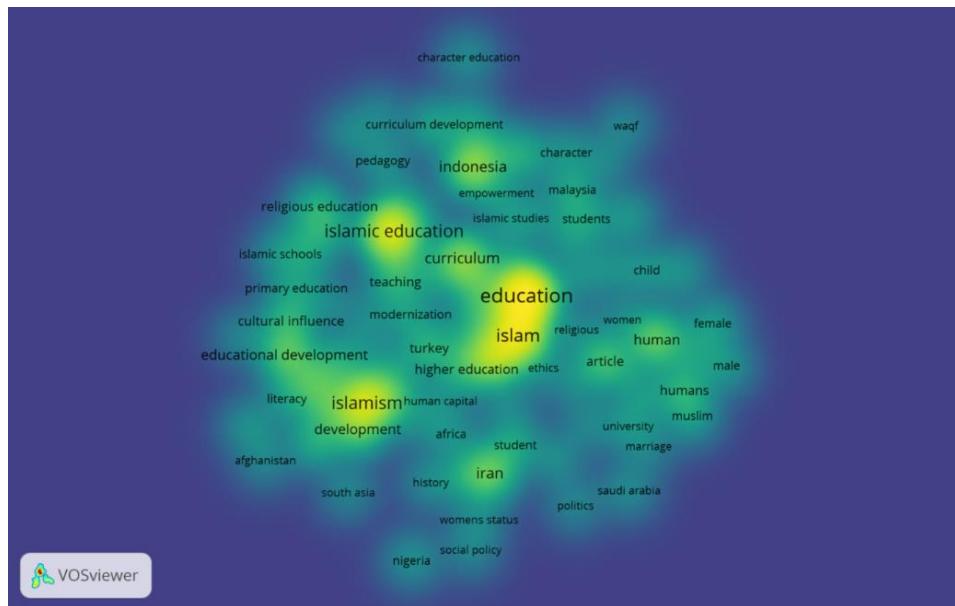


Figure 11. Co-occurrences density visualization

The Occurrences in Each Cluster;

Table 4 shows each cluster's occurrence, representing the main theme in Islamic education research. The theme in the first cluster is the scope of Islamic education development research. The keywords in this first cluster relate to several important areas in the context of education, especially in Indonesia, Malaysia, and Turkey. Education in Indonesia, Malaysia, and Turkey with the keywords "Indonesia," "Malaysia," and "Turkey" shows that being able to compare or understand differences between the education systems of the three countries can include differences in curriculum, approaches to religious education, and modernization of primary education. Islamic and religious education highlights the importance of faith-based education, which may be an important focus in some countries, such as Indonesia, Malaysia, and Turkey.

The theme in the second cluster is about gender in Islamic education, such as the keywords "human," "female," "male," and "human experiment". In Islamic education, human beings, whether male or female, must play an essential role as the main actors. Humanists can relate to humanist opinions or principles that can influence religious views and human life.

The theme in the third cluster is around the development of Islamic education. The keywords in this third cluster are broadly related to Islam, educational development, education policy, students, academic achievement, and economic development. The impact of Islam on Islamic education plays an essential role in developing education in various countries. It is crucial to understand how educational development occurs in different countries by focusing on how education policy affects educational attainment and economic development, including graduation rates, qualifications, and quality of education. Economic development Education also plays an essential role in economic development.

Finally, the theme in cluster four is the empowerment of Islamic education. The keywords contained in this fourth cluster are broadly related to education, Pakistan, pesantren, teaching, gender, Africa, Islamic studies, sustainable development, religion, and human resources. In education, effective teaching methods are fundamental to producing quality human resources. One of them is *pesantren*, which are traditional Islamic educational institutions widely located in Muslim countries, including Indonesia. Empowerment in the world of Islamic education Teachers have an important role in shaping human resources that reflect Islamic values without discriminating against gender. Gender inequality is a global issue that affects education, including Islamic education and development. Empowering women and building gender equality is essential for sustainable development. Investment in human capital through education is vital for sustainable development. Sustainable development is a priority in many African countries, encompassing the role of education and religion in environmental protection. Religion is important in culture and education in many countries, including Pakistan and Africa.

Table 4. The occurrences in each cluster

Keyword	Occurrences	Cluster
Education	100	1
Islamic education	59	1
Indonesia	34	1
Curriculum	29	1
Turkey	14	1
Religious Education	13	1
Malaysia	10	1
Curriculum Development	10	1
Primary Education	8	1
Modernization	8	1
Islam	67	2
Religion	41	2
Iran	27	2
Human	26	2
Article	18	2
Humans	14	2

Keyword	Occurrences	Cluster
Muslim	9	2
Female	9	2
Male	8	2
Human experiment	7	2
Islams	51	3
Educational development	23	3
Development	19	3
Eurasia	17	3
Culture influence	14	3
Educational policy	13	3
Bangladesh	11	3
Student	11	3
Educational attainment	7	3
Economic development	7	3
Learning	15	4
Pakistan	14	4
Pesantren	13	4
Teaching	12	4
Gender	8	4
Africa	7	4
Islamic studies	6	4
Sustainable development	6	4
Religious	5	4
Human capital	5	4

Conclusion

Based on the above data analysis, it can be concluded that 656 documents were collected over 49 years. Covering 1353 authors, 271 single authors, 11.28% international authorship collaborations, and 27,068 references, with an average citation per document alone of 6,032 citations. In 2022, research has increased, with 86 scientific articles produced. The first position is held by the author named Bensaid, B., followed by Avest, I.T., and Nor, M.R.M. The country that has many scientific publications on Islamic education development is the State of Indonesia, with as many as 198 documents produced. The most published source on Islamic education development is the International Journal of Innovation, Creativity and Change and Religions, which has 19 papers. The journal that publishes the most research on Islamic Education Development is Religions with the author Avast. Keywords related to the theme of Islamic education development There are five keywords, among others, namely, Islamic education, education, Indonesia, Islam, and Curriculum.

References

Ainissyifa, H, and A K Nurseha. " Contextualizing Mahmud Yunus' Islamic Education Concept in Madrasah Aliyah." *Jurnal Pendidikan Islam* 8, no. 1 (2022): 87–100.

<https://doi.org/10.15575/jpi.v8i1.19117>.

Al-Khuzaime, K M, N F Al-Zuhair, and D T Al-Mutairi. "The Corona Pandemic Impact on Education: Proposing a Mechanism for Postgraduate Programs at Imam Mohammad Ibn Saud Islamic University (IMSU)." *Journal of Educational and Social Research* 12, no. 4 (2022): 131–45. <https://doi.org/10.36941/jesr-2022-0102>.

Amin, A M, S H Ahmad, Zulkarnaim, and R Adiansyah. "RQANI: A Learning Model That Integrates Science Concepts and Islamic Values in Biology Learning." *International Journal of Instruction* 15, no. 3 (2022): 695–718. <https://doi.org/10.29333/iji.2022.15338a>.

Apriantoro, Muhamad Subhi, Adam Endra Dharma Iskandar, and M Muthoifin. "Analisis Bibliometrik Terhadap Peta Perkembangan Dan Arah Penelitian Wakaf Pada Publikasi Terindeks Scopus Tahun 2020-2022." *Prosiding University Research Colloquium*, 2023, 154–73. <http://repository.urecol.org/index.php/proceeding/article/view/2284/2245>.

Apriantoro, Muhamad Subhi, Shafy Garneta Maheswari, and Hudaifah Hudaifah. "At-Taradhi : Jurnal Studi Ekonomi Volume XIII Nomor 2, December 2022 Islamic Financial Research Directions During Pandemic : A Bibliometric Analysis Muhamad Subhi Apriantoro Rashifahunnisa' Mellinia Shafy Garneta Maheswari Hudaifah Introduction A Financ" XIII, no. 5 (2022).

Ardyansyah, Farid, ismita Citra Dewi D, Nurhayati, Emiliyan Mamuki, and Afif Alfianto. "Pengembangan Lembaga Pendidikan Islam Melalui Pesantren Ekonomi." *Jurnal Pendidikan Dan Konseling* 5, no. 1 (2023): 1349–58.

Arifianto, A R. "The State of Political Islam in Indonesia: The Historical Antecedent and Future Prospects." *Asia Policy* 15, no. 4 (2020): 111–32. <https://doi.org/10.1353/ASP.2020.0059>.

Belmonte, J L, A Segura-Robles, A.-J. Moreno-Guerrero, and M E Parra-González. "Machine Learning and Big Data in the Impact Literature. A Bibliometric Review with Scientific Mapping in Web of Science." *Symmetry* 12, no. 4 (2020). <https://doi.org/10.3390/SYM12040495>.

Boquera, L, J R Castro, A L Pisello, and L F Cabeza. "Research Progress and Trends on the Use of Concrete as Thermal Energy Storage Material through Bibliometric Analysis." *Journal of Energy Storage* 38 (2021). <https://doi.org/10.1016/j.est.2021.102562>.

Chen, Yufeng, and Biao Zheng. "What Happens after the Rare Earth Crisis: A Systematic

Literature Review." *Sustainability (Switzerland)* 11, no. 5 (2019): 1–26.
<https://doi.org/10.3390/su11051288>.

Clarke, C, E R Smith, D Wilde, B Doss, R Bodily, and M Singer. "Demographic Correlations for 100 Most-Cited Authors in Ophthalmic Research; A Bibliometric Study." *Medical Hypothesis, Discovery, and Innovation in Ophthalmology* 9, no. 4 (2020): 215–20.
<https://doi.org/10.51329/mehdiophthal1408>.

Cockcroft, A, N Andersson, D Milne, K Omer, N Ansari, A Khan, and U U Chaudhry. "Challenging the Myths about Madaris in Pakistan: A National Household Survey of Enrolment and Reasons for Choosing Religious Schools." *International Journal of Educational Development* 29, no. 4 (2009): 342–49.
<https://doi.org/10.1016/j.ijedudev.2008.09.017>.

Eck, Nees Jan van, and Ludo Waltman. "Software Survey: VOSviewer, a Computer Program for Bibliometric Mapping." *Scientometrics* 84, no. 2 (2010): 523–38.
<https://doi.org/10.1007/s11192-009-0146-3>.

Ghafur, H S. "Analysis of I.C.T. Development Supporting the E-Learning Implementation on Nadhatul Ulama Universities in Indonesia." *Journal of Social Studies Education Research* 12, no. 4 (2021): 121–43.

Gupta, B.M., and Sujit Bhattacharya. "Bibliometric Approach towards Mapping the Dynamics of Science and Technology." *DESIDOC Bulletin of Information Technology* 24, no. 1 (2004): 3–8. <https://doi.org/10.14429/dbit.24.1.3616>.

Ilham, Dodi. "Menggagas Pendidikan Nilai Dalam Sistem Pendidikan Nasional." *Didaktika: Jurnal Kependidikan* 8, no. 3 (August 1, 2019): 109–22.
<https://doi.org/10.58230/27454312.73>.

Jannah, Miftahul, Hakiman, and Syahrul Ramadhan. "Bibliometric Analysis of Islamic Education Research Development in Scopus International Database Publications 2018–2022." *SHAHIH: Journal of Islamicate Multidisciplinary* 7, no. 2 (2022): 151–68.
<https://doi.org/10.22515/shahih.v7i2.6006>.

Kenan, S. "The Formative Period of the Modern University ." *Osmanli Arastirmalari - Journal of Ottoman Studies* 2015, no. 45 (2015): 333–67.
<https://doi.org/10.18589/oa.570017>.

Muhammad, Ilham, Febrinna Marchy, Husnul Khatimah Rusyid, and Dadan Dasari. "Analisis Bibliometrik: Penelitian Augmented Reality Dalam Pendidikan Matematika." *JIPM (Jurnal Ilmiah Pendidikan Matematika)* 11, no. 1 (2022): 141.

<https://doi.org/10.25273/jipm.v11i1.13818>.

Munadi, M, and Khuriyah. "The Extracurricular Activities and Student Development of Secondary School: Learning from Indonesia." *International Journal of Education and Practice* 11, no. 1 (2023): 23–34. <https://doi.org/10.18488/61.v11i1.3245>.

Oyewola, David Opeoluwa, and Emmanuel Gbenga Dada. "Exploring Machine Learning: A Scientometrics Approach Using Bibliometrics and VOSviewer." *S.N. Applied Sciences* 4, no. 5 (2022). <https://doi.org/10.1007/s42452-022-05027-7>.

Pihar, A. "Modernization of Islamic Religious Education in the Era of Society 5.0." *Journey-Liasion Academia and Society* 1, no. 1 (2022): 1–12.

Rahman, I K, N S Rosidah, and A M Tamam. "Development of a Scale for Measuring the Competencies of Islamic Counselors." *Islamic Guidance and Counseling Journal* 6, no. 1 (2023): 28–44. <https://doi.org/10.25217/igcj.v6i1.3133>.

Ren, X, K C Terwel, J Li, and P.H.A.J.M. van Gelder. "A Science Mapping Review of Human and Organizational Factors in Structural Reliability," 4724–31. Safety and Security Science Group, Faculty of Technology, Policy and Management, Delft University of Technology, Netherlands, 2020.

Sijamhodžić-Nadarević, D. "Contribution of Islamic Religious Education to Intercultural Values in Pluralistic European Cultures: Insights from Bosnia and Herzegovina." *Religions* 14, no. 4 (2023). <https://doi.org/10.3390/rel14040453>.

Surahman, C. "Tafsīr Tarbawī in Indonesia: Efforts to Formulate Qur'an-Based Islamic Education Concept." *Jurnal Pendidikan Islam* 5, no. 2 (2019): 211–26. <https://doi.org/10.15575/jpi.v5i2.5915>.

Susanti, Linna, Muhamad Fiqhussunnah Al Khiron, Abid Nurhuda, Siti Jaroyatun Ni'mah, and Muhammad Al Fajri. "The Reality of Tarbiyah, Ta'lim, and Ta'dib in Islamic Education" 35, no. 2 (2023). <https://doi.org/10.23917/suhuf.v35i2.22964>.

Tambak, S, Hamzah, M Y Ahmad, E L Siregar, D Sukenti, M Sabdin, and R B Rohimah. "Discussion Method Accuracy in Islamic Higher Education: The Influence of Gender and Teaching Duration." *Cakrawala Pendidikan* 41, no. 2 (2022): 507–20. <https://doi.org/10.21831/cp.v41i2.40644>.

Triansyah, Fadli Agus, Yusupov Komaliddin Bakhtiyor Ugli, Ilham Muhammad, and Nurhoiriyah Nurhoiriyah. "Determinants of Teacher Competence in Islamic Education: Bibliometric Analysis and Approach." *Indonesian Journal of Islamic Education Studies (IJIES)* 6, no. 1 (2023): 17–32. <https://doi.org/10.33367/ijies.v6i1.3458>.

Wanto, D, J A Jamin, and R Ali. "Asserting Religiosity in Indonesian Muslim Urban Communities through Islamic Education." *Journal of Islamic Thought and Civilization* 12, no. 2 (2022): 116–35. <https://doi.org/10.32350/jitc.122.09>.

Yasin, A. Fatah, Abdulloh Chakim, Samsul Susilawati, and Suaib H. Muhammad. "Development of Islamic Religious Education Learning in Forming Moderate Muslims." *Tafkir: Interdisciplinary Journal of Islamic Education* 4, no. 1 (2023): 22–36. <https://doi.org/10.31538/tijie.v4i1.227>.

Zheng, L, K Chen, and W Lu. "Bibliometric Analysis of Construction Education Research from 1982 to 2017." *Journal of Professional Issues in Engineering Education and Practice* 145, no. 3 (2019). [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000412](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000412).



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