The evolution of Middle East migration research: A bibliometric analysis

Isa KALAYCI
Assoc. Prof. Dr., Hatay Mustafa Kemal University, Faculty of Science and Arts, History Department, Hatay, Turkey
E-posta: dodurga46@gmail.com
Orcid Id: http://orcid.org/0000-0003-2043-5127

Omer Cem KARACAOGLU
Assoc. Prof. Dr., Aydın Adnan Menderes University, Faculty of Education, Aydın, Turkey
Post-Doctoral Researcher, University of Delaware, Disaster Research Center, Newark, Delaware, USA
E-posta: omercem@udel.edu
Orcid Id: http://orcid.org/0000-0003-2474-5106

Aysen YETER
Teacher, National Education Directorate, Icel, Turkey
E-Posta: ayyeter70@hotmail.com
Orcid Id: http://orcid.org/0000-0005-0548-0730

Abstract---The geography of Southwest Asia, known as the Middle East, is rich in historical, socio-economic and political diversity. This geography is also the scene of many migration events due to factors such as conflicts arising from internal and external causes, internal strife, disasters, struggles for influence, inequality of opportunity, and insecurity created by authoritarian regimes. This study examines the evolution of 2914 academic studies on the Middle East and migration between 1947 and 2024 through bibliometric analysis. During this period, a significant increase in the number of citations has been observed, and this increase has been especially evident since the early 2000s. We also found an increase in the number of articles on the subject, especially since the 2010s. As a result of the review, collaboration between authors, productivity and the influence of specific authors were emphasized. The effectiveness of countries such as the USA, UK and France in scientific research is evaluated, and the importance of countries such as Greece, Kenya and New Zealand is emphasized. In conclusion, this study provides important clues for

understanding the evolution of research on the Middle East and migration and for developing strategies for future research.

Keywords---Migration, refugee, disaster, education, Middle East, bibliometric analysis

Introduction

Today, "Middle East" and "migration" issues occupy an important place in the academic world as well as in the agendas of international politics and humanitarian aid (Irrera, 2020; Kaygusuz, 2021; Köksoy, 2016; Zaccara & Gonçalves, 2021). The cradle of the first written civilizations, the birthplace of three major monotheistic religions, and rich in underground resources, the Southwest Asia Region (Middle East) has a historical depth that fosters diverse and contradictory views (Yerasimos, 1994; Gunay, 2005). While the region is known for its rich diversity in historical, social, political and economic terms, it is also characterized by ongoing conflicts, waves of migration and refugee crises. The complexity of the Middle East requires a multidimensional approach to understand migration movements and their causes. Migrations here have more differences than similarities with European migrations. Therefore, it is important to take into account that Middle Eastern migrations have their own unique dynamics.

The Middle East is a complex place with geopolitical, cultural, ethnic and religious diversity (Stewart, 2012). Geographically located in southwest Asia, the Middle East lies at the crossroads of Africa-Asia-Europe and is home to important waterways, energy resources and trade routes (Amanat, 2012). The Middle East directly influences the political and economic processes unfolding in the world; it is the product of the intertwined interests of major and regional powers, and the end of the Cold War and the dissolution of the Soviet Union gave rise to a much broader globalization that allowed the main actors of world politics to reshape the regional space south of Russia's borders. This process led Turkey, Iran and Saudi Arabia in the region to engage in a covert and irreconcilable struggle for regional leadership (Karyakin, 2020).

The region is home to a variety of religious and ethnic groups, which sometimes leads to conflicts and tensions. Moreover, the fact that the Middle East has been ruled by different civilizations throughout history causes cultural and historical complexity and sometimes even chaos (Hannoum, 2021). Due to its rich oil and natural gas reserves, the Middle East is also of great importance in international relations (Salameh & Chedid, 2020). Politically, for these reasons, many Middle Eastern countries have complex domestic and foreign policy dynamics, and as such, the region is often the focal point of international relations.

The Middle East is a region of great importance for world history and culture. It has hosted many civilizations and witnessed important events throughout history (Jamali et al., 2020; Karagüzel, 2020; Wilson, 2021). The history of this region has often interacted with migration movements. The historical significance of the Middle East begins with the fact that it has been home to various civilizations. In

ancient times, Mesopotamia was home to important civilizations such as the Sumerians, Babylonians and Assyrians (Erkurt, 2021; Cotterell, 2022). At the same time, it was also within the sphere of influence of other important civilizations such as Egypt and Anatolia. Another important period in the history of the Middle East is the birth and spread of Islam. Beginning in the 7th century with the influence of the Islamic prophet Muhammad, Islam spread rapidly in the Middle East and shaped the region. With the spread of Islam, great Islamic states such as the Arab Empire were established and the cultural and religious landscape of the Middle East changed significantly (Hoyland, 2020; Kennedy, 2022). Another important period in the history of the Middle East was the Crusades. Taking place in the 11th-13th centuries, the Crusades were Europe's military operations in the Middle East. These campaigns were linked to the efforts of Christians to reclaim what they considered to be the Holy Land and had a demographic impact on ethnic and religious dynamics in the region (Christie, 2020; Morton, 2020).

Migration has played an important role in the history of the Middle East since ancient times. Throughout history, the region has witnessed the coming together of different cultures, religions and ethnic groups. Migration has been driven by wars, occupations and economic reasons (Hashemi et al., 2020; Mikac & Wahdyudin, 2021). Especially in the last century, the Middle East has experienced large waves of migration due to political instability, civil wars and economic hardship (Durac & Cavatorta, 2022). Today, the Middle East is still seen as a transit route or destination point for many migrants. Refugees from Syria, Iraq, Afghanistan and other countries constitute a significant portion of the migrant population in the Middle East (Peptan, 2020; Zuntz, 2021). These migration flows, together with the political, economic and humanitarian crises in the region, continue to shape the history and demography of the Middle East.

Throughout history, the Middle East has both received and given migration. This is due to various historical, geographical, economic and political factors (Blaydes & Paik, 2021). Especially since ancient times, the strategic location and fertile soils of the Middle East have led various empires and civilizations to migrate to this region (Menek, 2020). For example, fertile lands such as Mesopotamia and the Nile River valleys have enabled various civilizations to settle (Dowlah, 2020). In addition, with the birth of Islam, pilgrimages and visits to the holy cities of Mecca and Medina have also brought intense migration to the region (Talmon-Heller, 2022). However, the Middle East has also witnessed migration at various periods throughout history (Della Puppa et al., 2021). In particular, factors such as wars, invasions and conquests, natural disasters and droughts have forced Middle Eastern peoples to leave their countries (Salameh et al., 2021). For example, the collapse of the Ottoman Empire and the wars that followed caused many people to migrate from the Middle East (Kalaycı, 2018; Yüksel, 2021). In recent years, there have been large-scale waves of migration from the Middle East due to the Syrian Civil War, conflicts in Iraq and other regional instability (Balsari et al., 2020). For these reasons, the Middle East is a region that has both received and given migration throughout history. These migratory movements have significantly affected the demography, culture and political dynamics of the region.

Today, the Middle East is at the center of many migratory movements. Factors such as political instability, civil wars, economic hardships and human rights violations in the region have forced many people to leave their homes. Conflicts and crises in Syria, Iraq, Afghanistan, Yemen and some other Middle Eastern countries have led to the emergence of a large number of refugees (Asfour, 2020). This has led to large waves of migration from the region to Europe and other regions. Especially in 2015, with the intensification of the civil war in Syria, the influx of refugees to Europe reached a huge scale. In addition, migrants from the Middle East have placed a huge burden on neighboring countries such as Turkey, Lebanon and Jordan (Barazesh, 2021).

It can be said that migration waves in the Middle East have deeply affected the social, economic and political dynamics in the region. It causes problems such as resource depletion, imbalances in the labor market and social unrest in the countries where migrants arrive (Karakaya, 2020). At the same time, coexistence problems, economic pressures and social conflicts arise in the countries where migrants go (Ibrahim, 2023; Salehyan & Savun, 2024; Yıldırım, 2023). In addition to the Middle East, these migration waves have brought with them many political, economic and social problems in Europe, Turkey and other regions. Therefore, the international community needs to develop and implement effective policies to resolve the crises in the region and protect the rights of migrants. In addition, international cooperation and support is also important for stabilizing the region and protecting human rights. This international cooperation and support will not only contribute to the solution of the migration problem in the Middle East, but also enhance the stability and prosperity of the region.

Today, Middle Eastern migration for various reasons has spread to different regions around the world. By compiling information from the literature, several important factors affecting the distribution of migration are listed below (Jolof et al., 2022; Lama et al., 2021; Putri et al., 2023; Tsegay, 2023; Tsetseri et al., 2024):

1. *Near geography and climate change:* The Middle East is located at the crossroads of Europe, Africa and Asia. Therefore, geographical proximity to neighbouring regions causes migration from the Middle East to be concentrated in regions such as Europe, North Africa and Central Asia.
2. *Economic and political reasons:* Political instability, wars, conflicts and economic difficulties in the Middle East cause people to find it difficult to live in their home countries. This situation prepares the ground for various countries from the Middle East.
3. *Immigration and refugees:* Conflicts and wars in the Middle East trigger refugee flows. Events such as the civil war in Syria, instability in Iraq and conflicts in Yemen have caused millions of people to flee their countries. These refugees usually seek refuge in Europe, Turkey and neighbouring Arab countries. Countries that neglect border security are most affected.
4. *Economic opportunities:* Some Middle Eastern countries offer economic opportunities because of their rich resources of oil and gas, and others due to entrepreneurship and easy citizenship. Job opportunities in these countries can be an attraction for people wishing to migrate from the Middle East to other regions.

For these reasons, migration from the Middle East has often spread to various regions and has become an important factor influencing migration flows around the world. In such a topical issue, scientists, researchers and educators have an important role to play.

The responsibility of researchers and educators to ensure that migrants have access to education in the context of migration in the Middle East should not be underestimated. Migrants are often among educationally disadvantaged groups. Educational scientists can provide policy recommendations, direct resources and develop strategies to improve the effectiveness of educational programs to increase migrants' access to education. Researchers and educators should also take responsibility for cultural adaptation and communication. Helping immigrants to adapt to new cultural environments is an issue that educational scientists emphasize. By working in areas such as language education, cultural awareness programs and social integration supports, they can strengthen the social and academic integration of immigrants. Otherwise, the culture of large migrant groups may be influenced by religious factors, which may affect and change the country of origin. This can lead to cultural shock and cultural deformation. It is also known that migrants often face psychosocial difficulties.

Scientists can respond to the emotional needs of migrant students and their families by providing psychosocial support and counseling services. If evaluating the effectiveness of policies and programs related to the education of migrants is not an area that scientists can work on, there may be greater problems with conscious education. Evaluating implemented education programs and examining research can inform policy makers and help them make more effective policy decisions. Unveiling and developing the talents and potentials of migrants should also be an issue that researchers and educational scientists should pay attention to with scientific methods. In this context, studies such as adapting teacher education programs to immigrant students, diversifying learning environments and developing strategies that respond to different learning needs can be focused on teaching cultural values in the integration of immigrants. Efforts to identify areas where scientists, researchers and especially educational scientists can contribute to migrants' education are important to ensure migrants' access to equal opportunities in education and to strengthen their integration into society. Due to this importance, knowing the status and future trends of scientific research will shed light on the field of curriculum development in education, especially for researchers and educators.

Considering the above-mentioned issues, it can be said that the importance of academic research on the Middle East and migration is increasing (Daoudy et al., 2022; Jolof et al., 2022). Through studies on these issues, scholars strive to understand the dynamics of the past and to develop strategies and policy recommendations for the future. However, a systematic approach needs to be adopted in order to make a comprehensive assessment of the general trends, emerging themes and growth trends of research in this field. This research makes an important contribution by examining the evolution and general trends of academic research on the Middle East and migration. This study provides an important opportunity to understand how scholarly research on the Middle East and migration has changed and evolved from the past to the present. This

evolution can help identify past weaknesses and future opportunities for the field. Assessing how academic interest in these topics has changed over time and its impact on scholarly impact is important for understanding how the topics are perceived in the scientific world as well as their social and political contexts.

In order to create a roadmap for future research on the Middle East and migration, we wish to guide future work by identifying which areas need more research and which areas need more focus. We hope to provide valuable insights to policy makers on migration and refugee issues in the Middle East and help mitigate negative societal impacts. We have come together as researchers from different disciplines to encourage collaboration and academic communication between authors and we want this collaboration to be an example for more comprehensive and effective studies. For these reasons, this research is of great importance in understanding the general landscape of scholarly research on the Middle East and migration, providing directions for future research, and offering important insights for policy makers.

The main purpose of this research is to provide a resource for new researchers by revealing the evolution of academic research on the Middle East and migration between 1947 and 2024. In this context, it is aimed to determine the general trends and growth trends of research in this field by evaluating the publications in scientific databases through a bibliometric analysis. The findings of the study will deepen the existing literature on this subject, guide future research and provide important clues to policy makers.

Method

This study used a bibliometric analysis to examine the evolution of academic publications on the Middle East and migration between 1947 and 2024 and the general trends of scholarly research on these topics. Bibliometrics is a methodology that examines the quantitative and qualitative characteristics of scientific publications (Comarú et al., 2021; Gauffriau, 2021; Moral-Muñoz et al., 2020). In this analysis, the widely used "Web of Science" and "Scopus" scientific databases were searched for publications on "Middle East" and "migration". The keywords identified for the research were "Middle East" and "migration". In the first step, search queries with specific keywords were used to identify the publications within the scope of the research. These search queries led to the creation of a large dataset covering publications on the Middle East and migration. This data set covers the period between 1947 and 2024. Due to the migration events of World War II, the scholarly world's interest in this subject increased, which played a decisive role in the scope of our research. In total, 8931 different authors were identified in 2914 documents. The bibliometric characteristics of these publications (e.g. distribution by year, number of citations, place of publication, collaboration between authors) were then analyzed. An analysis of the number of citations by year shows that there has been a significant increase since the early 2000s. It was also found that the average number of citations increased and the number of citable years decreased.

Once the dataset was created, we conducted a detailed analysis on the publications filtered and analyzed according to certain criteria. In this analysis,

we established various parameters such as the distribution of publications by years, changes in the number of citations, collaboration between authors, contributions of countries and trends of keywords over time. Finally, by evaluating and interpreting the findings, we drew conclusions and developed recommendations. These recommendations will identify potential areas for future research and provide guidance for policy makers.

Bibliometric analysis is an important tool for identifying general trends and growth trends in research on the Middle East and migration by providing a comprehensive review based on large amounts of data. There is sometimes confusion between bibliometric analysis, meta-analysis and classical literature review. Donthu et al. (2021) explained the differences between bibliometric analysis and meta-analysis and classical literature reviews. Meta-analysis provides an overall summary of a field by processing a large amount of literature, but it is less diverse and can be affected by factors such as publication bias that affect the results. On the other hand, classical literature reviews have a narrower scope and are often more suitable for limited or niche research areas. Bibliometric analysis examines the relationships between different research components and reveals the structural and social characteristics of a field. These analyses use quantitative techniques to avoid or reduce qualitative biases, which reduces the risk of interpretation bias by different researchers. The bibliometric analysis we used in this research offers an effective approach to understand the evolution of scientific research, assess the current state of the field and develop strategies for future work.

Data Collection: Database selection

In this study, we preferred Web of Science and Scopus databases, which are recognized for their scientific impact and visibility. This is because Web of Science (WoS) and Scopus are among the most preferred and recognized databases for academic research. We explained our reasons for choosing these two databases by using different references (Alviz-Meza et al., 2022; Donthu et al., 2021; Farooq, et al., 2023; Duplančić Leder et al., 2023; Pranckutė, 2021):

1. **Comprehensiveness**: Both Web of Science and Scopus are comprehensive databases and cover academic publications from a variety of disciplines. This enables the research to access data from different scientific fields and make a more comprehensive analysis. In addition, both databases cover international publications, allowing the research to access academic literature from around the world and to evaluate it from a broad perspective.
2. **High Quality Data**: Both databases contain high quality, reviewed and reliable academic publications, enabling the research to draw solid conclusions based on reliable data.
3. **Citation Indexing**: Both WoS and Scopus offer citation indexing, allowing the researcher to assess how often a particular publication is cited and the academic impact of that publication.
4. **Timeliness and Continuity**: Scopus and Web of Science are regularly updated databases, enabling research to access the most up-to-date data and conduct analyses based on the latest information available.

For these reasons, we chose recognized databases, such as WoS and Scopus, to provide data relevant to the purpose of this research. These databases increase the credibility of the research and provide more robust support for the results. "The data obtained from a search conducted on May 4, 2024 using the keywords "Middle East" and "migration" formed the basis of this research. WoS and Scopus stand out in our research as a reliable source of data for scholarly research on the Middle East and migration.

Data Analysis: Bibliometric analysis

Bibliometric analysis, which we used in this research, aims to examine the quantitative and qualitative characteristics of scientific publications in the literature by using numerical data (Comarú et al., 2021; Gauffriau, 2021; Farooq, et al., 2023; Moral-Muñoz et al., 2020). This analysis is often used to understand publication trends in academic research, author productivity, citation frequency, and interdisciplinary interaction (Alnajem et al., 2021; Anugerah et al., 2022; Saha et al., 2020). The main components of the bibliometric analysis we used in this research are as follows:

1. **Number of Publications and Trends**: Bibliometric analysis helps to determine the distribution and trends of publications in a particular subject or discipline over time. This is important for understanding in which periods have seen more publications and how the popularity of a particular topic has changed.
2. **Citation Analysis**: Citation analysis is used to determine how often a publication is cited and therefore how great its academic impact is. This is important for assessing how a publication is perceived and recognised by other researchers.
3. **Author and Institutional Analysis**: Bibliometric analysis examines the publications and citation upake of specific authors and academic institutions to assess the influence of these individuals and institutions in the field. This helps to identify leading figures and important research centres in the field.
4. **Co-Citation Analysis**: This analysis examines cases where two or more specific publications are frequently co-cited in the same works. This helps to identify relationships between specific topics and interdisciplinary interaction.
5. **Cluster Analysis**: Cluster analysis helps to identify how publications in a particular subject or discipline are grouped around certain themes or subtopics. This is used to understand the different subfields of the field and the relationships between these subfields.

A combination of these methods provides researchers with a comprehensive overview to understand the overall landscape of the literature on a particular topic and to develop strategies for future research. Bibliometric analysis, which we used in this research, is an important tool for understanding the general trends and growth patterns of academic research on the Middle East and migration issues.

We conducted a detailed data analysis on scientific publications obtained from Web of Science and Scopus databases. We searched using the keywords 'Middle

East' and 'Migration'. The data collected as a result of this analysis includes various parameters such as article titles, author information, citation counts, publication dates and abstracts.

In the data analysis phase, we evaluated this information with various statistical methods, which we used in accordance with the stages of bibliometric analysis (Linnenluecke et al., 2020; Romanini et al., 2021; Moral-Muñoz et al., 2020). First, we analyzed quantitative data, such as the number of articles and publication dates, obtained as a result of searches based on specific keywords. We used this data to assess the development and increasing interest in research topics over time. In addition, our analysis of the number of citations of articles obtained from searches on specific words provided information to identify important studies in the literature and the impact of these studies. The citation analyses provided us with important information to identify which topics are important to other researchers and pioneering studies in this field. The analysis of the data provides a comprehensive overview to support the main findings of the study and to better understand the historical and current state of the literature on the Middle East and migration. This analysis enhanced the credibility of the research and provided a more solid foundation for the conclusions drawn.

Findings

In the data analysis phase, we examined the collected information using a variety of statistical methods. First, we reviewed quantitative data such as the number of articles and publication dates obtained as a result of searches based on specific keywords. The data were used these data to assess the temporal evolution and increasing interest in research topics. We also conducted analyses on the citation counts of articles obtained from searches related to specific keywords. The findings of the citation analysis helped to understand important studies in the literature and identify influential studies in the field. By examining the citation patterns, we were able to identify which topics other researchers focused on and the important contributions in the field. In this way, we were able to examine the data obtained in depth and support the main findings of the research. Furthermore, through these analyses, it is possible to assess the scientific impact of the research and gain a more comprehensive understanding of the situation in the literature on the Middle East and migration issues. The distribution of the number of citations by year is given in Table 1.

Table 1. Total annual citations by year (1947-2024)

Year	Mean T Cper Art	N	Mean T Cper Year	Citable Years
1947	1	1,00	0,01	78
1959	5	1,00	0,08	66
1960	3	1,00	0,05	65
1963	5	1,00	0,08	62
1964	3	1,00	0,05	61
1967	0	1,00	0,00	58
1969	14	3,00	0,25	56
1970	0	2,00	0,00	55

Year	Mean T Cper Art	N	Mean T Cper Year	Citable Years
1971	5	2,00	0,09	54
1972	38	1,00	0,72	53
1974	8	1,00	0,16	51
1975	19,5	2,00	0,39	50
1976	0	1,00	0,00	49
1977	8,12	8,00	0,17	48
1978	5,62	8,00	0,12	47
1979	7,18	11,00	0,16	46
1980	8,86	14,00	0,20	45
1981	5,56	9,00	0,13	44
1982	3,53	17,00	0,08	43
1983	9,05	20,00	0,22	42
1984	7,12	26,00	0,17	41
1985	3,5	20,00	0,09	40
1986	7,9	31,00	0,20	39
1987	5,62	26,00	0,15	38
1988	7,38	29,00	0,20	37
1989	16,39	28,00	0,46	36
1990	14,6	25,00	0,42	35
1991	7,62	26,00	0,22	34
1992	12,51	37,00	0,38	33
1993	16,91	34,00	0,53	32
1994	14,88	26,00	0,48	31
1995	28,3	33,00	0,94	30
1996	29,74	19,00	1,03	29
1997	15,26	23,00	0,54	28
1998	37,35	34,00	1,38	27
1999	37,33	21,00	1,44	26
2000	90,73	22,00	3,63	25
2001	67,25	16,00	2,80	24
2002	79,92	25,00	3,47	23
2003	55,81	36,00	2,54	22
2004	48,47	64,00	2,31	21
2005	46,11	53,00	2,31	20
2006	36,9	73,00	1,94	19
2007	46,64	90,00	2,59	18
2008	43,68	96,00	2,57	17
2009	46,51	106,00	2,91	16
2010	36,6	67,00	2,44	15
2011	32,81	81,00	2,34	14
2012	29,27	73,00	2,25	13
2013	30,59	71,00	2,55	12
2014	31,37	83,00	2,85	11
2015	36,18	100,00	3,62	10
2016	32,12	119,00	3,57	9
2017	15,74	148,00	1,97	8
2018	15,49	156,00	2,21	7
2019	13,82	186,00	2,30	6

Year	Mean T Cper Art	N	Mean T Cper Year	Citable Years
2020	11,81	159,00	2,36	5
2021	6,66	183,00	1,67	4
2022	2,62	186,00	0,87	3
2023	1,46	144,00	0,73	2
2024	0,26	34,00	0,26	1

N =number of publications

MeanTCperArt = average total citations per article

MeanTCperYear = average total citations per year

This analysis assesses the change over time of 2914 academic publications on Middle East and migration issues between 1947 and 2024, as shown in Table 1. Throughout the period analyzed, there is a marked increase in the total number of annual citations, with a particularly significant increase in the number of citations since the early 2000s. This may indicate that research on the Middle East and migration issues is gaining more attention and impact. There is also an increase in the average number of citations over the years, which may suggest that these topics are receiving more academic attention and have a wider impact. However, it is noteworthy that although the number of publications increased in some years, the average number of citations remained low. This may show that the impact of research conducted during that period may have been limited or that the topics received less attention in the academic community in general. Declining citation years may indicate that older publications are now less cited or are no longer current and relevant. These findings are important for understanding the general trends in research on the Middle East and migration and for creating a roadmap for future research.

Scientific production

Basic information on documents, authors and collaborations by year is provided to understand scientific production. Figure 1 shows the number of articles published by year.
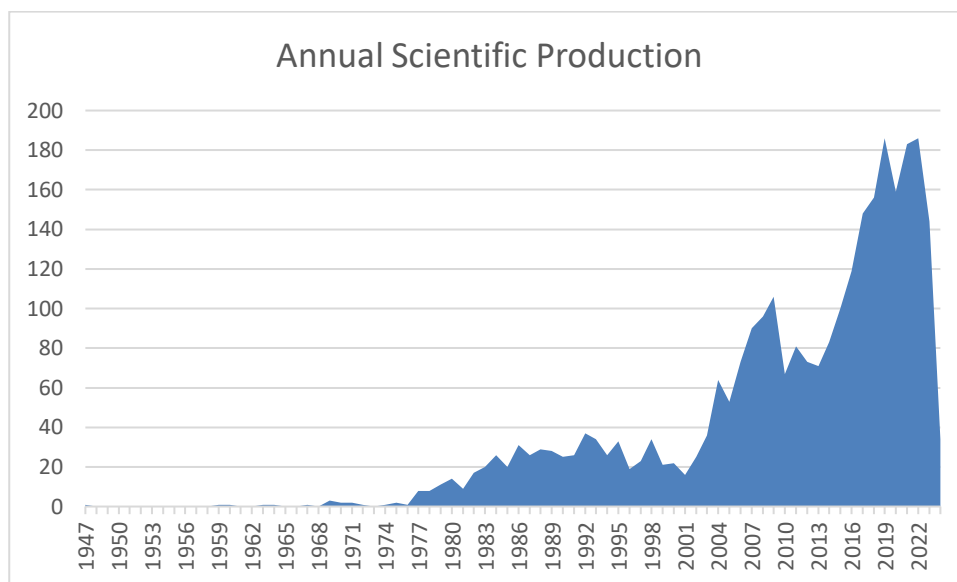
Figure 1. Total number of articles per year (1947-2024)

Figure 1 analyzes the number of articles published by year. The period 1947-1969 is characterized by generally low numbers of articles, and in some years no articles were published at all. This period reflects a time when scientific research and publications were less common and resources were limited. In the period 1970-1989, the number of articles increased, with a particularly marked increase in the 1980s. During this period, there may have been more investment in scientific research and more emphasis on scientific publications. The 1990s represent a period of continued growth in the number of articles. The increase in scientific research and publications may have contributed to the growth and development of the scientific community. In the 2000s and beyond, there was a significant increase in the number of articles, especially since the 2010s. The increase in this period can be attributed to the expansion of scientific research, advancement of technology and increased opportunities for scientific communication. Overall, Figure 1 shows how scientific publications have changed and grown over time. The increasing number of articles reflects the growing importance of scientific research and the growth of the scientific community.

Table 2. Scientific production from 1947 to 2024

Main information about the data	
Timespan	**1947:2024**
Sources (Journals, Books, etc)	1562
Documents	2914
Annual Growth Rate %	4,69
Document Average Age	13,9
Average citations per doc	23,06
References	110548
Document Contents	
Keywords Plus (ID)	10891

Main information about the data	
Author's Keywords (DE)	5904
Authors	
Authors	8931
Authors of single-authored docs	850
Authors Collaboration	
Single-authored docs	1054
Co-Authors per Doc	3,89
International co-authorships %	16,37

The data in Table 2 assess the scholarly production on the Middle East and migration between 1947 and 2024. The analysis covers a fairly broad period between 1947 and 2024, which means that scholarly developments in the field have been examined over a long period of time. In total, 2914 documents were retrieved from 1562 sources. This large dataset shows that research on the Middle East and migration has been extensively analyzed and compiled from a variety of sources. The annual growth rate was reported to be 4.69%, indicating that scholarly work in the field has increased and evolved over time. The average age of the documents is 13.9 years. This finding reflects the fact that research on the Middle East and migration is relatively new and has received more attention in recent years. The average number of citations per document was 23.06. This shows that research in the field is generally highly cited and influential. In total, 110,548 references were reported. This reflects the richness and depth of the literature on the Middle East and migration. Regarding the content of the documents, there are 10,891 Keywords Plus and 5,904 Author Keywords. This finding provides an important resource to better identify and understand the work of researchers. In total, there are 8,931 authors, with an average of 3.89 co-authors per document. Furthermore, international collaboration was reported to be 16.37%. This shows that researchers in the field tend to work together and that international collaboration is important. These data provide an important insight into the general characteristics of scholarly research on the Middle East and migration and the size of the field.

Most prolific writers

The analysis of the most prolific authors in the field of the Middle East and migration allows identifying scientific contributions as well as assessing research trends, collaborative networks and scientific performance. This analysis identifies key players in the field, shedding light on the development of the research field, while evaluate opportunities for strategic communication and collaboration. The analysis of the most prolific authors on the Middle East and migration is presented in Figure 2 and Table 3.
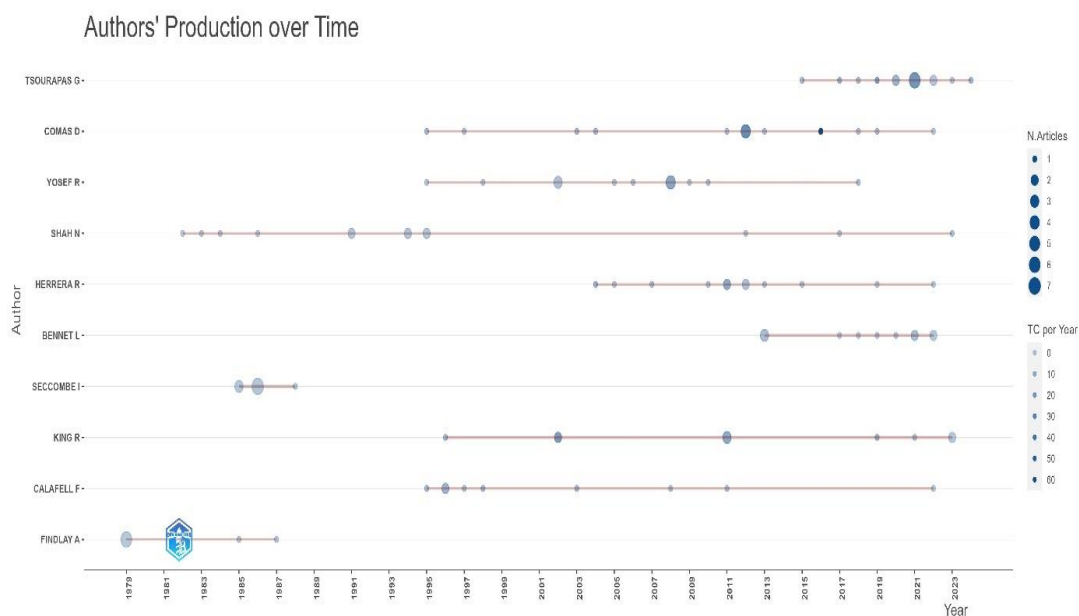
Figure 2. Production of the most prolific authors over time (1947-2024)

Figure 2 shows the number of articles published, the total number of citations (TC) and the annual citation rate for specific authors by year. While some authors publish a large number of papers and receive many citations, others tend to publish and receive fewer citations. Tsourapas G, for example, exhibits a publication and citation pattern that varies by year. There is a significant citation uptake, especially in 2019 and 2021. Comas D has a significant citation intake, especially in 2012. He tends to publish articles and receive citations in other years as well. Yosef R, There is a significant citation uptake in 2008 and the number of publications varies over the years. Shah N, The number of publications and citations is low, yet there is an increase in 2012. Herrera R, significant citation uptake, especially in 2011, but also in other years.

Bennet L has a citation intake that varies over the years. Seccombe I, with a significant citation intake in 1986 and an increase in the number of publications between 1985 and 1988. King R has a citation intake that varies over the years, particularly notable in 2002 and 2011. Calafell F and Findlay A have a citation intake that varies from year to year. These findings demonstrate the academic influence of particular authors and the prevalence of their work, as well as the tendency to collaborate with other authors. The authors' document production and citations over time are given in Table 3.

Table 3. Authors' production over time (total documents and citations)

AUTHOR	year	freq	TC	TCpY
TSOURAPAS G	2015	1	60	6
TSOURAPAS G	2017	1	62	7,75
TSOURAPAS G	2018	1	25	3,571
TSOURAPAS G	2019	1	97	16,167

AUTHOR	year	freq	TC	TCpY
TSOURAPAS G	2020	2	42	8,4
TSOURAPAS G	2021	6	97	24,25
TSOURAPAS G	2022	2	2	0,667
TSOURAPAS G	2023	1	1	0,5
TSOURAPAS G	2024	1	7	7
COMAS D	1995	1	187	6,233
COMAS D	1997	1	60	2,143
COMAS D	2003	1	116	5,273
COMAS D	2004	1	120	5,714
COMAS D	2011	1	35	2,5
COMAS D	2012	4	368	28,308
COMAS D	2013	1	33	2,75
COMAS D	2016	1	540	60
COMAS D	2018	1	16	2,286
COMAS D	2019	1	20	3,333
COMAS D	2022	1	1	0,333
YOSEF R	1995	1	10	0,333
YOSEF R	1998	1	5	0,185
YOSEF R	2002	3	70	3,043
YOSEF R	2005	1	16	0,8
YOSEF R	2006	1	25	1,316
YOSEF R	2008	4	276	16,235
YOSEF R	2009	1	1	0,063
YOSEF R	2010	1	28	1,867
YOSEF R	2018	1	21	3
SHAH N	1982	1	0	0
SHAH N	1983	1	10	0,238
SHAH N	1984	1	26	0,634
SHAH N	1986	1	9	0,231
SHAH N	1991	2	35	1,029
SHAH N	1994	2	33	1,065
SHAH N	1995	2	23	0,767
SHAH N	2012	1	10	0,769
SHAH N	2017	1	6	0,75
SHAH N	2023	1	5	2,5
HERRERA R	2004	1	181	8,619
HERRERA R	2005	1	8	0,4
HERRERA R	2007	1	50	2,778
HERRERA R	2010	1	25	1,667
HERRERA R	2011	2	194	13,857
HERRERA R	2012	2	40	3,077
HERRERA R	2013	1	18	1,5
HERRERA R	2015	1	11	1,1
HERRERA R	2019	1	1	0,167
HERRERA R	2022	1	0	0
BENNET L	2013	3	64	5,333
BENNET L	2017	1	0	0
BENNET L	2018	1	2	0,286
BENNET L	2019	1	5	0,833

AUTHOR	year	freq	TC	TCpY
BENNET L	2020	1	5	1
BENNET L	2021	2	19	4,75
BENNET L	2022	2	1	0,333
SECCOMBE I	1985	3	25	0,625
SECCOMBE I	1986	7	43	1,103
SECCOMBE I	1988	1	40	1,081
KING R	1996	1	193	6,655
KING R	2002	2	470	20,435
KING R	2011	3	196	14
KING R	2019	1	57	9,5
KING R	2021	1	14	3,5
KING R	2023	2	1	0,5
CALAFELL F	1995	1	187	6,233
CALAFELL F	1996	2	291	10,034
CALAFELL F	1997	1	60	2,143
CALAFELL F	1998	1	158	5,852
CALAFELL F	2003	1	116	5,273
CALAFELL F	2008	1	43	2,529
CALAFELL F	2011	1	35	2,5
CALAFELL F	2022	1	1	0,333
FINDLAY A	1979	6	8	0,174
FINDLAY A	1982	1	2	0,047
FINDLAY A	1985	1	3	0,075
FINDLAY A	1987	1	1	0,026

FREQ: FREQUENCY (NUMBER OF PUBLICATIONS BY THE AUTHOR IN A GIVEN YEAR)
TC: TOTAL CITATIONS (AUTHOR'S TOTAL NUMBER OF CITATIONS)
TCPY: AVERAGE CITATIONS PER YEAR (AUTHOR'S AVERAGE NUMBER OF CITATIONS PER YEAR)

The data in Table 3 show in detail how prolific different authors have been on Middle East and migration issues in different years and the number of citations they have received. The table provides frequency data on how many documents different authors published in different years. Some authors published published a great number of papers in certain years, while others published less. The total number of citations and the average number of citations per year are given for each author. This finding shows how cited and influential the authors' publications are. Some authors seem to have increased or decreased their performance over time. This finding shows how the work of specific authors has changed over time. The variation in the performance of different authors is striking. Some authors receive only a few citations per year, while others may receive hundreds of citations. Some authors publish alone, while others publish in collaboration. This shows that researchers tend to work together and that collaboration is common. These findings provide an important resource for understanding the performance of different authors over time and which authors are prominent in research on the Middle East and migration issues. Based on the data presented in Figure 2 and Table 3, we analyzed the most prolific authors on Middle East and migration issues and examined the publication and citation patterns of specific authors.

Their document production and citations over time provide an important source for assessing the prevalence and impact of their work. While some authors regularly publish documents and receive significant citations, others publish at a slower pace or receive fewer citations. This analysis is valuable for understanding which authors are prominent in research on the Middle East and migration issues and how they contribute to the development of the field. The frequency distribution (Lokta's law) of scholarly productivity related to the Middle East and migration is shown in Figure 3.
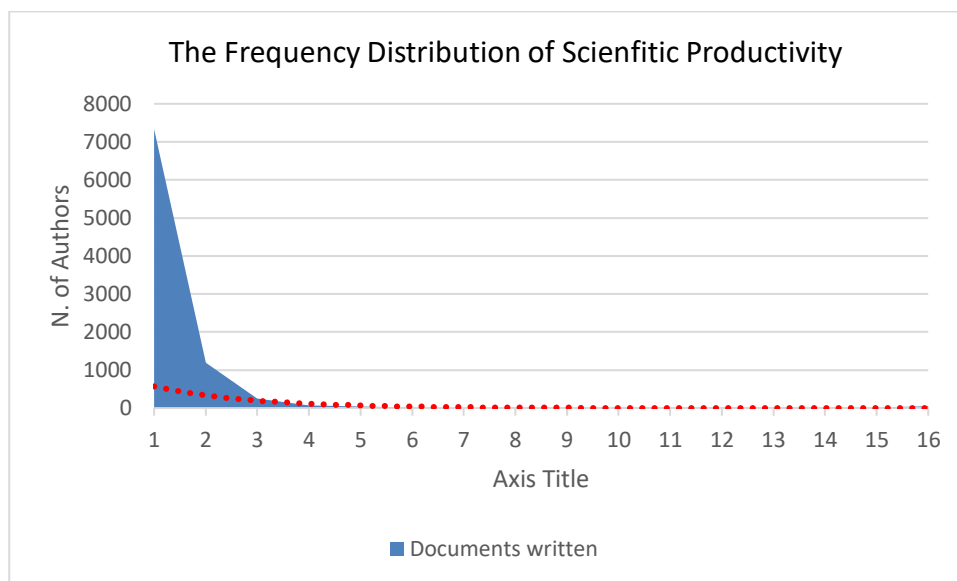

Figure 3. Frequency distribution of scientific productivity (Lokta's law)

Lokta's law shows the frequency distribution of scientific productivity according to the number of authors. Figure 3 shows Lokta's law and scientific productivity on Middle East and migration issues. Lokta's law is a model often used to explain the distribution of natural phenomena and social phenomena. The most common case is when a document is owned by a single author. This accounts for 82% of total documents. This finding is a common situation where individual researchers usually produce and publish their own work. Documents with two authors account for about 13% of the total documents. It indicates the frequency of collaborative research and partnerships. Documents with three and four authors are less common, but still represent a significant proportion. This finding may indicate the presence of larger research groups and teamwork. Documents with five and six authors are less common and may reflect collaboration and coordination between larger groups. Papers with nine or more authors are quite rare. This finding can often be attributed to multidisciplinary and comprehensive research projects. These interpretations are important for understanding how scholarly research on the Middle East and migration issues is distributed according to the number of authors, and for understanding collaboration and interaction in this field. Table 4 is presented to more effectively interpret the productivity of authors through Lokta's law.

Table 4. Authors' production through Lokta's law

Documents written	N. of Authors	Proportion of Authors
1	7333	0,821
2	1189	0,133
3	258	0,029
4	72	0,008
5	39	0,004
6	17	0,002
7	5	0,001
8	4	0
9	5	0,001
10	1	0
11	2	0
12	1	0
13	1	0
14	2	0
16	1	0

Table 4 presents the authors' production of scholarly productivity on the Middle East and migration issues, as indicated by Lokta's law. Lokta's law is a model used to explain how documents published on a given topic are distributed according to the number of authors. The situation where a single author owns a given document represents the most common situation, accounting for 82% of total documents. This is a common situation in which individual researchers usually produce and publish their own work. Documents with two authors account for about 13% of the total documents. This indicates the frequency of collaborative research and partnerships. Documents with three and four authors are less common, but still represent a significant proportion. This finding may indicate the existence of larger research groups and teamwork. Documents with five and six authors are less common and may reflect collaboration and coordination between larger groups. Papers with nine or more authors are quite rare and can often be associated with multidisciplinary and comprehensive research projects. These interpretations are important for understanding how scholarly research on the Middle East and migration issues is distributed according to the number of authors, and for understanding collaboration and interaction in this field. The results of Lokta's law help us to better understand the overall productivity in a given period, showing that the number of authors decreases rapidly as the number of documents increases. It appears that most authors produce a limited number of documents, but a small number of authors produce more documents. These data support the interpretation that productivity in the research field is usually concentrated by a few authors and that most authors have a lower productivity. To better interpret this productivity, it may be useful to look at the status of authors according to the H_index criterion. Therefore, the most productive authors according to H_index are shown in Figure 4.
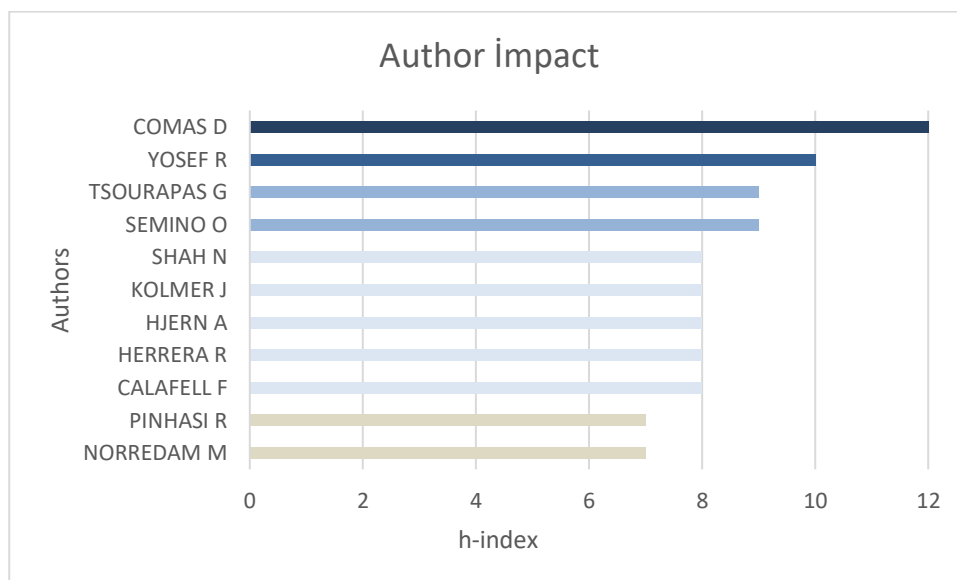
Figure 4. Most productive authors according to H_index

H-index stands for Hirsch index, a metric used to measure the effectiveness and impact of a researcher's publications. An H-index value means that at least h publications of a researcher have been cited at least h times. As seen in Figure 4, COMAS D is the author with the highest H-index value. This finding indicates that his publications and citations are highly influential and pioneering. He may have a significant academic influence, especially on the Middle East and migration issues. YOSEF R is another important researcher with the highest H-index value coming after COMAS D. His work seems to have attracted considerable attention and citation. SEMINO O, together with YOSEF R and TSOURAPAS G, is the author with the highest H-index values. This may indicate that he has had a significant influence in the Middle East and in the field of migration. TSOURAPAS G is another researcher with a high H-index value. His work may have played an important role in determining the scientific influence in this field. HERRERA R is another important researcher and has a high H-index value. This indicates that he may have made a significant contribution to the Middle East and migration issues. While other authors also have significant H-index values, those with the highest values, such as COMAS D, YOSEF R, SEMINO O and TSOURAPAS G, can be considered as the leading figures in the field. These researchers may have made significant contributions to scholarly research and literature on the Middle East and migration.

Most cited documents

For articles on the Middle East and migration, there is a wide variation in citation counts and local/global citation ratios. The normalized local and global citations of articles are an important measure to assess their impact. The impact of articles is assessed through citation counts and local/global citation ratios, and these factors reveal the importance of particular articles. The most cited articles are presented in Figure 5.
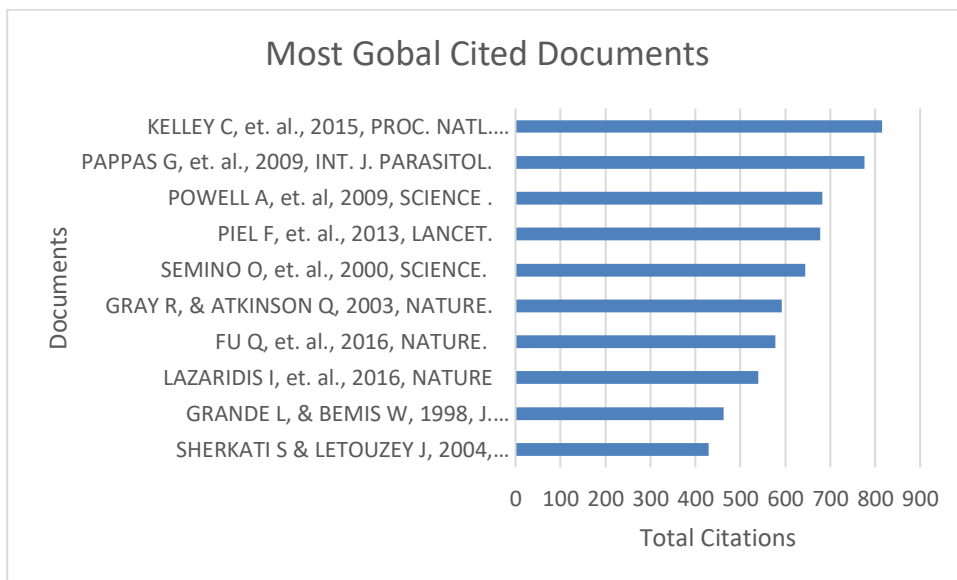
Figure 5. Most cited documents (1947-2024)

Figure 5 shows the most cited documents published in different scientific journals. These documents, published in specific journals, often appear to have made significant contributions in their respective fields and have had a broad impact on the scientific literature. For example, the paper by SCOTT E, et al. published in Nature Genetics in 2016, which can be considered as an important work in the field of genetics, received 27.22 citations. Similarly, the paper by WESOLOWSKI A, et al. published in Proceedings of the National Academy of Sciences of the United States of America in 2015 received 30.50 citations, indicating a significant citation of a study in a multidisciplinary field. The paper by RIZZI L, et al. published in BioMed Research International in 2014, which may have made a significant contribution in the field of medicine and biomedical research, received 38.00 citations. These examples demonstrate that papers published in specific journals have a wide impact and attract considerable attention within the scientific community. The distribution of these documents by year is shown in Figure 6.
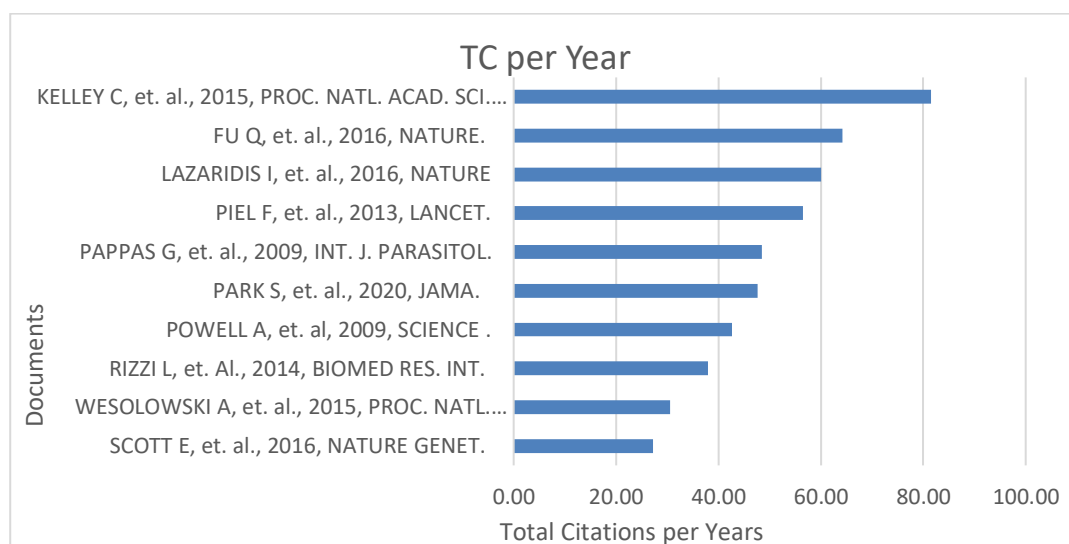
Figure 6. Most cited documents by years (1947-2024)

Figure 6 shows the average number of citations per year (TC per Year) of specific papers. The lowest citation count is 6.23 and the highest is 81.50, indicating that the papers receive a wide range of citations. As a general trend, most of the documents are cited above average. This finding may suggest that the documents have had a significant academic impact overall. Particularly noteworthy is "Climate change in the Fertile Crescent and implications of the recent Syrian drought" with 81.50 citations. Given that there is a large difference between the citation intake of the documents, it could be argued that some documents have attracted more attention than others and have had a wider impact.

Resource dynamics and Bradford's distribution

Resource dynamics and Bradford's distribution play an important role in scientific research. Resource dynamics contribute to the process of understanding existing literature and planning new research. Bradford's distribution provides strategic guidance to researchers by showing in which sources a topic is concentrated. These tools help to keep track of developments in the literature, provide effective access to resources and use limited resources more efficiently. The resource dynamics related to the Middle East and migration are presented in Table 5 and Figure 7.

Table 5. Resource Dynamics (1947-2024)

Year	International Migration	International Migration Review	Plos One	Journal of Ethnic and Migration Studies	Journal of Refugee Studies	Population Bulletin of ESCWA	BMC PUBLIC HEALTH
2024	71	50	46	29	22	21	20
2023	69	50	46	27	22	21	20
2022	66	46	41	25	20	21	20
2021	65	45	38	23	18	21	19
2020	65	43	37	18	15	21	17
2019	65	41	33	15	15	21	15
2018	64	40	31	13	13	21	15
2017	63	39	28	13	13	21	13
2016	61	39	26	10	13	21	12
2015	60	39	24	9	13	21	10
2014	57	39	18	8	13	21	10
2013	57	39	16	8	13	21	10
2012	57	37	10	8	13	21	9
2011	55	37	7	8	13	21	8
2010	54	37	5	6	13	21	6
2009	53	37	4	5	13	21	4
2008	52	33	3	3	12	21	2
2007	51	30	1	3	11	21	1
2006	45	30	0	2	8	21	0
2005	43	29	0	2	7	21	0
2004	43	29	0	2	4	21	0
2003	42	27	0	0	3	21	0
2002	39	27	0	0	3	21	0
2001	37	27	0	0	3	21	0
2000	37	27	0	0	3	21	0
1999	37	27	0	0	2	21	0
1998	35	27	0	0	2	21	0
1997	35	27	0	0	2	21	0
1996	34	27	0	0	2	21	0
1995	32	27	0	0	1	21	0
1994	29	24	0	0	1	20	0
1993	27	23	0	0	0	20	0
1992	27	20	0	0	0	19	0
1991	25	19	0	0	0	18	0
1990	20	17	0	0	0	17	0

Year	International Migration	International Migration Review	Plos One	Journal of Ethnic and Migration Studies	Journal of Refugee Studies	Population Bulletin of ESCWA	BMC PUBLIC HEALTH
1989	16	16	0	0	0	17	0
1988	14	13	0	0	0	15	0
1987	12	12	0	0	0	10	0
1986	12	10	0	0	0	5	0
1985	6	8	0	0	0	1	0
1984	3	7	0	0	0	0	0
1983	3	4	0	0	0	0	0
1982	1	3	0	0	0	0	0
1981	1	2	0	0	0	0	0
1980	1	2	0	0	0	0	0
1979	1	1	0	0	0	0	0
1978	1	1	0	0	0	0	0
1977	1	0	0	0	0	0	0
1976	1	0	0	0	0	0	0

Table 5 presents the citation status of different journals by year, providing important clues about the popularity and impact of journals and the development of the field. First of all, a comparison is made between journals and it is seen that the citation uptake varies. For example, the journal "International Migration" received 71 citations in 2024, while the "Journal of Refugee Studies" received only 22 citations in the same year. This finding may indicate differences in the level of influence and popularity of journals within the field. Moreover, certain trends or shifts in the citation intake of some journals can be observed. While "International Migration" exhibited a stable citation trend, "Journal of Refugee Studies" showed a more fluctuating trend. This finding may reflect the dynamics related to the topics and interaction of the journals. The citation intake of journals by year may reflect the popularity and influence of those journals. If journals receive fewer citations in certain years, it may indicate that research on related topics in those years is less important or considered less important for that journal. In the same way, the number of citations by year can also provide information about the development of a particular field. An increase in the number of citations of a journal may indicate that the research conducted in that journal addresses important and current issues in the field and thus contributes to the development of the field. Finally, the citation status of different journals may also reflect differences in importance between journals. Some journals may have more influence in a particular field and therefore receive more citations. Therefore, Table 5 can be used as an important resource for assessing the position and impact of journals within the field. The Bradford distribution for the topic of the Middle East and migration shows which sources concentrate on the topic in Figure 7.

Figure 7. Distribution of titles according to Bradford law

According to the data in Figure 7, journals that are an important source for researchers publishing on the Middle East and migration issues have been identified. INTERNATIONAL MIGRATION, which stands out as the most cited journal, is seen as a significant reference point in this field. It is followed by INTERNATIONAL MIGRATION REVIEW, which is frequently cited and influential in the field. The wide-ranging open access journal PLOS ONE contributes to Middle East and migration studies, but is cited slightly less frequently than the other journals. JOURNAL OF ETHNIC AND MIGRATION STUDIES and JOURNAL OF REFUGEE STUDIES are among the important journals focusing on ethnic and migration issues. These data offer a useful guide for researchers on which journals to turn to for publishing their work on the Middle East and migration issues.

Most cited journals

This section presents a detailed analysis of the most cited journals on Middle East and migration issues. These journals stand out as valuable resources for researchers to delve deeper into specific topics and access key articles. It also highlights the potential of these journals to provide researchers with in-depth knowledge on a specific topic by demonstrating that these journals offer specialized and concentrated information on specific topics. The total citations and indexed productivity of journals publishing on the Middle East and migration are presented in Table 6.

Table 6. Productivity of journals by total citations and indexes

Element	h_index	g_index	m_index	TC	NP	PY_start
PLOS ONE	22	37	1,222	1410	46	2007
INTERNATIONAL MIGRATION REVIEW	20	34	0,426	1263	50	1978
INTERNATIONAL	19	37	0,388	1540	71	1976

Element	h_index	g_index	m_index	TC	NP	PY_start
MIGRATION AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY	16	20	0,533	651	20	1995
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	15	15	0,5	1976	15	1995
BMC PUBLIC HEALTH	13	20	0,722	771	20	2007
JOURNAL OF ETHNIC AND MIGRATION STUDIES	13	26	0,619	690	29	2004
JOURNAL OF REFUGEE STUDIES	13	22	0,419	577	22	1994
GEOARABIA	12	14	0,444	1106	14	1998
SCIENTIFIC REPORTS	10	18	0,909	338	18	2014
HUMAN BIOLOGY	9	15	0,237	237	15	1987
AMERICAN JOURNAL OF HUMAN GENETICS	8	8	0,258	658	8	1994
ANNALS OF HUMAN BIOLOGY	8	12	0,229	159	13	1990
EUROPEAN JOURNAL OF HUMAN GENETICS	8	10	0,381	488	10	2004
EUROPEAN JOURNAL OF PUBLIC HEALTH	8	11	0,4	337	11	2005
MIDDLE EAST REPORT	8	11	0,25	129	15	1993
QUATERNARY SCIENCE REVIEWS	8	8	0,381	227	8	2004
HEREDITY	7	8	0,212	123	8	1992
JOURNAL OF IMMIGRANT AND MINORITY HEALTH	7	15	0,412	225	15	2008
JOURNAL OF PETROLEUM GEOLOGY	7	8	0,179	365	8	1986

Table 6 is an important source for assessing the productivity and impact of journals publishing on the Middle East and migration. Total citation counts (TC) play a critical role in determining the impact of journals; for example, PLOS ONE and International Migration have high total citation counts. Indices such as h_index, g_index and m_index are important metrics for measuring the impact of journals and reflect the level of citation of journals' publications. The productivity of journals is assessed based on factors such as the number of publications and the year of publication. The table shows the impact of journals in different disciplines besides Middle East and migration studies, indicating the interdisciplinary approach of this topic The fact that different journals have different indexes and productivity levels shows the diversity of the field and the contributions of journals. This data provides guidance for researchers in identifying which journals are important and in which journals to publish their work.

Most productive countries

Articles on the Middle East and migration are analyzed in this section according to the number of citations by country and by various years. The analysis can be used as an indicator to understand a country's effectiveness and success in the field of scientific research, but other factors (e.g. research funding, quality of universities and research institutions, research policies, etc.) should also be taken into account.
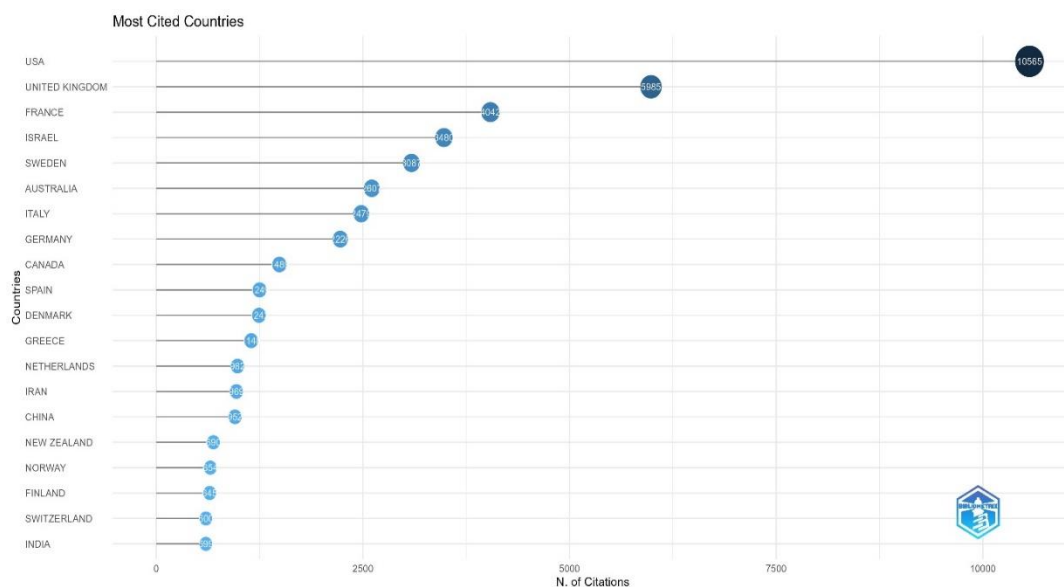

Figure 8. Most cited countries

Figure 8 is an important source of data showing the activity of different countries in scientific research and their average article citations. According to this data, the United States of America (USA) has the highest total number of citations, with 10,565 total citations and an average of 31.30 article citations. In second place is the United Kingdom, with 5,985 total citations and an average of 27.80 article citations. France has the third highest average number of citations, with 4,042 total citations and an average of 45.40 article citations. This data shows that each country's academic impact and performance in scientific research is different.

Countries such as Greece, Kenya and New Zealand have very high average citation counts. The research conducted in these countries is often of great interest to the academic community. Countries such as Denmark, Italy and Spain also have outstanding average citation counts. Research conducted in these countries is usually to have international recognition internationally. Countries such as Turkey, India and Russia have low average citation counts. Research in these countries is generally less internationally recognized. Some countries' research receives few citations on average. This may indicate that their scientific publications are generally less highly regarded or that their scientific research infrastructure may not yet be developed. Table 7 shows the most cited countries and their average article citations between 1947 and 2024.

Table 7. Most-cited countries (1947-2024)

Country	TC	Average Article Citations
USA	10565	31,30
UNITED KINGDOM	5985	27,80
FRANCE	4042	45,40
ISRAEL	3480	26,80
SWEDEN	3087	28,90
AUSTRALIA	2607	25,10
ITALY	2479	30,60
GERMANY	2226	21,80
CANADA	1489	19,10
SPAIN	1249	27,20
DENMARK	1242	34,50
GREECE	1148	71,80
NETHERLANDS	982	25,20
IRAN	969	20,20
CHINA	952	21,60
NEW ZEALAND	690	86,20
NORWAY	654	19,80
FINLAND	645	29,30
SWITZERLAND	600	27,30
INDIA	599	17,10

Table 7 serves as an important source for assessing country diversity in scientific research and their scientific impact. The USA stands out as the most cited country in the table. It is followed by countries such as the United Kingdom, France, Israel and Sweden. These countries can be characterized as being at the forefront of scientific research and having a wide sphere of influence. The average article citations of countries indicate the influence of scientific research in that country. For example, the high average number of citations of articles in Greece (71.80) emphasizes the country's influence and importance in scientific research, while the lower number of citations in India (17.10) may indicate that the impact of research is more limited. The US is a leader in scientific research, as it is in many other fields. However, other countries also make important contributions. Countries such as European countries and Australia have been influential in scientific research.

Table 7 shows that countries from different geographical regions contribute to scientific research. This emphasizes that scientific research is a global effort and that different countries contribute to scientific knowledge. Some countries have higher article citations compared to others, which may reflect the influence and quality of those countries in scientific research. However, the role of countries with low citation counts in scientific research should not be underestimated, as this may be due to a number of factors and their scientific contributions are not insignificant.

Most-cited universities

According to the documents on the Middle East and migration, the number of articles from specific university institutions was analyzed. The most relevant links to universities are given in Figure 9.
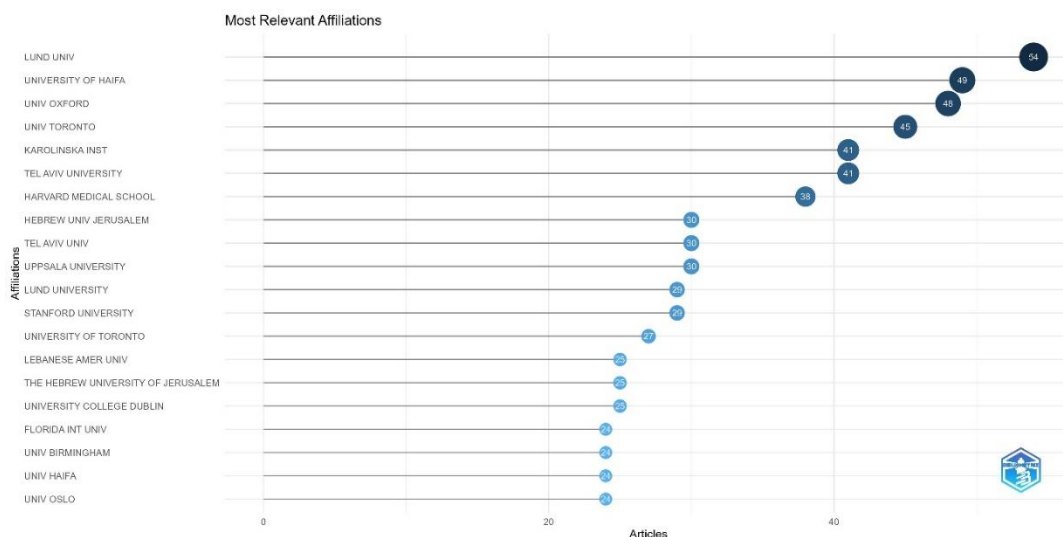

Figure 9. Most relevant connections (1947-2024)

In Figure 9, the prominent institutions where researchers published their studies are identified. Lund University ranked first as the institution with the highest number of articles with 54 articles. It is followed by the University of Haifa and the University of Oxford. It is clear that these institutions make significant contributions to scientific research and academic publications. The Karolinska Institute and Tel Aviv University are ranked fourth with 41 articles respectively, while Harvard Medical School also holds a prominent position in this ranking with 38 articles. Hebrew University (Jerusalem) and Tel Aviv University are also included in the list with 30 articles. These institutions have made valuable contributions in various disciplines, focusing on a wide range of scientific research topics. Moreover, the other institutions included in this list also demonstrate that they are active in the field of academic research and have a significant impact. Based on the number of articles, it can be concluded that these institutions provide valuable information and findings to the scientific community and contribute to the advancement of research. Therefore, these institutions occupy a leading position in scientific publications.

Analysis of keywords

Keyword analysis is important for identifying the focal points of research on the Middle East and migration, understanding trends in the field and identifying relevant topics. It can also identify gaps in the field by assessing which topics are more intensively researched and which topics receive less attention. This information guides researchers in exploring new research avenues and questions. Keyword analysis helps researchers to identify which words to focus on during

the literature review. Thus, they can conduct a more effective literature review. Figure 10 and Figure 11 show the number of publications associated with specific words and the trends of these keywords over time.
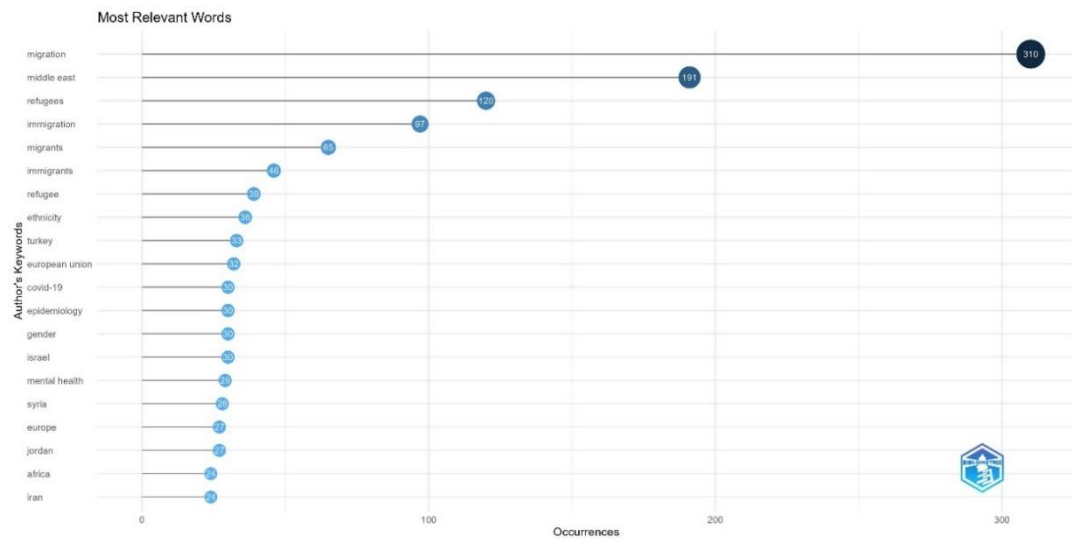

Figure 10. Most frequently used keywords in Middle East and migration articles (1947-2024)

Figure 10 shows the number of times certain words appear. Words such as migration, Middle East, refugees and immigration appear frequently. Especially migration movements in the Middle East and the refugee crises caused by these movements have been among the most discussed topics in recent years. In addition, with the COVID-19 pandemic, topics such as epidemiology and mental health seem to have come to the agenda. The health status of societies, pandemics and similar issues are among the topics that require research and attention. Concepts such as identity, culture and racism are also included in this list. This knowledge is important for understanding the interaction of societies and cultures, social dynamics and diversity. Issues such as wars, environmental changes, health care are also among the frequently recurring keywords. These are important topics for understanding the various challenges facing humanity and societies and how they can respond to these challenges.

Figure 11. Most frequently used keywords according to the word cloud

Figure 11 shows the most frequently used keywords in articles on "Middle East and migration" and their trends over time. According to the data, terms such as "migration", "middle east", "refugees", "refugees", "immigration", and "migrants" are frequently used. These terms indicate that researchers focus on migration movements, refugee crises, integration of migrants and similar issues in their studies. In addition, terms such as "covid-19" and "epidemiology" are also frequently used.

This shows how the COVID-19 disaster has affected migration and displacement processes, and the impact of the disaster on migrant communities and refugees. Geographically, terms such as "Turkey", "Israel", "Syria", "Jordan", "Iran", "Lebanon", "Egypt", "Sweden", and "Saudi Arabia" are frequently mentioned. This shows that countries in and around the Middle East stand out in migration and refugee issues. The fact that the term Turkey stands out the most as a region may be due to due to the fact that it has opened its borders to the Middle East. It should also be investigated whether Turkish citizens, who perceive themselves as a European country, are quite uncomfortable with this situation. Terms such as "ethnicity", "gender", "climate change", "population genetics", "culture", and "identity" also draw attention. These terms indicate that social, cultural and genetic dimensions of migration and displacement are being examined.

Figure 12. Tree map of migration keywords in the Middle East (1947-2024)

Figure 12 shows that topics such as demography, migration, population dynamics and economics are frequently discussed. "Middle East", "migration", "population", "population dynamics", "demography", "developing countries", "economics", "emigration and immigration", While terms such as "employment" are the main topics of research, geographical regions such as "Africa", "Asia", "Europe", "Northern Africa", "North Africa", "Israel", "Egypt" are also frequently mentioned. In addition, terms such as "female", "male", "adult", "adolescent", "middle-ged", "human resources", "mortality", "labor force", "prevalence" play an important role in demographic analysis and the study of social impacts. On the other hand, terms such as "policy", "politics", "socioeconomic factors", "socioeconomic factors", "macroeconomic factors" indicate that policies and economic conditions affecting migration and population dynamics are examined. In particular, it gives an idea of the importance of topics such as migration, the Middle East, refugees, immigration, ethnic groups, Turkey, and the European Union over the years. The topic of migration appears to be on an upward trend over the years. The issue of migration began to be increasingly researched from the 1980s onwards. Especially in recent years, the importance of this issue seems to have increased, especially in recent years, and these findings may confirm concerns among European countries that Turkey is becoming a "refugee warehouse" due to the impact of events and policies in the Middle East and European regions.

In recent years, Turkey has also take an increasing interest in terms related to migration, refugees and the Middle East. This could be a reflection of the measures and policies Turkey has taken in response to the political and humanitarian crises in the Middle East, or it could be interpreted as a quiet acceptance of the European Union's policy of using Turkey as a migration depot, despite fears of a backlash from Turkish public opinion. The findings also reflect a markedly increased interest in the Middle East, refugees, Syria and Iran. This reflects the increase in political and humanitarian crises in the Middle East and migration flows in the region. Overall, these data show that topics such as migration, refugees and the Middle East are gaining increasing interest and importance among researchers and scholars.
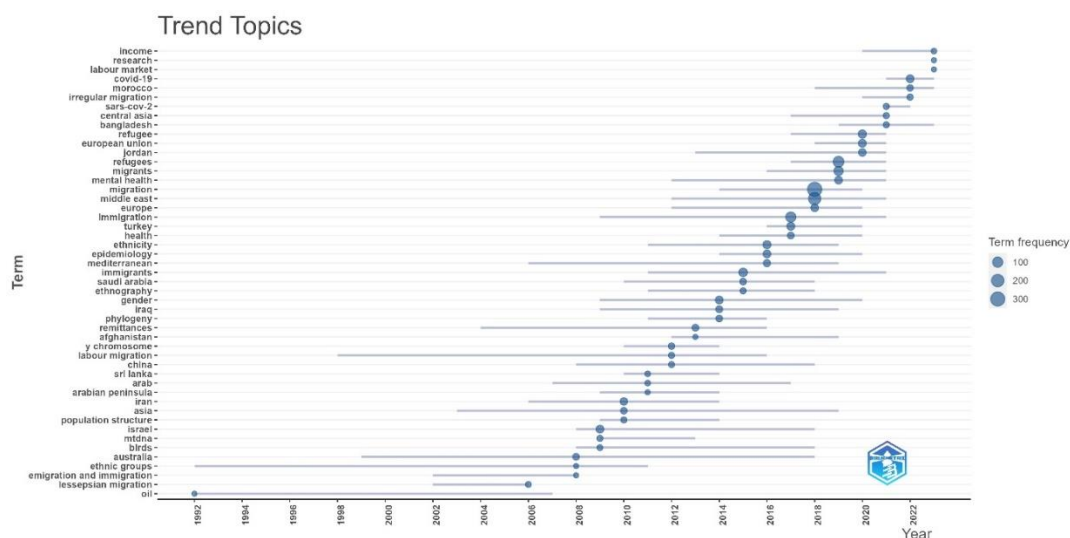
Figure 13. Middle East and migration-related issues

Figure 13 shows how often certain words occur in certain years. The terms "Migration", "Refugees", "Migrants", "Immigration", "Refugee" were frequently used between 2014-2021. Especially between 2017-2021, there is an increase in the terms "Refugees" and "Migrants". The terms "Middle East" and "Europe" have shown a significant increase since 2012. There is an increase in research on migration and refugee crises in the Middle East and Europe. The terms "Covid-19" and "Epidemiology" have shown a significant increase, especially in 2020 and beyond. This finding reflects the importance of pandemic-related health and epidemiology studies. The terms "Gender" and "Mental Health" show an increasing trend from 2012 onwards. This finding indicates that research on gender and mental health is increasing. The terms "Iran" and "Turkey" are increasingly mentioned, especially from the 2010s onwards. This finding indicates an increase in the research of socio-political and economic situations in these countries. Terms such as "European Union", "Bangladesh", "Central Asia", "Morocco", "Irregular Migration" indicate that international relations and regional dynamics are being researched. These trends are closely related to global and regional agenda items and indicate that researchers are focusing on these issues. This section also analyzes which topics are related. Figure 14 shows which keywords occur together.
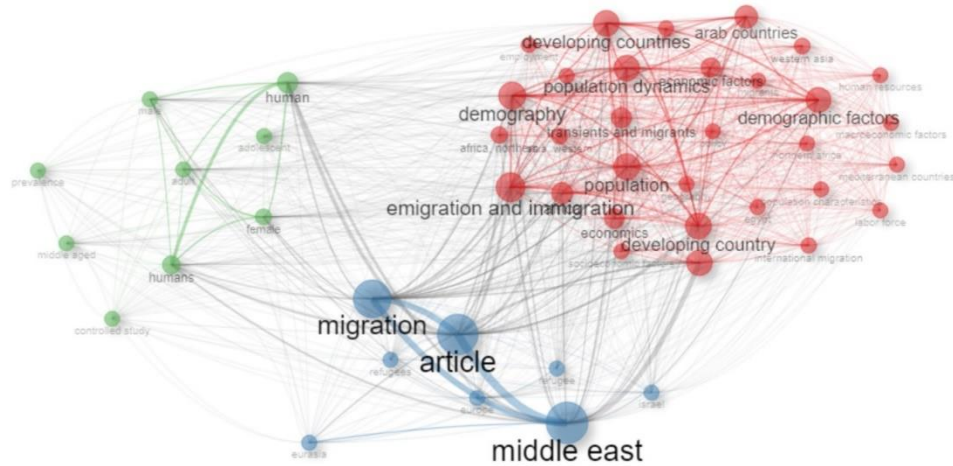
Figure 14. Co-occurrence of keywords

As seen in Figure 14, the concept "Migration" has the highest Callon Centrality value in the network. This finding indicates that the concept "migration" interacts heavily with other concepts and has a central position in the network. This term is of great interest among research topics. The concept "Migration" also has the highest RankCentrality value in the network, indicating that it is among the important concepts in the network. The concept "Migrants" has the highest Callon Density value in the network, indicating that it is heavily connected to other concepts. This finding indicates that the term "migrants" has an important position in the network and is widely discussed. This concept occurs with a high frequency among the important concepts in the network. "Covid-19" and "Iran" have the lowest Callon Centrality values in the network, indicating that they are less connected to other concepts in the network. These terms may be less associated with other research topics. The concept of "population genetics" has one of the highest Callon Centrality values in the network. This finding indicates that genetic research is important in the network and that the concept of "population genetics" is central to this research. In addition, in the analysis conducted to determine the importance and weight of certain words within certain clusters, Middle East and Migration were associated with "Middle East" and Middle Eastern countries such as "Syria", "Jordan", "Lebanon", "Iraq". It reflects the importance of research on migration and refugee crises in these countries.

The words "Migrants" and "Migration" have the highest frequency and weight in their clusters. Terms such as "Immigrants", "Immigrant", "Sweden", "Australia", "Canada", "Saudi Arabia" are also closely associated with migration and immigration. Outbreaks and Covid-19, the terms "Epidemiology" and "Covid-19" stand out prominently in their respective clusters. This finding reflects the global importance of epidemics and Covid-19 in particular.

Ethnicity and cltural factors, trms such as "Ethnicity", "Culture", "Identity" are associated with cultural and ethnic factors. These terms represent research on identity and cultural diversity of societies. The term "Iran" stands out prominently in its cluster. This finding reflects that Iran plays an important role in regional and global politics and attracts research interest. These findings suggest that different topics and concepts are concentrated within specific clusters and that these clusters reflect research focusing on specific themes. An analysis of the keywords using the centrality criteria for the topic is present in Table 8.

Table 8. Ranking of keywords according to centrality criteria

Node	Cluster	Betweenness	Closeness	PageRank
Asia	1	10,52951901	0,021276596	0,031701765
Population	1	1,434010295	0,020408163	0,033346272
Population dynamics	1	1,207494648	0,020833333	0,033182408
Africa	1	4,758794284	0,021276596	0,026316011
Demography	1	3,717327508	0,021276596	0,035210074
Developing countries	1	0,364416964	0,019230769	0,033270449
Demographic factors	1	0,287857428	0,018867925	0,032303384
Arab countries	1	0,185576693	0,018518519	0,029233074
Economics	1	0,588929108	0,020833333	0,025058255
Emigration and immigration	1	8,608816129	0,021276596	0,037648434
Economic factors	1	0,087915393	0,018518519	0,024476245
International migration	1	0,486743089	0,018181818	0,018086646
Developing country	1	1,073333248	0,020833333	0,033336127
Western asia	1	0,058620679	0,018518519	0,019289105
Northern africa	1	0,052585395	0,017857143	0,017900827
Employment	1	0,53546414	0,020833333	0,016265068
Migrants	1	0,081104725	0,018867925	0,015700233
Transients and migrants	1	4,152245929	0,021276596	0,025504274
Socioeconomic factors	1	1,370498123	0,021276596	0,016619116
Mediterranean countries	1	0,04079644	0,017857143	0,014184258
Population characteristics	1	0,050326911	0,018518519	0,014346204
Geography	1	0,319286976	0,021276596	0,01110167
Human resources	1	0,008201206	0,01754386	0,014050085
Africa, northern	1	1,103946122	0,020833333	0,020148533
Policy	1	0,088023569	0,019607843	0,011864551
Politics	1	0,074869604	0,02	0,010452081
Mortality	1	0,261646705	0,021276596	0,00866652
Egypt	1	0,09265288	0,019607843	0,008522904
Labor force	1	0,00039456	0,017241379	0,012698092
Asia, western	1	0,095939881	0,018867925	0,019315082
Macroeconomic factors	1	0,006147103	0,01754386	0,011518515
Middle east	2	31,98477405	0,021276596	0,053086359
Migration	2	19,84064152	0,021276596	0,047220479
Article	2	30,47555886	0,021276596	0,053047317
Europe	2	0,672070131	0,021276596	0,012516298
Eurasia	2	0,014982864	0,014925373	0,008355717
Israel	2	0,321985247	0,020408163	0,008618578
Refugees	2	0,344281384	0,020408163	0,01030455

Node	Cluster	Betweenness	Closeness	PageRank
Refugee	2	0,551379722	0,021276596	0,011086346
Female	3	0,605350552	0,019230769	0,019263001
Human	3	0,706618927	0,019230769	0,024502613
Male	3	0,151211998	0,016949153	0,017028255
Humans	3	0,276649501	0,016666667	0,021267124
Adult	3	0,130506532	0,017241379	0,015603753
Middle aged	3	0,011636571	0,015384615	0,01013443
Adolescent	3	0,160653945	0,018867925	0,009358598
Controlled study	3	0,023633384	0,015625	0,010306579
prevalence	3	0,00458007	0,015151515	0,006983738

The analysis in Table 8 shows that certain keywords are ranked according to these criteria. In particular, terms such as "emigration and immigration" and "middle east" represent important bridge points with high betweenness values. This finding indicates that these words control critical links within the network and are therefore important. In terms of "Closeness Centrality", words such as "demography" and "migration" stand out for their proximity to other nodes. These words indicate that they have the potential to communicate effectively within the network. Looking at the "PageRank" values, words such as "emigration and immigration" and "article" stand out. This finding indicates that these concepts have more links within the network and are therefore more important. By identifying the role and influence of specific words within the network, this analysis reveals important themes in the literature. High "Betweenness," "Closeness," and "PageRank" values indicate that certain words represent important bridging and interaction points within the network. Each cluster is named based on the overall theme of the keywords it represents, providing researchers with a better understanding of the position of keywords on specific topics within the network. To enable researchers to see the thematic evolution of keywords over the years, the alluvial plot is presented in Figure 15.
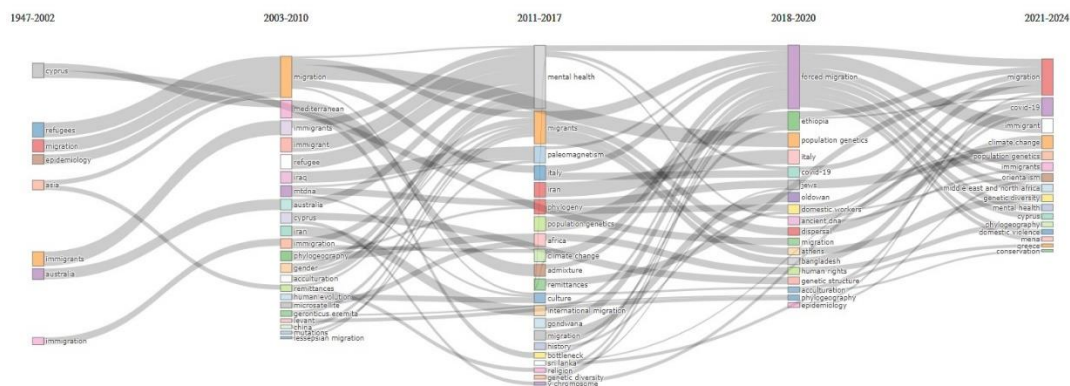
Figure 15. Thematic evolution alluvial graph of keywords by year

The thematic evolution map in Figure 15 shows the evolution of the authors' keywords over time. In the early focused terms, concepts such as "oil" and "ethnic groups" seem to have played an important role in certain time periods. For

example, the term "oil" emerged in 1992 and remained on the agenda until 2007. The term "ethnic groups" also emerged in 1992 but remained important until 2011. Among the emerging and stable concepts, terms such as "migration" and "immigration" show an increasing trend over time. Especially since the mid-2000s, there has been a significant increase in the frequency of these terms. On the other hand, the frequencies of some terms such as "oil" do not seem to have changed significantly over time. These terms may have been important in a certain period, but may have fallen off the agenda over time. When the rise of modern topics is analyzed, it is seen that terms such as "Covid-19" and "sars-cov-2" have shown a significant increase in recent years. Since there has been a significant increase in the frequency of these terms, indicating that the impact of the pandemic is reflected in the authors' fields of study. Similarly, the frequencies of terms such as "mental health" and "epidemiology" have also increased. This finding suggests that fields such as health and epidemiology are receiving increasing attention.

Geographically and politically oriented changes show a significant increase in the frequency of terms such as "Middle East" and "refugees". This finding suggests that geographical and political events are increasingly taking up more space in the authors' work. At the same time, the frequencies of terms such as "Europe" and "European Union" have also increased. This suggests that political structures such as the European Union and migration and demographic trends in Europe are of interest to authors. These findings help to understand how authors' fields of study have changed over time and which topics are at the forefront.

Co-citation analysis

Provides important insights by examining citation relationships between documents on the Middle East and migration. Co-citation analysis enables you to identify similar research, discover related studies and track research trends. It also helps you identify potential collaborations and joint work opportunities by examining co-citations between documents. This analysis is a valuable tool for gaining a more comprehensive understanding of the literature in the field and assessing the quality of documents.
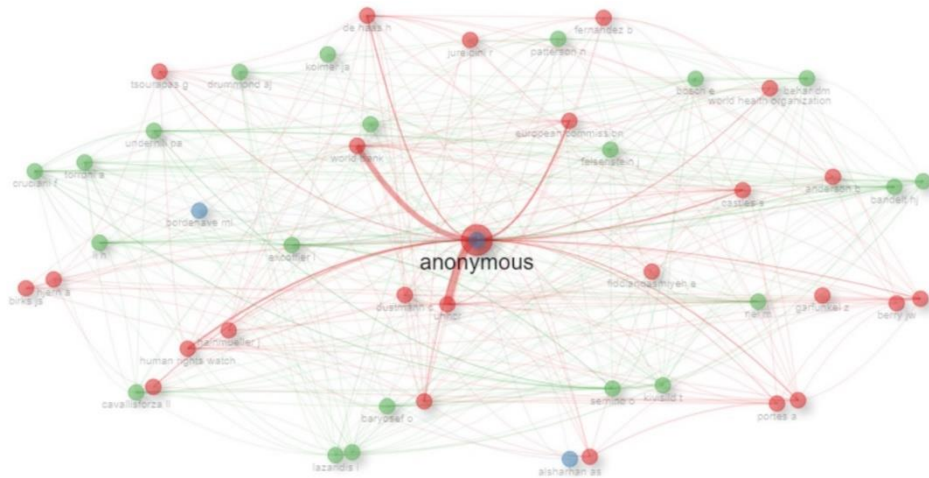
Figure 16. Authors' co-citation networks

Figure 16 shows the key metrics in the co-citation networks of authors. The "Betweenness" measure indicates the degree to which an author facilitates communication, while the "Closeness" measure refers to closeness. "PageRank" reflects the importance of authors in the network. For example, authors such as "anonymous" and "unhcr" have high "Betweenness" values, while organizations such as "World Bank" and "European Commission" are central. "PageRank" values vary, and some authors are more cited than others and therefore more important. This data is important to understand the influence and position of authors in the network.

Table 9 presents a co-citation analysis that assesses the centrality of studies and researchers on a given topic within the network. This analysis allows nodes (researchers or studies) to be evaluated on centrality measures such as Betweenness, Closeness and PageRank. In addition, Cluster information helps us understand the network structure by grouping researchers or studies that focus on similar topics. These values can help to understand the relationships between terms within the network and their ranking of importance.

Table 9. Co-citation analysis based on centrality criteria

Node	Cluster	Betweenness	Closeness	PageRank
ANONYMOUS	1	989,0075882	0,007092199	0,128007257
UNHCR	1	3,789564649	0,003496503	0,03645557
WORLD BANK	1	1,184666823	0,003378378	0,02837446
EUROPEAN COMMISSION	1	0,327557359	0,003067485	0,019520655
CASTLES S	1	2,844476041	0,003496503	0,026172189
HUMAN RIGHTS WATCH	1	0,575403424	0,003164557	0,020868974

Node	Cluster	Betweenness	Closeness	PageRank
WORLD HEALTH ORGANIZATION	1	0,083349714	0,002849003	0,010845841
BERRY JW	1	0,12272358	0,002808989	0,008136849
PORTES A	1	0,496453175	0,003067485	0,017694599
BIRKS JS	1	0,043364528	0,002932551	0,010725218
TSOURAPAS G	1	0,362442771	0,003021148	0,016589216
DE HAAS H	1	2,954229729	0,003496503	0,025794653
FERNANDEZ B	1	0,252089964	0,003115265	0,014248019
MASSEY DS	1	1,507333603	0,003322259	0,023252689
IOM	1	0,203664342	0,003164557	0,015873578
BORJAS GJ	1	0,254349069	0,003067485	0,016296016
WHO	1	0,161244317	0,002808989	0,011407418
HJERN A	1	0,036487789	0,002808989	0,006354485
JUREIDINI R	1	0,127922283	0,00297619	0,014014712
ANDERSON B	1	0,01396648	0,00297619	0,012329099
GARFUNKEL Z	1	0	0,004291845	0,003761764
FARGUES P	1	2,075293815	0,003436426	0,021695391
HAINMUELLER J	1	0,146625848	0,00297619	0,010261417
FIDDIANQASMIYEH E	1	0	0,002808989	0,006197085
DUSTMANN C	1	0,429202533	0,003164557	0,017017821
ALSHARHAN AS	2	0	0,005319149	0,016119
BORDENAVE ML	2	0	0,005319149	0,01593496
NO TITLE CAPTURED	2	0	0,005319149	0,008087112
EXCOFFIER L	3	0	0,005319149	0,039340431
NEI M	3	0	0,005319149	0,020132263
SEMINO O	3	0	0,005319149	0,033355006
BARYOSEF O	3	47	0,005376344	0,010649367
LI H	3	0	0,005319149	0,017172916
UNDERHILL PA	3	0	0,005319149	0,026696894
KOLMER JA	3	0	0,005319149	0,004718703
PATTERSON N	3	0	0,005319149	0,015496378
BANDELT HJ	3	0	0,005319149	0,030652476
LAZARIDIS I	3	0	0,005319149	0,014702372
CAVALLISFORZA LL	3	0	0,005319149	0,022846729
CRUCIANI F	3	0	0,005319149	0,024398581
BEHAR DM	3	0	0,005319149	0,02098866
HAMMER MF	3	0	0,005319149	0,021111871
RICHARDS M	3	0	0,005319149	0,02574373
TORRONI A	3	0	0,005319149	0,018887318
DRUMMOND AJ	3	0	0,005319149	0,010316944
BOSCH E	3	0	0,005319149	0,022046458
KIVISILD T	3	0	0,005319149	0,024680635
PRITCHARD JK	3	0	0,005319149	0,016665279
FELSENSTEIN J	3	0	0,005319149	0,017360939

Table 9 includes a co-citation analysis that assesses the centrality of research and researchers on a given topic within the network, showing the various characteristics and relationships of nodes in a network. Cluster information helps us understand the network structure by grouping researchers or studies that focus on similar topics, while centrality measures such as Betweenness,

Closeness and PageRank assess the importance and influence of nodes (researchers or studies).

The Betweenness value indicates how often a node traverses the shortest path in the network, i.e. the degree to which this node facilitates communication in the network. High betweenness values indicate the importance and influence of a node in the network. For example, a high betweenness value of node "anonymous" indicates that this node heavily controls communication in the network. The closeness value indicates how close a node is to other nodes. High closeness values indicate that a node can quickly access information within the network. For example, a low closeness value of node "unhcr" indicates that this node is more distant from other nodes and information or interaction spreads more slowly. PageRank is an algorithm used to determine the importance of a node in the network. High PageRank values indicate that a node has more connections within the network and is therefore more important. For example, the high PageRank of the node "anonymous" reflects the overall importance of this node in the network.

Collaboration network between authors and countries

Analyses to identify the network of collaboration between authors and countries, to understand scientific productivity, knowledge transfer and interdisciplinary innovation show how researchers interact with each other and on which topics they concentrate, thus revealing the structural characteristics of the scientific community and potential collaborations.
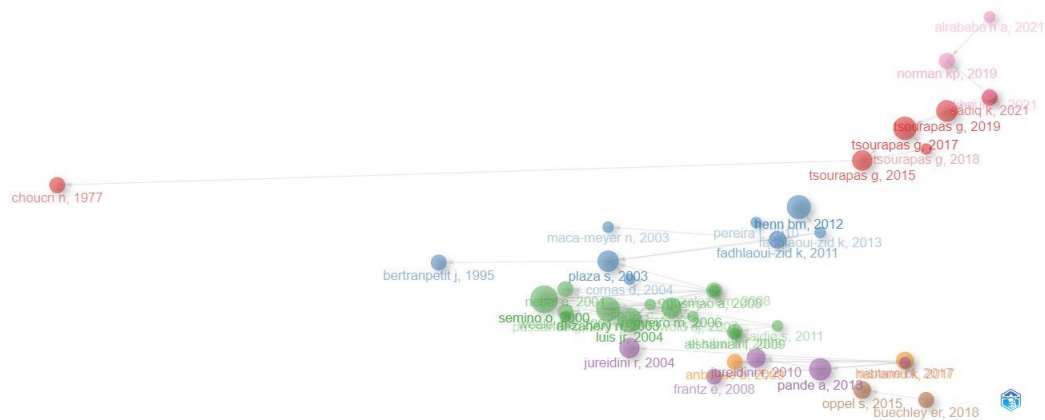
Figure 17. Historical direct citation network

Figure 17 creates a citation network showing the citation relationships between articles and how articles relate to each other. Some of the related articles focus on topics such as genetic heritage, human migration and migration policies in the Middle East, while others address topics such as genetic research, the history of genetic migration, and policy and diplomacy on human movements. The citation network shows the links of each article to others. For example, the article "THE GENETIC LEGACY OF PALEOLITHIC HOMO SAPIENS SAPIENS IN EXTANT

EUROPEANS A Y CHROMOSOME PERSPECTIVE" has cited many other articles. These papers address the effects of genetic heritage on human migration and genetic diversity. Furthermore, articles such as "TRAFFICKING AND CONTRACT MIGRANT WORKERS IN THE MIDDLE EAST" and "THE SYRIAN REFUGEE CRISIS AND FOREIGN POLICY DECISIONMAKING IN JORDAN LEBANON AND TURKEY" address issues related to migration and the problems faced by migrant workers in the Middle East, while other articles focus more generally on genetics and genetic migration. By visualizing the links between topics, this citation network can help researchers understand important studies in a particular field and the relationships between them. The data on authors' affiliation according to the centrality criteria that informed these analyses are given in Table 10.

Table 10. Authors' affiliation according to centrality criteria

Label	Group	Frequency	Centrality	Impact
gautier a gladieux p enjalbert j leconte m	1	47	0,302622467	1,365263014
behar d chaubey g skorecki k yudkovsky g	2	57	0,42483333	3,078778934
cavalli-sforza l rowold d passarino g luis j	3	74	0,420539134	2,374452997

Table 10 presents data on centrality measures, indicating the authors' connections and influence within the network. According to these data, authors with high centrality and influence values indicate important positions in the network and a wide impact of their work. For example, authors such as Gautier A, Gladieux P, Enjalbert J and Leconte M have a medium level of influence, while other authors such as Behar D, Chaubey G, Skorecki K and Yudkovsky G have a larger sphere of influence with their work. Authors such as Cavalli-Sforza L, Rowold D, Passarino G and Luis J also have a medium impact. This analysis allows to assess the role of authors within the network and the overall impact of their work. The clusters of journals according to centrality criteria are given in Table 11.

Table 11. Clustering by links (journals) based on centrality measures

Label	Group	Frequency	Centrality	Impact
journal of traumatic stress european journal of public health bmc public health social science \& medicine	2	33	0,287135738	1,171795587
plos genetics human heredity annals of human genetics nature	4	80	0,48674548	1,591917536
journal of global security studies third world quarterly middle east critique city \& society	5	99	0,393615622	1,460645445

The data in Table 11 allows journals to be grouped by cluster analysis, focusing on specific topics. Each cluster contains journals covering similar topics, and measures of centrality and influence determine the importance and impact of each group in the network. For example, journals in the fourth cluster have higher centrality and influence than those in the second cluster. This indicates that journals in the fourth group play a more prominent role in the network. The data in Table 11 is important to understand the grouping of journals focusing on specific topics and their role in the network. This analysis can facilitate researchers' and readers' access to journals focusing on specific topics and provide guidance in the research field by showing important links in the network. The most collaborating authors are shown in Figure 18.
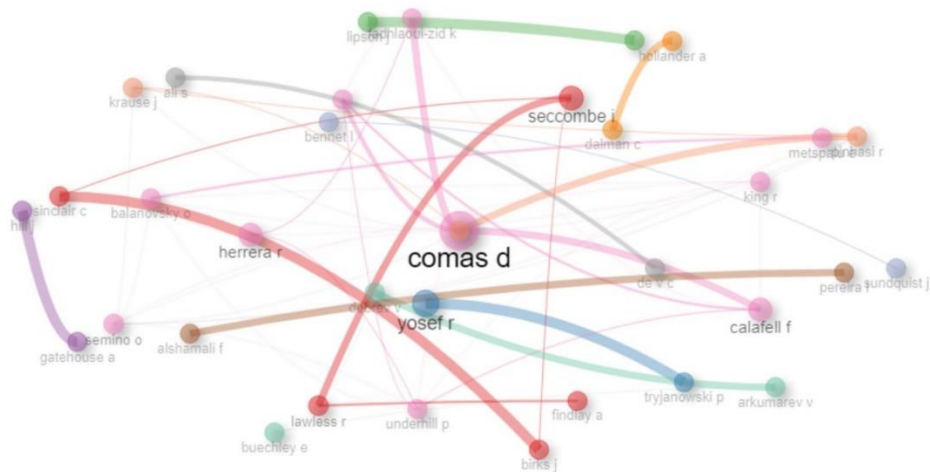
Figure 18. Top collaborators on the Middle East and migration (1947-2024)

The network analysis of the groups of authors in Figure 18 identifies their level of collaboration. Authors like "Comas D" collaborate intensively with others and are at the center of the network. The "betweenness" values of these authors are higher than others, reflecting their centrality in the network. For example, authors such as "Comas D" and "Semino O" are also higher than others in terms of "closeness" and "pagerank" values. Authors such as "Seccombe I" and "Lawless R" collaborate less with others and their interaction in the network is limited. These authors have low "betweenness" values and lower "closeness" and "pagerank" values than others. Some authors are closely related to other authors in the network, despite their low collaboration. These authors may specialize in certain topics or collaborate less, but they play an important role in the network. Other authors are more intermediate in their level of collaboration and tend to collaborate in a specific area. These authors have medium "betweenness", "closeness" and "pagerank" values.

These findings provide some important information about the level of collaboration and position of the authors in the network, and Table 12 evaluates

the level of collaboration of the authors with centrality measures. By showing the level of interaction of specific groups of authors within the network, this table attempts to identify which groups are more centralized and have stronger connections with other groups.

Table 12. Authors' collaboration according to centrality criteria

Node	Cluster	Betweenness	Closeness	PageRank
SECCOMBE İ	1	4	0,2	0,034728496
FİNDLAY A	1	0	0,111111111	0,014922106
LAWLESS R	1	3	0,166666667	0,033369072
SİNCLAİR C	1	0	0,142857143	0,029918735
BİRKS J	1	0	0,142857143	0,029918735
YOSEF R	2	0	1	0,028571429
TRYJANOWSKİ P	2	0	1	0,028571429
LİPSON J	3	0	1	0,028571429
MELEİS A	3	0	1	0,028571429
GATEHOUSE A	4	0	1	0,028571429
HİLL J	4	0	1	0,028571429
HOLLANDER A	5	0	1	0,028571429
DALMAN C	5	0	1	0,028571429
PEREİRA L	6	0	1	0,028571429
ALSHAMALİ F	6	0	1	0,028571429
COMAS D	7	21,03724952	0,066666667	0,056623467
HERRERA R	7	1,490842491	0,043478261	0,021021097
KİNG R	7	0,944327731	0,052631579	0,018426372
CALAFELL F	7	1,712179487	0,05	0,034878897
SEMİNO O	7	11,27319005	0,0625	0,027554735
FADHLAOUİ-ZİD K	7	3,152984271	0,047619048	0,027233925
METSPALU E	7	0	0,04	0,016423605
UNDERHİLL P	7	4,872823745	0,058823529	0,031697922
BALANOVSKY O	7	6,362556561	0,055555556	0,028894746
BERTRANPETİT J	7	0,153846154	0,047619048	0,029284209
ALİ S	8	0	1	0,028571429
DE V C	8	0	1	0,028571429
ARKUMAREV V	9	0	0,5	0,035662148
BUECHLEY E	9	0	0,5	0,01438999
DOBREV V	9	0	0,5	0,035662148
PİNHASİ R	10	0	0,047619048	0,029342395
KRAUSE J	10	0	0,047619048	0,020704807
FERNANDES D	10	0	0,047619048	0,029342395
BENNET L	11	0	1	0,028571429
SUNDQUİST J	11	0	1	0,028571429

Table 12 shows the level of interaction of specific groups of authors in the network, assessing the level of collaboration of groups of authors within the network by measures of centrality. Authors in Cluster 7, such as Comas and Semino, have a high betweenness value, meaning that they are frequently located

on short paths in the network and are at the center of the network. Furthermore, these authors with high PageRank values represent important anchor points in the network. On the other hand, some authors (e.g. Seccombe and Findlay) have lower centrality measures. This may indicate that these authors have limited interaction in the network and weaker connections with other groups. For example, authors such as Yosef and Tryjanowski, despite having a high proximity value, have a lower level of centrality according to other measures, which may indicate that their influence in the network is limited.

The data in Table 12 helps us to understand collaborations and network structure in the research field, while assessing the level of collaboration and impact of specific groups of authors within the network. This analysis can help us develop strategies to encourage collaborative work and strengthen important connections. The most collaborative countries are shown in Figure 19.
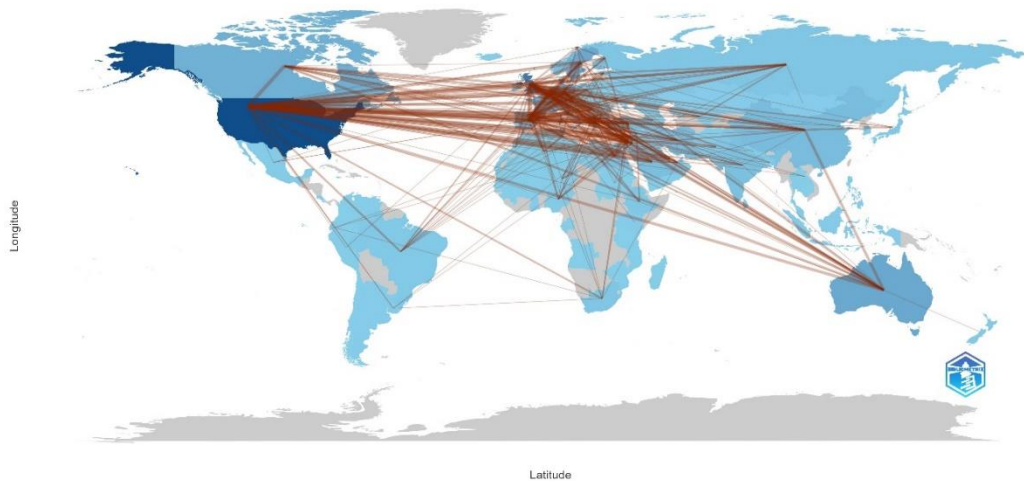
Figure 19. Cooperation between different countries

Figure 19 visualizes the cooperation between different countries. The findings are as follows: Countries such as Australia and Canada stand out as countries with high levels of cooperation. For example, Australia and China have collaborated 8 times. Among the countries with medium cooperation, Australia collaborated 3 or 4 times with France, the Netherlands, New Zealand and Spain. Among the countries with low cooperation, it is noteworthy that some countries have cooperated only once. For example, countries such as Angola and Cambodia cooperated only once. These findings help us understand the levels and frequency of cooperation between countries. Figure 20 shows the most collaborating organizations on the Middle East and migration.
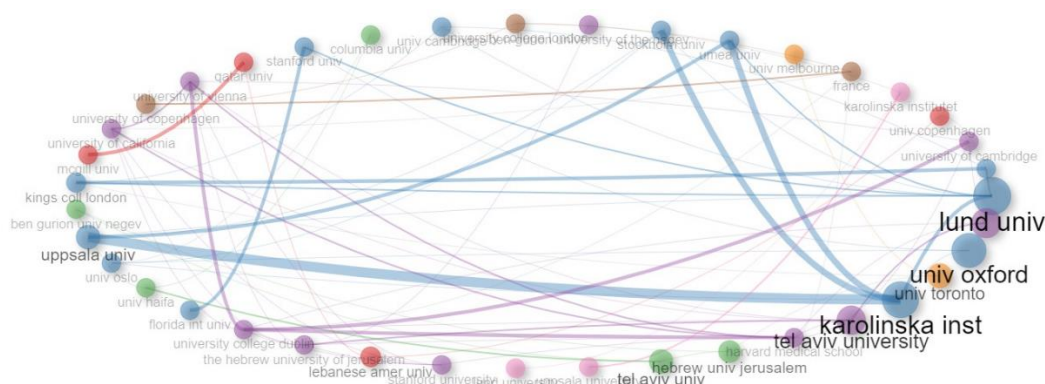
Figure 20. Institutions that collaborate the most in scientific studies on the Middle East and migration (1947-2024)

Figure 20 shows the research institutions and universities that collaborate the most in scholarly work on the Middle East and migration. In this context, "unhcr" (United Nations High Commissioner for Refugees) is the most prominent organization. UNHCR has contributed to many studies on migration in the Middle East and has played an important role globally for the protection and welfare of refugees. In addition, the "World Bank" and the "European Commission" are also important organizations that cooperate on migration issues in the Middle East. The World Bank and the European Commission play an active role in the development and implementation of migration policies. "Human rights-focused organizations such as iom (International Organization for Migration) and human rights watch have also contributed to and collaborated on migration issues in the Middle East. Finally, individual researchers (e.g. "tsourapas g", "fargues p") have also made important contributions by collaborating on Middle East and migration issues. These researchers have conducted extensive research to understand the social, economic and political dimensions of migration in the region.

Results and Discussion

This bibliometric analysis examines the evolution of academic publications on the Middle East and migration between 1947 and 2024. During the period analyzed, there has been a significant increase in the total number of annual citations, especially since the early 2000s. This increase indicates that research on the Middle East and migration is increasingly gaining attention and impact. Daoudy et al. (2022) similarly emphasized that many voices, from academics to practitioners, are reinforcing an increasingly popular narrative of the climate-conflict-migration nexus. There has also been an increase in the average number of citations over the years, suggesting that these issues are receiving more attention in academia and have a wider impact. However, it is noteworthy that although the number of publications increased in some years, the average number of citations remained low. This may indicate that the impact of the research conducted at that time may have been limited or that the topics received less attention in the academic community in general.

In particular, the fact that Turkey is the country receiving the highest number of migrants from the Middle East due to its migration policies, the importance of education in this process and the complication of European Union policies on migration should be evaluated together. The fact that Turkey became a party to the Geneva Convention in July 1951 and made reservations on migrants from the Middle East geography affected migration policies for many years. However, after 2003, new immigration policies were implemented with interim formulas. This situation has directly affected migration studies and accordingly reference values. Salehyan and Savun (2024) have argued that there may be a natural tension between refugee admissions and refugee integration policies, as countries seek to restrict aid when admissions increase. According to Balsari et al. (2020), migration is now recognized not only as a consequence of instability but also as an adaptation strategy to a changing climate. Migration must be accurately anticipated and therefore properly planned and supported. Perhaps migration to Turkey was planned and supported as part of a global plan. Aiming to discuss how the European Union and Turkey have handled the Syrian refugee crisis through a systematic literature review, Putri et al. (2023) found that Syrian refugees have been properly resettled, appropriately facilitated and contributed to the problem by providing information on digital literacy, information needs and strategies among Syrian and Iraqi refugees entering Europe and providing changing perspectives on migrants and refugees as passive victims of this phenomenon. It is evident that more qualified migrants were admitted to Europe and others remained in Turkey. Andersson et al. (2019) suggest that traditional cost estimates of migration are often overestimated because they implicitly assume that refugees and overall migration have large effects on the growth of low-wage occupations. These findings can provide guidance to both Turkey and the international community in future research and policy-making processes.

The Middle East is one of the regions where migration waves are intense. Approximately two-thirds of refugees worldwide are of Middle Eastern or African origin (Kalaycı, 2018). When this situation is evaluated in the context of the Middle East-migration-Turkey, it shows that academic studies will create a projection for the future. Addressing the economic, social and political dimensions of international migration, Koczan et al. (2021) emphasize that migration is an important channel of material development for individuals and their children and states that migration has significant effects in various dimensions. These points support the importance of the Middle East and migration topics examined in our bibliometric analysis and the wide range of research interest in this area. In particular, the economic impacts of migration also feature in the articles analyzed in our bibliometric analysis. The results of the citation analysis assess the impact of migration on labor markets, productivity, innovation and other economic factors in destination countries. Bn this context, research on the economic impact of migrants in destination countries is frequently cited in specific articles. The effects of migration on countries of origin are also included in our bibliometric analysis. Issues such as the loss of human capital and remittance flows are among the topics addressed in the reviewed articles. This emphasizes the importance of research to understand the effects of migration on both destination and origin countries. In conclusion, the information presented by Koczan et al. (2021), in line with the findings of our bibliometric analysis, highlights the importance and far-reaching implications of research to understand and assess

the economic, social and political dimensions of international migration. According to Triulzi (2021), the flight of millions of migrants to Europe is further evidence of the failure of the policies of both Middle Eastern countries and the EU.

Declining citation years may indicate that older publications are now less cited and less relevant. These findings are important for understanding the general trends of research in the Middle East and migration and for creating a roadmap for future research. This research also examined changes in the number of articles published by year. The period 1947-1969 is generally characterized by low numbers of articles, reflecting a time when scientific research and publications were less common. In the period 1970-1989, the number of articles increased, with a particularly marked increase in the 1980s. There may have been more investment in scientific research and more emphasis on scientific publications during this period. Likewise, Townsend (2020) emphasized that the concept of socially responsible investment came to the fore in the 1980s and 1990s. In support of this, in our research, the 1990s represent a period in which the number of articles continued to increase. The increase in scientific research and publications may have contributed to the growth and development of the scientific community. In the 2000s and beyond, there has been a significant increase in the number of articles, especially since the 2010s. The increase in this period can be attributed to the expansion of scientific research, the advancement of technology and the increase in scientific communication opportunities. With the increase in academic publications during these periods, the world population has also urbanized due to increased internal migration from rural to urban areas (Gu et al., 2021). Overall, our research shows how scientific publications have changed and grown over time. The increasing number of articles reflects the acceleration of migration towards both cities and other countries, the growing importance of scientific research, and the growth of the scientific community.

The study also examined productivity and interaction between authors. While some authors publish a large number of articles and receive a large number of citations, others tend to publish and receive fewer citations. This analysis reflects the academic influence of certain authors and the prevalence of their work, as well as their tendency to collaborate with other authors. It shows in detail how prolific different authors have been on Middle East and migration issues in different years and the number of citations they have received. While some authors publish papers regularly and receive significant citations, others publish at a slower pace or receive fewer citations. This analysis is valuable for understanding which authors stand out in research on the Middle East and migration and how they contribute to the development of the field. For example, the most cited study reflects current conditions and addresses one of the most important issues in the region, Syria.

Kelley et al. (2015) found evidence that drought contributed to the conflict and migration in Syria, arguing that the 2007-2010 drought was the worst on record and caused widespread crop failure and mass migration of farming families to urban centers. They concluded that human influence on the climate system has played a role in the current Syrian conflict and explained the cause of migration in the context of climate change, human influence and war. Migration is a

complex process shaped by environmental, economic and social pressures. People in the destination are affected as much as those who migrate. In addition to migrants, there are also refugees in Turkey. The total number of refugees and migrants in Turkey exceeds millions. In 2023, severe earthquakes in southeast Turkey and northern Syria killed more than 50,000 people. Around three million people, most of whom lost their homes in the two countries where the earthquakes occurred, were internally displaced or forced to migrate outside the country (Karacaoğlu and Güner, 2024; Karacaoğlu and Özkaya, 2024; Karacaoğlu et al., 2024). As can be seen, migration, climate, human impact and disasters are related concepts. Turkey is an example of a region where these events are experienced together.

Concerned with the economic causes and consequences of migration, Andersson et al. (2019) emphasize that the impact of migrant workers from low-income third-party countries is positive for the UK and Irish economy, but less positive for other European macros. Migrants often face difficulties in their countries of origin, which Crookes et al. (2022) link to exclusionary policies, poor personal health assessments, physical disability and poor mental health (Crookes et al., 2022). Powell et al. (2009), another research team mentioned in the analysis of our research, proposes a population model showing that the development of modern behaviors may depend on achieving critical population densities and migration patterns necessary for stable cultural transmission.

When the effectiveness of countries in scientific research is analyzed, it is seen that the United States of America is in a leading position, but other countries also make significant contributions. This result can be said to be due to the increasing immigration to the USA or policies regarding immigrants. Because Crookes et al. (2022) emphasize that US federal and sub-federal policy activities related to immigrants have increased in recent years. In particular, the high average article citations of countries such as the UK, France, Greece, Kenya and New Zealand indicate that research in these countries is generally of great interest to the academic community. It is noteworthy that the countries where research has been conducted are mostly receiving countries rather than sending countries. A similar situation can be observe in the research of Heilbrunn and Lannone (2020), which conducts a systematic review of refugee entrepreneurship; the central links cover Australia, Canada, Greece, Finland, France, Germany, New Zealand, Sweden, the United Kingdom and the United States. In the same study, top-tier institutions such as Columbia University, University of California, Santa Barbara, Oxford University, and Yale University stand out. The research on refugee entrepreneurship, which has gained significant momentum in publications in the last decade, and the institutions of our research are similar. It is seen that leading institutions such as Lund University, University of Haifa and University of Oxford are among the institutions of the researchers who published in our research. These institutions have made valuable contributions in various disciplines, focusing on a wide range of scientific research topics.

In conclusion, this research reveals the general trends and growth of scholarly research on the Middle East and migration, and the overall impact of the field. These findings are important for understanding the evolution of research in this field, developing strategies for future work and helping the field move forward.

Conclusion

The results of this research illuminate the general trends and growth patterns of scholarly research on the Middle East and migration. Throughout the period under review, there has been an increase in academic interest and research on these topics. Especially since the early 2000s, there has been a marked increase in the number of citations and published articles, indicating that these topics are gaining more attention and influence in the academic community. In addition to the increase in the number of citations and published articles over the years, the productivity and interaction between authors was also analyzed. While some authors stood out significantly, others had lower productivity and were less involved in collaboration. This analysis reveals the academic impact of specific authors as well as trends in collaboration in the field. The effectiveness of countries in scientific research was also examined, and it was find out that the United States of America is in a leading position, but other countries also make significant contributions. In particular, countries such as Greece, Kenya and New Zealand have made significant contributions to research in this field. As a result, this study presents the general characteristics, trends and growth patterns of scholarly research on the Middle East and migration. The discussion part of the research shows that Turkey is a region where migration, climate, human impact and disasters have coexisted, especially in recent times. While Turkey has become a refuge for both migrants and refugees, major disasters such as the 2023 earthquakes have profoundly affected displacement and migration dynamics. This situation reveals that Turkey plays an important role in regional stabilization and humanitarian policies. These findings are important for understanding the evolution of research in this field, developing strategies for future work and helping the field move forward.

Recommendations

Based on the results of this research, the following recommendations can be made to advance research on the Middle East and migration and contribute to the further development of the field:

- Collaboration of researchers from various disciplines should be encouraged.
- More space should be given to research that is based in and observes the migration area.
- It is important that local experts and stakeholders in the region are more involved in research.
- It is crucials that research on crisis management and humanitarian aid contribute to the policy-making process.
- Research results should be shared with policy makers and used to shape policy decisions.
- It is important to increase training and awareness-raising activities to raise society's awareness of migration issues.
- International co-operation and increased funding are essential to tackle migration issues in the Middle East.
- NGOs and think-thanks should be included in the process within the legal framework and support should be provided at the point of solution.

Based on the results of this study, a more detailed analysis can be conducted. In particular, a study focusing on the reasons why Turkey is the largest recipient of migration from the Middle East and the impact of this situation on Turkey's policies could be conducted. In addition, it is important to examine the integration processes of migrants in Turkey, the reactions of Turkish citizens to uncontrolled migration, the role of education policies in the lives of migrants, and the European Union's migration policies with Turkey. Such research can help us better understand the migration policies of Turkey and other countries and develop more effective policy recommendations.

References

Alnajem, M., Mostafa, M. M., & ElMelegy, A. R. (2021). Mapping the first decade of circular economy research: A bibliometric network analysis. *Journal of Industrial and Production Engineering, 38*(1), 29-50. https://doi.org/10.1080/21681015.2020.1838632

Alviz-Meza, A., Vasquez-Coronado, M. H., Delgado-Caramutti, J. G., & Blanco-Victorio, D. J. (2022). Bibliometric analysis of fourth industrial revolution applied to heritage studies based on web of science and scopus databases from 2016 to 2021. *Heritage Science, 10*(1), 189. https://doi.org/10.1186/s40494-022-00821-3

Amanat, A. (2012). *Is there a Middle East?: The evolution of a geopolitical concept.* Stanford University Press.

Andersson, L. F., Eriksson, R., & Scocco, S. (2019). Refugee immigration and the growth of low-wage work in the EU15. *Comparative Migration Studies, 7*(1), 1-19. https://doi.org/10.1186/s40878-019-0145-3

Anugerah, A. R., Muttaqin, P. S., & Trinarningsih, W. (2022). Social network analysis in business and management research: A bibliometric analysis of the research trend and performance from 2001 to 2020. *Heliyon, 8*(4), e09270. https://doi.org/10.1016/j.heliyon.2022.e09270

Asfour, H. (2020). Internal displacement in the Middle East: A review of the literature. *SAS Space.* https://sas-space.sas.ac.uk/9359/

Balsari, S., Dresser, C., & Leaning, J. (2020). Climate change, migration, and civil strife. *Current Environmental Health Reports, 7*(4), 404-414. https://doi.org/10.1007/s40572-020-00291-4

Barazesh, S. (2021). The Syrian refugee labor supply shock in Turkey, Jordan, and Lebanon: A literature review of critical impacts on labor markets, economies, and policies. *Autonomous University of Barcelona Institutional Repository.* http://hdl.handle.net/10230/47256

Blaydes, L., & Paik, C. (2021). Muslim trade and city growth before the nineteenth century: Comparative urbanization in Europe, the Middle East, and Central Asia. *British Journal of Political Science, 51*(2), 845-868. https://doi.org/10.1017/S0007123419000267

Christie, N. (2020). *Muslims and crusaders: Christianity's wars in the Middle East, 1095–1382, from the Islamic sources.* Routledge. https://doi.org/10.4324/9781351007368

Comarú, M. W., Lopes, R. M., Braga, L. A. M., Batista Mota, F., & Galvão, C. (2021). A bibliometric and descriptive analysis of inclusive education in science education. *Studies in Science Education, 57*(2), 241-263. https://doi.org/10.1080/03057267.2021.1897930

Cotterell, A. (2022). *Where war began: A military history of the Middle East from the birth of civilization to Alexander the Great and the Romans*. Rowman & Littlefield.

Crookes, D. M., Stanhope, K. K., & Suglia, S. F. (2022). Immigrant-related policies and the health outcomes of Latinx adults in the United States: A systematic review. *Epidemiology, 33*(4), 593-605. https://doi.org/10.1097/EDE.0000000000001480

Daoudy, M., Sowers, J., & Weinthal, E. (2022). What is climate security? Framing risks around water, food, and migration in the Middle East and North Africa. *Wiley Interdisciplinary Reviews: Water, 9*(3), e1582. https://doi.org/10.1002/wat2.1582

Della Puppa, F., Montagna, N., & Kofman, E. (2021). Onward migration and intra-European mobilities: A critical and theoretical overview. *International Migration, 59*(6), 16-28. https://doi.org/10.1111/imig.12815

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research, 133*, 285-296. https://doi.org/10.1016/j.jbusres.2021.04.070

Dowlah, C. (2020). Global human migration: An overview. *Cross-Border Labor Mobility, 17-42*. https://doi.org/10.1007/978-3-030-36506-6_2

Duplančić Leder, T., Baučić, M., Leder, N., & Gilić, F. (2023). Optical satellite-derived bathymetry: An overview and WOS and SCOPUS bibliometric analysis. *Remote Sensing, 15*(5), 1294. https://doi.org/10.3390/rs15051294

Durac, V., & Cavatorta, F. (2022). *Politics and governance in the Middle East*. Bloomsbury Publishing.

Erkurt, M. (2021). *Women's letters and literary texts about women in ancient Mesopotamia and Anatolia (until the end of the second millennium BC)* [Master's thesis, Pamukkale University Institute of Social Sciences]. https://hdl.handle.net/11499/38830

Farooq, R. (2023). Knowledge management and performance: A bibliometric analysis based on SCOPUS and WOS data (1988–2021). *Journal of Knowledge Management, 27*(7), 1948-1991. https://doi.org/10.1108/JKM-06-2022-0443

Gauffriau, M. (2021). Counting methods introduced into the bibliometric research literature 1970–2018: A review. *Quantitative Science Studies, 2*(3), 932-975. https://doi.org/10.1162/qss_a_00141

Gu, D., Andreev, K., & Dupre, M. E. (2021). Major trends in population growth around the world. *China CDC Weekly, 3*(28), 604. https://doi.org/10.46234/ccdcw2021.160

Gunay, B. (2005). *From Europe to Asia: Troubled Turkish regions*. Istanbul.

Hannoum, A. (2021). *The invention of the Maghreb: Between Africa and the Middle East*. Cambridge University Press.

Hashemi, N., Marzban, M., Sebar, B., & Harris, N. (2020). Religious identity and psychological well-being among middle-eastern migrants in Australia: The mediating role of perceived social support, social connectedness, and perceived discrimination. *Psychology of Religion and Spirituality, 12*(4), 475. https://psycnet.apa.org/doi/10.1037/rel0000287

Heilbrunn, S., & Iannone, R. L. (2020). From center to periphery and back again: A systematic literature review of refugee entrepreneurship. *Sustainability, 12*(18), 7658. https://doi.org/10.3390/su12187658

Hoyland, R. G. (2020). Were the Muslim Arab conquerors of the seventh-century Middle East colonialists? *Comparativ, 30*(3/4). https://doi.org/10.26014/j.comp.2020.03-04.04

Ibrahim, U. A. (2023). Effect of migration and remittance on economic and social development: A review of evidence and emerging issues. *Journal of Business Development and Management Research.* https://africanscholarpub.com/ajbdmr/article/view/92

Irrera, D. (2020). Humanitarianism and the migration crisis. *Ideologies in World Politics*, 33-50. https://doi.org/10.1007/978-3-658-30512-3_3

Jamali, D., Jain, T., Samara, G., & Zoghbi, E. (2020). How institutions affect CSR practices in the Middle East and North Africa: A critical review. *Journal of World Business, 55*(5), 101127. https://doi.org/10.1016/j.jwb.2020.101127

Jolof, L., Rocca, P., Mazaheri, M., Okenwa Emegwa, L., & Carlsson, T. (2022). Experiences of armed conflicts and forced migration among women from countries in the Middle East, Balkans, and Africa: A systematic review of qualitative studies. *Conflict and Health, 16*(1), 46. https://doi.org/10.1186/s13031-022-00481-x

Kalaycı, İ. (2018). *Ortadoğu'dan Türkiye'ye yapılan göçler 1923-2000.* Lambert Academic Publishing.

Karacaoğlu, Ö. C., & Güner, B. (2024). Earthquake experience: Emotional, social, and cognitive dimensions. *Istanbul University Journal of Sociology, 44*, 157-175. https://doi.org/10.26650/SJ.2024.44.1.0023

Karacaoğlu, Ö. C., & Özkaya, A. (2024). Data literacy and disaster: Information access and evaluation skills of earthquake survivors in Turkey. *Social International Journal, 8*(1), 28-37. https://doi.org/10.15406/sij.2024.08.00373

Karacaoğlu, Ö. C., Özkaya, A., Eryılmaz, C., & Karacaoğlu, D. (2024). Relief and recovery efforts after the 2023 earthquake in Turkey from an educational sciences perspective. *Electronic Journal of Educational Sciences, 13*(25), 1-15. https://doi.org/10.55605/ejedus.1393847

Karagüzel, A. (2020). Yeni Yüzyılda ABD'nin Ortadoğu politikası: Büyük Ortadoğu projesi. *Türkiye Siyaset Bilimi Dergisi, 3*(2), 27-46. https://dergipark.org.tr/en/download/article-file/1287968

Karakaya, H. (2020). Türkiye'de göç ve etkileri. *Fırat Üniversitesi Uluslararası İktisadi ve İdari Bilimler Dergisi, 4*(2), 93-130. https://dergipark.org.tr/en/download/article-file/1279975

Karyakin, V. (2020). Geopolitical regionalistics: The greater Middle East as the "heartland" of the 21st-century world-system. *Central Asia & the Caucasus, 21*(1), 59. https://doi.org/10.37178/ca-c.20.1.06

Kaygusuz, D. (2021). The phenomenon of migration and securitization of migration in international relations. *Journal of Academic Thought, (3)*60-76. https://dergipark.org.tr/en/download/article-file/1601813

Kelley, C. P., Mohtadi, S., Cane, M. A., Seager, R., & Kushnir, Y. (2015). Climate change in the Fertile Crescent and implications of the recent Syrian drought. *Proceedings of the National Academy of Sciences, 112*(11), 3241-3246. https://doi.org/10.1073/pnas.1421533112

Kennedy, H. (2022). *The Prophet and the age of the Caliphates: The Islamic Near East from the sixth to the eleventh century.* Routledge. https://doi.org/10.4324/9780429348129

Koczan, Z., Peri, G., Pinat, M., & Rozhkov, D. (2021). The impact of international migration on inclusive growth: A review. *IMF Working Paper, 2021/088.* https://ssrn.com/abstract=4026261

Köksoy, E. (2016). Kamu diplomasisi ve mülteci ilişkileri: Türkiye'nin mülteci ilişkilerinin uluslararası medya yansımaları. *Marmara İletişim Dergisi, (24),* 77-99. https://doi.org/10.17829/midr.20152419998

Lama, P., Hamza, M., & Wester, M. (2021). Gendered dimensions of migration in relation to climate change. *Climate and Development, 13*(4), 326-336. https://doi.org/10.1080/17565529.2020.1772708

Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management, 45*(2), 175-194. https://doi.org/10.1177/0312896219877678

Menek, İ. H. (2020). A historical example of multiculturalism: Achaemenid Empire multiculturalism. *Gaziantep University Journal of Faculty of Economics and Administrative Sciences, 2*(1), 118-138. https://dergipark.org.tr/en/download/article-file/1124675

Mikac, R., & Wahdyudin, A. Y. (2021, December). The impact of migration on university education. In *2nd International Indonesia Conference on Interdisciplinary Studies (IICIS 2021)* (pp. 14-24). Atlantis Press. https://doi.org/10.2991/assehr.k.211206.003

Moral-Muñoz, J. A., Herrera-Viedma, E., Santisteban-Espejo, A., & Cobo, M. J. (2020). Software tools for conducting bibliometric analysis in science: An up-to-date review. *Profesional de la Información/Information Professional, 29*(1). https://doi.org/10.3145/epi.2020.ene.03

Morton, N. (2020). The Crusades to the eastern Mediterranean, 1095-1291. In *Christian-Muslim Relations. A Bibliographical History Volume 15 Thematic Essays (600-1600)* (pp. 281-306). Brill. https://doi.org/10.1163/9789004423701_013

Peptan, C. (2020). Considerations regarding the security equation determined by the problematics of refugees in the Middle East. *Research and Science Today, 19*(1), 9-19. https://www.ceeol.com/search/article-detail?id=844427

Powell, A., Shennan, S., & Thomas, M. G. (2009). Late Pleistocene demography and the appearance of modern human behavior. *Science, 324*(5932), 1298-1301. https://doi.org/10.1126/science.1170165

Pranckutė, R. (2021). Web of Science (WoS) and Scopus: The titans of bibliographic information in today's academic world. *Publications, 9*(1), 12. https://doi.org/10.3390/publications9010012

Putri, F. N., Rizal, S., & Yumitro, G. (2023). Middle East refugee crisis in Europe and Turkey: A systematic literature review. *Journal of Islamic World and Politics, 7*(1), 11-24. https://doi.org/10.18196/jiwp.v7i1.10

Romanini, E., Schettini, I., Torre, M., Venosa, M., Tarantino, A., Calvisi, V., & Zanoli, G. (2021). The rise of registry-based research: A bibliometric analysis. *Acta Orthopaedica, 92*(5), 628-632. https://doi.org/10.1080/17453674.2021.1937459

Saha, V., Mani, V., & Goyal, P. (2020). Emerging trends in the literature of value co-creation: A bibliometric analysis. *Benchmarking: An International Journal, 27*(3), 981-1002. https://doi.org/10.1108/BIJ-07-2019-0342

Salameh, M. T. B., Alraggad, M., & Harahsheh, S. T. (2021). The water crisis and the conflict in the Middle East. *Sustainable Water Resources Management, 7*, 1-14. https://doi.org/10.1007/s40899-021-00549-1

Salameh, R., & Chedid, R. (2020). Economic and geopolitical implications of natural gas export from the East Mediterranean: The case of Lebanon. *Energy Policy, 140*, 111369. https://doi.org/10.1016/j.enpol.2020.111369

Salehyan, I., & Savun, B. (2024). Strategic humanitarianism: Host states and refugee policy. *Annual Review of Political Science, 27.* https://doi.org/10.1146/annurev-polisci-041322-023519

Stewart, D. J. (2012). *The Middle East today: Political, geographical and cultural perspectives*. Routledge.

Talmon-Heller, D. (2022). Islamic pilgrimage in the Middle East: An overview. In *Pilgrimage through the ages in religious and non-religious context* (pp. 48-65). CISMOR. https://www.cismor.jp/uploads-images/sites/2/2023/02/07Talmon.pdf

Townsend, B. (2020). From SRI to ESG: The origins of socially responsible and sustainable investing. *The Journal of Impact and ESG Investing, 1*(1), 10-25. https://doi.org/10.3905/jesg.2020.1.1.010

Triulzi, U. (2021). An overview of the changed EU-MENA economic landscape: From cooperation to migration. In *States, actors and geopolitical drivers in the Mediterranean* (pp. 69-105). https://doi.org/10.1007/978-3-030-69000-7_3

Tsegay, S. M. (2023). International migration: Definition, causes and effects. *Genealogy, 7*(3), 61. https://doi.org/10.3390/genealogy7030061

Tsetseri, M. N., Keene, D. J., Silman, A. J., & Dakin, S. G. (2024). Exploring the burden, prevalence and associated factors of chronic musculoskeletal pain in migrants from North Africa and Middle East living in Europe: A scoping review. *BMC Public Health, 24*(1), 769. https://doi.org/10.1186/s12889-023-17542-2

Wilson, R. (2021). *Economic development in the Middle East*. Routledge. https://doi.org/10.4324/9781003053149

Yerasimos, S. (1994). *Nationalities and borders: The Balkans, the Caucasus, and the Middle East*. Istanbul.

Yıldırım, S. G. (2023). Çokkültürcülük ve göç. *Meriç Uluslararası Sosyal ve Stratejik Araştırmalar Dergisi, 7*(19), 145-165. https://doi.org/10.54707/meric.1263747

Yoldas, N. (2022). Doğu Akdeniz'de enerji güvenliğinin güncel dinamikleri [Master's thesis, İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü]. https://hdl.handle.net/11363/3773

Yüksel, M. (2021). A review on the entanglement of forced migration and resettlement in the 19th-century Ottoman Empire. *Turkish Studies-Historical Analysis, 16*(3), 819-842. https://doi.org/10.7827/TurkishStudies.51931

Zaccara, L., & Gonçalves, M. D. C. D. S. (2021). Migrants, refugees, and displaced persons in the Middle East and North Africa: An approach from the Global South. *REMHU: Revista Interdisciplinar da Mobilidade Humana, 29*(63), 13-20. https://doi.org/10.1590/1980-85852503880006302

Zuntz, A. C. (2021). Refugees' transnational livelihoods and remittances: Syrian mobilities in the Middle East before and after 2011. *Journal of Refugee Studies, 34*(2), 1400-1422. https://doi.org/10.1093/jrs/feab016