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## TOURISM IN THE TIMES OF THE COVID-19 PANDEMIC IN SCIENTIFIC RESEARCH

### | Abstract

- ▶ *Goal* – the aim of the article was to review the current literature in the field of tourism during the COVID-19 pandemic.
- ▶ *Research methodology* – data for the analysis were collected from the Web of Science database from 2020–2023 – a total of 1,246 bibliometric records of publications.
- ▶ *Score/results* – the article is based on quantitative and qualitative analysis.
- ▶ *Originality/value* – one should also bear in mind the limitations of the conducted research, which mainly concern the methodological part. They include the selected publication database and search criteria, such as the year or language of the publication.

| **Keywords:** tourism, COVID-19 pandemic, Web of Science database.

## 1. Introduction

Tourism is one of the dynamically developing sectors of the economy. In the literature on the subject, tourism can be defined with regard to four components, such as: man as the most important (subject of tourism), free time without which it would be impossible to participate in this phenomenon, tourism as an element of movement in geographical space and the effects and natural, social and economic consequences resulting from travelling, staying in a specific place and serving tourists [Liszewski, 2013]. Phenomena and processes related to tourism, the movement of people and changing their place of residence for a certain period of time take place in a specific space. These phenomena contribute to the specific development, modelling, transformation and development of a given territory [Guzik, Ostrowska, 2015]. Tourists who decide to go on a trip, whether domestic or foreign, spend certain funds for this purpose, which allows them to meet their accommodation, food, cultural, entertainment and communication needs. The movement of tourists to selected destinations contributes to the transfer of funds from the areas of emission of tourist traffic to the areas of reception. This is quite important because it can occur both in the local, regional, national or international dimension [Stojczew, 2021]. In many places, tourism contributes to the activation of local communities, and it is often one of the basic sources of income for the residents. Taking into account the economic benefits of the development of the tourism industry, they should be seen at the level of tourist towns and regions, where tourists introduce a certain amount of money into the economy, and this contributes, among others, to the creation of new investments [Guzik, Ostrowska, 2021].

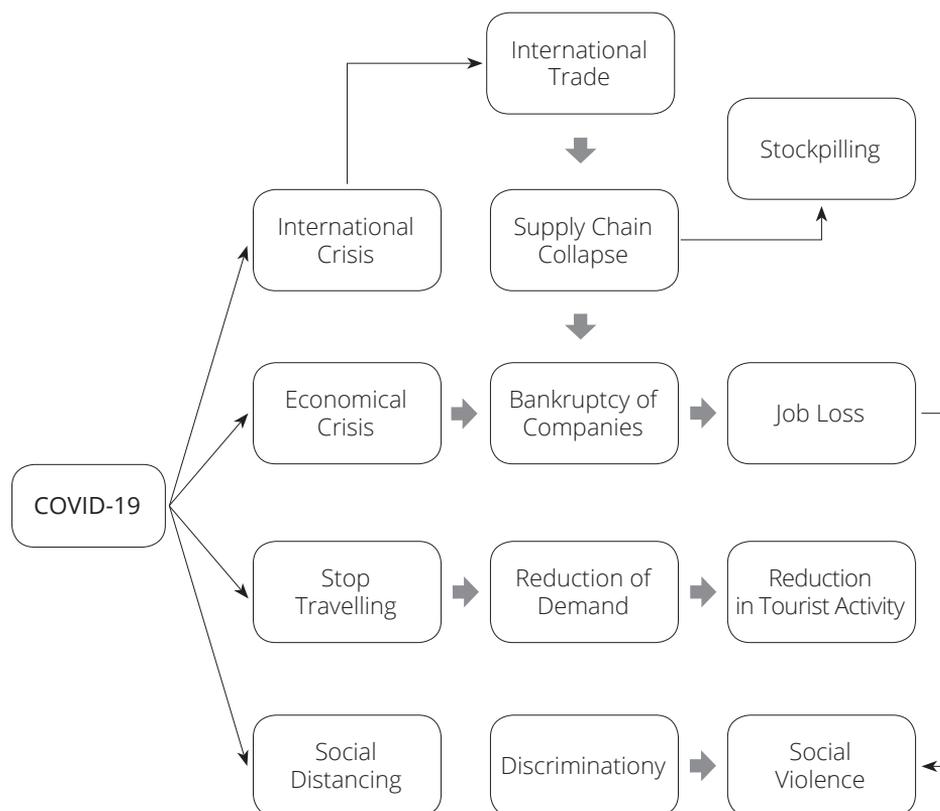
Over the last decades, we have observed an increased tourist traffic on an international scale. The research conducted by the World Bank in 2018 indicates that the number of foreign tourists amounted to 1.44 billion people. Compared to the previous year, this represented an increase of 5.8%. Taking into account statistical data, since 1995 international tourist traffic has increased on average by about 4% per year worldwide [Stojczew, 2021].

## 2. Crisis in tourism caused by the COVID-19 pandemic

The COVID-19 pandemic, which began in late 2019 in China, quickly spread around the world. Due to the protection of their citizens from the virus, most

countries have closed their borders, which significantly limited free movement, thus reducing tourist traffic. As a consequence of these actions, the hotel industry has been in many places and there were significant restrictions on gastronomy. However, the crisis resulted in by the COVID-19 pandemic caused disturbances not only in the tourism industry, but also in the disrupted and interrupted supply chains at many levels, including global production and trade. The diagram below shows the impact of COVID-19 on individual elements of the functioning of the economy and society (Figure 1). Among the specific features of the crisis caused by the COVID-19 pandemic, we should particularly emphasise, its complex and heterogeneous nature, extremely difficult to predict course (cyclicality of pandemic waves, lack of vision of the end of the crisis despite the actions taken) and global scope should be emphasized [Kowalczyk-Anioł, Pawlusiński, 2021].

Figure 1. COVID-19 and individual elements of the functioning of the economy and society



Source: Stojczew, 2021.

Tourism is not an independent branch of the national economy, e.g. on the model of trade. The direct composition of the tourism industry includes various types of branches of the economy, the common and basic feature of which is that the economic units operating in their area offer goods and services that meet the broadly understood needs related to tourism [Stojczew, 2021].

The tourist market has struggled with various crises and problems, including bankruptcy of travel agencies and airlines, volcanic eruptions, tsunamis, and terrorist attacks. None of them affected tourism on a global scale as much as the outbreak of the COVID-19 pandemic [Gössling, Scott, Hall, 2020].

As a result of the introduction of restrictions on movement, tourism in virtually all directions (both domestic and foreign) was unavailable for some time. As a result, residents (especially in large cities) were trapped in their apartments and houses, without the possibility of using the park or forest, not to mention going abroad. In the face of a pandemic, the society remained in its place of residence, often giving up their travel plans for a long time. At the local level, economic problems and the effects of the pandemic were particularly visible in cities with a developed tourist function in the short term. It might seem that in the period before the pandemic, this was their asset (e.g. variety of interpersonal contacts, close proximity), but during the pandemic it became a problem and was perceived as a health threat. Despite the initially quite optimistic expectations of virology specialists as for the duration of all the restrictions introduced during the pandemic around the world, it soon turned out that the return to the pre-pandemic situation would take much longer than expected. The situation of many tourist centers, and in particular cities operating mainly on the basis of tourism, due to the emerging mutations of the virus, was undoubtedly problematic, changeable and difficult to predict. The revival of the tourism sector will be and is significantly slowed down and will be accompanied by constant fears on the part of travellers about possible health risks [Kowalczyk-Anioł, Pawlusiński, 2021].

Crisis situations that we can encounter in modern times have a diverse dimension. Tourism is particularly affected by various crises, including political (wars) or environmental ones related to climate change. The most frequently mentioned threats from the point of view of their impact on broadly understood tourism include:

1. Exogenous, including:

- natural disasters (droughts, floods, fires),
- climate changes and prolonged unfavorable weather conditions, mainly in areas with a recreational tourist function,
- industrial disasters, including transport,

- social (internal) conflicts, not related to overtourism,
  - military and political conflicts,
  - terrorist activities,
  - migration crises,
  - epidemics and pandemics related to the use of information technology,
2. Mixed – exo-/endogenous, resulting from the fact that the processes taking place in a given tourist destination overlap with processes depending on the intensity of tourist traffic, such as:
- excessive transport congestion, which contributes to difficulties related to movement,
  - the condition of the natural environment in terms of clean air and water and the state of waste management,
3. Endogenous, related to the size and structure of tourism, called overtourism [Panasiuk, 2020].

During the COVID-19 pandemic, there were quite a lot of articles focusing on topics related to the threats it caused. On his website, P. Zmyślony has collected many different scientific articles, various reports or reports related to the impact of the pandemic on tourism in the broad sense. Most of the collected materials indicate the negative effects, the crises caused by the outbreak of the pandemic in the world in relation to tourism [Staszewska, 2022].

### 3. Material and methods

#### 3.1. Research methodology

The aim of the article was to review the current literature in the field of tourism in the times of the COVID-19 pandemic. The SotA procedure is described in detail by Barry et al. [2022]. The study used bibliometric methods to facilitate the analysis of a large number of publications [Pritchard, 1969]. Descriptive bibliometrics was used to analyze trends in scientific research, as well as to identify appropriate researchers or research centers [Klincewicz et al., 2012].

The following tools and techniques were used in the bibliometric analysis: the analysis of changes in the number of publications, the analysis of citations. The analysis of changes in the number of publications and citations made it possible to identify trends and determine the level of knowledge transfer and dissemination by authors representing various scientific centres.

## 3.2. Data Collection and Research Tasks

The data for the analysis were collected from the Web of Science database on May 19, 2023. Web of Science is one of the main mechanisms for finding scientific sources offering a large variety of documents. In the search for records, the fundamental issue is to identify the keywords that are considered relevant to the analyzed problem. The analysis included articles in the titles of which the following phrases “touris\*” (i.e. tourism, tourists, etc.) and “COVID-19” were introduced. The following limiting criteria were used in the analysis:

1. date of publication – including the publications from 2020 to 2023;
2. type of publication – including the publications in peer reviewed scientific journals and books;
3. topic of the publication – publications focusing on selected keywords.

After applying all limiting criteria, the dataset consisted of 1246 publications.

Next, answers were sought regarding the overall trend in publication and citation numbers, identification of key researchers, centres, countries and journals, as well as major research areas in the field of tourism during the COVID-19 pandemic.

## 4. Findings

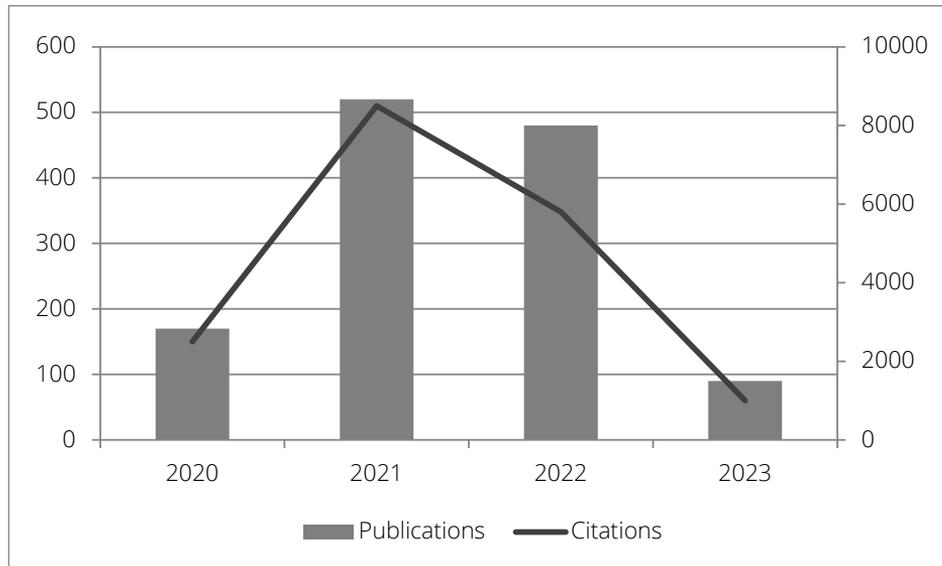
### 4.1. General trend in tourism publications during the COVID-19 pandemic

Figure 2 shows the number of publications in the WoS database on tourism during the COVID-19 pandemic in 2020–2023. Attention should be paid to the constantly growing trend related to the interest in the analyzed topic. The significant increase in the number of publications in recent years can be attributed to the increased attention to tourism issues during the COVID-19 pandemic.

The growing interest in the subject of tourism in the times of the COVID-19 pandemic confirms the usefulness of systematizing the latest literature review and searching for future directions of research in this area.

Most articles were written in English. Most of the publications were classified as articles (1104). Most publications concerned such research topics as social sciences or business economics (Table 1).

Figure 2. Number of publications related to tourism and the COVID-19 pandemic in 2020–2023



Source: the authors' elaboration based on the created data base.

Table 1. 10 most important research fields in Tourism during COVID-19 pandemic

Research Area	Percent	Number
Social Sciences	48,5%	604
Business Economics	19,8%	247
Environmental Sciences Ecology	16,7%	208
Science Technology Other Topics	14,4%	179
Geography	5,0%	63
Public Environmental Occupational Health	4,1%	51
Sociology	3,3%	41
Computer Science	2,6%	33
Education Educational Research	2,3%	28
Psychology	1,8%	23

Source: the authors' elaboration based on the created data base.

Table 1 shows that the authors represented different research areas. A lot, however, has been written in the social and environmental sciences.

#### 4.2. Web of Sciences Categories

The next step concerned the division of scientific publications into Web of Sciences categories (Table 2).

Table 2. Web of Sciences Categories

Web of Science Categories	Perecent	Number
Hospitality Leisure Sport Tourism	45,8%	571
Environmental Studies	14,4%	179
Green Sustainable Science Technology	13,0%	162
Environmental Studies	12,7%	159
Management	10,0%	125
Economics	6,3%	78
Geography	5,1%	63
Business	4,7%	59
Public Environmental Occupational Health	4,1%	51
Sociology	3,3%	41

Source: the authors' elaboration based on the created data base.

Most of these publications (as many as 571 items) were qualified to the “Hospitality Leisure Sport Tourism” category.

#### 4.3. The analysis of publication sources

The most popular journals containing articles on tourism were published during the COVID-19 pandemic include: *Sustainability*, *Current Issues in Tourism*, *International Journal of Environmental Research and Public Health*, *Annals of Tourism Research*, *Tourism Economics* (Table 3).



**Table 3.** Scientific journals with the largest number of publications in the field of tourism during the COVID-19 pandemic

Publications Titles	Percent	Number
Sustainability	10,5%	131
Current Issues in Tourism	7,0%	88
International Journal of Environmental Research and Public Health	2,3%	28
Annals of Tourism Research	1,9%	24
Tourism Economics	1,8%	23
Tourism Geographies	1,6%	20
Journal of Sustainable Tourism	1,4%	18
Journal of Hospitality and Tourism Management	1,3%	17
Worldwide Hospitality and Tourism Themes	1,3%	17
Tourism and Hospitality Research	1,2%	16

Source: the authors' elaboration based on the created data base.

**The most popular publishers include: Taylor & Francis, MDPI, Elsevier, Emerald Group Publishing, Sage, Springer Nature (Table 4).**

**Table 4.** Publishers with the largest number of publications in the field of tourism during the COVID-19 pandemic

Publishers	Percent	Number
Taylor & Francis	20,3%	253
MDPI	15,7%	196
Elsevier	11,7%	146
Emerald Group Publishing	8,2%	102
Sage	5,3%	66
Springer Nature	4,0%	50
Frontiers Media	1,8%	23

Publishers	Percent	Number
Wiley	1,7%	22
Univ Federal Juiz Fora, Campus Univ	0,9%	12
Crc Press-Balkema	0,8%	11

Source: the authors' elaboration based on the created data base.

The next stage concerned the presentation of the authors of the publication, country of origin and their affiliation.

#### 4.4. Analysis of publications by country and research center

The leader in publishing the largest number of publications on tourism during the COVID-19 pandemic was Rob Law (Table 5).

*Table 5.* The authors' publications in the field of Tourism in COVID-19 pandemic

Author	Number of publications in the field of Tourism in COVID-19 pandemic	Rank
Law R.	8	1
Li Z.Y.	7	2
Wen J.	7	2
Yang Y.	7	2
Baum T.	6	3
Gil-alana L.A.	6	3
Hall C.M.	6	3
Jeon C.Y.	5	4
Kozak M.	5	4
Li X.	5	4

Source: the authors' elaboration based on the created data base.

The authors publishing articles on tourism during the COVID-19 pandemic were most often from China. In addition, many publications were associated with authors from countries such as Spain, the USA, Australia, Great Britain or India (Table 6).

*Table 6.* Publications number by country

Country	Percent	Number
China	17,0%	212
Spain	9,9%	124
USA	7,8%	98
Australia	6,4%	80
Great Britain	6,1%	76
India	5,9%	74
Indonesia	4,4%	56
Italy	4,2%	53
Portugal	4,2%	53
South Korea	4,2%	53

Source: the authors' elaboration based on the created data base.

The next step was to make an analysis about the research centers. It should be noted that the dispersion of research on tourism during the COVID-19 pandemic was large. Most publications were published by employees of Rluk Research Libraries UK (Table 7).

*Table 7.* Number of publications by scientists from individual research centers

Affiliation	Percent	Number
Rluk Research Libraries Uk	2.1%	26
University of Johannesburg	2.0%	25
Hong Kong Polytechnic University	1.8%	23

Affiliation	Percent	Number
State University System of Florida	1.2%	16
Egyptian Knowledge Bank Ekb	1.1%	14
Sichuan University	1.1%	14
Universidad de Malaga	1.1%	14
Indian Institute of Management Iim System	1.0%	13
Kyung Hee University	0.9%	12
Swinburne University of Technology	0.9%	12

Source: the authors' elaboration based on the created data base.

The authors also represented the University of Surrey, Complutense University of Madrid, Edith Cowan University and Hainan University.

## 5. Discussion

According to the presented analyses, many authors described the impact of the COVID-19 pandemic on tourism in their publications. Table 8 presents a list of publications from 2020 on this subject, also showing the methods used by their authors.

*Tabela 8.* Number of publications regarding to influence of COVID-19 pandemic on tourism

Authors	Title	Publisher	Methods
Gössling, Scott, Hall	Pandemics, tourism and global change: a rapid assessment of COVID-19	Journal of Sustainable Tourism / Taylor&Francis	<ul style="list-style-type: none"> <li>• Period: 1972–2020</li> <li>• Methods: Systematic Literature Review (SLR)</li> </ul>
Higgins-Desbiolles	Socialising tourism for social and ecological justice after COVID-19	Tourism Geographies An International Journal of Tourism Space, Place and Environment / Taylor & Francis	<ul style="list-style-type: none"> <li>• Period: 1999–2020</li> <li>• Methods: SLR</li> </ul>

Authors	Title	Publisher	Methods
Qiu, Park, Li, Song	Social costs of tourism during the COVID-19 pandemic	Annals of Tourism Research / Elsevier	<ul style="list-style-type: none"> <li>• Period: 2020</li> <li>• Area: 1627 respondents of Hong Kong, Guangzhou and Wuhan</li> <li>• Methods: survey questionnaire, valuation method</li> </ul>
Zheng, Goh, Weng	The effects of misleading media reports about COVID-19 on Chinese tourists' mental health: a perspective article	Anatolia, An International Journal of Tourism and Hospitality Research / Taylor & Francis	<ul style="list-style-type: none"> <li>• Period: 1995–2020</li> <li>• Methods: SLR</li> </ul>
Brouder	Reset redux: possible evolutionary pathways towards the transformation of tourism in a COVID-19 world	Tourism Geographies An International Journal of Tourism Space, Place and Environment / Taylor & Francis	<ul style="list-style-type: none"> <li>• Period: 2013–2020</li> <li>• Methods: SLR</li> </ul>
Farzanagen, Gholipour, Feizi, Nunkoo, Andargoli	International Tourism and Outbreak of Coronavirus (COVID-19): A Cross-Country Analysis	Journal of Travel Research / SAGE	<ul style="list-style-type: none"> <li>• Period: 2020</li> <li>• Area: selected countries</li> <li>• Methods: regression method</li> </ul>
Correa-Martinez, Kampmeier, Kumpers, Schwierzack, Hennies, Hafezi, Kuhn, Pavenstadt, Ludwig, Mellmann	A Pandemic in Times of Global Tourism: Superspreading and Exportation of COVID-19 Cases from a Ski Area in Austria	Journal of Clinical Microbiology / ASM	<ul style="list-style-type: none"> <li>• Period: 2020</li> <li>• Area: Germany, Austria</li> <li>• Methods: case study</li> </ul>
Yu, Li, Yu, He, Zhou	Communication related health crisis on social media: a case of COVID-19 outbreak	Current Issues in Tourism / Taylor & Francis	<ul style="list-style-type: none"> <li>• Period: 2020</li> <li>• Methods: case study</li> </ul>
Carr	COVID-19, indigenous peoples and tourism: a view from New Zealand	Tourism Geographies An International Journal of Tourism Space, Place and Environment / Taylor & Francis	<ul style="list-style-type: none"> <li>• Period: 1979–2020</li> <li>• Methods: SLR</li> </ul>

Authors	Title	Publisher	Methods
Chang, McAleer, Ramos	A Charter for Sustainable Tourism after COVID-19	Sustainability / MDPI	<ul style="list-style-type: none"> <li>• Period: 2020</li> <li>• Methods: SLR</li> </ul>
Roman, Niedziółka, Krasnodębski	Respondents' Involvement in Tourist Activities at the Time of the COVID-19 Pandemic	Sustainability / MDPI	<ul style="list-style-type: none"> <li>• Period: 2020</li> <li>• Area: Poland, USA</li> <li>• Methods: survey questionnaire</li> </ul>

Source: Correa-Martinez et al., 2020; Gössling et al., 2020; Higgins-Desbiolles, 2020; Qiu, et al., 2020; Zheng et al., 2020; Brouder, 2020; Farzanagen et al., 2020; Yu, et al., 2020; Carr, 2020; Chang et al., 2020; Roman et al., 2020.

The scientific publications presented in Table 8 show that the work is focused on the use of databases to develop methods and tools showing the impact of the COVID-19 pandemic on tourism. The authors used a number of variables to show the issue of the pandemic and its importance in global tourism. The largest group of people used the Systematic Literature Review method to present the issue of the impact of the COVID-19 pandemic on tourism.

## 6. Conclusions

The COVID-19 pandemic has significantly contributed to a number of changes in socio-economic life. Given the different sectors of the economy, it is difficult to say which has been hit the hardest by this crisis. What is certain is that every sector has felt the changes caused by the outbreak of the COVID-19 pandemic around the world to a greater or lesser extent. However, tourism is the sector of the economy that is certainly struggling with the effects of this crisis to this day. The pandemic not only reduced the number of travellers, but also affected all sub-sectors related to tourism, such as gastronomy.

Overall, it can be said that the COVID-19 pandemic has shown that the tourism sector is very vulnerable, causing unprecedented changes, e.g. at some point during the pandemic, no mobility was possible [Espinero et al., 2017].

The COVID-19 pandemic not only affected the functioning of economic entities operating in the field of tourism, but also had a negative impact on many

associate organizations, e.g. local tourist organizations, which are considered to be one of the basic elements of the tourism organization system in Poland [Borzyszkowski, 2022].

It should be assumed that in the post-pandemic period, the structure of tourism demand will start to change, especially in the short term. Domestic trips will be more popular, as they will be an opportunity to rebuild the tourist market that has been so shaken. Several years are needed for the situation in the tourism sector to stabilize, and a full return to the pre-pandemic demand structure will take a relatively long time. Similarly, in the case of incoming foreign tourism, the adjustment period will be slow, especially for tourist traffic from non-European destinations. Countries and regions heavily dependent on tourism, not only in Poland but also around the world, are currently struggling with the problems and consequences caused by the pandemic. The most important of them concerns the decrease in tourist arrivals, which translates not only into the revenues of the industry itself, but also the impact on social problems resulting, for example, from the increase in unemployment [Dziuba, 2022].

It is noticeable that scientists are quite interested in the impact of the COVID-19 pandemic in relation to tourism in general, as indicated by numerous articles that appear around the world. It can be pointed out that research on this issue should cover many issues, including: the functioning of tourism economy entities, employment issues in the tourism sector, tourist behavior and its changes (comparison in the pre-pandemic and post-pandemic period), the scope of measures taken by the state to mitigate the negative effects caused by the COVID-19 pandemic [Panasiuk, 2020].

## | References

- Badger D., Nursten J., Williams P., Woodward M., 2000, *Should All Literature Reviews Be Systematic? Evaluation and Research in Education*, Vol. 14, pp. 220–230, DOI: 10.1080/09500790008666974.
- Barry E.S., Merkebu J., Varpio L., 2022, *State-of-the-art Literature Review Methodology: A Six-step Approach for Knowledge Synthesis. Perspectives on Medical Education*, Vol. 11, pp. 281–288, DOI: 10.1007/s40037-022-00725-9.
- Borzyszkowski J., 2022, *Wsparcie Turystyki w dobie pandemii COVID-19. Przegląd wybranych działań podejmowanych przez lokalne organizacje turystyczne*, "Mazowsze. Studia Regionalne", No. 41, pp. 25–36, DOI: 10.21858/msr.41.02.

- Brouder P., 2020, *Reset Redux: Possible Evolutionary Pathways Towards the Transformation of Tourism in a COVID-19 World*, "Tourism Geographies – An International Journal of Tourism Space, Place and Environment", Vol. 22(3), pp. 484–490.
- Carr A., 2020, *COVID-19. Indigenous Peoples and Tourism: a View from New Zealand*, "Tourism Geographies", Vol. 22(3), pp. 491–502.
- Chang C.L., McAleer M., Ramos V., 2020, *A Charter for Sustainable Tourism after COVID-19. Sustainability*, Vol. 12, pp. 3671.
- Correa-Martinez C.L., Kampmeier S., Kumpers P., Schwierzeck V., Hennies M., Hafezi W., Kuhn J., Pavenstadt H., Ludwig S., Mellmann A., 2020, *A Pandemic in Times of Global Tourism: Superspreading and Exportation of COVID-19 Cases from a Ski Area in Austria*, "Journal of Clinical Microbiology", Vol. 58(6), pp. 1–3.
- Dziuba R., 2022, *Zrównoważony rozwój turystyki w dobie pandemii COVID-19 – przykład państw Bałkanów Zachodnich kandydujących do Unii Europejskiej*, DOI: 10.18778/8220-933-4.4.
- Espinero S., Orchiston C., Higham J., 2017, *Resilience and Sustainability: a Complementary Relationship? Towards a Practical Conceptual Model for the Sustainability – Resilience Nexus in Tourism*, "Journal of Sustainable Tourism", Vol. 25(10), pp. 1385–1400, DOI: 10.1080/09669582.2017.1281929.
- Farzanagan M.R., Gholipour H.F., Feizi M., Nunkoo R., Andargoli A.E., 2020, *International Tourism and Outbreak of Coronavirus (COVID-19): A Cross-Country Analysis*, "Journal of Travel Research", Vol. 3, pp. 687–692, DOI: 10.1177/0047287520931593.
- Gössling S., Scott D., Hall M., 2020, *Pandemics, Tourism and Global Change: a Rapid Assessment of COVID-19*, "Journal of Sustainable Tourism", Vol. 29, pp. 1–20.
- Guzik H., Ostrowska B., 2015, *Ekonomiczne aspekty gospodarowania przestrzenią turystyczną*, „Zeszyty Naukowe Finanse”, No. 913, pp. 57–76.
- Higgins-Desbiolles F., 2020, *Socialising Tourism for Social and Ecological Justice after COVID-19*, "Tourism Geographies", Vol. 22(3), pp. 610–623.
- Kliniewicz K., 2012, *Bibliometria a inne techniki analityczne*, [in:] *Bibliometria w zarządzaniu technologiami i badaniami naukowymi*, K. Kliniewicz, K. Żemigała, M. Mijał (eds.), pp. 34–40, Warszawa.
- Kowalczyk-Anioł J., Pawlusiński R., 2021, *Miasto turystyczne wobec pandemii COVID-19. Pierwsze doświadczenia w świetle literatury przedmiotu*, "Annales Universitatis Mariae Curie-Skłodowska", Vol. 76, pp. 203–222, DOI: 10.17951/b.2021.76.203-222.
- Liszewski S., 2013, *Treści, formy, przestrzenie i klasyfikacje turystyki*, "Warsztaty z Geografii Turyzmu", Vol. 3, pp. 9–19, DOI: 10.18778/7525-925-4.02.
- Panasiuk A., 2020, *Przyczynek do badań nad wpływem pandemii na stan gospodarki turystycznej*, [in:] *Turystyka w Naukach Społecznych*, Vol. 3: *Ekonomia i Finanse*, K. Nessel (ed.), Kraków, pp. 55–70.
- Pritchard A., 1969, *Statistical Bibliography or Bibliometrics*, "Journal of Documentation", Vol. 25(4), pp. 348–349.



- Qiu R.T.R., Park J., Li S., Song H., 2020, *Social Costs of Tourism during the COVID-19 Pandemic*, "Annals of Tourism Research", Vol. 84(102994), DOI: 10.1016/j.annals.2020.102994.
- Prideaux B., Thompson M., Pabel A., *Lessons from COVID-19 Can Prepare Global Tourism for the Economic Transformation Needed to Combat Climate Change*, "Tourism Geographies", Vol. 22(3), pp. 667–678.
- Roman M., Niedziółka A., Krasnodębski A., 2020, *Respondents' Involvement in Tourist Activities at the Time of the COVID-19 Pandemic*, "Sustainability", Vol. 12(9610), DOI: 10.3390/su12229610.
- Staszewska A., 2022, *Zarządzanie kryzysem w turystyce podczas pandemii COVID-19*, "Zeszyty Naukowe Wydziału Zarządzania GWSH", No. 17, pp. 14–23 DOI: 10.53259/2022.17.02.
- Stojczew K., 2021, *Ocena wpływu pandemii koronawirusa na branżę turystyczną w Polsce*, "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", No. 65(1).
- Yu M., Li Z., Yu Z., He J., Zhou J., 2020, *Communication Related Health Crisis on Social Media: a Case of COVID-19 Outbreak*, "Journal Current Issues in Tourism", Vol. 24, pp. 2699–2705, DOI: 10.1080/13683500.2020.1752632.
- Zheng Y., Goh E., Wen J., 2020, *The Effects of Misleading Media Reports about COVID-19 on Chinese Tourists' Mental Health: A Perspective Article*. *Anatolia*, "An International Journal of Tourism and Hospitality Research", Vol. 31(2), pp. 337–340.