

Mapping the evolution of tourism research: the Spanish case

1. Introduction

Tourism serves as a significant catalyst for economic growth on a global scale. In 2022, the travel and tourism sector made a remarkable contribution of 7.6% to the global gross domestic product (GDP), representing a substantial 22% increase compared to the previous year (World Travel & Tourism Council, 2023). Following a sharp decline caused by the onset of the coronavirus pandemic, the number of international tourist arrivals worldwide experienced a notable recovery, roughly doubling in 2022 in comparison to the preceding year (Statista, 2022a). The travel and tourism market is projected to witness substantial growth in global revenue, reaching an estimated value of US \$1,015.7 billion by 2027; this represents a 3% increase compared to the revenue generated in 2017 (Statista, 2022b).

Within Spain, tourism assumes a crucial position, acting as a principal catalyst for economic expansion. In 2022, the tourism industry accounted for an impressive 61% of the country's economic growth (Exceltur, 2023). Spain attained a remarkable feat by securing the second-highest position globally in terms of international tourist arrivals, attracting approximately 71.7 million visitors in 2022 who collectively spent 87.061bn (United Nations World Tourism Organization, 2023). Recent forecasts indicate that in 2023, the tourism industry will contribute over 164 billion euros to Spain's gross domestic product (GDP) (Exceltur, 2023).

From an academic perspective, tourism research has historically derived contributions from a diverse array of journals associated with various disciplines. These include anthropology, business, economics, geography, history, political science, sociology, architecture, urban studies, agriculture, rural development, and many others (Butler, 2015).

Tribe and Airey's review (2014) sheds light on the changes that have transpired in tourism research in recent decades. They emphasize the shifting influences of different disciplines within tourism research. For instance, cultural geographers' increasing interest in tourism has gained prominence, challenging the once-dominant discipline of economics. Additionally, while management issues continue to attract considerable interest among researchers, there has been a growing focus on consumption and performance-related aspects, alongside questions related to production. Furthermore, issues surrounding tourism embodiment have also gained exposure and recognition in the field.

Over the past two decades, there has been a notable emergence of dedicated academic journals specifically focused on tourism. In fact, 77.9% of journals indexed in the SJR (Scimago Journal Rank) under the category of "tourism, leisure, and hospitality management" commenced their publication activity in the year 2000 or later (Scimago, 2023). This substantial increase in the number of dedicated journals highlights the growing importance and recognition of tourism as a significant academic subject.

The literature on tourism includes in-depth analyses of its primary research themes and the evolving landscape of this subject through review articles, exemplified by the works of Mulet-Forteza et al. (2019) and Leong et al. (2021). Furthermore, a variety of specialized bibliometric studies have been published across multiple subfields within tourism. These encompass topics such as smart tourism (Bastidas-Manzano et al., 2021; Johnson and Samakovlis, 2019), e-tourism (Singh and Bashar, 2023), eco-tourism (Shasha et al., 2021), sustainable tourism (Serrano et al., 2019), accessible tourism (Qiao et al., 2022; Singh et al., 2023), heritage tourism (Bhowmik, 2021), medical tourism (Habibi et al., 2022), artificial intelligence in tourism (Knani et al., 2022), food, gastronomy and restaurants in tourism (Durán Domínguez et al., 2017; Okumus et al., 2018; Rodríguez-López et al., 2020), value cocreation in tourism (Liu et al., 2022), social media and tourism (Nusair et al., 2019), customer experience and tourism (Kim and So, 2022), COVID-19 and tourism (Utkarsh and Sigala, 2021), and the sharing economy in tourism (Mody et al., 2021), among others.

In the context of Spain, the country has made notable contributions to tourism research and is recognized as one of the most productive countries in the field, ranking after the United States, the United Kingdom, and Australia (Zhang et al., 2015). However, no research to date have specifically delved into the scientific literature on tourism in Spain and its evolution over time. Therefore, this study examines the intellectual structure and evolution of tourism research related to Spain. In so doing, we firstly assessed the production of tourism research focused on Spain. Second, scientific mapping was conducted using co-word analysis to identify the main research themes in the area and their evolution.

2. Literature review

The earliest research in the field of tourism dates back to the first half of the twentieth century, primarily focusing on urban destinations, land use, the environmental impact of tourism, and its economic effects, as noted by Butler (2015). The author also stated that the 1960s marked a period of growth in tourism studies, particularly related to leisure, recreation, travel demand, carrying capacity, and other related topics. The theoretical foundations of tourism research were rapidly developed during the 1970s.

Over the past few decades, there has been a proliferation of refereed tourism academic journals. Journals affiliated with other academic disciplines have also begun regularly publishing tourism-related studies. These developments, coupled with the increasing global tourist population, industry growth, and the growing interest in tourism research from scholars across various disciplines, have spurred substantial expansion in the field of tourism research.

To address this expanding landscape of tourism research, bibliometric analysis has emerged as a popular and robust method for exploring and analyzing large volumes of scientific data, as observed by Donthu et al. (2021). In the realm of tourism, several studies have focused on mapping the intellectual structure and evolution of research within the field as well as on specific subjects within it. For instance, Mulet-Forteza et al. (2019) conducted a comprehensive analysis of research output in the tourism, leisure, and hospitality fields from 1969 onwards.

Their study identified five primary streams of research within these fields: i) tourists' perceived experience when visiting destinations or participating in alternative forms of tourism, such as events, sports, races, or outdoor recreation, ii) tourism and the hospitality industry, social networks, corporate social responsibility, and customer loyalty, iii) sustainable development (e.g., tourism development, economic growth, climate change, environmental impacts, and tourism planning), iv) destination image related to tourist behaviour, satisfaction, and cultural tourism, and v) travellers' motivations related topics (e.g., perceived value of a trip, consumer loyalty, and emotional aspects).

Research at the intersection of Information and Communication Technologies (ICT) and tourism has grown significantly too. Studies like Bastidas-Manzano et al. (2021) indicate that this research mainly revolves around defining smart tourism, assessing tourist experiences, consumer behavior in smart destinations, and exploring smart tourism aspects, including technology, sustainability, and smart cities. Johnson and Samakovlis (2019) further underline the close connection between smart tourism research and technologies like big data and social media.

Within the ICT framework applied to tourism, artificial intelligence (AI) research has gained prominence. Knani et al. (2022) reveal that neural networks and data mining are leading research themes, predominantly used to predict guest satisfaction, tourist arrivals, tourism demand, hotel room prices, and profitability. In fact, the most specialized research themes in this fields include the use of biometrics as well as methods and models for forecasting tourism demand or tourist arrivals, such as machine-learning models. Additionally, research on robotics and customer experiences with service robots are emerging themes.

Research concerning social media and tourism has experienced significant growth in the past decade. Nusair et al. (2019) highlight the increasing exploration of various social media platforms in the hospitality and tourism literature and their influence on various sectors within the tourism industry, including travel businesses, destinations, and hotels. Consumer behavior

research in the realm of social media and tourism has also expanded, with hot topics including web 2.0, travel 2.0, big data, and netnography.

Sustainable tourism and ecotourism have also garnered attention. Serrano et al. (2019) categorize this research into environmental and management approaches. Studies within the environmental category address sustainable planning, the environmental impact of tourism, economic aspects of ecotourism, nature-based tourism, conservation, and slow tourism, among others. Management-oriented studies focus on sustainable businesses, responsible industries, business tourism responsibility, conservation, and industry impacts. Shasha et al. (2020) expand on ecotourism topics such as biodiversity and community involvement, classifying research into conservation, management, and community engagement categories.

Several noteworthy bibliometric studies explore specific tourism domains, including heritage tourism (Bhowmik, 2021), tourism and disability (Singh et al., 2021), and literature emerging from the COVID-19 pandemic's impact on tourism (Utkarsh and Sigala, 2021).

In the case of Spain, the most studied topics in the last five decades are related to issues such as the importance of the tourist destination (e.g., Andrades-Caldito et al., 2013; Molera and Albadalejo, 2013), seasonality (e.g., González and Moral, 1995), types of tourism (e.g., González and Medina, 2003; Lasanta et al., 2007), the use of marketing techniques to improve the profitability of firms (e.g., Robledo, 2002), competitiveness (e.g., Sundbo, et al., 2007), the influence of tourism on the environment (e.g., Williams et al., 2016) and natural resources (e.g., Downward and Taylor, 2007), or the adaptation of the sector to crisis contexts such as the COVID-19 pandemic (Arbulú et al., 2021) or climate change (Bujosa et al., 2015).

However, no studies have systematically analyzed the intellectual structure and evolution of tourism research in Spain. This research gap is noteworthy, considering Spain's industrial and academic contributions to the tourism sector (Zhang et al., 2015). To address these gaps, the following research questions are proposed:

RQ1: How has the publication of scientific documents about tourism in Spain evolved to date?

RQ2: Which journals have published the most scientific documents about tourism in Spain?

RQ3: Which authors have contributed the most to the research area?

RQ4: Which scientific documents have had the most impact?

RQ5: What are the primary research themes in tourism related to Spain?

RQ6: How have the main research themes about tourism in Spain evolved over time?

3. Methodology

We followed a historical longitudinal approach to analyse the main research themes within the domain of tourism research related to Spain. Our methodology involved two key steps. First, we conducted a performance analysis to examine the evolution of research documents published in this field and assessed the impact. This allowed us to understand how the body of literature has developed over time. Second, we employed scientific mapping through co-word analysis. Co-word analysis involves examining the frequency of co-occurrence of two keywords within the analysed documents. By identifying the patterns of keyword associations, we were able to uncover the primary research themes that emerged within the field of study and to observe the evolution of these themes. This approach allows us to provide a comprehensive understanding of the research landscape in tourism studies related to Spain.

Bibliographic data were collected from the Scopus database using the following query:
(TITLE-ABS-KEY (tourism) AND TITLE (spain) OR TITLE (spani*))

We specifically chose articles and book chapters written in English from the top three subject areas based on the search results: social sciences, business, management, and accounting, and environmental sciences. This approach ensured the exclusion of much more tangentially related areas, such as energy, earth and planetary sciences, and others. Our search resulted in 1,100 bibliographic records spanning from 1972 to 2022, all of which were downloaded for further data analysis.

Scopus was selected as the database for our study due to its status as the largest repository of scientific articles (Norris and Oppenheim, 2007). Its extensive coverage encompasses nearly 60 percent more content compared to Web of Science (Zhao and Strotmann, 2015). The use of Scopus provides us with access to a broader selection of scholarly articles, thus contributing to the enhanced robustness of our findings. This data collection strategy aligns with recent studies that share similar objectives (Donthu et al., 2021; Ye et al., 2021).

We used SciMAT as the data analysis software for our study (Cobo, 2012). The primary rationale for selecting SciMAT was its capability to facilitate longitudinal research, aligning well with our research questions. Furthermore, SciMAT offers a suitable framework for integrating performance measures, including output and impact indicators, with co-word analysis. In addition, we also used the Biblioshiny package from R software to obtain a country collaboration map of scientific publications, as it is commented below.

To facilitate a comprehensive exploration of the interconnectedness of the research themes and their historical evolution, we divided the overall period of 1972-2022 into three distinct subperiods. Specifically, we have followed the criteria established in the literature by dividing the study period into decades (to facilitate the longitudinal analysis of the evolution of the most relevant themes) (e.g., Borah et al., 2022; Rojas-Lamorenna et al., 2022; Rodríguez-López et al., 2020). However, in the first of the sub-periods, corresponding to an embryonic phase, we have included three decades to ensure a sufficiently representative number of works for thematic analysis (Muñoz-Leiva et al., 2012; Murgado-Armenteros et al., 2015). The initial period, spanning from 1972 to 2002, consisted of 70 documents. The growing period, ranging from 2003 to 2012, encompassed 225 documents. Finally, the consolidation period, covering the years 2013 to 2022, included 805 articles.

The results of the co-word analysis for the three subperiods are presented through a longitudinal evolution map and three strategic diagrams, one for each period (Cobo et al., 2012). The longitudinal evolution map (Figure 4) provides a visual representation of the development

of research themes over time. It consists of three columns representing the three subperiods. Within each column, research themes are depicted as spheres, with the size of each sphere indicating the number of research documents associated with that particular theme. The map includes solid lines, representing thematic bonds between topics. These lines signify that the themes are studied from a similar perspective, with one theme appearing in the thematic network of the other. Dotted lines, on the other hand, indicate that two themes share keywords. The thickness of the lines corresponds to the level of co-occurrence of keywords between any two topics.

The strategic diagrams (Figures 5, 6, and 7) offer an analysis of the main themes in the research field for each subperiod. Similar to the evolution map, themes are depicted as spheres, and the sizes of these spheres are proportional to the number of articles published on each theme.

In the strategic diagrams, themes are positioned based on two criteria: centrality and density. Centrality refers to the degree of interaction of a theme with other networks, reflecting its overall importance in the development of the research field. Density, on the other hand, measures the strength of internal ties between keywords describing a theme, indicating the level of development of that theme (Cobo, 2012). By combining these two measures, themes can be classified into four categories or quadrants within the strategic diagrams. Themes with high centrality and density are positioned in the upper-right quadrant (Q1). These primary "motor themes" are well-developed mainstream topics that hold significant importance in the research field. "Peripheral themes" are located in the upper-left quadrant (Q2), characterized by low centrality but high density. These themes are highly specialized and internally developed but have limited connections to external networks. "Marginal themes" appear in the lower-left quadrant (Q3) and exhibit low density and low centrality. These themes are typically emerging or declining topics with relatively poor development. "Basic themes" are situated in the lower-right quadrant (Q4), showcasing strong centrality but low density. Although these themes may

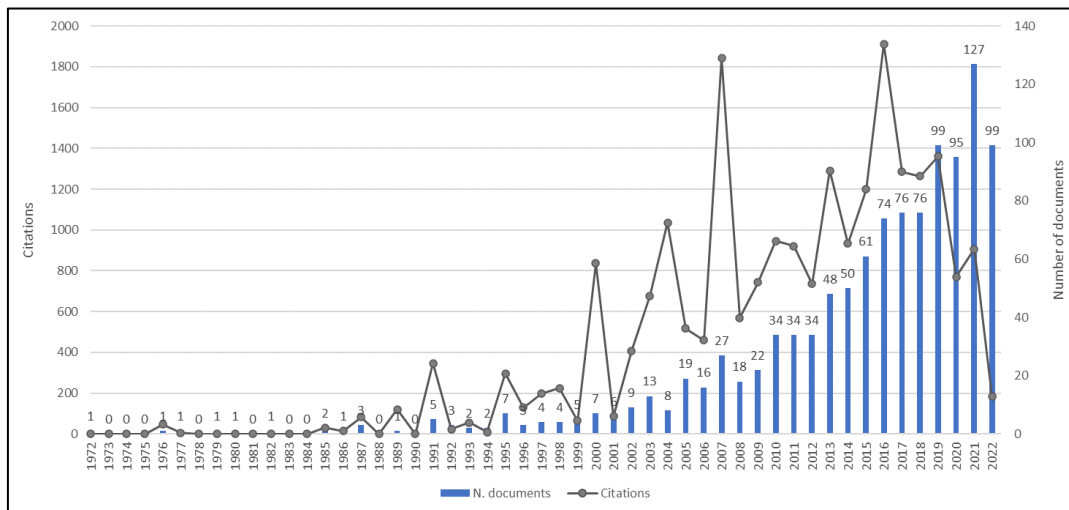
be poorly developed, they hold importance in the scientific field. They can be characterized as transversal, generic subjects.

3. Results

3.1. Performance analysis

Figure 1 shows the evolution of tourism research publications focused on Spain and their impact, addressing RQ1. In the initial two decades, research in this field was very limited. However, there has been a significant increase in research output, particularly during the last two decades. Notably, the publications between 2003 and 2022 account for 93.6% of the overall output, indicating a substantial growth in research activity during these periods. Research conducted in this area has therefore captured attention from the scholarly community over the last years. Moreover, research on tourism and Spain has garnered a considerable impact, as evidenced by the 22,533 citations received by the publications. On average, each document has received 20.5 citations.

Figure 1. Evolution in volume and impact of scientific publications (1972–2022)



Source: Own elaboration

Table I lists the most prolific journals in the field of study (RQ2). *Sustainability* is first, with 92 publications. *Tourism Management* and *Tourism Economics* rank second and third, with 53 and 42 scientific documents, respectively.

Table I. Most productive journals in the field.

Journal	N. docs
Sustainability	92
Tourism Management	53
Tourism Economics	42
Land	31
Cuadernos de Turismo	28
Current Issues in Tourism	27
Boletín de la Asociación de Geógrafos Españoles	21
Annals of Tourism Research	18
Science of the Total Environment	17
International Journal of Tourism Research	14

Source: Own elaboration

Table II lists the authors with the highest output in the research area (RQ3), and those whose research made the highest impact. Tomas Lopez-Guzman, Jose Francisco Perles-Ribes, and Ana Belén Ramon-Rodríguez, with 10 articles each, are the most productive authors in the field. Metin Kozak had the highest impact (787 citations).

Regarding RQ4, Table III provides a ranking of the 20 articles with the highest impact in the area. Notably, the three articles with the highest impact are authored by the seven most influential authors mentioned earlier in Table II.

Table III reveals that impactful tourism studies focused on Spain encompass a diverse range of themes. These studies address various topics including the relationship between transnational terrorism and tourism, the role of transport systems, the effects of overtourism, suburbanization and land use dynamics, market segments and business models in rural tourism, migration patterns associated with tourism history and tourist systems, sustainable tourism practices and systems, and heritage tourism, among others.

Table II. Author performance.

Authors with the most articles	No. Doc.	No. Cit.	Authors with the most citations	No. Cit.	N. Doc.
López-Guzmán, T. (University of Córdoba, Spain)	10	105	Kozak, M. (Mugla University, Turkey)	787	2
Perles-Ribes, J.F. (University of Alicante, Spain)	10	243	Rimington, M. (Oxford Brookes University, UK)	748	1
Ramón-Rodríguez, A.B. (University of Alicante, Spain)	10	243	Beerli, A. (University of Las Palmas de Gran Canaria, Spain)	567	1
Moreno-Izquierdo, L. (University of Alicante, Spain)	9	244	Martín, J.D. (University of Las Palmas de Gran Canaria, Spain)	567	1
Anfuso, G. (University of Cádiz, Spain)	8	246	Sundbo, J. (Roskilde University, Denmark)	290	1
Armesto-López, X.A. (University of Barcelona, Spain)	8	114	Orfila-Sintes, F. (University of The Balearic Islands, Spain)	290	1
Gómez-Martín, M.B. (University of Barcelona, Spain)	8	82	Sørensen, F. (Ceus School of Business, Denmark)	290	1
Ramón-Cardona, J. (University of the Balearic Islands, Spain)	8	26	Pulido-Bosch, A. (University of Granada, Spain)	286	6
Sánchez-Fernández, M.D. (University of the Balearic Islands, Spain)	8	16	Cortés-Jiménez, I. (Nottingham University Business School, UK)	278	2
Blázquez-Salom, M. (University of the Balearic Islands, Spain)	7	123	Anfuso, G. (University of Cádiz, Spain)	246	8
Robina-Ramírez, R. (University of Extremadura, Spain)	7	97	Blancas, F.J. (Pablo de Olavide University, Spain)	246	2
Sánchez-Rivero, M. (University of Extremadura, Spain)	7	98	Lozano-Oyola, M. (Pablo de Olavide University, Spain)	246	2
Williams, A.T. (University of Wales, UK)	7	241	González, M. (Málaga University, Spain)	246	2

Source: Own elaboration

Notably, the study conducted by Kozak and Rimmington (2000) achieved the greatest impact. Their research was pioneering in identifying critical attributes of tourist satisfaction in a mass tourism destination focused on sun and beach, specifically Mallorca, during the winter season. The study revealed that destination attractiveness, tourist attractions and facilities, as well as facilities and services at the destination airport, played crucial roles in explaining the overall level of satisfaction. Moreover, destination attractiveness, facilities and services at the destination airport, overall satisfaction, and frequency of previous experiences emerged as strong indicators of tourists' intentions to revisit.

Another highly impactful article, authored by Beerli and Martín (2004), examined the relationships between tourist characteristics and perceptions of place, using a representative sample of tourists visiting the island of Lanzarote. The results underscored that tourists' motivations influenced the affective component of image, the vacation travel experience had a significant relationship with cognitive and affective images, and socio-demographic characteristics influenced the cognitive and affective assessment of image.

The third notable article was authored by Enders and Sandler (2008). This article took a managerial perspective and presented a theoretical framework for understanding the innovativeness of tourism firms and its determinants, comparing data from Spanish and Danish tourism firms across various sectors (accommodation, restaurants, travel agencies, attractions, transport companies, etc.). The authors developed a taxonomy of tourism firms to explain their innovative behaviour. The main findings highlighted that tourism firms' innovation behaviour was linked to firm size, with larger firms exhibiting greater innovativeness. Furthermore, the type of firm (tourism corporations being the most innovative, followed by tourism enterprises) and professionalism (including aspects like business and training plans, quality control systems, academic employees, IT utilization, etc.) influenced the level of innovation displayed by tourism firms.

Table III. Articles with the greatest impact in the field.

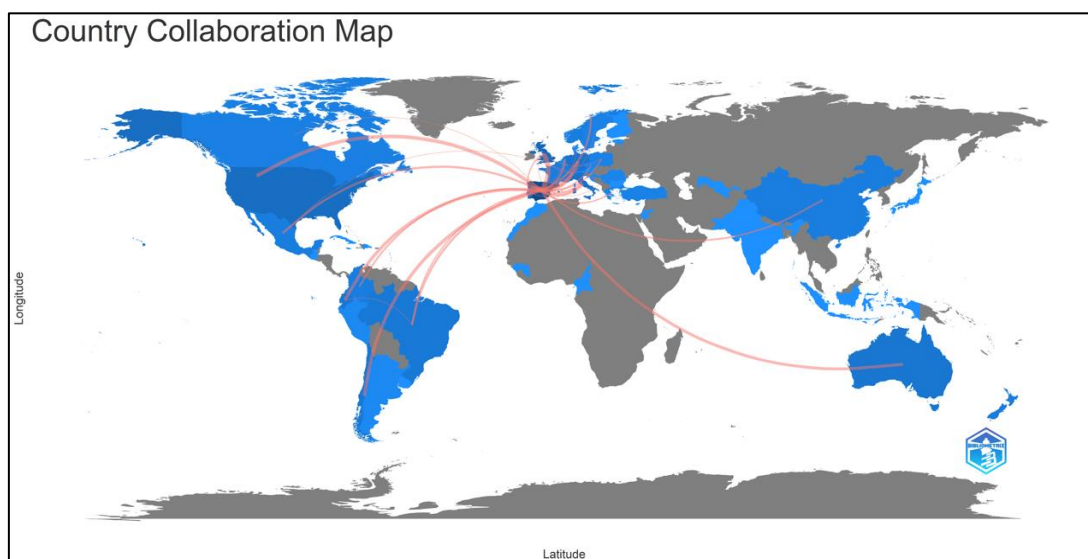
Document	Author(s) and year	Cit.
Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination	Kozak and Rimmington (2000)	748
Tourists' characteristics and the perceived image of tourist destinations: A quantitative analysis - A case study of Lanzarote, Spain	Beerli and Martín (2004)	567
The innovative behaviour of tourism firms-Comparative studies of Denmark and Spain	Sundbo et al. (2007)	290
Causality between transnational terrorism and tourism: The case of Spain	Enders and Sandler (2008)	241
Residents' perceptions of tourism development in Benalmádena (Spain)	Almeida-García et al. (2016)	200
Can the high speed rail reinforce tourism attractiveness? The case of the high speed rail between Perpignan (France) and Barcelona (Spain)	Masson and Petiot (2009)	198
Overtourism: residents' perceptions of tourism impact as an indicator of resident social carrying capacity - case study of a Spanish heritage town	Muler Gonzalez et al. (2018)	192
Not only tourism: unravelling suburbanization, second-home expansion and "rural" sprawl in Catalonia, Spain	Cuadrado-Ciuraneta et al. (2017)	182
Rural tourism in Spain: An analysis of recent evolution	Cánoves et al. (2004)	179
Tourism, capital good imports and economic growth: Theory and evidence for Spain	Nowak et al. (2007)	162
Impacts of land use change on ecosystem services and implications for human well-being in Spanish drylands	Quintas-Soriano et al. (2016)	157
Profiling segments of tourists in rural areas of South-Eastern Spain	Molera and Albaladejo (2007)	152
High speed rail and tourism: Empirical evidence from Spain	Albalate and Fageda (2016)	148
When is a tourist?: The articulation of tourism and migration in Spain's Costa del Sol	O'Reilly (2003)	145
Sustainable tourism and policy implementation: Lessons from the case of Calviá, Spain	Dodds (2007)	137
Land use change and land degradation in southeastern Mediterranean Spain	Symeonakis et al. (2007)	137
The assessment of sustainable tourism: Application to Spanish coastal destinations	Blancas et al. (2010)	132
Identity and community - Reflections on the development of mining heritage tourism in Southern Spain	Ballesteros and Ramírez (2007)	131
An analysis of the international tourism demand in Spain	González and Moral (1995)	129

Source: Own elaboration

Finally, Figure 2 analyses the social structure of the research area. It identifies the main collaboration networks between researchers linked to Spanish research centres (since Spain is the nerve centre of research in the field of tourism in our paper) and academics who work in other countries. We can observe that most of the studies available in our database arise from collaboration between Spain and regions such as the United States, Canada, Latin America

(mainly Brazil, Colombia, Ecuador, or Chile), the United Kingdom, the European Union (mainly Italy and Germany), China or Australia.

Figure 2. Country collaboration map of scientific publications (1972–2022)



Source: Own elaboration based on Biblioshiny

3.2. Science mapping: historical evolution of tourism research focused on Spain

The first tourism study of which we have record in our database is entitled *Tourism and tourism promotion in Spain* (Moser, 1972). The article examined the tourism boom in 1960s Spain, with tourist numbers increasing from 4 to nearly 27 million. It explored the economic and employment impacts while critically analysing the challenges stemming from the Spanish Stabilisation Plan of 1959. Issues identified included susceptibility to income fluctuations and seasonal imbalances in tourist demand. Concentration of tourist services in a few regions, such as Balearic Islands, Barcelona, Girona, and Málaga, was also highlighted. The article criticized the lack of significant promotion for less-developed provinces suitable for tourism. The Spanish Second Development Plan (1968-1971) was also assessed, noting increased seasonal fluctuations and further concentration in coastal and island provinces. The need for a tailored promotion concept and closer cooperation among stakeholders was emphasized. The article also called for increased development aid and better coordination to drive social-economic progress through tourism.

Based on this work, other studies focused on Spain have developed tourism as a field of research. Using the evolution map and strategic diagrams for each period, we examined the thematic evolution and identified the most prominent topics for each period (1972-2002, 2003-2012 and 2013-2022).

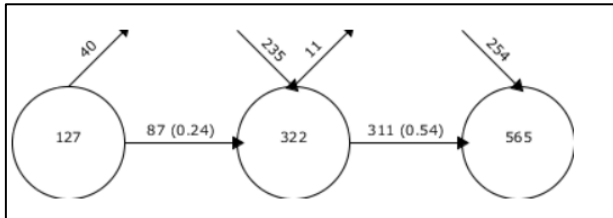
3.2.1. Thematic analysis

To answer RQ5 and RQ6, the SciMAT tool was used to trace the evolution of the research themes appearing in the three periods. Results demonstrate a somewhat heterogeneous yet largely consolidated evolution of knowledge. More precisely, the transition map reveals a moderate level of cohesion among periods (see Figure 3). During the first period (1972-2002), 127 keywords were identified, with the majority (87) being recaptured in the second phase. In this second period (2003-2012), there was an emergence of 235 new keywords, indicating a robust evolution of the thematic area. Hence, in the second period, 322 keywords were found, of which 311 were once again gathered in the third period (2013-2022). In this third period 243 new keywords were incorporated.

In a general sense, if we look at the continuous lines of the evolution map (see Figure 4), it can be discerned that several themes originated from the first period are included within the thematic network of a subsequent research theme. Thus, during the initial phase of research on the topic of tourism in Spain (1972-2002), as depicted by the evolution map, tourism was associated with four research themes: "Environmental Impact", "Tourism Development", "Seasonality" and "Marketing". The first two themes, "Environmental Impact" and "Tourism Development" stood out as the most significant driving themes, with the highest number of documents and citations. The theme "Marketing" was scarcely developed during this time frame. This theme first appears in the initial period, but it eventually evolves into "Competitiveness", a theme that finally developed into the "Tourist Destination" in the third period. Thus, three out of the four themes ("Environmental Impact", "Tourism Development", and "Marketing") from this initial period demonstrated a thematic linkage with one or more themes from the subsequent

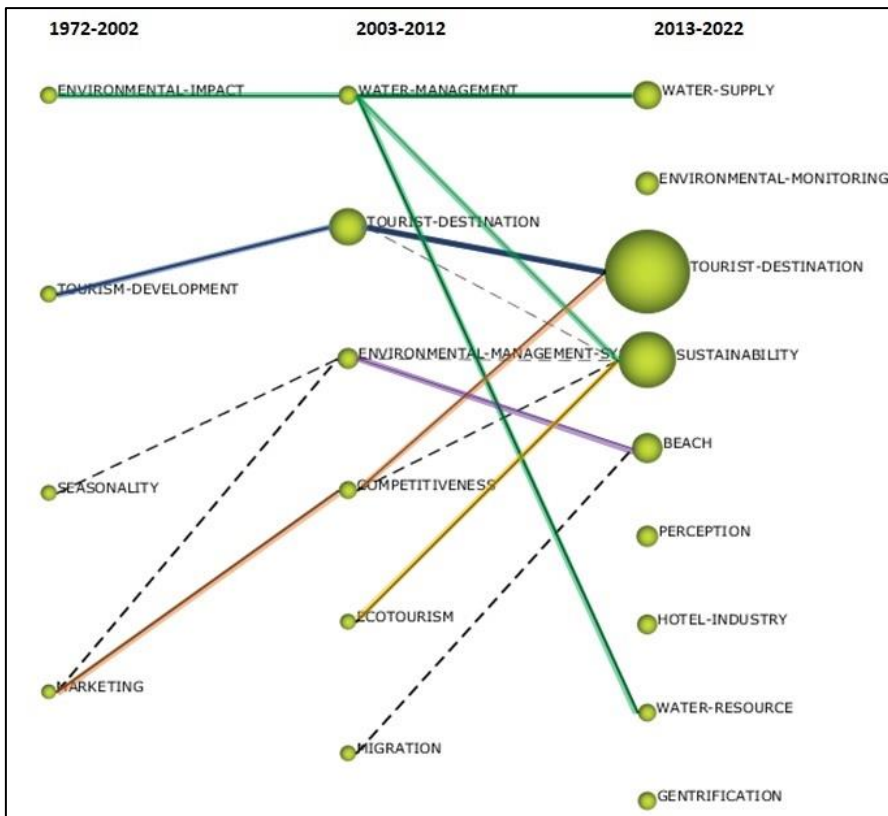
period, becoming part of the thematic network of the themes from the two later periods due to their investigation from a correlated perspective.

Figure 3. Transition map (1972-2022)



Source: Own elaboration based on SciMAT

Figure 4. Longitudinal evolution map (1972–2022)



Source: Own elaboration based on SciMAT

Regarding "Marketing", in the tourism context during the early years, it was primarily studied from a strategic perspective and in relation to the concept of business competitiveness (e.g., Bueno, 1999; Rubalcaba and Gago, 2001), with a particular focus on the Spanish hotel

industry (Robledo, 2002). As the field of tourism research moved into the second period, "Marketing" was observed to strengthen its thematic link with the concept of "Competitiveness". This connection can be inferred from an examination of the core documents from this period, which include studies focusing on the innovative behaviour of tourism companies (e.g., Sundbo, et al., 2007), on the relationship between business characteristics and ICT deployment in rural tourism (e.g., Peña and Jamilena, 2010), and strategic behaviour in the hotel sector (Sánchez-Ollero, et al., 2012). Within this context, these studies reinforce the notion that competitiveness in the tourism sector is inherently tied to innovation, technology adoption, and sustainability. Thus, Sundbo et al. (2007) highlighted how tourism enterprises exhibit innovative behaviors in the cross-cultural context; Peña and Jamilena (2010) emphasized the significance of business characteristics in the adoption of ICTs in the rural tourism sector in Spain, suggesting that factors such as company size and age might influence their ability to embrace emerging technologies; and Sánchez-Ollero et al. (2012) offered insights into how the strategic behavior of hotels can impact their environmental footprint, underscoring the intersection between business strategy and environmental sustainability.

Hence, the "Marketing" theme in the second period evolved into the "Competitiveness" theme, which finally, in the third period focused on research regarding "Tourist Destination". This association is evidenced by a range of influential documents published between 2013-2022, covering the variety of aspects such as residents' perceptions of tourism development (e.g., Almeida-García, et al., 2016), destination brand equity in the context of wine tourism (e.g., Gomez et al., 2015), or the evolution of mass tourism destinations (Ivars-Baidal et al., 2013). In this vein, Almeida-García et al. (2016) delved into the perceptions of residents, revealing that while tourism has brought economic benefits, it has also raised concerns about sustainability and environmental impact. Gomez et al. (2015) proposed a brand equity model for wine tourism destinations in Spain, emphasizing the role of perceived quality, brand loyalty, and brand associations in shaping a destination's brand equity. Furthermore, challenging traditional deterministic models, Ivars-Baidal et al. (2013) showcased the adaptability and evolution of mass

tourism destinations, using Benidorm as a case study. In summary, the thematic evolution of "Marketing" in tourism research focused on Spain over the analysed time period can be seen as an evolution from a focus on strategic and competitive aspects within the hotel industry towards a broader concern with competitiveness in the tourism sector as a whole, and subsequently to the role of marketing in the development and perception of tourism destinations.

On the other hand, we will focus on the "Environmental Impact" theme. During the first phase of research (1972-2002), the environmental approach was primarily associated with impacts on geology, biodiversity, and coastal pollution (Hoyos et al., 1998; Peña-Méndez et al., 2001; Pulido-Bosch et al., 1997), indicating at the same time an initial interest in understanding the effects of human and tourist activities on natural ecosystems and their biodiversity, as well as on water quality. In the second period (2002-2012), the focus shifted towards water management, and a growing interest in water use in tourist areas and its relationship with sustainable development was shown (Downward and Taylor, 2007; García and Servera, 2003), hence the theme "Environmental Impact" evolved into "Water Management". Thus, in this stage, the related research was focused on the effects of tourist demand on water quality and quantity (Andreu et al., 2011; Morales-Pinzón et al., 2012), and efforts to implement technological and planning solutions for more sustainable water management (Molina and Casañas, 2010; Torregrosa et al., 2010; Valenzuela-Montes and Matarán-Ruiz, 2008). Finally, in the third period (2013-2023), the focus became even more centered on water management and supply, considering factors such as the energy intensity of water supply alternatives (e.g., Yoon et al., 2018) or cost analysis and stakeholder involvement in selecting cost-effective measures in the context of the Water Framework Directive (e.g., González-Pérez et al., 2020; Perni and Martínez-Paz, 2013). Thus, the theme "Environmental Impact" first has evolved on "Water management" that finally in the third period has diversified into three themes: "Water Supply", "Sustainability" and "Water Resource".

Other driving theme of the first period, "Tourism Development", evolved into the "Tourist Destination" by the second period, and thus stood out, maintaining a leading position over the past 20 years. In the initial stage of research on tourism in Spain (1972-2002), the topic

of "Tourism Development" was associated with studies in various geographic areas and sectors of the tourism industry. This multidisciplinary approach is evidenced in studies on urban-rural migration and tourism entrepreneurship (e.g., Paniagua, 2002), the dunes of the coast (e.g., Mowl and Blackwood, 1999; Sanjaume and Pardo, 1992), or competitiveness in the tourism industry and the role of Spanish public administration (e.g., Bueno, 1999). Thus, Paniagua (2002) highlighted the transformative role of urban-rural migration and tourism entrepreneurs in restructuring rural areas, leading to profound socioeconomic shifts. Concurrently, the ecological aspect of tourism was explored by Sanjaume and Pardo (1992), who emphasized the historical evolution and current state of the Valencian coast's dunes, underscoring the need for conservation amidst human and environmental pressures. Delving into the human aspect of tourism, Mowl and Blackwood (1999) provided insights into the motivations of expatriate tourism service providers on the Costa del Sol, revealing cultural, economic, and lifestyle factors as key determinants. Lastly, Bueno (1999) shed light on the pivotal role of Spanish Public Administrations in enhancing the competitiveness of the Valencian region's tourist industry. Collectively, these studies offer a multifaceted perspective on Spain's tourism landscape, emphasizing the interplay between human, ecological, and policy-driven factors.

In the second period, the theme "Tourism Development" evolves into "Tourist Destination." This progression underscores a growing concern for tourism sustainability, as evidenced by studies focused on the implementation of sustainable tourism policies (e.g., Dodds, 2007) or the proposal for employing sustainability indicators in tourism planning (e.g., Blancas et al., 2011) which surfaced during this period. Simultaneously, studies focusing on the analysis of specific tourist segments and the development and identity of tourism heritage in rural and urban areas emerged (Ballesteros and Ramírez, 2007; González and Medina, 2003; Molera and Albaladejo, 2007). The study by Ballesteros and Ramírez (2007) highlighted the importance of mining heritage tourism, emphasizing how this type of tourism has strengthened local identity and fostered a sense of community in southern Spain. On the other hand, the pilgrimage to Santiago de Compostela, a significant cultural phenomenon in northwestern Spain, has been

analyzed by González and Medina (2003) from an urban management perspective, showing the interaction between cultural tourism and city planning. Furthermore, the study by Molera and Albaladejo (2007) on rural tourism provides a detailed view of the different tourist segments, which became essential for effective management and promotion of tourism in rural areas. A significant increase in citations is also noted, indicating a rising interest and consolidation of this field of study.

In the third period, the theme further solidifies, with a growing concern for the impact of tourism on local communities (e.g., Almeida-García et al., 2016), and the adaptation and recovery of the tourism industry in crisis contexts (e.g., Arbulú et al., 2021; Rodríguez-Antón and Alonso-Almeida, 2020). There is also an increased interest in cultural tourism and the competitiveness of tourist destinations (e.g., Andrades-Caldito et al., 2013; Domínguez-Vila et al., 2015), as well as in analysing seasonal patterns in hotel demand and cost efficiency in the accommodation industry (e.g., Duro, 2016). Consequently, competitiveness in the tourism sector emerges as a central concern for destinations, and research increasingly addresses this topic from various angles. Various authors, such as Andrades-Caldito et al. (2013), have emphasized the significance of tourism image as a distinguishing tool, suggesting that a positive image can enhance a destination's competitiveness. Taking a more specialized approach, Domínguez-Vila et al. (2015) focus on theories related to accessible tourism and the competitiveness of the tourism market for individuals with disabilities, analyzing the infrastructure and services that can influence the appeal to this market segment. Lastly, Duro (2016), within the context of hotel demand in Spain, provides valuable insights in their study about seasonal patterns and their underlying causes.

In summary, the evolution of the topic "Tourism Development" into "Tourist Destination" displays a change from a broader analysis of tourism towards the study of specific aspects related to sustainability, local community impacts, and adaptation and competitiveness in changing and crisis contexts. This evolution has reflected an increase in the number and diversity of published research, as well as a growing interest in these topics, as evidenced by the surge in conducted studies.

In general terms, research on tourism focused on Spain can be considered a consolidated yet continuously evolving area of study. From the initial four themes with a relatively low number of articles published in Scopus-indexed journals and a very limited number of citations in the first period, it has evolved into an area addressing nine themes, four of which are driving themes by the third period. However, this evolution is quite heterogeneous. For instance, there are two themes that first appear in the second period without showing any signs of an evolutionary trajectory up until that point: "Ecotourism" and "Migration". "Migration" can be considered a theme that has not had much impact on the literature over the past decade. Conversely, "Ecotourism" has evolved into "Sustainability", a cross-cutting theme that is highly developed in the scientific literature related to tourism and has sparked the interest of many authors since 2013.

The shift towards sustainability underscores the field's growing emphasis on ensuring that tourism practices support the long-term health of environments, economies, and cultures. Various studies during the third period have addressed this issue from different angles. Likewise, some authors have discussed strategies for improving competitiveness in rural tourism destinations in Spain through sustainability, emphasizing the importance of tourist loyalty (e.g., Campón-Cerro, et.al., 2017). Others have explored the effects of the COVID-19 pandemic on the sustainability of the Spanish tourism sector, providing a critical perspective on resilience in the face of a global health crisis (e.g., Moreno-Luna et al., 2021). Sustainability and tourism impact have also been addressed from a cultural heritage perspective (Parga-Dans and Alonso-González, 2019), and cultural sustainability has been linked to the use of advanced spatial analysis technologies (e.g., Cano et al., 2013). Furthermore, some authors (e.g., Martín-Martín et al., 2017) have evaluated tourism's potential as a tool for sustainable development, highlighting the importance of annual stability in Spanish rural destinations in the process of consolidation. To conclude, sustainable food and gastronomy have also been examined as tourism assets in this period (e.g., Folgado-Fernández et al., 2019; Vázquez-Martínez et al., 2019).

Finally, the themes of "Environmental Monitoring" and "Beach", are also driving themes that emerge in this third period. "Environmental Monitoring" in Spanish tourism research is

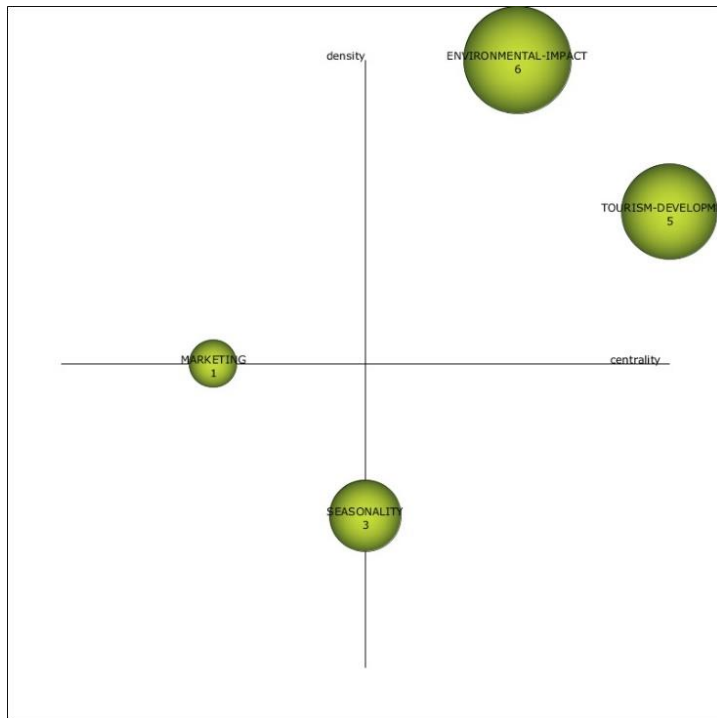
focused on assessing and managing the environmental impact of tourism activities, particularly in coastal areas. Thus, several studies underscore the environmental repercussions of tourism activities on the local environment (e.g., Alonso-Castillo et al., 2013; Williams et al., 2016), indicating the necessity for ongoing environmental surveillance to ensure the safety and sustainability of tourism. Other studies related to this theme delves further into the pollution levels associated with tourism activities, emphasizing the critical importance of regular environmental monitoring (e.g., Bayo et al., 2019). Research on the "beach" theme revolves around cleanliness, maintenance, quality, beach management and public perception (e.g., Peña-Alonso et al., 2018; Semeoshenkova and Newton, 2015). It underscores the necessity for effective and sustainable management policies and practices to preserve beach quality and enhance the tourist experience in Spain (e.g., Alves et al., 2017; Manno et al., 2016). In summary, this evolution not only showcases the growing maturity and complexity of the research field but also highlights the interconnectivity of themes and the importance of taking a holistic view in tourism research.

3.2.2. Strategic diagrams

To answer RQ5, the themes identified in the three periods are categorized through two-dimensional strategic diagrams based on centrality (abscissa axis) and density (ordinate axis) (Callon et al., 1991; He, 1999). As reflected in Figure 5, the motor themes (upper-right quadrant) in the period between 1972 and 2002 were related to the environmental impact of human intrusion as a consequence of tourism (e.g., Hoyos et al., 1998; Pulido-Bosch et al., 1997) and tourism development in Spain (e.g., Bueno, 1999; Paniagua, 2002). Apart from these key topics, the need to implement marketing techniques to achieve competitive advantages in the hotel industry (e.g., Robledo, 2002) was a more isolated issue that was being somewhat explored in the literature. More relevant in the field of tourism was seasonality (or concentration of travellers in the same destination in a short period of time), although at this time it was still in an incipient stage of development (e.g., García-Ferrer and Queralt, 1997; Gonzalez and Moral, 1995). The vast majority of the papers included in these topics are empirical applications, lacking a theoretical framework on which to base the study. This shows that, in this embryonic

phase, researchers were beginning to build the foundations for more elaborate studies to be carried out in later decades.

Figure 5. Strategy map: period 1972-2002

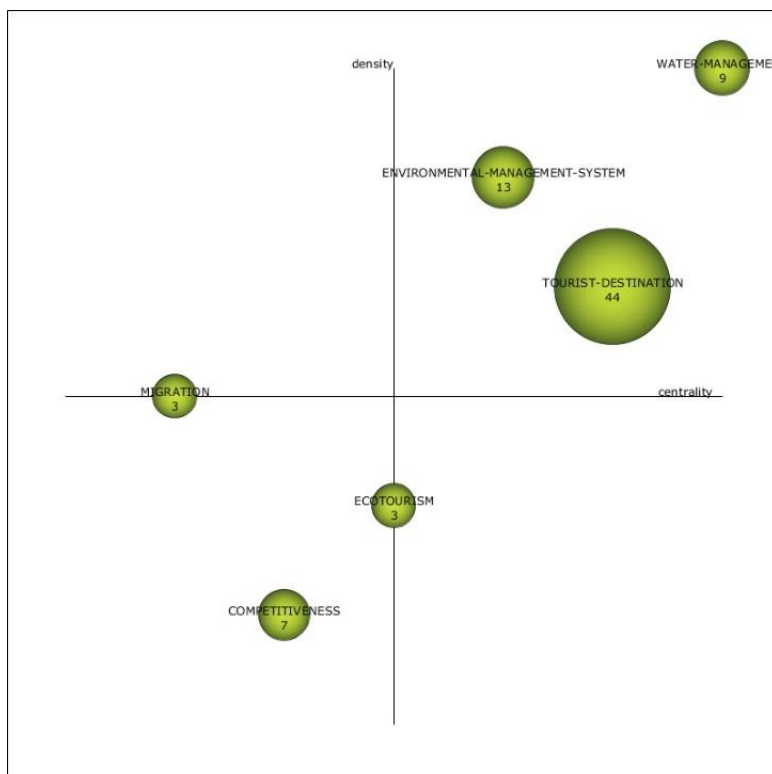


Source: Own elaboration based on SciMAT

Focusing on the period between 2003 and 2012, Figure 6 reveals the following motor themes: i) the impact of urban growth and tourism development on water management (e.g., Downward and Taylor, 2007; García and Servera, 2003); ii) the analysis of the tourism destination through aspects related to demand (e.g., Molera and Albadalejo, 2007), with symbolic and identity factors (e.g., Ballesteros and Ramirez, 2007), with the transition to sustainability (e.g., Blancas et al., 2011), with types of tourism (e.g., González and Medina, 2003) or with prices (e.g., Nicolau, 2010); and iii) the environmental management system in the field of tourism (e.g., Downward and Taylor, 2007). A somewhat more isolated topic that was moderately developed was migration as a form of human mobility and its difference with tourism (e.g., Haug et al., 2007; O'Reilly, 2003). Ecotourism (as a form of responsible travel to natural areas, conserving the environment and improving the well-being of the local population)

was still in its embryonic stage in this period, although it did have some importance in the literature (e.g., Lasanta et al., 2007). In addition, the analysis of competitiveness (or the ability of firms to be profitable against their rivals) in the tourism industry from a strategic point of view began to capture the attention of researchers (e.g., Sundbo et al., 2007; Romeiro and Costa, 2010). Practically all of these topics remain curious case studies, focused on Spain, but do not contribute to creating theoretical frameworks that can be replicated in the field of tourism and hospitality.

Figure 6. Strategy map: period 2003-2012



Source: Own elaboration based on SciMAT

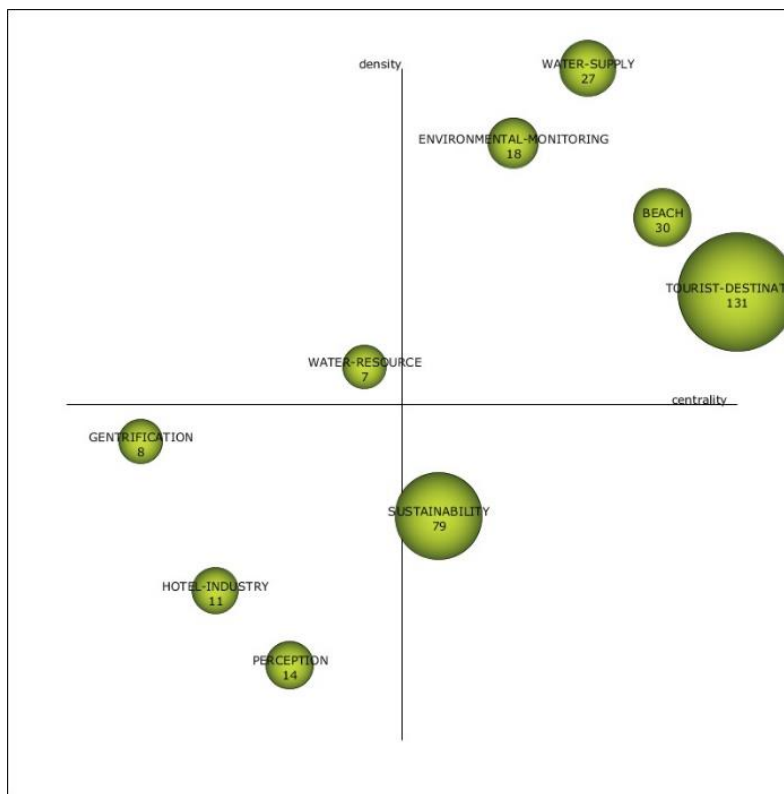
More recently, in the period between 2013 and 2022 (see Figure 7), the motor themes focus on cardinal issues such as: the relationship between tourism in a vacation destination and water supply (e.g., Martínez-Ibarra, 2015; Yoon et al., 2018); the importance of environmental monitoring as a prevention mechanism (e.g., Prades et al., 2015); the analysis of the tourism destination from factors linked to sustainability (e.g., Martín et al., 2014), competitiveness

analyzed through destination competitiveness theory (e.g., Andrades-Caldito et al., 2013) and adaptation to crisis contexts (e.g., Arbulú et al., 2021; Bujosa et al., 2015); and the value of the recreational experience in beach areas explored through economic theory (Alves et al., 2017).

In turn, as emerging themes we find the following: the transformation of the social fabric of urban areas explained by gentrification (or replacement of a lower income population by a higher status one) and touristification (or consequences derived from the increase in tourist activity) (e.g., Jover and Díaz-Parra, 2020); the strategic responses of the hotel industry in crisis contexts (e.g., Alonso-Almeida and Bremser, 2013; García-Pozo et al., 2016; Rodríguez-Antón and Alonso-Almeida, 2020); and the impact of residents' perceptions of tourism development in Spain through social exchange theory (e.g., Almeida-García et al., 2016).

That said, a basic, transversal theme focuses on assessing perceptions of climate change in order to design effective strategies to ensure the sustainability of tourism. Finally, we also find an isolated topic which has been considerably developed: the use of water resources to guarantee the supply of urban and tourism demands (e.g., Morote et al., 2017). In short, although case studies with empirical applications continue to be carried out in this decade, researchers export theories from other disciplines to enrich their papers or justify their hypothesized relationships. However, we must highlight the absence of a theoretical framework that has emerged and is used exclusively by articles published in this field of study.

Figure 7. Strategy map: period 2013-2022



Source: Own elaboration based on SciMAT

As we can see, tourism research focused on Spain is a multidisciplinary area with growing expansion. This continuous evolution is reflected in the strategic diagrams, which allow us to visualize the change and disappearance of thematic clusters between the different periods. This evolution has led to a greater concern for climate change and resource conservation, which is reflected in most of the topics identified in the third period.

4. Conclusions

Our research examined the evolution and impact of tourism research focused on Spain over the course of five decades (1972-2022). To do so, we utilized performance indicators, an evolution map, and strategic diagrams.

The results of the performance analysis demonstrate a significant growth in tourism studies focused on Spain, particularly over the last two decades. Furthermore, the impact of this

research has been noteworthy, positioning it as a relevant and influential area of study within the broader field of tourism research.

If we focus on the evolution map and the strategic diagrams, we find four themes in the first period (1972-2002): "Environmental Impact," "Tourism Development," "Seasonality," and "Marketing." Of these, "Environmental Impact" and "Tourism Development" demonstrated the most substantial impact and trajectory of development across the three periods.

The "Environmental Impact" theme unveiled early concerns about tourism's repercussions on geology, biodiversity, and coastal pollution. Over time, a distinct emphasis on "Water Management" became evident, with research delving into the ramifications of tourist demand on water quality, sustainable water stewardship, and alternative water sources. This theme further branched into "Water Supply", "Sustainability", and "Water Resource" subtopics.

As observed in our analysis, research focused on tourism in Spain has evolved from analysing the direct effects of tourists on the environment to a more concentrated focus on water management and supply, beach impacts, and environmental monitoring. We believe that it is not a coincidence that the pivotal role of water in the sustainability of tourist areas has been underscored in recent years. Instead, this emphasizes the necessity for integrated and sustainable approaches to water and beach management. The theme of "Tourism Development", originating in the initial stage, soon transformed into "Tourist Destination", revealing an escalating concern not only for sustainable tourism, but also for identity and the development of tourist heritage, as well as the impact of tourism on local communities. Its evolution unveiled a growing interest in aspects related to the impacts on local communities and adaptation and competitiveness in dynamic contexts. The trajectory of the "Marketing" theme also suggests a shift from a focus on strategic and competitive aspects within the hotel industry towards broader competitiveness within the general tourism sector and the role of marketing in the development of tourist destinations.

Thus, the evolution of tourism research related to Spain reveals a shift from a focus on general tourism phenomena to nuanced explorations of specific areas, most notably sustainability and environmental administration. The diversification of research themes and the emergence of new topics underscore the field's adaptability in responding to changing societal, environmental, and industry demands. Given this adaptability, it is pertinent to emphasize the increasing focus on sustainability, especially in the context of water management and beach conservation. This underlines a pressing need for applied research on sustainable policies and practices in tourism. It is conceivable that future studies will explore the broader business implications of these sustainable approaches within Spain's tourism sector and evaluate their potential applicability in a global context. In the second period, themes such as "Ecotourism" and "Migration" came to the fore, unveiling novel aspects of Spain-centric tourism research. The progression from "Ecotourism" to the more holistic "Sustainability" indicates the sector's deepening commitment to fostering long-term ecological, economic, and cultural vitality. The emphasis on sustainability is evident in diverse research angles, spanning from competitiveness in rural tourism to resilience strategies during global health challenges and the preservation of cultural heritage. This evolution lends itself to several research implications.

As the "Tourist Destination" theme gains traction, there is an imperative to grasp the intricacies of local community involvement in tourism design and the equitable distribution of its benefits. Concurrently, with "Environmental Monitoring" gaining prominence, it presents a ripe avenue for exploring the role of technological advancements in facilitating real-time oversight and timely interventions in tourism endeavors. Thus, the theme of "Environmental Monitoring" that emerges as a driving theme in the third period underscores the necessity of regular assessments and effective management of the environmental impact of tourism activities, especially in coastal regions. The "Beach" theme, centred around maintaining beach quality and gauging public perceptions, accentuates the cruciality of robust and sustainable governance strategies in elevating Spain's tourist appeal. Expanding on this, there lies a ripe opportunity for

scholarly explorations focusing on assimilating stakeholder feedback in beach management, especially dissecting tourist and local perceptions and their sway in policy formulation.

To conclude, the maturation and intricacy evident in Spanish tourism research have transpired from an initial four themes to an expansive nine by the third period. This evolution accentuates the importance of a holistic lens in tourism research endeavours. The fluid nature of these themes showcases the dynamic essence of tourism research, reflecting its adaptability in catering to the ever-evolving sectoral requisites. Prospective research avenues should underscore sustainability, given its burgeoning relevance in contemporary tourism studies.

This comprehensive analysis of the evolution of tourism research focused on Spain provides critical insights into the area's development over the past five decades. These findings contribute to our understanding of the current state of Spanish tourism research and suggest potential avenues for future investigations, notably in the areas of sustainable practices, water monitoring and management, and the effective management of tourist destinations.

References

- Albalade, D., & Fageda, X. (2016). High speed rail and tourism: Empirical evidence from Spain. *Transportation Research Part A: Policy and Practice*, 85, 174–185.
- Almeida-García, F., Peláez-Fernández, M. Á., Balbuena-Vázquez, A., & Cortés-Macias, R. (2016). Residents' perceptions of tourism development in Benalmádena (Spain). *Tourism Management*, 54, 259–274.
- Alonso-Almeida, M., & Bremser, K. (2013). Strategic responses of the Spanish hospitality sector to the financial crisis. *International Journal of Hospitality Management*, 32, 141–148.
- Alonso-Castillo, M., Sánchez-Trujillo, I., Vereda-Alonso, E., García, A., & Cano-Pavón, J. C. (2013). Bioavailability of heavy metals in water and sediments from a typical

Mediterranean Bay (Málaga Bay, Region of Andalucía, Southern Spain). *Marine pollution bulletin*, 76(1-2), 427–434.

Alves, B., Ballester, R., Rigall-I-Torrent, R., Ferreira, Ó., & Benavente, J. (2017). How feasible is coastal management? A social benefit analysis of a coastal destination in SW Spain. *Tourism Management*, 60, 188–200.

Andrades-Caldito, L., Sánchez-Rivero, M., & Pulido-Fernández, J. I. (2013). Differentiating competitiveness through tourism image assessment: an application to Andalusia (Spain). *Journal of Travel Research*, 52(1), 68–81.

Andreu, J. M., Alcalá, F. J., Vallejos, A., & Pulido-Bosch, A. (2011). Recharge to mountainous carbonated aquifers in SE Spain: different approaches and new challenges. *Journal of Arid Environments*, 75(12), 1262–1270.

Arbulú, I., Razumova, M., Rey-Maqueira, J., & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, 20, 100568.

Ballesteros, E. R., & Ramírez, M. H. (2007). Identity and community—reflections on the development of mining heritage tourism in Southern Spain. *Tourism Management*, 28(3), 677–687.

Bastidas-Manzano, A.-B., Sánchez-Fernández, J., & Casado-Aranda, L.-A. (2021). The Past, Present, and Future of Smart Tourism Destinations: A Bibliometric Analysis. *Journal of Hospitality & Tourism Research*, 45(3), 529–552.

Bayo, J., Rojo, D., & Olmos, S. (2019). Abundance, morphology and chemical composition of microplastics in sand and sediments from a protected coastal area: the Mar Menor lagoon (SE Spain). *Environmental Pollution*, 252, 1357–1366.

- Beerli, A., & Martín, J. D. (2004). Tourists' characteristics and the perceived image of tourist destinations: a quantitative analysis—a case study of Lanzarote, Spain. *Tourism Management, 25*(5), 623–636.
- Bhowmik, P. (2021). Heritage Tourism: a bibliometric review. *Anatolia, 32*(3), 387–403.
- Blancas, F. J., González, M., Lozano-Oyola, M., & Pérez, F. (2010). The assessment of sustainable tourism: application to Spanish coastal destinations. *Ecological Indicators, 10*(2), 484–492.
- Blancas, F. J., Lozano-Oyola, M., Gonzalez, M., Guerrero, F. M., & Caballero, R. (2011). How to use sustainability indicators for tourism planning: the case of rural tourism in Andalusia (Spain). *Science of the Total Environment, 412*, 28–45.
- Borah, A., Bonetti, F., Calma, A., & Martí-Parreño, J. (2023). The Journal of the Academy of Marketing Science at 50: A historical analysis. *Journal of the Academy of Marketing Science, 51*(1), 222–243.
- Bueno, A. P. (1999). Competitiveness in the tourist industry and the role of the Spanish Public Administrations the case of Valencian region. *Turizam, 47*(4), 316–331.
- Bujosa, A., Riera, A., & Torres, C. M. (2015). Valuing tourism demand attributes to guide climate change adaptation measures efficiently: the case of the Spanish domestic travel market. *Tourism Management, 47*, 233–239.
- Butler, R. (2015). The evolution of tourism and tourism research. *Tourism Recreation Research, 40*(1), 16–27.
- Callon, M., Courtial, J. P., & Laville, F. (1991). Co-word analysis as a tool for describing the network of interactions between basic and technological research: the case of polymer chemistry. *Scientometrics, 22*, 155–205.

- Campón-Cerro, A. M., Hernández-Mogollón, J. M., & Alves, H. (2017). Sustainable improvement of competitiveness in rural tourism destinations: the quest for tourist loyalty in Spain. *Journal of Destination Marketing & Management*, 6(3), 252–266.
- Cano, M., Garzon, E., & Sanchez-Soto, P. J. (2013). Historic preservation, GIS, & rural development: the case of Almería province, Spain. *Applied geography*, 42, 34–47.
- Cánoves, G., Villarino, M., Priestley, G. K., & Blanco, A. (2004). Rural tourism in Spain: an analysis of recent evolution. *Geoforum*, 35(6), 755–769.
- Cobo, M. J. (2012). *SciMat: Herramienta software para el análisis de la evolución del conocimiento científico. Propuesta de una metodología de evaluación*. University of Granada.
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2012). SciMAT: A new science mapping analysis software tool. *Journal of the American Society for Information Science and Technology*, 63(8), 1609–1630.
- Cuadrado-Ciuraneta, S., Durà-Guimerà, A., & Salvati, L. (2017). Not only tourism: unravelling suburbanization, second-home expansion and “rural” sprawl in Catalonia, Spain. *Urban Geography*, 38(1), 66–89.
- Dodds, R. (2007). Sustainable Tourism and Policy Implementation: lessons from the Case of Calviá, Spain. *Current Issues in Tourism*, 10(4), 296–322.
- Domínguez-Vila, T., Darcy, S., & González, E. A. (2015). Competing for the disability tourism market—a comparative exploration of the factors of accessible tourism competitiveness in Spain and Australia. *Tourism Management*, 47, 261–272.
- Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: a systematic review and bibliometric analysis. *Journal of Business Research*, 135, 758–773.

- Downward, S. R., & Taylor, R. (2007). An assessment of Spain's Programa AGUA and its implications for sustainable water management in the province of Almería, southeast Spain. *Journal of environmental management*, 82(2), 277–289.
- Durán Domínguez, A., Del Río Rama, M. D. L. C., & Álvarez García, J. (2017). Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. *European Research on Management and Business Economics*, 23, 8–15.
- Duro, J. A. (2016). Seasonality of hotel demand in the main Spanish provinces: Measurements and decomposition exercises. *Tourism Management*, 52, 52–63.
- Enders, W., & Sandler, T. (2008). Causality between transnational terrorism and tourism: the case of Spain. *Terrorism*, 14(1), 49–58.
- Exceltur. (2023). *Valoración turística de 2022 y perspectivas para 2023*. Retrieved from <https://www.exceltur.org/wp-content/uploads/2023/01/Informe-Perspectivas-N83-Balance-del-ano-2022-y-expectativas-para-2023.pdf>
- Folgado-Fernández, J. A., Di-Clemente, E., & Hernández-Mogollón, J. M. (2019). Food festivals and the development of sustainable destinations. the case of the cheese fair in Trujillo (Spain). *Sustainability*, 11(10), 2922.
- García, C., & Servera, J. (2003). Impacts of tourism development on water demand and beach degradation on the island of Mallorca (Spain). *Geografiska Annaler: Series A, Physical Geography*, 85(3-4), 287–300.
- García-Ferrer, A., & Queralt, R. A. (1997). A note on forecasting international tourism demand in Spain. *International journal of forecasting*, 13(4), 539–549.
- García-Pozo, A., Sánchez-Ollero, J. L., & Ons-Cappa, M. (2016). ECO-innovation and economic crisis: a comparative analysis of environmental good practices and labour productivity in the Spanish hotel industry. *Journal of Cleaner Production*, 138, 131–138.

- Gomez, M., Lopez, C., & Molina, A. (2015). A model of tourism destination brand equity: The case of wine tourism destinations in Spain. *Tourism management*, 51, 210–222.
- González, P., & Moral, P. (1995). An analysis of the international tourism demand in Spain. *International Journal of Forecasting*, 11(2), 233–251.
- González, R., & Medina, J. (2003). Cultural tourism and urban management in northwestern Spain: the pilgrimage to Santiago de Compostela. *Tourism Geographies*, 5(4), 446–460.
- González-Pérez, D. M., Martín-Martín, J. M., Guaita-Martínez, J. M., & Sáez-Fernández, F. J. (2020). An analysis of the cost of water supply linked to the tourism industry. An application to the case of the Island of Ibiza in Spain. *Water*, 12(7), 2006.
- Habibi, A., Mousavi, M., Jamali, S. M., & Ale Ebrahim, N. (2022). A bibliometric study of medical tourism. *Anatolia*, 33(3), 415–425.
- Haug, B., Dann, G. M., & Mehmetoglu, M. (2007). Little Norway in Spain: From tourism to migration. *Annals of Tourism Research*, 34(1), 202–222.
- He, Q. (1999). Knowledge discovery through co-word analysis. *Library trends*, 133–159.
- Hoyos, M., Soler, V., Cañaveras, J. C., Sánchez-Moral, S., & Sanz-Rubio, E. (1998). Microclimatic characterization of a karstic cave: human impact on microenvironmental parameters of a prehistoric rock art cave (Candamo Cave, northern Spain). *Environmental Geology*, 33, 231–242.
- Ivars-Baidal, J., Rodriguez-Sanchez, I., & Vera-Rebollo, J. F. (2013). The evolution of mass tourism destinations: new approaches beyond deterministic models in Benidorm (Spain). *Tourism Management*, 34, 184–195.
- Johnson, A.-G., & Samakovlis, I. (2019). A bibliometric analysis of knowledge development in smart tourism research. *Journal of Hospitality and Tourism Technology*, 10(4), 600–623.
- Jover, J., & Díaz-Parra, I. (2020). Gentrification, transnational gentrification and touristification in Seville, Spain. *Urban Studies*, 57(15), 3044–3059.

- Kim, H., & So, K. K. F. (2022). Two decades of customer experience research in hospitality and tourism: A bibliometric analysis and thematic content analysis. *International Journal of Hospitality Management*, *100*, 103082.
- Knani, M., Echchakoui, S., & Ladhari, R. (2022). Artificial intelligence in tourism and hospitality: Bibliometric analysis and research agenda. *International Journal of Hospitality Management*, *107*, 103317.
- Kozak, M., & Rimmington, M. (2000). Tourist Satisfaction with Mallorca, Spain, as an Off-Season Holiday Destination. *Journal of Travel Research*, *38*(3), 260–269.
- Lasanta, T., Laguna, M., & Vicente-Serrano, S. M. (2007). Do tourism-based ski resorts contribute to the homogeneous development of the Mediterranean mountains? A case study in the Central Spanish Pyrenees. *Tourism management*, *28*(5), 1326–1339.
- Leong, L.-Y., Hew, T.-S., Tan, G.W.-H., Ooi, K.-B. and Lee, V.-H. (2021). Tourism research progress – a bibliometric analysis of tourism review publications, *Tourism Review*, *76*(1), 1–26.
- Liu, X., Zeng, Y., He, J., & Li, Z. (2022). Value cocreation research in tourism and hospitality: a comparative bibliometric analysis. *International Journal of Contemporary Hospitality Management*, *34*(2), 663–686.
- Manno, G., Anfuso, G., Messina, E., Williams, A. T., Suffo, M., & Liguori, V. (2016). Decadal evolution of coastline armouring along the Mediterranean Andalusia littoral (South of Spain). *Ocean & Coastal Management*, *124*, 84–99.
- Martín, J. M. M., Aguilera, J. D. D. J., & Moreno, V. M. (2014). Impacts of seasonality on environmental sustainability in the tourism sector based on destination type: an application to Spain's Andalusia region. *Tourism Economics*, *20*(1), 123–142.

- Martínez-Ibarra, E. (2015). Climate, water and tourism: causes and effects of droughts associated with urban development and tourism in Benidorm (Spain). *International Journal of Biometeorology*, 59, 487–501.
- Martín-Martín, J. M., Salinas-Fernández, J. A., Rodríguez-Martín, J. A., & Jiménez-Aguilera, J. D. D. (2017). Assessment of the tourism's potential as a sustainable development instrument in terms of annual stability: application to Spanish rural destinations in process of consolidation. *Sustainability*, 9(10), 1692.
- Masson, S., & Petiot, R. (2009). Can the high speed rail reinforce tourism attractiveness? The case of the high speed rail between Perpignan (France) and Barcelona (Spain). *Technovation*, 29(9), 611–617.
- Mody, M. A., Hanks, L., & Cheng, M. (2021). Sharing economy research in hospitality and tourism: a critical review using bibliometric analysis, content analysis and a quantitative systematic literature review. *International Journal of Contemporary Hospitality Management*, 33(5), 1711–1745.
- Molera, L., & Albaladejo, I. P. (2007). Profiling segments of tourists in rural areas of South-Eastern Spain. *Tourism Management*, 28(3), 757–767.
- Molina, V. G., & Casañas, A. (2010). Reverse osmosis, a key technology in combating water scarcity in Spain. *Desalination*, 250(3), 950–955.
- Morales-Pinzón, T., Lurueña, R., Rieradevall, J., Gasol, C. M., & Gabarrell, X. (2012). Financial feasibility and environmental analysis of potential rainwater harvesting systems: a case study in Spain. *Resources, Conservation and Recycling*, 69, 130–140.
- Moreno-Luna, L., Robina-Ramírez, R., Sánchez, M. S. O., & Castro-Serrano, J. (2021). Tourism and sustainability in times of COVID-19: the case of Spain. *International Journal of Environmental Research and Public Health*, 18(4), 1859.

- Morote, A. F., Rico, A. M., & Moltó, E. (2017). Critical review of desalination in Spain: a resource for the future? *Geographical Research*, 55(4), 412–423.
- Moser, C. R. (1972). Tourism and tourist promotion in Spain. *Intereconomics*, 7(11), 346–349.
- Mowl, G., & Blackwood, T. (1999). The characteristics and motivations of expatriate tourism service providers on the Costa del Sol, Spain. *Anatolia*, 10(2), 72–88.
- Muler Gonzalez, V., Coromina, L., & Galí, N. (2018). Overtourism: residents' perceptions of tourism impact as an indicator of resident social carrying capacity - case study of a Spanish heritage town. *Tourism Review*, 73(3), 277–296.
- Mulet-Forteza, C., Genovart-Balaguer, J., Mauleon-Mendez, E., & Merigó, J. M. (2019). A bibliometric research in the tourism, leisure and hospitality fields. *Journal of Business Research*, 101, 819–827.
- Muñoz-Leiva, F., Viedma-del-Jesús, M. I., Sánchez-Fernández, J., & López-Herrera, A. G. (2012). An application of co-word analysis and bibliometric maps for detecting the most highlighting themes in the consumer behaviour research from a longitudinal perspective. *Quality & Quantity*, 46, 1077–1095.
- Murgado-Armenteros, E. M., Gutiérrez-Salcedo, M., Torres-Ruiz, F. J., & Cobo, M. J. (2015). Analysing the conceptual evolution of qualitative marketing research through science mapping analysis. *Scientometrics*, 102, 519–557.
- Nicolau, J. L. (2005). Leveraging profit from the fixed-variable cost ratio: The case of new hotels in Spain. *Tourism Management*, 26(1), 105–111.
- Norris, M., & Oppenheim, C. (2007). Comparing alternatives to the Web of Science for coverage of the social sciences' literature. *Journal of Informetrics*, 1(2), 161–169.
- Nowak, J. J., Sahli, M., & Cortés-Jiménez, I. (2007). Tourism, Capital Good Imports and Economic Growth: Theory and Evidence for Spain. *Tourism Economics*, 13(4), 515–536.

- Nusair, K., Butt, I., & Nikhashemi, S.R. (2019). A bibliometric analysis of social media in hospitality and tourism research. *International Journal of Contemporary Hospitality Management*, 31(7), 2691–2719.
- Okumus, B., Koseoglu, M. A., & Ma, F. (2018). Food and gastronomy research in tourism and hospitality: A bibliometric analysis. *International Journal of Hospitality Management*, 73, 64–74.
- O'Reilly, K. (2003). When is a tourist? The articulation of tourism and migration in Spain's Costa del Sol. *Tourist Studies*, 3(3), 301–317.
- Quintas-Soriano, C., Castro, A. J., Castro, H., & García-Llorente, M. (2016). Impacts of land use change on ecosystem services and implications for human well-being in Spanish drylands. *Land Use Policy*, 54, 534–548.
- Paniagua, A. (2002). Urban-rural migration, tourism entrepreneurs and rural restructuring in Spain. *Tourism geographies*, 4(4), 349–371.
- Parga-Dans, E., & Alonso-González, P. (2019). Sustainable tourism and social value at World Heritage Sites: towards a conservation plan for Altamira, Spain. *Annals of Tourism Research*, 74, 68–80.
- Peña, A. I. P., & Jamilena, D. M. F. (2010). The relationship between business characteristics and ICT deployment in the rural tourism sector. The case of Spain. *International Journal of Tourism Research*, 12(1), 34–48.
- Peña-Alonso, C., Ariza, E., Hernández-Calvento, L., & Pérez-Chacón, E. (2018). Exploring multi-dimensional recreational quality of beach socio-ecological systems in the Canary Islands (Spain). *Tourism Management*, 64, 303–313.
- Peña-Méndez, E. M., Astorga-España, M. S., & Garcia-Montelongo, F. J. (2001). Chemical fingerprinting applied to the evaluation of marine oil pollution in the coasts of Canary Islands (Spain). *Environmental Pollution*, 111(2), 177–187.

- Perni, A., & Martínez-Paz, J. M. (2013). A participatory approach for selecting cost-effective measures in the WFD context: The Mar Menor (SE Spain). *Science of the total environment*, 458, 303–311.
- Prades, M., Gallardo, A., & Ibàñez, M. V. (2015). Factors determining waste generation in Spanish towns and cities. *Environmental monitoring and assessment*, 187, 1–13.
- Pulido-Bosch, A., Martín-Rosales, W., López-Chicano, M., Rodríguez-Navarro, C. M., & Vallejos, A. (1997). Human impact in a tourist karstic cave (Aracena, Spain). *Environmental geology*, 31(3-4), 142–149.
- Qiao, G., Ding, L., Zhang, L., & Yan, H. (2022). Accessible tourism: a bibliometric review (2008–2020). *Tourism Review*, 77(3), 713–730.
- Robledo, M. A. (2002). DBM as a competitive strategy: the state of the art in the Spanish hotel industry. *Tourism (Zagreb)*, 50(1), 43–50.
- Rodríguez-Antón, J. M., & Alonso-Almeida, M. D. M. (2020). COVID-19 impacts and recovery strategies: the case of the hospitality industry in Spain. *Sustainability*, 12(20), 8599.
- Rodríguez-López, M. E., Alcántara-Pilar, J. M., Del Barrio-García, S., & Muñoz-Leiva, F. (2020). A review of restaurant research in the last two decades: A bibliometric analysis. *International Journal of Hospitality Management*, 87, 102387.
- Rojas-Lamorenna, Á. J., Del Barrio-García, S., & Alcántara-Pilar, J. M. (2022). A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling. *Journal of Business Research*, 139, 1067–1083.
- Romeiro, P., & Costa, C. (2010). The potential of management networks in the innovation and competitiveness of rural tourism: a case study on the Valle del Jerte (Spain). *Current Issues in Tourism*, 13(1), 75–91.

- Rubalcaba, L., & Gago, D. (2001). Relationships between services and competitiveness: The case of Spanish trade. *Service Industries Journal*, 21(1), 35–62.
- Sánchez-Ollero, J. L., García-Pozo, A., & Marchante-Lara, M. (2012). Environment and Strategic Behaviour: The Case of Hotels in and Alusia (SPAIN). *International Journal of Environmental Research*, 6(4), 1067–1076.
- Sanjaume, E., & Pardo, J. (1992). The dunes of the Valencian coast (Spain): past and present. In *Proceedings of the third European dune congress, Galway, IE*.
- Scimago. (2023). *Scimago Journal & Country Rank*. Retrieved from <https://www.scimagojr.com/>
- Semeoshenkova, V., & Newton, A. (2015). Overview of erosion and beach quality issues in three Southern European countries: Portugal, Spain and Italy. *Ocean & Coastal Management*, 118, 12–21.
- Serrano, L., Sianes, A., & Ariza-Montes, A. (2019). Using bibliometric methods to shed light on the concept of sustainable tourism. *Sustainability*, 11(24), 6964.
- Shasha, Z. T., Geng, Y., Sun, H. P., Musakwa, W., & Sun, L. (2020). Past, current, and future perspectives on eco-tourism: A bibliometric review between 2001 and 2018. *Environmental Science and Pollution Research*, 27, 23514–23528.
- Singh, S., & Bashar, A. (2021). A bibliometric review on the development in e-tourism research. *International Hospitality Review*, 37(1), 71–93.
- Singh, R., Sibi, P. S., Yost, E., & Mann, D. S. (2023). Tourism and disability: A bibliometric review. *Tourism Recreation Research*, 48(5), 749–765.
- Statista. (2022a). *Coronavirus: impact on the tourism industry worldwide*. Retrieved from <https://www.statista.com/study/70298/coronavirus-impact-on-the-tourism-industry/>
- Statista. (2022b). *Travel & Tourism - Market Data Analysis & Forecast*. Retrieved from <https://www-statista-com.eu1.proxy.openathens.net/study/40460/travel-tourism/>

- Sundbo, J., Orfila-Sintes, F., & Sørensen, F. (2007). The innovative behaviour of tourism firms—comparative studies of Denmark and Spain. *Research Policy*, *36*(1), 88–106.
- Symeonakis, E., Calvo-Cases, A., & Arnau-Rosalen, E. (2007). Land Use Change and Land Degradation in Southeastern Mediterranean Spain. *Environmental Management*, *40*(1), 80–94.
- Torregrosa, T., Sevilla, M., Montaña, B., & López-Vico, V. (2010). The integrated management of water resources in Marina Baja (Alicante, Spain). A simultaneous equation model. *Water resources management*, *24*, 3799–3815.
- Tribe, J., & Airey, D. (2014). A Review of Tourism Research. In *Developments in Tourism Research* (pp. 3–14). Routledge.
- United Nations World Tourism Organization. (2023). *Global and regional tourism performance*. Retrieved from <https://www.unwto.org/tourism-data/global-and-regional-tourism-performance>
- Utkarsh, & Sigala, M. (2021). A bibliometric review of research on COVID-19 and tourism: Reflections for moving forward. *Tourism Management Perspectives*, *40*, 100912.
- Valenzuela-Montes, L. & Matarán-Ruiz, A. (2008). Environmental indicators to evaluate spatial and water planning in the coast of Granada (Spain). *Land Use Policy*, *25*(1), 95–105.
- Vázquez-Martínez, U. J., Sanchís-Pedregosa, C., & Leal-Rodríguez, A. L. (2019). Is gastronomy a relevant factor for sustainable tourism? An empirical analysis of Spain country brand. *Sustainability*, *11*(9), 2696.
- Williams, A. T., Randerson, P., Di Giacomo, C., Anfuso, G., Macias, A., & Perales, J. A. (2016). Distribution of beach litter along the coastline of Cádiz, Spain. *Marine pollution bulletin*, *107*(1), 77–87.

- World Travel & Tourism Council. (2023). *Economic Impact Research*. Retrieved from <https://wttc.org/research/economic-impact>
- Ye, G., Hudders, L., De Jans, S., & De Veirman, M. (2021). The Value of Influencer Marketing for Business: A Bibliometric Analysis and Managerial Implications. *Journal of Advertising*, 50(2), 160–178.
- Yoon, H., Sauri, D., & Rico Amorós, A. M. (2018). Shifting scarcities? The energy intensity of water supply alternatives in the mass tourist resort of Benidorm, Spain. *Sustainability*, 10(3), 824.
- Zhang, S., Lyu, P., & Yan, Y. (2015). Global geographical and scientometric analysis of tourism-themed research. *Scientometrics*, 105(1), 385–401.
- Zhao, D., & Strotmann, A. (2015). *Analysis and Visualization of Citation Networks* (Vol. 7). Springer International Publishing.