

BIBLIOMETRIC ANALYSIS OF VENTURE TEAMS OF TECHNOLOGY-BASED FIRMS

Gabriela Ribes-Giner^A, Ismael Moya-Clemente^B, Ana Lucía Alzate-Alvarado^C



ARTICLE INFO	ABSTRACT
Article history: Received: December, 02 nd 2023 Accepted: March, 11 th 2024	Purpose: Due to its growing impact on the economic development of countries, research on venture teams in new technology-based firms - TBFs has been increasing in recent years, seeking to identify the success and failure factors of this type of firms, given their high mortality rates. This paper ana-lyzes the changes that have occurred in the intellectual structure of this discipline.
Keywords: Bibliometric Analysis; New Technology-Based Firms; Teams; Bibliographic Coupling; Co-citation; Co-authorship.	Methodology: The bibliometric method was used to analyze the theme of venture teams in the new TBFs. The information collected was extracted from the main collection of the Web of Science (WoS) and SCOPUS databases from 1987 to 2020. The Nvivo and VOSviewer softwares are used to perform the initial analyzes as well as the analysis of citations, co-citations, co-authorship, etc.
	Findings and Conclusion: The advances associated with the main authors, sources and countries, the general citation structure and the development of this field are presented. The results show a growing publication trend as of 2009, seeing a higher production of articles between 2014 and 2019. USA is the most influential country, followed by China and Italy. The "Research Policy" and "Strategic Entrepreneurship Journal" are the most influential sources.
	Originality/Value: The main contribution of this work is to show the evolution of this theme, so that researchers can use it in the future in their theoretical and research frameworks.
	Doi: https://doi.org/10.26668/businessreview/2024.v9i4.4439

ANÁLISE BIBLIOMÉTRICA DE EQUIPES DE NEGÓCIOS EM EMPRESAS DE BASE TECNOLÓGICA

RESUMO

Objetivo: Devido ao seu crescente impacto no desenvolvimento económico dos países, a investigação sobre equipas de risco em novas empresas de base tecnológica - TBFs tem vindo a aumentar nos últimos anos, procurando identificar os factores de sucesso e fracasso deste tipo de empresas, dada a sua elevada taxas de mortalidade. Este artigo analisa as mudanças ocorridas na estrutura intelectual desta disciplina.

Metodologia: Utilizou-se o método bibliométrico para analisar o tema equipes de empreendimentos nas novas TBFs. As informações coletadas foram extraídas do acervo principal das bases de dados Web of Science (WoS) e SCOPUS de 1987 a 2020. Os softwares Nvivo e VOSviewer são utilizados para realizar as análises iniciais, bem como a análise de citações, cocitações, co-citações, autoria, etc

Resultados e Conclusão: São apresentados os avanços associados aos principais autores, fontes e países, a estrutura geral de citações e o desenvolvimento deste campo. Os resultados mostram uma tendência crescente de publicação a partir de 2009, verificandose uma maior produção de artigos entre 2014 e 2019. Os EUA são o país mais influente, seguidos pela China e pela Itália. A "Research Policy" e a "Strategic Entre-preneurship Journal" são as fontes mais influentes.

^A Ph.D. in Industrial Engineering. Universitat Politècnica de València. València, Spain.

E-mail: gabrigi@omp.upv.es Orcid: <https://orcid.org/0000-0001-6843-6968>

^B Ph.D. in Agricultural Engineering. Universitat Politècnica de València. València, Spain.

E-mail: imoya@esp.upv.es Orcid: <https://orcid.org/0000-0002-1219-1890>

^C Master in Business Administration with emphasis in Strategic Management. Universidad Icesi. Cali, Colombia.

E-mail: alalzate@icesi.edu.co Orcid: <https://orcid.org/0000-0003-3977-6730>

Originalidade/Valor: A principal contribuição deste trabalho é mostrar a evolução deste tema, para que os pesquisadores possam utilizá-lo futuramente em seus referenciais teóricos e de pesquisa.

Palavras-chave: Análise Bibliométrica, Novas Empresas de Base Tecnológica, Equipes, Acoplamento Bibliográfico, Cocitação, Coautoria.

ANÁLISIS BIBLIOMÉTRICO DE LOS EQUIPOS EMPRESARIALES EN LAS EMPRESAS DE BASE TECNOLÓGICA

RESUMEN

Objetivo: Debido a su creciente impacto en el desarrollo económico de los países, la investigación sobre los equipos empresariales en las nuevas empresas de base tecnológica - EBTs ha ido en aumento en los últimos años, buscando identificar los factores de éxito y fracaso de este tipo de empresas, dadas sus altas tasas de mortalidad. Este artículo analiza los cambios que se han producido en la estructura intelectual de esta disciplina.

Métodología: Se utilizó el método bibliométrico para analizar la temática de los equipos empresariales en las nuevas EBTs. La información recopilada se extrajo de la colección principal de las bases de datos Web of Science (WoS) y SCOPUS de 1987 a 2020. Los softwares Nvivo y VOSviewer se utilizan para realizar los análisis iniciales, así como el análisis de citas, co-citaciones, co- autoría, etc.

Hallazgos y Conclusiones: Se presentan los avances asociados a los principales autores, fuentes y países, la estructura general de citación y el desarrollo de este campo. Los resultados muestran una tendencia de publicación creciente a partir del 2009, evidenciando una mayor producción de artículos entre 2014 y 2019. Estados Unidos es el país más influyente, seguido de China e Italia. "Research Policy" y " Strategic Entrepreneurship Journal" son las fuentes más influyentes.

Originalidad/Valor: El principal aporte de este trabajo es mostrar la evolución de este tema, para que los investigadores puedan utilizarlo en el futuro en sus marcos teóricos y de investigación.

Palabras clave: Análisis Bibliométrica, Nuevas Empresas de Base Tecnológica, Equipos Empresariales, Acoplamiento Bibliográfico, Co-citación, Coautoría.

1 INTRODUCTION

The new technology-based firms (TBFs) according to Litan and Song (2008), are defined as those that have a business model strongly rooted in the development and application of a new technology and have a positive impact on the economic development of the countries. They are objects of interest due to their ability to create high-quality employment, generate knowledge, make innovations, and energize industries thanks to their disruptive technologies (Colombo & Grilli, 2005; Song et al., 2008). They are characterized by being agile and having the ability to operate in a world with a volatile, uncertain, complex and ambiguous context (Xing et al., 2019), facing the uncertainty of both potential demand and technology (Sommer et al., 2009).

Its high mortality rates have made some researchers get interested in identifying the most determining factors of its success and failure. For example, around 20% of this type of companies that open in Portugal "die" in their first year (Silva, 2020). Song et al. (2008) found that the survival rate of TBFs established between 1991 and 2000 in USA after 4 years was

36%, falling to 21.9% at 5 years. In their research, they defined 24 success factors, grouped into 3 large groups: the market and the opportunity, the venture team, and the resources employed. In this same study, it was found that successful TBFs were founded by venture teams of between 2 and 5 members, and not by individual entrepreneurs. These entrepreneurs had more prior experience working together, had previously held similar roles, and had been involved in fast-growing companies competing in the same industry as the nascent TBF.

Other entrepreneurship researchers have focused their efforts on relating the characteristics of new entrepreneurs and the performance of TBFs (Shrader & Siegel, 2007). Aspelund et al. (2005) for example, affirm that for the venture team of the TBFs to be effective, it does not depend only on its size but also on how it is constituted. In addition, the previous business experience of the founders of the TBFs is decisive in the performance.

With the intention of identifying the works that have had a greater impact on the investigation of the venture teams of the TBFs and to analyze the changes that have occurred in the intellectual structure of this field, a bibliometric analysis is presented, showing the main authors, countries and journals that investigate this theme.

On the other hand, in order to establish thematic associations between scientific works, and to be able to identify the existing relationships between the key ideas of the different authors who write on this theme, maps were used that allowed visualizing elements such as: bibliographic coupling, co-citation, and co-authorship. Bibliometric maps serve as an organizing tool and analysis of scientific information and their objective is to show the structure and evolution of the field of scientific research, such as the research activity of the most representative researchers, the intellectual group of leading journals, the indication of similarity of important topics and concepts, etc. These maps are used to help users better understand the domain's area of interest and address their information needs clearly (Sampieri Cabrera & Trejo Rodríguez, 2015; Yu et al., 2018).

2 THEORETICAL FRAMEWORK

Chandler et al. (2005), affirm that operating in complex, dynamic and uncertain conditions imposes a greater demand for work on the venture team of new firms, with a direct influence on performance. Jin et al. (2016) carried out the first meta-analysis to examine the relationship between the composition characteristics of the venture team and the performance of the TBFs; affirming that higher levels of human capital (in terms of education, experiences,

knowledge and skills) allow venture teams to better face the labor demands of new companies immersed in this context.

According to Xing et al. (2019), the effectiveness of venture teams has a high incidence on the success of their firms. In their study on technology-based firms and observing the effect of the characteristics of venture teams on their good performance, they found that it is important to analyze the skills, personality and needs of the business team at different stages of the process; in such a way that they can exploit their competitive advantage and focus on effective results, especially in a dynamic context.

Eliakis et al. (2020) examines the characteristics that affect the performance of a mature and constantly growing technologically innovative enterprise, finding that a number of characteristics pertaining to both the profile of the entrepreneurial team, as well as of the employees, significantly affect company survival and growth in this context. The most important characteristics of the entrepreneurial team are: perseverance and passion for long-term goals, flexibility, prior work experience in the same industry of the new firm, team size (the more members that take part in the founding team, the greater is the probability of survival for a new venture), team heterogeneity, entrepreneurial experience.

De Mol et al. (2019) conducted a study with high-tech startups, to investigate how the average level of business passion and the diversity of passion of venture teams contribute to the performance of the firm in the short and long term. They found, among other things, that encouraging teams to discuss passion in the firm's operating agreement, and to address known mechanisms to address interpersonal conflicts productively, can help lessen conflict in later stages of the company, when they are taken strategic decisions that impact performance.

Birley and Stockley (2000) state that despite the existence of many studies about the venture team and its impact on the growth of companies from the organizational, strategic and psychological perspective; the dialogue is incomplete, and they suggest that studies on this issue should be delved in order to know the how and why of their successes and failures. Eliakis et al. (2020) and Bolzani et al. (2019) state that despite the fact that the venture team is a subject that has grown substantially in interest to researchers, the literature is quite fragmented.

3 METHODOLOGY

In order to more accurately know how scientific activity has developed, gain an idea about what the state of the art of a given research field is like, and improve the ways in which

data and data retrieval design systems are represented, conceptual and methodological bases with different representation models, including the bibliometric method, were developed some decades ago (Moya Anegón et al., 2004).

Bibliometry forms part of the scientometrics that applies mathematical and statistics methods to the whole scientific literature, and also to the authors that produce this literature, to study and analyze scientific activity (Sampieri Cabrera & Trejo Rodríguez, 2015; Merigó et al., 2018). It provides data on research process outcomes, its volume, evolution, visibility and structure, and allows both scientific activity, and the impact of research and sources, to be assessed. It is also very useful for classifying and providing a representative view of a series of bibliographic documents (Merigó et al. 2018; Juvêncio et al., 2024).

One of the key advantages of using the bibliometrics method is that it allows a specific research field to be analyzed, and a general image to be built of it, by bearing articles, journals, authors, institutions and countries in mind (Merigó et al., 2015).

Bibliometric indicators are indices or calculations that enable the performance of both bibliographic production and scientific communication to be quantified. Different bibliometric indicators that represent respective data exist; for instance, quantitative indicators of scientific activity, which include the number of publications to, thus, measure a researcher's productivity; indicators of impact, which are based on the number of citations that works obtain, and characterize the importance of this production according to other researchers' acknowledgment (Bordons & Zulueta, 1999; Merigó et al., 2018).

In order to quantify researchers' bibliographic production, we can use, for instance, the total number of published articles or the number of articles published during a given time period. To measure the impact of scientific communication, some indicators are used, such as journals' median impact factor, citation rates, collaboration in publications, etc. (Moya Clemente et al., 2021). To measure the importance and scientific impact of publications, the total number of received citations, the mean number of citations per article, and the number and percentage of significant articles, are employed (Leeuwen et al. 2003; Alonso et al., 2009).

Some authors have attempted to combine a researcher's productivity and influence in a single indicator. One example of such is the h index, a very popular measure that combines them both to find the threshold that connects the number of documents to the number of citations (Merigó et al., 2018).

In order to perform a bibliometric analysis of this study, the main collection of the Web of Science (WoS) database was consulted with the following search string: THEME: ("New

Technology Ventures" OR "Technology Entrepreneurship" OR "Tech start up" OR "Tech startup" OR "High tech Start up") AND ("team" OR "funding team")). Twenty-eight documents were found, of which 19 were papers from journals, and nine were works published in conference papers. The following search strategy was applied to the main collection of the SCOPUS database: TITLE-ABS-KEY (("New Technology Ventures" OR "Technology Entrepreneurship" OR "Tech start up" OR "Tech startup" OR "High tech Start up") AND ("team" OR "funding team")). This time 77 documents were obtained, of which 47 were papers from journals, 27 were works published in conference papers and three were books.

The results of both these searchers were organized by removing duplicates, which left 83 documents published between 1987 and September 2020, of which 51 were research articles, 29 were works published in conference papers and three were books. A bibliometric analysis was performed with these results by graphically mapping the bibliographic material with the VOSviewer. VOSviewer collects data and builds maps in the following terms: bibliographic coupling, citations, co-citations, co-authorship and co-occurrence of key words (Merigó et al., 2018).

In order to identify the main terms most frequently found in the performed systematic data search, the NVivo software (version Release 1.3) was used. This software is used for qualitative and mixed methods research and facilitates comparison and identification of different relationships in the data (Bergeron & Gaboury, 2019).

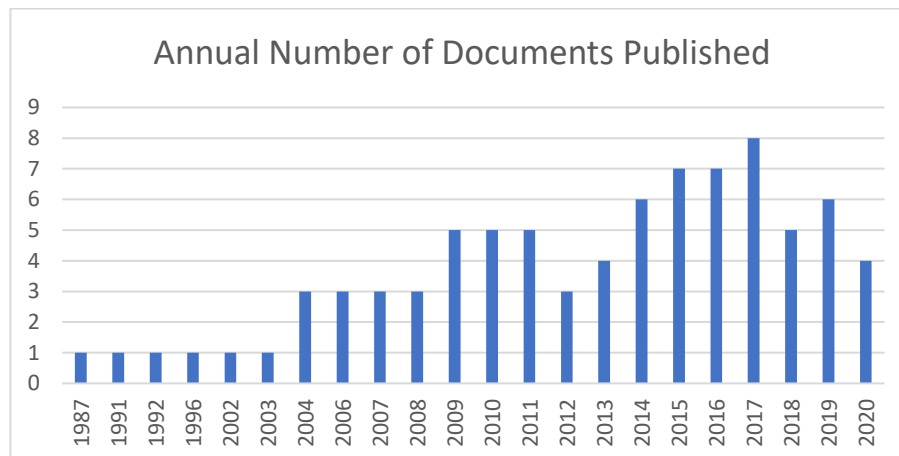
4 RESULTS AND DISCUSSION

4.1 PUBLICATIONS AND CITATION STRUCTURE

Not many works about venture teams in new TBFs have yet been published. Figure 1 illustrates the evolution of publications year by year from 1987 to September 2020. It shows how the annual number of published documents has gradually grown since 2004 because 72.3% of these documents were published between 2010 and 2020. This can be explained by the growing interest that TBFs have drawn in recent years, their high business mortality rates, and the identification of key success factors, including venture teams (Shrader & Siegel, 2007; Song et al., 2008). It is important to point out that 61.4% of the documents in this bibliometric study corresponded to articles in journals, 34.9% works were published in conference papers and only 3.6% were books.

Figure 1

Annual Number of Documents published in research on new TBFs' venture teams.



Source: Prepared by authors, 2022

In order to identify the main terms most frequently found in the performed systematic data search, the NVivo software (version Release 1.3) was used, as were the following key data to group data: author, publication year, a document's title and abstract. Of the 83 found documents, both title and abstract were taken to consult frequency of words, which consists in identifying the most widely used terms in this dataset by forming groups with derived words.

To facilitate the identification of these terms, a word cloud graph was used (see Figure 2), which identifies frequency of use according a text's colour and size: the longer the text and the more intense color becomes, and the higher the frequency. The most widely used works in searches were: team, technology, entrepreneurship, start, business, tech, management, among others.

Figure 2

Word cloud of the words that most frequently appeared in the systematic data search.

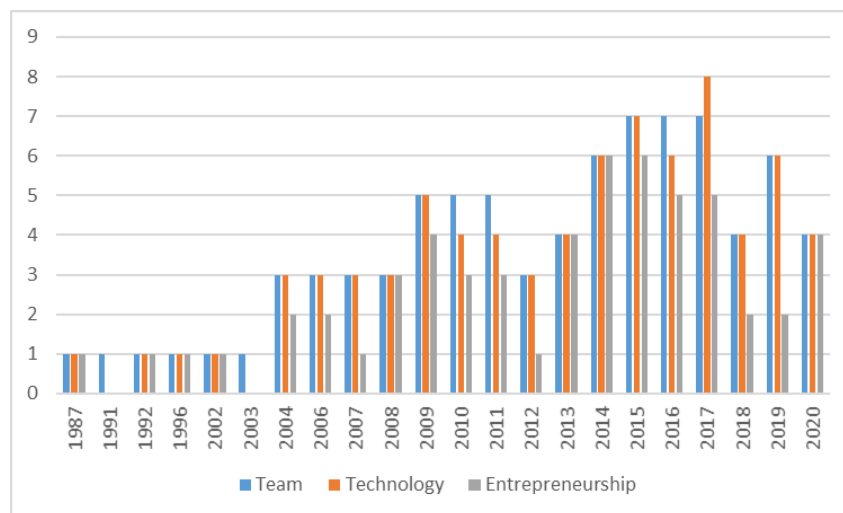


Source: Prepared by authors using NVivo, 2022

When tracking the use of the terms team, technology and entrepreneurship over the years and viewing their evolution with time (by employing the abstracts of the 83 articles as a data source), we found that these terms were rarely employed in research until 2003. From 2009, their use considerably increased because this was when more interest was shown in investigating the key success factors of new TBFs, in which venture teams were identified as one of these factors. This phenomenon is depicted in Figure 3.

Figure 3

Historic use of terms Team, Technology and Entrepreneurship.



Source: Prepared by authors, 2022

4.2 MAIN AUTHORS AND COUNTRIES

When carrying out the analysis of the most productive authors, it is found that authors like Wang, Liukkunen, Oivo and Clarysse are highlighted with six, five, five and four publications, respectively. The authors with the highest number of publications are not necessarily the most influential in terms of citations. The most representative authors are Wang, Oivo, Liukkunen and Clarysse with 564, 547 and 517 citations respectively.

When analyzing the most influential countries on new TBFs' venture teams, USA has more papers (111 publications), and a greater number of citations (1748). Despite China appears in second place in publications (27), it ranks number 8 in citations (221).

4.3 MAIN SOURCES

The leading sources in publishing documents related to new TBFs' venture teams according to highest number of citations are: "Research Policy", "Strategic Entrepreneurship Journal", "Journal of Business Venturing", with 708, 444 and 438 citations, respectively. "Research Policy" and "Small Business Economics" had an h index of 5.

5 CONCLUSIONS

The number of published documents has gradually increased since 2004, with more documents being published between 2010 and 2020. This can be explained due to the interest aroused in recent years to understand the key success factors of this type of firms (among which are venture teams), given their strong impact on socioeconomic development and their high business mortality rates.

When carrying out the analysis of the most productive authors, it is found that Wang (Italia), is the author with the biggest number of publications, but he was not the most influential, because Grilli (Italy), Colombo (Italy) and Clarysse (Belgium) received many more citations, even though they published fewer documents.

USA is the most productive country for publications on this subject, with an annual number of documents well above the rest of the countries, followed far behind by China, Italy, Germany and England.

An analysis of the citation structure of the most published sources in the area was carried out, defining the h index for each of them. In this ranking, it is observed that despite of "Small Business Economics" is one of the sources that have the largest number of documents published, is not the most influential, because it didn't receive the biggest number of researcher citations. The most relevant sources in this regard are "Research Policy" and "Strategic Entrepreneurship Journal".

This theme is becoming a field of growing interest for researchers, entrepreneurs, and even for governments in the design of their public policies. The main contribution of this work is to show the evolution of this topic, so that researchers can use it in the future in their theoretical and research frameworks. For example, topics such as entrepreneurship, venture capital, technology entrepreneurship, business growth, and innovation could be further explored.

It is expected that, with the evolution of research in the technological field, similar dynamics of knowledge creation will occur that will contribute to growing the field of research of venture teams and their influence on new technology-based firms even more.

REFERENCES

- Alonso, S., Cabrerizo, F. J., Herrera Viedma, E., & Herrera, F. (2009). h-index: A Review Focused in its Variants, Computation and Standarization for Different Scientific Fields. *Journal of Informetrics*, 3(4), 273-289.
- Aspelund, A., Berg-Utby, T., & Skjevedal, R. (2005). Initial resources' influence on new venture survival: a longitudinal study of new technology-based firms. *Technovation*, 25, 1337-1347. doi: <https://doi.org/10.1016/j.technovation.2004.06.004>
- Bergeron, D., & Gaboury, I. (2019). Challenges related to the analytical process in realist evaluation and latest developments on the use of NVivo from a realist perspective. *International Journal of Social Research Methodology*, 23(3), 355-365. doi: <https://doi.org/10.1080/13645579.2019.1697167>
- Birley, S., & Stockley, S. (2000). Entrepreneurial Teams and Venture Growth. En D. L. Sexton, & H. Landström (Eds.), *The Blackwell Handbook of Entrepreneurship* (Vol. First Edition, pp. 287-307). Blackwell Publishers Ltd. doi: <https://doi.org/10.1002/9781405164214.ch14>
- Bolzani, D., Fini, R., Napolitano, S., & Toschi, L. (2019). Entrepreneurial Teams: An Input-Process-Outcome Framework. *Foundations and Trends® in Entrepreneurship*, 15(2), 56 - 258. doi: <https://doi.org/10.1561/03000000077>
- Bordons, M., & Zulueta, M. Á. (1999). Evaluación de la actividad científica a través de indicadores bibliométricos. *Revista Española de Cardiología*, 52(10), 790-800. doi: [https://doi.org/10.1016/S0300-8932\(99\)75008-6](https://doi.org/10.1016/S0300-8932(99)75008-6)
- Chandler, G. N., Honig, B., & Wiklund, J. (2005). Antecedents, moderators, and performance consequences of membership change in new venture teams. *Journal of Business Venturing*, 20, 705-725. doi: <https://doi.org/10.1016/j.jbusvent.2004.09.001>
- Colombo, M. G., & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research Policy*, 34, 795-816. doi: <https://doi.org/10.1016/j.respol.2005.03.010>
- de Mol, E., Cardon, M. S., de Jong, B., Khapova, S. N., & Elfring, T. (2019). Entrepreneurial passion diversity in new venture teams: An empirical examination of short and long-term performance implications. (E. Inc., Ed.) *Journal of Business Venturing*. doi: <https://doi.org/10.1016/j.jbusvent.2019.105965>
- Eliakis, S., Kotsopoulos, D., Karagiannaki, A., & Pramataris, K. (2020). Survival and Growth in Innovative Technology Entrepreneurship: A Mixed-Methods Investigation. *Administrative Science*, 10(3), 39. doi: <https://doi.org/10.3390/admsci10030039>

- Jin, L., Madison, K., Kraiczy, N. D., Kellermanns, F. W., Crook, T. R., & Xi, J. (2016). Entrepreneurial Team Composition, Characteristics and New Venture Performance: A Meta-Analysis. *Entrepreneurship Theory and Practice*, 41(5), 743-771. doi: <https://doi.org/10.1111/etap.12232>
- Juvêncio, J., Silva, W., & Freire, F. (2024). Bibliometric Study of Life Cycle Analysis Applied to Motor Vehicles. *Revista de Gestão Social e Ambiental*, 18(3), e04502, 1-15. doi: <https://doi.org/10.24857/rgsa.v18n3-042>
- Leeuwen, T. V., Visser, M. S., Moed, H. F., Nederhof, T. J., & Van Raan, A. J. (2003). The Holy Grail of science policy: Exploring and combining bibliometric tools in search of scientific excellence. *Scientometrics*, 57(2), 257-280.
- Litan, R. E., & Song, M. (2008). From the Special Issue Editors: Technology Commercialization and Entrepreneurship. *Journal of Product Innovation Management*, 25, 2-6. doi: <https://doi.org/10.1111/j.1540-5885.2007.00279.x>
- Merigó, J. M., Gil Lafuente, A. M., & Yager, R. R. (2015). An Overview of Fuzzy Research with Bibliometric Indicators. *Applied Soft Computing*, 27, 420-433. doi: <http://dx.doi.org/10.1016/j.asoc.2014.10.035>
- Merigó, J. M., Pedrycz, W., Weber, R., & de la Sotta, C. (2018). Fifty Years of Information Sciences: A Bibliometric Overview. *Information Sciences*, 432, 245-268. doi: <https://doi.org/10.1016/j.ins.2017.11.054>
- Moya Clemente, I., Ribes Giner, G., & Chaves Vargas, J. (2021). Sustainable Entrepreneurship: An Approach From Bibliometric Analysis. *Journal of Business Economics and Management*, 22(2), 297-319. doi: <https://doi.org/10.3846/jbem.2021.13934>
- Perianes Rodríguez, A., Olmeda Gómez, C., & Moya Anegón, F. (2010). Detecting, Identifying and Visualizing Research Groups in Co-authorship Networks. *Scientometrics*, 82, 307-319. doi: <https://doi.org/10.1007/s11192-009-0040-z>
- Sampieri Cabrera, R., & Trejo Rodríguez, M. Á. (2015). Mapas Bibliométricos como Herramienta en la Organización y Análisis en Ciencia. *Revista de Educación Bioquímica - REB*, 34(4), 93-97.
- Shrader, R., & Siegel, D. S. (2007). Assessing the Relationship between Human Capital and Firm Performance: Evidence from Technology-Based New Ventures. *Entrepreneurship: Theory and Practice*, 31(6), 893-908. doi: <https://doi.org/10.1111/j.1540-6520.2007.00206.x>
- Silva, L. (2024). The Management of Business and Technology Incubators in Brazil. *Revista de Gestão Social e Ambiental*, 18(2), e04189, 1-13. doi: <https://doi.org/10.24857/rgsa.v18n2-060>
- Sommer, S. C., Loch, C. H., & Dong, J. (2009). Managing Complexity and Unforeseeable Uncertainty in Startup Companies: An Empirical Study. Institute for Operations Research and the Management Sciences (INFORMS). Maryland, USA: *Organization Science*, 20(1). doi: <http://dx.doi.org/10.1287/orsc.1080.0369>

- Song, M., Podoyntsina, K., Van Der Bij, H., & Halman, J. I. (2008). Success Factors in New Ventures: A Meta-analysis. *The Journal of Product Innovation Management*, 7-27. doi: <http://dx.doi.org/10.1111/j.1540-5885.2007.00280.x>
- Sonnenwald, D. H. (2007). Scientific collaboration. *Annual review of information science and technology*, 41(1), 643-681. doi: <https://doi.org/10.1002/aris.2007.1440410121>
- Xing, Y., Liu, Y., & Boojihawon, D. K. (2019). Entrepreneurial team and strategic agility: A conceptual framework and research agenda. *Human Resource Management Review*. doi: <https://doi.org/10.1016/j.hrmr.2019.100696>
- Yu, D., Xu, Z., & Wang, W. (2018). Bibliometric analysis of fuzzy theory research in China: A 30 year perspective. *Knowledge Based Systems*, 141, 188-199. doi: <https://doi.org/10.1016/j.knosys.2017.11.018>