

Abstract

A Brief Bibliometric Analysis of Microplastic and Nanoplastic Particles in Food [†]

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Abstract: Microplastic and nanoplastic particles have gained significant attention in recent years due to their potential presence in various environmental matrices, including food. This bibliometric analysis aims to explore the scientific landscape surrounding the study of microplastic and nanoplastic particles in food, shedding light on key research trends, prominent authors, and notable journals in this field. To conduct this analysis, a comprehensive search was performed on scholarly databases, including Web of Science, PubMed, and Scopus, using relevant keywords such as “microplastic”, “nanoplastic”, “food”, and related terms. The analysis focused on peer-reviewed articles published between 2020 and 2023. The search found 313 articles on microplastic and nanoplastic particles in food, indicating a growing interest in this research area. The number of publications showed an upward trend, with the most productive year being 2020 (38% of papers), followed by 2023 and 2021 (23% each). In 2020, 16% of papers were published. Among the analyzed articles, 48% were original research papers, 46% were reviews, and the remaining 6% included book chapters, perspectives, and other publications. The analysis revealed that the most prolific authors in this field include researchers such as Jansen, M.A.K., Abbasi, S., and Banerjee, A., who have significantly contributed to the study of microplastics and nanoplastics in food. Additionally, several collaborations between different research institutions were observed, emphasizing the multidisciplinary nature of this research area. Furthermore, the analysis identified key journals publishing research on microplastics and nanoplastics in food, including *Science of the Total Environment*, the *Journal of Hazardous Materials*, and *Environmental Pollution*. The increasing number of publications on microplastic and nanoplastic particles in food indicates the growing awareness and concern regarding the potential risks associated with these contaminants. This bibliometric analysis provides insights into the scientific landscape of microplastic and nanoplastic particles in food. The analysis demonstrates the upward trajectory of research in this field, identifies influential authors, and highlights the significant role of specific journals. Continued research and collaboration are essential to further our understanding of the impacts of microplastics and nanoplastics on food safety and human health, facilitating the development of effective mitigation strategies.

Keywords: food; microplastic; nanoplastic



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