

Abstract submission for:

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Title of abstract:

Mapping the Landscape of Artificial Intelligence in Dermatology: A 10-Year Bibliometric Review

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Main body:

Background:

Artificial intelligence (AI) has the potential to revolutionize the field of dermatology by improving diagnosis, treatment, and patient outcomes. However, there are also significant challenges that must be addressed in order to fully realize the benefits of AI in this domain.

Objective:

To provide a comprehensive analysis of the research trends and themes in the field of AI in dermatology over the past decade.

Methods:

This bibliometric analysis examines the scientific literature on the application of AI in dermatology over the past 10 years. A total of 195 articles were retrieved from Pubmed Collection database, published between 2012 and 2022. To build bibliometric network visualization maps in this study, we utilized VOS viewer resource freeware.

Results:

The results showed that the United States was the leading country in terms of publication output, followed by Germany and China. The analysis also revealed that the research on AI and dermatology has been rapidly increasing in recent years, with a peak in publications in 2021. The most common topics covered in the articles included the use of AI for skin cancer diagnosis, dermatological image analysis, and the development of computer-aided diagnosis systems. Machine learning, deep learning, and convolutional neural networks were the most commonly used AI techniques in the field.

Conclusion:

The challenges and opportunities of AI in dermatology are complex and multifaceted. However, with careful attention to data quality, interpretability, and clinical utility, AI has the potential to significantly enhance the field of dermatology and improve patient outcomes.

Keywords: artificial intelligence, machine learning, dermatology

