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## BIBLIOMETRIC ANALYSIS METHOD FOR ANTIBACTERIAL TEXTILE MATERIALS

**Purpose.** To research and systematize the current state of the industry of antibacterial textile development.

**Keywords:** bibliometrics, research evaluation, antibacterial textile, triclosan.

**Introduction.** Textile materials can be used in many areas, for example, for the production of products focused on modern fashion trends, technical purposes, and special appointments [1]. In recent years, antibacterial textile materials have become one of the most relevant research objects for scientists. Therefore, the analysis and review of the known methods of obtaining antibacterial materials through a literature search is actual and can become a driving force for improving the known methods of finishing textile materials.

Bibliometric analysis of publications on the topic available in Google Scholar.

**Methodology.** Bibliometric analysis of publications on the topic available in the Google Scholar system.

**Research results.** A significant part of the textile materials consumed today are treated with biocides. To impart antimicrobial properties to textile materials, synthetic organic compounds are used, such as triclosan, quaternary ammonium compounds, polybiguanides, N-galamines, metals such as silver, and natural antimicrobial substances (chitosan, novoimmanin, lutenurin, etc.) [2].

Scientific publications over the past 5 years were analyzed. An increase in the number of publications on antimicrobial textiles and methods of their production was recorded [3]. The world experience of publication activity about antibacterial textiles and the use of triclosan as an active antibacterial substance was taken into account. Triclosan is compliant with the EU and US toxicity hazard requirements and can be used for textile materials [4].

Data from Google Scholar by keyword reveals the number of approximately 18,500 review articles published between 2018 and 2023 on antibacterial textile materials. The search results are illustrated in Fig. 1.

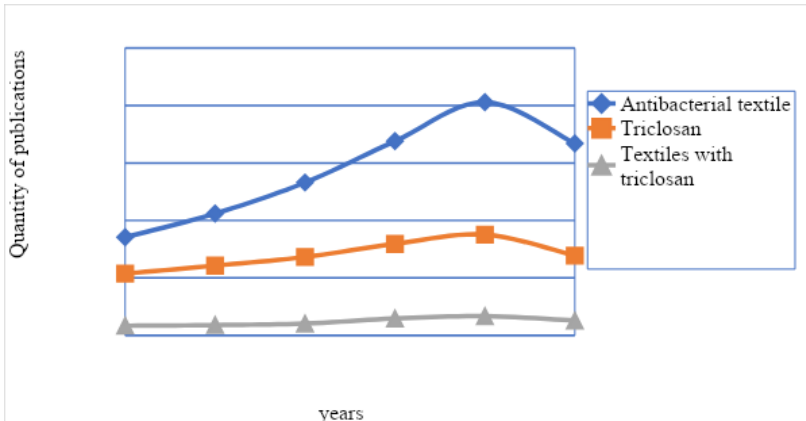


Fig. 1. Statistics on articles in the Google Scholar system

The bibliometric analysis showed that in 2022, the total amount of review articles on antibacterial textiles was approximately 4030 articles per year. This area is very active and developing.

**Conclusion.** The method of bibliometric analysis used has revealed a global interest in the chosen research area, which is caused by the global COVID-19 pandemic. The use of triclosan as an antibacterial agent in various applications is relevant today, but its use for the treatment of textile materials is not sufficiently covered in world scientific sources and may be a direction for further research.

### Література

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