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ABSTRACT

Title of Abstract : Environmental Monitoring, Environmental Health, and Artificial Intelligence: A Bibliometric Analysis
Authors of Abstract : M. Bakti Samsu Adi
Affiliation : Others
Correspondence E-mail : mbaktisamsuadi@mail.ugm.ac.id

Background : The rapid development of artificial intelligence is driving integration across various areas of life. The demands of the digital era, which focus on efficiency, speed, and accuracy, have led to a shift in several research trends toward digitalization. Environmental monitoring, which aims to monitor environmental health status on a broader scale, is also integrating with artificial intelligence.

Objective : This bibliometric analysis aims to obtain an overview of research trends in environmental monitoring and health combined with artificial intelligence.

Research Methods/ Implementation Methods : The method used was a bibliometric analysis of publications searched using the Scopus and Web of Science search engines. The keywords used were “environmental monitoring” or “environmental assessment” and “environmental health” and “artificial intelligence.” Bibliometric data were visualized and interpreted using the VOSviewer application.

Results : After screening, 37 documents were included in the bibliometric analysis. The analysis results show that research trends related to environmental monitoring tend toward themes related to contamination, role, sensors, and accuracy. In environmental health, research trends tend toward the themes of strategy, control, accuracy, issue, and site. AI themes are related to environmental monitoring and environmental health. AI trends related to healthcare include health risk assessment, human health, and food safety.

Conclusion/Lesson Learned : The theme of accuracy represents a point of convergence that is directing research toward obtaining valid data for environmental and health assessments.

Keyword : VOSviewer, research trends, efficiency, accuracy.