

Two Decade Research Trend in Artificial Intelligence of Climate Change: A Bibliometric Analysis

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Abstract

Climate change and population growth trigger digital transformation challenges in various fields. Artificial Intelligence (AI) is considered a key element to answer the current challenges facing these multiple fields related to climate change. We present a bibliometric analysis to answer how the academic publication of artificial intelligence in various areas to systematically understand research trends on this topic. We used Scopus indexed references, bibliometric methodologies, and software to conduct the research. We retrieved 1264 published documents from the Scopus database over two decades from 2002 to 2021. Analysis was also performed by visualizing the bibliometric network using Vosviewer. The method used consists of five stages: determination of search keywords, initial search results, refinement of search results, initial compilation, and data analysis. Among the most published articles indexed by Scopus, papers published by researchers in the United States (US) have the highest number of publications with 296 scientific publications, then the second country is China with 136 academic documents, and the United Kingdom is in third place with 136 academic documents. Computer Science is the subject with the highest number of documents with 441 documents (18.3%). The processed data shows the patterns and trends of Scopus indexed international publications.

Keywords

Bibliometric, artificial intelligence, sustainability, climate change, research trend, scientometric

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