

Sustainability and Clustering: A Bibliometric Assessment

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Abstract : Review researches are useful in terms of analysis of research problems. Between the types of review documents, we commonly find bibliometric studies. This type of application often helps the global visualization of a research problem and helps academics worldwide to understand the context of a research area better. In this document, a bibliometric view surrounding clustering techniques and sustainability problems is presented. The authors aimed at which issues mostly use clustering techniques, and, even which sustainability issue would be more impactful on today's moment of research. During the bibliometric analysis, we found ten different groups of research in clustering applications for sustainability issues: Energy; Environmental; Non-urban planning; Sustainable Development; Sustainable Supply Chain; Transport; Urban Planning; Water; Waste Disposal; and, Others. And, by analyzing the citations of each group, we discovered that the Environmental group could be classified as the most impactful research cluster in the area mentioned. Now, after the content analysis of each paper classified in the environmental group, we found that the k-means technique is preferred for solving sustainability problems with clustering methods since it appeared the most amongst the documents. The authors finally conclude that a bibliometric assessment could help indicate a gap of researches on waste disposal - which was the group with the least amount of publications - and the most impactful research on environmental problems.

Keywords : bibliometric assessment, clustering, sustainability, territorial partitioning

Conference Title : ICCP 2020 : International Conference on Cleaner Production

Conference Location : Vancouver, Canada

Conference Dates : August 06-07, 2020