



Estrategias de predicción de consumo energético en edificaciones: una revisión [

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text (article)

Analítica

Buildings are one of the main polluting actors in the environment. Therefore, it is necessary to strengthen strategies to reduce their energy consumption, such as energy-efficient design (new buildings) and energy management (existing buildings). For this, it is essential to predict energy consumption to know the state of the building's operation and infer the causes and effectiveness of energy-saving strategies. However, the diversity of existing energy consumption prediction techniques makes it difficult for researchers to identify, select, and apply them. Therefore, from a literature review, this article identifies prediction techniques, exposes its theoretical principles, describes the general stages of building a prediction model, recognizes evaluation metrics, identifies some of its strengths and weaknesses, and presents criteria to facilitate the selection of a prediction technique and evaluation metrics according to the characteristics of the case study. A bibliometric analysis was carried out to identify and study the most critical articles on energy demand in buildings. It is found that there is a trend in the application of machine learning techniques and that energy consumption prediction models are mainly applied to residential, commercial, and educational buildings

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