

Special Issue

Fault Identification and Fault Impact Analysis of Ventilation System in Buildings

Message from the Guest Editors

This Special Issue is dedicated to fault modeling, fault detection and diagnostics (FDD), and fault impact analysis (FIA) with focus on heating, ventilation and air conditioning (HVAC) systems. Buildings use 40% of total global energy and are responsible for more than 35% of CO₂ emissions. In most buildings, the heating, ventilation and air conditioning (HVAC) systems consume 50% of the building energy. Access to information on the actual energy performance of buildings and its systems is essential in order to improve energy efficiency, leading to considerable reduction in GHG emissions and end-user costs. Today's energy performance calculation of buildings is at the design stage, which does not account for the dynamic variation of the energy performance over time. The inefficient use of energy in buildings, for instance, the inefficient energy use of common faulty systems, is a question that spans the whole process of building planning, design, construction, operation and maintenance. The HVAC systems are a priority since they are the largest end-use energy consumption in buildings. Furthermore, these systems are well known to be...

Guest Editors

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Deadline for manuscript submissions

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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