DESCRIPTION

Energy and Buildings is an international journal publishing articles with explicit links to energy use in buildings. The aim is to present new research results, and new proven practice aimed at reducing the energy needs of a building and improving indoor environment quality. Energy and Buildings considers and publishes articles considerably advancing Building Science. Preference is given to practical and experimental research articles reporting considerable innovations. Articles reporting advances in theoretical and simulation methods are welcome once results are fully validated using appropriate experimental data, and so are the articles reporting application of numerical or theoretical methods for the analysis of new technology and materials and innovative designs.

Topics covered include:

- Energy demands and consumption in existing and future buildings - prediction and validation
- Indoor environment quality, including health and thermal comfort vis-à-vis energy
- Natural, mechanical and mixed ventilation
- Air distribution in buildings
- Application of solar and other renewable energy sources in buildings
- Energy balances in building complexes (residential, commercial, industrial, public and other buildings)
- Energy efficiency improvement measures of HVAC&R and other technical systems in residential, commercial, public and industrial buildings, and semi open built spaces
- Heat recovery systems in buildings
- Buildings and district heating and cooling
- Energy conservation in built environment
- Energy efficient buildings
- Building physics
- Energy sustainability, resilience and climate adaptability of buildings
- Evaluation and control of indoor thermal and lighting systems
- Building’s total performance and intelligent buildings
- Links between architectural design, mechanical and lighting systems
- New materials in buildings and their impact on energy demands
- External and internal design conditions for energy efficient buildings
- Building envelope materials and structure energy performance
- Thermal energy storage and thermally active building systems - TABS
- Energy performance of buildings and modeling predictive control
- Zero CO2 emission - zero energy and energy plus buildings and their smart grid harmonized operation
- Residential/municipal energy refurbishment and renovation
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- Energy related aspects of buildings after catastrophic events
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