

Special Issue

Algorithm and Intelligence for Optimizing Urban/Building Morphology

Message from the Guest Editors

In the near future, city and building design will face new challenges, mainly due to progressively increasing urbanization, the need of fuel fossil energy reduction, and the negative effects related to the climate change. On the other hand, the professionals and researchers involved in urban and building design can take advantages from computer learning and solving algorithms. This Special Issue aims to investigate the potentialities related to the use of computer intelligence applied mainly, but not limited to, the following topics:

- Urban/building morphology to improve building energy needs, health, and thermal comfort;
- Effects of urban greenery (trees, rooftop gardens and greenhouse, green walls, etc.) at urban and building scales;
- New paradigms for residential and non-residential buildings (such as rural facilities, food storage buildings, etc.);
- Definition of new methodologies and indicators;
- Integration of different renewable energy sources (such as photovoltaic, thermal, and geothermal);
- Predictive models for energy need and consumption;
- Building energy optimization;
- New constructions and retrofitting.

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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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