Special Issue

The Development and Utilization of Solar Energy in Space Cooling

Message from the Guest Editors

This Special Issue aims to explore cutting-edge research, technologies and implementations that harness solar energy to address cooling needs, especially in arid and semi-arid regions.

Scope and Objectives This Special Issue will focus on the integration of solar technologies in the following:

- **Space Cooling Systems**: Passive and active cooling strategies using solar thermal and photovoltaic systems, solar-assisted air conditioning and hybrid cooling technologies.
- **System Optimization and Integration**: Smart control systems and energy storage solutions in solar-integrated cooling systems.
- **Techno-Economic and Environmental Assessments**: Life cycle analysis, cost–benefit studies and sustainability evaluations of solar cooling.
- **Case Studies and Field Deployments**: Real-world applications, pilot projects and performance evaluations in different geographic contexts.

Potential Topics

- Solar-assisted absorption and adsorption cooling systems
- Photovoltaic-powered cooling technologies
- Energy storage for solar cooling
- AI and IoT in solar-cooling system optimization.

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Message from the Editor-in-Chief

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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