Special Issue

Solar Energy for Cooling and Heating: Theory, Methods and Applications

Message from the Guest Editors

This special issue highlights advances in solar energy applications for heating and cooling—key areas in the transition toward low-carbon, sustainable energy systems. Given the significant energy demand from buildings and industry, particularly for thermal needs, solar-driven solutions offer great potential for reducing environmental impact. The issue invites original research and reviews on topics such as solar thermal collectors, photovoltaic systems, hybrid technologies, and system integration methods. Submissions are encouraged in areas including passive and active solar heating, solar-powered cooling cycles, thermal energy storage (sensible, latent, sorption, and thermochemical), as well as system modelling, optimization, and techno-economic evaluation. We look forward to receiving more manuscripts from authors who can make a difference in the dissemination of these technologies. By bringing together experts across disciplines, this special issue aims to accelerate progress in solar energy systems and support the development of more energy-efficient and climate-resilient infrastructure.

Keywords:
- solar cooling
- solar heating
- evaporative cooling
- solar architecture

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About the Journal

Message from the Editor-in-Chief

Solar is a new international, open access journal for solar technologies. Climate change is real! Therefore, fast and wide-spread application of solar technologies is of utmost importance. Consequently, *Solar* aims to publish articles which make a real, influential, and often cited contribution not only to basic research and development, but also to the application of photovoltaics as well as to solar thermal conversion. In addition, articles discussing the politics, economy, environmental, and social issues of solar technologies are also welcome. We encourage authors to submit high-quality original articles, letters, and review articles. Our editorial and technical team guarantees a high-quality, fast reviewing process, fast publication, and promotion. With your articles, our journal will rank among the best soon!

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