



Research on Building Coating for Urban Heat Island Mitigation

Guest Editor:

Dr. Jihui Yuan

Department of Architecture and
Civil Eng., Toyohashi University of
Technology, Toyohashi, Aichi
441-8580, Japan

Deadline for manuscript
submissions:

closed (31 March 2023)

Message from the Guest Editor

As you know, the Urban Heat Island (UHI) effect is currently increasing seriously, resulting in a well-defined, distinct “warm island” represented by the urban area among the surrounding natural landscape. Thus, the call to make cities cooler is getting louder and louder. To provide a contribution to the cause of UHI mitigation, the journal “Atmosphere” is launching a Special Issue on the topic of “Research on Building Coating for Urban Heat Island Mitigation” and is inviting researchers from all world-leading Universities and Research Institutions to contribute their research achievements in this field. The Special Issue covers the following topics:

Research on the building coating materials for mitigating UHI effect, such as diffuse highly reflective (DHR) materials, retro-reflective (RR) materials, and other advanced building coating materials.

The interaction between building surfaces, shortwave radiation, and outdoor thermal environment by means of the field measurement, lab experiment, and simulation analysis, etc.

Passive design of building exterior wall structure for the aims of UHI mitigation and zero energy building (ZEB).





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ilias Kavouras

Environmental, Occupational,
and Geospatial Health Sciences,
CUNY School of Public Health,
New York, NY 10027, USA

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank: CiteScore - Q2 (*Environmental Science (miscellaneous)*)

Contact Us

Atmosphere Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/atmosphere
atmosphere@mdpi.com
[X@Atmosphere_MDPI](https://twitter.com/Atmosphere_MDPI)