Special Issue

Urban Microclimate: Thermal Comfort, Air Quality and Green Building as Drivers of Healthy Urban Design

Message from the Guest Editors

Rapid urban expansion and anthropogenic activities are dramatically impacting the urban microclimate in multiple and various ways. It is important to establish solutions to address the urban microclimate according to local conditions. In this context, this Special Issue aims to deal with different aspects involving the urban microclimate, including investigating the origin and evolution of the urban microclimate, comprehensive and interdisciplinary studies focusing on the mitigation of and adaptation to the UHI phenomenon, solutions to air pollution, green building design, as well as the improvement of indoor and outdoor thermal comfort and livability. We are interested in a broad range of urban microclimate studies from various parts of the world. We also welcome papers presenting innovative methods and interdisciplinary research. This Special Issue is designed to provide insights into recent research in experimental, numerical modelling, integrated planning and design approaches. We hope that this Special Issue will enrich ongoing studies on urban livability and science-driven urban design practices.

Guest Editors

Prof. Dr. Lei Yuan

School of Architecture and Urban Planning, Shenzhen University, Shenzhen 518060, China

Prof. Dr. Lei Li

School of Atmospheric Sciences, Sun Yat-Sen University, Zhuhai 519082, China

Deadline for manuscript submissions

closed (31 October 2023)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/145803

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

mdpi.com/journal/ atmosphere





an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



About the Journal

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!

Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

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))

