

## Special Issue

# Urban Heat Island and Building Energy Sustainability

### Message from the Guest Editors

The urban heat island (UHI) is a special environmental phenomenon in which temperatures (e.g., land surface temperatures, or near surface air temperatures) in the urban area are significantly higher than its surrounding rural areas. Scientific evidence has proved that UHIs can cause many adverse effects in society. Thus, this Special Issue aims to report the most recent studies related to UHIs, for creating a comfortable and livable urban environment. We warmly welcome original, high quality and unpublished manuscripts coming from both academia and industry. This Special Issue will focus on, but not limited to, the following topics:

- Estimating land surface temperatures or near-ground air temperatures;
- Modeling spatio-temporal heat sources, e.g., anthropogenic heat and latent heat;
- Modeling dynamic evolutions of UHIs;
- Investigating formation mechanisms;
- Forecasting UHIs in the current or reformed urban areas;
- Proposing UHIs mitigation strategies;
- Energy interactions with UHIs, e.g., solar energy, distributed solar PV farming, building/transport energy consumptions;
- UHIs related to public health.

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### Guest Editors

Dr. Rui Zhu

Prof. Dr. Mansing Wong

Dr. Sawaid Abbas

Dr. Jinxin Yang

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### Deadline for manuscript submissions

closed (31 October 2023)



## Sustainability

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### Editor-in-Chief

Prof. Dr. Marc A. Rosen

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