1. Record Nr. UNINA9910346835803321 Autore Santamouris Matheos Titolo Urban Overheating - Progress on Mitigation Science and Engineering **Applications** MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa Descrizione fisica 1 online resource (350 p.) Soggetti Meteorology & climatology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The combination of global warming and urban sprawl is the origin of Sommario/riassunto the most hazardous climate change effect detected at urban level: Urban Heat Island, representing the urban overheating respect to the countryside surrounding the city. This book includes 18 papers representing the state of the art of detection, assessment mitigation and adaption to urban overheating. Advanced methods, strategies and technologies are here analyzed including relevant issues as: the role of urban materials and fabrics on urban climate and their potential mitigation, the impact of greenery and vegetation to reduce urban temperatures and improve the thermal comfort, the role the urban geometry in the air temperature rise, the use of satellite and ground data to assess and quantify the urban overheating and develop mitigation solutions, calculation methods and application to predict and assess mitigation scenarios. The outcomes of the book are thus relevant for a wide multidisciplinary audience, including: environmental

and students.

scientists and engineers, architect and urban planners, policy makers