



water



Special Issue Reprint

Smart Urban Water Networks

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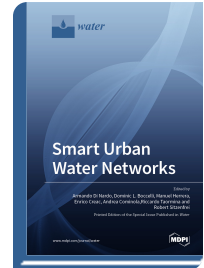
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This book presents the paper form of the Special Issue (SI) on Smart Urban Water Networks. The number and topics of the papers in the SI confirm the growing interest of operators and researchers for the new paradigm of smart networks, as part of the more general smart city. The SI showed that digital information and communication technology (ICT), with the implementation of smart meters and other digital devices, can significantly improve the modelling and the management of urban water networks, contributing to a radical transformation of the traditional paradigm of water utilities. The paper collection in this SI includes different crucial topics such as the reliability, resilience, and performance of water networks, innovative demand management, and the novel challenge of real-time control and operation, along with their implications for cyber-security. The SI collected fourteen papers that provide a wide perspective of solutions, trends, and challenges in the contest of smart urban water networks. Some solutions have already been implemented in pilot sites (i.e., for water network partitioning, cyber-security, and water demand disaggregation and forecasting), while further investigations are required for other methods, e.g., the data-driven approaches for real time control. In all cases, a new deal between academia, industry, and

must be embraced to start the new era of smart urban water systems.



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