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# Advances in Green Energy Systems and Smart Grid

First International Conference on Intelligent Manufacturing  
and Internet of Things and 5th International Conference on Computing  
for Sustainable Energy and Environment, IMIOT and ICSEE 2018  
Chongqing, China, September 21–23, 2018  
Proceedings, Part III

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# Preface

This book constitutes the proceedings of the 2018 International Conference on Intelligent Manufacturing and Internet of Things (IMIOT 2018) and International Conference on Intelligent Computing for Sustainable Energy and Environment (ICSEE 2018), which were held during September 21–23, in Chongqing, China. These two international conference series aim to bring together international researchers and practitioners in the fields of advanced methods for intelligent manufacturing and Internet of Things as well as advanced theory and methodologies of intelligent computing and their engineering applications in sustainable energy and environment. The new conference series IMIOT is jointly organized with the well-established ICSEE conference series, under the auspices of the newly formed UK-China University Consortium in Engineering Education and Research, with an initial focus on intelligent manufacturing and sustainable energy.

At IMIOT 2018 and ICSEE 2018, technical exchanges within the research community took the form of keynote speeches, panel discussions, as well as oral and poster presentations. In particular, two workshops series, namely the Workshop on Smart Energy Systems and Electric Vehicles and the Workshop on Communication and Control for Distributed Networked Systems, were held again in parallel with IMIOT 2018 and ICSEE 2018, focusing on the two recent hot topics of the integration of electric vehicles with the smart grid, and distributed networked systems for the Internet of Things.

The IMIOT 2018 and ICSEE 2018 conferences received 386 submissions from over 50 different universities, research institutions, and companies from both China and UK. All papers went through a rigorous peer review procedure and each paper received at least three review reports. Based on the review reports, the Program Committee finally selected 135 high-quality papers for presentation at the IMIOT 2018 and ICSEE 2018. These papers cover 22 topics and are included in three volumes of the CCIS series, published by Springer. This volume of CCIS includes 30 papers covering 5 relevant topics.

Located at the upstream Yangtze basin, Chongqing constitutes the most important metropolitan area in the southwest of China. It has a glorious history and culture and serves as a major manufacturing center and transportation hub. Chongqing is also well-known for its spicy food and hotpot, attracting tourists and gourmets from around the world. In addition to academic exchanges, participants were treated to a series of social events, including receptions and networking sessions, which served to build new connections, foster friendships, and forge collaborations. The organizers of IMIOT 2018 and ICSEE 2018 would like to acknowledge the enormous contribution of the Advisory Committee, who provided guidance and advice, the Program Committee and the numerous referees for their efforts in reviewing and soliciting the papers, and the Publication Committee for their editorial work. We would also like to thank the editorial team from Springer for their support and guidance. Particular thanks are of

course due to all the authors, as without their high-quality submissions and presentations the conferences would not have been successful.

Finally, we would like to express our gratitude to our sponsors and organizers, listed on the following pages.

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