Preface

Computational electronics is facing new challenges in nanometer scale era. We would like to use this special issue to report the recent computational advances in this field. The purpose of this special issue is for academics and industrial professionals to present their recent advances, ideas and results and to exchange experiences in modeling, simulation, optimization, and other computational support for related problems. This issue includes not only selected best papers from The 2010 International Symposium on Computational Electronics (ISCE 2010) held in conjunction with The 2010 International Conference of Computational Methods in Sciences and Engineering, Psalidi, Kos, Greece, 03–08 October 2010, but also papers applied for this call for papers. There were a large number of paper submissions, not only from the Asia Pacific, but also from Europe and North America. All submissions and selected best papers were reviewed by at least three independent reviewers on relevance and technical contents on basis of papers. It was extremely difficult to select the presentation in the special issue because there were many excellent and interesting submissions. In order to allocate as many papers as possible and keep the high quality of the special issue, we finally decide to accept 18 papers in the special issue. We believe all of these papers and topics, ranging from emerging semiconductor material and nanoelectronics to intelligent electrical and computer engineering will not only provide novel ideas, new results, work in progress and state-of-the-art techniques in this field, but also stimulate the future research activities in the area of computational electronics.

The represented topics and papers are certainly not an exhaustive representation in the related field. Nonetheless, they represent the rich and many-faceted knowledge, that we have the pleasure of sharing with the readers. We would like to thank all authors for their excellent contributions and patience in assisting us. Finally, the fundamental work of all reviewers on these papers is also very warmly acknowledged. I would like to thank the former Editor-in-Chief of Mathematical and Computer Modelling, Professor Dr. Ervin Y. Rodin, for his support and all the Associated Guest Editors of this issue.

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