Special Issue on the 2016 & 2017 International Conference on Computing and Precision Engineering in Taiwan (1)

Preface

Technologies in the research field of innovative and intelligent sensing control analysis and experiments have made great progress in recent years, and the relative issues for functional materials have now become popular in the field of nanomaterial and mechanic engineering. Many researchers in system measurement, sensor design, and optimized experiments have made great efforts to develop methodologies for physical, engineering, and biological applications among others, and the research results of such efforts have had great influence on the greater field of multidisciplinary fields of sensing technology.

On the other hand, with the miniaturization of electronic devices and advances in nanomaterial research and production, the application of functional nanomaterials is at the forefront of scientific and industrial attention. Driven by such motivation, the innovative and intelligent methodologies of system modeling, materials for sensor technology, and associated phenomena are proposed not only in the field of engineering but also in biological sciences. This special issue includes the theoretical and experimental results of innovative and intelligent sensing control analysis and experiments on functional materials in optical, physical, engineering, and biological studies, and their various applications. Prospective authors are invited to submit original papers to this Special issue.

This special issue presents 24 papers selected from the proceedings of the 2016 & 2017 International Conference on Computing and Precision Engineering (ICCPE) in Taiwan. The topics include advanced materials and manufacturing technology, biotechnology and biomaterials, advanced modeling and control technology in mechatronic and energy systems, dimension measurement and metrology technology, advanced design and manufacturing technology for precision engineering, sensing and automation systems, and surface science and nanotechnology. All the papers submitted to this conference were first subjected to peer review by two independent reviewers prior to the conference. This special issue presents the current innovative and intelligent sensing analysis and experiments on functional materials. Lastly, I sincerely thank Prof. Makoto Ishida, the Editor-in-Chief, and Ms. Misako Sakano, Editorial Department of MYU K.K., for their kind support in the publication of this issue. I would also like to thank ICCPE Program Chairman/Professor Chien-Hung Liu for his advice.

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