

Theory and Practice of MEMS, NEMS, and MOEMS

Research in the field of the theory and practice of MEMS, NEMS, and MOEMS has made tremendous strides during the past decade. Throughout this period of progress, the Asia-Pacific Conference on Transducers and Micro-Nano Technologies (APCOT) has been one of the premier venues for reporting on results in this field. In this special section of the *Journal of Micro/Nanolithography, MEMS, and MOEMS* (JM³), we are pleased to present selected papers from the 5th APCOT held in July 2010 in Perth, Western Australia.

The diversity of techniques considered by papers selected for this special section range across micro- and nanotechnology, material sciences, sensors and actuators, packaging and assembly technology, radio-frequency devices, and chemistry. We believe all these papers project the essence of APCOT—they present rigorous techniques for developing tools that can be applied with good effect to address practical problems. Many of these papers have associated tool implementations and several papers report on experimental

studies that demonstrate the practicality of approaches they propose.

The purpose of this special section is to highlight recent progress in the application of transducers and micro-nano technologies. We invited several researchers to contribute to the special section. We hope that their key works will enlighten readers of JM³ on the recent trends in the development of transducers and micro-nano technology.

I would like to thank Burn Lin, the Editor-in-Chief of JM³, for providing me with the opportunity to act as the guest editor of this special section. Finally, my deep gratitude is directed to Brenda McDonald of the SPIE staff for her kind support and assistance in organizing this special section.

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Guest Editor