Special Issue on Advanced Nanofabrication Processes for Emerging Devices and Materials

Preface

In the world of sub-100-nm space, nano-originated physical properties and the so-called size effects, such as quantum phenomena, have been clarified and reached practicality. This special issue spotlights the technical advancements in micro- and nanofabrication processes for various types of emerging material and device. The issue contains peer-reviewed papers (one review letter and seven research papers). The first three papers deal with advanced deposition and lithography processes, namely, supercritical-fluid-deposited high-aspect-ratio micro- and nanostructures by Usami *et al*., sol–gel deposit of lead zirconate titanate by Moriyama *et al*., and rapid large-area direct electron beam exposure methods by Higo *et al*. The next two papers are on applications. Iida *et al*. demonstrated the processes for solidified ionic liquid with a 3D microstructure for vibration energy harvesters. Tyagi *et al*. reported on neodymium iron garnet multilayers for spin Seebeck effect sensors. The last two papers expand on these topics. The cutting-edge operando desorption gas analysis system was reported by Kurisu *et al*. With a video material, Totsu *et al*. introduce a five-day practical program to fabricate IoT force sensor module, which can be widely applied not only to other MEMS sensors but also for nurturing engineers in the field of nanofabrication. I believe that this special issue boosts further development of nanofabrication processes and of interest to potential users.

As the guest editor of the special issue, I would like to thank all authors, reviewers, and others who have helped in the editorial process. In this special issue, the submission of video materials was encouraged, and the publications were licensed under a Creative Commons Attribution 4.0 International License (CC BY). I thank Ms. Tomoko Tanabe and the editorial office of *Sensors and Materials* for great efforts in editing. I sincerely appreciate Professor Masayoshi Esashi, one of the editorial board members, for giving me a chance to organize this issue.

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