Special Issue on Transducer Design for Sensing Applications

Preface

Sensors are essential in our daily lives and are used in various fields such as life science, agriculture, automobiles, and medicine. In addition, the design of transducers, which are important components of sensors, can be expected to achieve even higher sensitivity, integration, and miniaturization, leading to the development of useful sensors and systems. Particularly in recent years, advances in nanotechnology have led to the discovery of specific characteristics and the design of novel transducers that take advantage of these characteristics.

From these backgrounds, in this special issue, novel valuable research papers related to transducers and materials, including sensing applications and systems using novel transducer design, are included. This special issue includes papers on a wide variety of novel transducers, including lasers, mass spectrometry, electrochemistry, microfluidic devices, and immunochromatography. At first glance, they may seem unrelated, but in fact, they have high potential from the perspective of transducer design.

I sincerely hope that the papers published in this special issue will be viewed by many readers in a wide range of fields and that they will be applied to the development of innovative sensors.

Finally, I would like to thank the authors for their contributions to this special issue for Sensors and Materials and all the reviewers for their constructive reviews. I would particularly like to thank Ms. Tomoko Tanabe for giving me a chance to edit this special issue and for her invaluable help in producing this special issue.

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