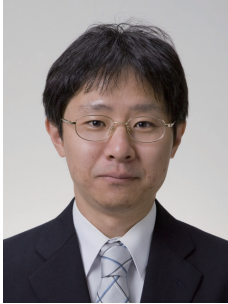


**SPECIAL ISSUE ON INTERNET OF THINGS (IoT)
AND APPLICATIONS FOR IMPROVING QUALITY OF LIFE**

PREFACE



Networking technology, especially mobile networking, is rapidly progressing. Furthermore, communication devices and sensing devices are being miniaturized and their power consumption is also decreasing. To develop these innovations, we can conduct many kinds of measurement, and the results can be easily transmitted and collected by networks, such as mobile networks, low power wide area (LPWA) networks, the Internet, and so on. This is known as the Internet of Things (IoT), and the utilization of IoT-related applications is rapidly becoming widespread.

The IoT not only consists of hardware. It also has a software side for processing data collected by sensors and networks. Through the IoT, it is becoming easier to collect data, known as Big Data, for analysis and application to many fields. Novel methods of analysis and innovative applications are being proposed one after another.

At present, the IoT has more applications to infrastructures at companies and factories than those directly related to our daily lives. However, the coordination between the IoT and home electrical appliances and wearable devices is rapidly progressing. Therefore, it is important to develop methods for improving our quality of life (QOL) by applying IoT technologies.

This special issue contains 11 papers related to the IoT and QOL, focusing on the use of collected data in various fields. The topics of papers on the use of IoT include communications, detecting sleep disorders, supporting children with developmental disorders, and estimating human emotions and behaviors.

Finally, I would like to thank Ms. Misako Sakano for this opportunity to edit this special issue, and I also thank all the authors and reviewers for their support. Furthermore, it is a great honor to publish this special issue on the 30th anniversary of *Sensors and Materials*.

Hidetaka Nambo
Kanazawa University
Japan