
FOREWORD

Special Section on Current Situation of Ultra-High Sensitivity Magnetic Sensors and Measurement Techniques: Present Location of SQUID Sensors

It is our great pleasure to have a Special Section entitled “Special Section on Current Situation of Ultra-High Sensitivity Magnetic Sensors and Measurement Techniques: Present Location of SQUID Sensors” in IEICE Transactions on Electronics.

Superconducting Quantum Interference Devices (SQUIDs) have widely been used for ultraweak magnetic signal measurements, such as biomagnetic measurements, as the highest sensitivity magnetic sensor. In recent years, the sensitivities of magnetic sensors without superconductivity are rapidly improved and their potential for ultraweak magnetic signal measurements have been also demonstrated. This special section will focus on the recent progress in the recent progress in ultra-high sensitivity magnetic sensors and measurement techniques including SQUID sensors.

Lastly, I would like to express my sincere thanks to all authors for their contributions to the special section. I also appreciate all reviewers and the editorial committee members for their irreplaceable contributions.

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Akihiko Kandori (*Nonmember*) received the B. Eng., and M. Eng. degrees from Sophia University in 1988, and 1990, respectively. He also received D. Eng. and D. Med. Degrees from Sphia University and Tsukuba University in 1997, and 2003, respectively. He is currently working for Hitachi Ltd. as a Distinguished Researcher of Center for Exploratory Research, Research and Dvelopment Group. He most distinctive contribution has been as a pioneer and a technology leader in developing commercial Magnetocardiography, which has a clinical application method for diagnosing the adult and fetal heart disease.

