

Call for Papers

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

The IEICE (Institute of Electronics, Information and Communication Engineers) Transactions on Electronics announces a forthcoming special section entitled "Current Situation of Ultra-high Sensitivity Magnetic Sensors and Measurement Techniques: Present Location of SQUID Sensors," which will be published in **June 2024**. 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.

1. Scope

The major topics of interest include, but not limited to:

- SQUID sensors
- Magnetic sensors including Diamond, TMR, OPM, MI, Fluxgate, and so on.
- Ultra-high sensitive magnetic measurement techniques
- Novel applications

2. Submission Instructions

The deadline for submission is **June 16, 2023 (Japan Standard Time)**. The standard number of pages is 8 for a PAPER. The maximum number of pages of a Brief Paper is 4. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, https://www.ieice.org/eng/shiori/mokuji_es.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept only papers by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

Submit a paper using the IEICE web site, https://review.ieice.org/regist/regist_baseinfo_e.aspx. Authors should choose the [Special-SE] "Current Situation of Ultra-High Sensitivity Magnetic Sensors and Measurement Techniques: Present Location of SQUID Sensors" as a "Journal / Section" on the online screen. Do not choose [Regular-EC].

3. Inquiries:

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4. Special Section Editorial Committee

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- * Authors must agree to the "Copyright Transfer, Article Processing Charge Agreement, Notices from the IEICE, and Privacy Policy" via electronic submission.
- * Upon accepted for publication, all authors, including authors of invited papers, should pay the page charges covering partial the cost of publication around November 2023. If payment is not completed by December 15, 2023, your manuscript will be handled as rejection.
- * The accepted papers will be published online soon on the web site of Transactions Online after the payment of page charges has been completed. For detailed information, please visit https://www.ieice.org/eng/shiori/page2_es.html#8
- * If there are non-members among the authors, we recommend that the authors take this opportunity to join the IEICE. For detailed information on the IEICE Membership Application, please visit the web-page, https://www.ieice.org/eng_r/join/individual_member.html.
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