

----- Special Section on Microwave Photonics and Terahertz Photonic-Electronics Technologies Paving the Way for the B5G/6G Era -----

The IEICE (Institute of Electronics, Information and Communication Engineers) Transactions on Electronics announces a forthcoming special section on "Microwave Photonics and Terahertz Photonic-Electronics Technologies Paving the Way for the B5G/6G Era" to be published in **August 2026**.

As we move toward the B5G/6G era and the need to realize ultra-high-speed, high-capacity communications, microwave terahertz optoelectronic technologies are attracting attention as key elements of next-generation communications networks. These technologies are expected to play an important role in the future communications infrastructure by enabling wideband transmission, low latency, and improved energy efficiency. This requires a variety of research approaches in millimeter- and microwave photonics and terahertz technologies to further improve the performance of communication systems and to develop new applications. Therefore, we have planned this special section.

1. Scope

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

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| - Millimeter wave/Microwave/Terahertz wave technologies | - High-speed broadband transmission technologies |
| - Fiber optic wireless technologies | - High-frequency electronic devices and systems |
| - Optical wireless fusion technologies | - Terahertz materials |
| - Radar and sensor technologies | - Others |
| - 5G/6G communication technologies | |

2. Submission Instructions

The deadline for submission is extended to **September 15, 2025(Japan 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-MT] Microwave Photonics and Terahertz Photonic-Electronics Technologies as a "Journal / Section" on the online screen. Do not choose [Regular-EC].

3. Inquiries:

Kyoya Takano

Email: ktakano@rs.tus.ac.jp

4. Special Section Editorial Committee

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* 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

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* IEICE Transactions on Electronics requires authors to cite 30 or more references for full paper and 15 or more references for brief paper.

* All papers published in or after August 2023 issue of the IEICE Transactions on Electronics are opened to all readers in the world through J-STAGE.

* IEICE has begun a multilingual (16 languages) translation trial of IEICE Transactions Online in April 2024.

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