

Call for Papers

----- Special Section on Electromagnetic Compatibility in Conjunction with EMC Japan/APEMC Okinawa -----

The IEICE Transactions on Communications announces that it will publish a special section entitled “Special Section on Electromagnetic Compatibility in Conjunction with EMC Japan/APEMC Okinawa” in the **September 2025** Issue.

In the field of electromagnetic compatibility (EMC), issues such as electromagnetic interference in wireless communications and electronic equipment and devices have been known for quite some time. In recent years, the rapid development and widespread adoption of IoT products and autonomous vehicles, the swift growth of digital ecosystems utilizing the Internet, and high-speed wireless communication technologies have given rise to new challenges. These include emerging problems with EMC, signal and power integrity, and electromagnetic information leakage associated with those new technologies. Moreover, the impact of increasingly complex electromagnetic environments on human bodies and the relationship between natural phenomena such as lightning and the electromagnetic environment presents longstanding and contemporary challenges. Consequently, the challenges in the EMC field are becoming progressively more diverse. In May 2024, an international symposium on EMC (EMC Japan/APEMC Okinawa) will be held in Okinawa, Japan. Many EMC issues are discussed there. For these reasons, a special section is planned (scheduled to appear in the September 2025 issue) to promote further research and development of future EMC fields.

1. Scope

This special section aims to timely disseminate research in these areas. Possible topics include, but are not limited to:

- **EMC Management:** Education for EMC Engineers, Qualification System for EMC Engineers, ISO/IEC 17025, and Site Control and Verification
- **EMC Measurements:** Measurement and Instrumentation, Measurement Techniques, EMC Test Facilities, Antenna and Instrument Calibration, Radiated and Conducted Emission and Immunity Tests, Emission Limits, and Test Instrumentation and Facilities
- **Electromagnetic Environment:** Natural and Man-made Noise Source and Control of Intentional and Unintentional Emissions
- **Electromagnetic Interference Control:** Shielding, Gasketing, Filtering, Cables, Grounding and PCB Layout, and EMC Product Design and Modeling
- **High Power Electromagnetics:** ESD and Transients, Lightning EM fields and Currents, EMP and IEMI, and Information Leakage
- **Spectrum Engineering:** Spectrum Sharing, Adaptive Interference Mitigation, Interference Among Wired/Wireless Communication Systems, Antennas, and Wave Propagations
- **Low Frequency EMC:** Electric Power System EMC, Power Quality, and Renewables, Electric Vehicles
- **Computational Electromagnetics:** EMC/EMI Modeling and Novel Analysis Techniques for EMC/EMI
- **Signal and Power Integrity:** Chip, Package, PCB and Cables, and Transmission Lines
- **Nanotechnology and Advanced Materials:** Nanomaterials, Materials for Electromagnetic Shielding and Absorbers
- **EMC for Emerging Wireless Technologies:** Wireless Coexistence, Intra/Inter-system Interference, and Wireless Power Transfer
- **Power Electronics EMC:** DCDC Converter, SiC, GaN, IGBT, Conducted EMI, Radiated EMI, Snubber, and Ringing
- **EMF Safety and Biomedical Issues:** Human Exposure to ELF/RF EM Fields, Biological Effects, Medical Application, Medical Devices, and Hospital Equipment

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guidelines in the “Information for Authors.” The latest version is available at the website: https://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgment 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 papers only by electronic submission. Submit a manuscript and electronic source files (LaTeX/Word files, figures, authors’ photos, and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by **October 1, 2024 (JST)**. Authors should choose the [Special-MC] Special Section on Electromagnetic Compatibility in Conjunction with EMC Japan/APEMC Okinawa as a “Journal/Section” on the online screen. Do not choose [Regular EB].

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3. Special Section Editorial Committee

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* Authors must agree to the “Copyright Transfer and Page Charge Agreement” via electronic submission.

* Upon acceptance for publication, all authors, including authors of invited papers, are required to pay the article processing charges to partially cover the cost of publication around February 2025. If payment is not completed by 15 March 2025, your manuscript will be handled as rejection. For detailed information on article processing charges, please visit https://www.ieice.org/eng/shiori/page2_cs.html#5

* Accepted papers will be published online on the publishing websites (IEEE Xplore, J-STAGE, and IEICE Transactions Online) immediately after the payment. For detailed information, please visit https://www.ieice.org/eng/shiori/page2_cs.html#8

* All papers published in or after the February 2024 issue of the IEICE Transactions on Communications are opened to all readers worldwide through IEEE Xplore; visit <https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=10400553>