



Call for Papers

2025 IEEE International Symposium on Radio-Frequency Integration Technology

August 25-27, Kagoshima, Japan

<https://www.ec.ee.es.osaka-u.ac.jp/rfit2025/>

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IMPORTANT DATES

March 14, 2025

Deadline of paper
submission

May 9, 2025

Notification of acceptance

June 13, 2025

Submission of final paper

Venue

Shiroyama Hotel Kagoshima
<https://www.shiroyama-g.co.jp/en/>

Sponsored by

IEEE Microwave Theory and
Technology Society (MTT-S)

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Chapters

The 2025 IEEE International Symposium on Radio-Frequency Integration Technology (RFIT2025) will be held in Kagoshima, Japan on August 25-27, 2025. This conference is sponsored by the IEEE Microwave Theory and Technology Society, and will be supported by IEEE MTT-S Japan / Kansai /Nagoya Chapters, IEEE . The RFIT2025 invites papers in the following technical areas, but are not limited to the following technical areas.

A. EM Field, Design and Measurement Techniques

- Modeling and CAD: active/passive device modeling, CAD, EM simulation, co-simulation

B. Passive Components and Packaging

- Packaging Technologies: 3D, chiplet, MCM, SiP, TSV, flip chip assembly, wire bonding, anisotropic conductive film, additive manufacturing

- Passive Circuits and Antennas: on-chip antennas, integrated passive devices, ferrite, piezoelectric

C. Active Devices and Circuits

- Device Technologies: CMOS, SOI, LDMOS, SiGe, GaAs, InP, GaN, MEMS, reliability, characterization

- Frequency Generation/ Conversion ICs: VCOs, PLLs, synthesizers, dividers/multipliers/mixers

- Front-end RFICs: LNAs, VGAs, phase shifters, RF switches

- Power ICs: power amplifiers, linearization circuits, drivers

D. Systems and Applications

- Analog and Mixed Signal ICs: ADC, DAC, comparators, filters, AGC/VGA

- High-Speed Data Transceivers: wireless/wireline/optical transceivers, CDRs for data links.

- Power Transmission ICs: RFID, electromagnetic induction, wireless power transmission ICs

- Radio Integrated Systems: IoT M2M, automotive radars, wearable devices, security, biomedical and healthcare applications

- 5G/B5G/6G Systems: MIMO systems, smart radio systems, cube satellite and satellite communication systems

- RF Sensor ICs: automotive radars, wearable devices, security, biomedical and healthcare applications

E. Emerging Technologies

- Millimeter-wave and THz ICs: circuits operating at mm-wave and THz bands

- Emerging ICs: power management, digital RF circuits, RF BIST, reconfigurable ICs, vehicle electronic ICs

- Cryogenic technologies: cryogenic/quantum devices and modelings, cryogenic circuits, systems, measurement techniques, and quantum computing

- AI/Machine Learning for RF/MW/mmW: AI/ML, algorithms implementations, and demonstrations for: spectrum sensing; mobile edge networking; MIMO and array beam operations and management; design and optimization; in-situ sensing, diagnostics, control, reconfiguration of MHz to THz communication and sensing circuits and systems

Paper Submission: To encourage timely reporting of the latest results and have better opportunities to expand papers for possible journal publications, prospective authors are invited to submit a 3-page manuscript (both initial submission and final manuscript, if accepted) in English and in IEEE PDF eXpress format. The manuscript should emphasize original contributions and key findings, including figures, diagrams and results from both simulations and measurements. References should be clearly cited and up-to-date. Accepted conference papers can be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. By submitting a manuscript, the authors agree that, if accepted, at least one of the authors will make a full registration and attend the RFIT2025 to present their paper. All must be made through the RFIT2025 website: <https://www.ec.ee.es.osaka-u.ac.jp/rfit2025/>