IEEE Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems

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IEEE · MTT-S IEEE MICROWAVE THEORY & TECHNOLOGY SOCIETY · **Part of** **Radio and Wireless Week** RWW

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Call For Papers

IEEE Topical Meetings on Silicon Monolithic Integrated Circuits in RF Systems have been at the forefront of moving Silicon technologies into microwave, millimeter-wave and THz applications – a development now widely accepted, and of great importance. RF CMOS and Si/SiGe BiCMOS technologies are well established in commercial and defense applications. SiRF 2025 will mark the 25th topical meeting on SiRF, with a renewed emphasis on promoting a dialogue between IC designers and researchers promoting non-standard technologies, exploiting the maturity of Silicon processes, but addressing the challenges of tomorrow. The three days of SiRF 2025 will chronicle recent advances in our dynamic field, and provide the platform for developing new ideas, and candid exchange, facilitated by SiRF's single-session format. As in past years, a line-up of reputed invited speakers will stimulate our discussions, with an emphasis on emerging technologies. For more details, visit: www.radiowirelessweek.org/conferences/sirf. SiRF 2025 solicits papers in the following focus areas:

1. RF, Millimeter-Wave and THz Integrated Circuit Front Ends
   - RF, mmW, THz Circuit Building Blocks, Sub-systems, and Integrated Transceivers
   - Integrated Circuits for Phased Array, MIMO and 5G/6G Systems
   - Ultra-Wideband Systems, Reconfigurable Front Ends, and Wideband or Multi-Band Circuits
   - Other Advanced Microwave Circuits and Novel Applications

2. Wireline Communication Circuits and Silicon- Photonics Integrated Circuits
   - Wideband Wireline Transmitters, Receivers, and Transceivers
   - Oscillators, PLLs, Synthesizers, and Signal Generators
   - Precise Timing and Data Recovery Circuits
   - High-Speed Electronic and Photonic Modulators and Drivers
   - Electronic-Photonic Systems and Electronic-Photonic Circuit Building Blocks

3. High Speed Data Converters and Mixed Signal Circuits
   - Nyquist Rate and Oversampling A/D and D/A Converters
   - Time-to-Digital and Analog to Information Converters
   - Analog Circuits and Building Blocks
   - Digitally Assisted Analog Circuits and Analog Calibration Techniques

4. Semiconductor Technologies, Advanced Packaging, and Heterogeneous Integration
   - Advanced RF CMOS and SiGe BiCMOS Transistor Technology and Device Modeling
   - Heterogeneous Integration, System-on-Chip, and System-on-Package
   - Through-Silicon Vias, RF MEMs, and Micromachining
   - Circuit-Package Interaction/Co-simulation
   - On-chip/In-package Antennas and Metasurfaces
   - Robust Measurement and De-embedding

Paper submission instructions can be found at www.radiowirelessweek.org. Submissions should be formatted according to the submission review template available on the RWW website. Authors should indicate preference for oral or poster presentation. All submissions must be received by **23 July 2024**. All accepted papers will be published in a digest and included in the IEEE Xplore® Digital Library. Submissions will be evaluated based on novelty, significance of the work, technical content, interest to the audience, and quality of writing.