

CALL FOR PAPERS

The 27th edition of the IEEE International Interconnect Technology Conference (IITC) will be held June 3-6, 2024 in San Jose, California. Authors are encouraged to submit their original work describing innovative research and development in the critically important field of on-chip interconnects. The conference seeks papers on all aspects of BEOL/MOL interconnects and metallization, including design, unit process, integration and reliability. The deadline for submission of abstracts is February 12, 2024.

IEEE IITC is sponsored by the IEEE Electron Devices Society as the premier conference for interconnect technology devoted to leading-edge research in the field of advanced metallization and 3D integration for ULSI IC applications. The conference seeks papers on all aspects of BEOL/MOL interconnects and metallization, including design, unit process, integration and reliability.

Applications of Interest

- Advanced interconnects: low-k interconnects, optical, wireless, and carbon-based interconnects, Airgap, 1D/2D interconnects, beyond Cu...
- Emerging BEOL Integration flows such as semi-damascene
- 3D integration & packaging concerns: Wafer-to-Wafer/Chip-to-Wafer bonding, RDL's and Interposers, Through Si Via, Non-destructive, high throughput methods to identify defects, backside power distribution network (BSPDN), thermal management
- · Contacts on MOS devices: Silicide, III-V, 2D materials...
- Memory architecture: CBRAM, PCRAM, ReRAM, MRAM, FeRAM, DRAM, 3DNAND...
- Novel System and Emerging Technology: Energy harvesting, brain-inspired computing...
- Novel Form Factors: flexible electronics, wearables...

Topics of Interest

- Process integration, advanced patterning for MOL/BEOL
- Materials and Unit Processes (Dielectrics, metals, barriers, Wet, CMP, PVD, CVD, ALD, selective deposition/SAMs, patterning, advanced cleaning and surface treatment)
- Reliability and Failure analysis, characterization, techniques, and methods
- Advanced material/process characterization, system-technology & design-technology co-optimization, and modelling techniques

Abstract Information

Abstracts must be no more than 3 pages in length. Details of abstract submission, including a template may be found at <u>www.iitc-conference.org</u>. Submissions will be reviewed for acceptance as an oral presentation or poster. Accepted abstracts will be published digitally by IEEE as IITC Conference Proceedings without further changes.