

First Call for Papers
The 18th International Workshop
on Junction Technology

March 8-9, 2018

Fudan University, Shanghai, China

Organized by
IEEE EDS Shanghai Chapter
Fudan University



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The 18th International Workshop on Junction Technology (IWJT-2018) will be held on Mar. 8-9, 2018 in Shanghai, China, one of the most promising areas for semiconductor manufacturing. As CMOS device continues scaling-down, source/drain junction engineering becomes one of the most critical issues for CMOS fabrication. To meet tremendous demand for sharing ideas on junction technology, International Workshop on Junction Technology started from 2000 and was held annually in Japan or China. At the past IWJTs, a number of eminent and experienced scientists and engineers from Asia, America, and Europe presented their latest results on junction technology, which makes the workshop a high-level scientific forum for experts in this field to exchange their ideas and information. The main focus of IWJT-2018 is on junction technologies for nanometer CMOS devices. The workshop will provide a good opportunity for researchers and engineers to present their new research results, share the latest information, keep pace with the rapid development of semiconductor technology, and exchange ideas with leading scientists in this field.

Workshop Scope (Papers are solicited in, but not limited to the following areas)

- **Doping Technology** --- Ion implantation, plasma doping, gas and solid doping
- **Annealing Technology** --- Rapid thermal process, laser annealing, flash annealing, SPE, lattice damage and defects
- **Junction Technology for Novel CMOS Device Structures** --- Junction for SOI, strained Si, SiGe, Ge, Schottky barrier S/D MOSFET, FinFET(Tri-gate FET), and bonding junctions.
- **Silicides and Contact Technology for CMOS** --- Silicide materials and silicide technology, elevated S/D, low barrier contact, surface pre-treatment
- **Junction and Contact Technologies for Compound Semiconductors and Novel Material Devices** --- Schottky and ohmic contacts to wide bandgap compound semiconductors, junction and contact technologies for carbon nanotube, graphene and other 2D or nano-, quantum devices, hetero-junction devices
- **Contact and Junction Technologies for Energy Harvesting Devices**---solar cells
- **Characterization for Shallow Junction (1D, 2D)** --- Physical and electrical characterization of ultra-shallow junction formation, dopant incorporation/activation, dopant profiling/mapping, novel characterization techniques
- **Modeling and Simulation** --- Modeling and simulation of ultra-shallow junction formation, modeling of novel junction-structure CMOS devices and non-Si based devices
- **Equipment, Materials and Substrates for Junction Technology**

Paper Submission

Prospective authors are requested to submit the camera-ready full-length papers. Camera-ready full-length late news papers are also accepted. A notice of acceptance will be announced after review. The proceedings will have an IEEE catalogue number and may be collected in IEEE publication database --- IEEE X[®] *Explore*. The proceedings will be published before the workshop and distributed at the workshop.

Deadline for Camera-Ready Full-Length Paper Submission:

Dec. 31, 2017

Notification of Acceptance: **Jan. 31, 2018**

Deadline for Late News Submission: **Jan. 31, 2018**

Email submission* with a cover letter to iwjt@fudan.edu.cn is preferred.

* Please use the first author or corresponding author's name as a filename, eg., authorname.doc or authorname.pdf.

About paper submission, please contact:

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More information about IWJT-2018 can be found at web site:

<http://www.iwjt.org>

Looking forward to meeting you soon in Shanghai.

IWJT-2017 (Kyoto, Japan)

