IIT16: Abstracts due in two weeks

作者是 系統管理員
週二, 17 五月 2016 13:27 - 最近更新 週二, 17 五月 2016 13:45

Ion Implantation Technology 2016: (IIT2016)
National Cheng Kung University, Tainan, Taiwan
September 26-30, 2016: http://iit2016.web2.ncku.edu.tw/

Call for Papers

The IIT2016 Conference is an open forum for discussion of major challenges in current and emerging technologies related to the tools and process for Ion Implantation, Thermal Processing and Semiconductor Metrology. The Conference offers an excellent opportunity forengineers and researchers in industry and universities to present new results and to discuss mutual needs for future collaborative work.

The organizers welcome contributions from a broad range of topics concerning different aspects of the essential knowledge, skills and techniques related to Ion Implanation Technology and Thermal Processing for Semiconductor Materials and Device Fabrication and Ion Implantation Technology for New Applications.

Conference Topics include, BUT ARE NOT LIMITED TOO:
(I) Ion Implanation and Thermal Processing for Semiconductor Materials & Device Fabrication.

*Planar and Non-Planar CMOS (FinFETs, nanowires, etc), 3D Memory and Power devices, Large-area Displays, LEDs, MEMS, Image Sensors, Photovoltaics, etc.
*Ion processing of Si, Group IV, III-V materials, graphene, disulphides, etc.
*Materials Modification by ion implanation and thermal processing technology for etch rate and dielectric constant modification, junction contact and metal gate work function tuning,PR stabilization for multi-exposure lithography, etc.
*Systems and conponents for beamline ion implantation, plasma doping, cluster and molecular ion beams over an ion energy range from 100 eV to several MeV.
*New doping techniques: "monolayer" dopant-organic films, ALD, selective CVD/epi, MOCVD, laser-assisted doping, thermal and recoil mixing methods, etc.
*Advanced Thermal Annealing: Flash, Laser, Microwave, Neutral Beams, etc.
*Metrology methods: elemental, electrical and morphological analysis of 3D devices, junctions, strain, interfaces and contacts, in-line process controls, etc.
*TCAD modeling.

(II) Ion Implantation Technology for New Applications

*Biotechnology: processing of bio-compatible surfaces and interfaces, fabricariion of DNA-scale sensors and bio-active devices.
*Photonic devices: CMOS-photonic integration, materials for multi-dimentional photonic signal processing and transmission,Vertical-Cavity Surface-Emitting Lasers.
*Ion-assited methods for advanced Photovoltaic devices and photon energy-shifting layers, etc.
*Layer transfer for Heterogeneous Materials Integration, 3D IC stacking, etc.
*Nano-scale device fabrication for quantum confined films, wires and dots, Quantum Information Processing, chemical and physical sensors, etc.

Note: IIT2016 will be preceded by a 3-day school on implant & annealing with a faculty of international experts and a 600+ page textbook written for this course. September 22-24, 2016

Regards,
W-H. Lee,
Co-Chair of IIT 2016

National Cheng Kung University
Department of Electrical Engineering

No.1, Daxue Rd., East Dist., Tainan City 701, Taiwan
Phone:+886-6-2757575-62445