

DSL2023

HERAKLION, CRETE | GREECE

26 - 30 JUNE 2023

SHORT BIO:

Francesca Iacopi* has over 20 years' industrial and academic research expertise in semiconductor technologies, with 160 peer-reviewed publications and 10 granted US patents, spanning interconnects, CMOS devices and packaging. Her research focuses on the translation of basic scientific advances in nanomaterials and novel device concepts into implementable integrated technologies. She is known for her seminal work on the integration of porous dielectrics in on-chip interconnects, and for the invention of the alloy -mediated epitaxial graphene platform on SiC/Si pseudo-substrates.

Staff Scientist at IMEC (Belgium) over 1999-2009, she then took up a year Guest Professorship at the University of Tokyo (Japan). In 2010-2011 she directed the Chip-Package Interaction strategy for GLOBALFOUNDRIES (Ca, USA), the world's second -largest semiconductor foundry. She moved to Australia as full -time academic, where she invented a process to obtain graphene on silicon with applications in integrated microtechnologies, such as bio-compatible sensing and energy storage. At the University of Technology Sydney since 2016, she is Full Professor of Electronics, in the Faculty of Engineering & IT, and leader of the Integrated Nano Systems Lab, with focus on graphene miniature devices on silicon for integrated optical metasurfaces and neural sensors for brain-computer interfaces.

She was recipient of an MRS Gold Graduate Student Award (2003), an Australian Research Council Future Fellowship (2012), and a Global Innovation Award in Washington DC (2014) and was listed among the most innovative engineers by Engineers Australia (2018). Francesca is a Fellow of the Institution of Engineers Australia, an IEEE EDS Distinguished Lecturer and serves regularly in technical and strategic committees for IEEE and MRS. She is an Elected Member to the IEEE EDS Board of Governors (2021) and serves in the Editorial Advisory Board for ACS Applied Nanomaterials, the Journal of Electronic Materials (Springer), and the IEEE The Institute magazine. She leads the Integrated Nanosystems Lab, in the Faculty of Engineering and IT, University of Technology Sydney. She is an Associate Investigator of the Centre of Excellence in Low-Energy Electronics Technologies (FLEET) and a Chief Investigator of the CoE in Transformative Meta-Optical Systems (TMOS), funded by the Australian Research Council.

(*) Prof. Francesca Iacopi

University of Technology Sydney, Faculty of Engineering and IT
Centre of Excellence in Transformative Meta-Optical Systems (TMOS)
Centre of Excellence in Low-Energy Electronics Technologies (FLEET)