

**Umberto Celano** is a Principal Member of Technical Staff with imec (Belgium) and Asst. Professor at the University of Twente (The Netherlands), with expertise in materials analysis for semiconductor technology, device physics and nanoscale functional materials. He has an electrical engineer background and a Master’s in nanoelectronics. He received his Ph.D. in Physics from the University of Leuven - KU Leuven (Belgium) in 2015, working to establish a novel three-dimensional nanoscale imaging technique that combines sensing with sub-nm material removal to study materials in confined volumes. Currently, Dr. Celano’s research interests encompass nanoelectronics, nanophotonic, functional materials and VLSI materials analysis. In these areas, he conducted research in various institutions including KU Leuven, Osaka University and Stanford University.