

Dr. Fabrice Nemouchi

CEA-Leti, France



Fabrice Nemouchi received the PhD degree in Materials Science from Paul Cézanne University (Marseille), France, in 2005. He dealt with growth and kinetics mechanism of mainly Ni-silicides and Ni-germanides. Then, he joined the CEA, LETI in 2006 as fellow research engineer to develop contacts on both Si and Ge layers (silicidation an d germanidation) for FDSOI technology in 200 mm in the frame bilateral project with STMicroelectronics.

In 2008, he was hired by the CEA, LETI to work on Cu metal CMP processes and low k damage limitation for C45 and C28 nodes. From 2011 to 2017, he led the LE TI Contact Team engaged in developing semi-conductor metallization on several techn ologies: Nanoelectronics (FDSOI 28, FDSOI 22) with STMicroelectronics and GlobalF oundries, photonics (III-V metallization with CMOS compatible process and material) and superconducting contacts for Qbit applications. After one year spent as a CEA-LE TI assignee in GlobalFoundries Dresden working on 12FDSOI technology development (integration of MOL/BEOL), he took in charge the MOL and BEOL integration activ ities for various applications. In 2020, he was the head of process integration and pre -industrialization lab supporting internal projets, start ups and industrial companies. Fin ally, he became in 2023 Manager of clean-room methods & logistics, process integrati on & pre-industrialization section.

Since 2011, he was supervising 6 PhD students, 4 Post-doctorants and over 10 master students. He wrote over 140 papers and communications and holds over 40 patents a nd still active on advanced contact and BEOL for FDSOI and superconducting Qbits.

Key Dates

- 2005 Material Science PhD of Paul Cezanne University- IN2MP lab ((Marseille France)
- 2006 Post doctoral position at CEA-LETI (Grenoble France)
- 2008 CMP process Engineer (Grenoble France)
- 2011 Team leader of the Contact Team (Grenoble France)



- 2015 Member of executive comitee of Advanced Metallization Conference
- 2017 Assegnee in GlobalFoundries (Dresden Germany)
- 2018 MOL/BEOL integration cross technologies (Grenoble -France)
- 2019 Member of Material for Advanced Material Conference
- 2020 Head of process integration and pre-industrialization Lab
- 2023 Head Clean-room methods &logistics, process integration Section