Interconnections: Copper and Low K Dielectrics - lifetime optimisation by improvement of electromigration understanding

Giulio MARTI

Sous la direction de Yves Wouters et Lucile Arnaud (CEA-LETI)
Co-encadrée par David Ney et Xavier Federspiel (STMicroelectronics)

Vendredi 02 décembre à 14h00
Amphithéâtre André Rassat – UFR Chimie

Résumé : "The objective of the manuscript is to investigate the CMOS 28 nm technology regarding electromigration (EM) failure in interconnections. In order to cover the full range of failure development, several experimental characterizations, and simulation with the numerical model implemented on the software COMSOL have been carried out. This accomplishment is the basis for the EM failure assessment of interconnects structure also taking "voiding" into account. In conclusion, this project has allowed improving the reliability evaluation of interconnections"