

2014

Interface and electrical properties of Au catalysts(dots) on Ge(111)

H. Zitouni, N. Hakiki, K. Driss Khodja, A. Mehdaoui, L. Josien, G. Garreau, J. L. Bubendorff, C. Pirri

Abstract : We investigate the interface between Au nanodots and a Ge(111) substrate. Au dots are achieved by dewetting an Au layer above the Au-Ge eutectic temperature $TE(TE= 362^{\circ}C)$. Surface and interface structural properties are analysed by using scanning tunnelling microscopy, transmission electron microscopy and scanning electron microscopy measurements while electrical characterizations are performed a by 4-points I-V probe

Keywords : Au-Ge contacts, eutectic, Au droplets, germanium