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

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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 T_E ($T_E = 362^\circ\text{C}$). 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