

Creating New VLS Silicon Nanowire Contact Geometries by Controlling Catalyst Migration - DTU Orbit (08/11/2017)

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The formation of self-assembled contacts between vapor-liquid-solid grown silicon nanowires and flat silicon surfaces was imaged in situ using electron microscopy. By measuring the structural evolution of the contact formation process, we demonstrate how different contact geometries are created by adjusting the balance between silicon deposition and Au migration. We show that electromigration provides an efficient way of controlling the contact. The results point to novel device geometries achieved by direct nanowire growth on devices.

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