



Figure 1: Schematic of the selective area growth polynorbornene PNB on a patterned surface containing copper lines and silicon spaces. First, the surface binding of a monomeric material is achieved in, a self-assembly process, with a diphosphonic acid containing exo-norbornene. This is followed by the introduction of a metathesis catalyst and finally a monomer (norbornene), introduced in the vapor phase. The resulting PNB protected copper lines can subsequently be used to direct the growth of an atomic layer deposited film, providing robust protection of the copper surface against the ALD of TiO_2 or ZnO .