

Area-selective atomic layer deposition using inductively coupled plasma polymerized fluorocarbon layer: A case study for metal-oxides and metals

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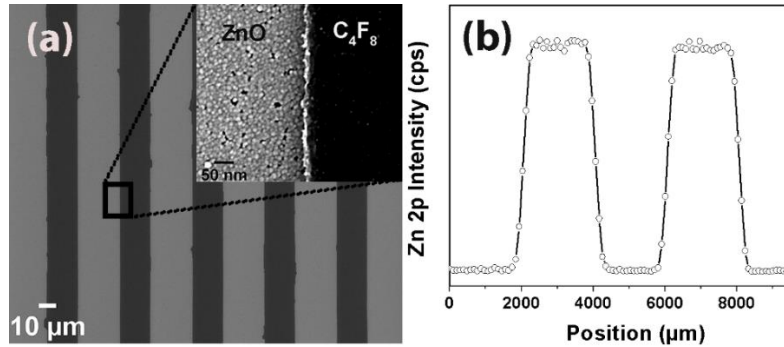


Figure 1. (a) SEM image of patterned ZnO line features on lithographically defined fluorocarbon patterns, (inset) High resolution SEM image from the interface of ZnO and fluorocarbon confirming successful pattern placement, (b) XPS line scan obtained from ZnO patterned features.

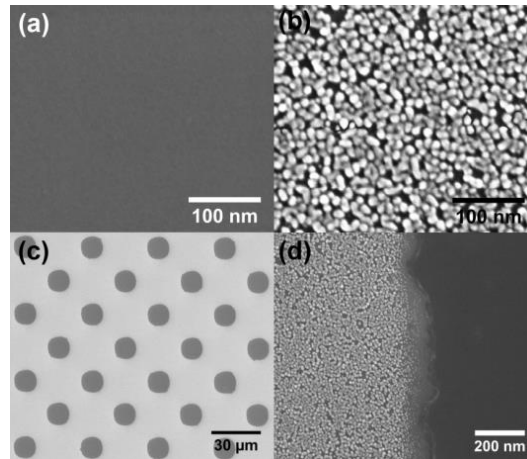


Figure 2. SEM and HR-SEM images after 2000 cycles of Pd-ALD obtained from fluorocarbon-coated and uncoated regions and their interfaces: (a) Si(100), (b) CF_x/Si(100), (c-d) patterned CF_x-Pd interfaces at the micro- and nanoscale.

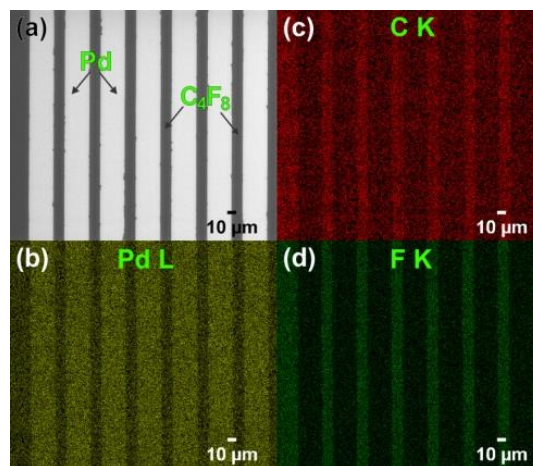


Figure 3. SEM image of (a) Pd pattern, (b) Pd L EDX elemental map, (c) C K EDX elemental map, (d) F K EDX elemental map.