Physical self-assembly and 3D nanostructures

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Directed self-assembly of 3D nano-architectures: shadowing through oblique angle physical vapor deposition (glancing angle deposition)
Deposition of Ru on flat surface (RPI):
clockwise: $\theta=0^\circ$ (normal incident); $\theta = 85^\circ$, no substrate rotation;
$\theta = 85^\circ$, fast rotation (30 rpm); $\theta = 85^\circ$, slow substrate rotation (0.03 rpm)

All scale bars 100 nm

T.-M. Lu, SPS 2005
Deposition of Si on templated surface (RPI)