
Supporting Information

Manuscript Title: Alternative SiO₂ surface energies direct MDCK epithelial behavior

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Supplemental Figure: 5

Supplemental Tables: 0

Figure S1-Sn. Raman spectrum of <111> substrate (three trials).

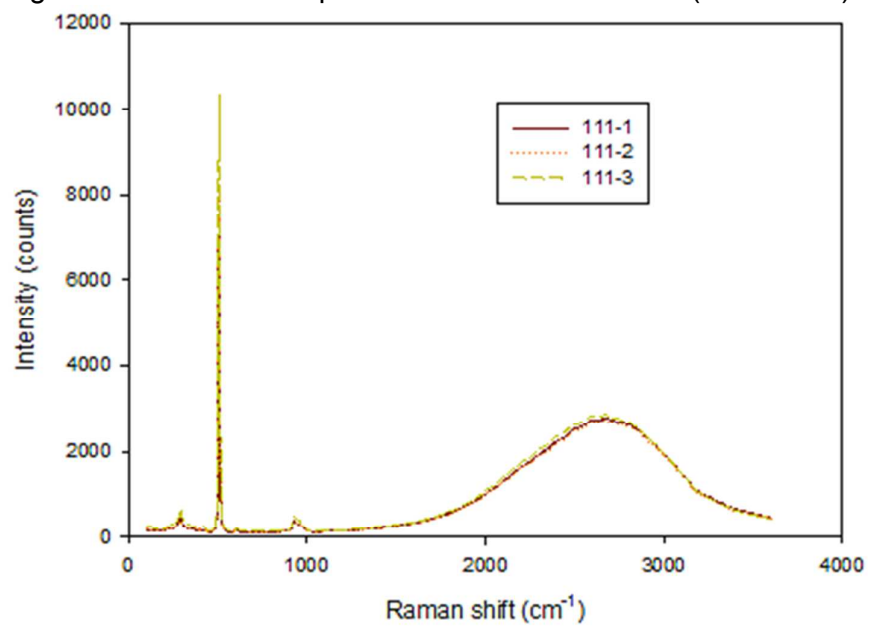


Figure S2-Sn. Raman spectrum of <100> substrate (three trials).

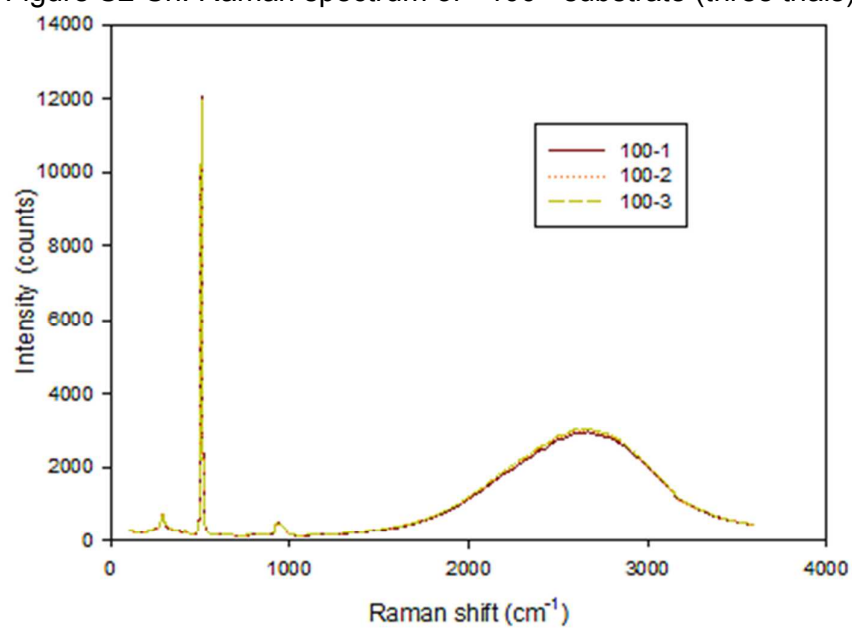


Figure S3-Sn: EDX analysis of <111> and <100> Si wafers

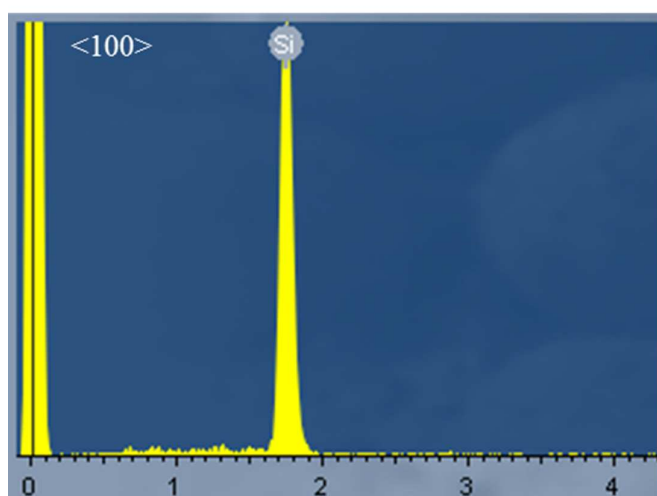
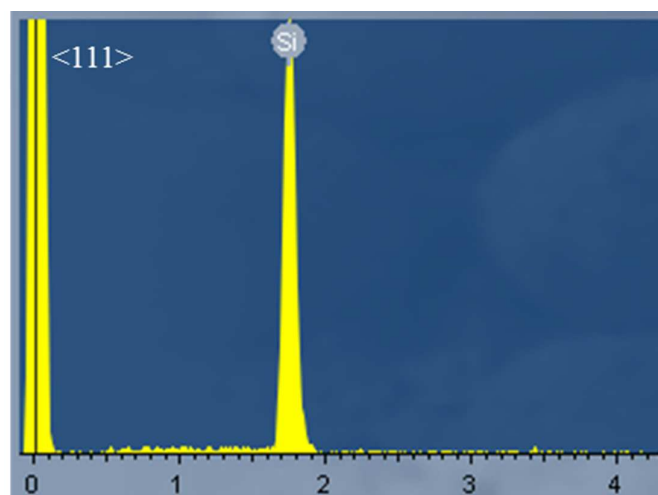


Figure S4-Sn. Epithelial Cell Growth on SiO₂ substrated, 1 and 4 day culture compared on 100-SiW, 111-SiW, and GCS both with standard RCA-1 cleaning, and plasma cleaning. Values are given as Percent Differences to GCS. The 100-SiW Growth was the only consistent statistically significant difference observed (n=5, p<0.05).

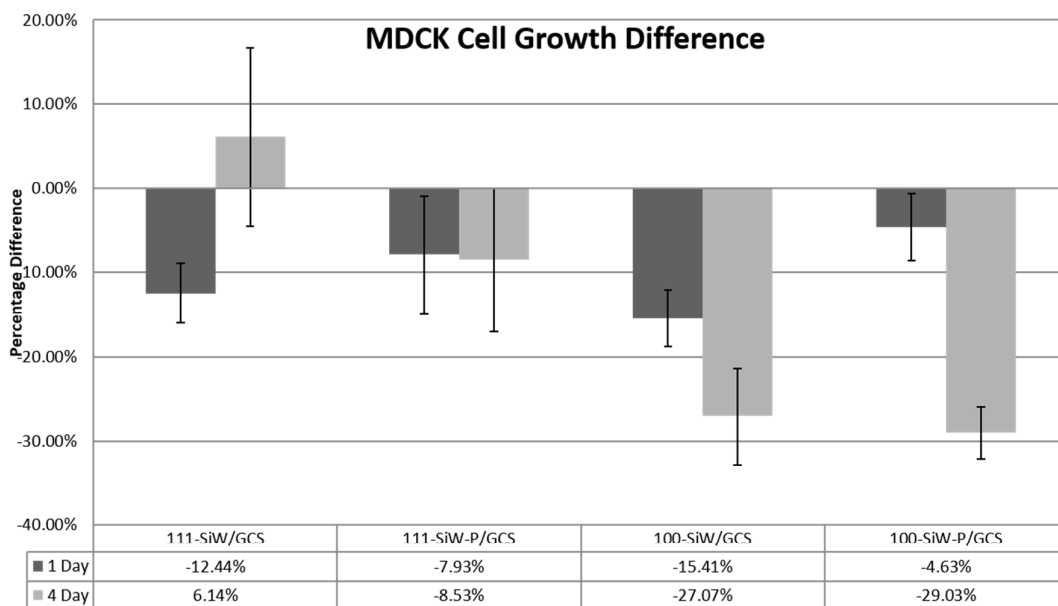


Figure S5-Sn: Confocal micrographs of the basal portion of MDCK epithelial cells demonstrating the expression of laminin (A-C) and collagen (D-F) in cells cultured on glass coverslip (A,D), <111> derived SiO₂ substrates (B,E), and <100> derived SiO₂ substrates (C, F). Note the upregulated of both ECM proteins in the cells cultured on <100> substrates when compared to cells cultured on other SiO₂ substrates.

