Electronic Supplementary Material (ESI) for RSC Advances.

Cell adherence and drug delivery from particle based mesoporous silica films

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Supplementary Material

Substrate preparation

To enable the growth of particles on the surface of silica wafers, the surfaces first had to be cleaned in a two-steps process. The films were initially treated with RCA solution (5:1:1 / H_2O:NH_3:H_2O_2) for 10 min at 85 °C before being cleaned with HNO_3 for 10 min at room temperature (RT). Subsequently all films were functionalized with OTS (1 mmol) for 15 min at 18 °C and extensively washed with heptane. Finally, the functionalized substrates were heated to 200 °C for 2 h and stored in heptane.

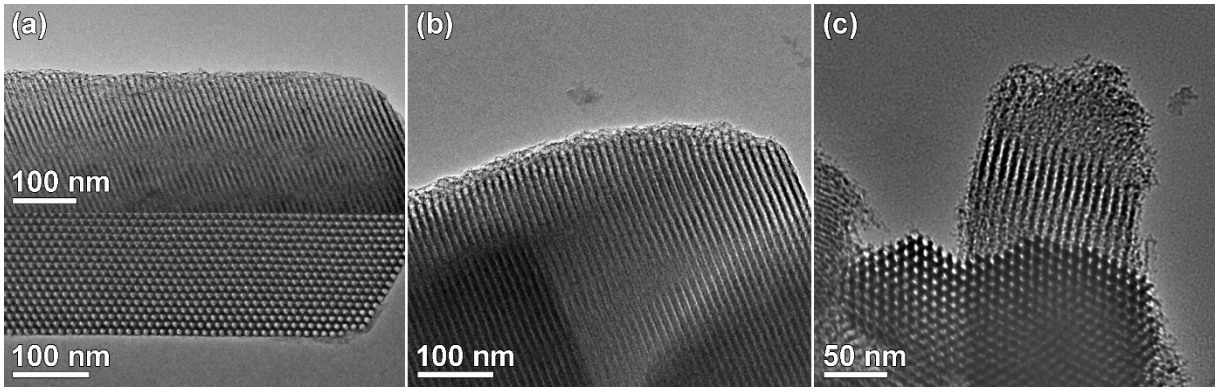

Figure S1. TEM micrographs of (a) DiG_0.00 (b) DiG_0.45, and (c) DiG_1.83 powders.

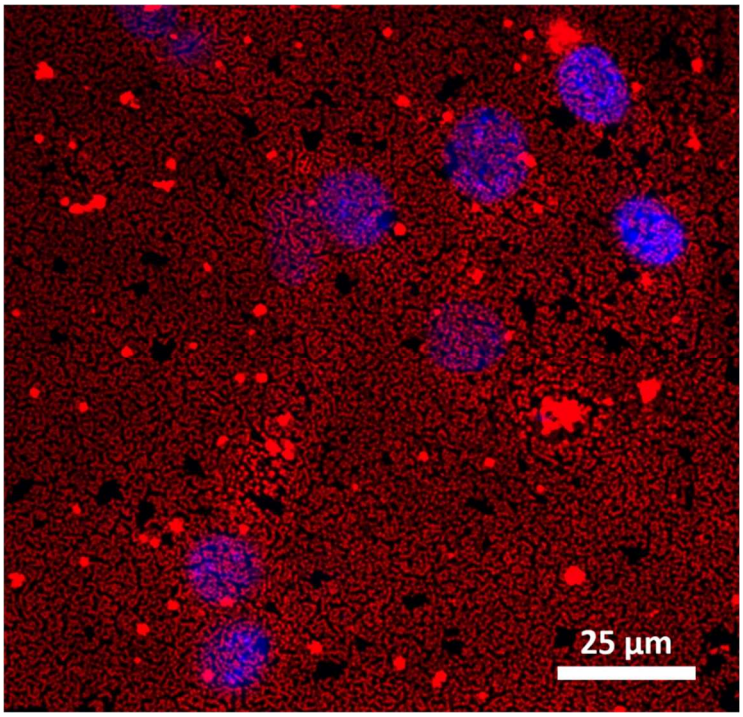

Figure S2: CLSM micrograph of an ATTO labeled DiG_0.00 film with C2C12 cells cultivated for 24 h (red = ATTO647N labeled DiG-film particles, blue= C2C12 cell core, black= substrate without film).

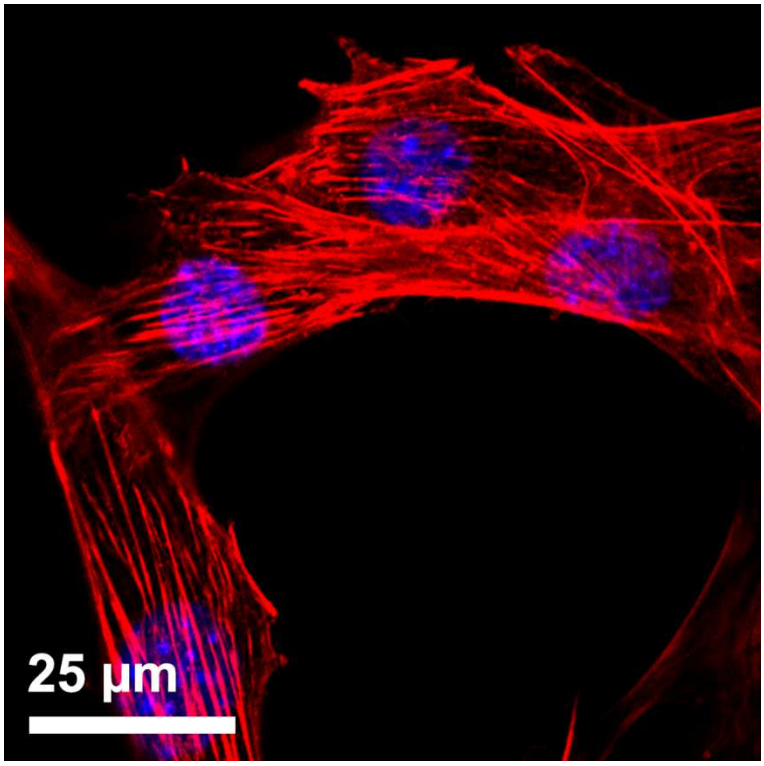

Figure S3. CLSM micrograph of C2C12 on a DiG_0.00 film. Staining: blue = nucleus, red = microfilaments, and green = vinculin-stained FACs.