SUPPORT INFORMATION

Synthesis of Micropillar Arrays via Photopolymerization: An In Situ study of Light-Induced Formation, Growth Kinetics and the Influence of Oxygen Inhibition

Fu Hao Chen¹, Shreyas Pathreeker¹, Saeid Biria¹, Ian D. Hosein¹

1. Department of Biomedical and Chemical Engineering, Syracuse University, Syracuse, NY, 13244, United States

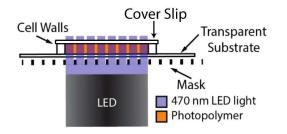


Figure S1. Schematic of the closed system, which consists of a cover slip to protect the photoresin from the ambient environment, which eliminates the oxygen inhibition.

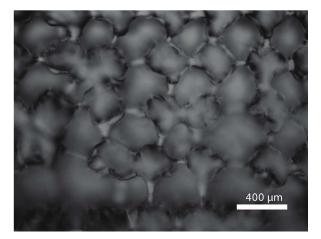


Figure S1. Top view of pillars for the closed system, 40/400 µm, 15 mW/cm² for 5min, 5 mW/cm² for 40min.

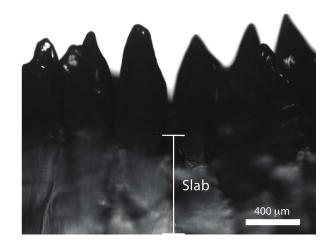


Figure S2. Side view of pillars for the closed system, $40/400 \ \mu m$, 15 mW/cm² for 5min, 5 mW/cm² 40min. A thick gelled slab is formed under the pillars.

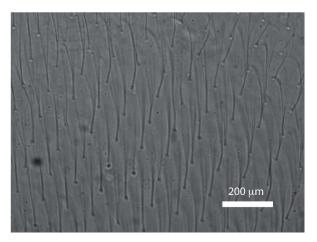


Figure S3. Top view for pillars formed in resins with 0.3 wt% hydroquinone. Mask 10/100 μ m, closed system, 15 mW/cm² for 5min, 5 mW/cm² 40min. The pillars are embedded in a gelled slab.



Figure S4. Side view of cured resin with 0.3 wt% hydroquinone. Mask is 10/100 μ m, closed system, 15 mW/cm² for 5min, 5 mW/cm² 40min. Pillars are buried in a slab of gelled TMPTA.