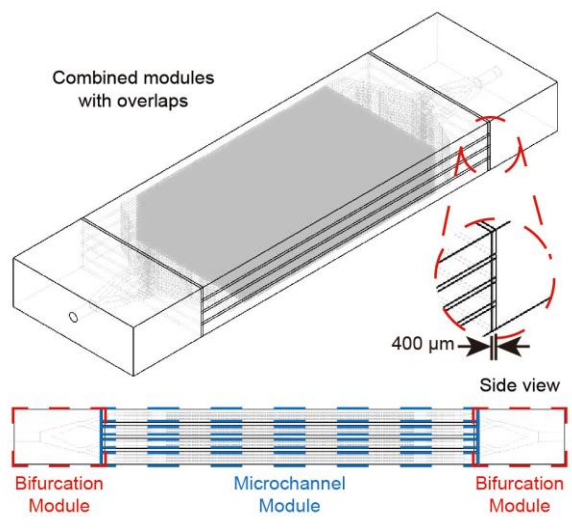
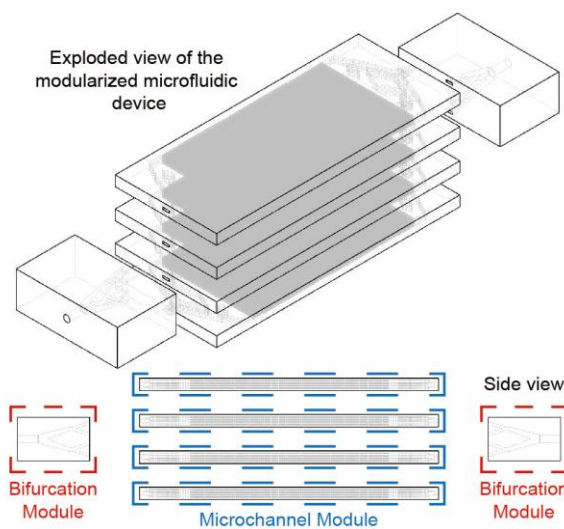
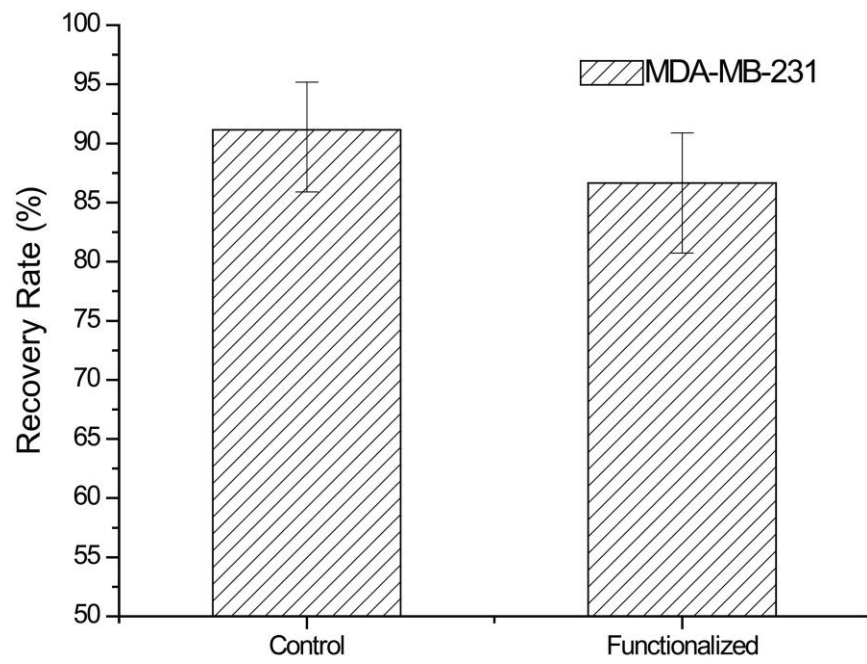


**Fig. S1** Scanning electron micrographs of the micropillars and microfluidic channels printed by a SLA 3D printer with (a) normal and (b) glossy finish. The surface roughness of the printed micropillars in both finishes are much smoother than the micropillars printed by the ProJet 3510 HD 3D printer.



**Fig. S2** The device with 16 stacked microfluidic layers was divided into different modules and reassembled with overlaps between the modules during the 3D printing process.



**Fig. S3** MDA-MB-231 cancer cell recovery rate in the immunocapture channels with and without surface functionalization.