

Fig. S1 Time-lapse series of four types of cellular growth behaviours for cells cultured on glass modified with a triangle-shaped PEGDA hydrogel for 40 hours. Cells proliferated and covered the defined adhesive area until they filled the areas not covered with PEGDA. Scale bars are 100 μm .

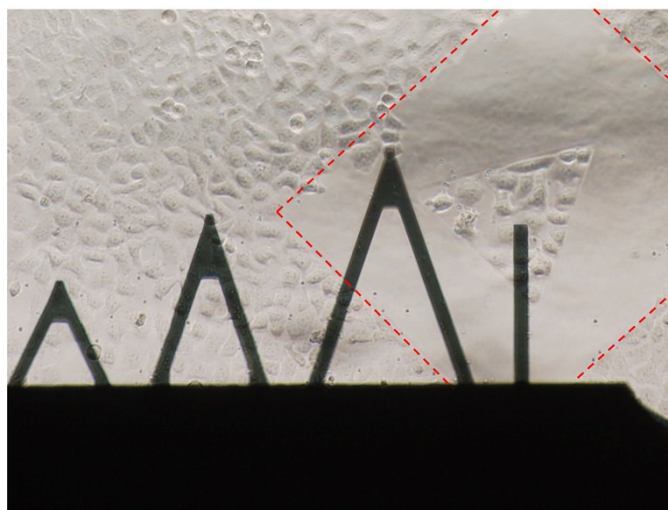


Fig. S2 MCF-7 cells could be able to grow on the PEGDA surface after filling the PEGDA-uncovered area. The red line is the outline of triangle-shaped PEGDA hydrogel.

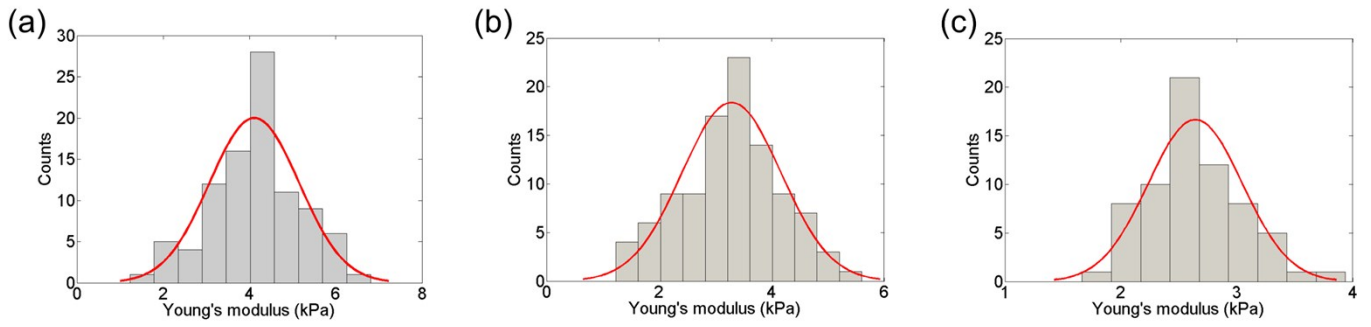


Fig. S3 (a) Histogram of Young's modulus for cells growing in confined area. (b) Histogram of Young's modulus for cells growing in common area. (c) Histogram of Young's modulus for cells growing on the PEGDA surface.

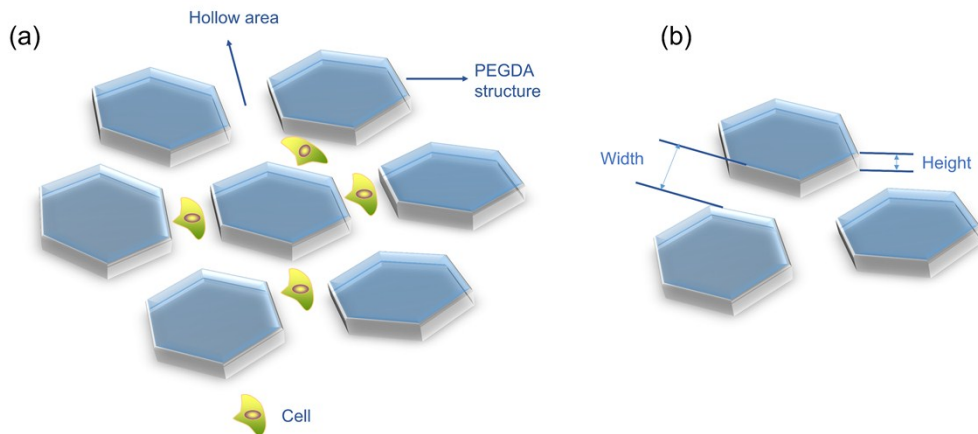


Fig. S4 Schematic of the honeycomb microstructures. (a) Cells growing in honeycomb microstructures. (b) The detailed dimensions of microstructures and channel.

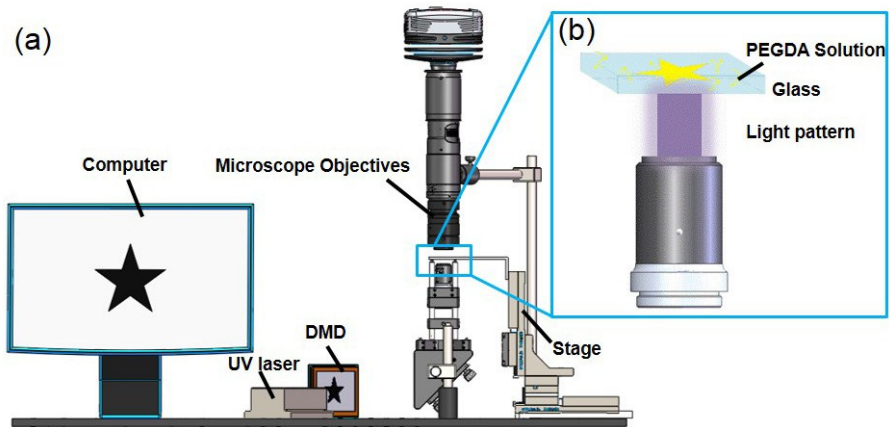


Fig. S5 Experimental system: (a) Schematic of DMD-based modulating projection printing system. (b) Light-addressable PEGDA hydrogel polymerization.

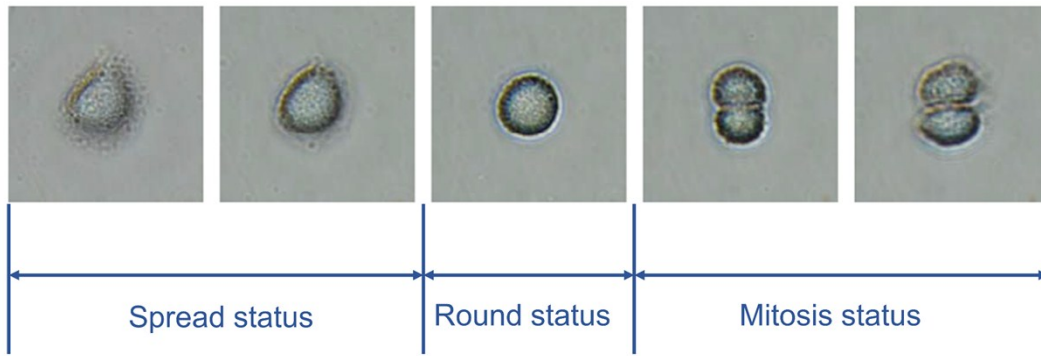


Fig. S6 When cells began to proliferate, they would stop moving and shrink into the round shape.

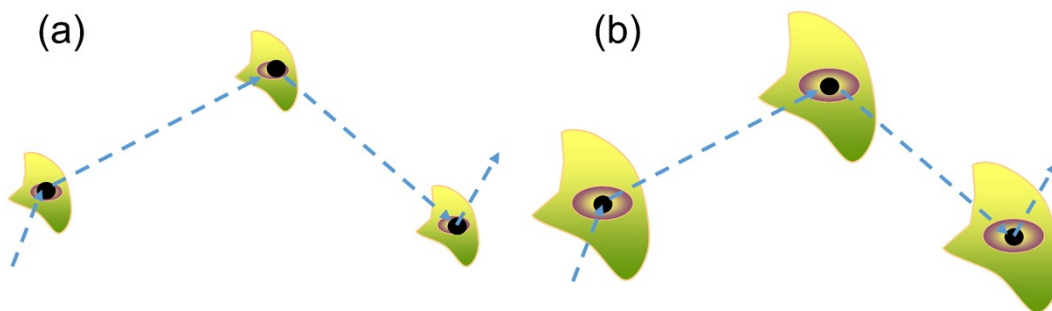


Fig. S7 Method of measuring cell migration speed. The center of cells (black symbols) was chosen as the measuring point. (a) The track of the migration of small cell. (b) The track of the migration of large cell.