Supporting Information

Intelligent drug delivery microparticles with visual stimuli-responsive structural color changes

Supporting Figures:

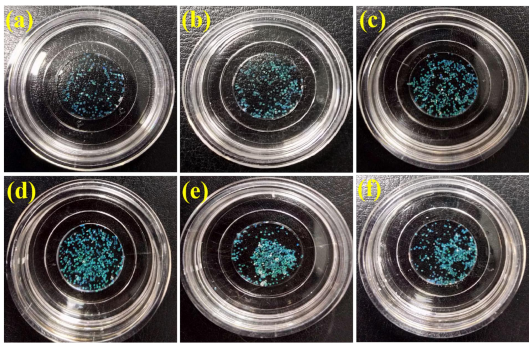

Figure S1. (a-f) The images of pNIPAM hydrogel inverse opal particles with different PEGDA concentration. The concentrations from a to b were 2%, 4%, 6%, 8%, 10%, 12% and 14% (v/v)，respectively.

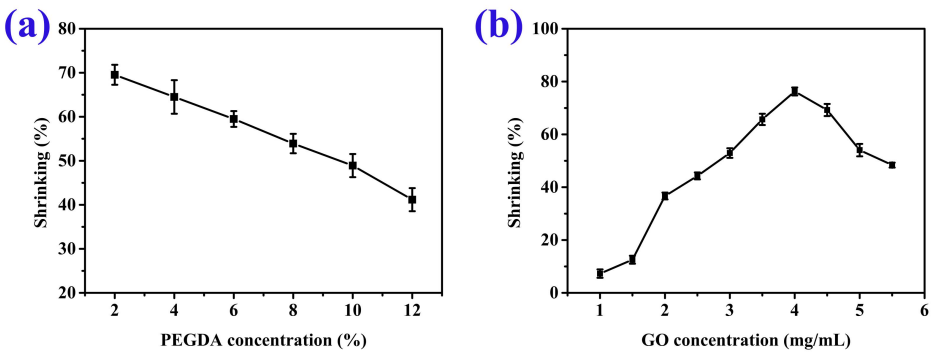

Figure S2. The effects of the concentration of PEGDA (a) and GO (b) on the volume shrinkage ratio of the composite hydrogel (n=3).

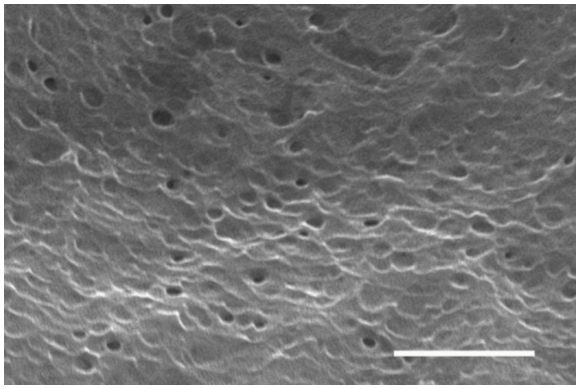

Figure S3. The SEM images of collapsed structure of inverse opal scaffold. The scale bars are 1 μm.

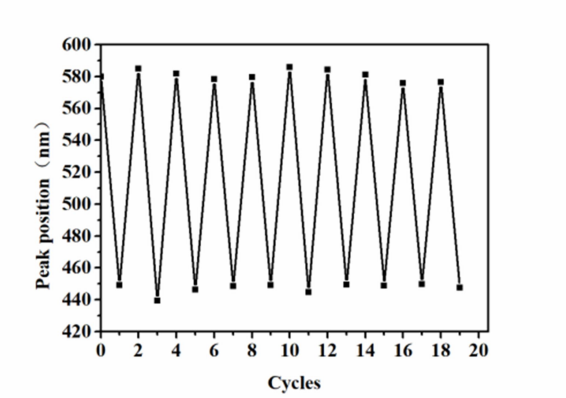

Figure S4. Reversible changes of the reflection peaks of the inverse opal microparticles. The microparticles showed good durability during more than twenty cycles.

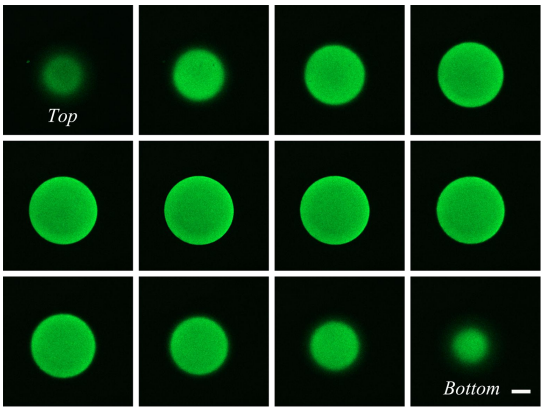

Figure S5. Laser scanning confocal microscope images of FITC-dextran loaded inverse opal microparticles with 0.2% Sodium alginate. Image optical slices (parallel to horizontal) were taken along the *z* direction (from the top of the microparticles to the bottom). The scale bar is 50 μm.

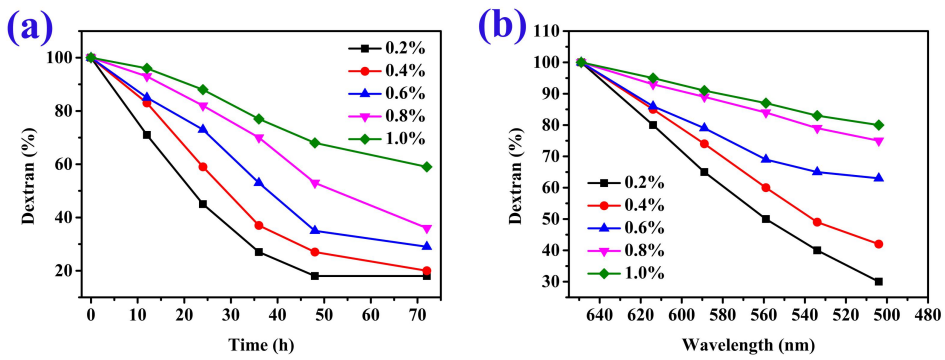

Figure S6. (a) Cumulative release curves of the FITC-dextran loaded inverse opal microparticles with different calcium alginate concentrations (w/v) at room temperature. (b) The relationships of the reflection peak positions and the drug release level at different calcium alginate concentrations.

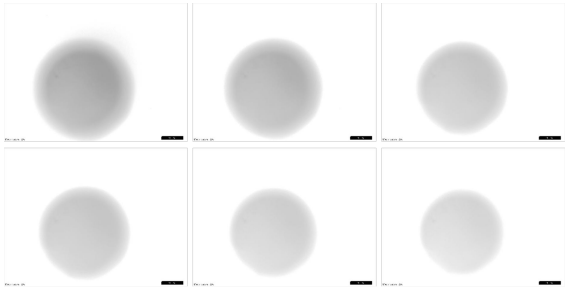

Figure S7. The 8-bit gray images of FITC-dextran loaded inverse opal microparticles after Image J processing. The scale bars are 50 μm.