

## **RESEARCH ARTICLE**

## Controlled preparation of droplets for cell encapsulation by air-focused microfluidic bioprinting

## **Supplementary File**

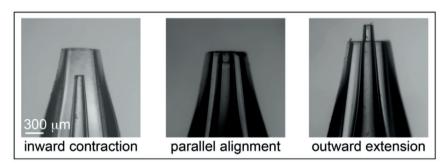
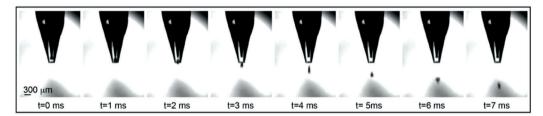


Figure S1. Design of microfluidic devices used for air-focused microfluidic 3D droplet printing (AFMDP).



**Figure S2.** Snapshots showing the generation of droplets by AFMDP. Droplets are pulled off the orifice of the inner capillary with the help of focused air flow.

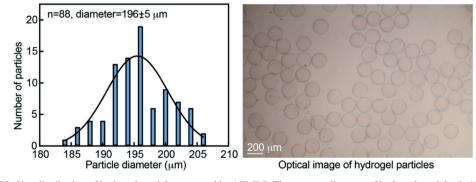
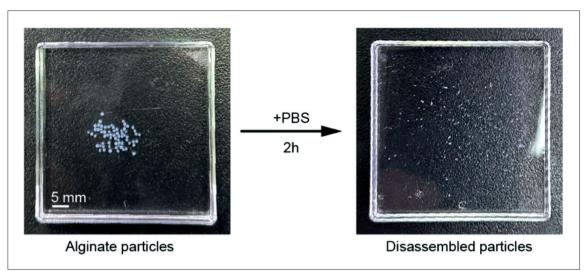


Figure S3. Size distribution of hydrogel particles prepared by AFMDP. The average diameter of hydrogel particles is  $196 \pm 5 \mu m$ .



**Figure S4.** Disassembly of alginate hydrogel particles by PBS.