Supporting Information for

Holographic fabrication of three-dimensional nanostructures for microfluidic passive mixing

Sung-Gyu Park, a Seung-Kon Lee, a Jun Hyuk Moon b and Seung-Man Yang* a

a National Creative Research Initiative Center for Integrated Optofluidic Systems and Department of Chemical and Biomolecular Engineering, KAIST, Daejeon, 305-701, Korea.
Fax: +82-42-350-5962;
Tel: +82-42-350-3922;
E-mail: smyang@kaist.ac.kr

b Department of Chemical & Biomolecular Engineering, Sogang University 1 Shinsu-dong, Mapo-gu, Seoul, 121-742, Korea

Fig. S1. Profile of water droplets on the 3D holographic patterns (a) before and (b) after 0.2M H₂SO₄ treatment for 30 mins. Contact angles were 114° and 25°, respectively.

Fig. S2. OM and SEM images of a 3D passive mixer flowing red coloring dye. (a) and (b) illustrate breaking microfluidic chip due to a locally lower void fraction of 3D structures at the entrance region of the mixer. (c) SEM image of a locally lower void fraction of 3D structures at the entrance region of the mixer without RIE.