Supplementary information for

Bio-inspired Eyes with Eyeball-shaped Lenses Actuated by Electro-Hydrodynamic Forces

Hongzhong Liu, Lanlan Wang,* Weitao Jiang,* Rui Li, Lei Yin, Yongsheng Shi, and Bangdao Chen

Email: lanlan 1900@163.com, wtjiang@mail.xjtu.edu.cn



Fig. S1. Photograph of the fabricated lens array chip.

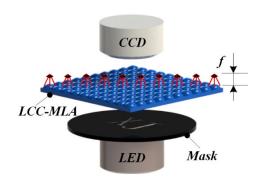


Fig. S2. Diagram of a microscope projection system to test the focal length of LCC-LMLA. The distance between the LCC-LMLA' plane and focus plane (or image plane) is the focal length (f).

To evaluate the optical performances of LCC-LMLA, a testing system for imaging was built up (Fig. S2). This setup consists of a tungsten light source, a CCD camera, and a computer-controlled stage. The LCC-LMLA was positioned on a motion stage, which can move forwards or backwards, and was illuminated with the tungsten light source. To measure the focal length of LCC-LMLA, we first adjust the position of LCC-LMLA so that it is focused on its plane. Then, we vertically adjust the position of LCC-LMLA to reach the focus plane. The motion distance between the LCC-LMLA' plane and the focus plane is the focal length.