**Supporting Information**

**Fig. S1** Photographs of 280-µm-thick PDMS grating substrate (a) before and (b) after growth of CuPc NW array. The color in (a) comes from the grating structure on PDMS substrate. (c), (d) Optical microscope images of the horizontally aligned CuPc NW. (e), (f) SEM images of the CuPc NW array grown on PDMS grating substrate. (g), (h) SEM images of the CuPc NWs grown on smooth PDMS substrate without grating.
Fig. S2 (a) Schematic illustration of the device with bending direction (a) parallel and (b) perpendicular to the NW length direction. (b) Dependence of the strain (S) on the bending radius. The calculation of S for the device with varied substrate thickness can refer to previous report.¹