Laser-triggered Carbon Nanotube Microdevice for Remote Control of Biocatalytic Reactions

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**Supplementary Figure:**

*Fig. S1* Adjustment of an NIR focus position by the laser trapping of fluorescent microspheres. The Red arrow indicates the direction and position of the laser beam. The white arrow shows the NIR focus position (The fastest movement of microspheres). Magnification: ×5. Laser power: 3 W. Wavelength: 1,064 nm. Scale bar: 20 μm. Fluorescent microsphere was purchased from Invitrogen [FluoSpheres® Size kit #2, carboxylate-modified microspheres, yellow-green fluorescent (505/515), Size: 1 μm].

**Supplementary Video legends:**

**Supplementary Video M1**
Adjustment of an NIR focus position by the laser trapping of microspheres.

**Supplementary Video M2**
Microthermal effect by the photoinduced CNT microdevice.

**Supplementary Video M3**
Highly precise thermal cycle by the photoinduced CNT microdevice.

**Supplementary Video M4**
DNA extension reaction by the photoinduced CNT microdevice.

**Supplementary Video M5**
LAMP reaction by the photoinduced CNT microdevice.

**Supplementary Video M6**
Highly precise control of the LAMP reaction by the photoinduced CNT microdevice.

**Supplementary Video M7**
Enzymatic CD production by the photoinduced CNT microdevice.