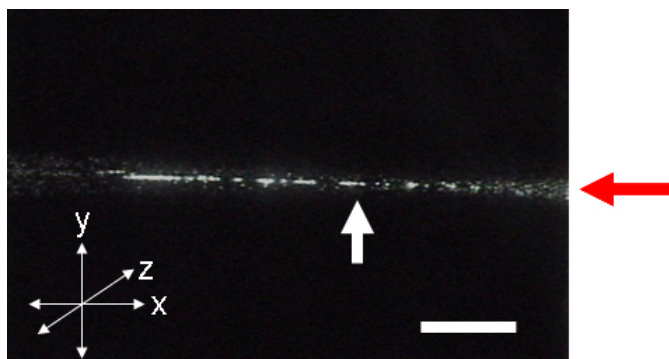


## Laser-triggered Carbon Nanotube Microdevice for Remote Control of Biocatalytic Reactions

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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:  $\times 5$ . Laser power: 3 W. Wavelength: 1,064 nm. Scale bar: 20  $\mu\text{m}$ . Fluorescent microsphere was purchased from Invitrogen [FluoSpheres® Size kit #2, carboxylate-modified microspheres, yellow-green fluorescent (505/515), Size: 1  $\mu\text{m}$ ].

### 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.