Supporting Information

Concentration Determination at Countable Molecular Level in Nanofluidics by Solvent-enhanced Photothermal Optical Diffraction

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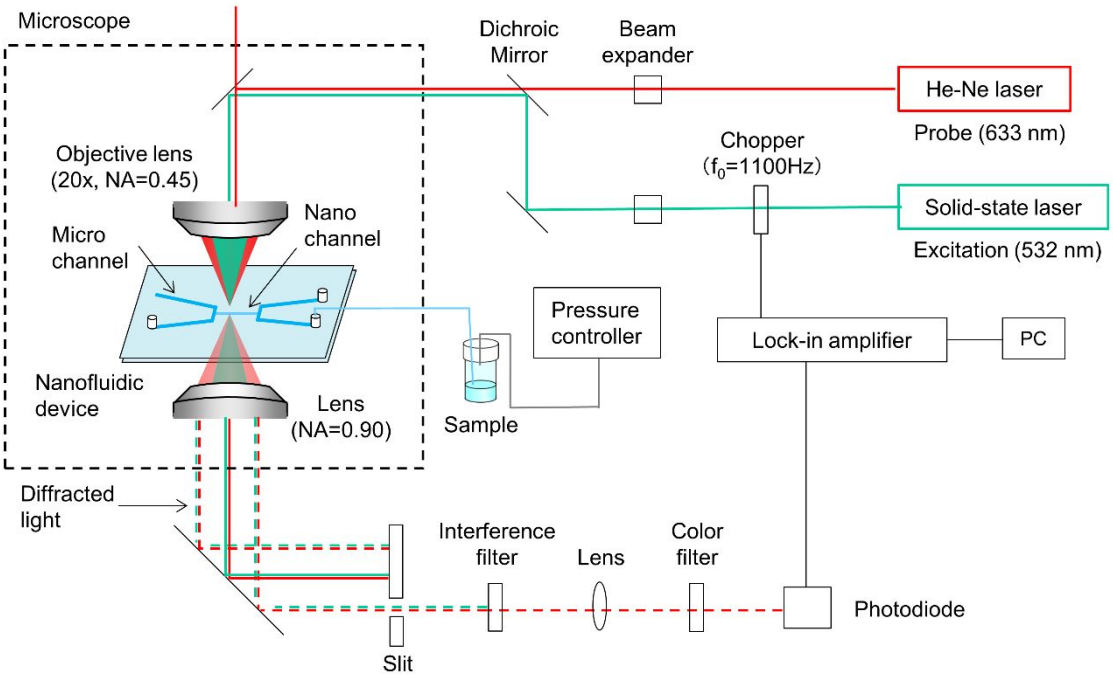

Figure S1. Experimental setup for photothermal optical diffraction (POD). Both probe laser and excitation laser are focused on a nanochannel through an objective lens equipped with a microscope. After passing through a nanofluidic device, a diffracted probe laser is selectively detected by slit, filter, and photodiode.

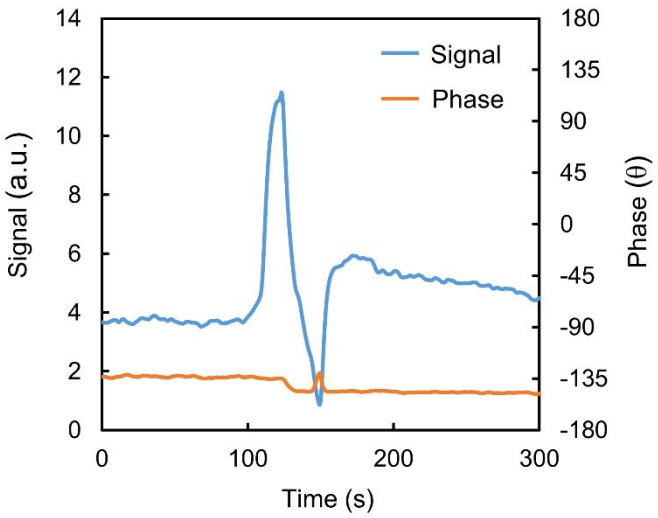

Figure S2. Time trace of signal intensity and phase when the solution in the channel was replaced from hexane to acetonitrile. Sudan IV was used as a solute. No phase change was observed before and after replacement.