Electronic Supplementary Information

Jae Bem You[1,2], Detlef Lohse[2], and Xuehua Zhang[1,2,*]

[1]Department of Chemical and Materials Engineering, University of Alberta, Alberta T6G 1H9, Canada

[2]Physics of Fluids Group, Max Planck Center Twente for Complex Fluid Dynamics, JM Burgers Center for Fluid Dynamics, Mesa+, Department of Science and Technology, University of Twente, Enschede 7522 NB, The Netherlands.

[*]Email: xuehua.zhang@ualberta.ca

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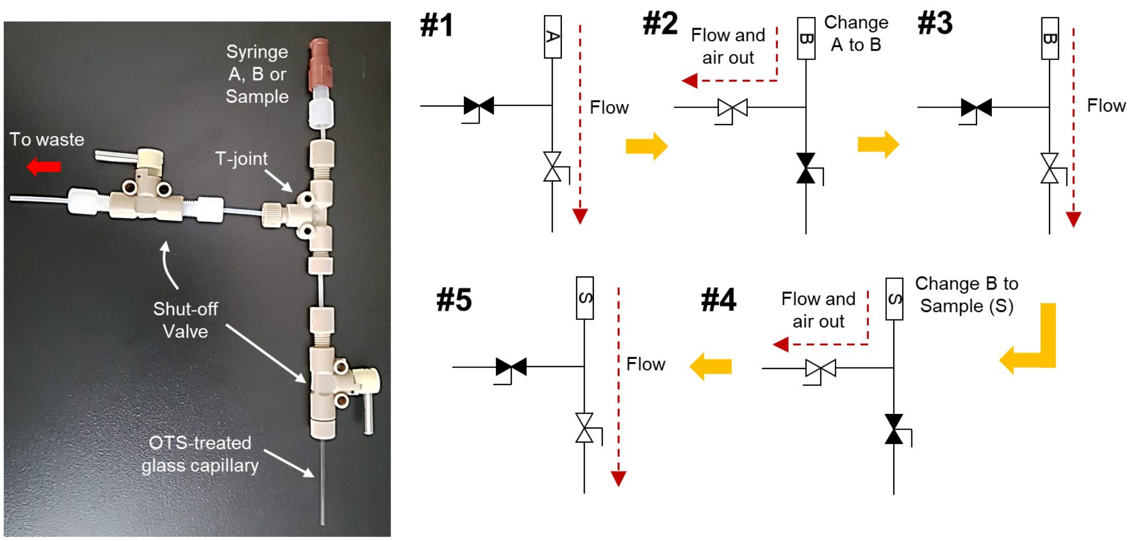

Figure S1. Steps for operating portable nanoextraction device for nanodroplet forming and extraction.

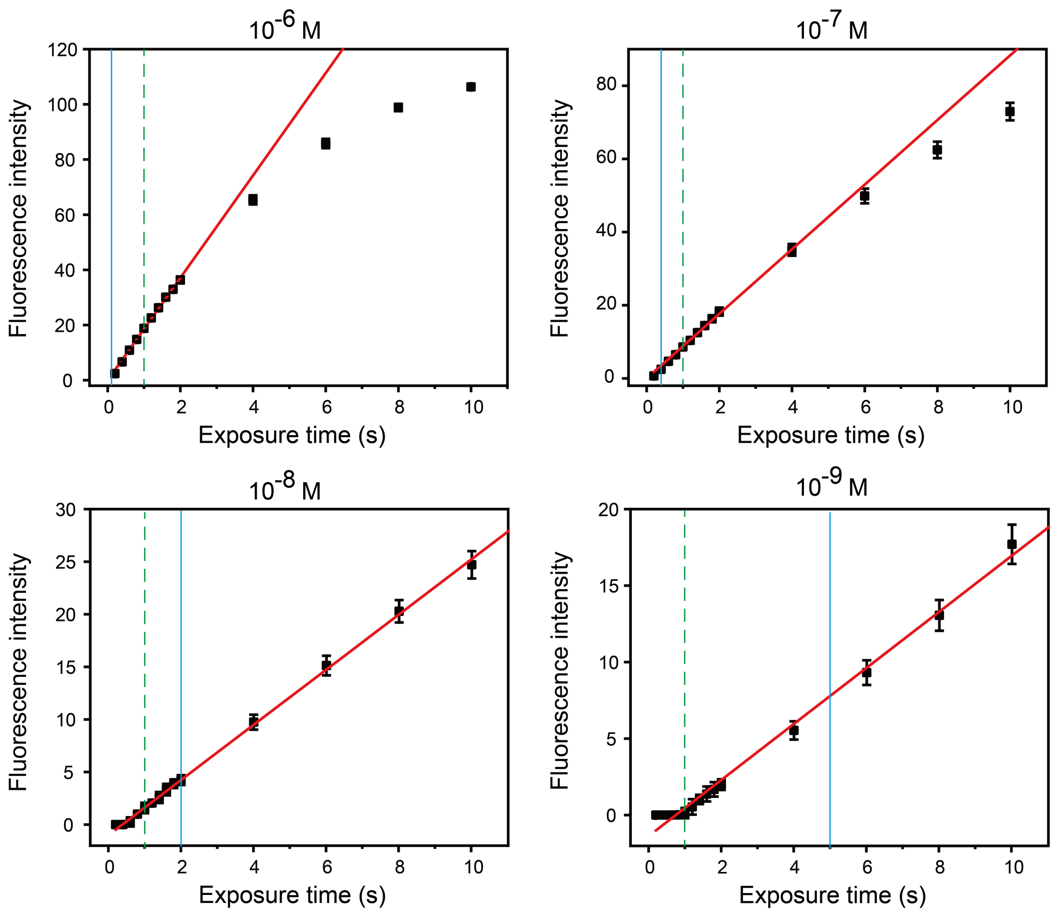

Figure S2. Influence of exposure time on background Nile red fluorescence intensity for $10^{-6}M$ to $10^{-9}M$. Red dashed line (- - -) indicates the best fit line for linear region of fluorescence. The green dotted line (···) represents the exposure time used for each experiment. Blue solid line (—) shows the exposure time to which the intensity data were normalized to (t = 1 s)

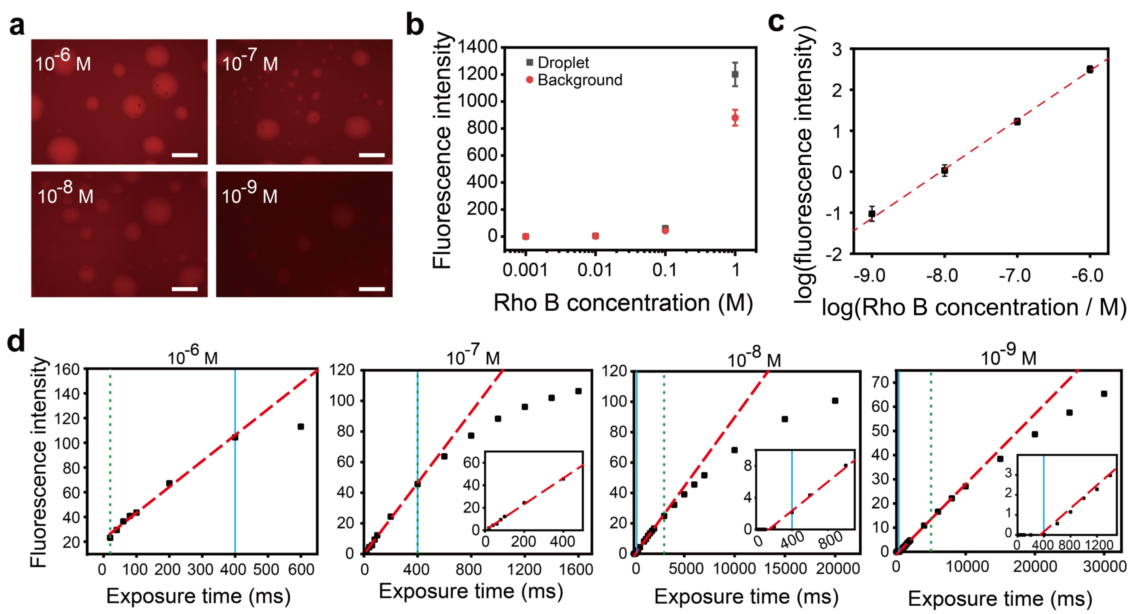

Figure S3. Limit of detection for Rhodamine B dye. a) Images of surface nanodroplets after extracting Nile red from different initial concentrations. For better visualization purposes, the brightness has been adjusted. b) Average fluorescence intensity values of surface nanodroplets as well as the background after nanoextraction for various initial concentration of Nile red. c) Fluorescence intensity of droplets after subtracting the background signal. The trend has a slope ∼1.2 when plotted in log-log scale. d) Background fluorescence intensities for Rhodamine B solution at various exposure times ranging 0 to 30 s. Blue solid line (—) indicates the exposure time to which the intensity data were normalized to (t = 400 ms)