

Supporting Information

Continuous flow purification of nanocrystal quantum dots

Duckjong Kim^{†,§}, Hye Kyung Park[†], Hyekyoung Choi^{†,§}, Jaehong Noh[†], Kyungnam Kim[†],
and Sohee Jeong^{*†,§}*

[†]Department of Nano Mechanics, Korea Institute of Machinery and Materials (KIMM),
Daejeon 305-343, South Korea.

[§]Korea University of Science and Technology (UST), 206 Gajeong-ro, Daejeon 305-350,
South Korea.

* To whom correspondence should be addressed, dkim@kimm.re.kr, sjeong@kimm.re.kr

Microfluidic Chip Fabrication

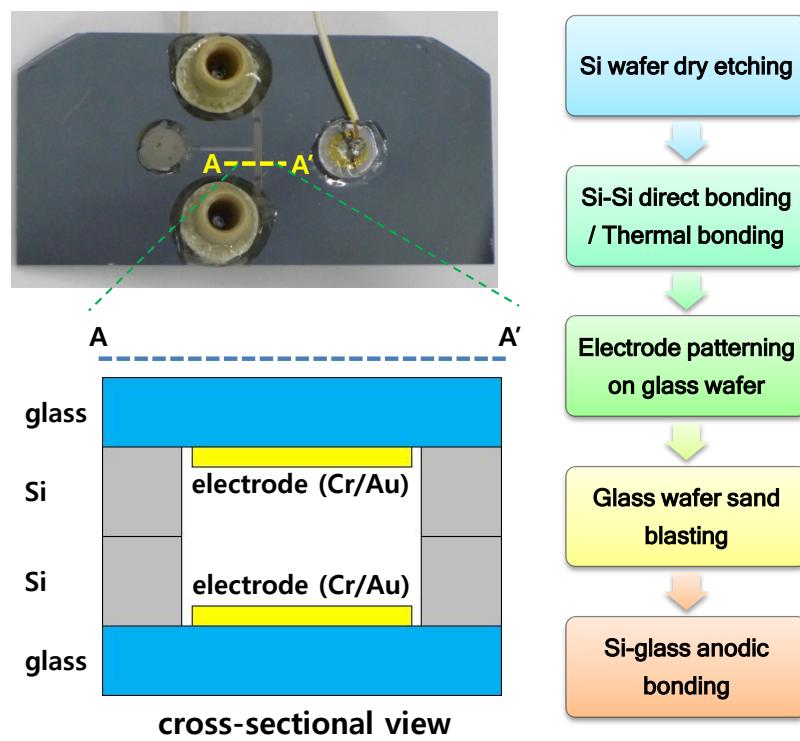


Figure S1: Fabrication process and fabricated microfluidic chip.

QD size analysis

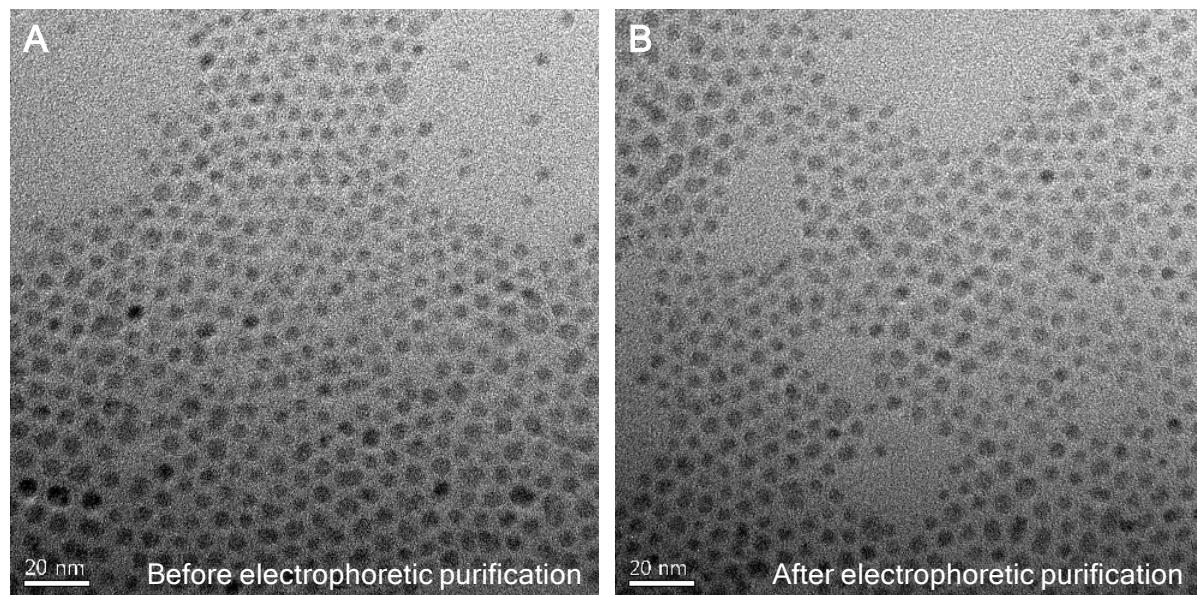


Figure S2. TEM micrographs of the CdSe QDs before (A) and after (B) electrophoretic purification at 50 V. CdSe QDs before and after our process are 5.10 ± 0.64 nm and 5.10 ± 0.61 nm in diameter respectively.

The effect of the solution environment (dilution) on removal of ligands

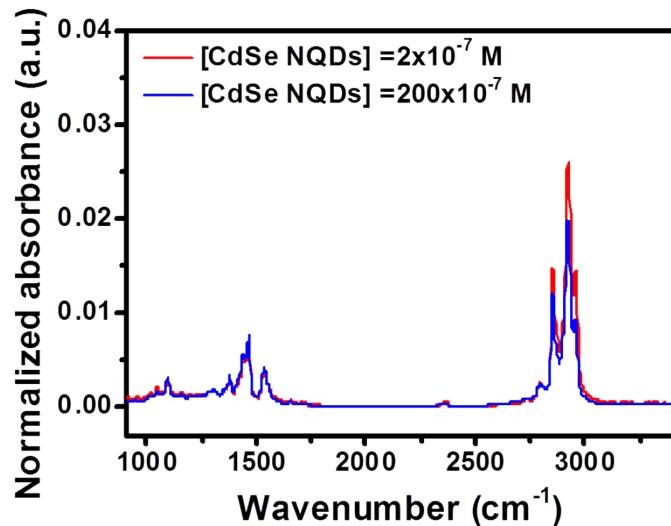


Figure S3. ATR-FTIR spectra of CdSe QDs capped with oleate before (blue line) and after (red line) 100 fold dilution by hexane.