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## **Supporting Information**

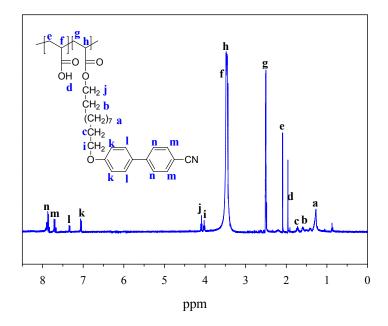
## Real-time liquid crystal-based biosensor for urea detection

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**Figure SI 1.** <sup>1</sup>H NMR spectrum of PAA-b-LCP.

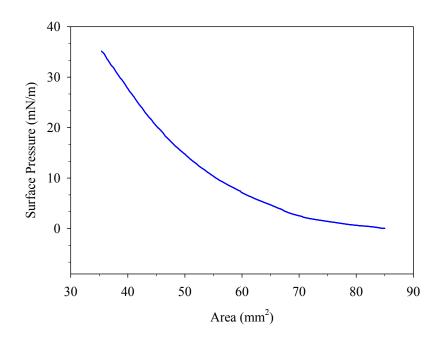
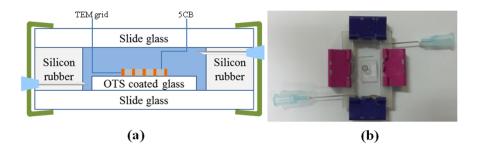
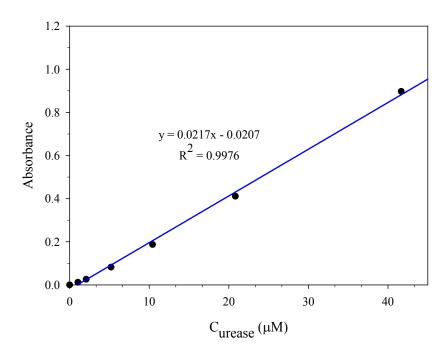


Figure SI 2. LB isotherm curve of the PAA-b-LCP monolayer on water.



**Figure SI 3.** (a) Schematic diagram and (b) photograph of the sensor cell containing a TEM grid cell.



**Figure SI 4.** Calibration curve of the urease solutions at  $\lambda = 276$  nm.

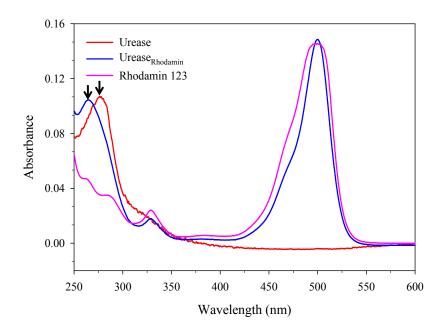


Figure SI 5. UV-VIS spectra of urease, Rhodamin and urease<sub>-rhodamin</sub>.