Supplementary Information

Label-Free Biodetection using a Smartphone

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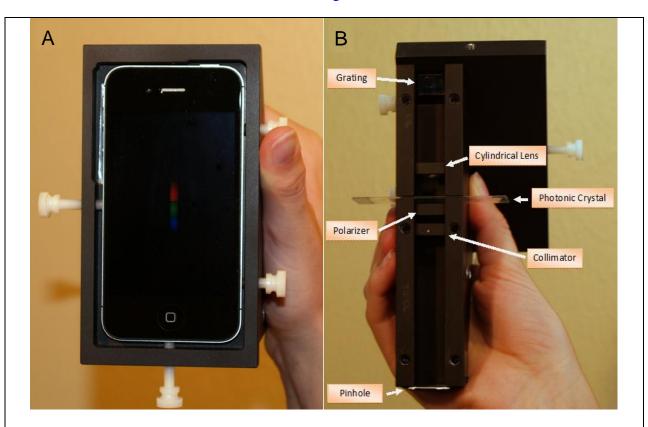


Figure 1. A. The spectrum band is displayed on the center of the iPhone's screen. From here the user can manipulate the App and review results instantaneously. **B.** This view shows the back of the cradle, where the optical components and the PC are housed inside a light-sealed chimney.

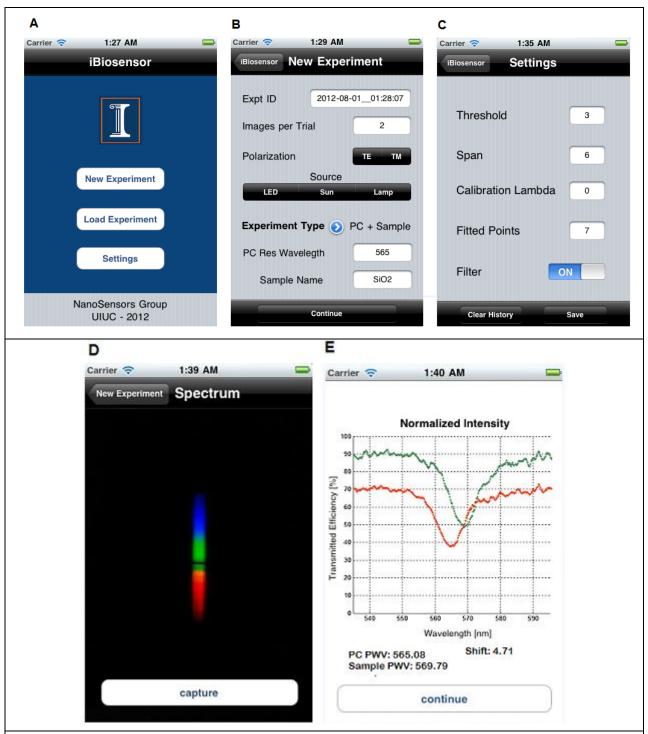


Figure 2. A. Home screen view of the custom App. **B.** Screen view from which the App collects information about the experiment. **C.** The user can also change general parameters within the settings view. **D.** The spectrum band as seen by the App. **E.** The App plots intensity profile of both, the reference PC (Red) and a sample (Green) and outputs the resulting PWV shift between the two as shown.

Table 1: List of optical components and their cost

Component/ part list	Cost (USD)
1. 100 micron pinhole NT36-392	\$39.00
2. 75 mm FL pl-cx lens NT63-491	\$27.50
3. Linear plastic polarizer NT85-354	\$25.00
4. 50mm FL Cylindrical lens NT48-354	\$47.00
5. 1200 grooves transmission grating GT13-12	\$71.40
Item #1-4 were purchased from Edmund Optics, while #5 from Thorlabs Inc.	