A Self-Cleaning Membrane to Extend the Lifetime of an Implanted Glucose Biosensor

## **AUTHOR NAMES**

Alexander A. Abraham, a Ruochong Fei, Gerard L. Coté, and Melissa A. Grunlan \*\*

## **AUTHOR ADDRESS**

a: Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843-3120, USA

b: Materials Science and Engineering Program, Texas A&M University, College Station, TX, 77843-3120, USA

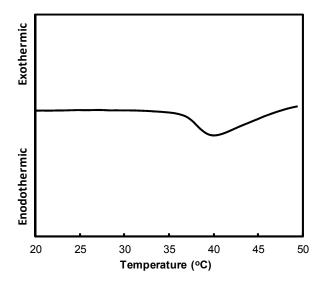
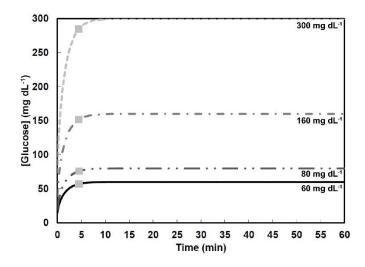


Figure S1. DSC thermogram of the DNNC hydrogel.



**Figure S2.** Decreasing the cylindrical diameter to 350 μm, a computational model exhibited the average glucose concentration inside a DNNC hydrogel at 35 °C for constant environmental glucose levels of 300, 160, 80 and 60 mg dL<sup>-1</sup>. The glucose diffusion lag time ( $\blacksquare$ ) marks when the average internal hydrogel glucose concentration is 95% to that of the external environment. The mean glucose lag time was determined as  $4.48 \pm 0.02$  minutes.