

# Supplementary Information

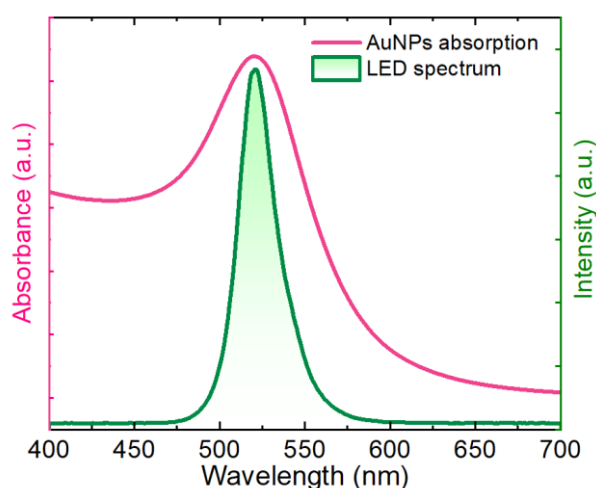
## Waveguide-Enhanced Nanoplasmonic Biosensor for Ultrasensitive and Rapid DNA Detection

Devesh Barshilia <sup>1</sup>, Akhil Chandrakanth Komaram <sup>2</sup>, Lai-Kwan Chau <sup>2,\*</sup> and Guo-En Chang <sup>1,\*</sup>

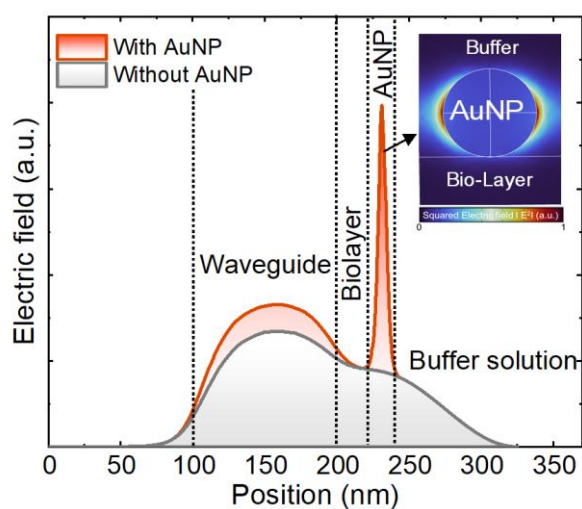
<sup>1</sup> Department of Mechanical Engineering and Advanced Institute of Manufacturing with High-Tech Innovations, National Chung Cheng University, Chiayi 621301, Taiwan; barshiliadevesh@gmail.com

<sup>2</sup> Department of Chemistry and Biochemistry and Center for Nano Bio-Detection, National Chung Cheng University, Chiayi 621301, Taiwan; akhilsnm7@gmail.com

\* Correspondence: chelkc@ccu.edu.tw (L.-K.C.); imegec@ccu.edu.tw (G.-E.C.)



**Figure S1.** Measured LED spectrum alongside the absorption spectrum of AuNPs immobilized on a glass substrate.



**Figure S2.** Electric field distributions in the sensor with and without AuNPs. Inset: Electric field distribution in vicinity of AuNPs.