Supplementary Information

Mechanistic Evaluation of Antimicrobial Lipid Interactions with Tethered Lipid Bilayers by Electrochemical Impedance Spectroscopy

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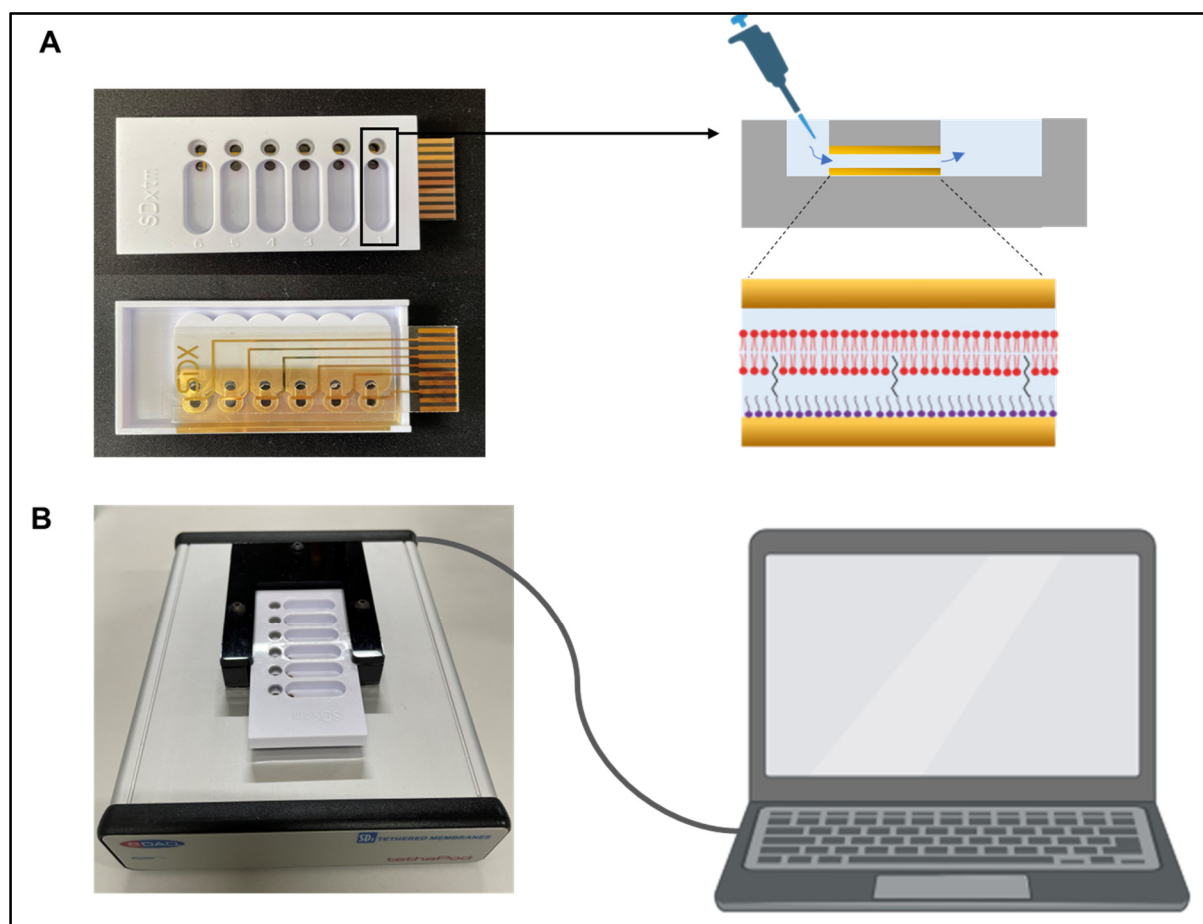* Correspondence: bkyoon@jnu.ac.kr (B.K.Y.); jjackman@skku.edu (J.A.J.)

Figure S1. Experimental setup for EIS measurements. (**A**) Assembly of patterned gold electrode slide with flow cell cartridge. One cartridge contains six chambers. Cross section of each chamber shows the presence of the gold electrode surface to enable tBLM formation *via* the solvent-exchange method. (**B**) Flow cell cartridge containing the tBLM platforms was attached to the tethaPod reader, which was connected to a computer *via* USB port for obtaining signal outputs.
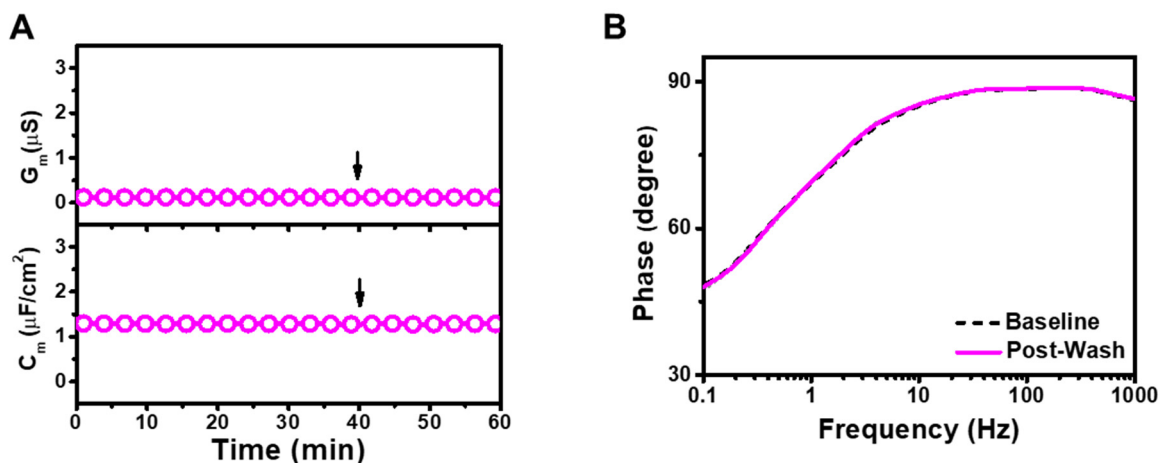
Figure S2. (**A**) Time-resolved conductance (G_m) and capacitance (C_m) shifts of negative control experiment. The arrow indicates buffer washing at t = 40 min. (**B**) Bode plots for negative control experiment, whereby baseline and post-washing reflect the initial measurement signal and signal after buffer washing, respectively.
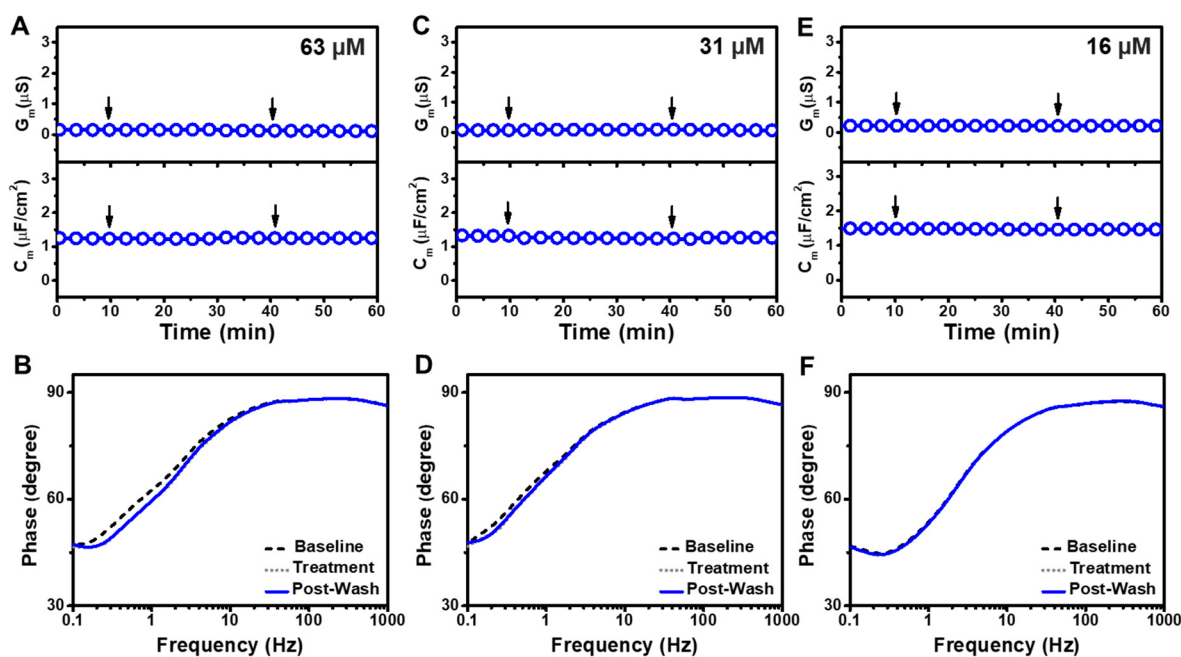

Figure S3. (**A**) Time-resolved conductance (G_m) and capacitance (C_m) shifts upon 63 μM GML addition to the tBLM platform. The arrows indicate compound addition at t = 10 min and buffer washing at t = 40 min, respectively. (**B**) Bode plots for 63 μM GML addition to the tBLM platform, whereby baseline, treatment, and post-washing reflect the initial measurement signal, signal after compound addition, and signal after buffer washing, respectively. Corresponding data for (**C,D**) 31 μM GML and (**E,F**) 16 μM GML addition to the tBLM platform.
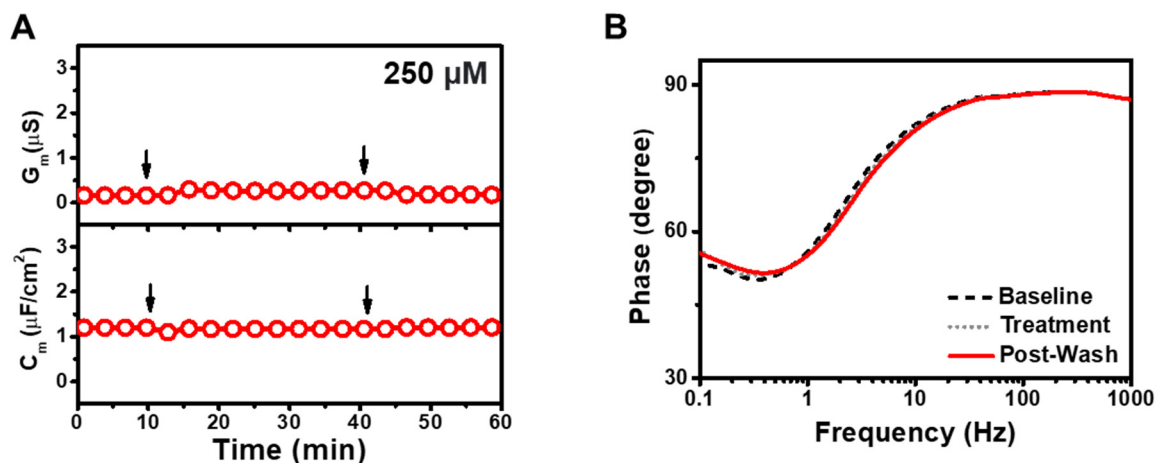
Figure S4. (**A**) Time-resolved conductance (G_m) and capacitance (C_m) shifts upon 250 μM LA addition to the tBLM platform. The arrows indicate compound addition at t = 10 min and buffer washing at t = 40 min, respectively. (**B**) Bode plots for 250 μM LA addition to the tBLM platform, whereby baseline, treatment, and post-washing reflect the initial measurement signal, signal after compound addition, and signal after buffer washing, respectively.