Electronic Supplementary Material (ESI)

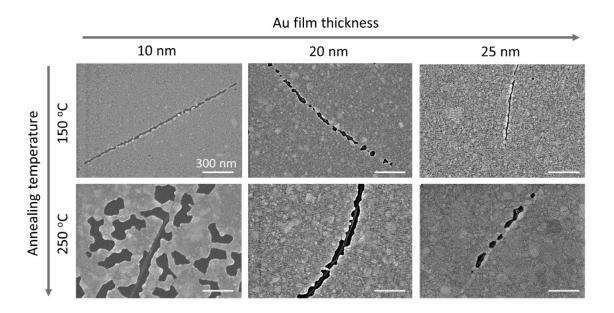


Figure S1. SEM observations of the evolution of Au film morphology for the film thickness from 10 to 25 nm (columns in the figure) and annealing temperatures of 150 or 250 °C (rows). Annealing time was 300 sec for all experiments. All images in the figure were taken at identical magnifications.

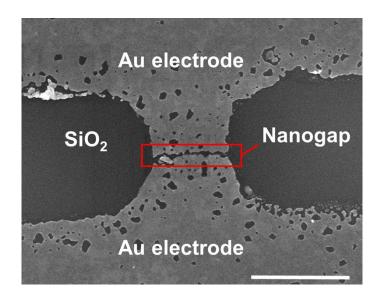


Figure S2. SEM image of the whole electrode structure with nanogap. 10 nm thick Au film was annealed at temperature of 150 $^{\circ}$ C for 300 sec. Scale bar is 2 μ m.