

Supporting Information

Fluorescence-Enhanced Bio-Detection Platforms Obtained through Controlled "Layer-by-Layer" Anchoring of Silver Nanoparticles

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1. *Effect of the spray time on the deposition of Ag NPs.*

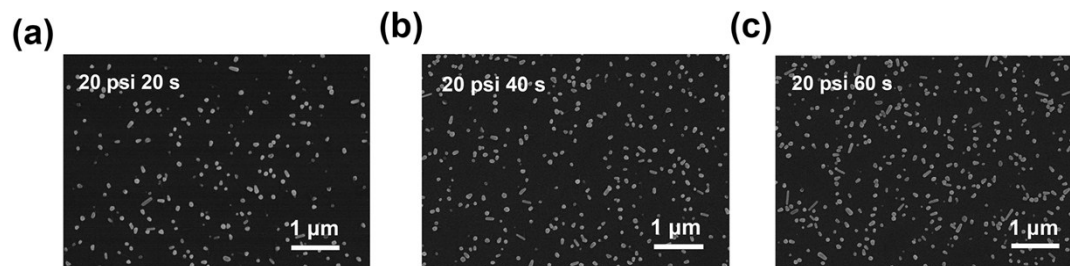


Fig. S1. SEM images of the one-time sprayed Ag platforms under 20 psi for (a) 20, (b) 40 and (c) 60 s.

2. *Effect of the spray pressure on the deposition of Ag NPs.*

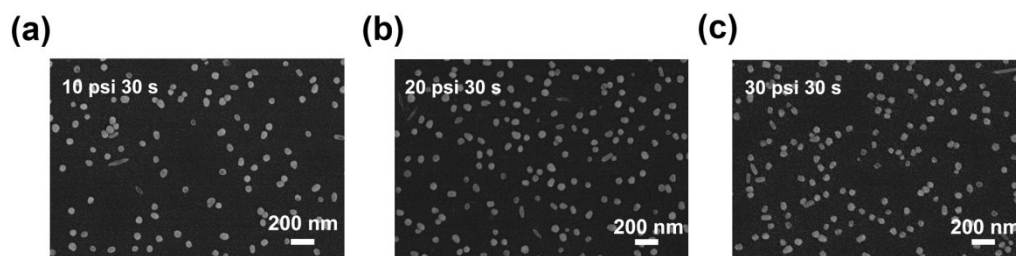


Fig. S2. SEM images of one-time sprayed Ag platforms under (a) 10, (b) 20 and (c) 30 psi for 30 s.

3. *Effect of the aggregation degree of the planar Ag clusters on the electric field enhancement.*

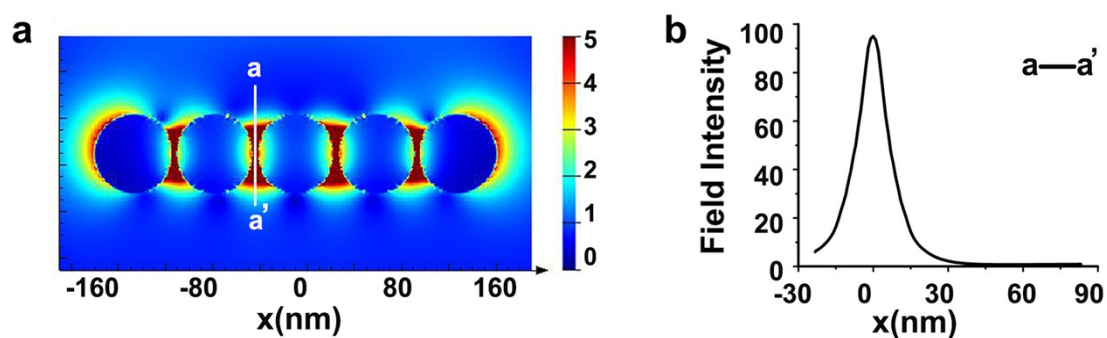


Fig. S3. Electric field density distribution simulated using FDTD and corresponding line plot of field enhancement in the gaps between two particles for the 5-aggregated planar Ag cluster (93.6).