

Supporting information

Size fitting effect for hybridization of DNA/mercaptohexanol mixed monolayers on gold

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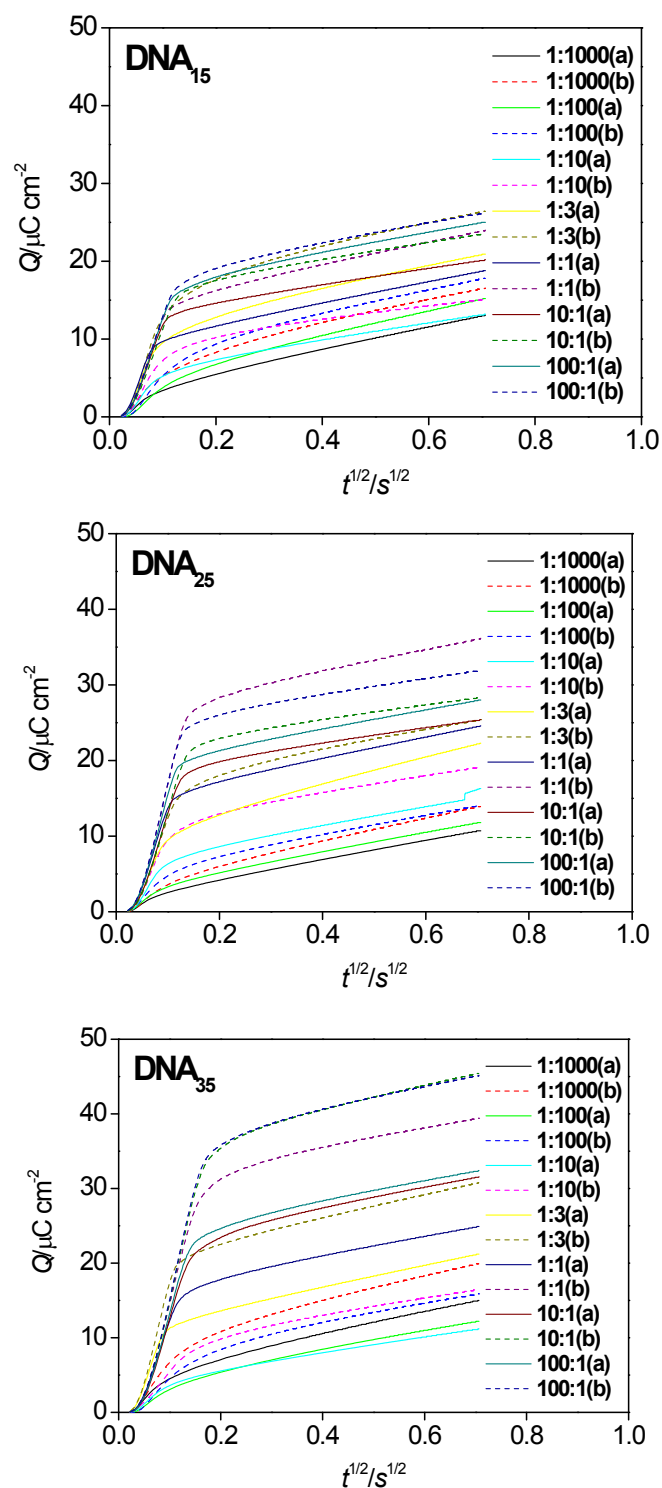


Fig. S1 CC plots (background subtraction) of DNA_{15} , DNA_{25} or DNA_{35} /MCH mixed SAMs on gold in 50 μM RuHex, 10 mM tris-HCl (pH 7.4) solution. The concentration ratios of probe DNA and MCH for mixed assembly ($C_{\text{DNA}}/C_{\text{MCH}} = 1:1000, 1:100, 1:10, 1:3, 1:1, 10:1$ and $100:1$) were investigated. The “a” and “b” in the bracket represented “before hybridization” and “after hybridization” for probe DNA/MCH mixed SAMs.

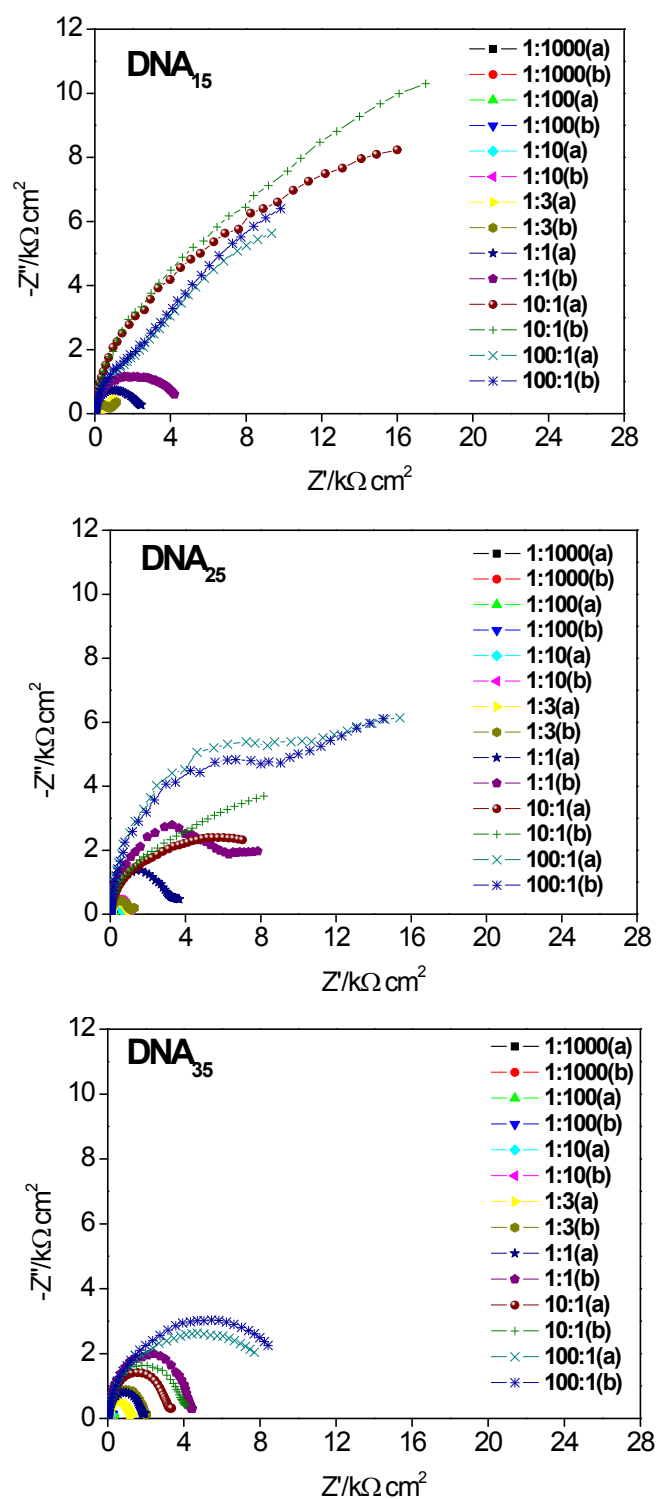


Fig. S2 *EIS* plots of DNA₁₅, DNA₂₅ or DNA₃₅/MCH mixed SAMs on gold in 2 mM Fe(CN)₆^{3-/4-}, 50 mM NaCl and 5 mM sodium phosphate buffer solution (pH 7.0). The concentration ratios of probe DNA and MCH for mixed assembly ($C_{\text{DNA}}/C_{\text{MCH}} = 1:1000, 1:100, 1:10, 1:3, 1:1, 10:1$ and $100:1$) were investigated. The “a” and “b” in the bracket represented “before hybridization” and “after hybridization” for probe DNA/MCH mixed SAMs.