Supporting material

1S. Binding isotherm for 1:1 Cu(II)/Neotetren complex formation. $C_L = 3\times10^{-5}$ M. pH = 0.52, I = 0.5M (NaCl), λ = 300 nm, T = 25°C.

2S. Binding isotherm for 2:1 Cu(II)/Neotetren complex formation. $C_L = 3\times10^{-5}$ M. pH = 3.5, I = 0.5M (NaCl), λ = 300 nm, T = 25°C. The continuous line shows the trend calculated if the 1:1 complex, instead of 2:1 complex, should have formed.

3S. Spectrophotometric titrations fit for 1:1 Cu(II)/Neotetren complex formation; $C_L = 3\times10^{-5}$ M, pH = 0.52, I = 0.5 M (NaCl), λ = 300 nm, T = 25°C, fit of the data to Eq. (1).

4S. Spectrophotometric titrations fit for 2:1 Cu(II)/Neotetren complex formation; $C_L = 3\times10^{-5}$ M, pH = 3.5, I = 0.5 M (NaCl), λ = 300 nm, T = 25°C, fit of the data to Eq. (2); the deviations at low Cu(II) load indicate the presence of the 1:1 complex.

5S. Stopped flow curve for 1:1 Cu(II)/Neotetren complex formation; $C_L = 1.0\times10^{-5}$ M, $C_{Cu} = 1.0\times10^{-3}$ M, pH = 1.15, I = 0.5M (NaCl), λ = 300 nm, T = 25°C.

6S. Stopped flow curve for 2:1 Cu(II)/Neotetren complex formation; $C_L = 1.5\times10^{-6}$ M, $C_{Cu} = 5\times10^{-5}$ M, pH = 3.00, I = 0.5M (NaCl), λ = 300 nm, T = 25°C.

7S. Difference spectrophotometric titration (DNA added in both reference and sample cuvettes) of the CuNeotetren/DNA system; top) $C_D = 1.5\times10^{-5}$ M, $C_P = 0$ M; bottom) $C_D = 1.5\times10^{-5}$ M, $C_P = 1.5\times10^{-4}$ M. I = 0.11 M, T = 25°C, pH = 7.0.

8S. Scatchard plot for the CuNeotetren/DNA system. $C_D = 1.5\times10^{-5}$M, $C_P = (0 \div 1.5)\times10^{-4}$M, I = 0.11M, pH = 7.0, λ = 275 nm, T =25°C. The titration variable is $r = [DS]/C_P$, being C_P the total DNA concentration and $[DS] = (A-A_o)/\Delta\varepsilon$ with $\Delta\varepsilon = \varepsilon_{DS} - \varepsilon_D$ first estimated from the amplitude of the titration curve.

9S. Scatchard plot for the CuNeotetren/DNA system. $C_D = 1.5\times10^{-5}$M, $C_P = (0 \div 1.5)\times10^{-4}$M, I = 0.025M, pH = 7.0, λ = 275 nm, T =25°C.

10S. Stopped flow curve for the CuNeotetren/DNA system. $C_D = 1.5\times10^{-6}$ M, $C_{DNA} = 3.5\times10^{-5}$ M, I = 0.11 M, T = 25°C, pH = 7.0, λ = 275 nm.

11S. Stopped flow curve for the Cu_2Neotetren/DNA system. $C_D = 1.5 \times 10^{-6}$ M, $C_{DNA} = 3.5\times10^{-5}$ M, I = 0.71 M, T = 25°C, pH = 7.0, λ = 275nm.

Figure 1S

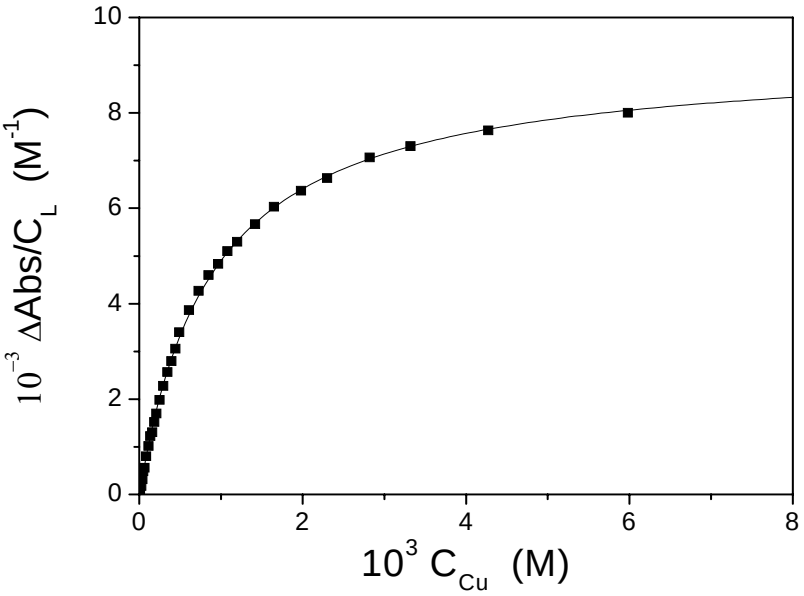


Figure 2S

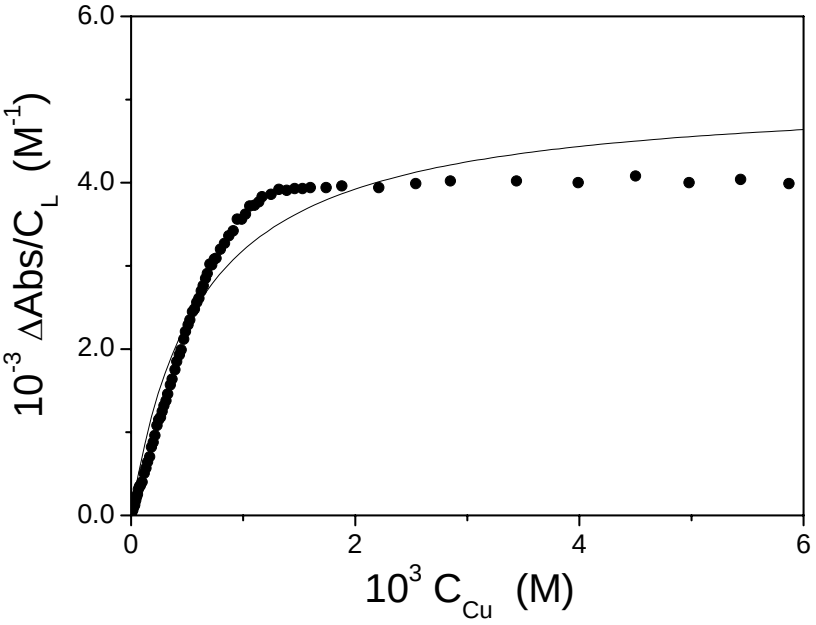


Figure 3S

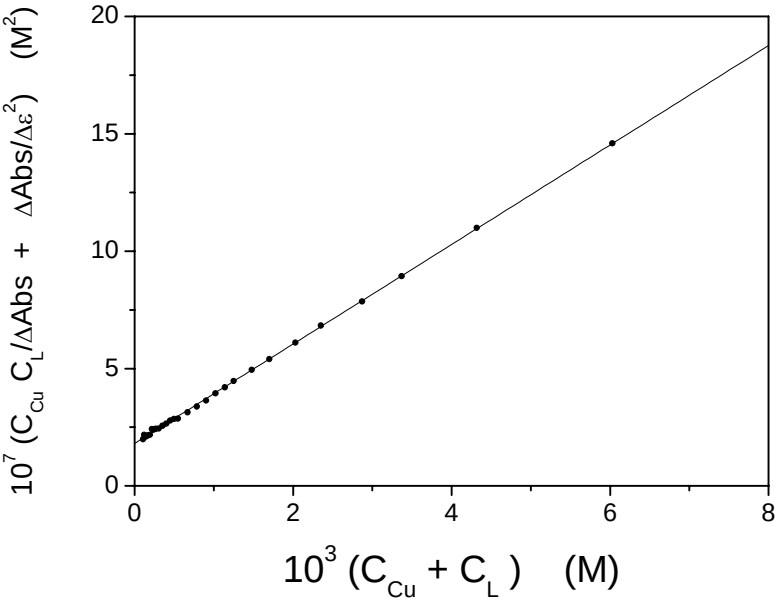


Figure 4S

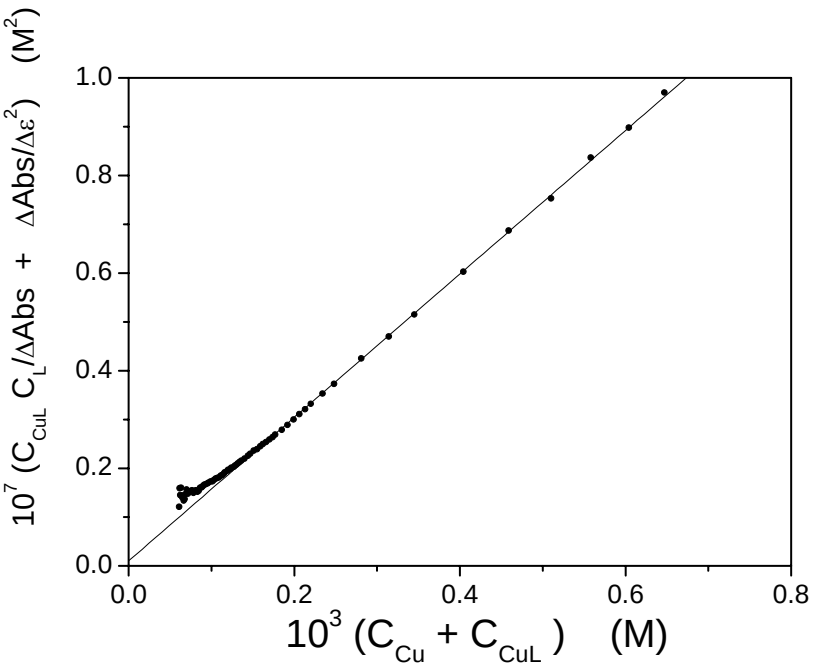
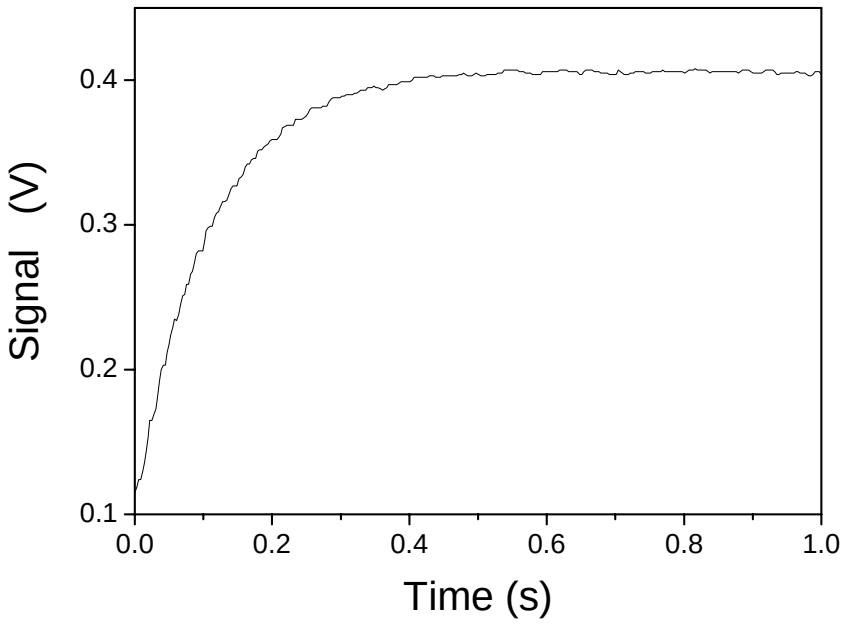


Figure 5S



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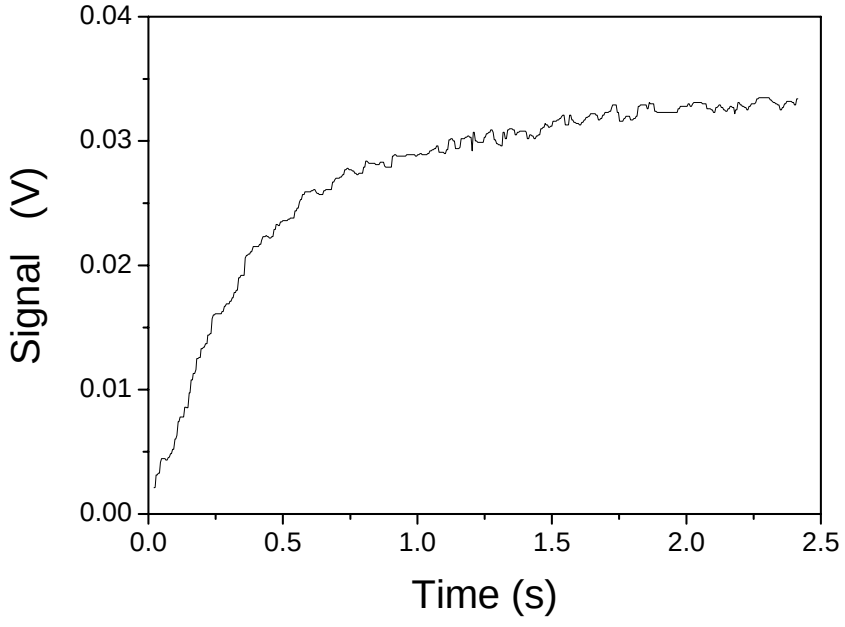

Figure 7S

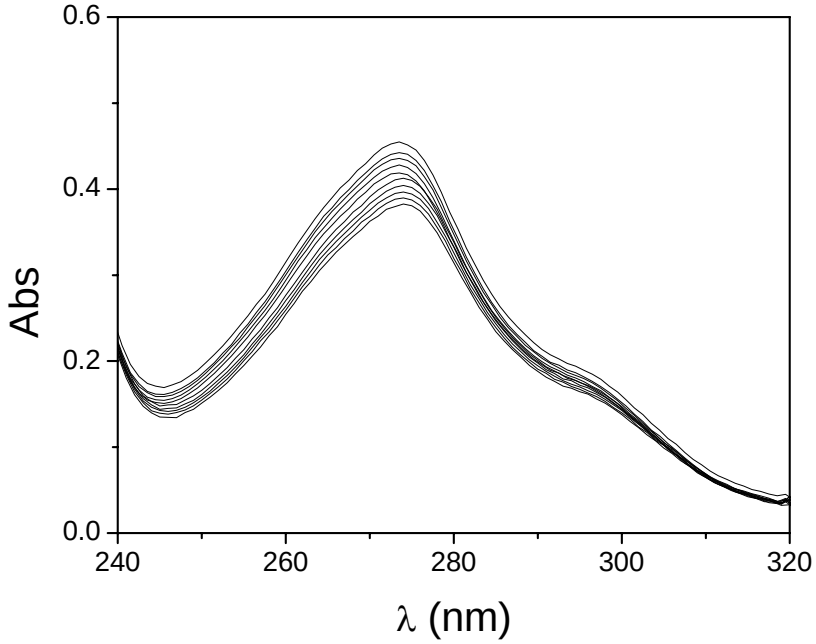

Figure 8S

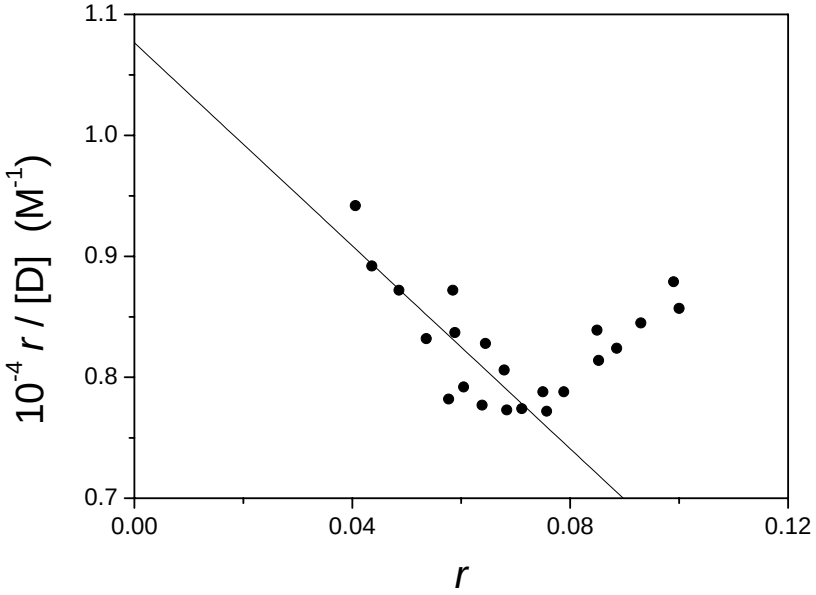

Figure 9S

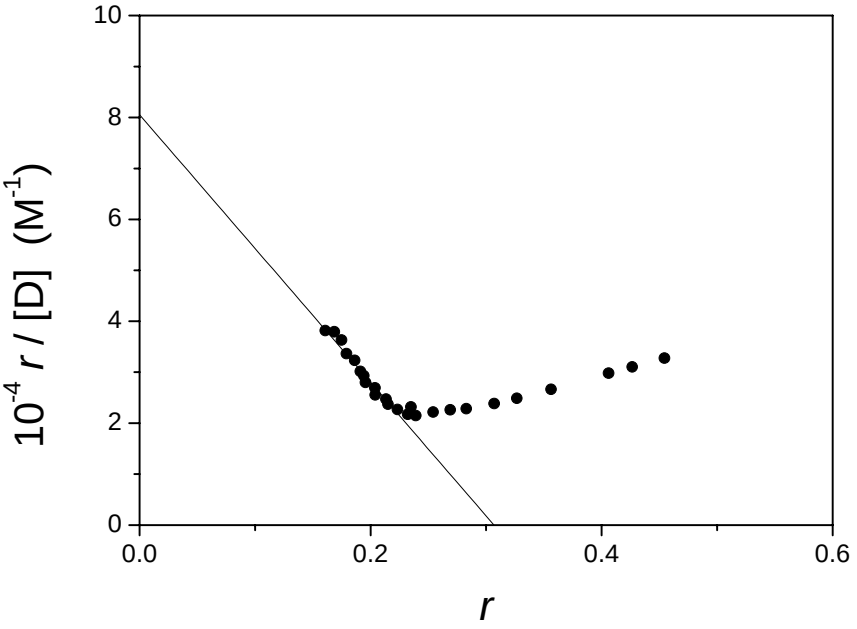

Figure 10S

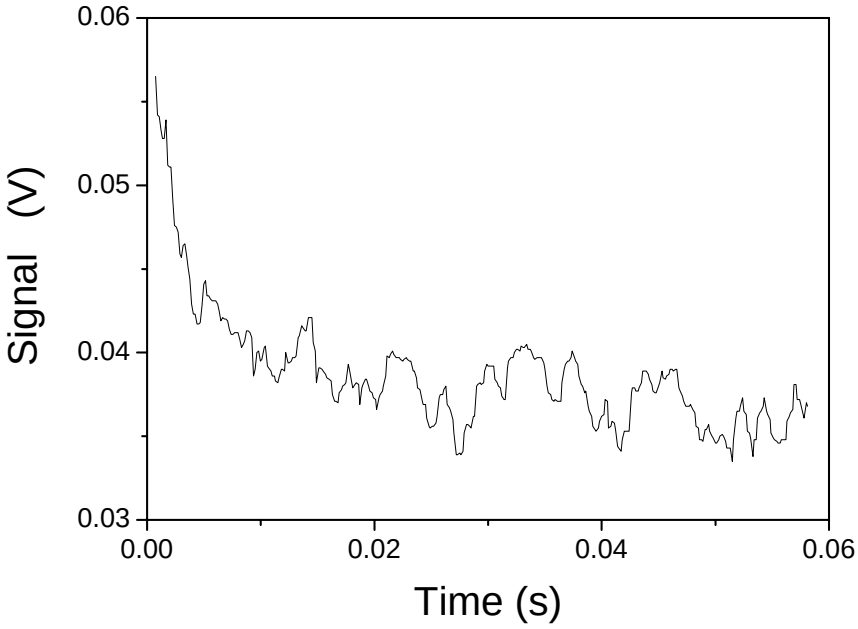

Figure 11S