A trimethine cyanine dye for Copper (II) detection based on the transformation between monomers and J-aggregates via G-quadruplex regulation

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Figure S1. The structure of G1 oligonucleotide (left) and G2 oligonucleotide (right).

Figure S2. Different time points of the OD value at 650 nm was investigated.

Figure S3. Photoimages of the color intensity with different concentrations of Cu$^{2+}$ (0, 0, 0, 50 μM, 65 μM, 80 μM, 100 μM, 125 μM, 150 μM, 200 μM).
Figure S4. Competitive experiments of the MTC-Cu$^{2+}$ mixture with 1 eq. of common metal ions.

Figure S5. The mass spectra of G1 and G2 in the absence of Cu$^{2+}$.

Figure S6. The mass spectra of G1 and G2 in the presence of 100 mM K$^+$. 