Supporting Information

Fluorescent ZnO-Au Nanocomposite as a Probe for Elucidating Specificity in DNA Interaction

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Figure S1. Digital image of G-Au NC solution under visible light and UV light.



Figure S2. Absorption spectral titration of AZO composite with (a) CT DNA, (b) EC DNA and (c) ML DNA, respectively.



Figure S3. Fluorescence titration of native ESM based ZnO nanoparticles with (a) CT , (b) EC and (c) ML DNA's $(0.1\mu M \text{ to } 0.7\mu M)$, respectively.



Figure S4. Fluorescence titration of G-Au NCs with (a) CT , (b) EC and (c) ML DNA's $(0.1\mu M \text{ to } 0.7\mu M)$, respectively.



Figure S5. Deconvulation of the emission spectra of the composite and composite with (a) CT, (b) EC and (c) ML DNA, respectively at their saturation level (Red color for bare composite and blue for after saturation)



Figure S6. Linear plots of F_0 -F versus concentration of (a) CT DNA, (b) EC DNA and (c) ML DNA, respectively.



Figure S7. Fluorescence titrations of AZO with (a) Deoxyadenosine monophosphate, (b) Deoxythymine monophosphate, (c) Adenine, (d) Thymine, respectively (inset: observed wavelength shifts with the respective structures).



Figure S8. Comparative liquid FT-IR study of AZO with CT, EC and ML DNA, respectively.



Figure S9. Changes in the CD spectrum of CT DNA with saturated concentration of AZO with increasing temperature.



Figure S10. Emission spectra of Hoechst-DNA complex in presence of increasing concentration of AZO nano composite.