

Electronic Supplementary Material (ESI) for New Journal of Chemistry.

### A Gold-carbon dots nanoprobe for dual mode detection of ketamine HCl in soda drinks

Mahmoud A. Tantawy<sup>a</sup>, Mohamed A. Farag<sup>b,c</sup>, Ali M. Yehia<sup>a,d\*</sup>

<sup>a</sup> Analytical Chemistry Department, Faculty of Pharmacy, Cairo University, Cairo 11562, Egypt; [ali.yehia@pharma.cu.edu.eg](mailto:ali.yehia@pharma.cu.edu.eg)

<sup>b</sup> Pharmacognosy Department, Faculty of Pharmacy, Cairo University, Cairo 11562, Egypt

<sup>c</sup> Department of Chemistry, School of Sciences & Engineering, The American University in Cairo, New Cairo, Egypt

<sup>d</sup> Pharmaceutical Chemistry Department, School of Pharmacy and Pharmaceutical Industries, Badr University in Cairo (BUC), Badr City, 11829, Cairo, Egypt

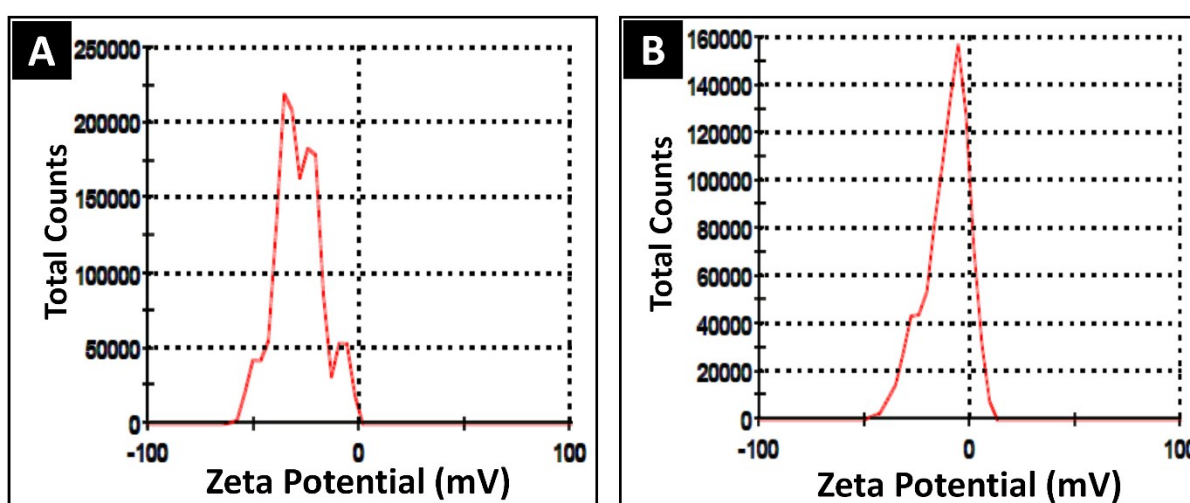


Figure 1S. Zeta potential distribution charts of (A) AuNPs and (B) CDs.

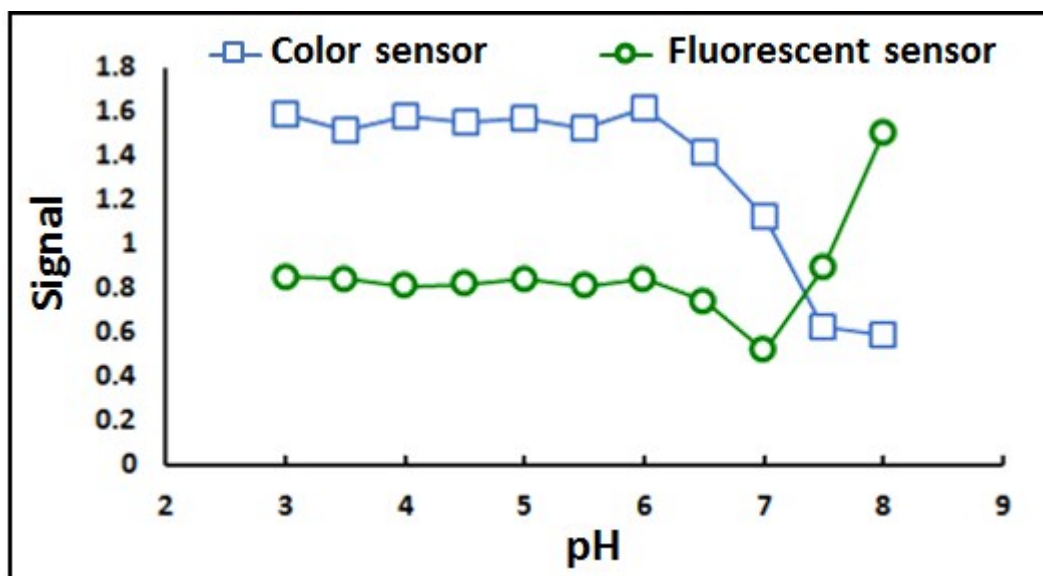


Figure S2. Effect of pH on the fluorescent recovery efficiency  $((F - F_0)/F_0)$  or absorption ratio  $(A_{650}/A_{520})$  after addition of KET ( $6 \times 10^{-4} \text{ mol L}^{-1}$ ) to AuNPs/CDs nanoprobe