Strong red-emitting Gold Nanoclusters Protected by Glutathione S-transferase

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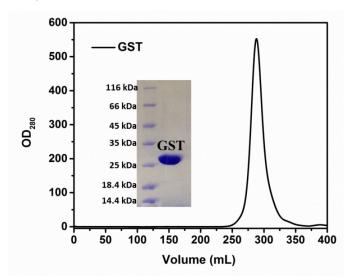


Fig. S1 FPLC elution profile of GST after purification from a GST affinity column, and the corresponding SDS-PAGE (insert) used to assay the molecular weight of product.

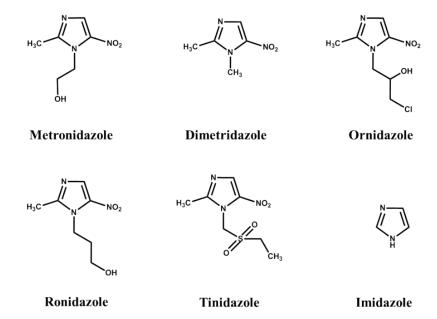


Fig. S2 The molecular structural formulas of metronidazole (MNZ) and its analogues.

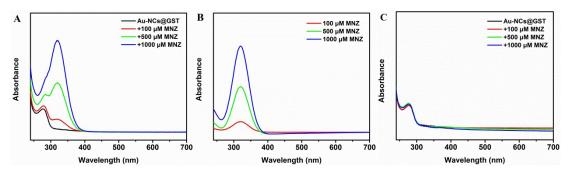


Fig. S3 UV-vis absorption spectra of (A) Au-NCs@GST (1 mg mL⁻¹, black), and those of it in presence of 100 μM (red), 500 μM (green), 1000 μM (blue) MNZ; (B) 100 μM (red), 500 μM (green), 1000 μM (blue) MNZ; (C) Au-NCs@GST (1 mg mL⁻¹, black) and different concentration of MNZ, after subtracting the contribution of corresponding MNZ.

Table S1. Lifetime and percentage of Au-NCs@GST (0.8 mg mL⁻¹) in the absence and presence of different amount of MNZ in PBS solution.

| Lifetimes & percentages Components | | $	au_1/\mu s$ | a_1 | $	au_2/\mu s$ | a_2 |
|-------------------------------------|--------------|---------------|--------|---------------|--------|
| 0.8 mg mL ⁻¹ Au-NC@GST | | 0.62 | 20.66% | 1.96 | 79.34% |
| 0.8 mg mL ⁻¹ Au-NC@GST | +100 μM MNZ | 0.65 | 25.36% | 1.74 | 74.64% |
| | +500 μM MNZ | 0.52 | 26.91% | 1.51 | 73.09% |
| | +1000 μM MNZ | 0.49 | 25.87% | 1.25 | 74.13% |