Supporting information

Gold–chitosan composite with low symmetry zinc phthalocyanine for enhanced singlet oxygen generation and improved photodynamic therapy activity

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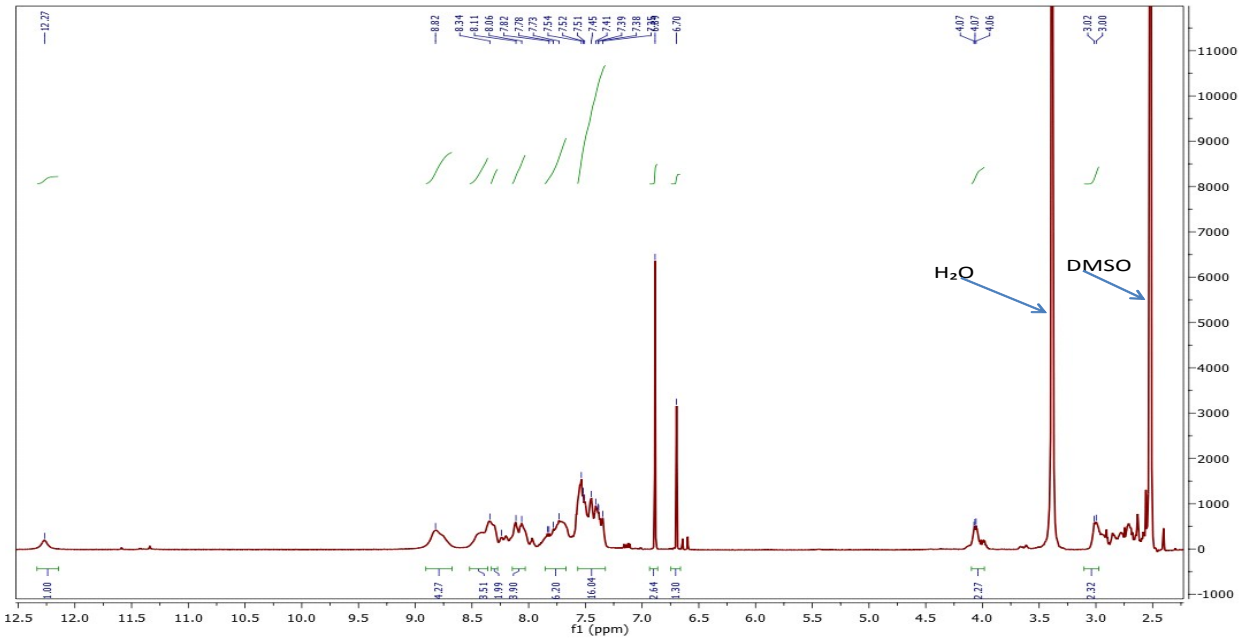


Fig. S1. ^{1}H NMR of complex **3** in DMSO.

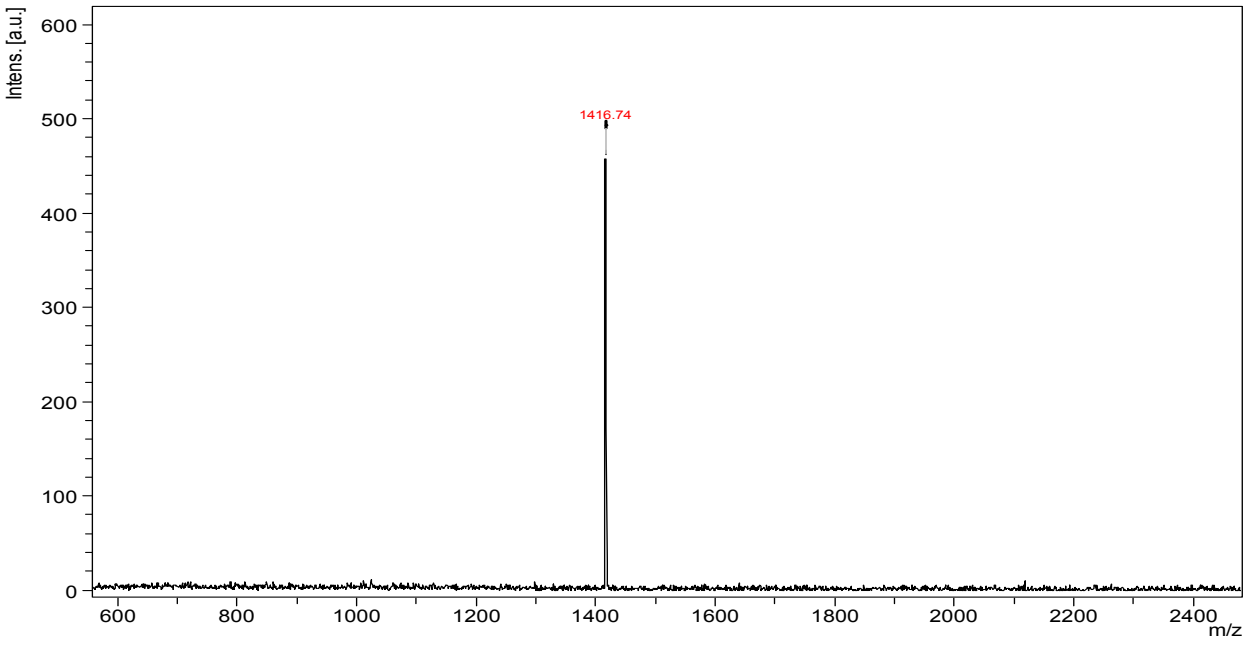
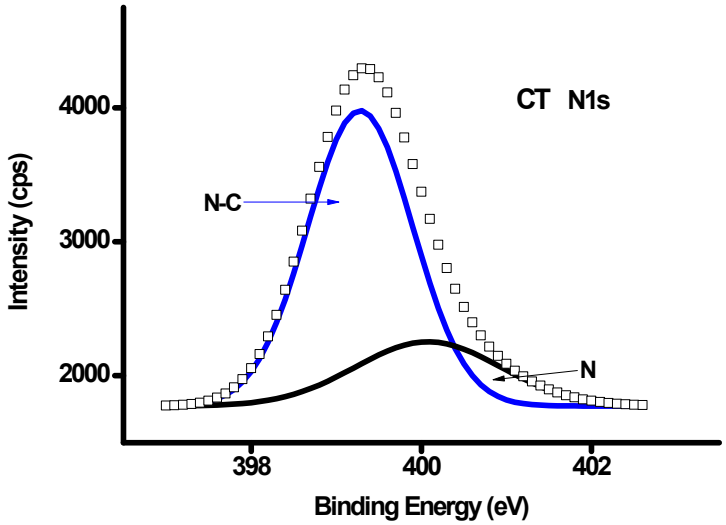
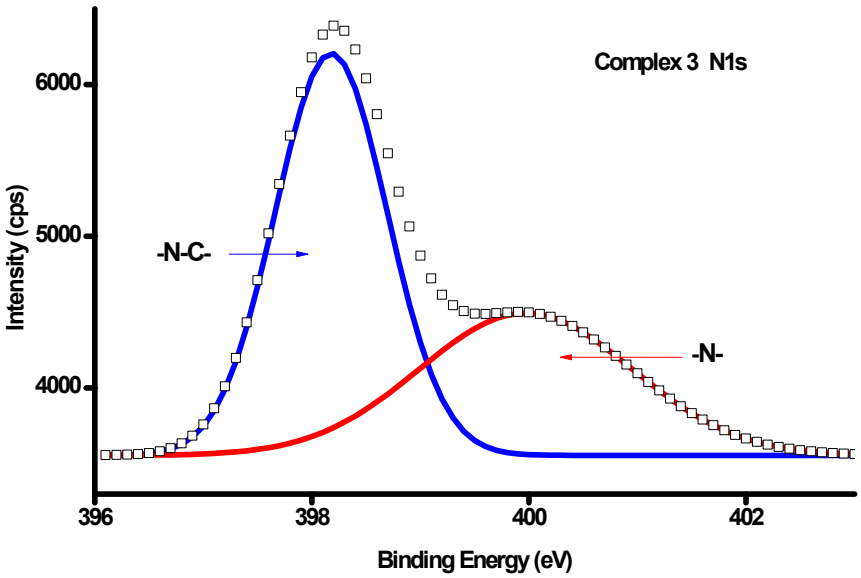
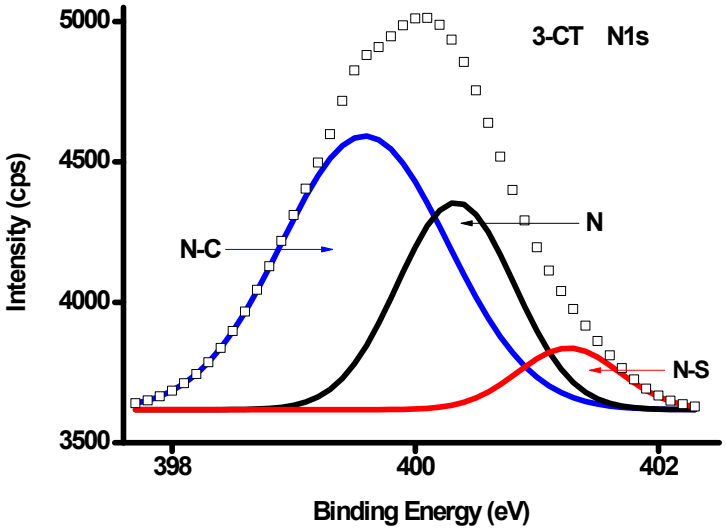
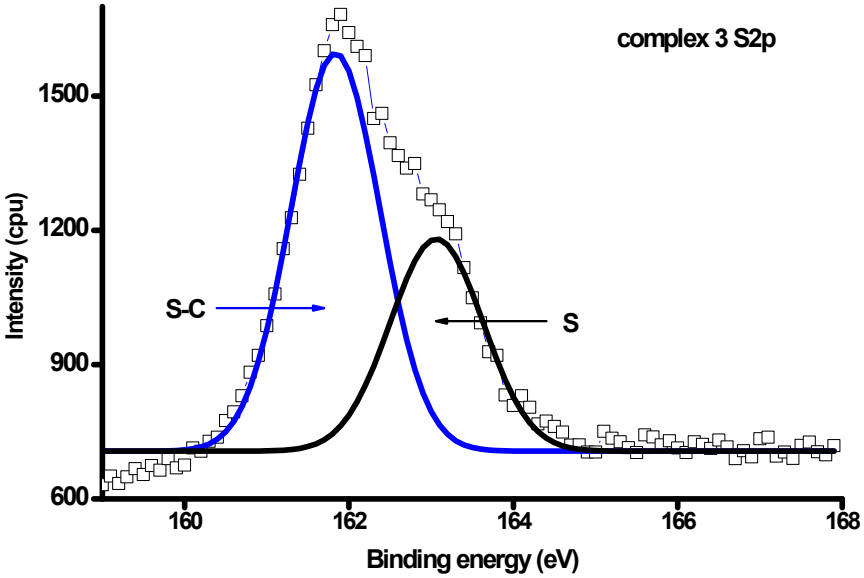


Fig. S2. MS (Maldi-TOF) of complex **3**.


CT N1s
Intensity (cps)
4000
3000
2000
N-C
N
398
400
402
Binding Energy (eV)


Complex 3 N1s
Intensity (cps)
6000
5000
4000
-N-C-
-N-
396
398
400
402
Binding Energy (eV)


3-CT N1s
Intensity (cps)
5000
4500
4000
3500
N-C
N
N-S
398
400
402
Binding Energy (eV)


complex 3 S2p
Intensity (cpu)
1500
1200
900
600
S-C
S
160
162
164
166
168
Binding energy (eV)

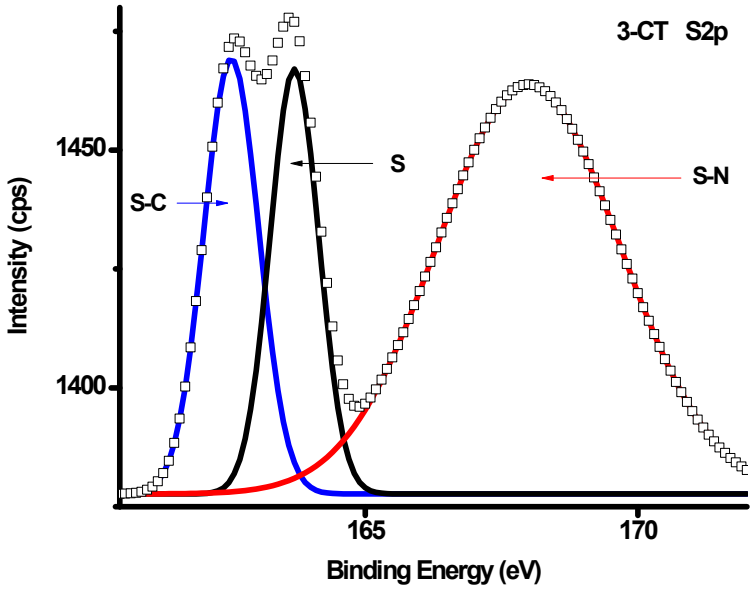
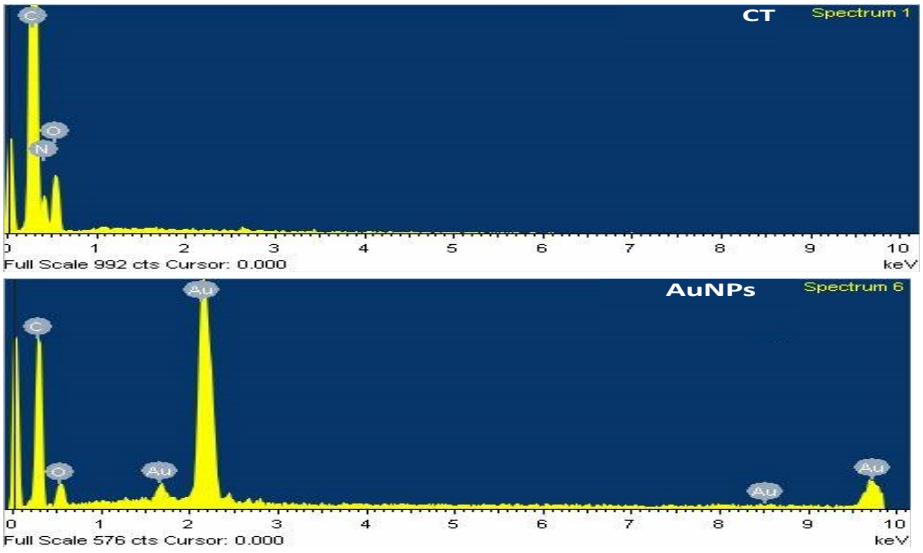


Fig. S3. XPS N1sand S2p spectra forCT, complex **3** and **3**-CT.



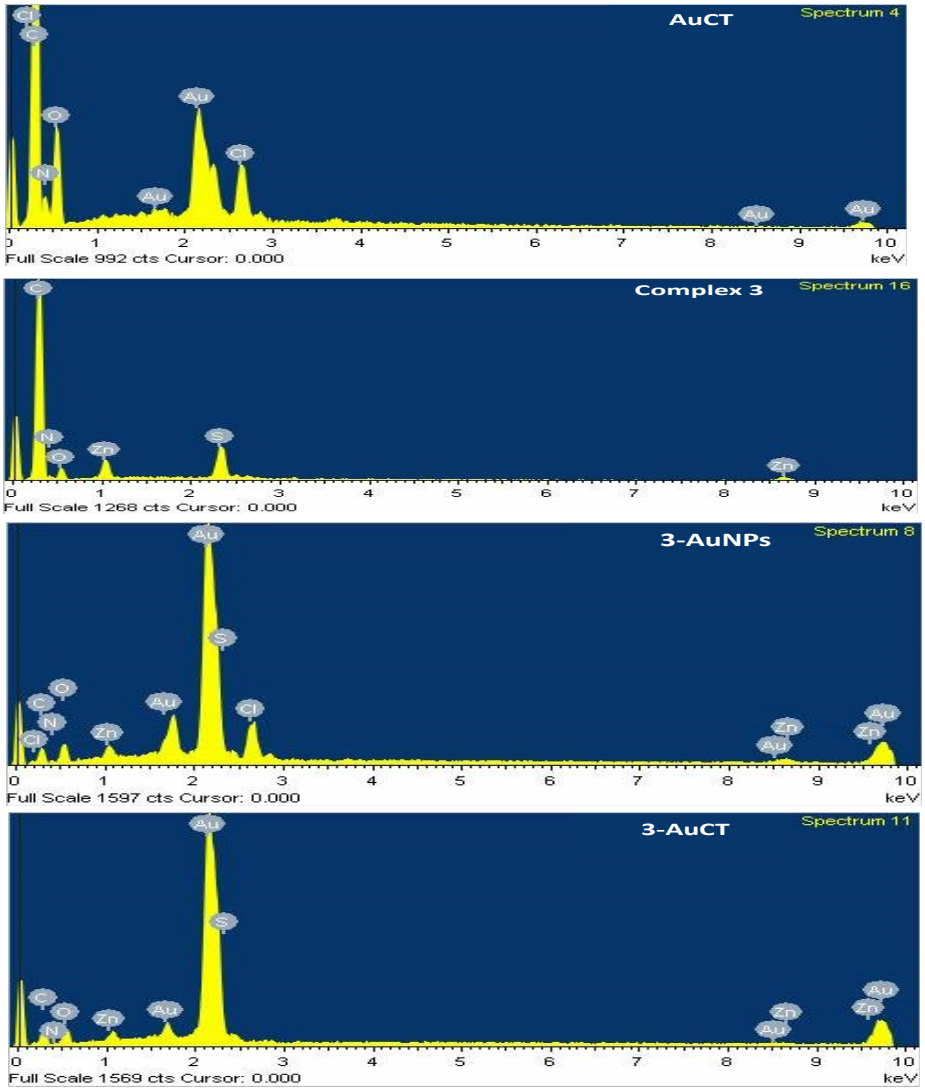


Fig. S4.EDX spectra for CT, AuNPs, AuCT, complex **3**,**3**-AuCT and **3**-AuNPs.

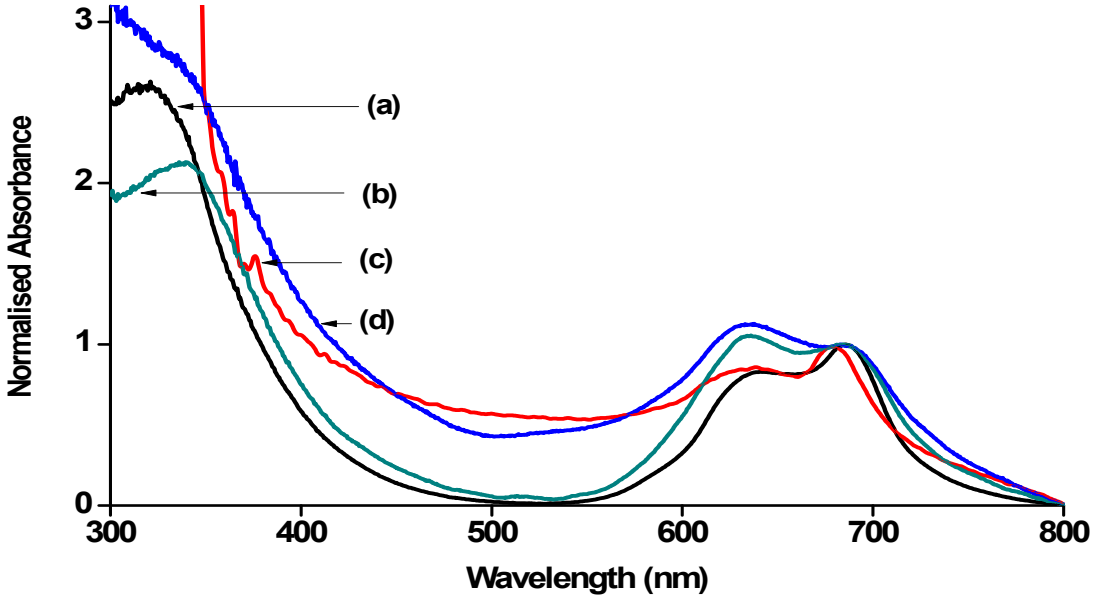


Fig. S5. Absorption spectra for **3**(a), **3**-CT (b), **3**-AuNPs (c) and **3**-AuCT (d)). For **3**-CT and **3**-AuCT, the solvent is water containing 1% acetic acid together with 1.6% DMSO. For **3** and **3**-AuNPs, the solvent is water containing 1.6% DMSO.

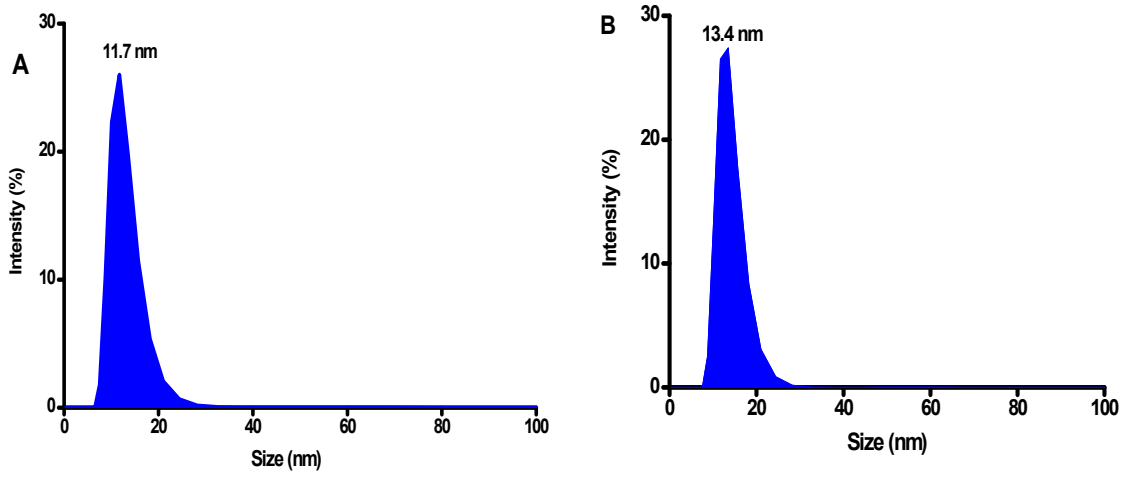


Fig.S6. Dynamic light scattering of AuNPs alone (A) and **3**-AuNPs (B).

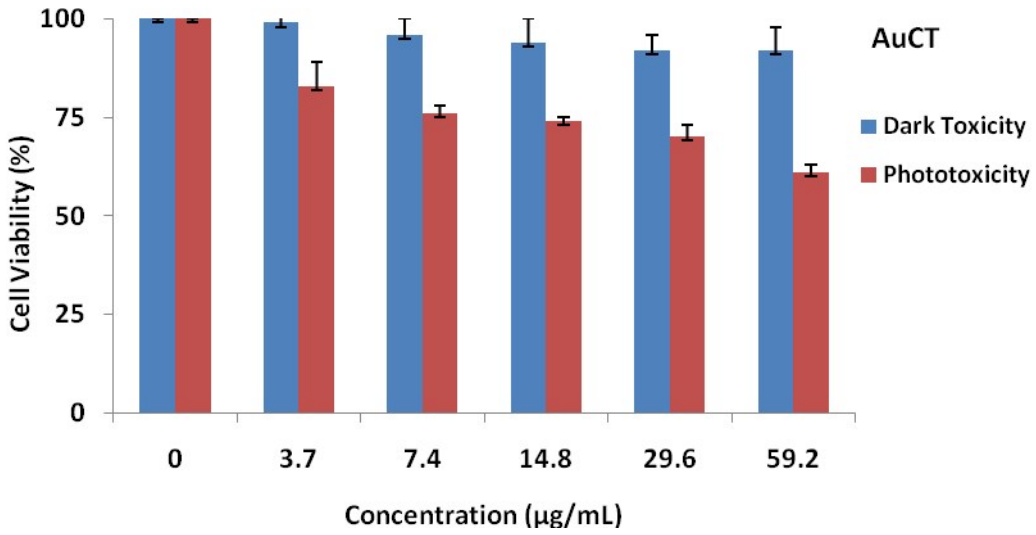
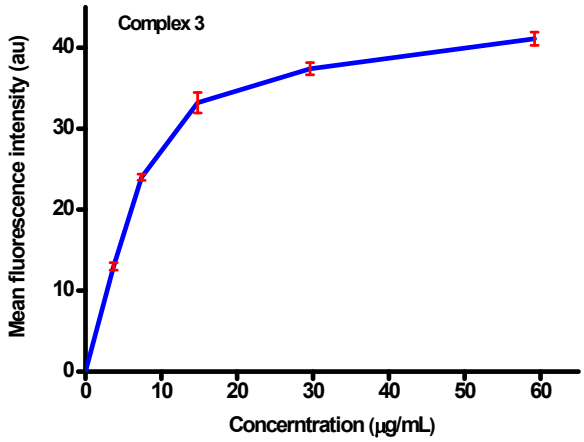


Fig. S7. Histograms for % cell viability in dark and after radiation for AuCT.



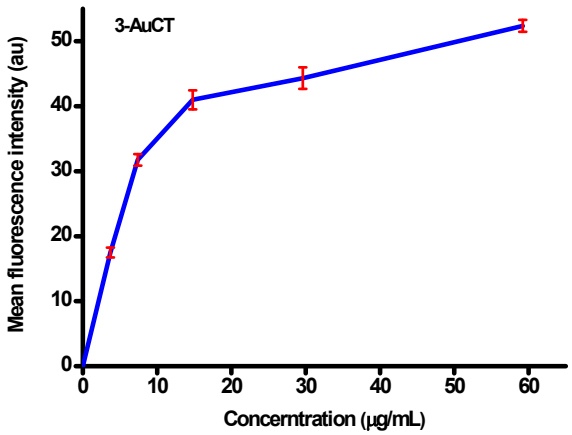


Fig. S8. Cellular uptake of complex **3** and **3**-AuCT as a function of concentration.