

Supporting information

Fabrication of innovative ZnO nanoflowers showing drastic biological activity

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Table S1. Selected bond lengths (Å) and bond angles(°) of **1**.

Bond distance	(Å)
Zn(1)-O(3)	2.064(3)
Zn(1)-N(1)	2.069(4)
Zn(1)-N(2)	2.080(4)
Zn(1)-O(2)	2.167(3)
Zn(1)-O(1)	2.172(3)
Zn(1)-Cl(1)	2.4977(13)
Zn(2)-Cl(4)	2.2405(13)
Zn(2)-Cl(3)	2.2414(14)
Zn(2)-Cl(2)	2.2872(13)
Zn(2)-Cl(1)	2.3284(12)
Bond angle(Å)	(°)
O(3)-Zn(1)-N(1)	101.87(14)
O(3)-Zn(1)-N(2)	93.98(14)
N(1)-Zn(1)-N(2)	160.97(15)
O(3)-Zn(1)-O(2)	170.17(13)
N(1)-Zn(1)-O(2)	87.57(13)
N(2)-Zn(1)-O(2)	76.25(13)
O(3)-Zn(1)-O(1)	86.54(14)
N(1)-Zn(1)-O(1)	76.99(14)
N(2)-Zn(1)-O(1)	93.71(13)
O(2)-Zn(1)-O(1)	93.03(13)
O(3)-Zn(1)-Cl(1)	91.29(11)
N(1)-Zn(1)-Cl(1)	97.01(11)
N(2)-Zn(1)-Cl(1)	93.06(11)
O(2)-Zn(1)-Cl(1)	90.23(10)
O(1)-Zn(1)-Cl(1)	173.02(9)
Cl(4)-Zn(2)-Cl(3)	112.57(5)
Cl(4)-Zn(2)-Cl(2)	110.31(5)
Cl(3)-Zn(2)-Cl(2)	112.49(5)
Cl(4)-Zn(2)-Cl(1)	108.70(5)
Cl(3)-Zn(2)-Cl(1)	107.83(5)
Cl(2)-Zn(2)-Cl(1)	104.52(5)
Zn(2)-Cl(1)-Zn(1)	119.47(5)

Table S2. Selected bond lengths (Å) and bond angle(°) of **2**.

Bond distance	(Å)
Zn(1)-N(1)	2.025(3)
Zn(1)-O(1)	2.208(3)
Zn(1)-Cl(1)	2.2504(17)
Zn(1)-Cl(2)	2.2782(11)
Zn(1)-Cl(2)#1	2.6062(10)
Bond angle	(°)
N(1)-Zn(1)-O(1)	83.13(11)
N(1)-Zn(1)-Cl(1)	114.53(9)
O(1)-Zn(1)-Cl(1)	94.37(8)
N(1)-Zn(1)-Cl(2)	124.89(9)
O(1)-Zn(1)-Cl(2)	90.62(8)
Cl(1)-Zn(1)-Cl(2)	120.54(5)
N(1)-Zn(1)-Cl(2)#1	88.57(8)
O(1)-Zn(1)-Cl(2)#1	167.39(7)
Cl(1)-Zn(1)-Cl(2)#1	97.72(4)
Cl(2)-Zn(1)-Cl(2)#1	86.33(4)
Zn(1)-Cl(2)-Zn(1)#1	93.67(4)

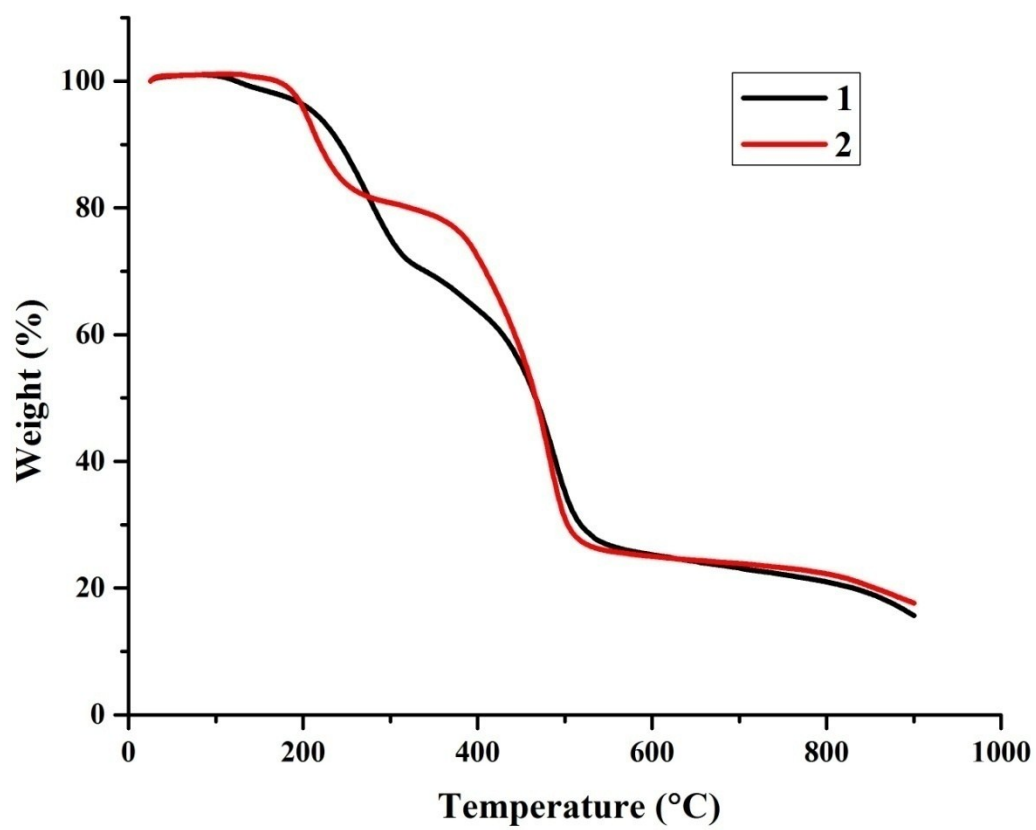


Fig. S1 Two step thermal decomposition of complexes 1 and 2.

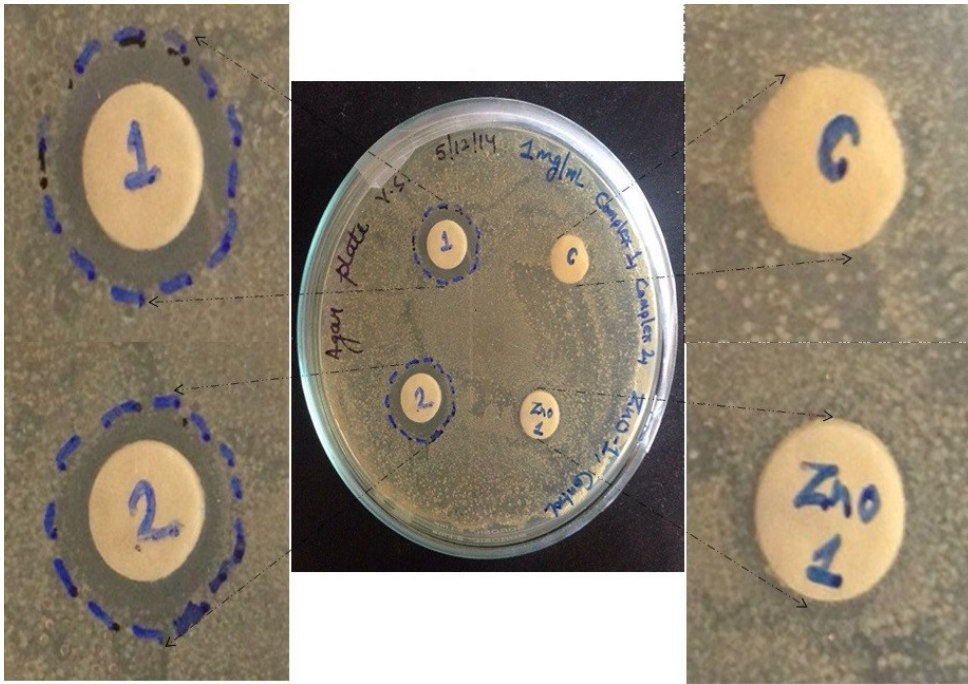
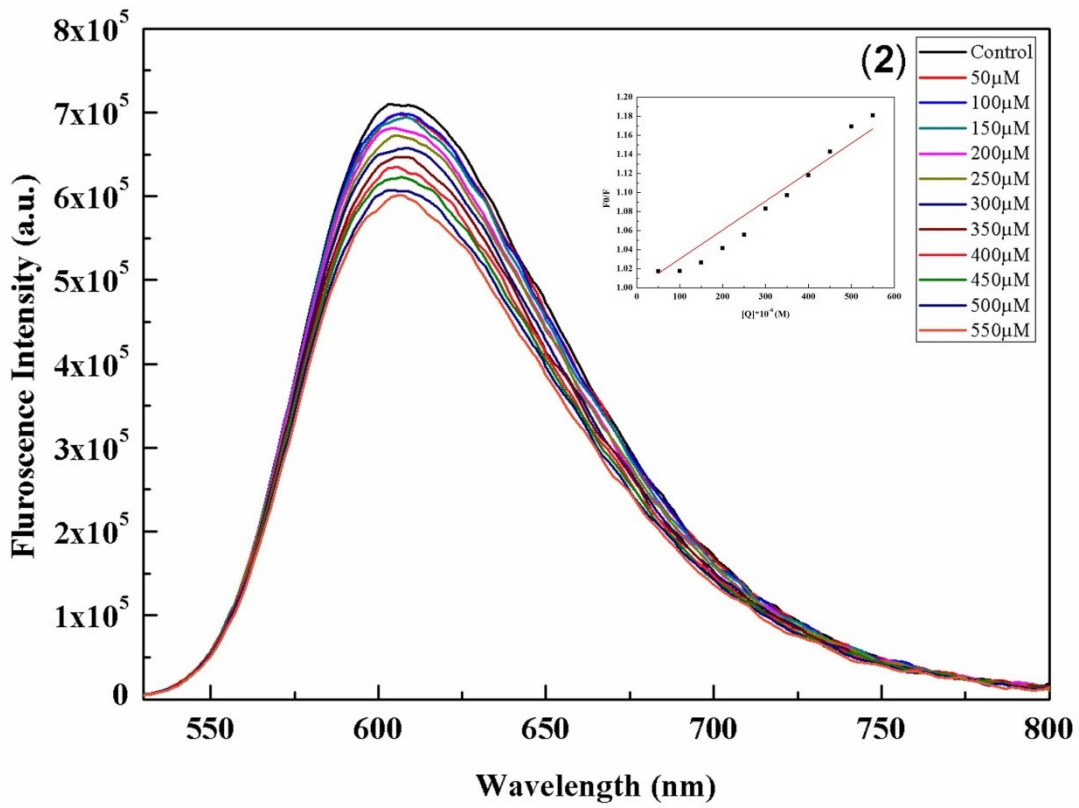
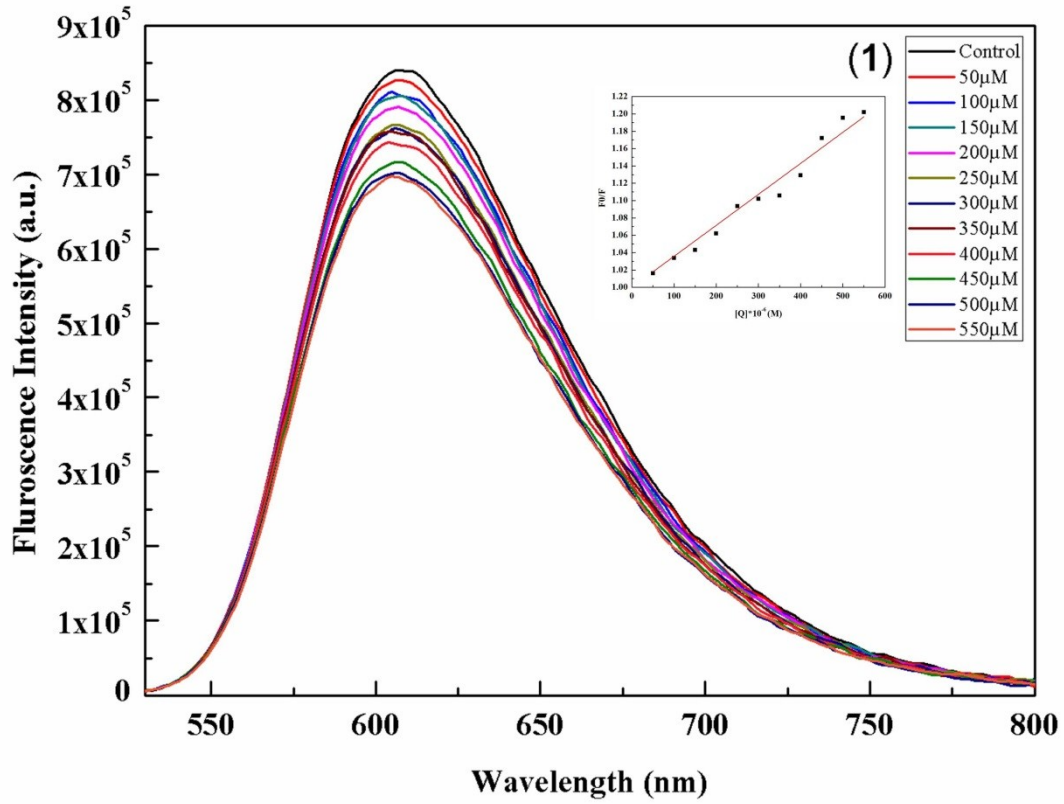


Fig. S2 Zone of inhibition formed by **1**, **2** and **ZnO-1** at 1000 $\mu\text{g}/\text{mL}$ in Disc diffusion test.



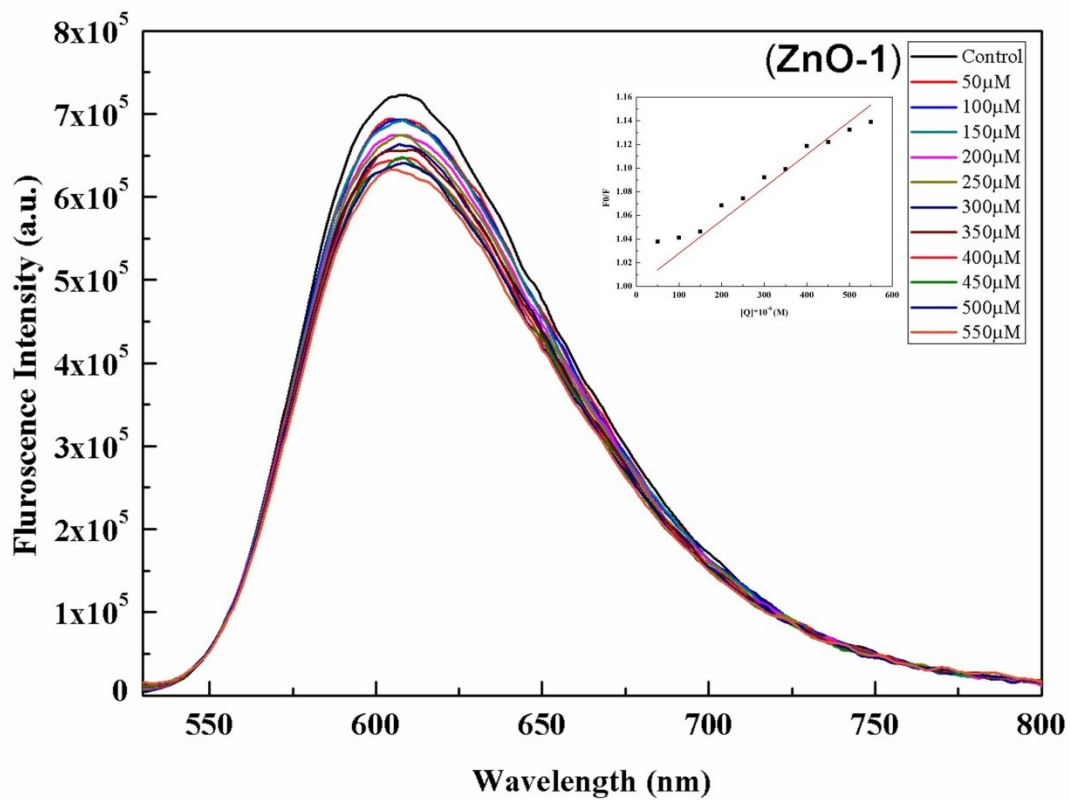


Fig.S3 Fluorescence quenching of CT-DNA+ EtBr by **1**, **2** and **ZnO-1**. Inset showing Stern-Volmer plots.

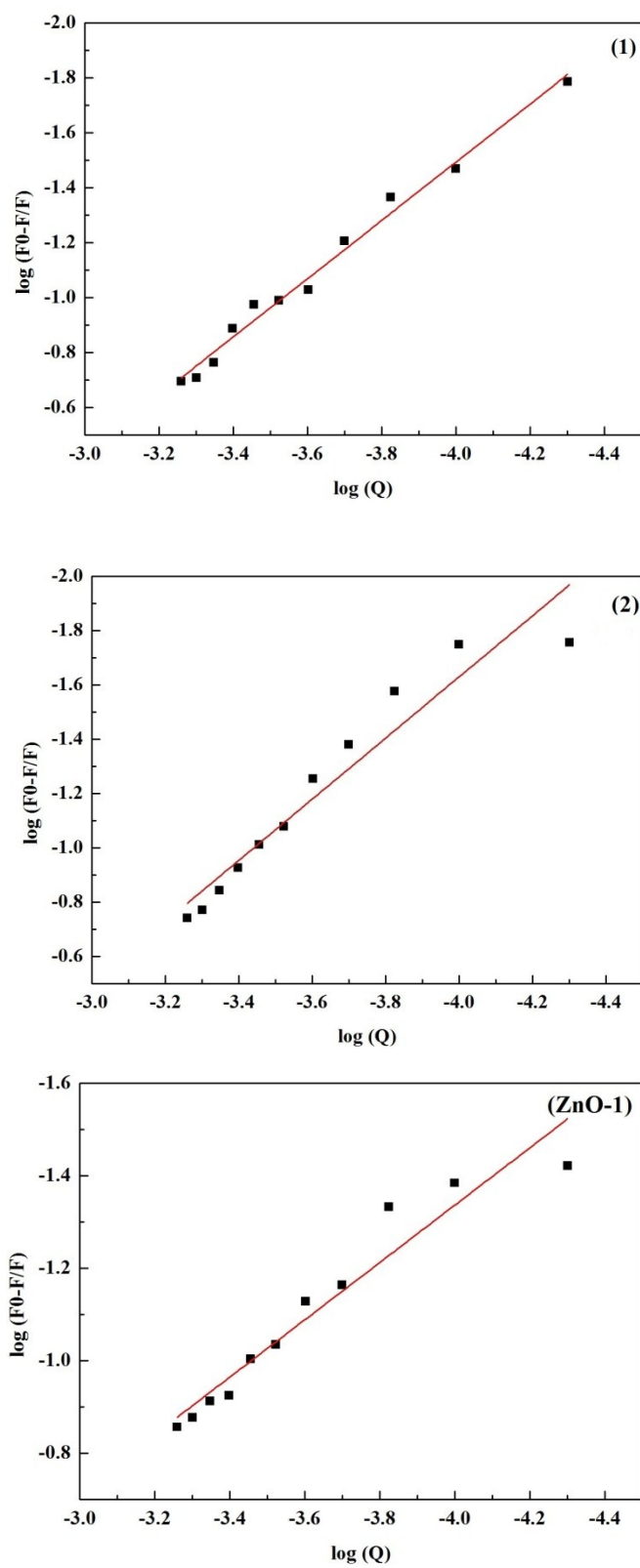


Fig. S4 Scatchard plots for fluorescence quenching of CT-DNA+ EtBr by 1, 2 and ZnO-1.