

## Structure, antimicrobial activity, albumin– and DNA–binding of manganese(II)–sparfloxacinato complexes

Marianthi Zampakou<sup>1</sup>, Sofia Balala<sup>2</sup>, Franc Perdih<sup>3</sup>, Stavros Kalogiannis<sup>2</sup>, Iztok Turel<sup>3</sup> and George Psomas<sup>1</sup>, \*

<sup>1</sup> Department of General and Inorganic Chemistry, Faculty of Chemistry, Aristotle University of Thessaloniki, GR–54124 Thessaloniki, GREECE.

<sup>2</sup> Department of Nutrition and Dietetics, Faculty of Agriculture, Food Technology and Nutrition, Alexander Technological Educational Institution, Sindos, Thessaloniki, GREECE.

<sup>3</sup> Faculty of Chemistry and Chemical Technology, University of Ljubljana, Vecna pot 113, 1000 Ljubljana, SLOVENIA.

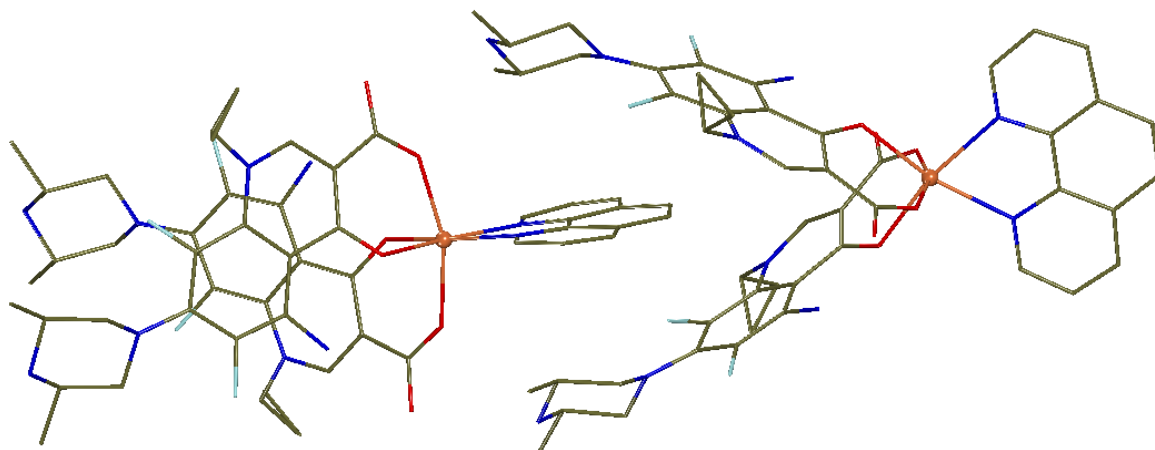
### Supplementary material

**Table S1.** Hydrogen bonding parameters for 1·4MeOH.

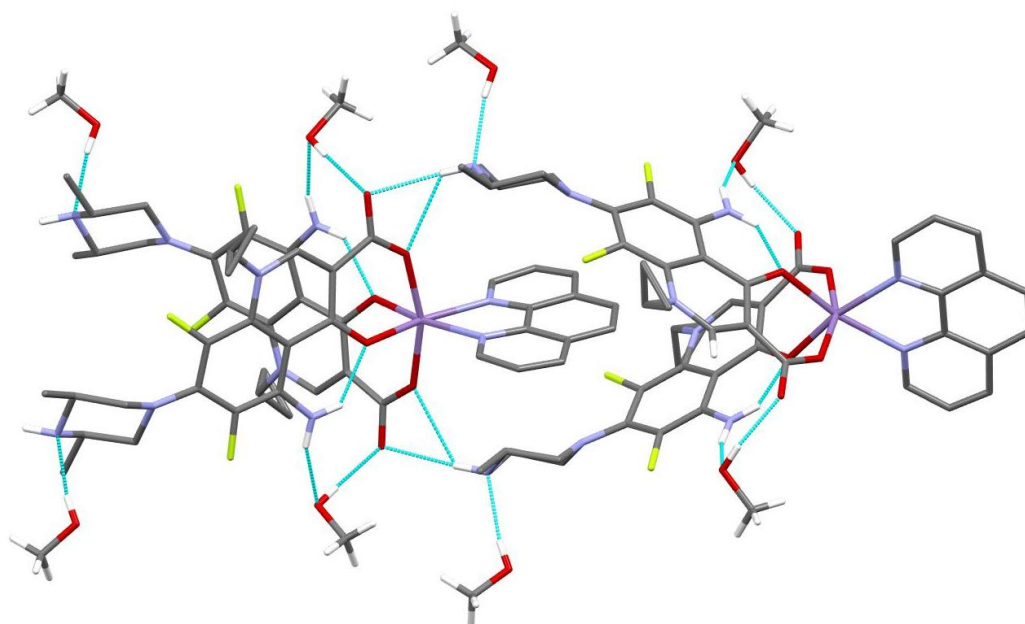
Interaction	D–H (Å)	H···A (Å)	D···A (Å)	D–H···A (°)	Symmetry transformation for acceptors
N(3)–H(3A)···O(5)	0.86	2.32	3.076(4)	147.4	$-x + \frac{1}{2}, -y + \frac{1}{2}, z$
N(3)–H(3B)···O(3)	0.86	2.00	2.630(3)	129.5	$x, y, z$
N(5)–H(5A)···O(2)	0.92(3)	2.21(3)	3.126(3)	173(2)	$-x + \frac{1}{2}, y, z + \frac{1}{2}$
O(4)–H(4)···N(5)	0.82	2.03	2.830(4)	165.7	$x, y, z$
O(5)–H(5)···O(2)	0.82	1.93	2.739(3)	169.5	$x, y, z$

\* Corresponding author:

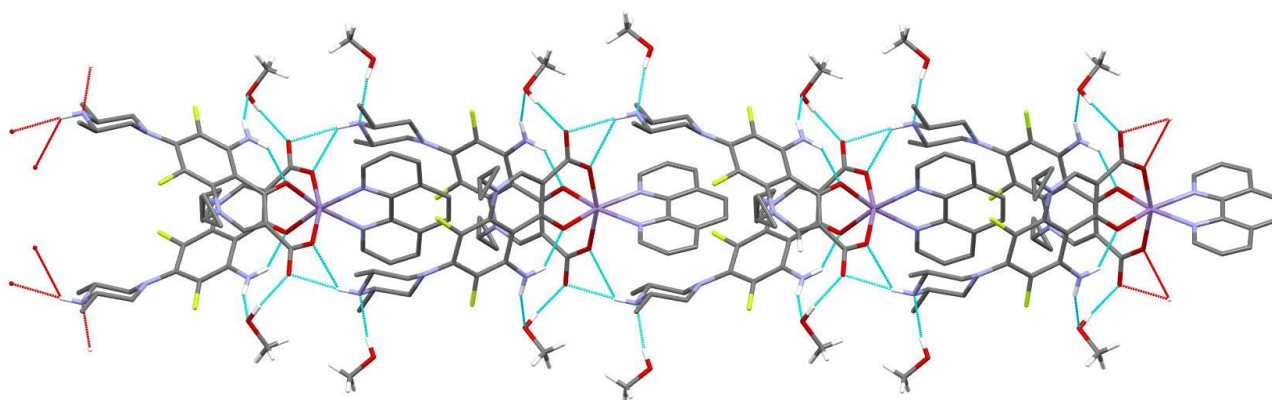
Tel.:+30+2310997790; Fax:+30+2310997738; E–mail: gepsomas@chem.auth.gr



**Figure S1.** Interaction of guest–host molecules in **1**. Mn in orange, O in red, N in blue, C in dark yellow and F in light blue.

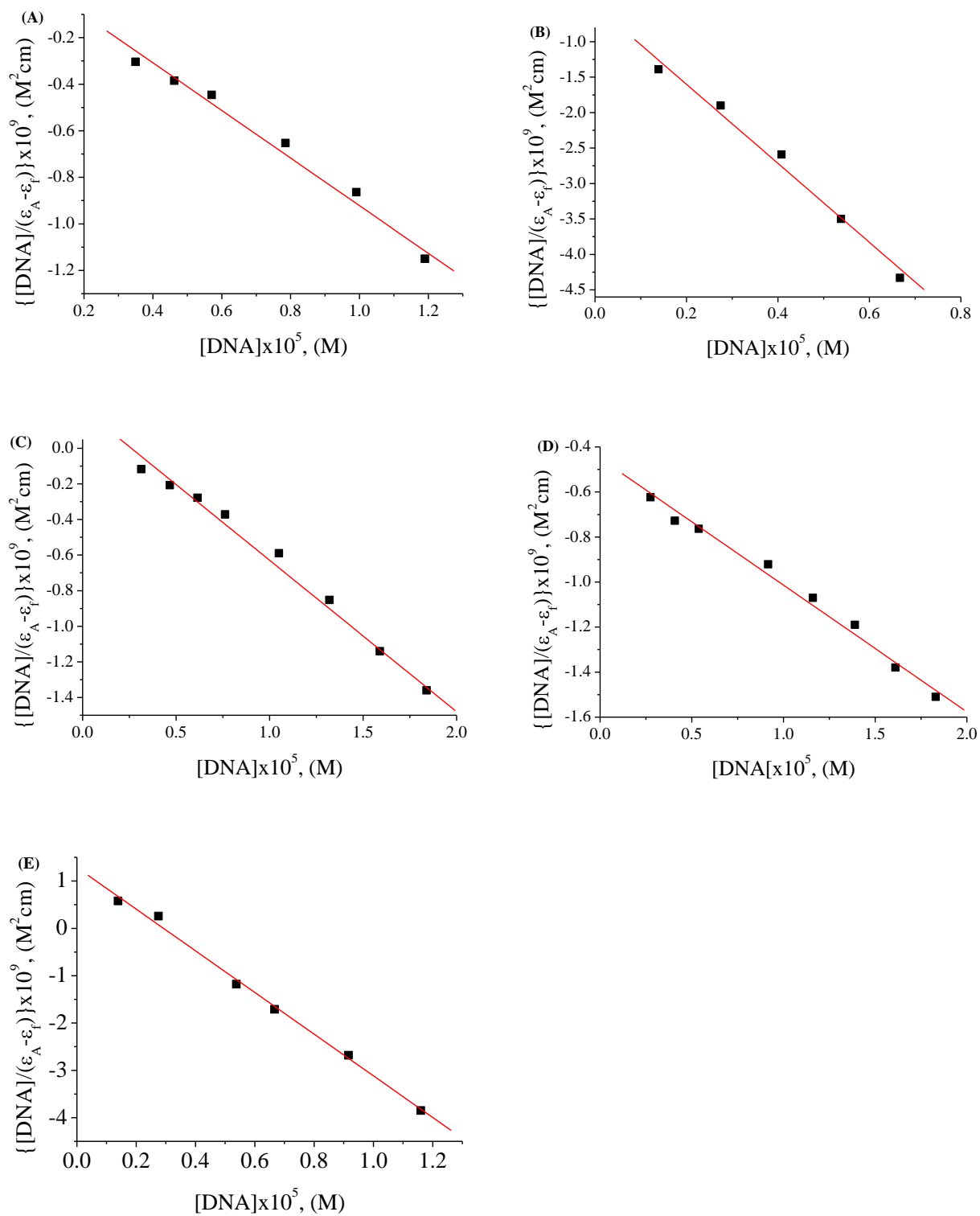


(A)

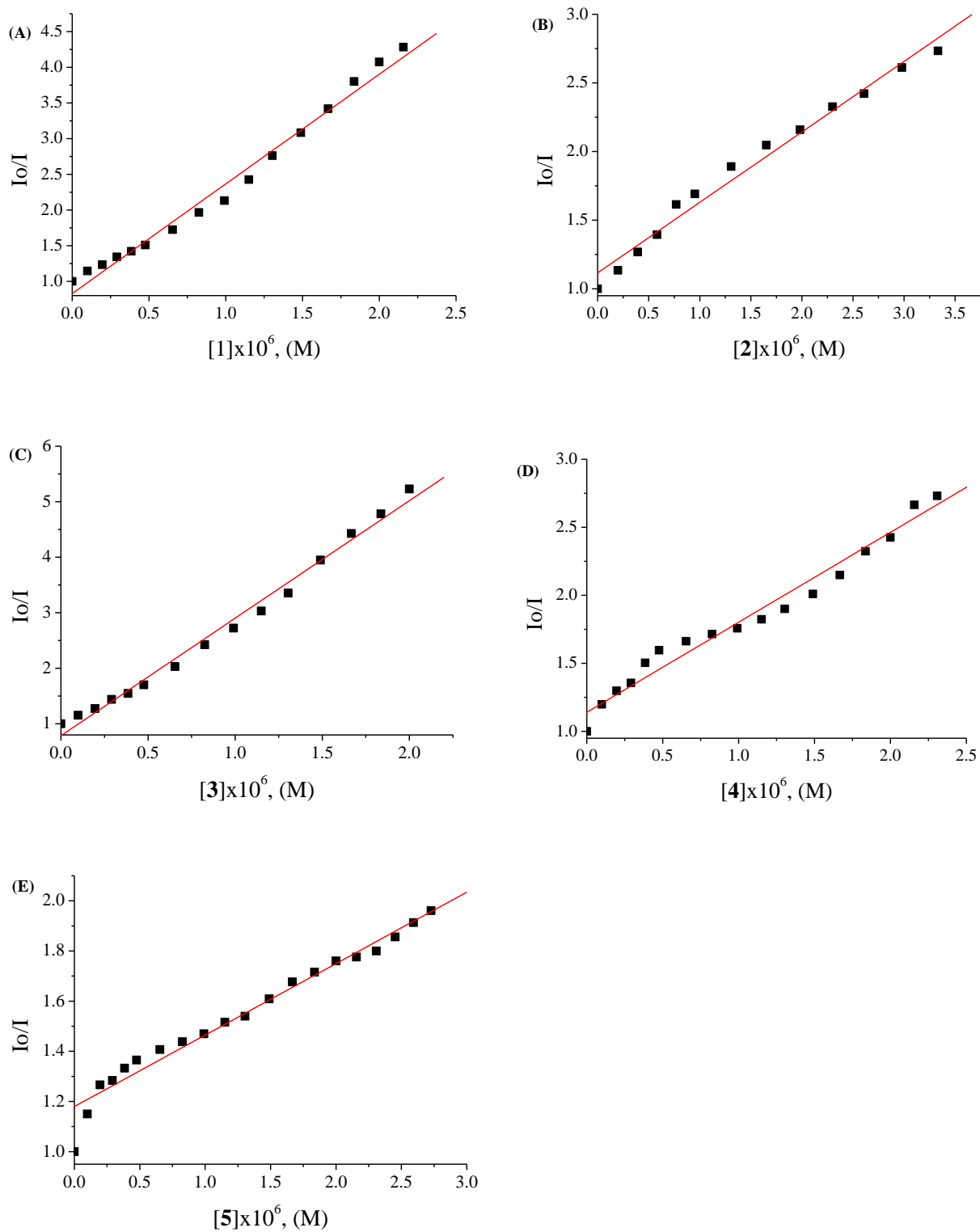


(B)

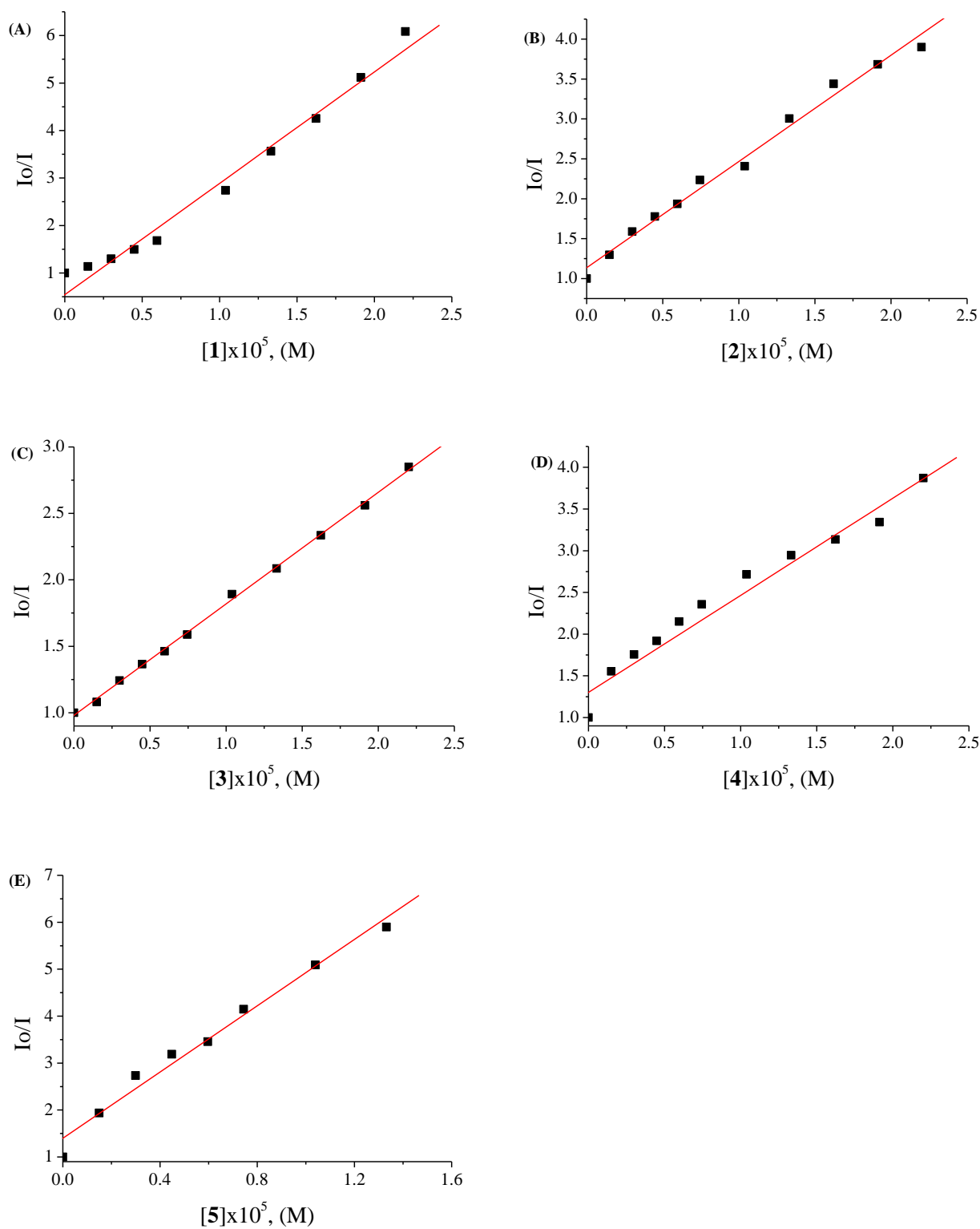
**Figure S2.** (A) Hydrogen bonding in 1:4MeOH, (B) chain formation. Hydrogen atoms not involved in the motif shown have been omitted for clarity.



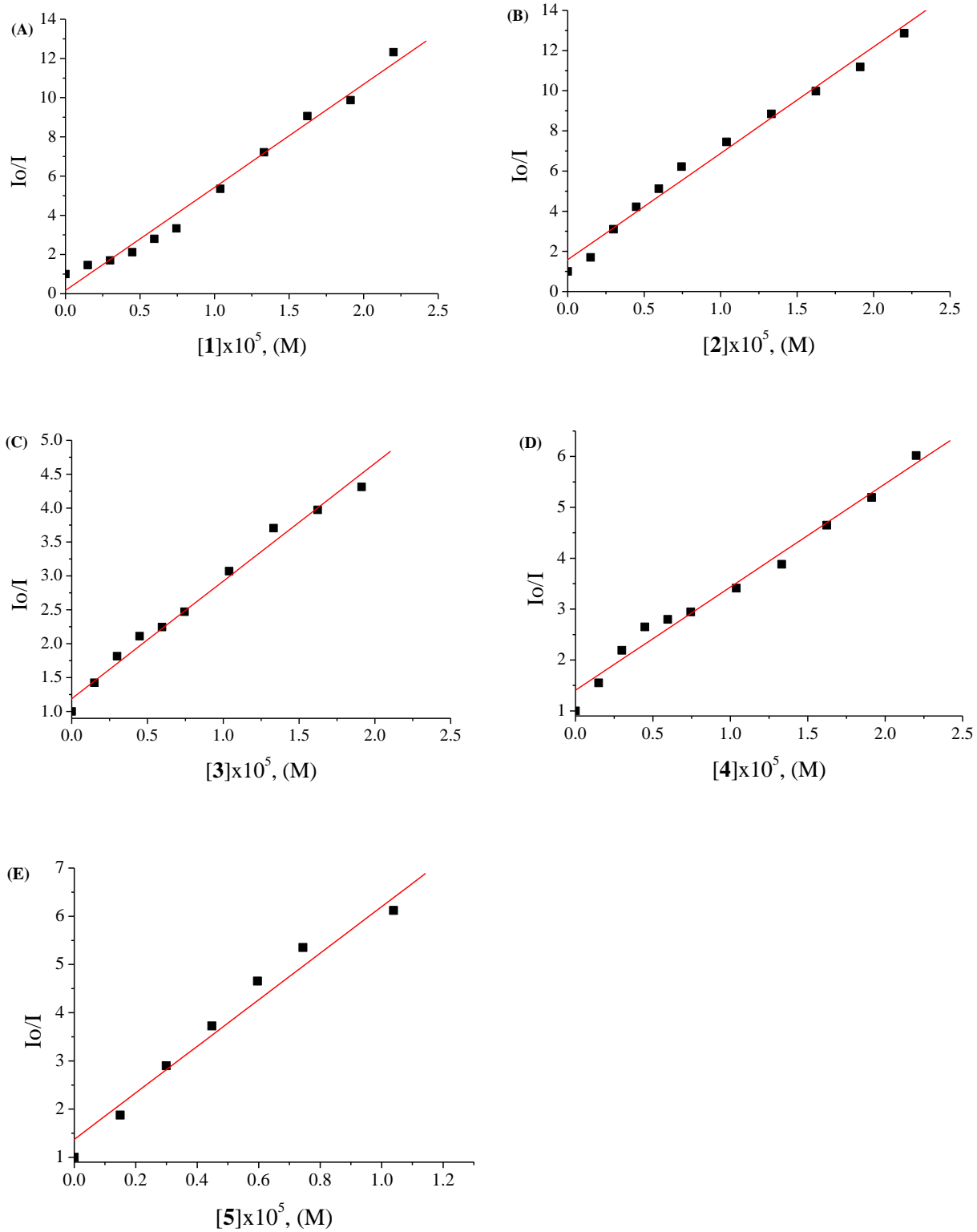
**Figure S3.** (A)–(E) Plot of  $\frac{[\text{DNA}]}{(\epsilon_A - \epsilon_f)}$  vs  $[\text{DNA}]$  for complexes 1–5, respectively.



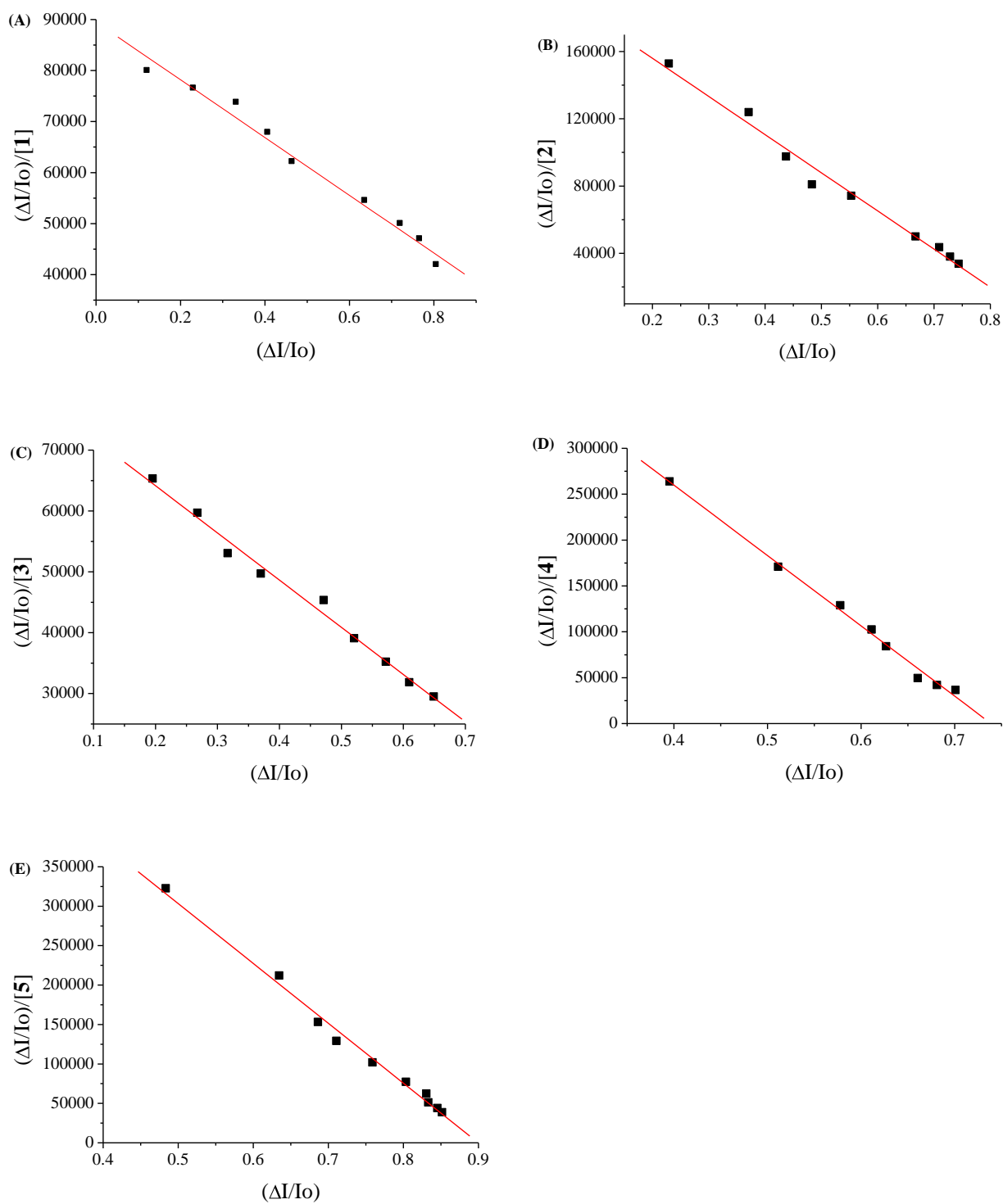
**Figure S4.** (A)–(E) Stern–Volmer quenching plot of EB bound to CT DNA for complexes 1–5, respectively.



**Figure S5.** (A)–(E) Stern–Volmer quenching plot of HSA for complexes 1–5, respectively.

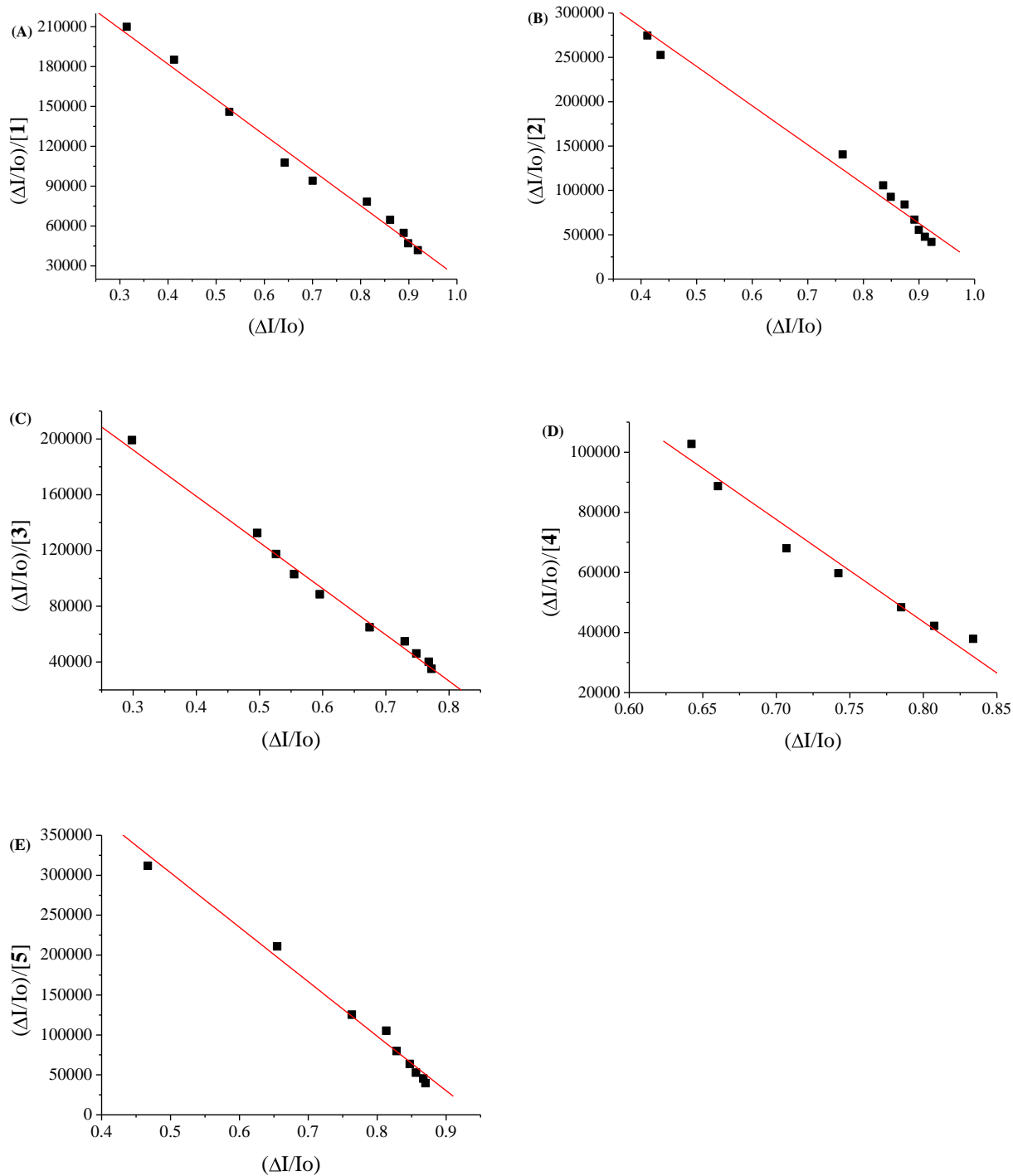


**Figure S6.** (A)–(E) Stern–Volmer quenching plot of BSA for complexes 1–5, respectively.



**Figure S7.** (A)–(E) Scatchard plot of HSA for complexes 1–5, respectively.





**Figure S8.** (A)–(E) Scatchard plot of BSA for complexes 1–5, respectively.