**Supplementary section**



**Fig. 16.** Effect of [Pd(8-QO)(Ala)] (a), [Pd(8-QO)(Val)] (b), [Pd(8-QO)(Leu)] (c) and [Pd(8-QO)(Ile)] (d) on the absorption spectrum of CT-DNA at 300 K. The inset plots show corresponding *K*app at 300K.



**Fig. 17.** Effect of [Pd(8-QO)(Leu)] on the absorption spectrum of BSA at 300 K. The inset plot shows corresponding *K*app at 300 K.





**Fig. 18.** the changes of absorbance of DNA at *λ*max = 260 nm due to increasing the concentration of [Pd(8-QO)(AA)] (where AA = Ala (c), Val (d), Leu (e), Ile (f) at temperatures of 300 and 310 K.



**Fig. 19.** The changes of absorbance of BSA at *λ*max = 280 nm due to increasing the concentration of [Pd(8-QO)(Leu)] at temperatures of 300 and 310 K.



**Fig. 20.** The emission spectra of DNA-EB due to increasing the concentration of [Pd(8-QO)(Leu)] complex.



**Fig. 21.** Stern-Volmer plots of quenching of DNA-EB fluorescence by [Pd(8-QO)(Leu)] at different temperatures (293, 300 and 310 K).



**Fig. 22.** Plot of log(*F*0-*F*)/*F* versus log[complex] of CT-DNA interaction with [Pd(8-QO)(Leu)] at different temperatures (293,300 and 310 K).



**Fig. 23.** The van't Hoff plot in the intereaction of [Pd(8-QO)(Leu)] with DNA-EB at different temperatures (293, 300 and 310 K).



**Fig. 24.** The emission spectra of BSA due to increasing the concentration of [Pd(8-QO)(Leu)].



**Fig. 25.** Stern-Volmer plots of quenching of BSA fluorescence by [Pd(8-QO)(Leu)] at different temperatures (293, 300 and 310 K).



**Fig. 26.** Plots of log(*F*0–*F*)/*F* versus log[complex] of BSA interaction with [Pd(8-QO)(Leu)] at different temperatures (293, 300 and 310 K).



**Fig. 27.** The van't Hoff plot in the interaction of [Pd(8-QO)(Leu)] with BSA at difference temperatures (293, 300 and 310 K).



**Fig. 28.** The Stern-Volrmer plots corresponding to the effect of site marker (warfarin or ibuprofen) to the [Pd(8-QO)(leu)]–BSA systems at 300 K.