Electronic Supplementary Material (ESI) for Dalton Transactions.


# Evaluation of the effects of newly synthesized metallophthalocyanines on breast cancer cell lines with photodynamic therapy

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## Content of supporting information

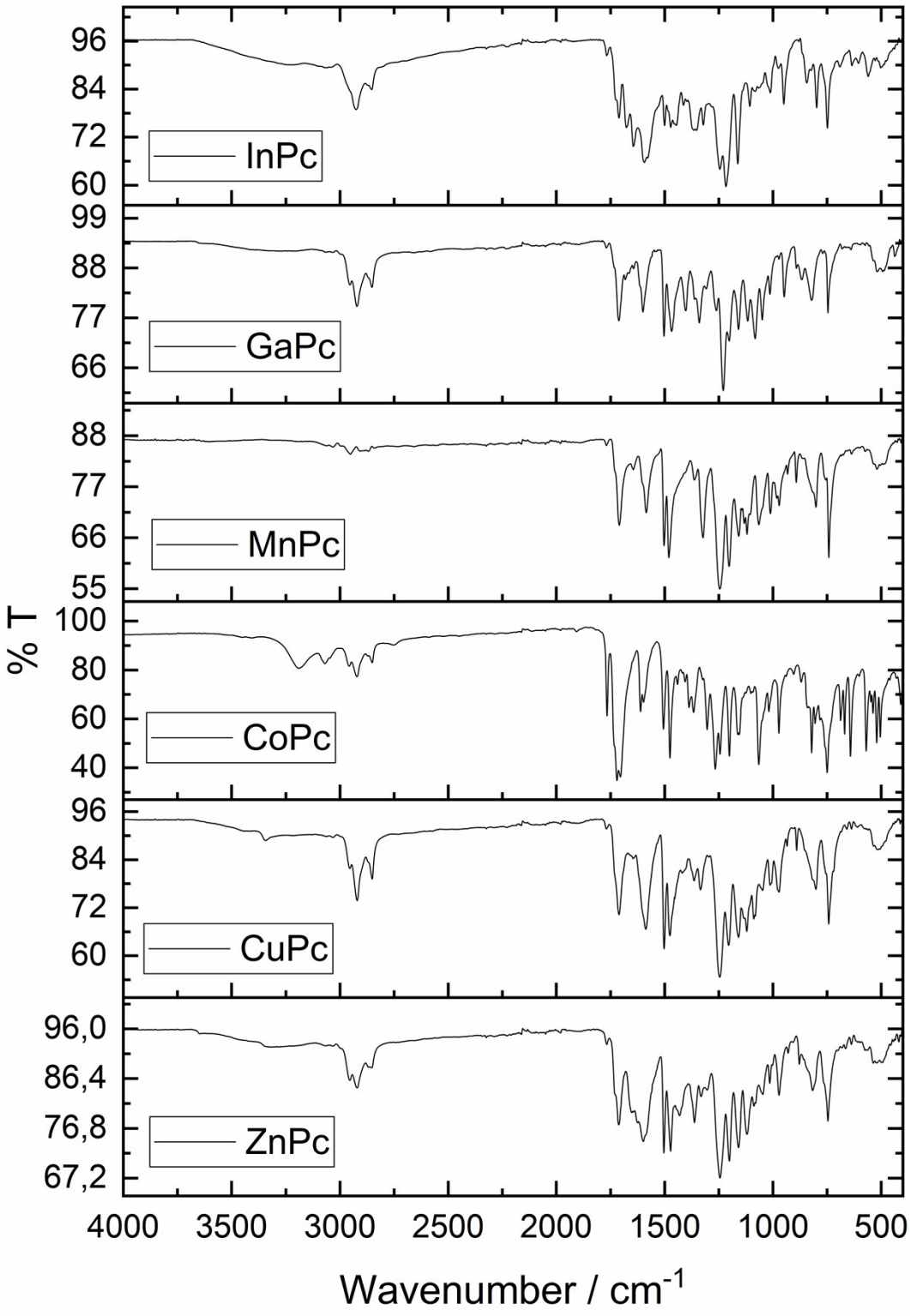


**Fig. S1** FTIR spectra of novel synthesized phthalocyanines (**2-7**)

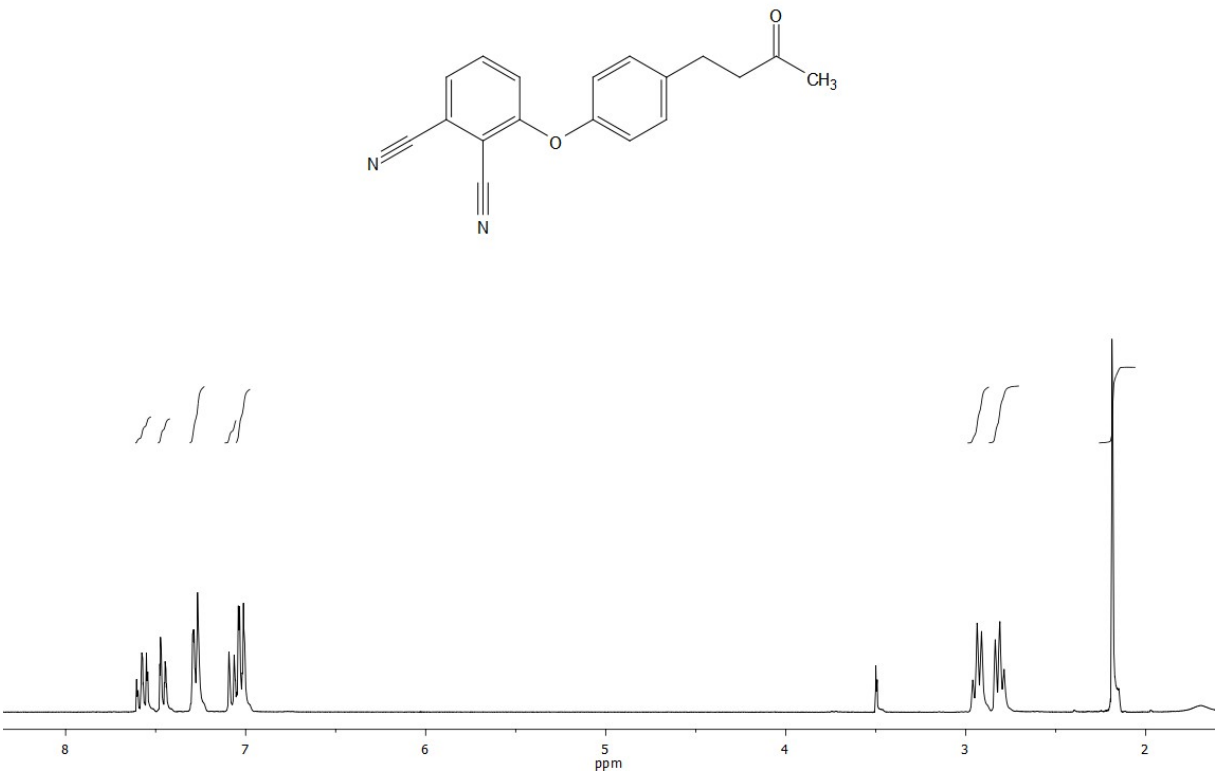


**Fig. S2** $^{1}$H-NMR spectra of 3-(4-(3-oxobutyl)phenoxy)phthalonitrile (**1**)

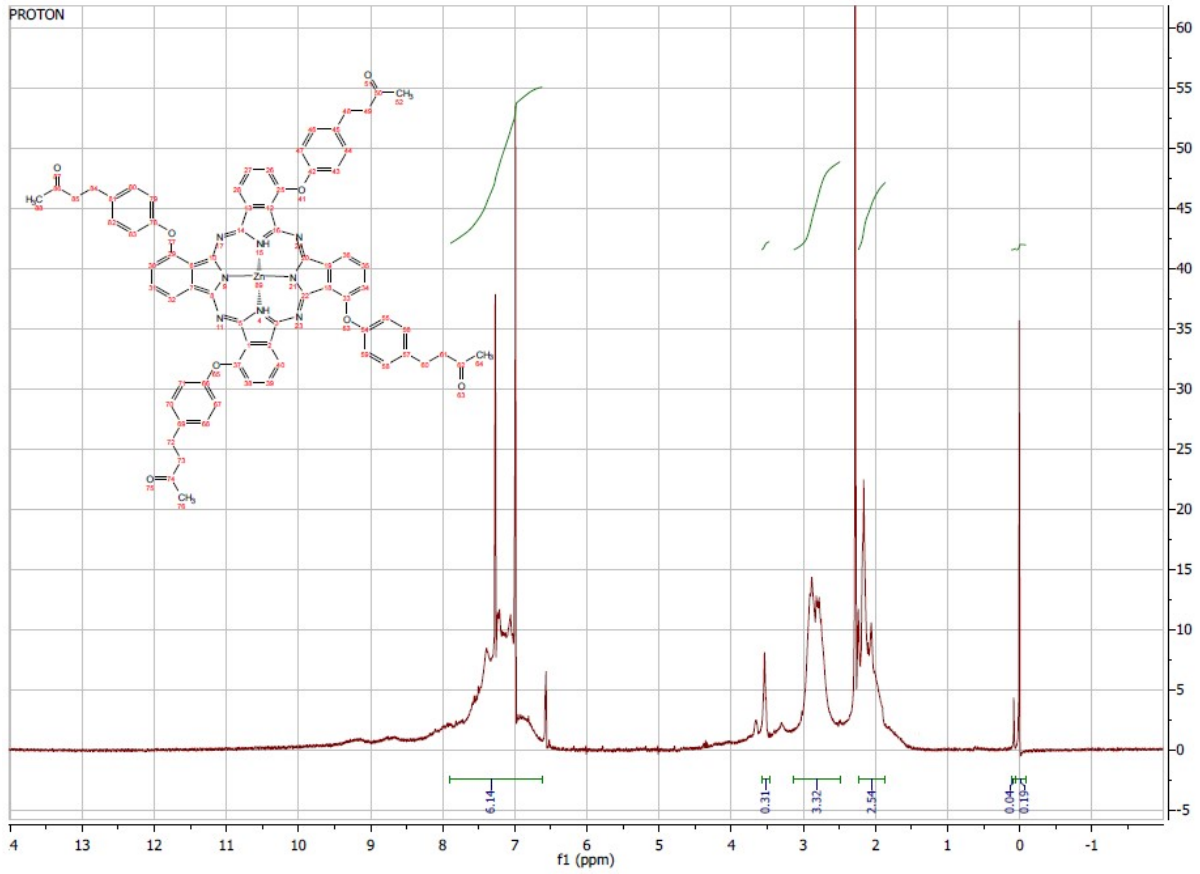


**Fig. S3** $^{1}$H-NMR spectra of ZnPc (**2**)

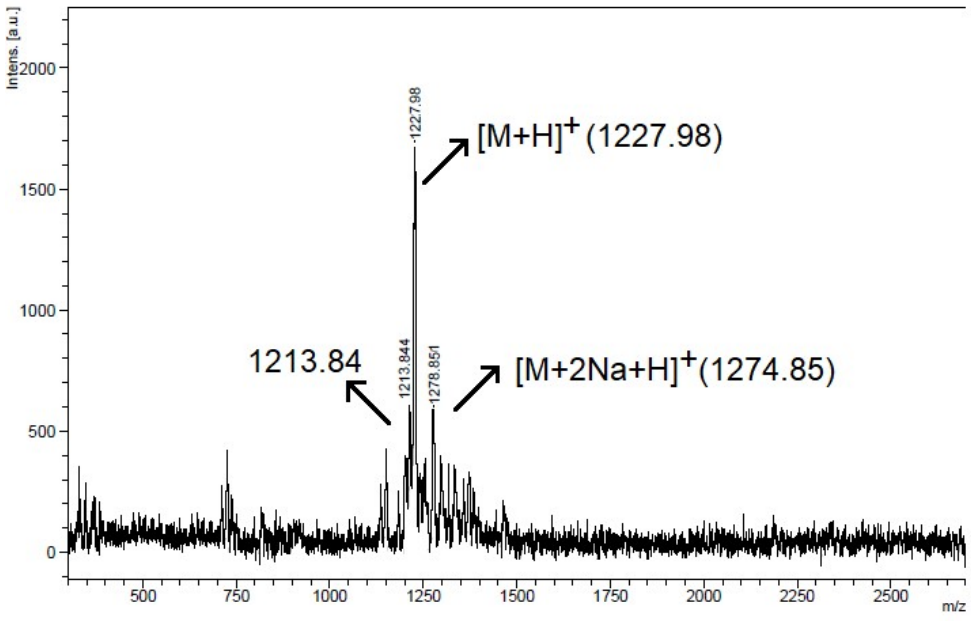


**Fig. S4** Mass spectrum of ZnPc (**2**)

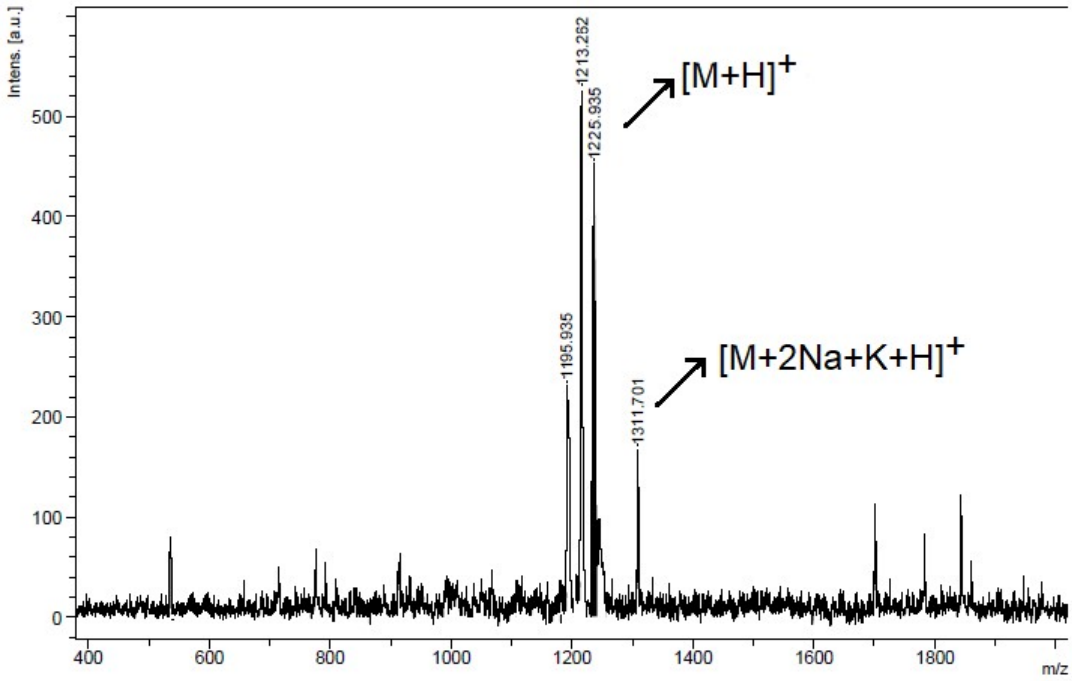


**Fig. S5** Mass spectrum of CuPc (**3**)

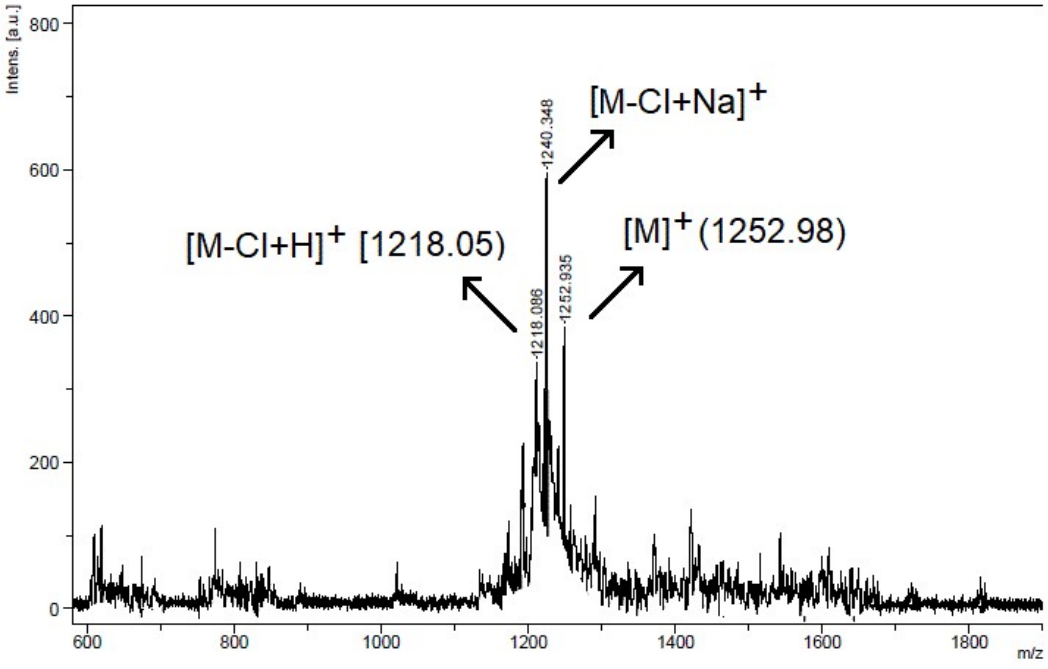


**Fig. S6** Mass spectrum of MnPc (**5**)

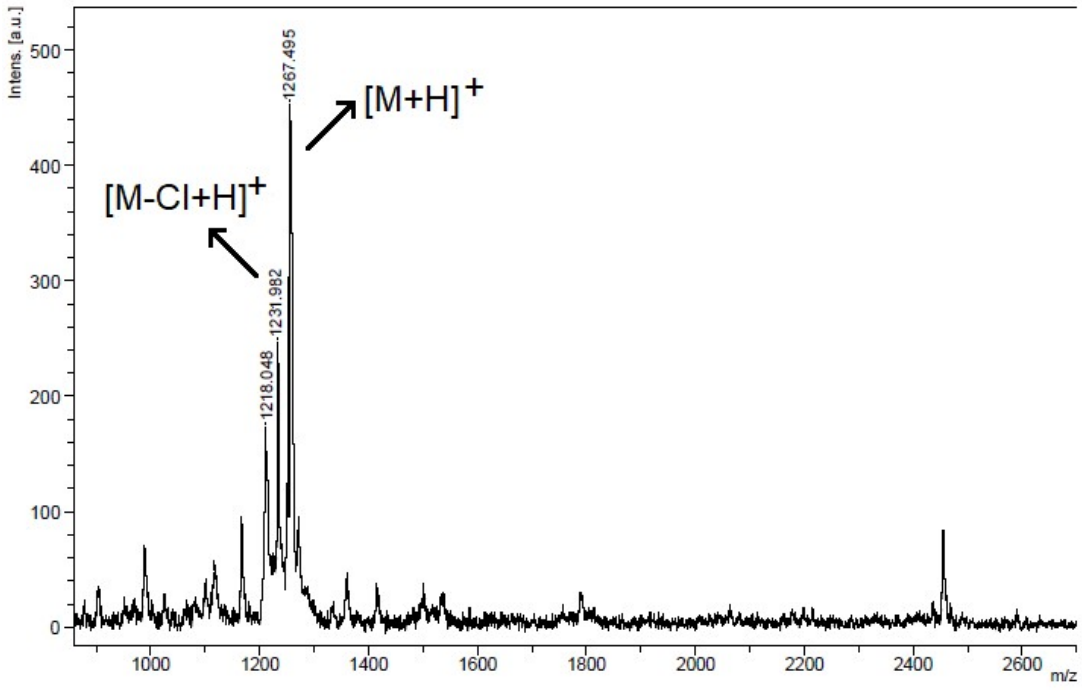


**Fig. S7** Mass spectrum of GaPc (**6**)

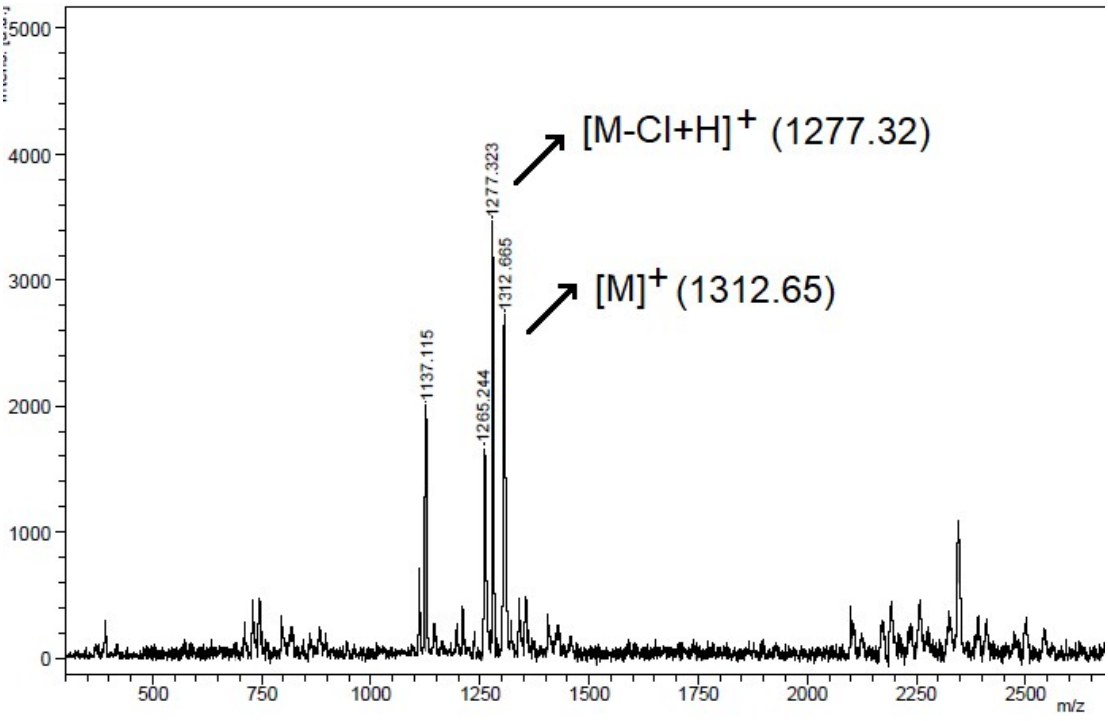


**Fig. S8** Mass spectrum of InPc (**7**)

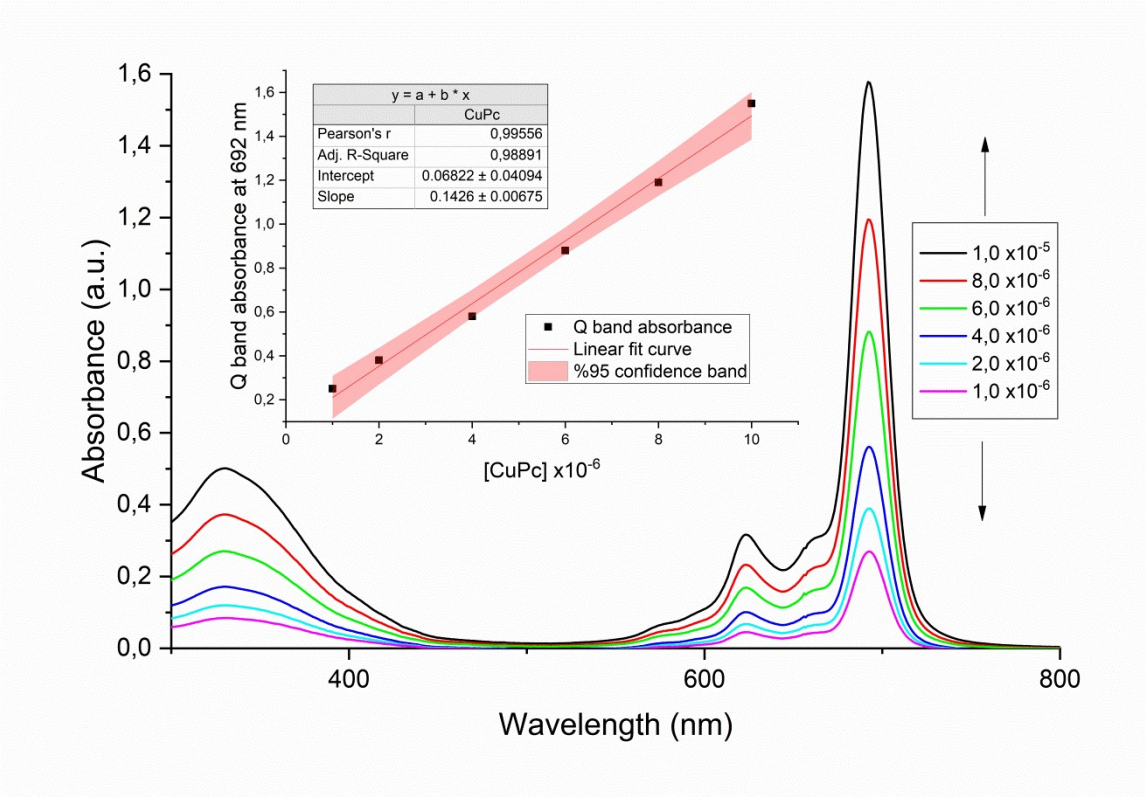


**Fig. S9** Electronic spectra of CuPc (**3**) at different concentration value in THF (inset: Q-band absorbance versus concentration).

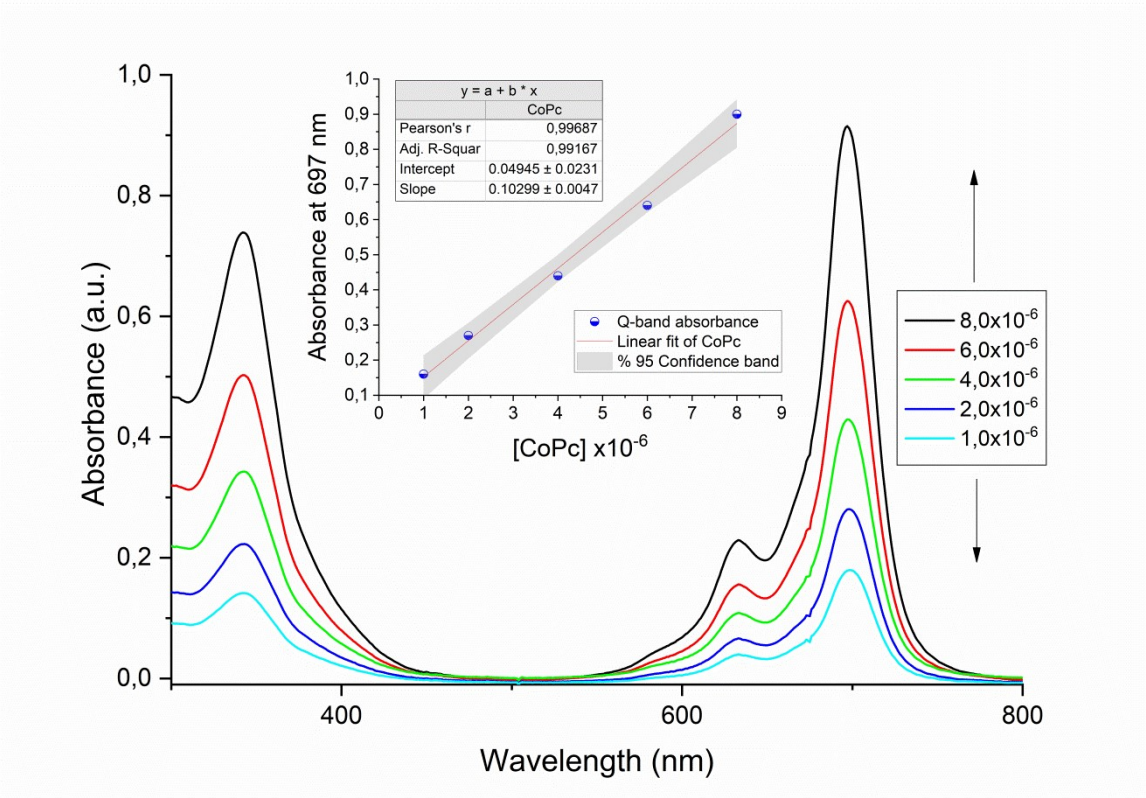


**Fig. S10** Electronic spectra of CoPc (**4**) at different concentration value in THF (inset: Q-band absorbance versus concentration).

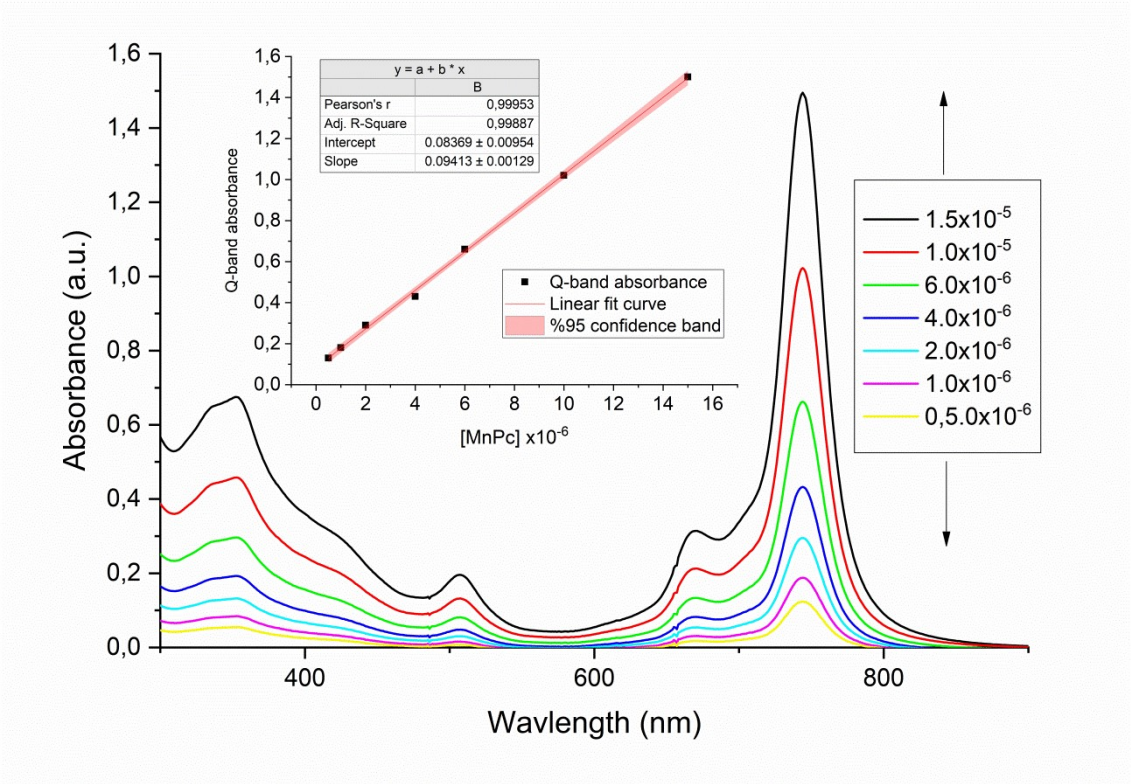


**Fig. S11** Electronic spectra of MnPc (**5**) at different concentration value in THF (inset: Q-band absorbance versus concentration).

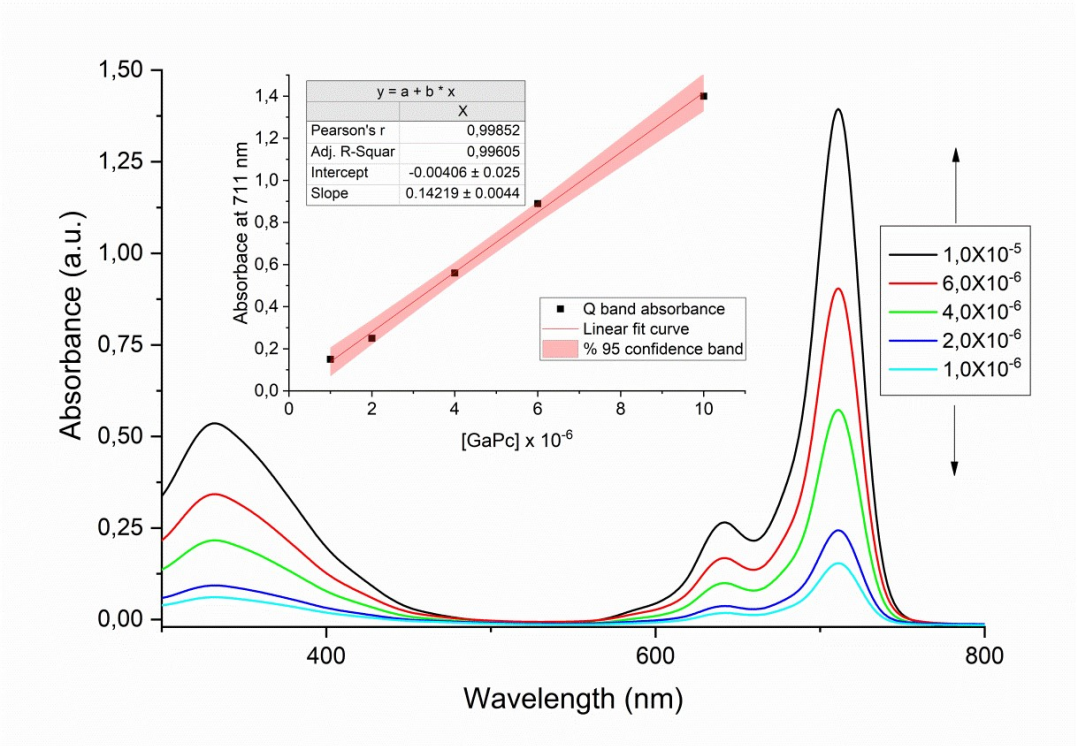


**Fig. S12** Electronic spectra of GaPc (**6**) at different concentration value in THF (inset: Q-band absorbance versus concentration)

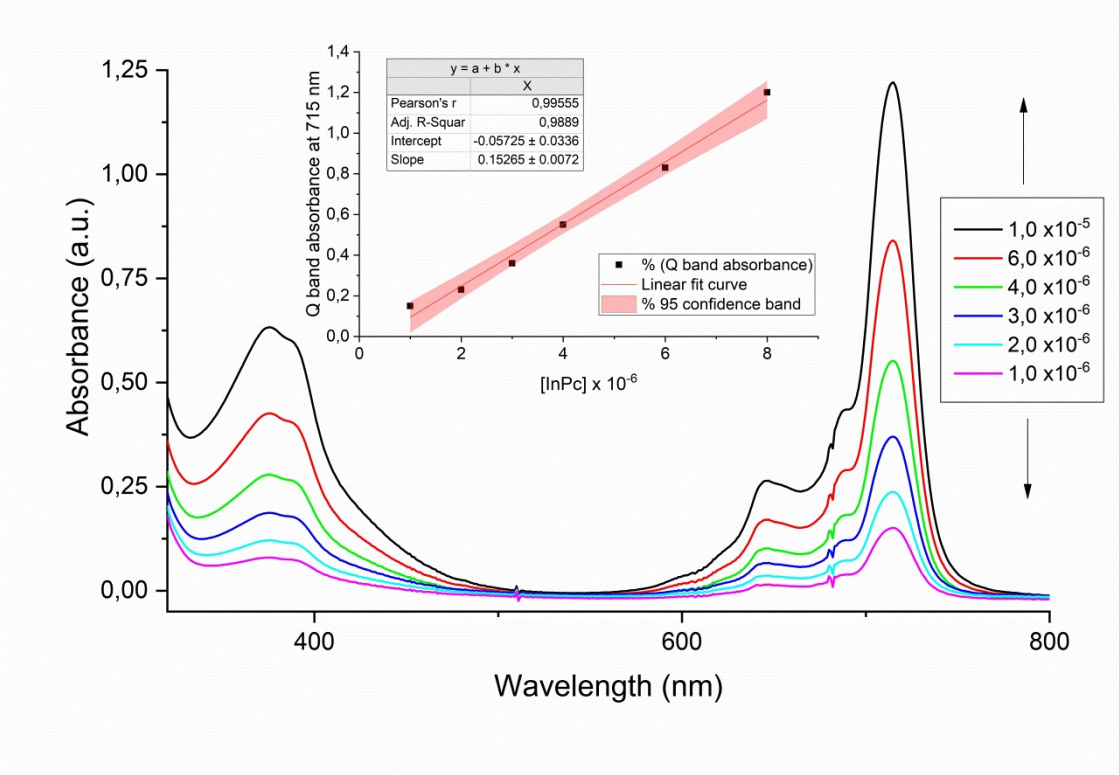


**Fig. S13** Electronic spectra of InPc (**7**) at different concentration value in THF (inset: Q-band absorbance versus concentration).

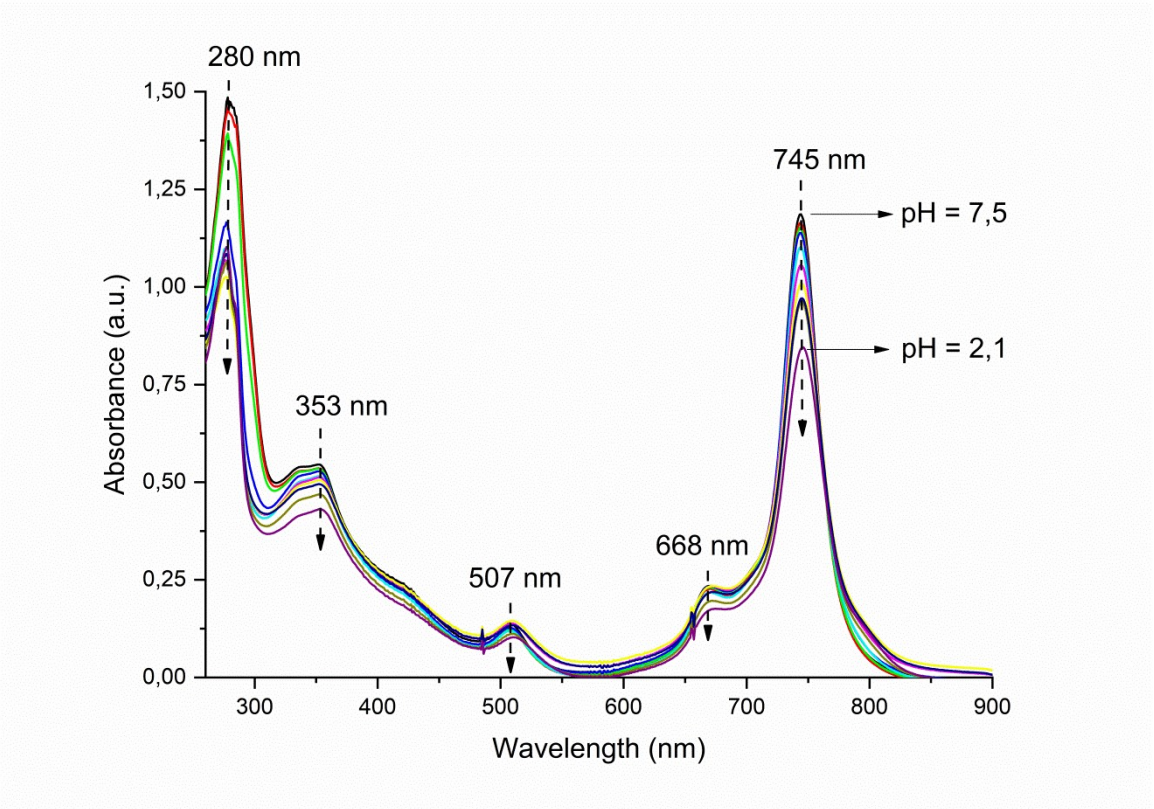


**Fig. S14** UV-Vis spectra of MnPc (**5**) at different pH values.

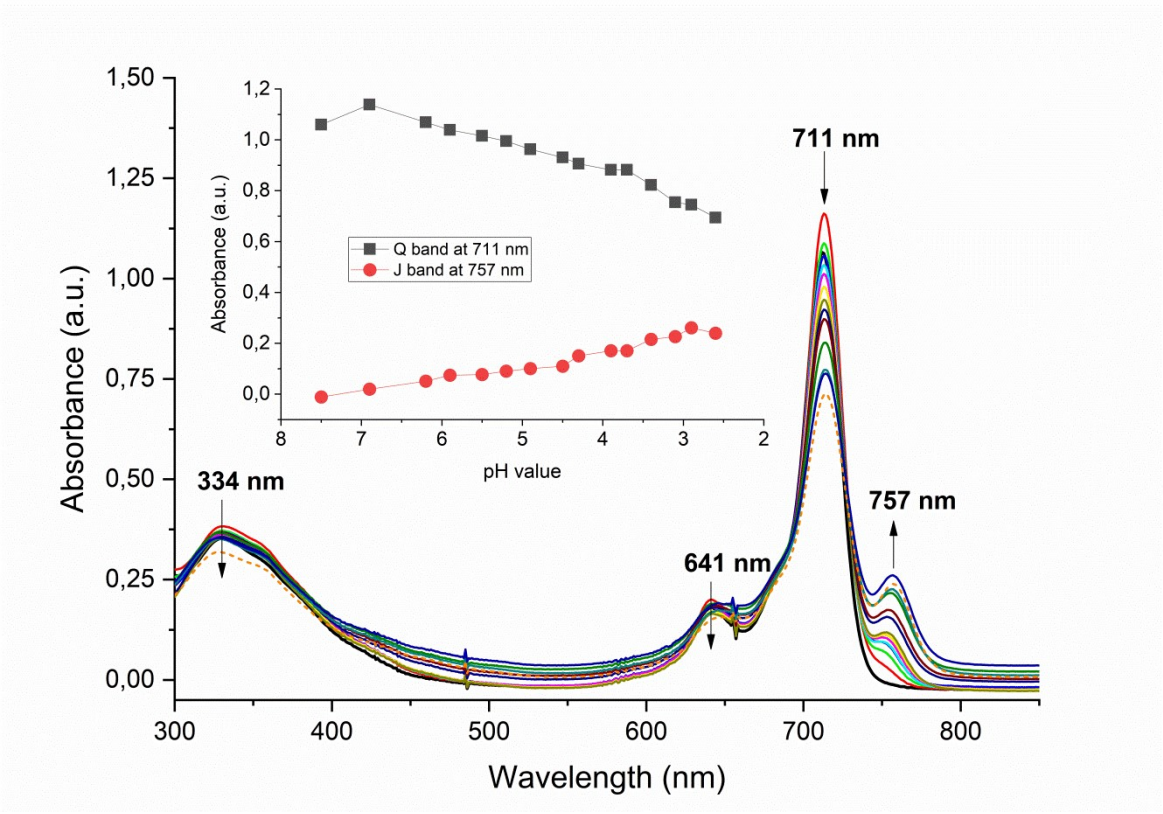


**Fig. S15** UV-Vis spectra of GaPc (**6**) at different pH values (inset: the change of Q-band and J-band absorbance versus pH value).

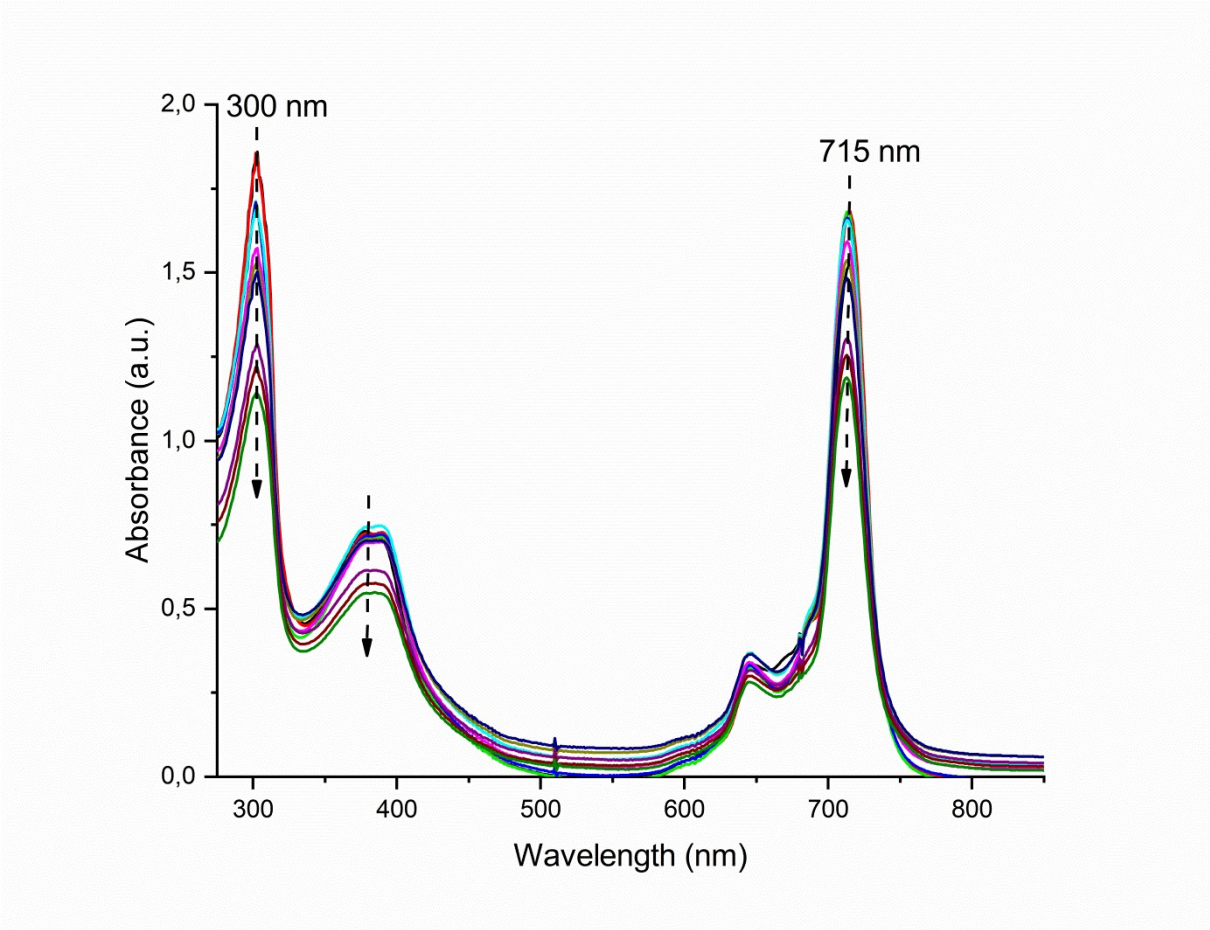


**Fig. S16** UV-Vis spectra of InPc (**6**) at different pH values

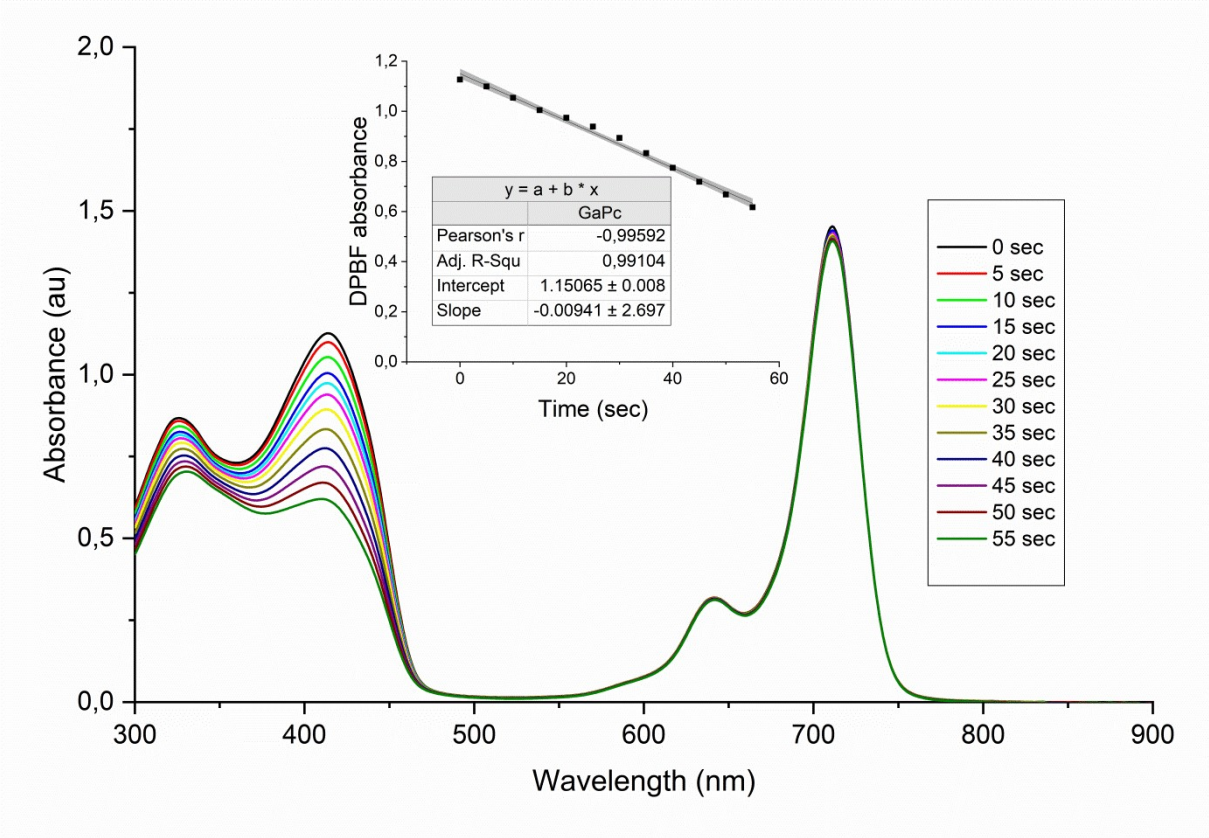


**Fig. S17** Absorption changes of GaPc **(6)** during the determination of singlet oxygen quantum yield in DMSO (inset: plot of DPBF absorbance vs. time).

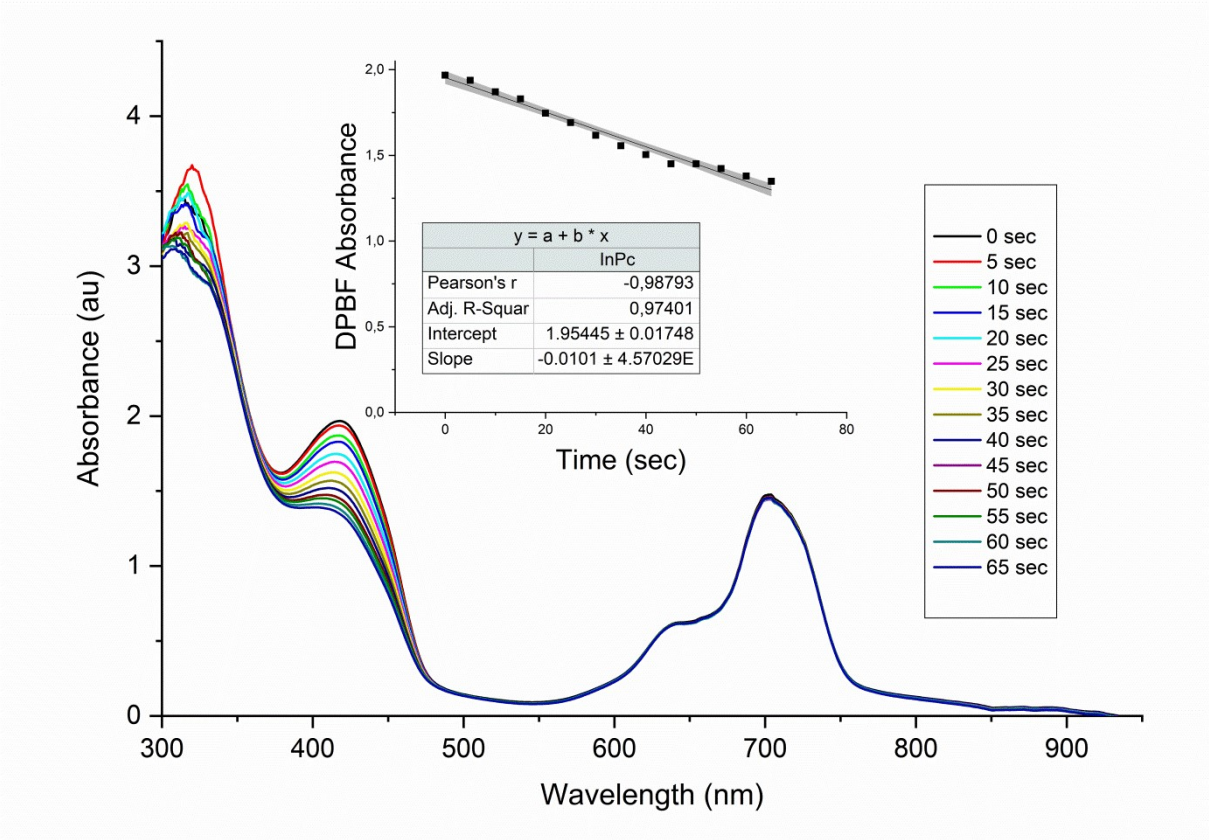


**Fig. S18** Absorption changes of InPc **(7)** during the determination of singlet oxygen quantum yield in DMSO (inset: plot of DPBF absorbance vs. time).