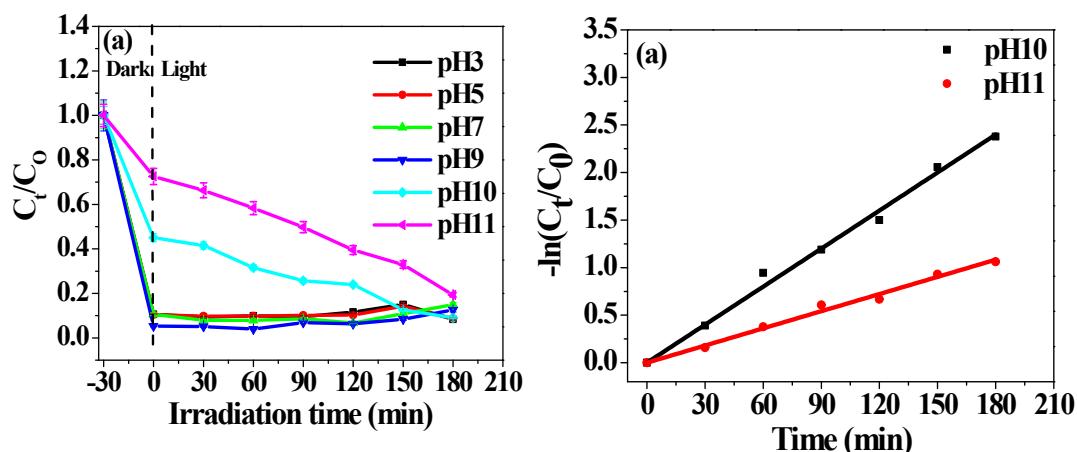
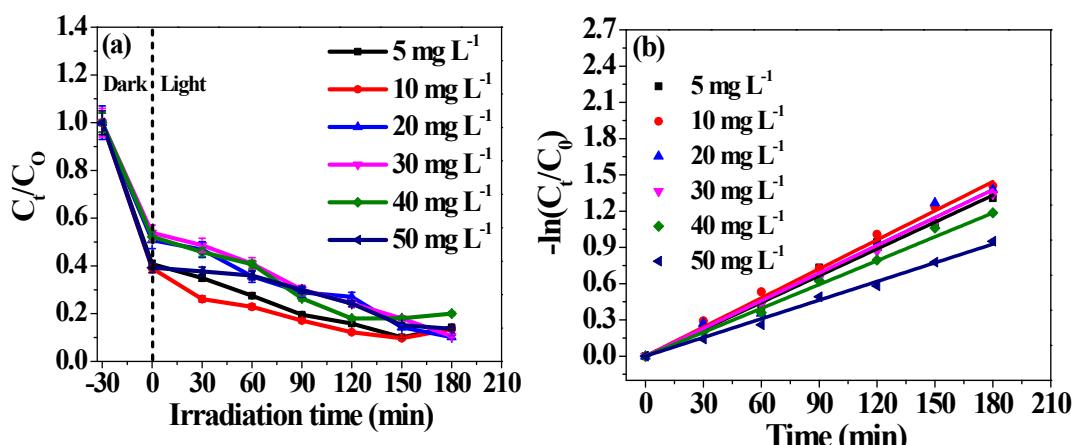


**AN INSIGHT INTO THE PHOTODEGRADATION MECHANISM OF BISPHENOL-A BY OXYGEN DOPED MESOPOROUS CARBON NITRIDE UNDER VISIBLE IRRADIATION AND DFT CALCULATION**

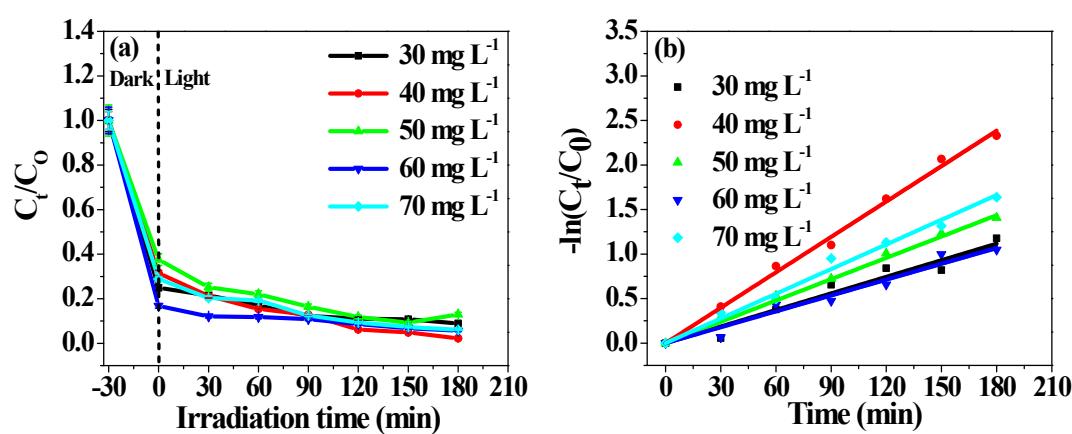
Shittu Fatimah Bukola, Anwar Iqbal, Mohammad Norazmi Ahmad, Muhammad Rahimi Yusop, Mohamad Nasir Mohamad Ibrahim, Sumiyyah Sabar, Lee D. Wilson, Dede Heri Yuli Yanto



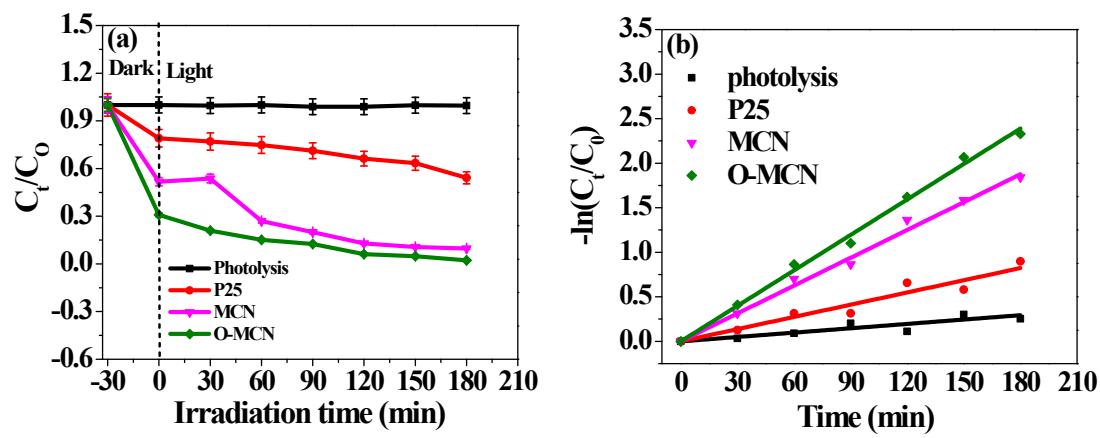
**Fig. S1** The plot of (a) effect of initial pH of BPA and (b) pseudo-first-order kinetics of BPA photodegradation by O-MCN nanocomposite in different pH media on the removal of BPA ( $[BPA] = 20 \text{ mg L}^{-1}$ ;  $[O\text{-MCN}] = 50 \text{ mg L}^{-1}$ ).



**Fig. S2** The plot of (a) effect of initial concentration of BPA and (b) pseudo-first order kinetics of BPA photodegradation by O-MCN nanocomposite under different initial concentration of BPA solution. ( $[BPA] = 5, 10, 20, 30, 40$  and  $50 \text{ mg L}^{-1}$ ;  $[0.2O\text{-MCN}] = 50 \text{ mg L}^{-1}$ ; pH = 10).



**Fig. S3** The plot of (a) effect of catalyst dosage on BPA and (b) pseudo-first order kinetics of BPA photodegradation using different dosages of O-MCN nanocomposite. ( $[BPA] = 10 \text{ mg L}^{-1}$ ;  $[O\text{-MCN}] = 30, 40, 50, 60$  and  $70 \text{ mg L}^{-1}$ ; pH= 10).



**Fig. S4** The plot of (a) the effect of different synthesized photocatalyst and (b) pseudo-first order kinetics of BPA photodegradation using different synthesized against P25 on degradation of BPA ( $[BPA] = 10 \text{ mg L}^{-1}$ ;  $[catalyst] = 40 \text{ mg L}^{-1}$ ; pH= 10).