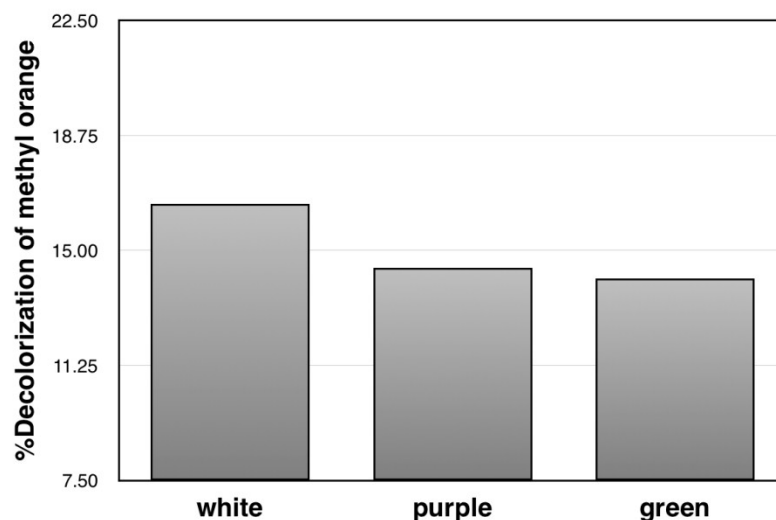
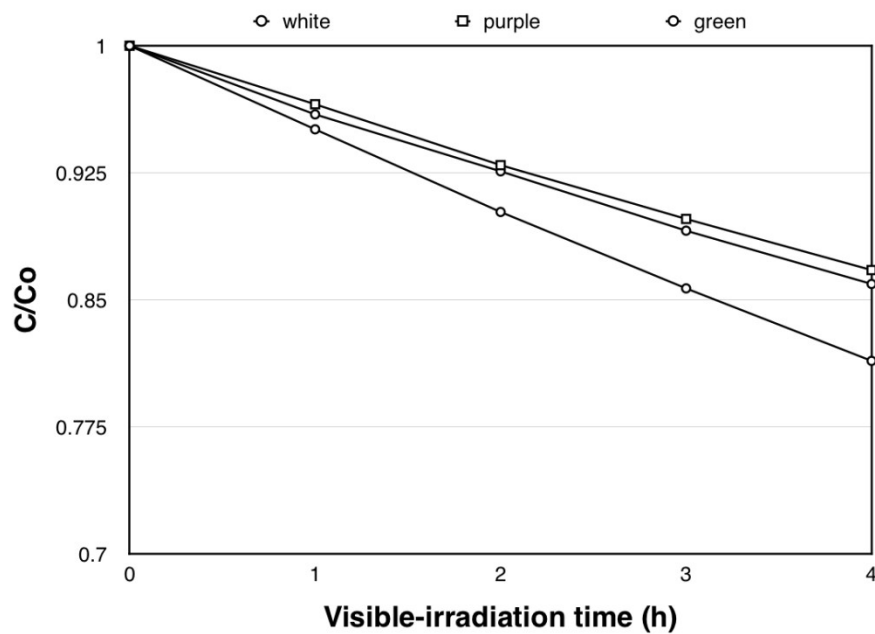


(S1)



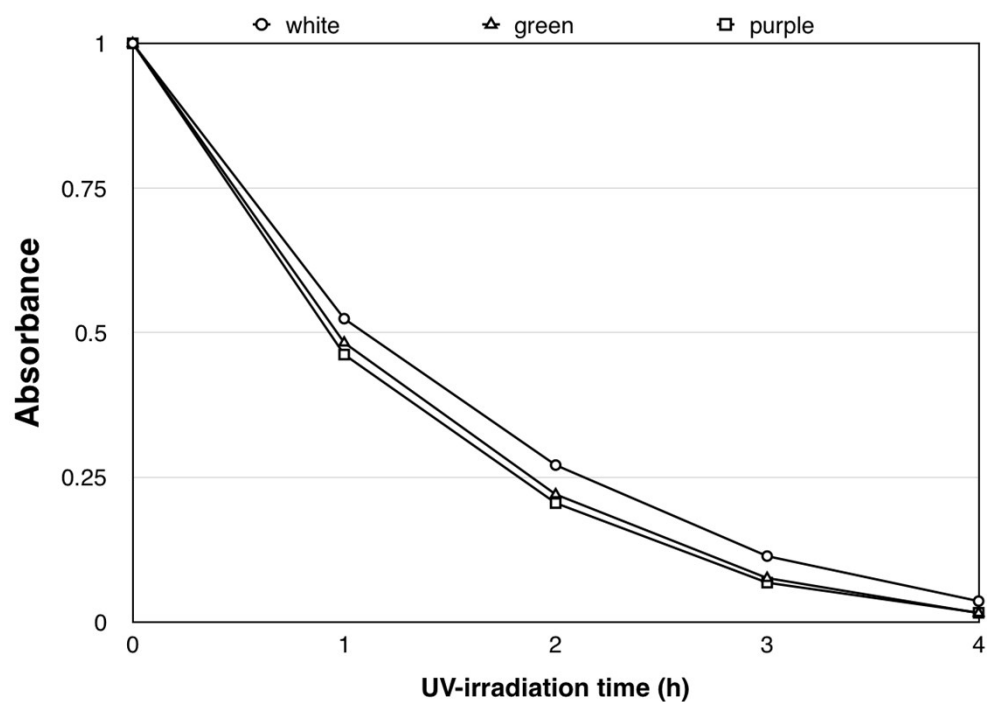
S1 : Photobleaching of methyl orange under UV irradiation for 24 hours, without  $\text{H}_2\text{O}_2$  addition

(S2)



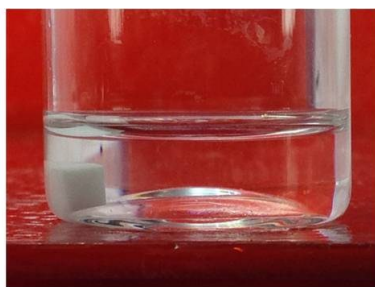
S2 : Photobleaching of methyl orange in the presence of  $\text{H}_2\text{O}_2$  under visible light irradiation

S3

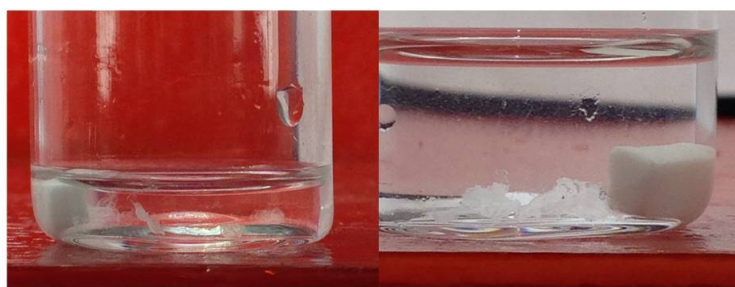


S2 : Photobleaching of methyl orange in the presence of  $H_2O_2$  with UV irradiation of new composition coloured ZBP glasses ( 50 mol% ZnO concentration)

S4



acrylamide + UV 24 h



ZBP + acrylamide + UV 24 h

S4 : Polyacrylamide prepared by radical polymerization initiating using the synthesized white ZBP glass