

Supplementary Information

From spent dye-loaded palygorskite to a multifunctional palygorskite/carbon/Ag nanocomposite

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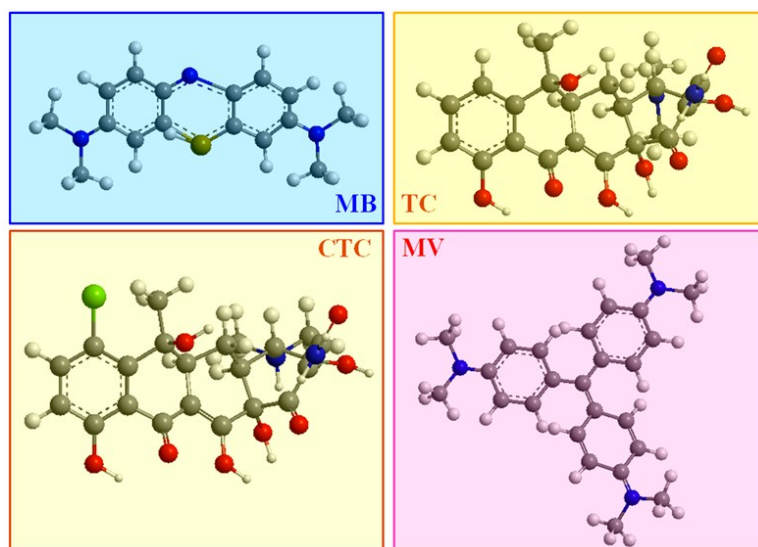


Fig. S1 The molecular structure scheme of MB, TC, CTC and MV.

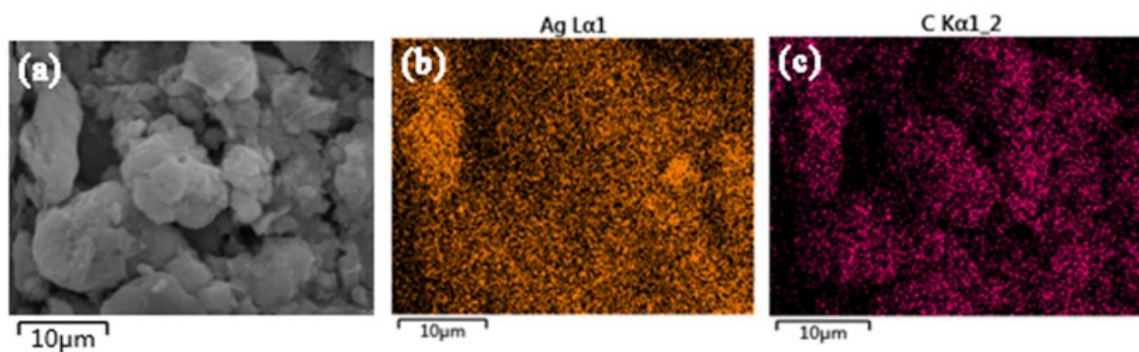


Fig. S2 SEM image of PAL/C/AgNPs-10 (a); Elemental mapping of Ag element in PAL/C/AgNPs-10 (b), and C element in PAL/C/AgNPs-10 (c).

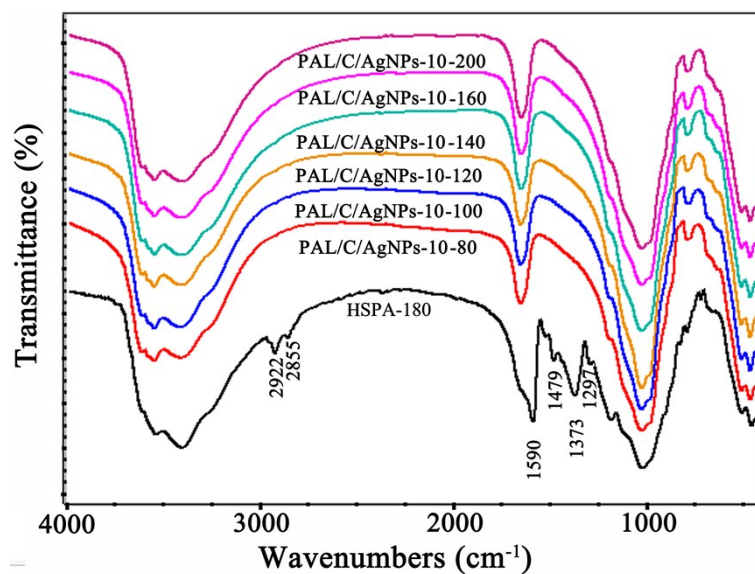


Fig. S3 FTIR spectra of the hydrothermal treated MV-loaded PAL at 180 °C (HSPA-180) in the absence of Ag(I) and the nanocomposites prepared at different hydrothermal temperatures in the presence of 10 mass% of AgNO₃.

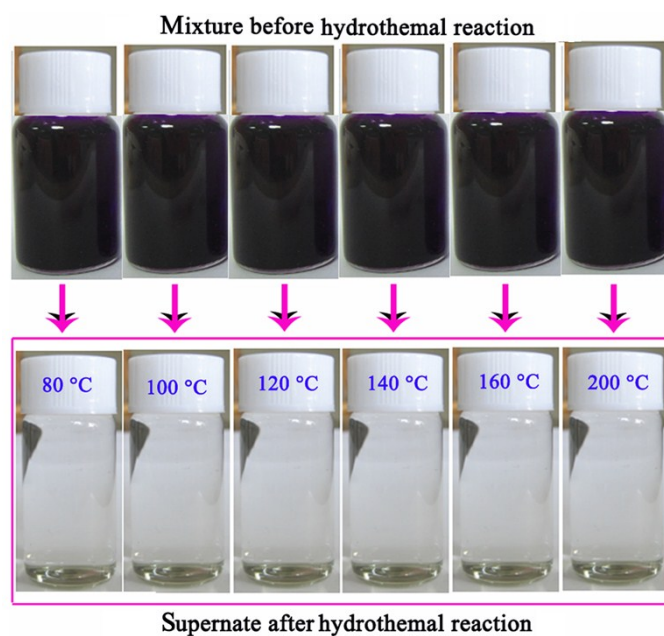


Fig. S4 Digital photographs of the supernate after being treated at different hydrothermal temperature.

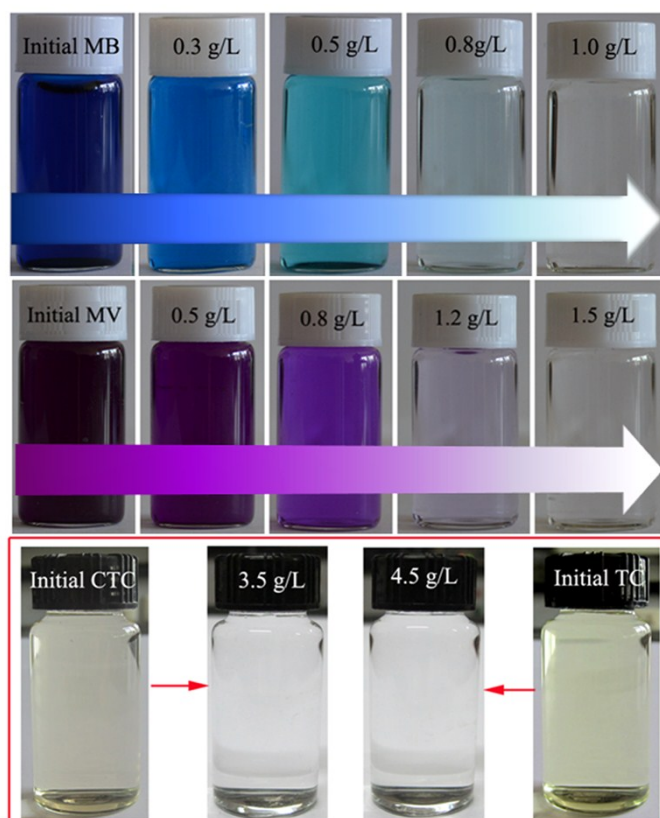


Fig. S5 Digital photographs of the supernatant before and after adsorption by different dosage of PAL/C/AgNPs-5 nanocomposite (g/L).

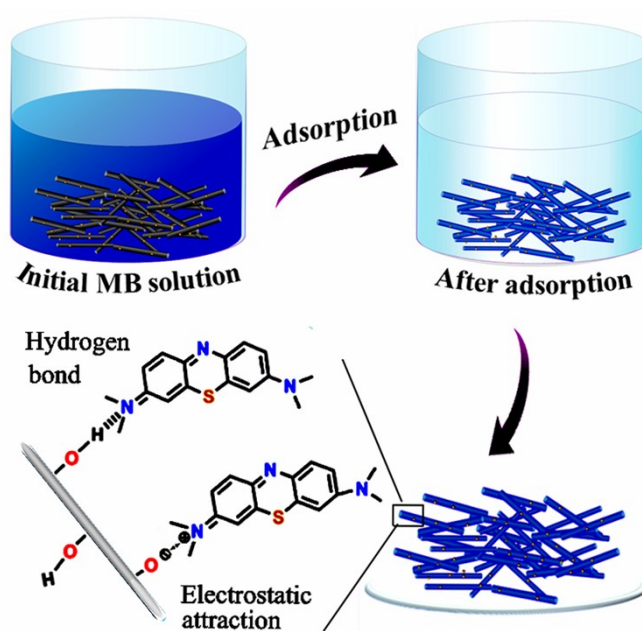


Fig. S6 A proposed mechanism for the adsorption of MB onto the PAL/C/AgNPs nanocomposite