Electronic supplementary information

Ball milling synthesis of Fe_3O_4 nanoparticles-functionalized porous boron nitride with enhanced cationic dye removal performance

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Fig. S1 (a) XRD patterns of Fe_3O_4/PBN2 and Fe_3O_4/PBN3. (b) FTIR spectra of Fe_3O_4/PBN2 and Fe_3O_4/PBN3.

Fig. S2 Effect of temperature on the adsorption performance of Fe_3O_4/PBN1 for MB.

Fig. S3 Effect of the different water sources on the adsorption performance of Fe_3O_4/PBN for MB.

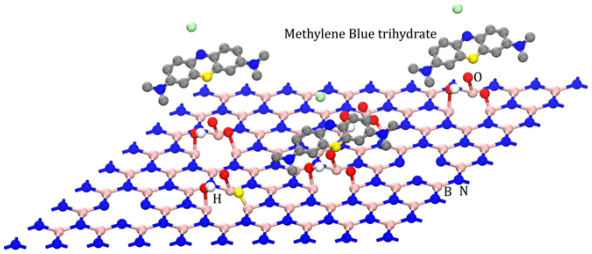

Fig. S4 Schematic diagram of the interaction mechanism between the dye molecules and the Fe_3O_4/PBN.

Fig. S5 Reusability of Fe_3O_4/PBN1 for MB regenerated by catalytic degradation method with the assistance of H_2O_2.

Fig. S6 Zeta-potential *vs.* pH values of the regenerative Fe_3O_4/PBN1 after the tenth cycle.