

Electronic Supplementary Information (ESI)

Highly enhanced cationic dye adsorption from water by nitro-functionalized Zn-MOF nano/microparticles and biomolecular binder for improving the reusability

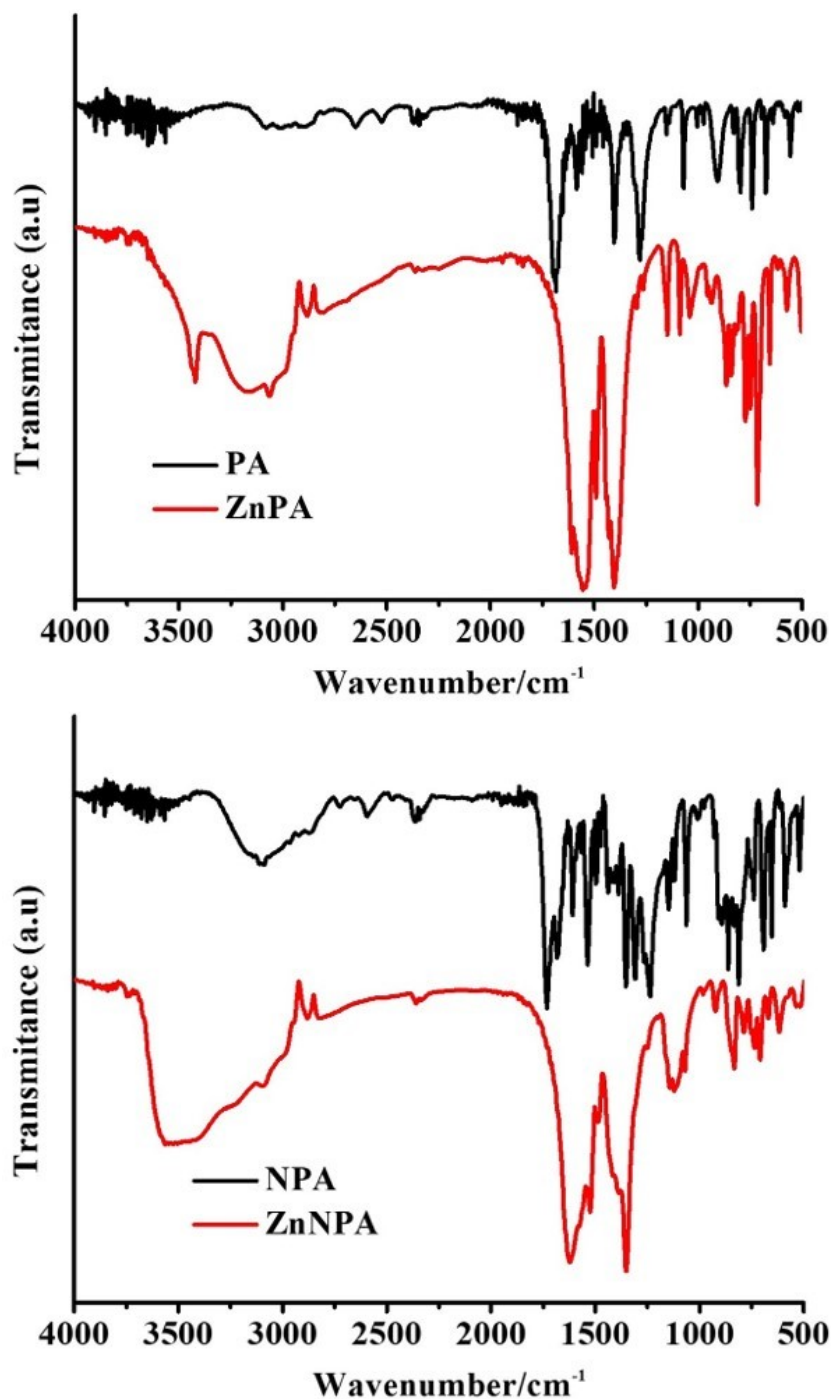


Figure S1. Comparing FTIR spectra of phthalic acid (PA) and nitrophthalic acid (NPA) ligands with corresponding Zn-MOFs nano/microparticles.

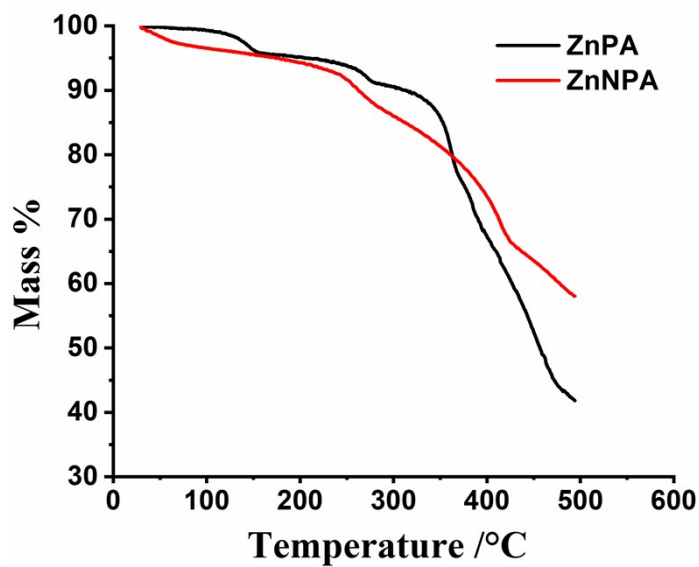


Figure S2. TGA of ZnPA and ZnNPA MOFs.

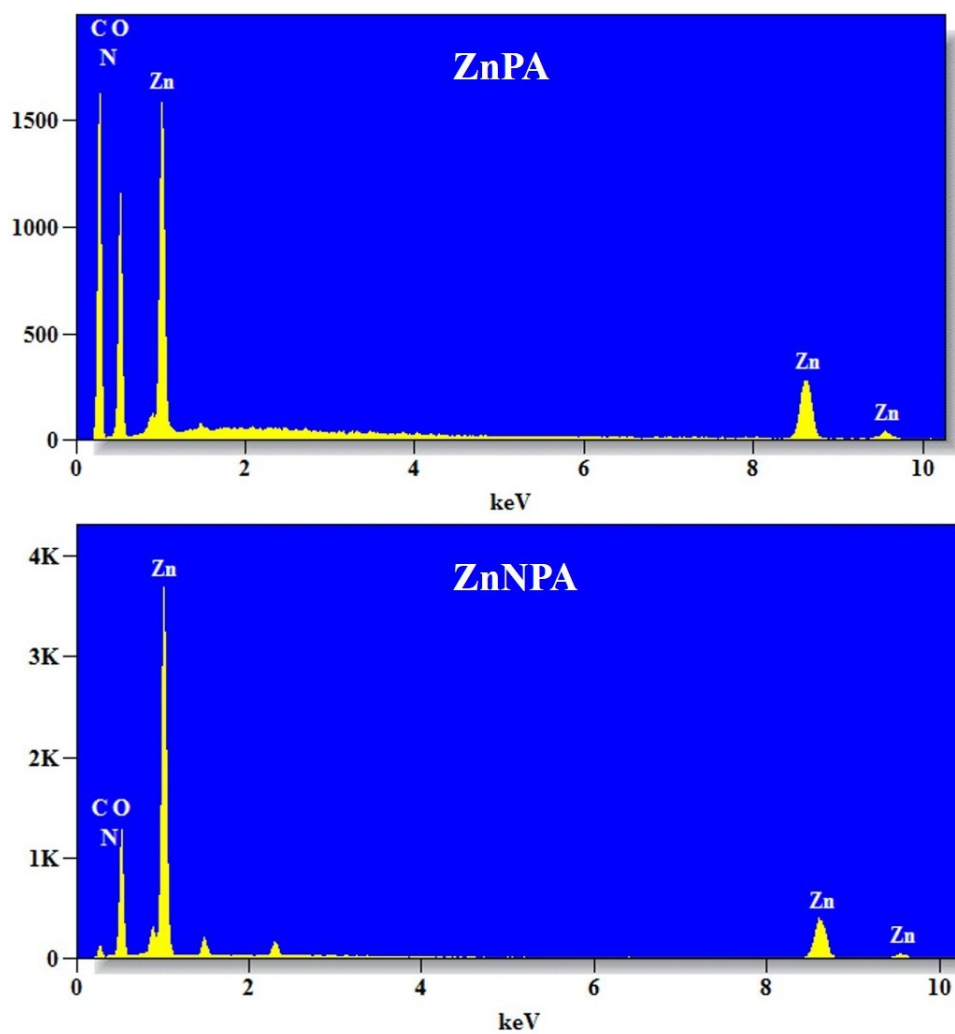


Figure S3. EDX of ZnPA and ZnNPA MOFs.

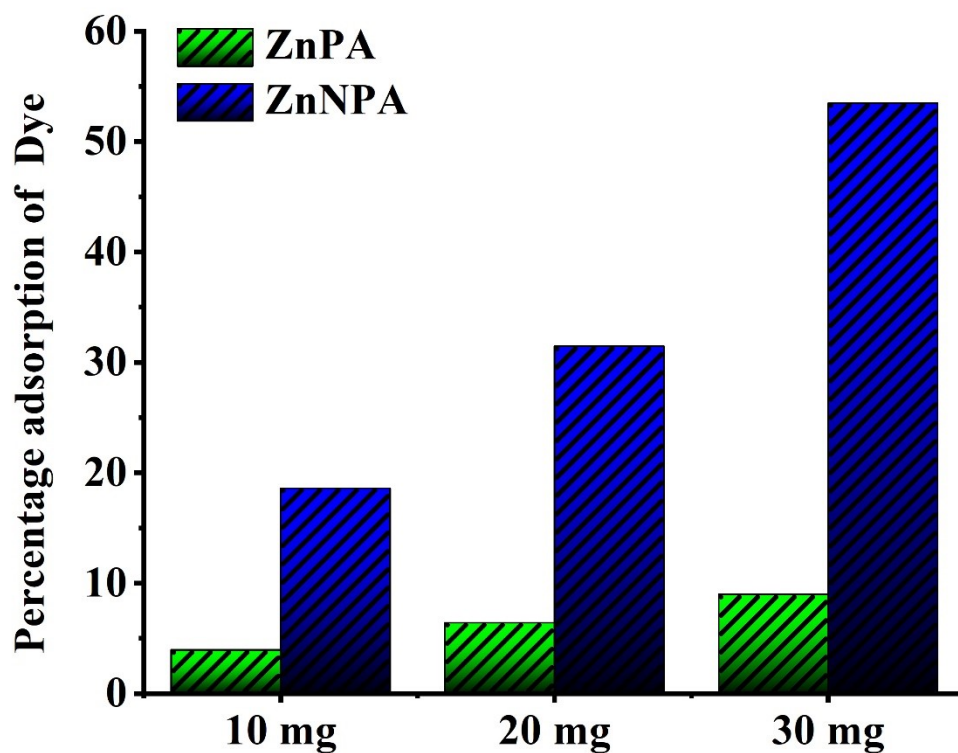


Figure S4. Rh B dye (2×10^{-5} M) adsorption using different amount of ZnPA and ZnNPA adsorbents.

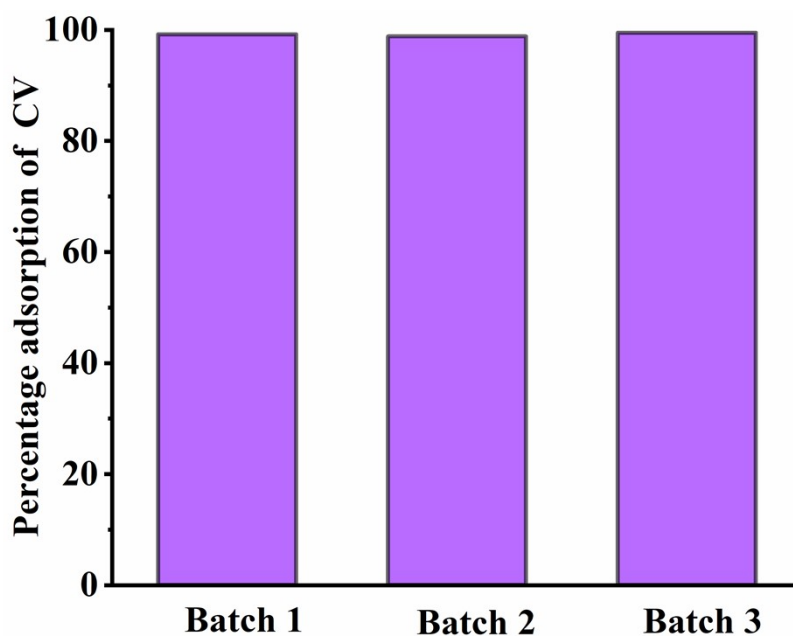


Figure S5. CV dye adsorption of ZnNPA MOF nano/microparticles prepared in three different batches.

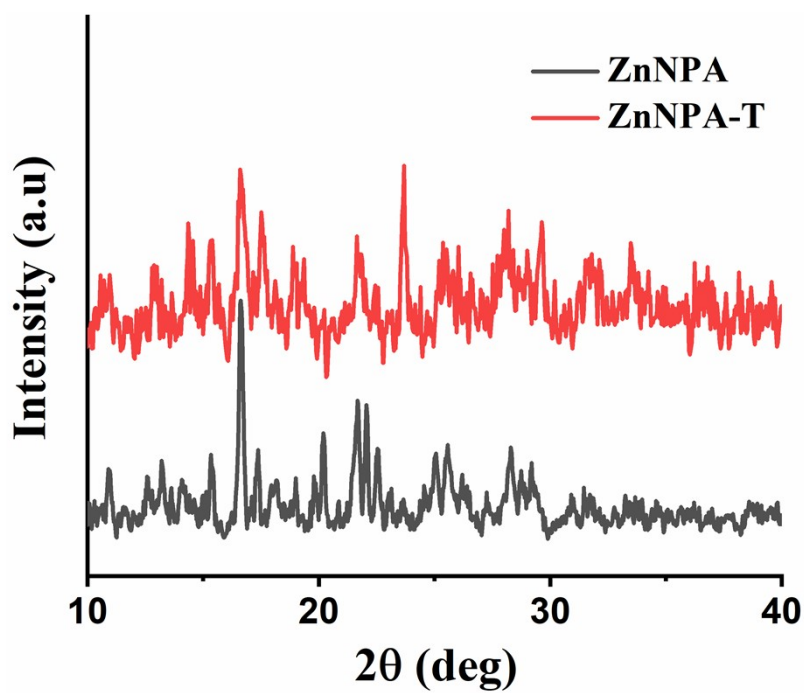


Figure S6. Comparison of PXRD patterns of ZnNPA before and after dipping in tea extract.

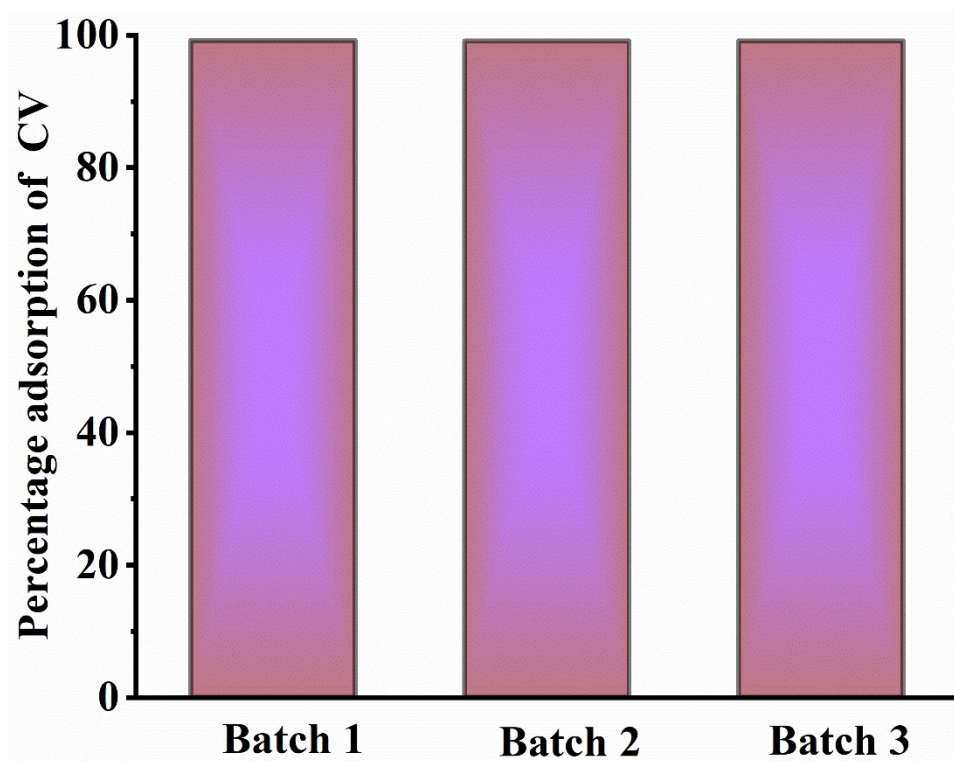


Figure S7. CV dye adsorption of ZnNPA-T MOF nano/microparticles prepared in three different batches.

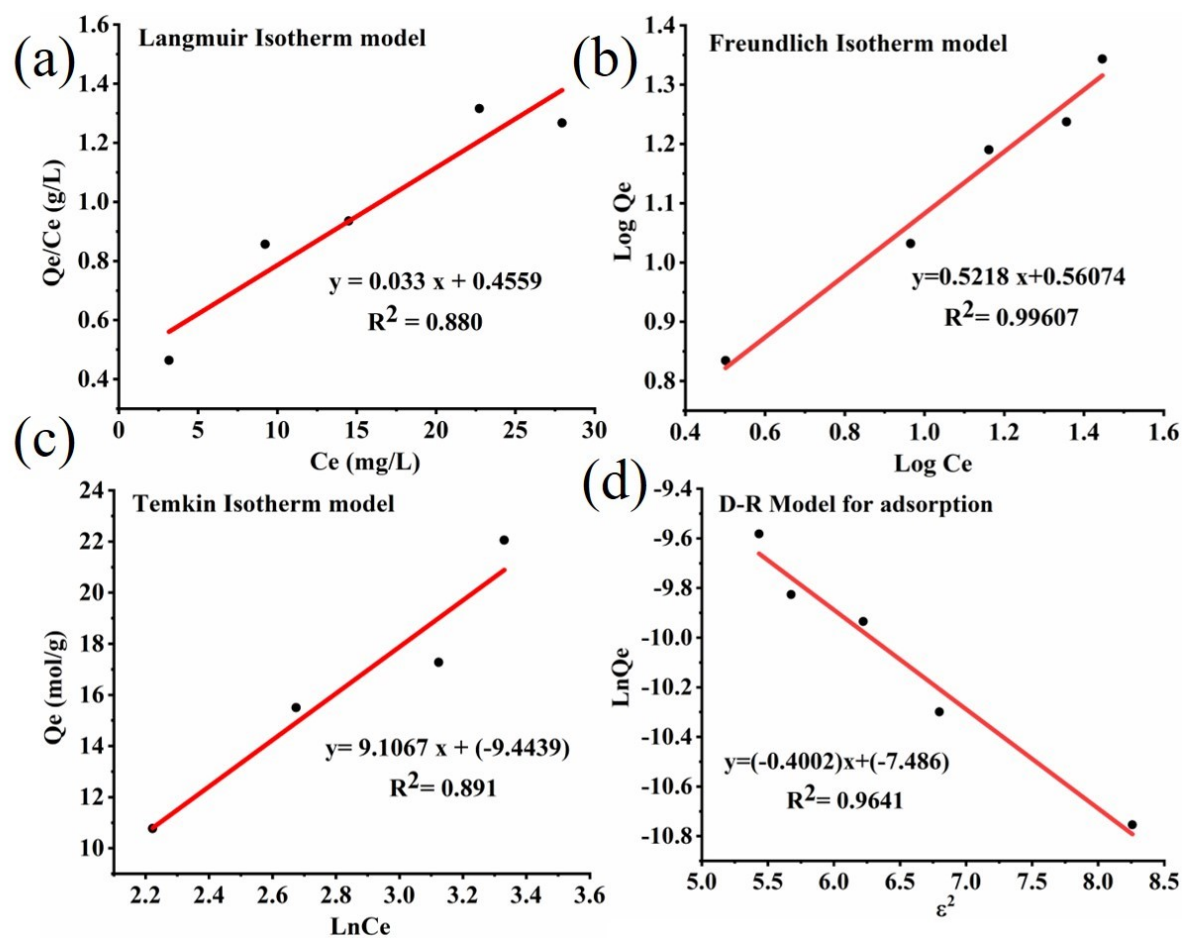


Figure S8. Adsorption isotherm for MB adsorption onto the ZnNPA, (a) Langmuir (b) Freundlich (c) Temkin and (d) Dubinin – Radushkevich models fitting.