

Meso- and microporous soft templated hydrothermal carbons for dye removal from water

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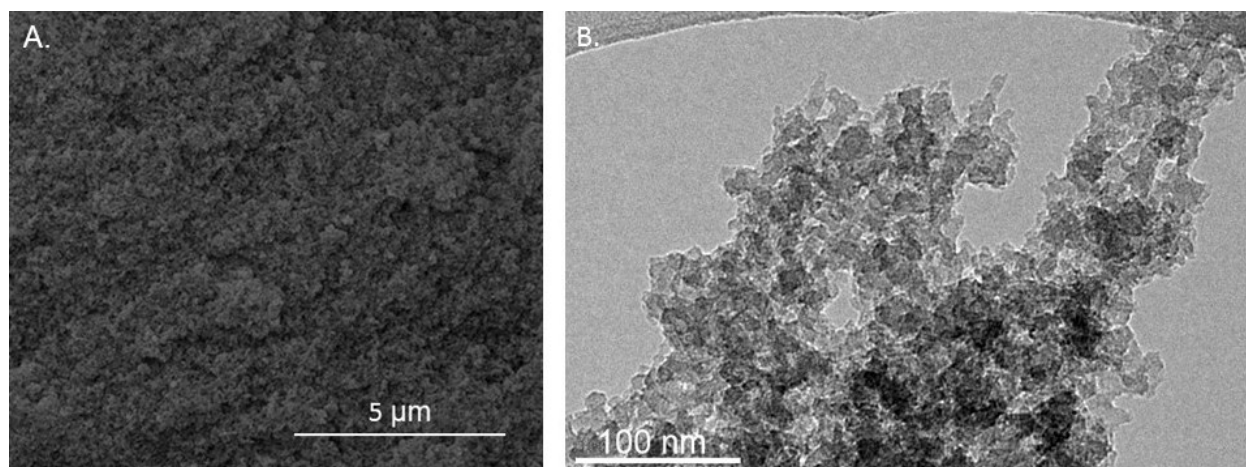
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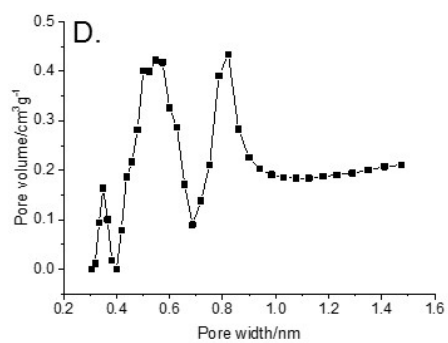
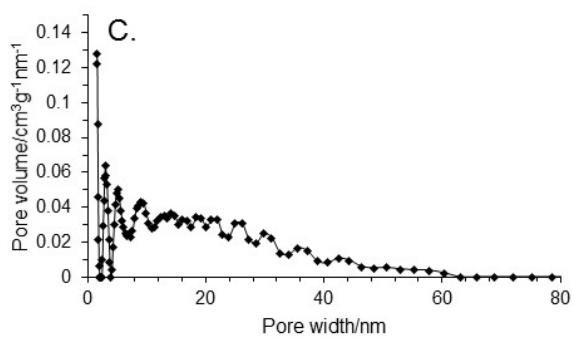
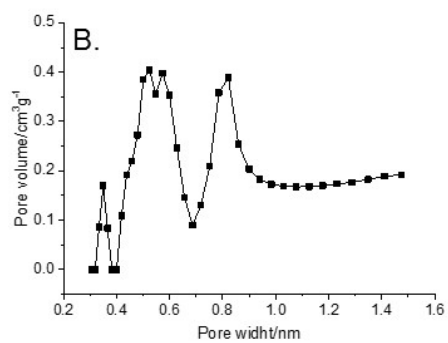
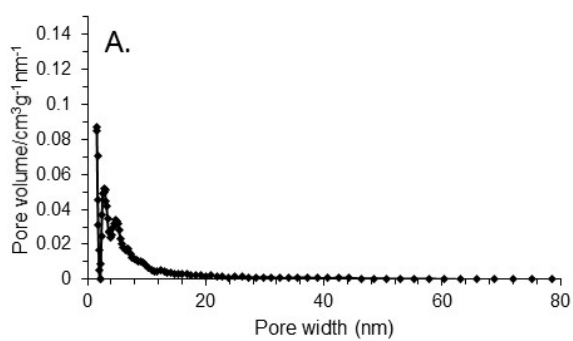
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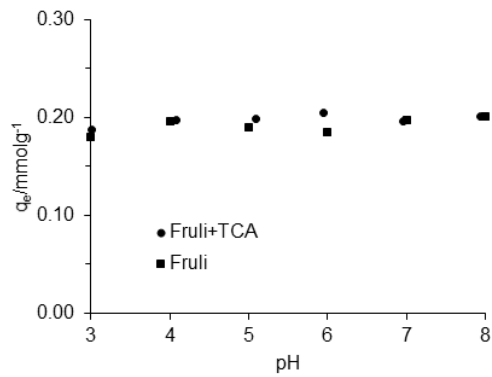
Supporting information



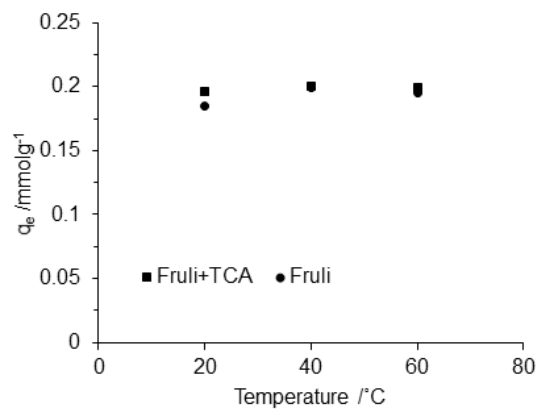
S1. A. SEM 20 k magnification and B. TEM 60 k magnification images of Fruli+TCA



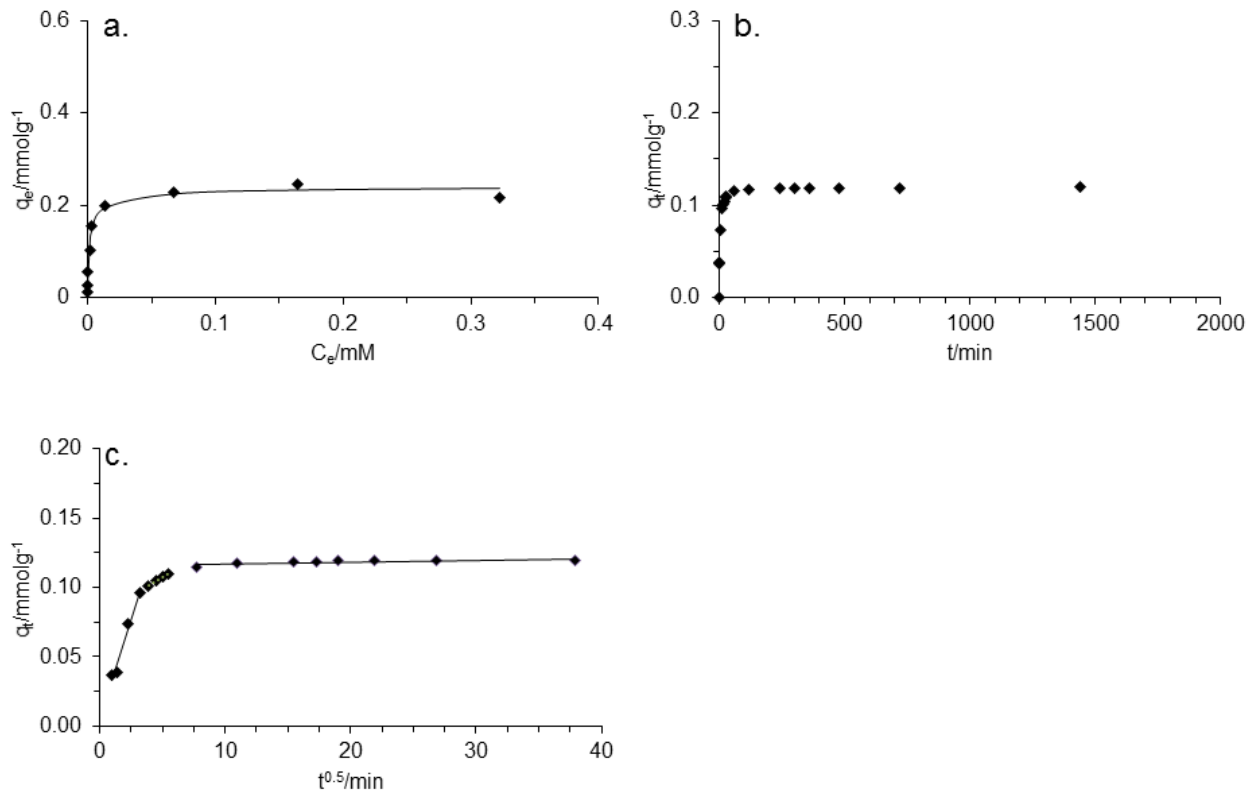
S2. FruLi pore size distribution from A. N₂ sorption data calculated with NLDFT assuming slit shaped pores and B. CO₂ sorption data calculated with NLDFT. FruLi+TCA pore size distributions from C. N₂ sorption data and D. CO₂ sorption data.



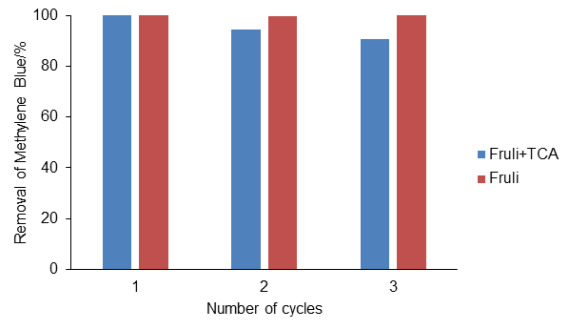
S3. Effect of solution pH on the adsorption capacity of Methylene blue FruLi (■) and FruLi+TCA (●). Dye concentration 0.4 mM, adsorption temperature 20 °C and stirring speed 200 rpm, equilibrium time 24 h, amount of adsorbent 20 mg and dye solution volume 10 ml.



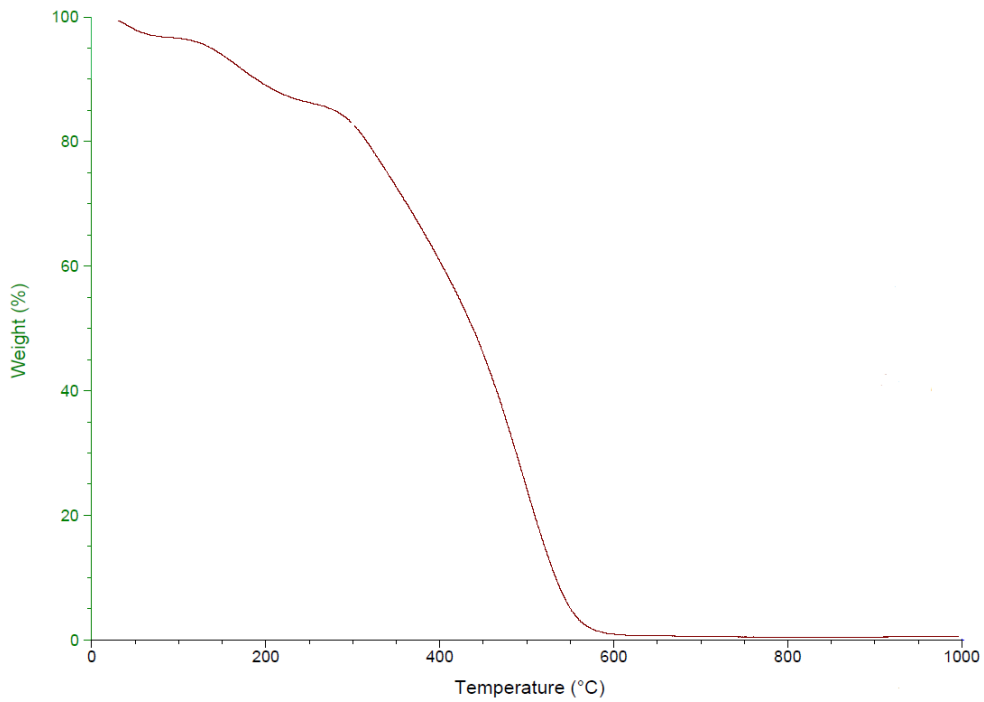
S4. Effect of adsorption temperature on the adsorption capacity of Methylene blue Fruli (■) and Fruli+TCA (●). Dye concentration 0.4 mM and stirring speed 200 rpm, reaction time 24 h and equilibrium time 24 h.



S5. A. Experimental adsorption equilibrium results and Sips adsorption isotherm (—) Fruli+TCA Methylene Blue (■) B. Experimental kinetic data and C. Intraparticle diffusion modeling methylene blue adsorption.



S6. Desorption of Methylene Blue from the carbon Fruli and Fruli+TCA. Adsorption efficiency of carbon materials after regeneration up to three cycles.



S7. Thermogravimetric analysis of salt templated carbon under air.