Supporting information

Easy preparation of Liposome@PDA microspheres for fast and highly efficient removal of methylene blue from water

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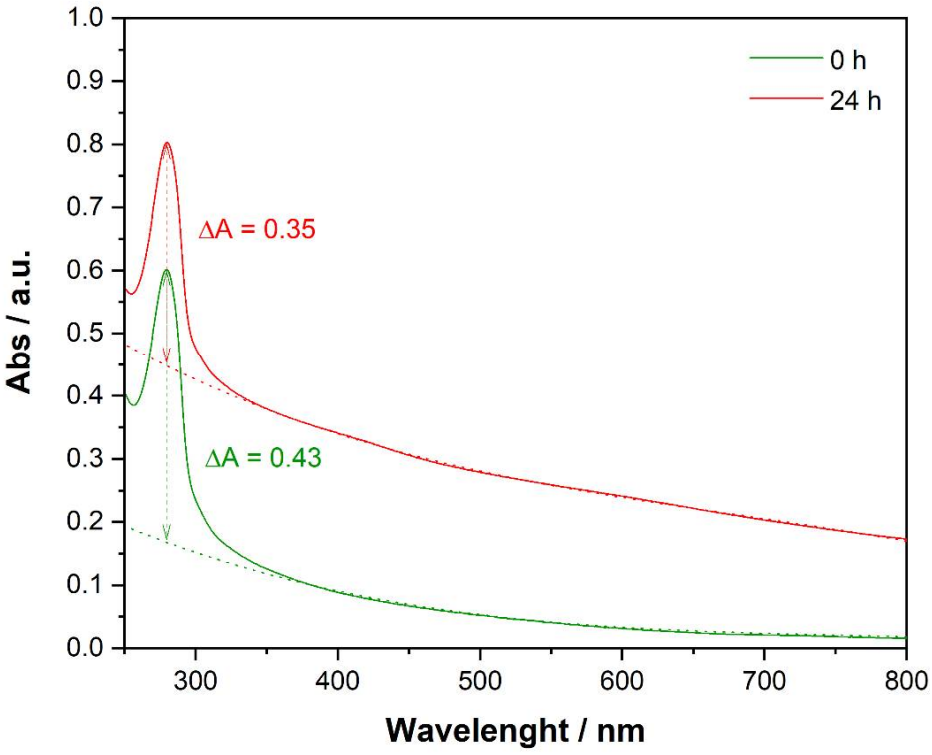


Figure S1: The characteristic absorption peak of the DA at 280 nm, which decreases as the polymerization proceeds. To subtract the contribution of the scattering due to liposomes (at 0

h) and Liposome@PDA microspheres (at 24 h), scattering was estimated by interpolating the traces with a third-degree polynomial curve.

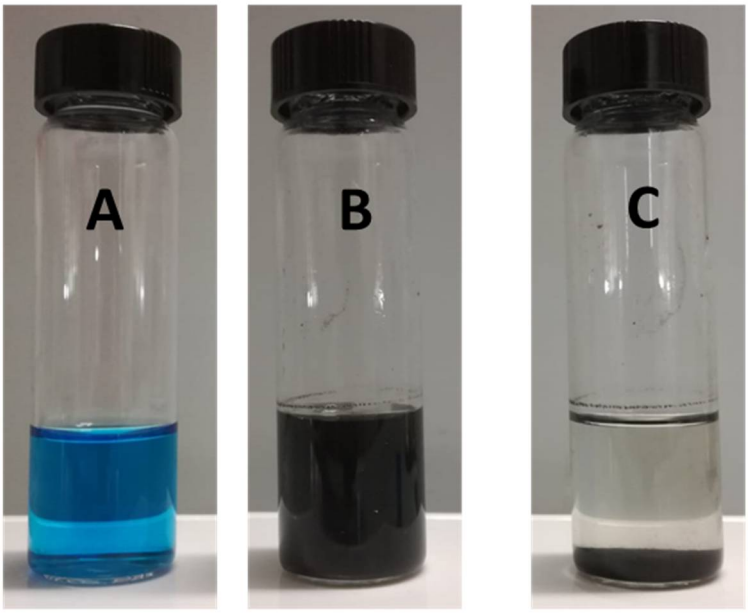


Figure S2: Stages of the adsorption process of MB by the Liposome@PDA microspheres. (A) Initial dye solution; (B) after adding Liposome@PDA adsorbent material; (C) at the end of the adsorption after sedimentation of the Liposome@PDA microspheres.

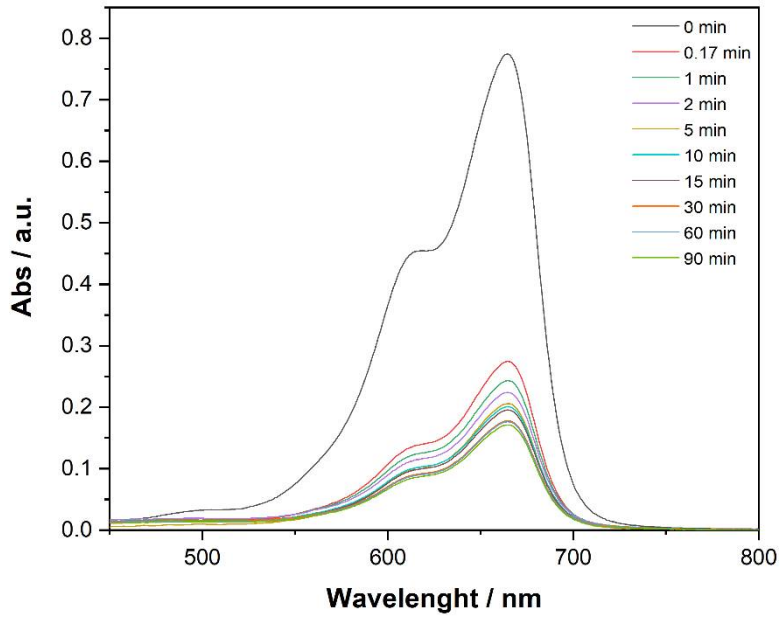


Figure S3: Vis-NIR absorption spectra of MB recorded during a typical experiment of batch adsorption monitored over time. MB initial concentration: 4 mg L^{-1}. Liposome@PDA microspheres: 0.06 mg

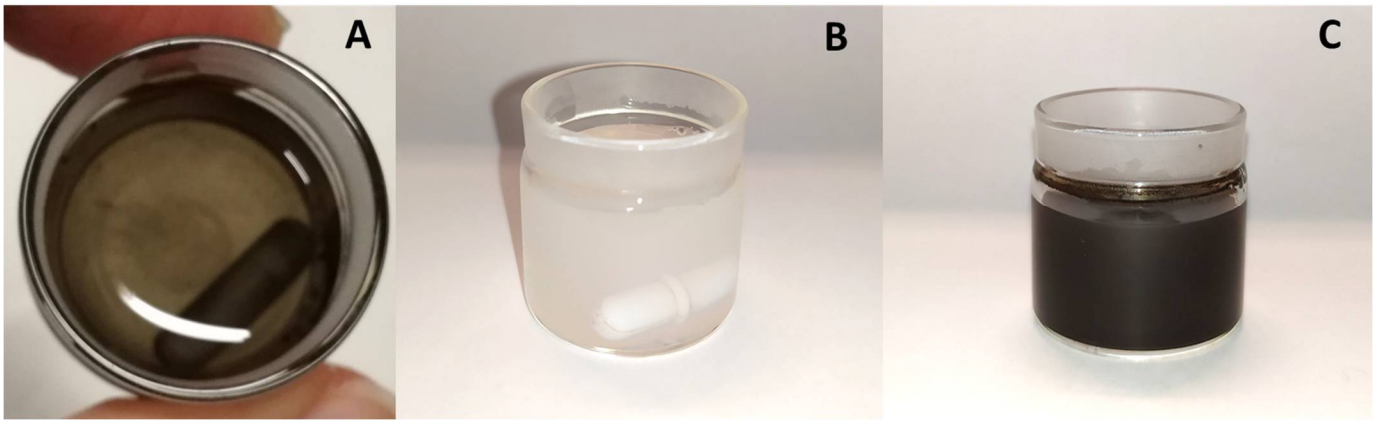


Figure S4: (A) In absence of liposomes, PDA polymerization occurred mainly on the vessel walls. (B) Liposomal suspension in DA solution at zero polymerization time. (C) After 24 h of polymerization the solution became dark indicating the formation of Liposome@PDA microspheres. In all samples, the initial DA concentration was 0.5 mg mL^{-1}.