

Supplementary Material

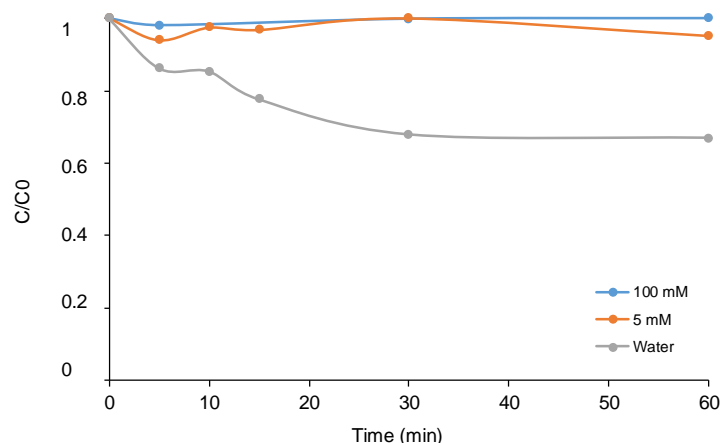
Fast Degradation of Bisphenol A in Water by Nanostructured CuNPs@CALB Biohybrid Catalysts

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A



B

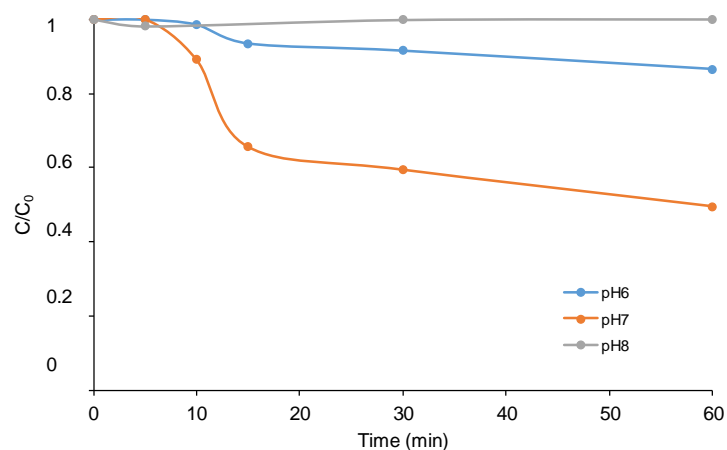


Figure S1. Hydrogen peroxide degradation profile of the CuNPs@CALB-1 biohybrid at different experimental conditions in aqueous media. A) Catalase activity at pH 8 in the presence of different ionic strength. B) Catalase activity in 100 mM phosphate buffer at different pHs. Experimental conditions: $[H_2O_2]$: 50 mM, [catalyst]: 1.5 mg. mL⁻¹.

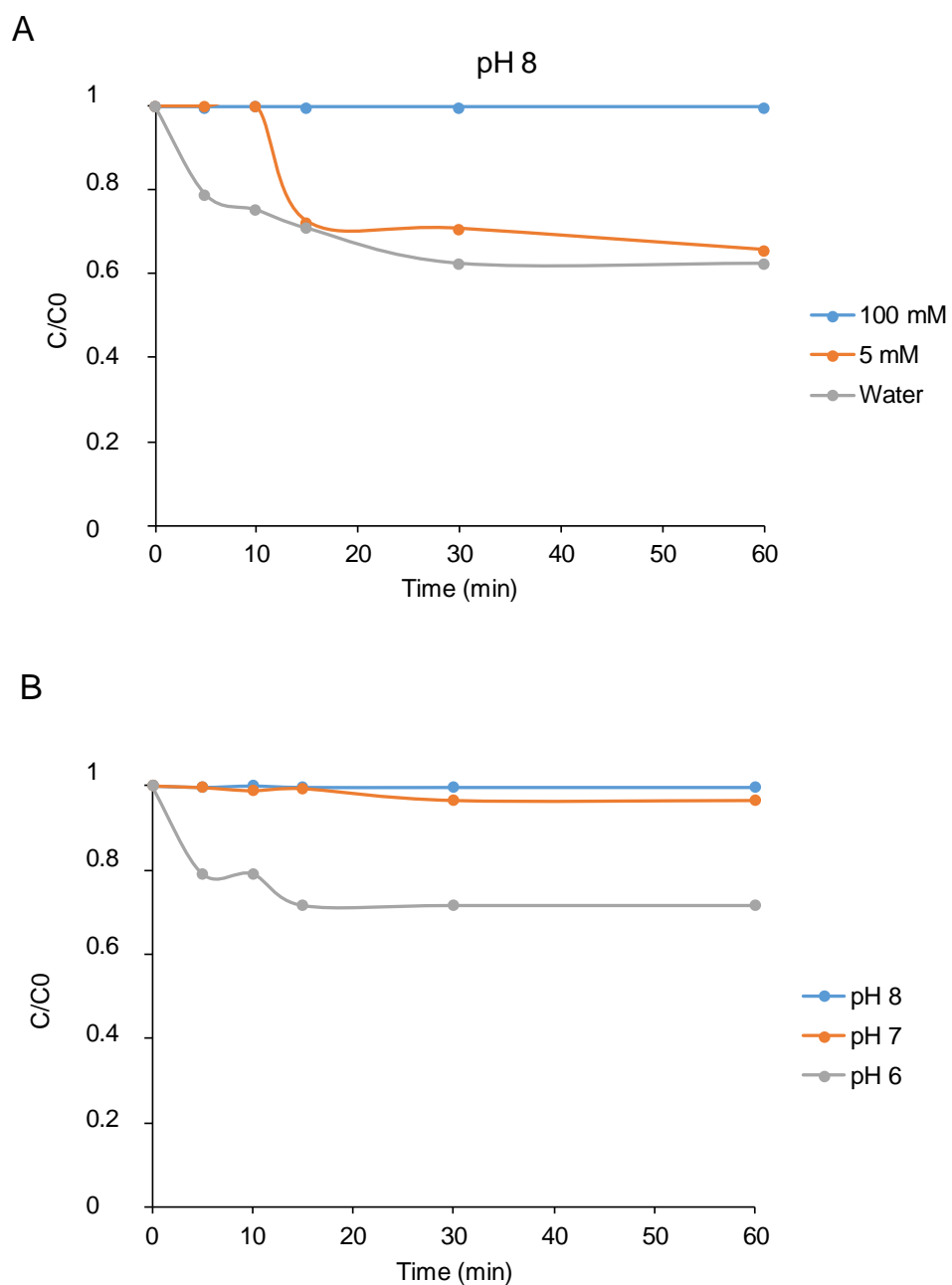


Figure S2. Hydrogen peroxide degradation profile of the **CuNPs@CALB-2** biohybrid at different experimental conditions in aqueous media. A) Catalase activity at pH 8 in the presence of different ionic strength. B) Catalase activity in 100 mM phosphate buffer at different pHs. Experimental conditions: [H₂O₂]: 50 mM, [catalyst]: 1.5 mg. mL⁻¹.

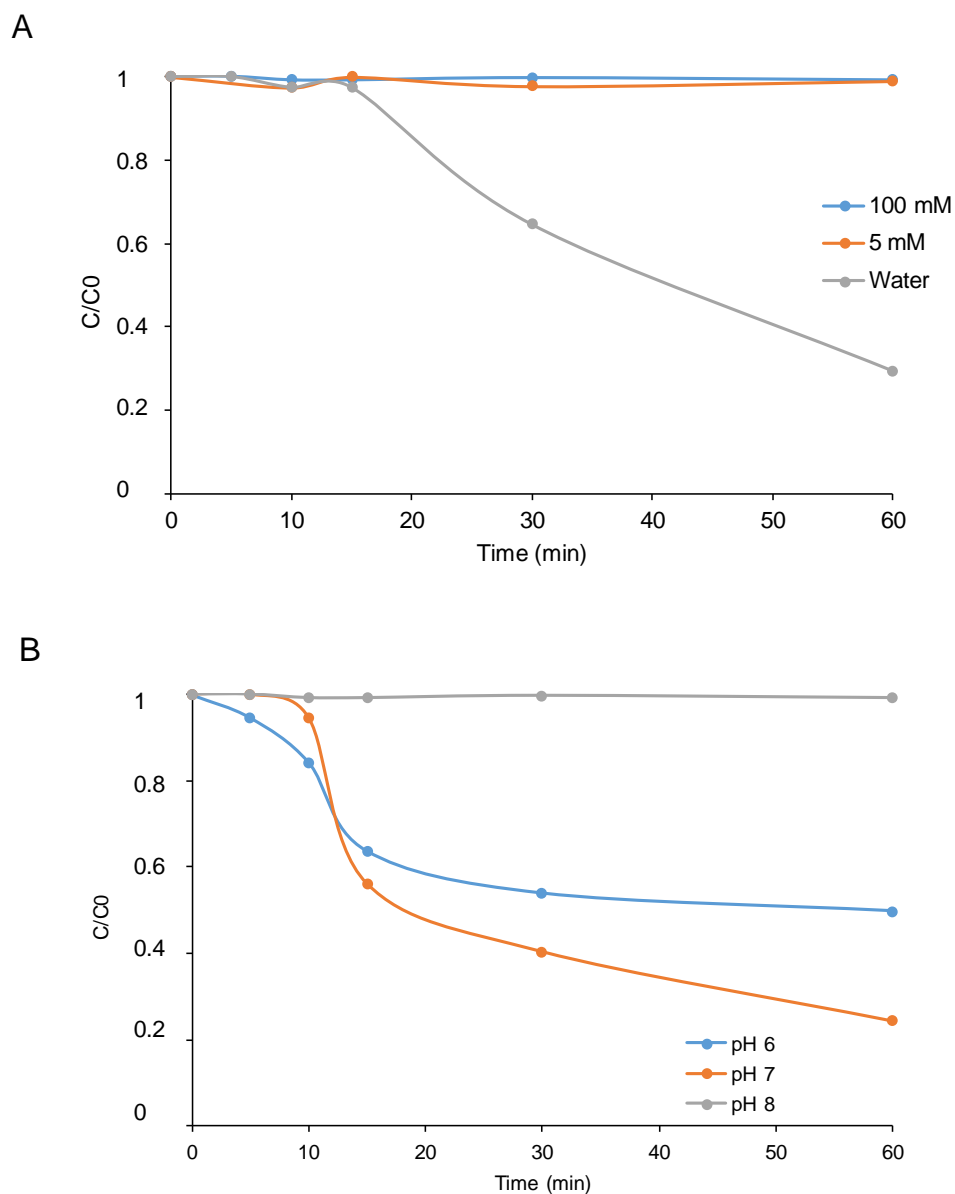


Figure S3. Hydrogen peroxide degradation profile of the **CuNPs@CALB-4** biohybrid at different experimental conditions in aqueous media. **A)** Catalase activity at pH 8 in the presence of different ionic strength. **B)** Catalase activity in 100 mM phosphate buffer at different pHs. Experimental conditions: $[H_2O_2]$: 50 mM, $[catalyst]$: 1.5 mg. mL⁻¹.

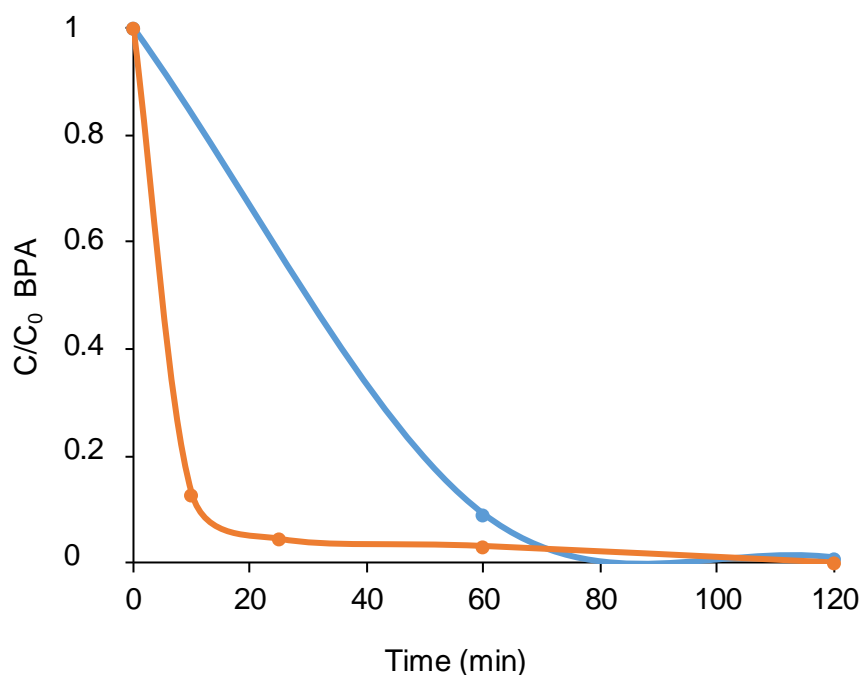


Figure S4. Degradation of BPA catalyzed by **CuNPs@CALB-3** changing the relation catalyst amount/ reaction volume. Experimental conditions: [BPA]: 45 mg. L⁻¹, [H₂O₂]: 100 mM, [Phosphate buffer]:100 mM pH 8. [catalyst]:1.5 mg. mL⁻¹ (orange) or 0.3 mg. mL⁻¹ (blue).

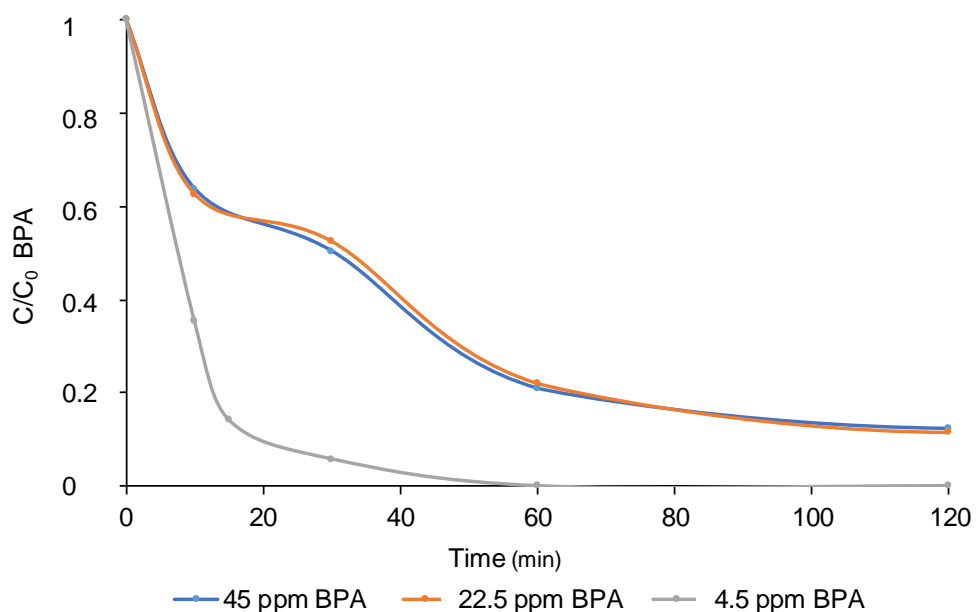


Figure S5. Degradation of BPA catalyzed by **CuNPs@CALB-2** at different BPA concentrations. Experimental conditions: [H₂O₂]: 100 mM, [Phosphate buffer]:100 mM pH 8. [catalyst]:1.5 mg. mL⁻¹.