processes

Supplementary Material

Immobilization of Laccase on Hybrid Super-Structured Nanomaterials for the Decolorization of Phenolic dyes

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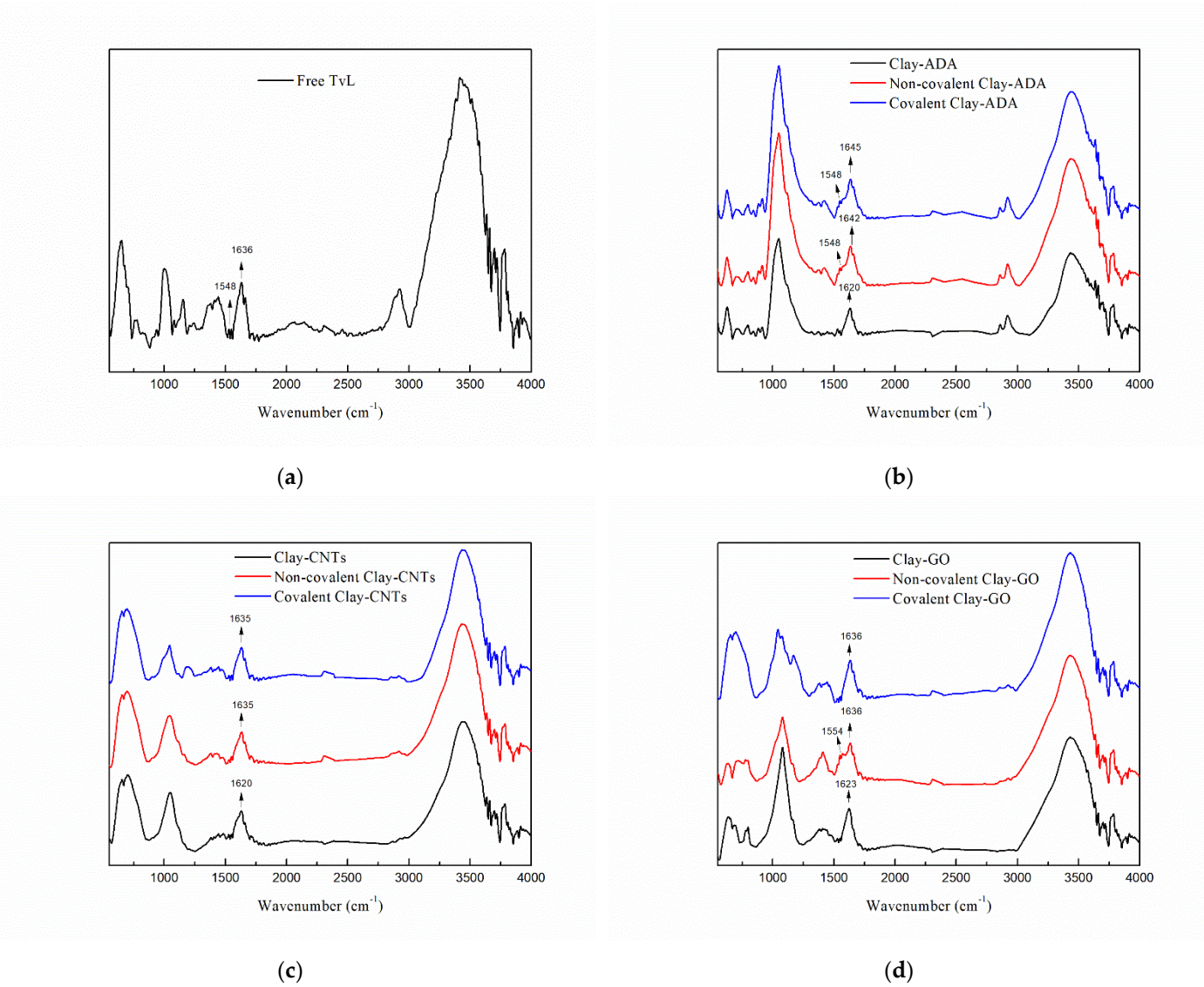
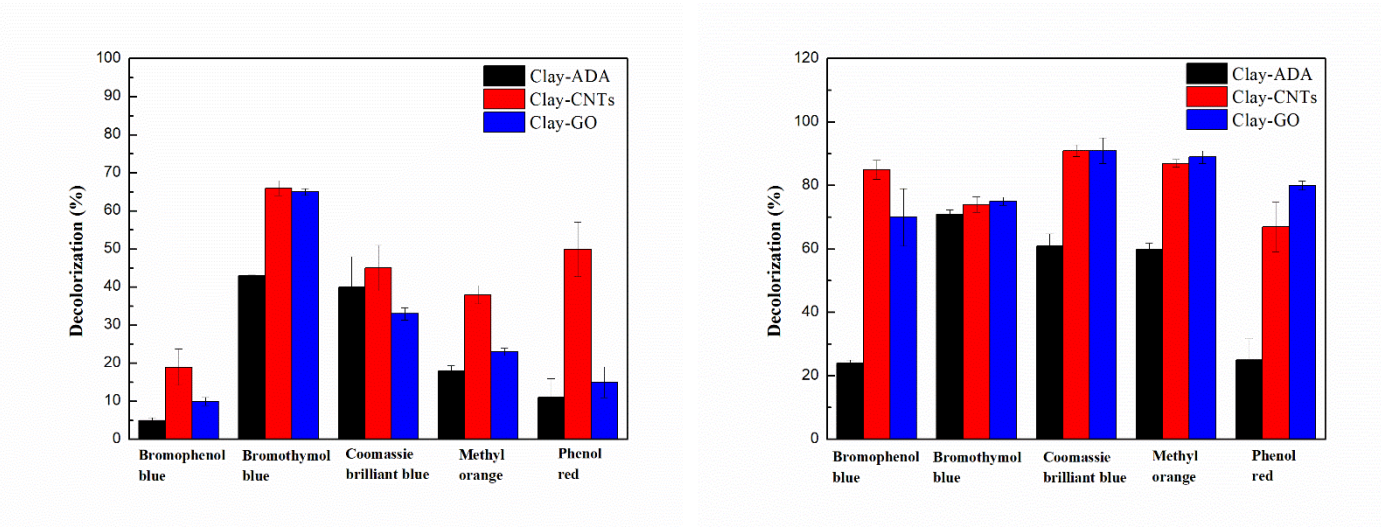
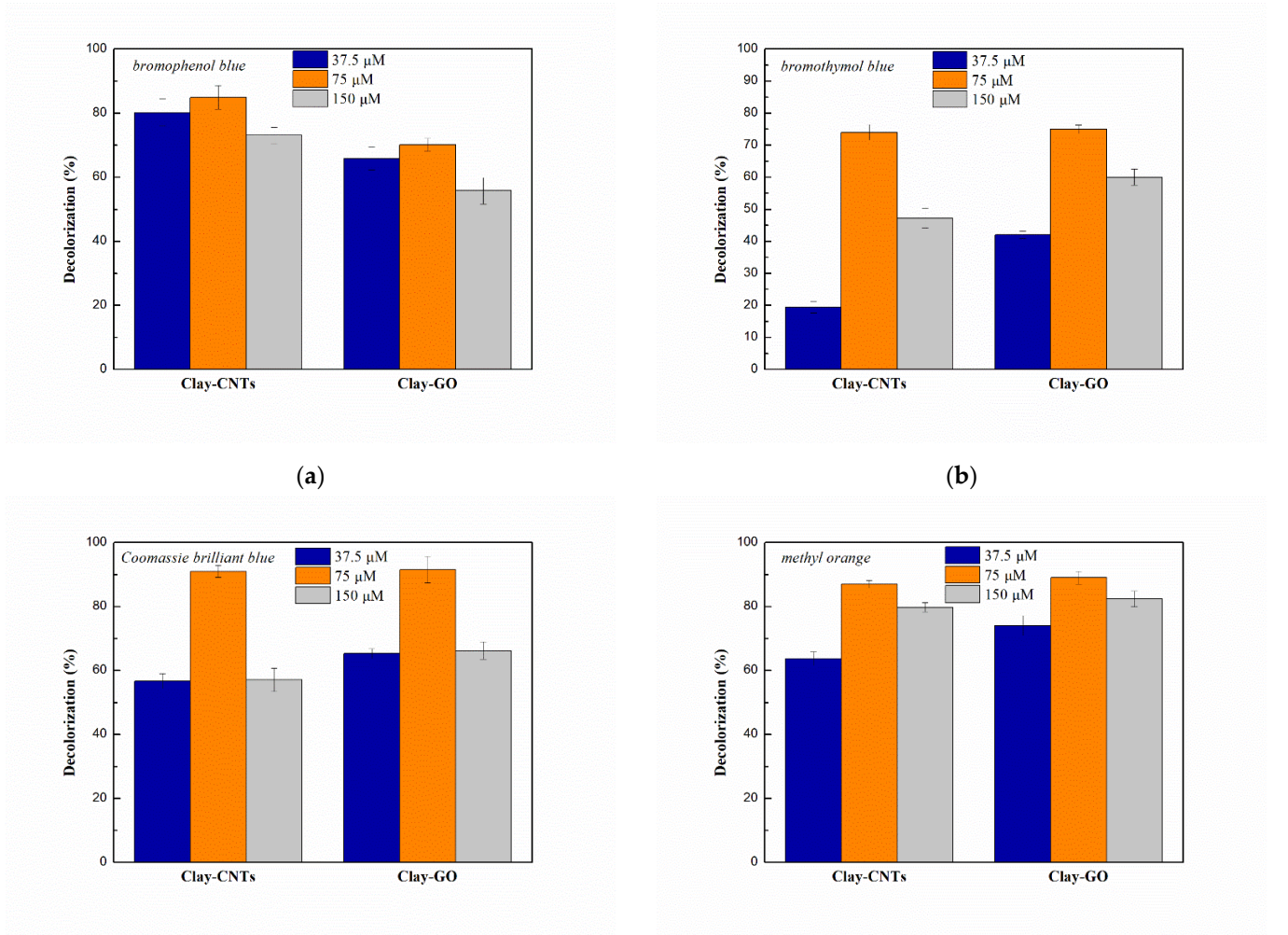


Figure S1. FTIR spectra of (**a**) free TvL, (**b**) Clay-ADA nanomaterial and immobilized TvL on Clay-ADA, (**c**) Clay-CNTs nanomaterial and TvL immobilized on Clay-CNTs, (**d**) Clay-GO nanomaterial and immobilized TvL on Clay-GO.



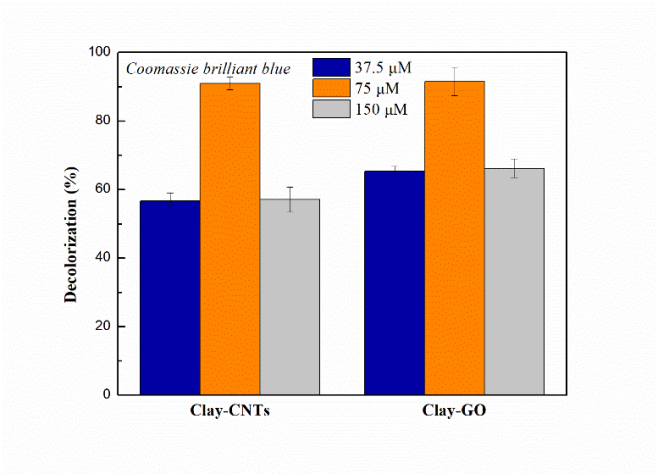
(**a**) (**b**)

Figure S2. Decolorization of different dyes (75 μM) by (**a**) non-covalently and (**b**) covalently immobilized TvL on hybrid nanomaterials at 48 h. The reaction was conducted in acetate buffer (0.1 M, pH 4.58), at 30 °C.



(**a**) (**b**)

(**c**) (**d**)



(**e**)

Figure S3. Effect of concentration of (**a**) bromophenol blue, (**b**) bromothymol blue, (**c**) Coomassie brilliant blue, (**d**) methyl orange, (**e**) phenol red on the decolorization ability of immobilized TvL on hybrid nanomaterials. The reaction was conducted in acetate buffer (0.1 M, pH 4.58), at 30 °C, for 48 h.