Supplementary Information (SI) for Materials Chemistry Frontiers.

Microwave-assisted ultrafast synthesis of iron-based biomolecule-templated nanozyme with augmented peroxidase-mimetic activity

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Section S1: Iron content estimation using 1,10 phenanthroline assay

The quantification of total Fe in the fabricated samples (rGO, and GF-(1/2/3)) was performed using the standard 1,10-phenanthroline colorimetric method and calibrated using a standard plot prepared by using Mohr's salt with a concentration range of 1-10 mg/mL[1].

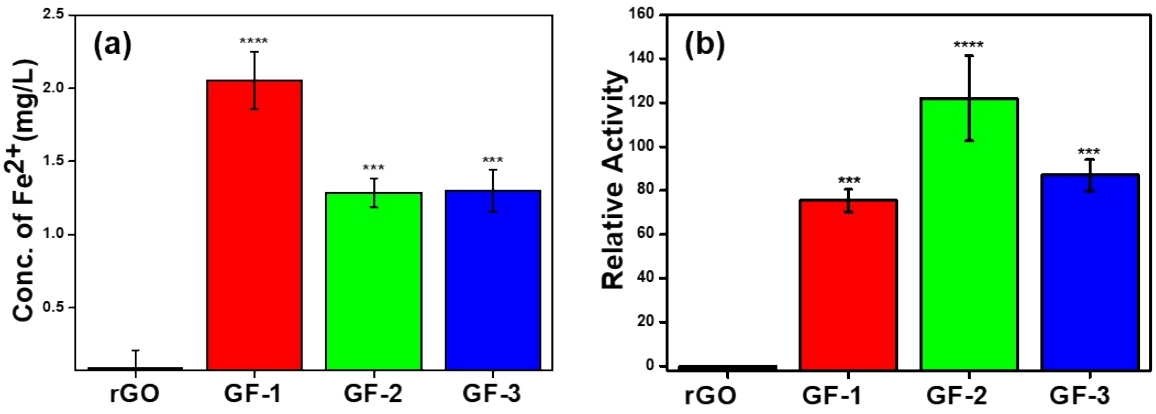

Figure S1 (a) Total iron content and (b) relative peroxidase activity of the fabricated nanocomposites (GF-1, GF-2, and GF-3) (*** $P \leq 0.001$, *** $P \leq 0.0001$).

Section S2: Peroxidase-like activity

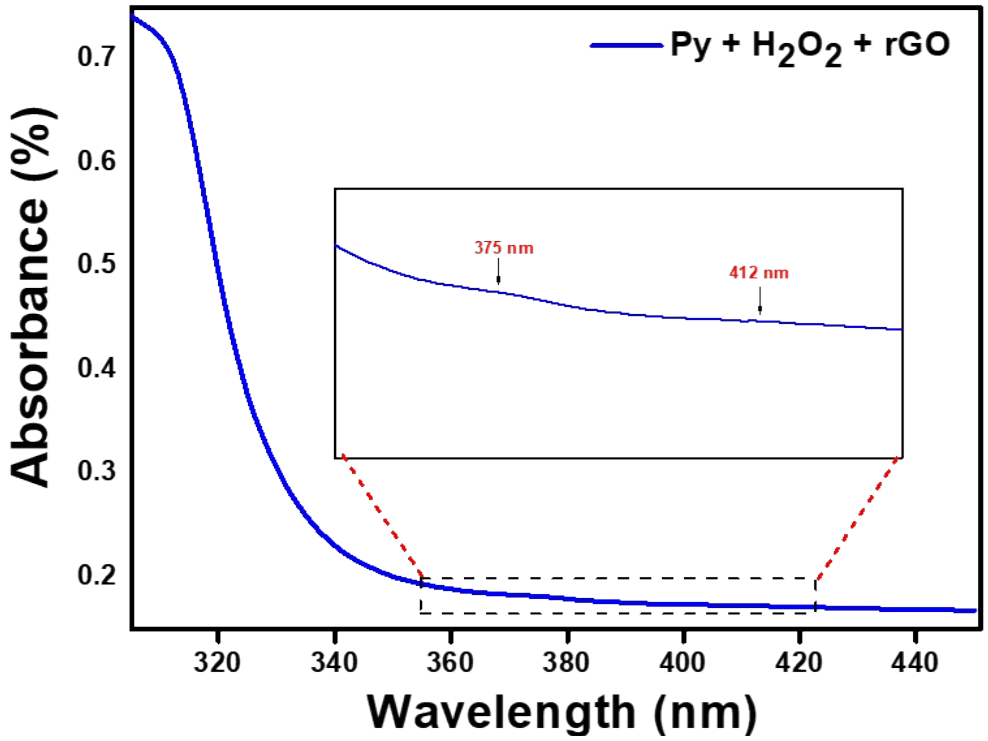

Figure S2 Peroxidase-like activity of (Py + H_2O_2 + rGO) treated group.

References

1. G. Jeffery, J. Basse and J. Mendham, Vogel's TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS FIFTH EDITION Revised/GH Jeffery, B Sc, Ph D, C Chem, FRS CJ Bassett, M Sc, C Chem, FRS CJ Mendham, M Sc, C Chem, MRS CR C Denney, B Sc, Ph D, C Chem, FRSC, MB 1 M, Longman Group UK Limited 1978, 1989, Longman Group UK Limited 1978, 1989, 1989.