

Agro-waste extracted cellulose supported silver phosphate nanostructures as green photocatalyst for improved photodegradation of RhB dye and industrial fertilizer effluent

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Supplementary data



Figure S1: Steps followed for isolation of cellulose (Cel) from waste fruit rinds

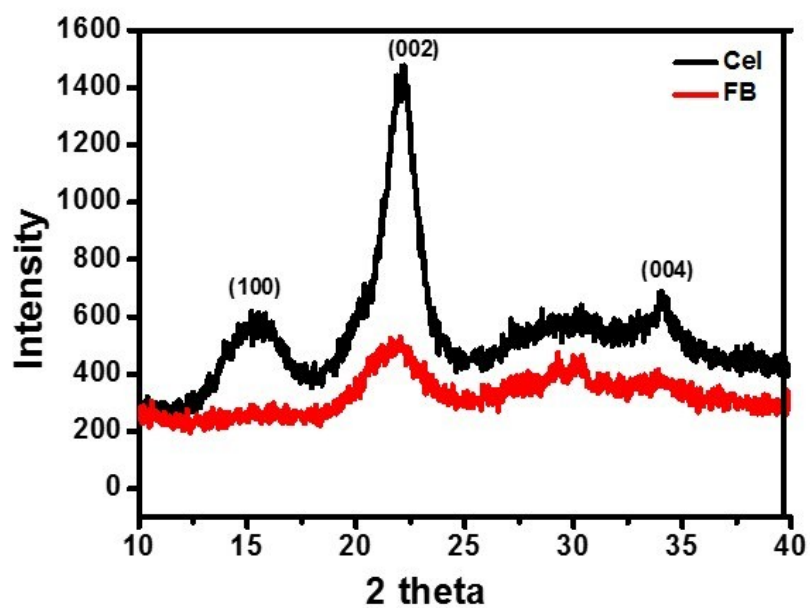


Figure S2: X-ray diffraction pattern of fruit bran (FB) and cellulose (Cel)

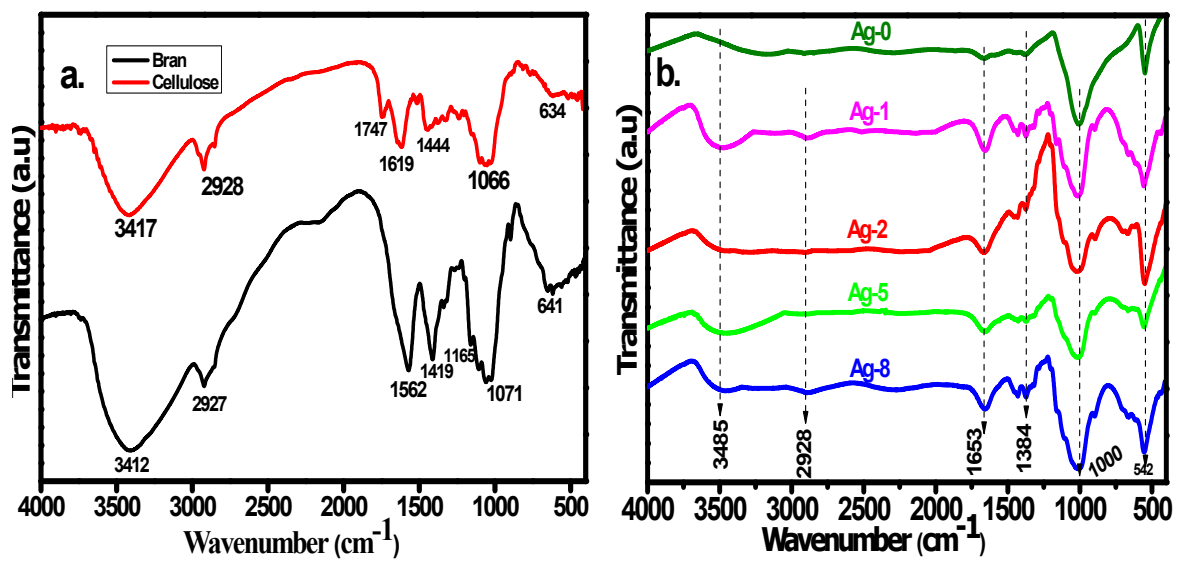


Figure S3: (a) FTIR spectra of fruit bran and cellulose (b) FTIR spectra of cellulose supported Ag₃PO₄ nanostructures [Ag-0 to Ag-8]

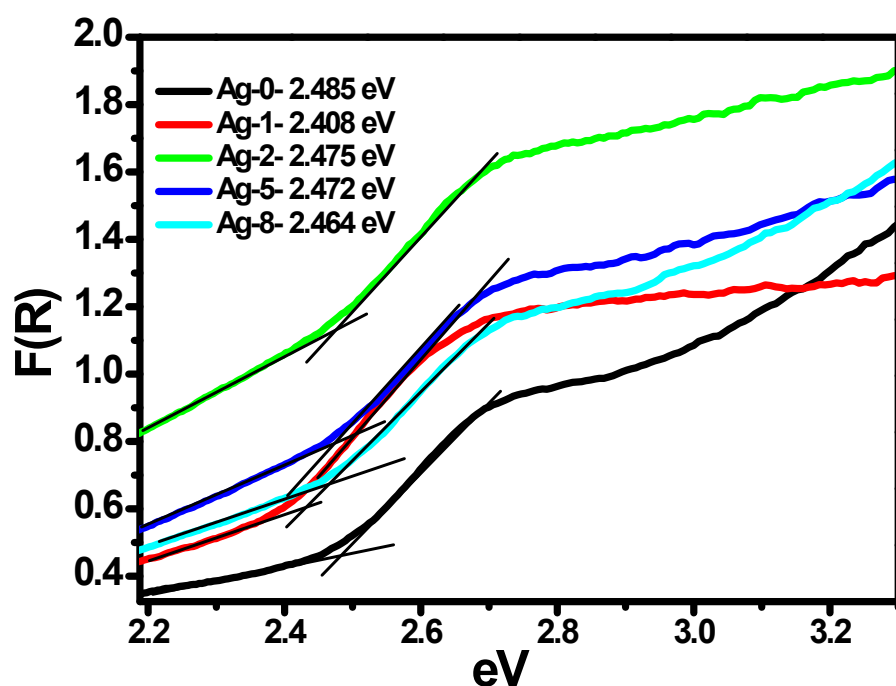


Figure S4: Diffused reflectance spectra of cellulose supported Ag_3PO_4 nanostructures [Ag-0 to Ag-8]

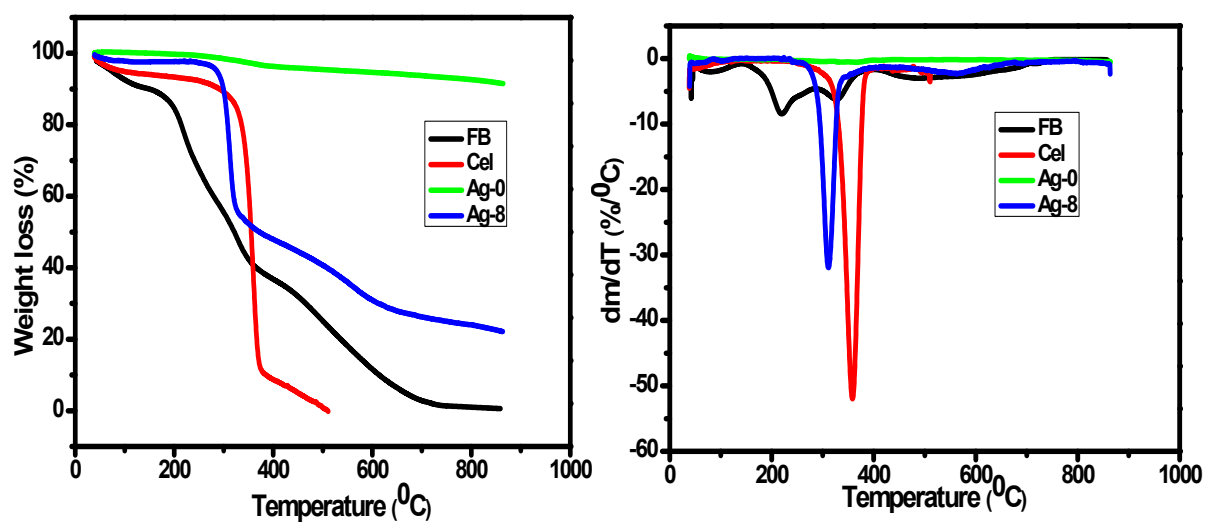


Figure S5: TGA and DTA curves of fruit bran (FB), cellulose (Cel), silver phosphate (Ag-0) and cellulose supported Ag_3PO_4 nanostructures (Ag-8)

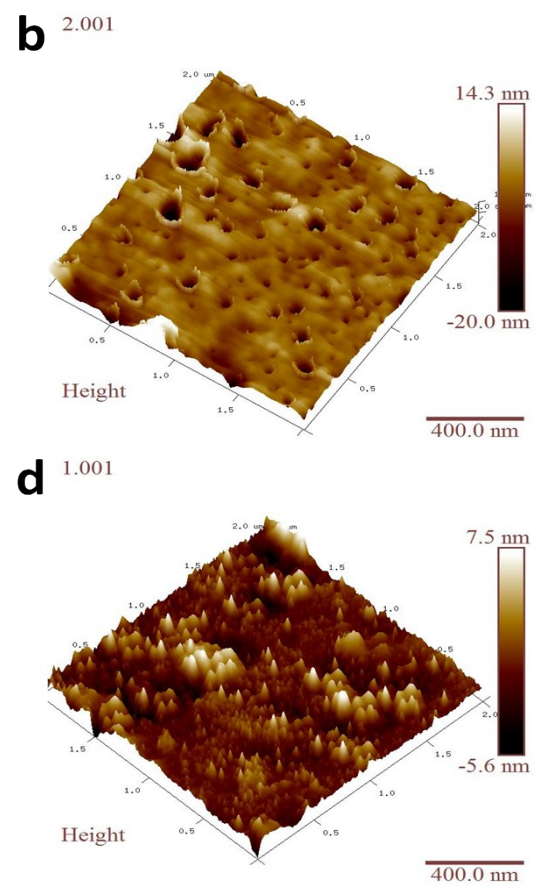
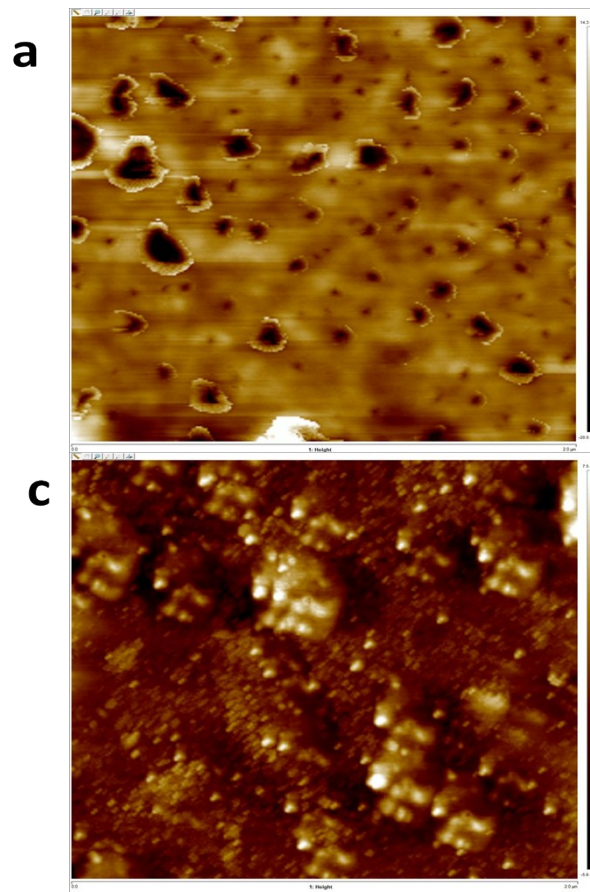


Figure S6: AFM micrographs of a.) Fruit bran (FB) in 2-dimension b.) Fruit bran (FB) in 3-dimension c.) Cel (Cel) in 2-dimension d.) Cel in 3-dimension

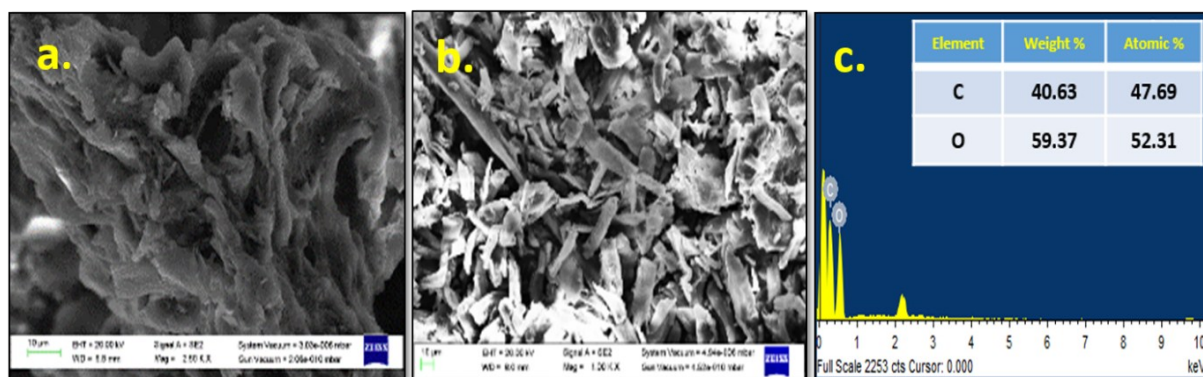


Figure S7: FESEM images of a.) Fruit bran (FB) b.) Cellulose (Cel) c.) EDAX spectra of Cel