

Investigating the Performance of Lithium-Doped Bismuth Ferrite [BiFe_{1-x}Li_xO₃]-Graphene Nanocomposites as Cathode Catalyst for the Improved Power Output in Microbial Fuel Cells

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The catalytic activity of [BiFe_{1-x}Li_xO₃]-graphene nanocomposite sample (x=0.02) against CIP has been studied as shown in Figure S1. No significant degradation is observed without light for x=0.02 sample.

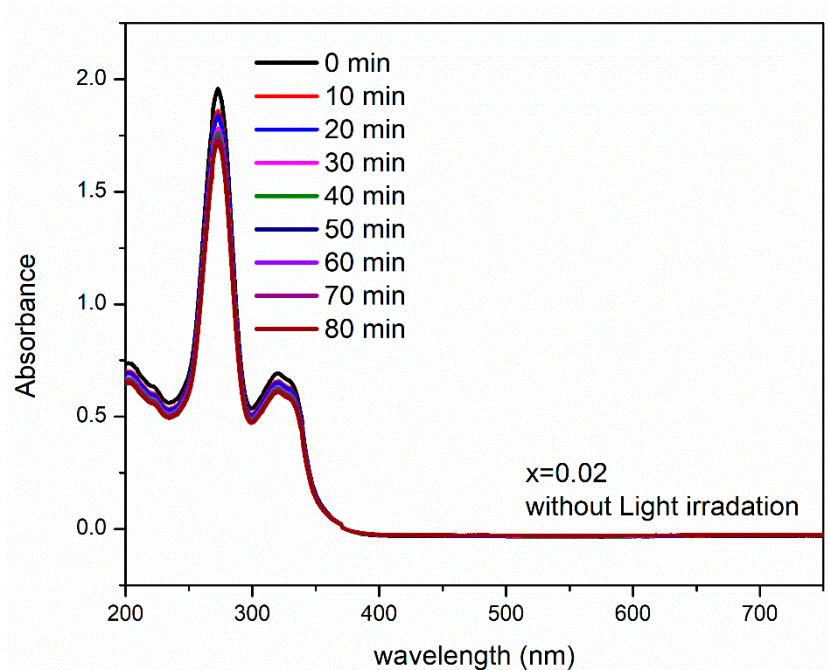


Figure S1: Catalytic degradation of CIP by using $[\text{BiFe}_{1-x}\text{Li}_x\text{O}_3]$ -graphene nanocomposites without light irradiation for $x=0.02$ sample.

We have also completed the studied on the structural properties of the catalysts before and after photocatalytic activity. The XRD and the FTIR results of the $[\text{BiFe}_{1-x}\text{Li}_x\text{O}_3]$ -graphene nanocomposite are represented in Figure S2 and S3. No structural changes have been observed after the photocatalytic activity for the $x=0.02$ sample.

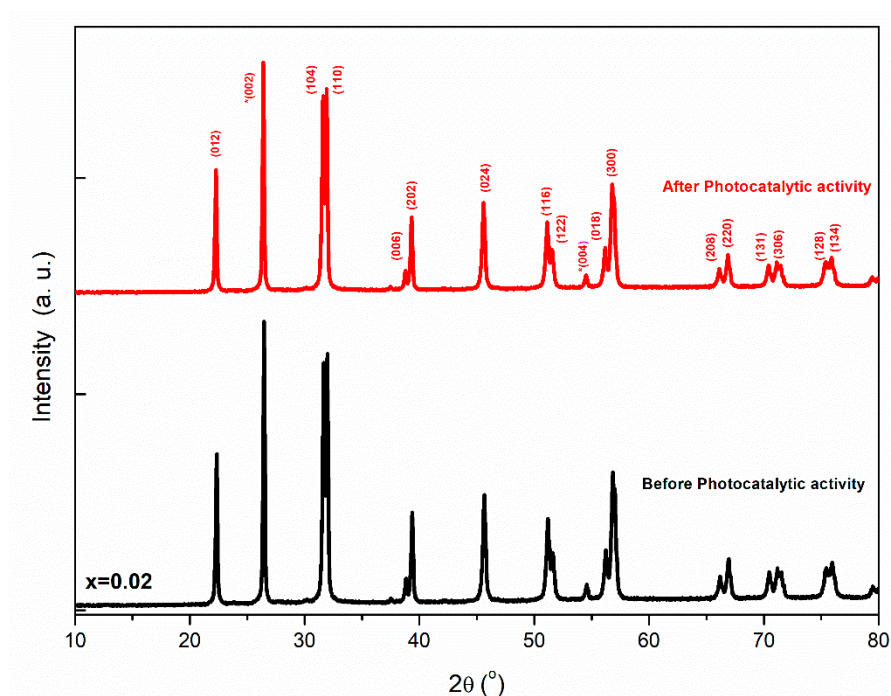


Figure S2: XRD of $[\text{BiFe}_{1-x}\text{Li}_x\text{O}_3]$ -graphene nanocomposite before and after photocatalytic activity.

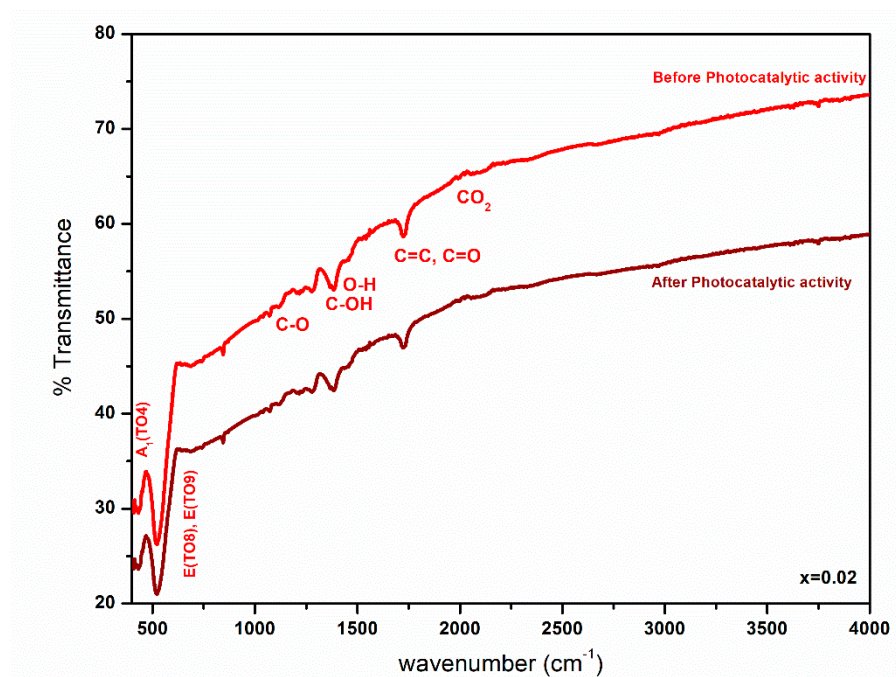


Figure S3: FTIR transmittance spectra of [BiFe_{1-x}Li_xO₃]-graphene nanocomposite before and after photocatalytic activity.