

## **Supplementary Information**

# **Sulfonated polyaniline encapsulated graphene@graphitic carbon nitride nanocomposites for significantly enhanced photocatalytic degradation of phenol: A mechanistic study**

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Structural analysis of Pure PANI

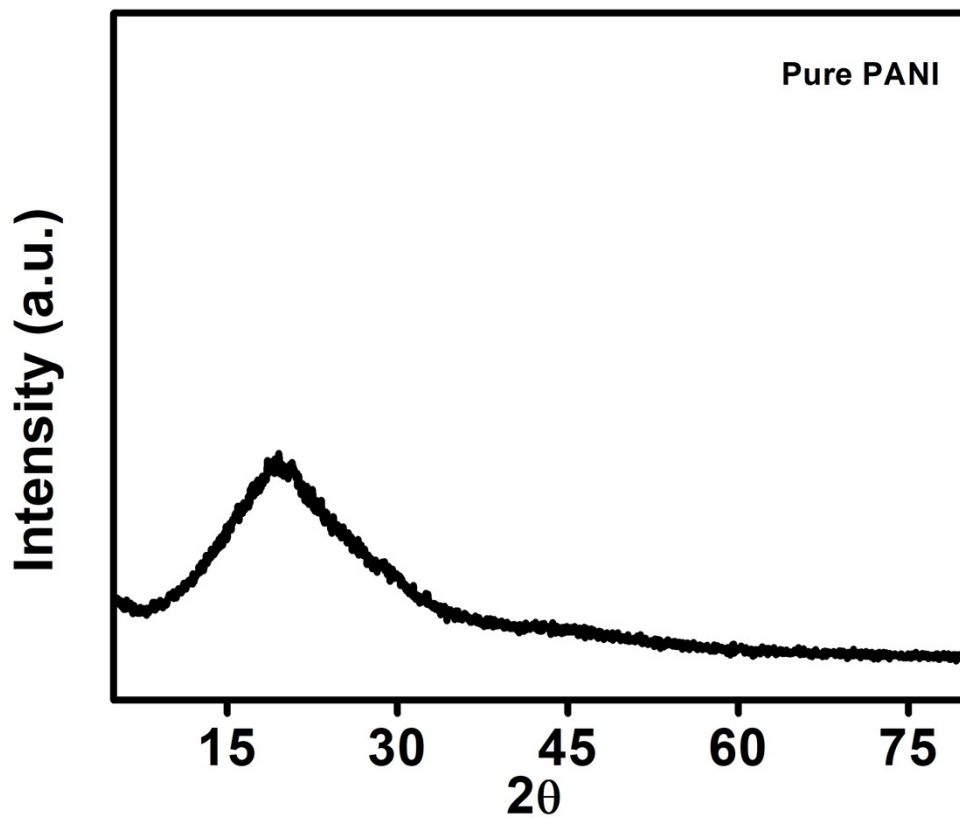
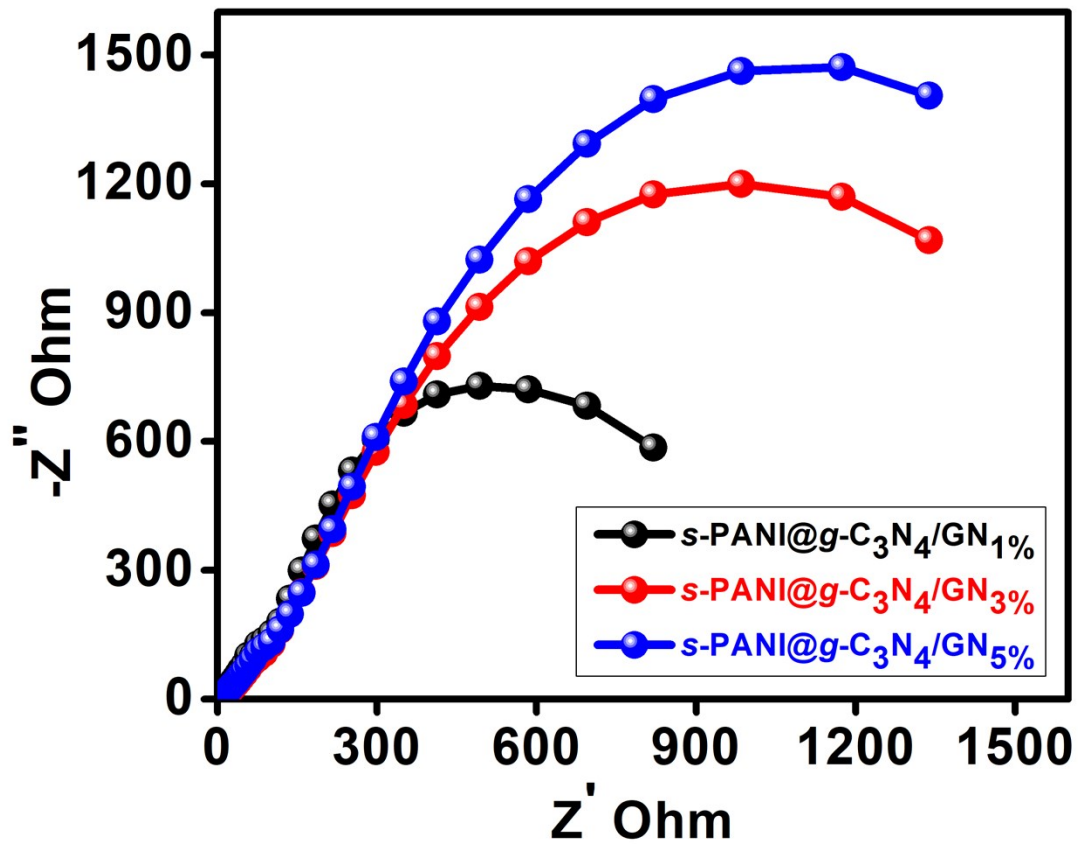
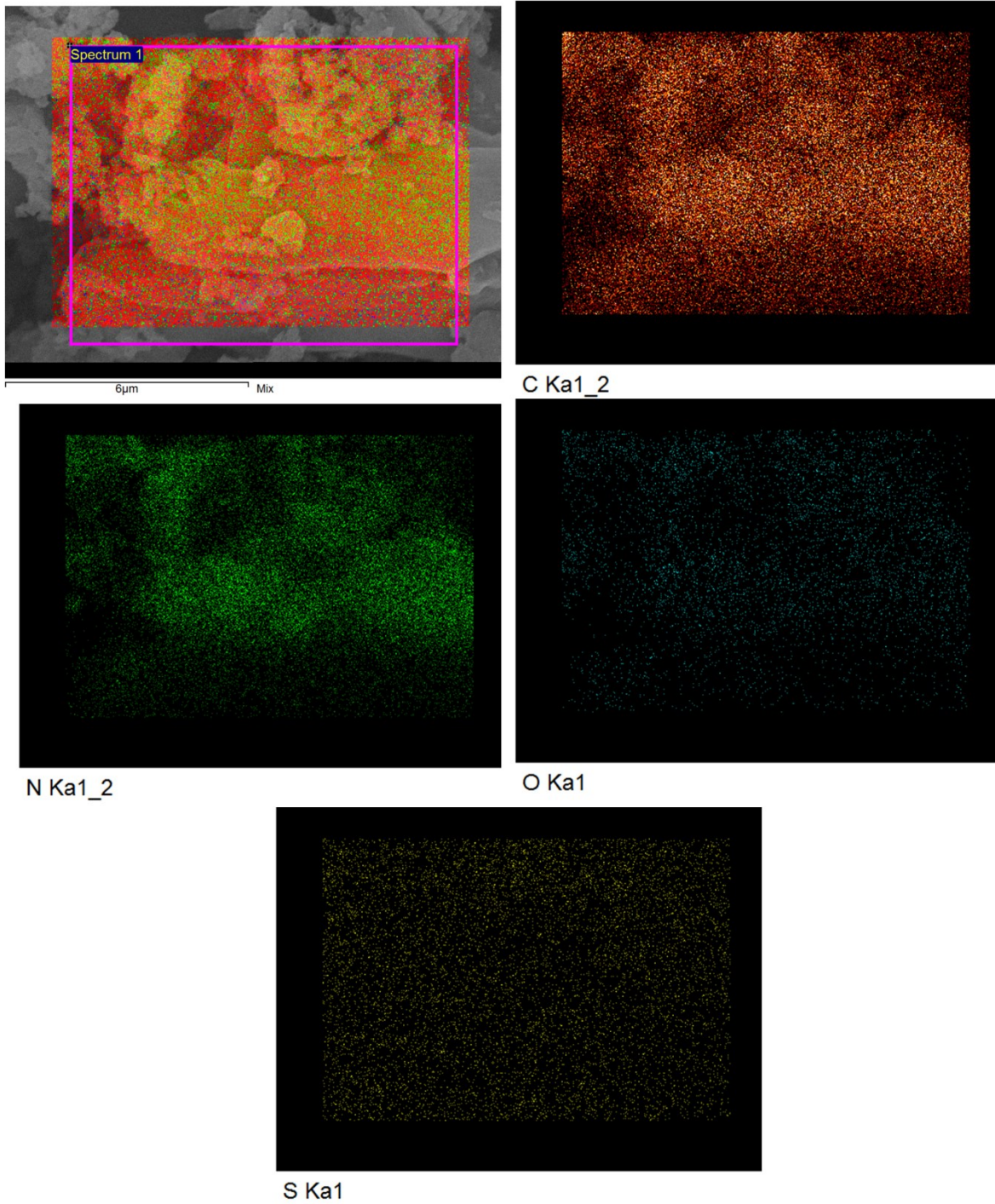


Fig. S1 X-ray diffraction pattern of Pure PANI



**Fig. S2:** EIS Analysis of *s*-PANI@g-C<sub>3</sub>N<sub>4</sub>/GN<sub>1</sub>%, *s*-PANI@g-C<sub>3</sub>N<sub>4</sub>/GN<sub>3</sub>%, and *s*-PANI@g-C<sub>3</sub>N<sub>4</sub>/GN<sub>5</sub>%



**Fig. S3** : EDS elemental mapping of *s*-PANI@g-C<sub>3</sub>N<sub>4</sub>/GN<sub>1%</sub>