

Supporting information

Hexachlorocyclotriphosphazene Functionalized Graphene Oxide as highly Efficient Flame Retardant

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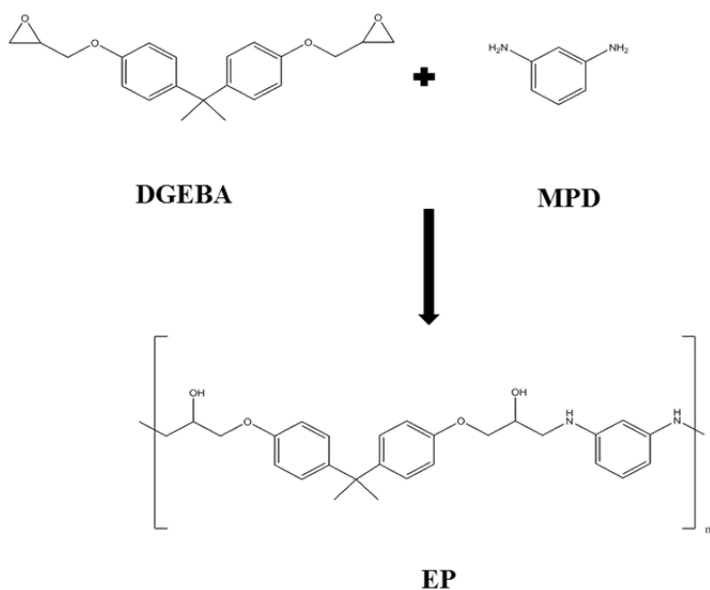


Figure S1. Illustration of synthesized thermoset epoxy resin.

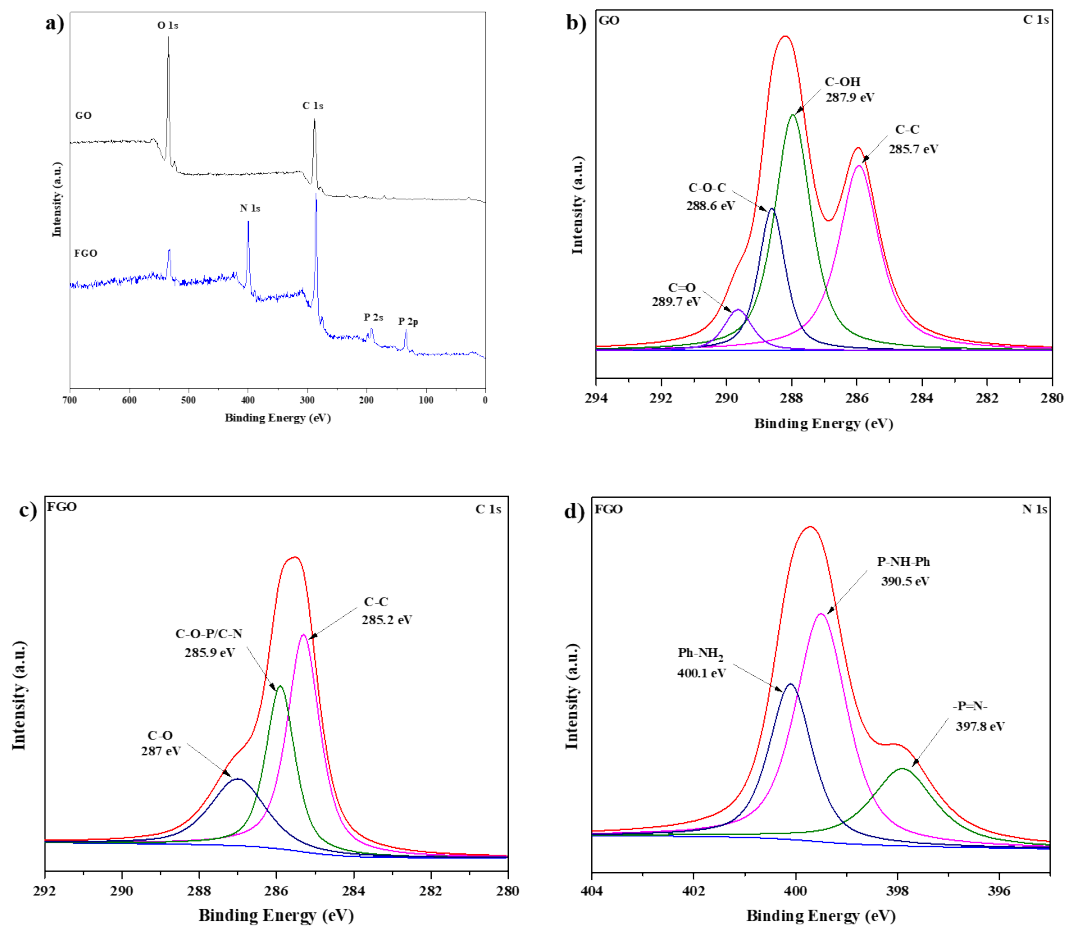


Figure S2. a) survey spectra of GO and FGO; (b) C 1s spectrum of GO; (c) C 1s and (d) N 1s spectra of FGO.

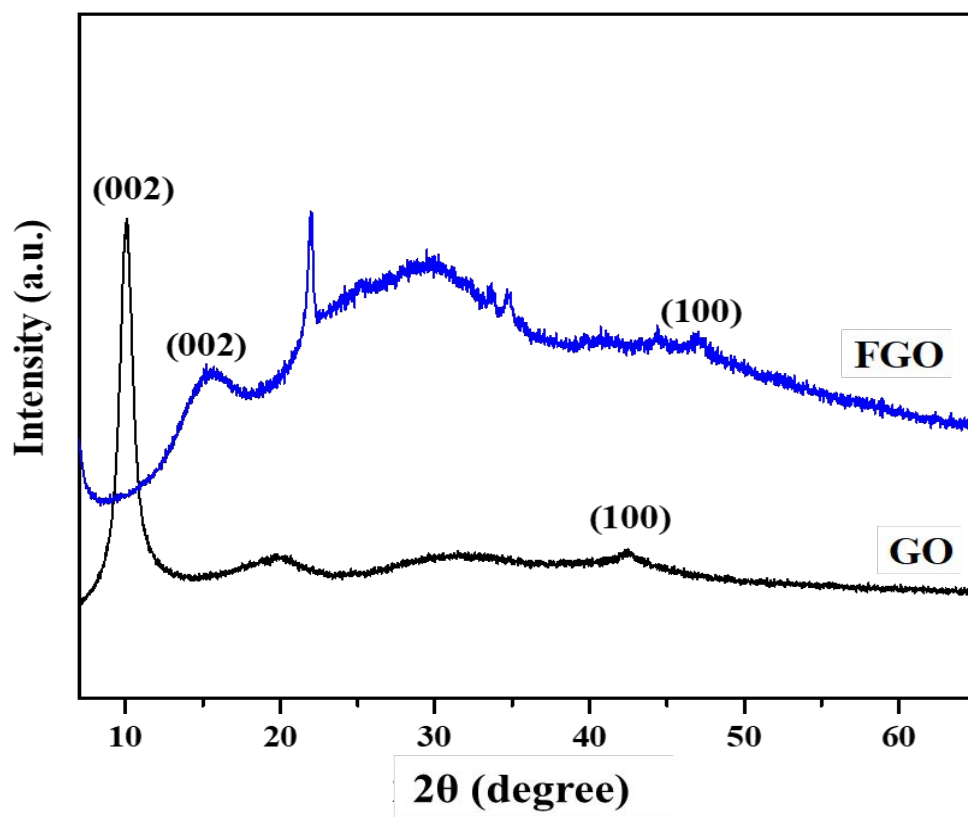


Figure S3. XRD spectra of GO and FGO.

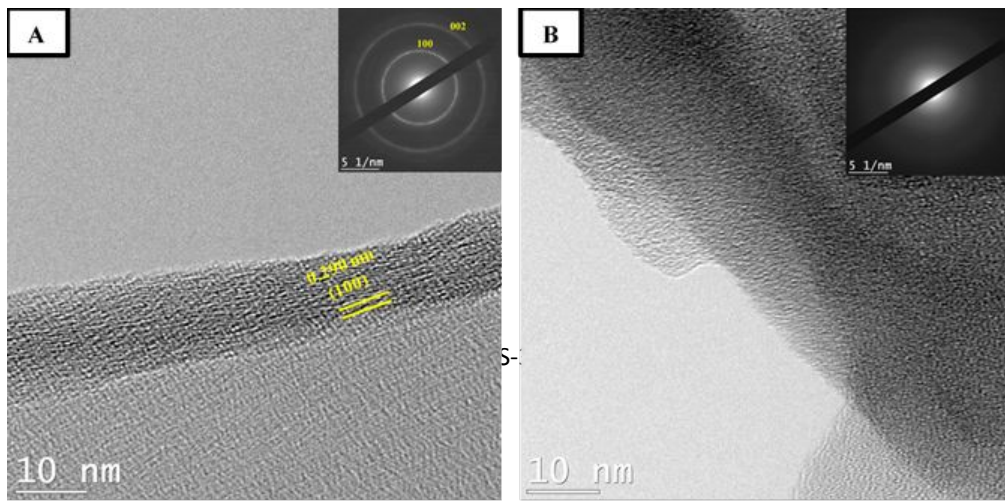


Figure S4. High-resolution transmission electron microscopy (HRTEM) image with the corresponding SAED pattern (top insert) of (A) (GO) and (B) (FGO).

Table S1: Element content of GO and FGO measured from XPS analysis.

Samples	C (at.%)	O (at.%)	P (at.%)	N (at.%)
GO	64.3	35.7	-	-
FGO	63.7	7.9	6.0	22.5

Table S2: Detailed TGA data for EP and its composites under N₂ atmosphere.

Samples	T ₁₀ /°C	T _{max} (wt%/°C)	Residue at 800 °C (wt%)
EP	370	-1.85	14
EP@GO2%	341	-1.57	14.7
EP@FGO2%	342	-1.36	18.3
EP@FGO5%	350	-1.18	20.1
EP@FGO10%	317	-0.85	23