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Electronic Supplementary Material

Ammonium Polyphosphate @Melamine Phytate–Layered Double Hydroxides, a Loaded Core-Shell Flame Retardant for Flame Retardancy and Smoke Suppression in Polypropylene

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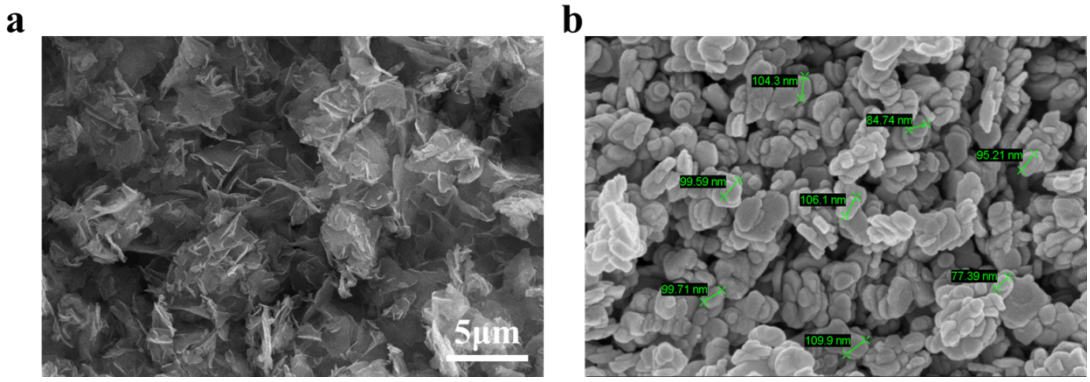
2.3 Preparation of flame-retardant polypropylene

The set temperatures of the twin-screw extruder and the injection molding machine

The temperature distribution in the twin-screw extruder was set to 160°C, 165°C, 170°C, 175°C, 180°C and 180°C for each zone, with a head temperature of 180°C and a melt temperature of 160°C. The temperature distribution of the injection molding machine was set to 180°C for zone one, 190°C for zone two, and 200°C for zone three.

Fig. S1. SEM of PMA and LDH



(a) SEM images of PMA, (b) SEM images of LDH

Fig. S2. N 1s XPS spectra of PMA

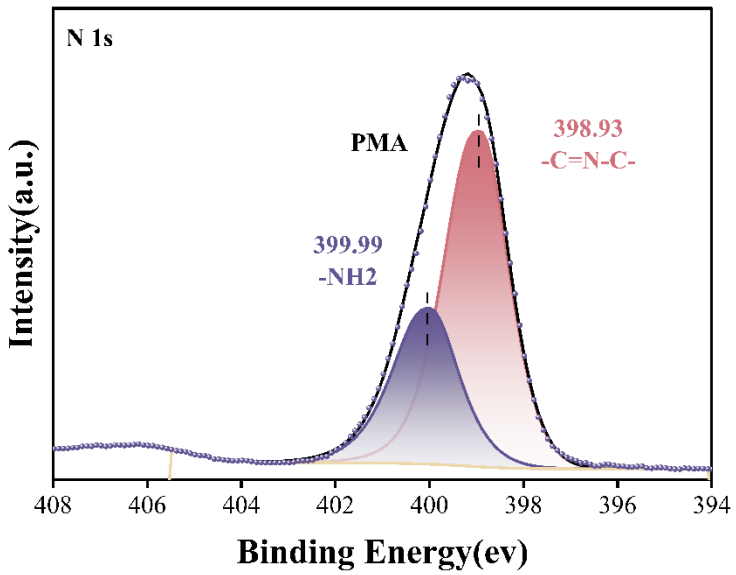
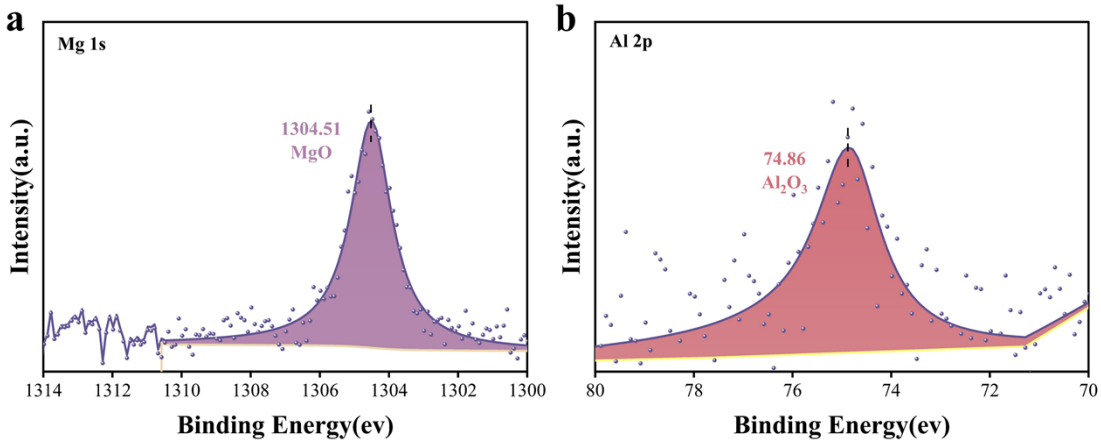


Fig. S3. Mg 1s and Al 2p XPS spectra of char residue



(a) Mg 1s XPS spectra of images of char residue, (b) Al 2p XPS spectra of images of char residue