

# Morphology-Controlled Synthesis of Polyphosphazene-Based Micro- and Nano-Materials and Their Application as Flame Retardants

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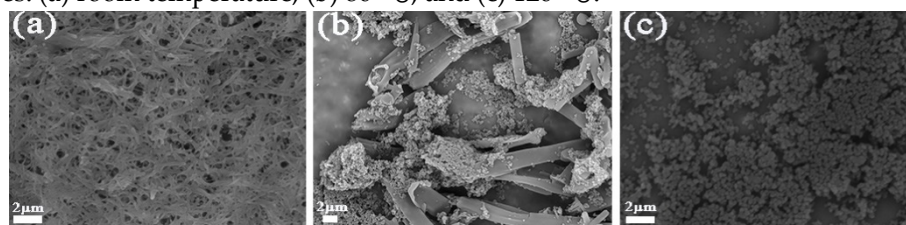
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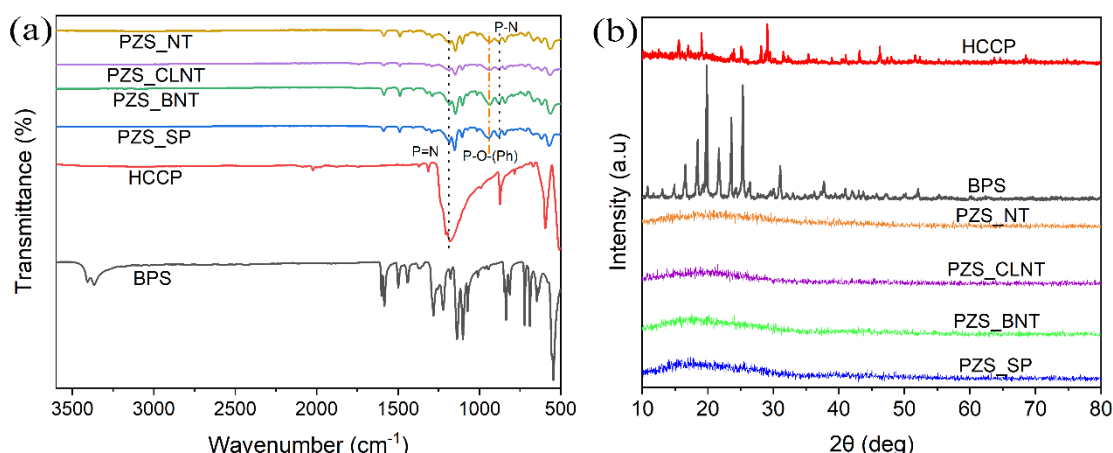
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## S1. Characterization of PZSs

Figure S1 shows the resulting product morphologies obtained at different temperatures: (a) room temperature, (b) 80 °C, and (c) 120 °C.



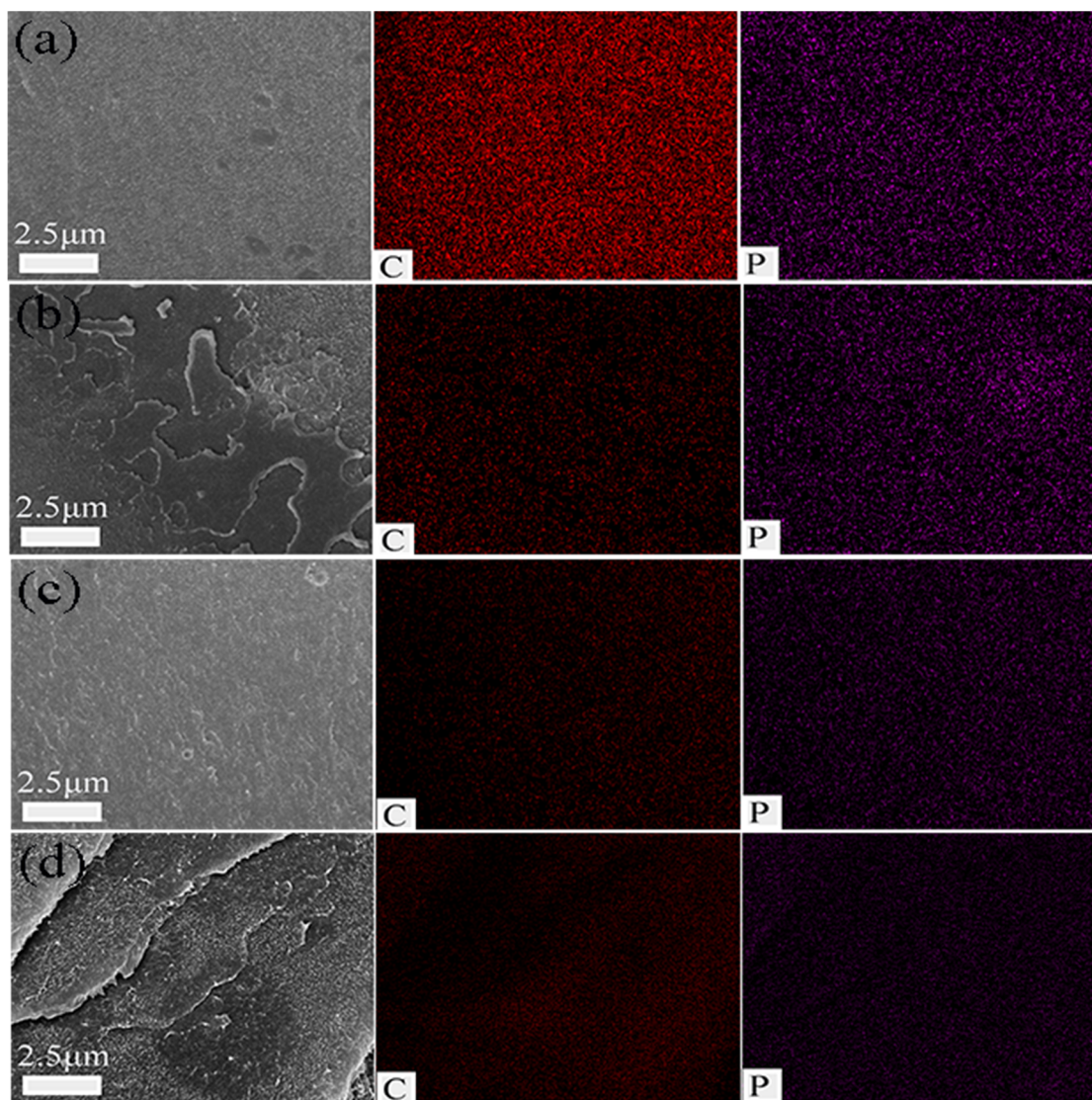
**Figure S1.** SEM images of PZS obtained at different temperatures: (a) room temperature, (b) 80 °C, and (c) 120 °C.



**Figure S2.** (a) FTIR and (b) XRD profiles of HCCP, BPS, PET/PZS\_SP, PET/PZS\_BNT, PET/PZS\_CLNT, and PET/PZS\_NT.

## S2. Dispersibility of PZS in PET

According to the energy dispersive spectroscopy (EDS) mapping of PET/PZS\_SP, PET/PZS\_CLNT, PET/PZS\_BNT, and PET/PZS\_NT, PZS with different morphologies is well dispersed in PET.



**Figure S3.** EDS mapping of (a) PET/PZS\_SP, (b) PET/PZS\_CLNT, (c) PET/PZS\_BNT, and (d) PET/PZS\_NT.