

Supplementary materials

Table S1. TGA data of samples for WAUPM, WAUM, WAU and WA

| | T _{-5%} | T _{MAX1} | Max1 lose rate | T _{MAX2} | Max2 lose rate | Residues at 800°C |
|-------|------------------|-------------------|----------------|-------------------|----------------|-------------------|
| | (°C) | (°C) | (%/°C) | (°C) | (%/°C) | (%) |
| WA | 367.4 | 433.1 | 3.41 | - | - | 1.5 |
| WAU | 241.3 | 427.1 | 1.07 | 548.6 | 0.29 | 29.9 |
| WAUM | 234.6 | 430.5 | 1.30 | 552.7 | 0.27 | 30.9 |
| WAUPM | 195.9 | 293.8 | 0.15 | 415.1 | 1.04 | 38.8 |

Table S2. Results of flame retardant coated PC/ABS for LOI and vertical burning test

| Sample | LOI/% | UL-94 | t ₁ /s | t ₂ /s | Dripping |
|-----------|-------|-------|-------------------|-------------------|----------|
| Untreated | 21.2 | NR | >60 | >60 | YES |
| WAU-3 | 23.4 | NR | >60 | >60 | YES |
| WAUM-3 | 26.1 | V-1 | 17.4 | 21.3 | NO |
| WAUPM-1 | 22.9 | NR | >60 | >60 | YES |
| WAUPM-2 | 24.8 | V-2 | 19.6 | 25.7 | YES |
| WAUPM-3 | 27.5 | V-0 | 1.7 | 10.8 | NO |

Table S3. Results of flame retardant coated PC/ABS for Cone Calorimetry Test

| Parameters | Untreated | WAUM-3 | WAUPM-1 | WAUPM-2 | WAUPM-3 |
|--------------------------------------|-----------|--------|---------|---------|---------|
| PHRR(kW/m ²) | 221.9 | 153.7 | 132.1 | 127.2 | 94.4 |
| t-PHPR(s) | 127 | 143 | 272 | 296 | 249 |
| TRR(kW/m ²) | 25870 | 18913 | 26383 | 24693 | 17167 |
| TSR(m ² /m ²) | 13.58 | 11.44 | 13.06 | 13.58 | 12.03 |
| FGI | 1.75 | 1.07 | 0.49 | 0.43 | 0.38 |

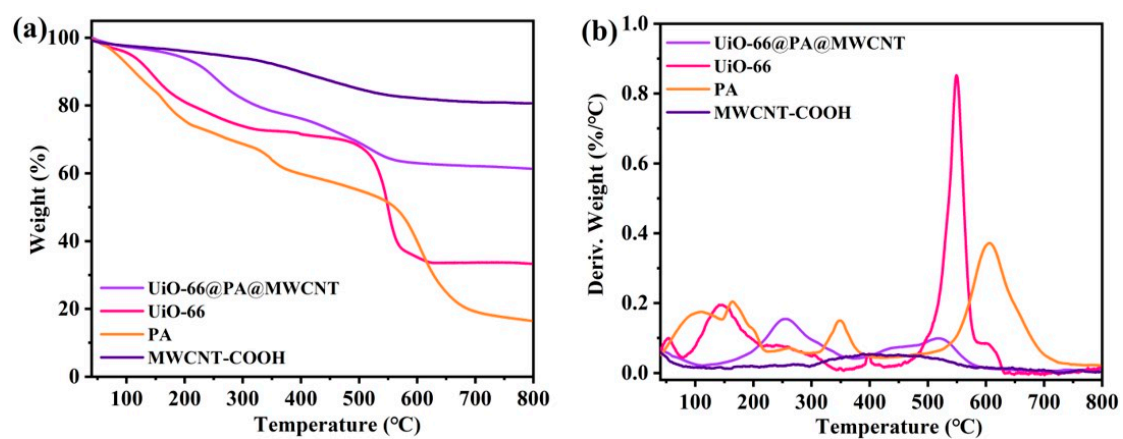


Fig S1. TGA(a) and DTG(b) curves of UiO-66@PA@MWCNT, UiO-66 and MWCNT-COOH

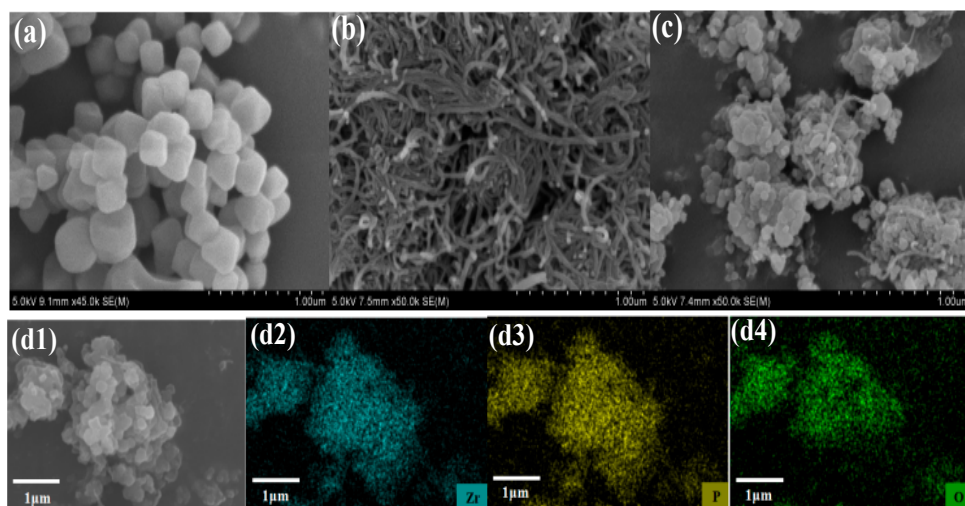


Fig.S2.SEM images of (a) UiO-66; (b) MWCNT-COOH; (c) UiO-66@PA@MWCNT, and elemental distribution (d1-d4) of UiO-66@PA@MWCNT