

# SUPPORTING INFORMATION

## Flexible Fiber Membrane Based on Carbon Nanotube and Polyurethane with High Thermal Conductivity

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Fourier transform infrared (FTIR) spectra measurements were performed with a resolution of 4 cm<sup>-1</sup> and a range from 500 to 4000 cm<sup>-1</sup> via KBr pressed disc technique.

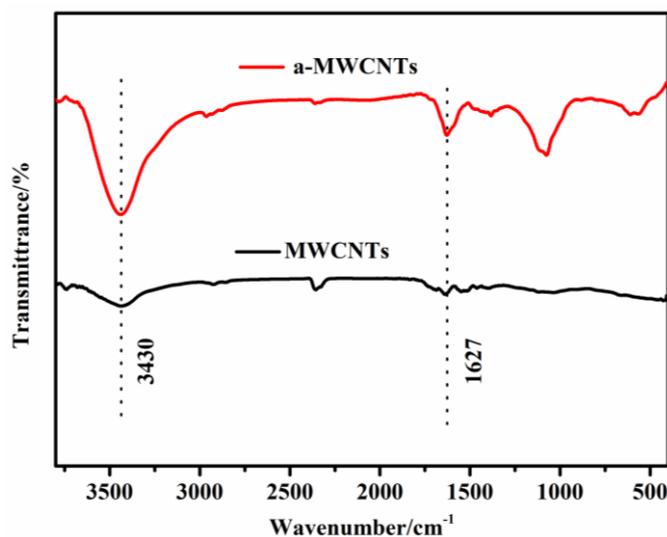


Figure S1 FTIR spectra of MWCNTs and a-MWCNTs.

**Table S1** A comparison of the enhancement of thermal conductivity for CNTs-

based film-like composites.

| Filler loading | Polymeric matrix | $\lambda$ (W/mK) | Enhancement (%) | Ref.     |
|----------------|------------------|------------------|-----------------|----------|
| 2 wt% MWCNTs   | PAN              | 4.825            | 234             | [28]     |
| 35.3 wt% CNTs  | NFC              | 19.3             | 1135            | [36]     |
| 15 wt% CNTs    | PVDF             | 1.12             | 747             | [37]     |
| 4 wt% MWCNTs   | PI               | 0.63             | 461             | [38]     |
| 10 wt% MWCNTs  | PA6              | 1.159            | 232             | [39]     |
| 5 wt% CNTs     | EP               | 1.0              | 441             | [19]     |
| 10 wt% MWCNTs  | TPU              | 3.60             | 1800            | Our work |