Electronic Supplementary Material (ESI) for Soft Matter.

Supporting Information

Flexible h-BN Foam Sheets for Multifunctional Electronic Packaging Materials with Ultrahigh Thermostability

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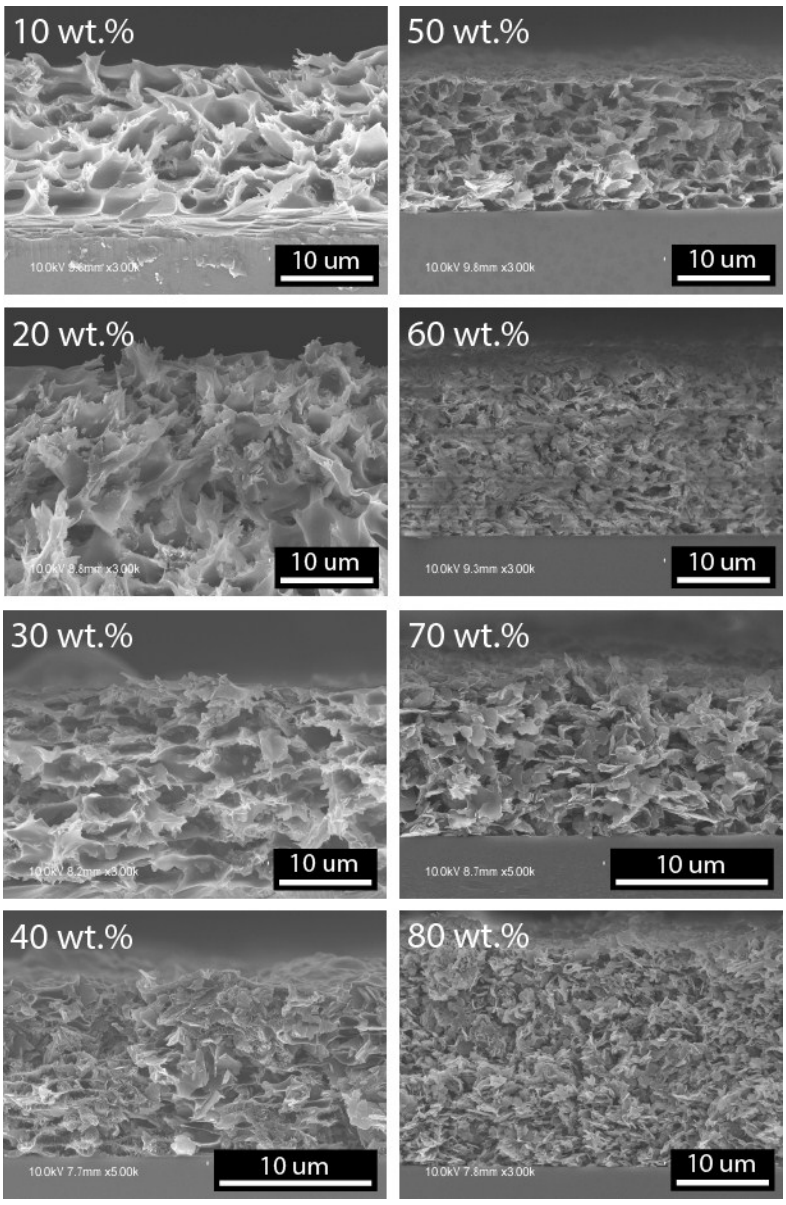

Fig S1. Scanning electron micrographs of *as-cast* h-BN foam sheets with a variety of h-BN contents (10 – 80 wt.%).

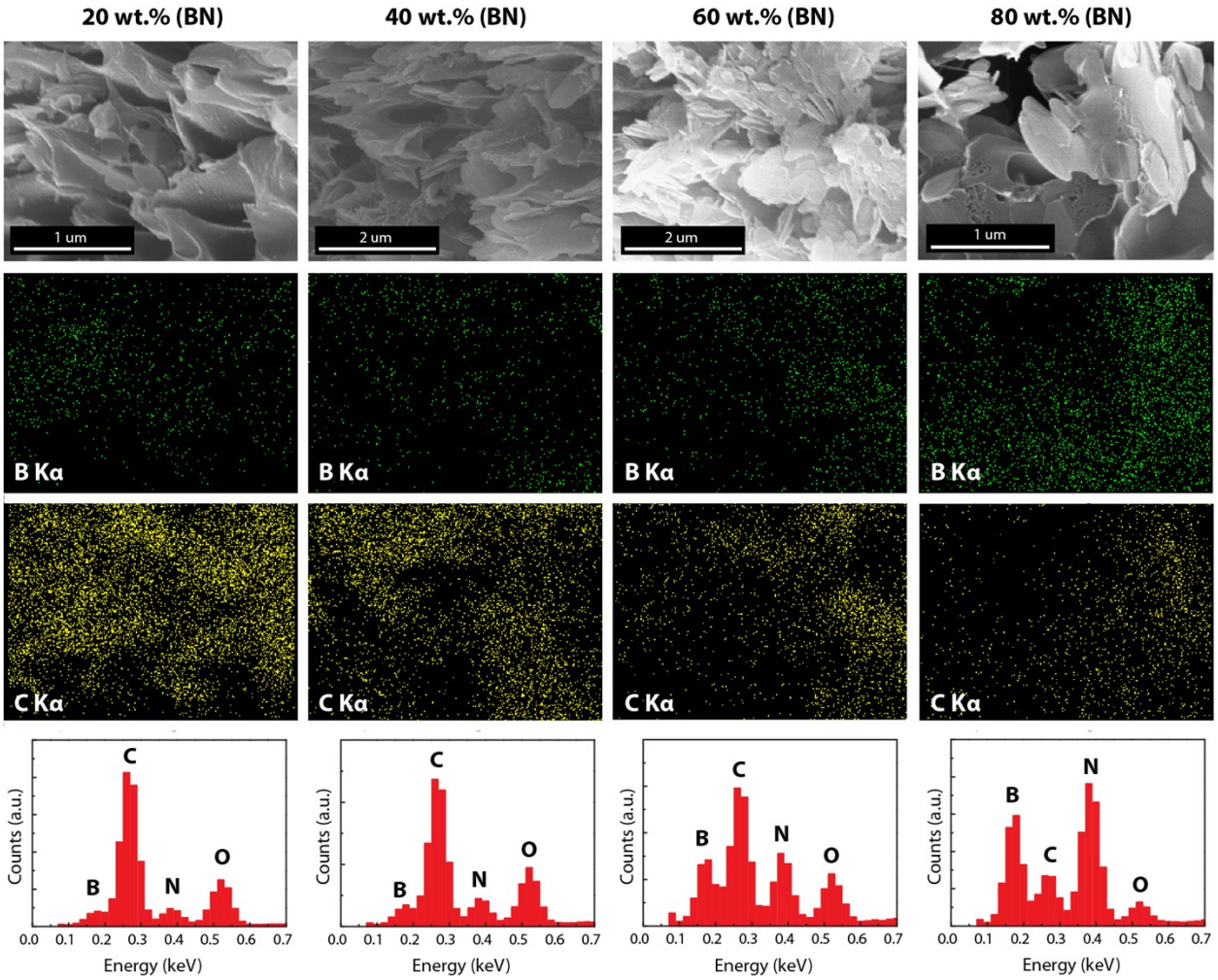

Fig S2. Magnified SEM images of *as-cast* h-BN foam sheets (20 – 80 wt.%) and the corresponding EDS spectra and elemental mapping of boron and carbon.

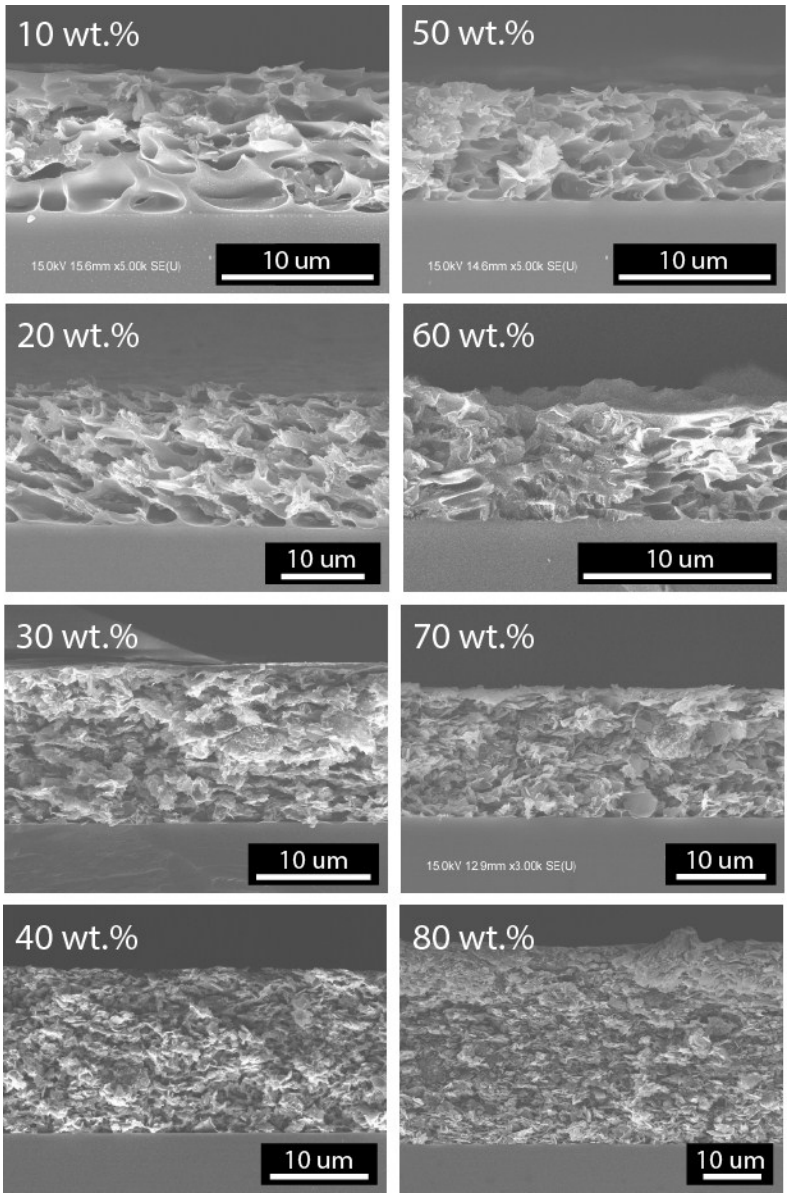

Fig S3. Scanning electron micrographs of *roll-milled* h-BN foam sheets with a variety of h-BN contents from 10 wt.% to 80 wt.%.

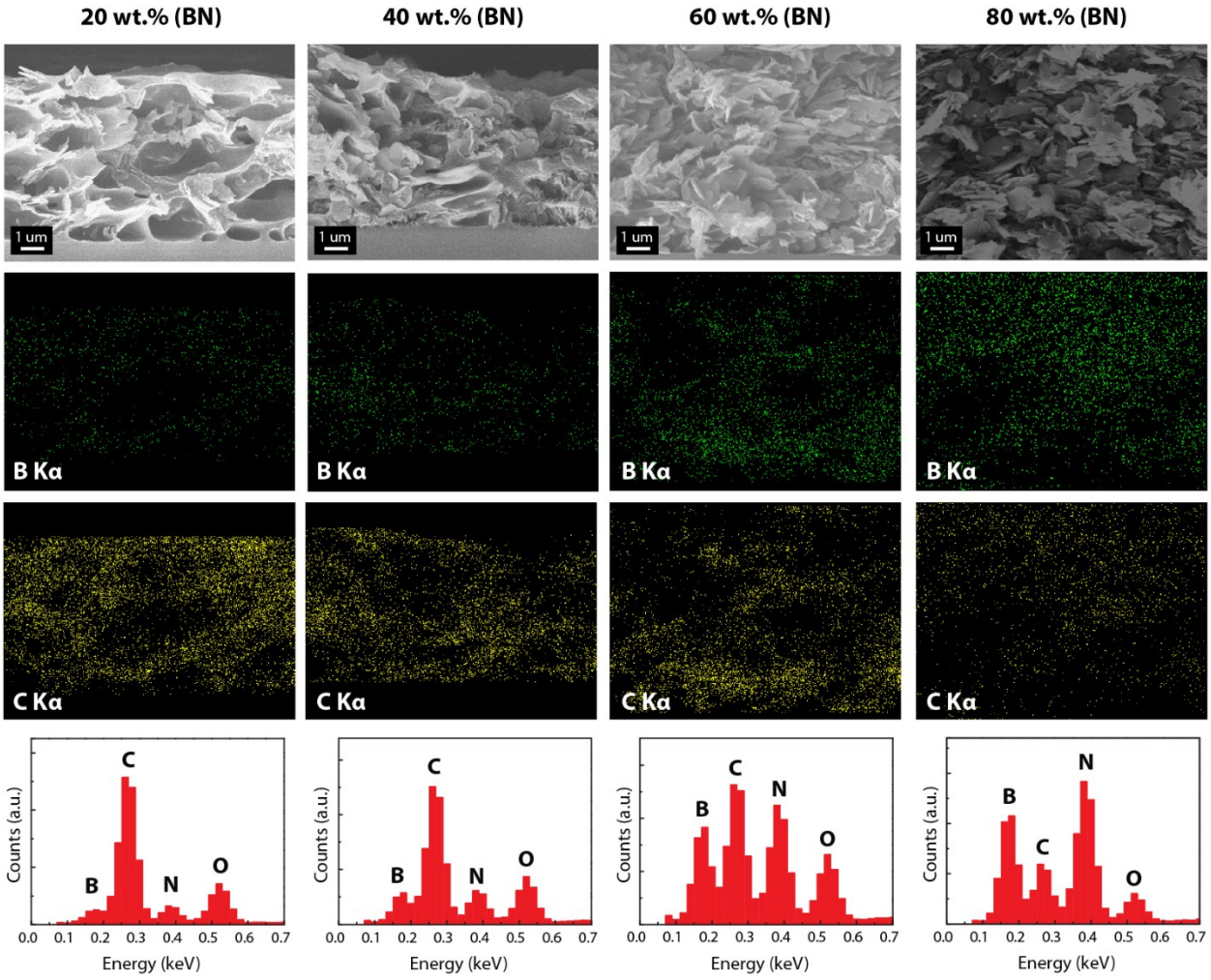

Fig S4. Magnified SEM images of *roll-milled* h-BN foam sheets (20 – 80 wt.%) and the corresponding EDS spectra and elemental mapping of boron and carbon.

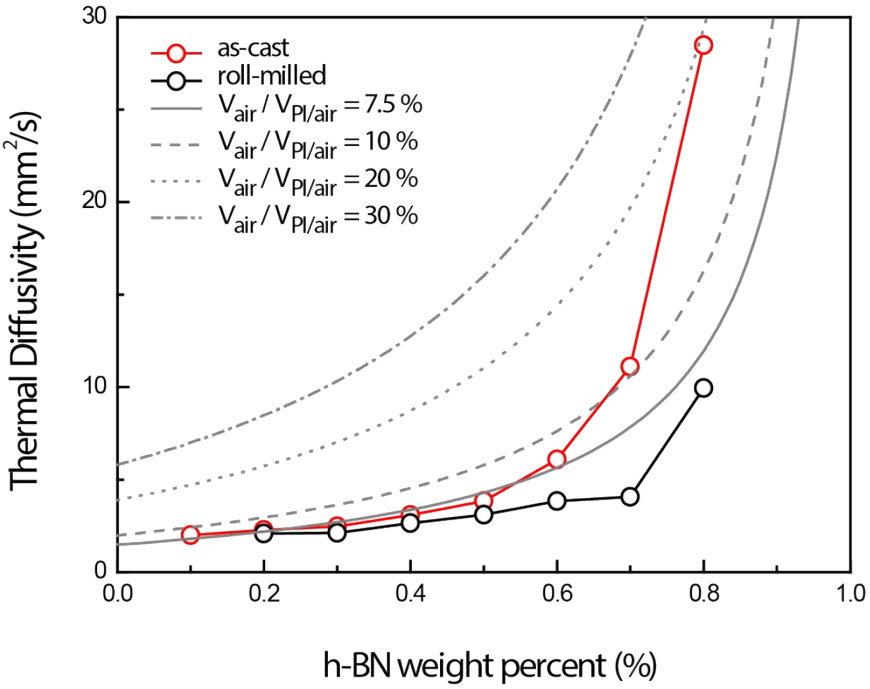

Fig S5. Thermal diffusivity of *as-cast* (red circles) and of *roll-milled* (black circles) h-BN foam sheets as a function of h-BN contents. Gray lines represent the theoretical thermal diffusivity of the h-BN foam sheets using Hatta and Taya model ($\alpha_{\text{h-BN}} = 180$, $\alpha_{\text{PI/air}} = 1.5$ mm^2/s, $S = 0.5$) with different volume fraction of pores (i.e. air).[25]

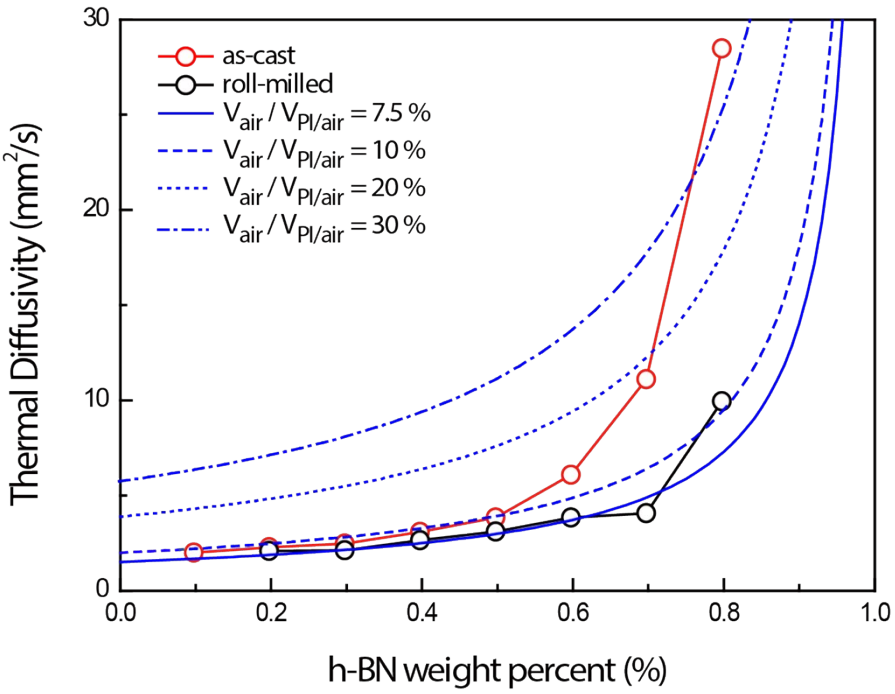

Fig S6. Thermal diffusivity of *as-cast* (red circles) and of *roll-milled* (black circles) h-BN foam sheets as a function of h-BN contents. Blue lines represent the theoretical thermal diffusivity of the h-BN foam sheets using Hatta and Taya model ($\alpha_{\text{h-BN}}$ = 180, $\alpha_{\text{PI/air}}$ = 1.5 mm^2/s, S = 1) with different volume fraction of pores (i.e. air).[25]

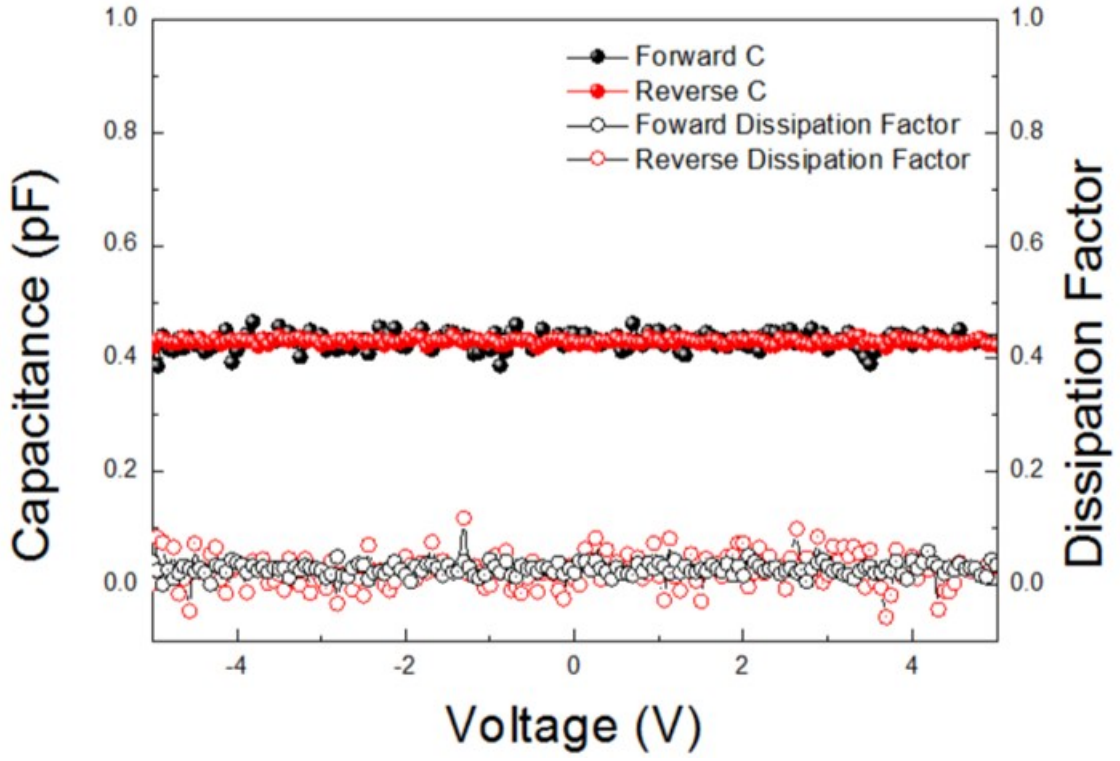

Fig S7. Capacitance (left) and dissipation factor (right) as a function of voltage of h-BN foam sheet (80 wt.%).