*Supplementary Material*

# Polyamide-imide/polyimide alloy with enhanced energy density and efficiency

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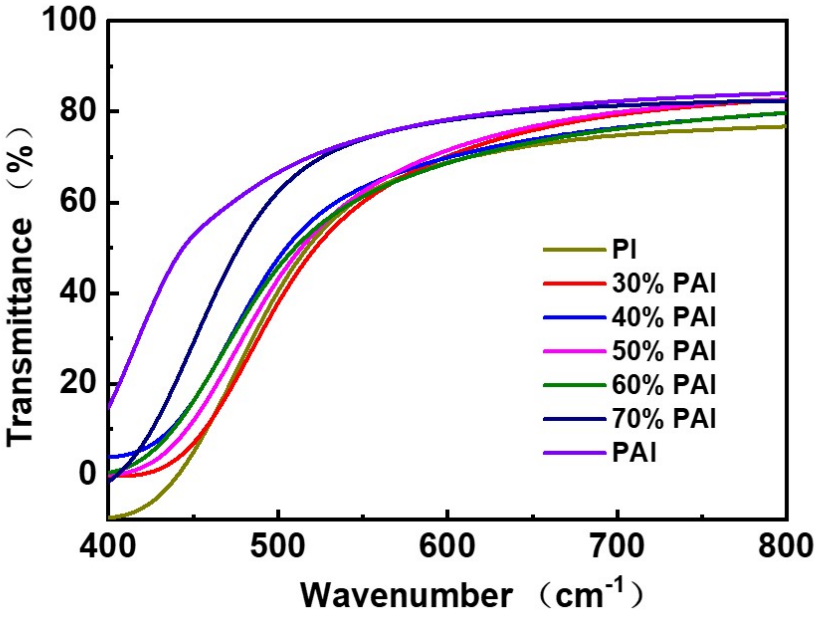


**Fig. S1**. UV spectra of PI, PAI and PAI/PI alloys.

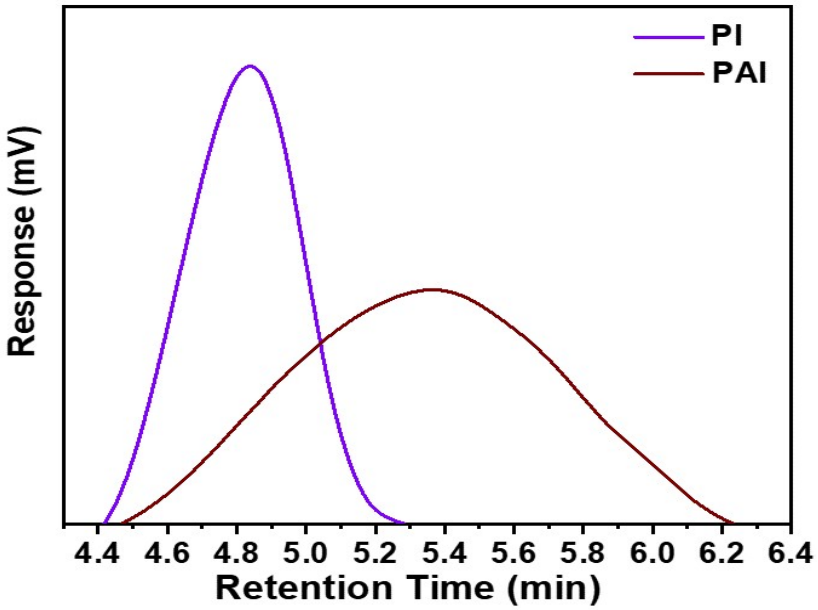


**Fig. S2**. GPC curves of PI and PAI.

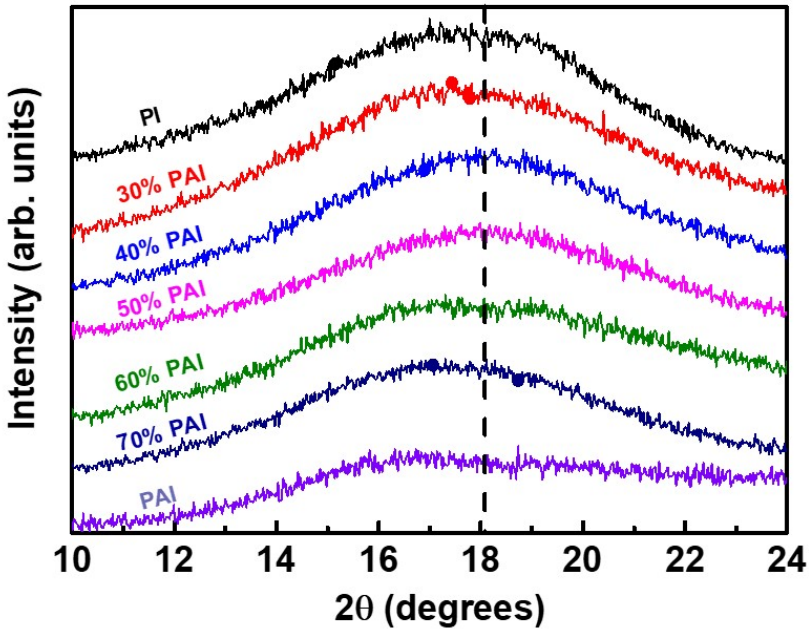


**Fig. S3**. X-ray diffraction (XRD) spectra of PI, PAI and PAI/PI alloys.

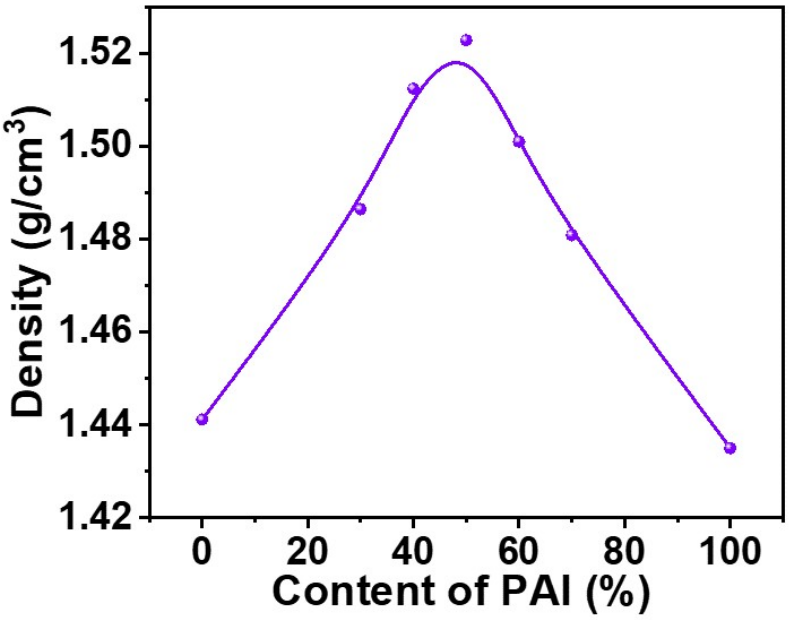


**Fig. S4**. The density of PAI/PI alloys with different PAI contents.

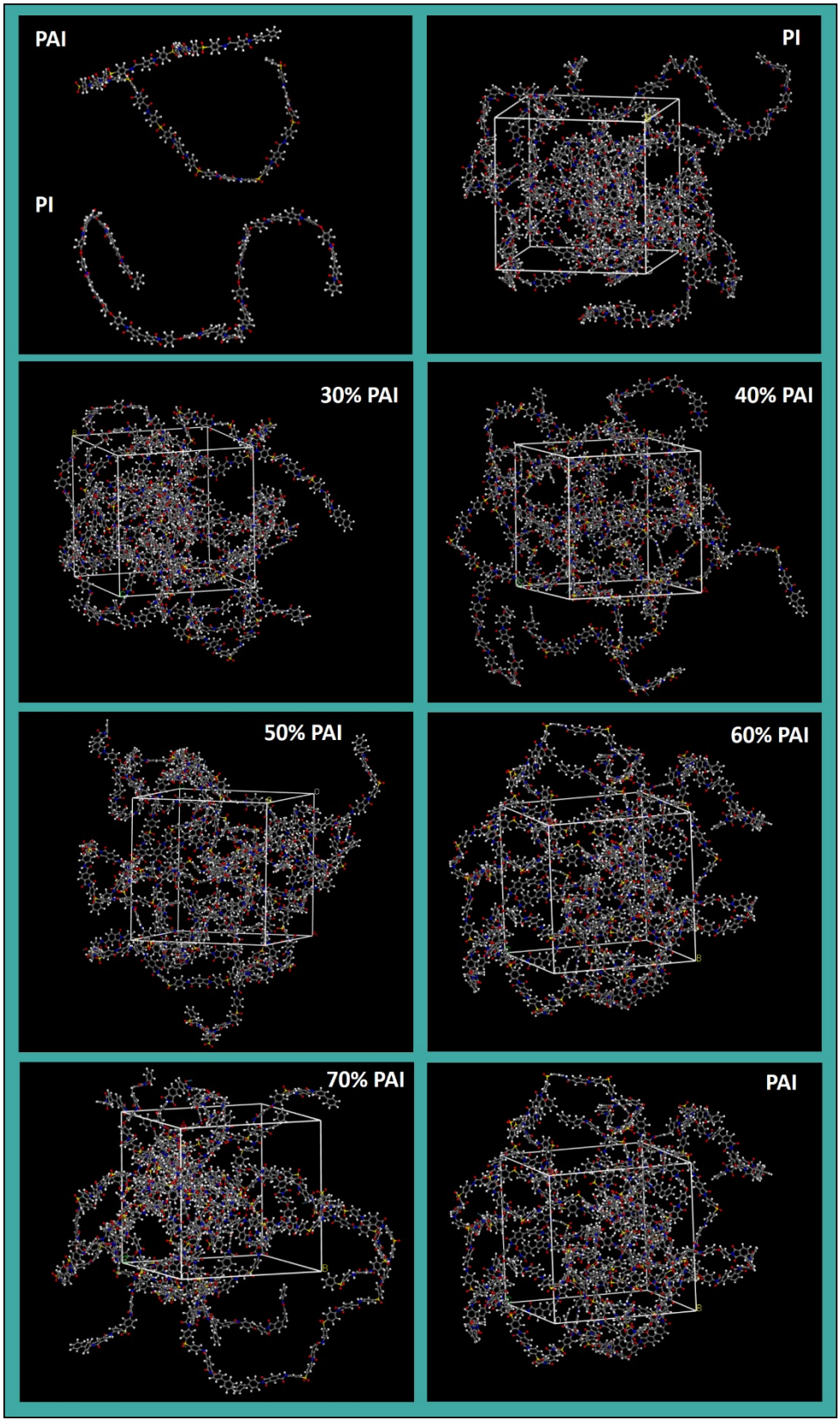


**Fig. S5**. Molecular structure modeling of PAI/PI alloys with different PAI contents by Materials Studio.