Supporting Information

A long-term stable thermochromic smart window of PNIPAM-based hydrogels with excellent water retention and visible light modulation

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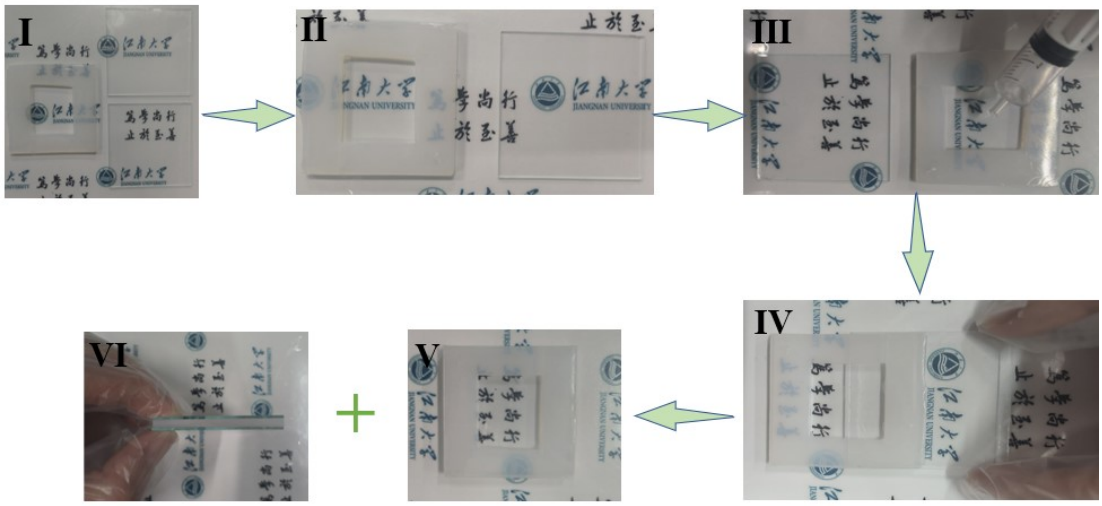

Fig. S1 Photograph of the process of fabricating the smart window

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Fig. S2 Photograph of the indoor experiment system.

Fig. S3 Photograph of the outdoor experiment system.

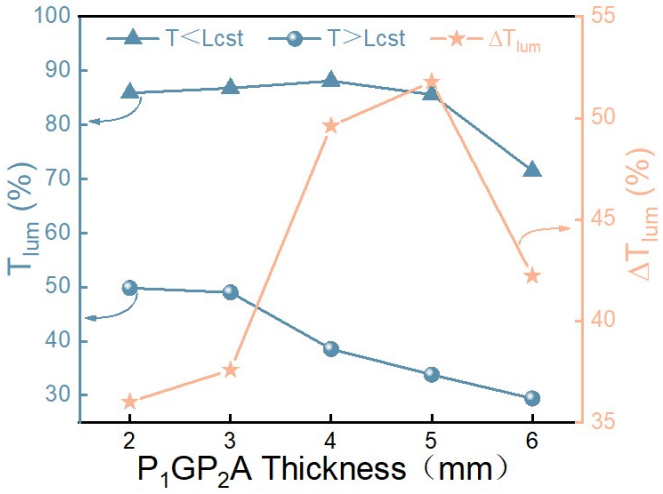

Fig. S4 T_{lum} before and after phase transition and ΔT_{lum} of the P_1GP_2A smart windows with different thickness hydrogels.

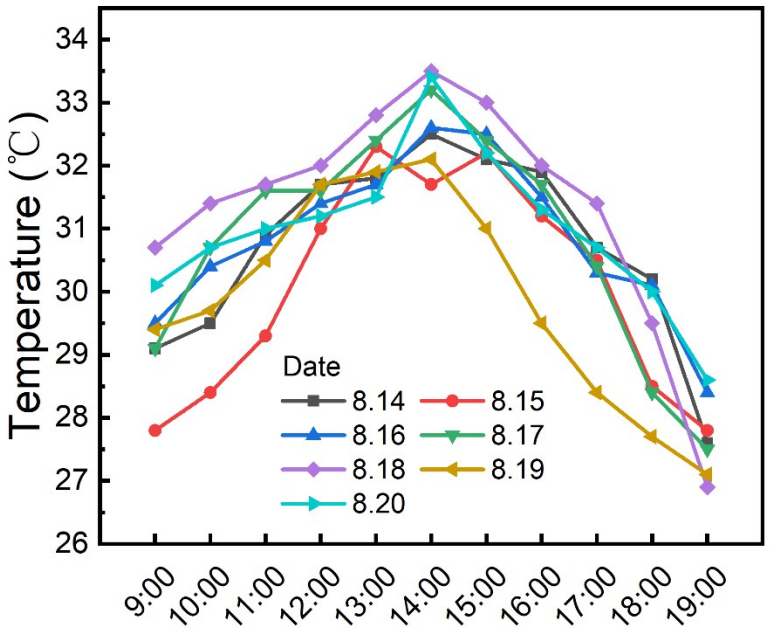

Fig. S5 Air temperature curves for the outdoor experiment in Yixing, Jiangsu, China, August 14-20, 2025, 9:00-19:00.