

Supporting Information

Table S1. Average electrolytes' thickness used for ionic conductivity calculations.

Electrolyte	Thickness (cm)
CMC-CS sw	0.28 ± 0.09
CA30 sw	0.31 ± 0.0001
CA40 sw	0.36 ± 0.05
CA50 sw	0.35 ± 0.05

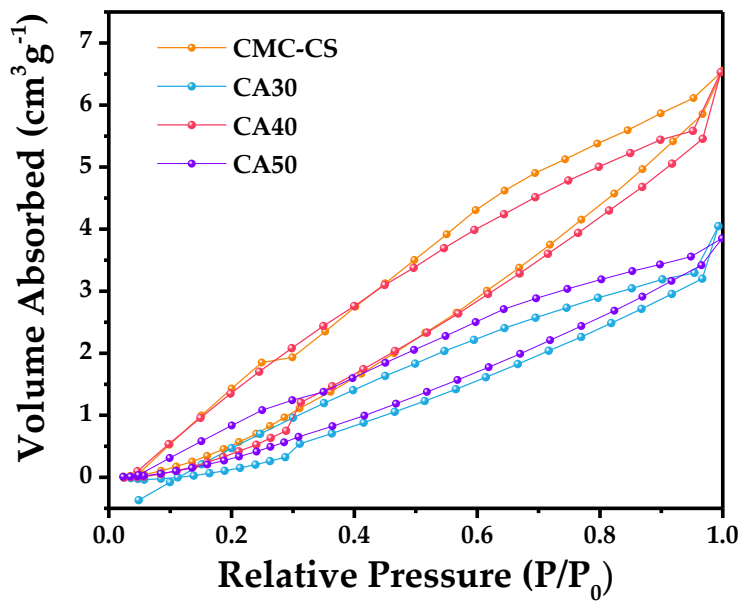


Figure S1. Nitrogen adsorption/desorption isotherms for the synthesized hydrogels.

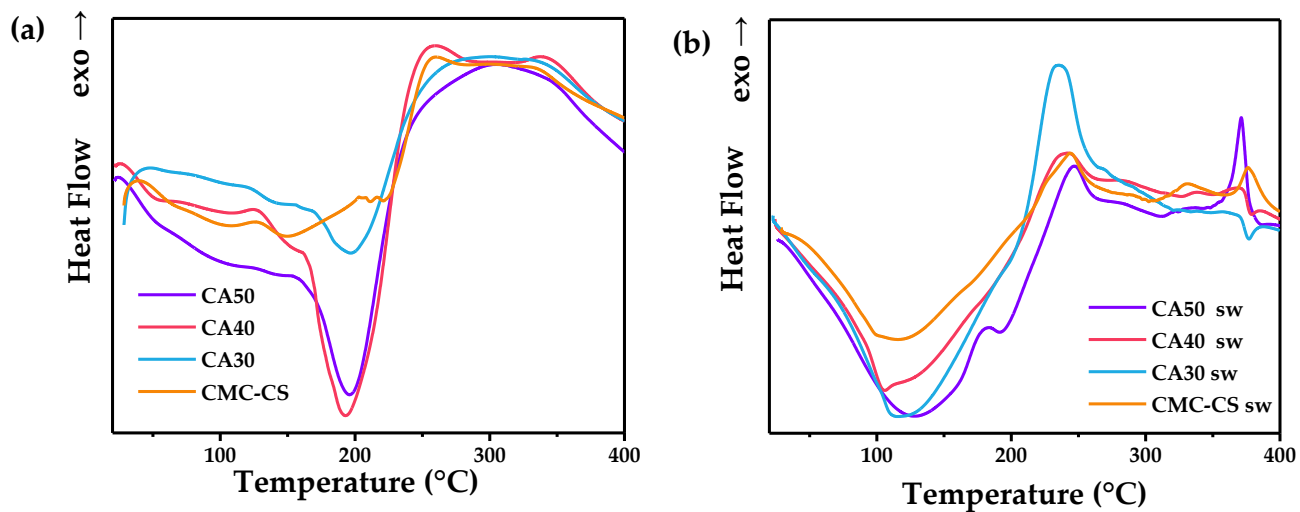


Figure S2. DSC curves for (a) dried hydrogels and (b) swollen hydrogels.