

Supporting information for

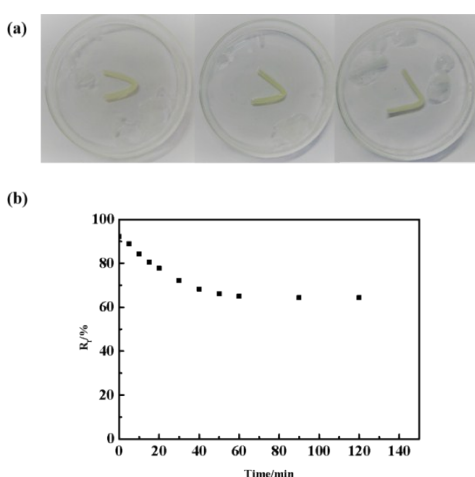
## Thermal- and Salt-Activated Shape Memory Hydrogels Based on Gelatin/Polyacrylamide

### Double Network

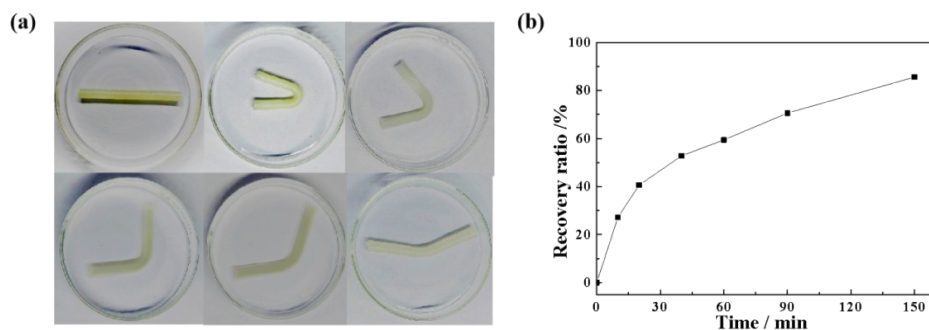
Fang Chen,<sup>a</sup> Kaixiang Yang,<sup>a</sup> Dinglei Zhao,<sup>a</sup> and Haiyang Yang<sup>\*a</sup>

<sup>a</sup> CAS Key Laboratory of Soft Matter Chemistry, School of Chemistry and Materials Science,  
University of Science and Technology of China, Hefei 230026,  
China.

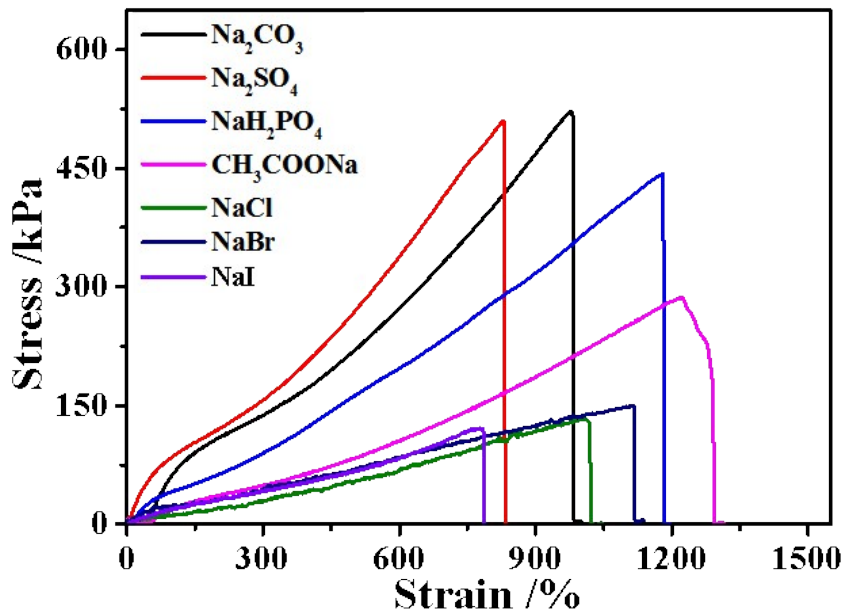
E-mail: yhy@ustc.edu.cn



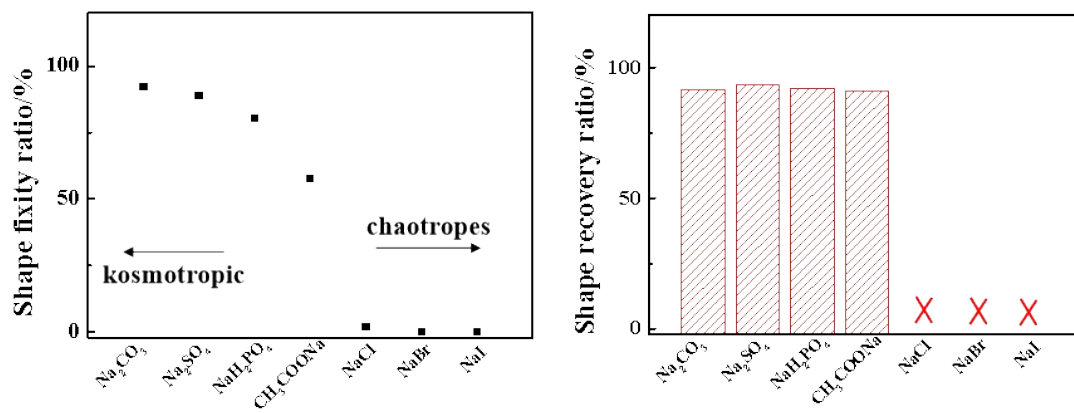
**Fig. S1** (a) The shape transition of the hydrogel with time at freezing temperature. (b) Shape fixity ratio ( $R_f$ ) of the hydrogel shown as a function of time at freezing temperature.



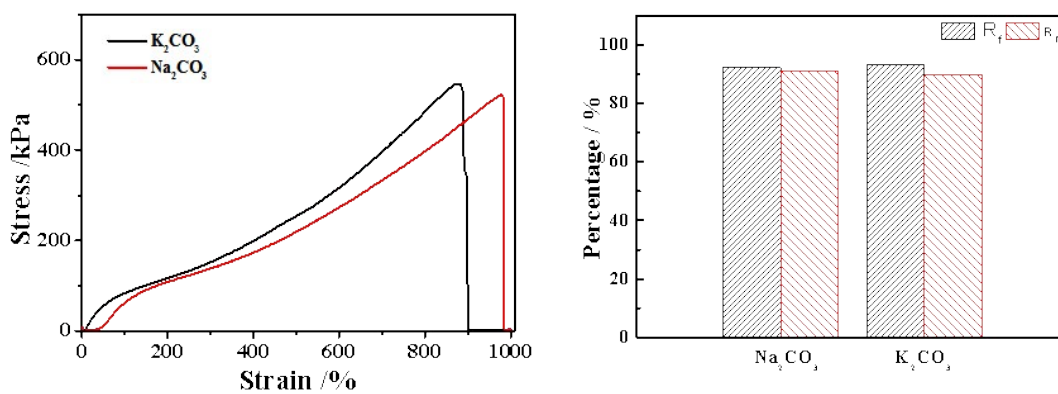
**Fig. S2** (a) Images demonstrating the transition of the hydrogel from the temporary shape to the permanent shape for the salt-activated SME. (b) Shape recovery ratio ( $R_r$ ) for G10AM3 hydrogels shown as a function of time at room temperature.



**Fig. S3** Tensile stress-strain curves of hydrogels treated with solutions containing different anions at room temperature.



**Fig. S4** (a)  $R_f$  for hydrogels treated with solutions that containing different anions at room temperature. (b)  $R_r$  for hydrogels treated with solutions containing different anions at room temperature.



**Fig. S5** (a) Tensile stress-strain curves of hydrogels treated with solutions containing different cations at room temperature. (b)  $R_f$  and  $R_r$  for hydrogels treated with solutions containing different cations at room temperature.