

Electronic Supplementary Information for Microstructural Transition of Poly (vinyl alcohol)-based Aerogels in the Present of Interpolymer Complexes

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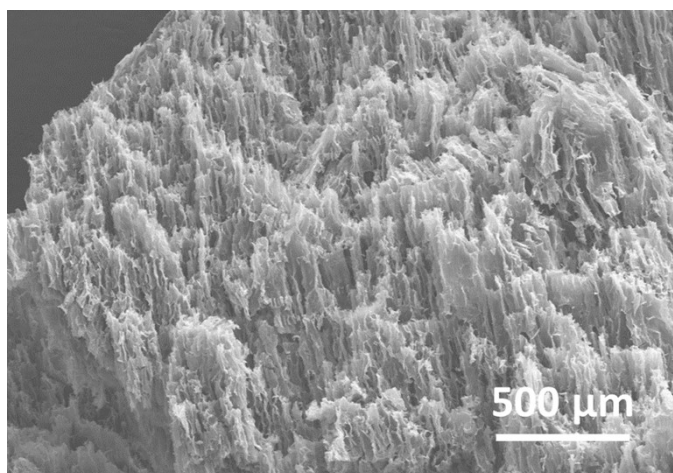


Figure S1 SEM image of C60 sample. The unidirectional stripe structure were easy to be recognized.

entry	E20	E40	E60	E80	A20	A40	A60	A80	C20	C40	C60	C80
pH value	5.41	4.57	3.85	3.34	4.01	3.54	3.28	3.16	9.52	9.63	9.67	9.81

Table S1 pH value of the precursor solutions of the PVA-based aerogels.

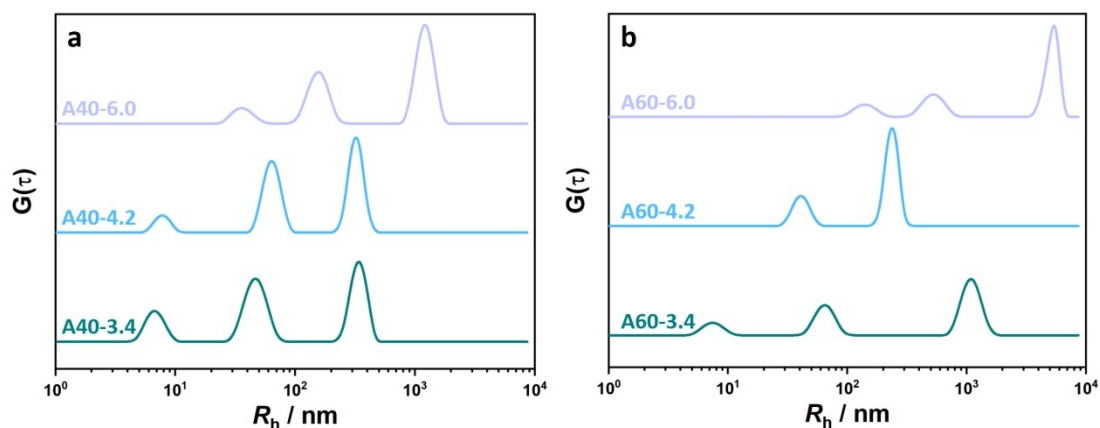


Figure S2 DLS data of A40 and A60 samples with different pH values.

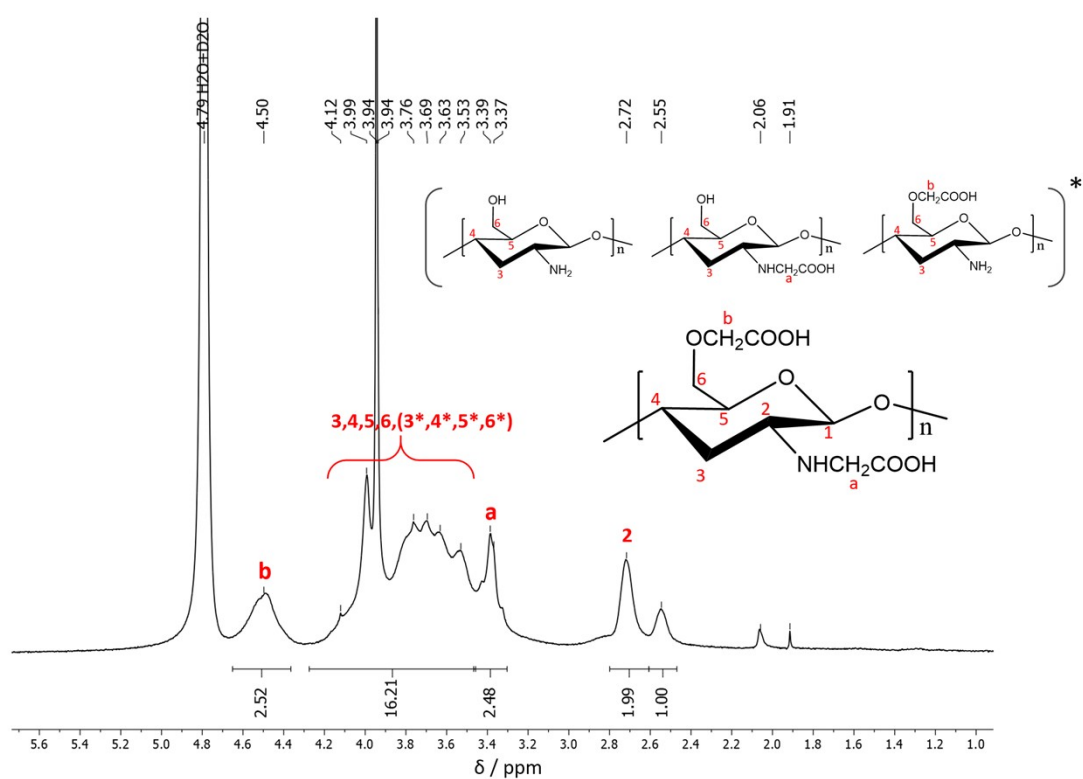


Figure S3 ^1H NMR of carboxymethyl chitosan. The peaks and corresponding structure were labeled on the graph.

Calculation of the degree of substitution (DS)

The average DS of CM-CTS was calculated as follow:

$$\text{DS} = \frac{(I_a + I_b) / 2}{(I_* + I_3 + I_4 + I_5 + I_6) / 6} * 100\% = \frac{(2.48 + 2.52) / 2}{16.21 / 6} * 100\% = 92.4\%$$

The ratio of N-carboxymethyl and O-carboxymethyl was almost 1:1 as the integral suggested.