

Supporting Information

Cellulose Diacetate Aerogels with Low Drying Shrinkage, High-Efficient Thermal Insulation, Superior Mechanical Strength

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Figure S2: XPS spectra of CDAAs: (a-c) CDAAs-T2P2, (d-f) CDAAs-T2P3, (g-i) CDAAs-T2P4.

Table S1: Chemical composition and corresponding properties of CDAAs.

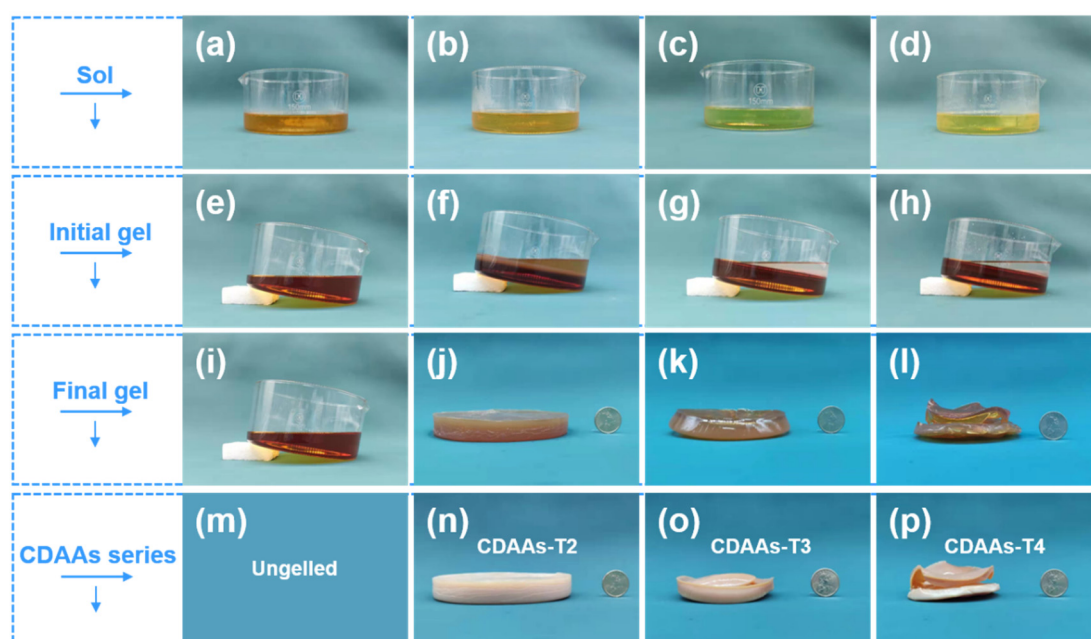


Figure S1. Photographs of the corresponding sol, initial gel, final gel and aerogel in preparing CDAAs processes. The respective stages for (a, e, i, m) CDAAs-T1, (b, f, j, n) CDAAs-T2, (c, g, k, o) CDAAs-T3, (d, h, l, p) CDAAs-T4.

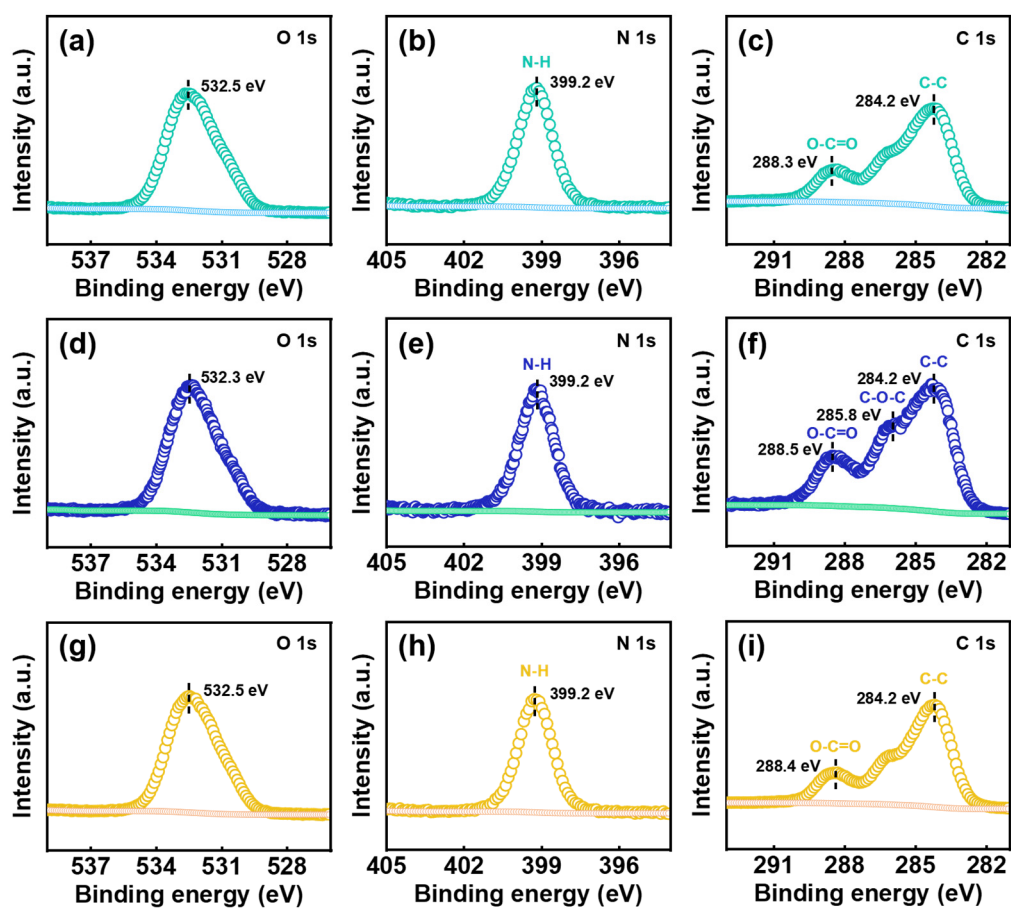


Figure S2. XPS spectra of CDAA-T2P2, (d-f) CDAA-T2P3, (g-i) CDAA-T2P4.

Table S1. Chemical composition and corresponding properties of CDAAs. Note: the preparation system all controlled in the sum volume of 300 mL; TC refers to thermal conductivity.

Specimens	CDA (g)	TDI (g)	Py (mL)	ρ (g cm ⁻³)	TC (W m ⁻¹ K ⁻¹)
CDAAs-T1	9	9.44	9.0	—	—
CDAAs-T2	9	10.20	9.0	0.073	0.021
CDAAs-T3	9	10.98	9.0	0.391	—
CDAAs-T4	9	11.75	9.0	0.405	—
CDAAs-T2P1	9	10.20	8.0	0.209	—
CDAAs-T2P2	9	10.20	8.5	0.069	0.025
CDAAs-T2P3	9	10.20	9.0	0.073	0.021
CDAAs-T2P4	9	10.20	9.5	0.079	0.023
CDAAs-T2P5	9	10.20	10.0	0.223	0.030