SUPPORTING INFORMATION

Fabrication of highly elastic nanocomposite hydrogel by surface modification of cellulose nanocrystal

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Table S1. Acylation conditions of CNCs and their DS.

Sample	Oxidized CNCs (mg)	AC or UC addition (mL)	T (°C)	DS	Zeta potential (mV)
CNC	-	-	-	-	−40.3
CNC-T	-	-	-	-	-59.5
AC-T-1	100	0.3	55	0.08	-
AC-T-2	100	0.5	55	0.24	-58.4
AC-T-3	100	0.7	55	0.28	-
UC-T-1	100	0.6	30	0.10	-
UC-T-2	100	0.8	30	0.20	-
UC-T-3	100	1.0	30	0.25	-57.1

Table S2. Synthesis conditions of hydrogels.

Sample	AM (g)	Addition of CNCs (mmol[a])	MBA (mmol)	C=C groups in crosslink agent (mmol)
B	3.0	-	0.05	0.16
A1	3.0	1.00	-	0.24
A2	3.0	0.50	-	0.12
A3	3.0	0.25	-	0.06
U1	3.0	1.00	-	0.25
U2	3.0	0.50	-	0.13
U3	3.0	0.25	-	0.06

[a] The amount of modified glucose ring.

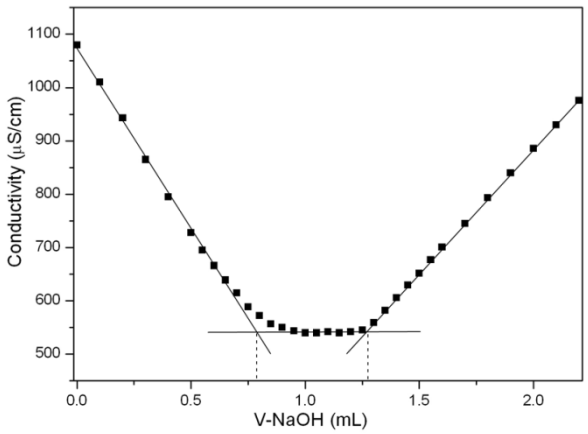

Figure S1. Conductometric titration curve of TEMPO oxidized CNCs