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Electronic Supplementary Information

2 Super Biosorbent from Dendrimer Poly(amidoamine)-Grafted

3 Cellulose Nanofibril Aerogels for Effective Removal of Cr(VI)

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10 **Table S1.** Isotherm parameters for the Cr (VI) removal by PAMAM-g-CNFs.

Sample	Langmuir model			Freundlich model		
	q_{max} (mg/g)	K_L (L/mg)	R^2	n	K_F	R^2
G5	377.36	0.16	0.9951	2.79	55.08	0.8115

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12 **Table S2.** Kinetics parameters for the Cr (VI) removal by PAMAM-g-CNFs.

Sample	$q_{\text{e,exp}}$ (mg/g)	Pseudo-second-order kinetic model		
		k_2 (g/mg·h)	$q_{\text{e,cal}}$ (mg/g)	R^2
G5	335.99	0.0122	338.98	0.9996

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14 **Table S3.** Thermodynamic parameters for the Cr (VI) removal by PAMAM-g-CNFs.

ΔH° (kJ/mol)	ΔS° (J/mol·K)	ΔG° (kJ/mol)				
		T=278K	T=293K	T=303K	T=313K	T=323K
37.51	141.81	-1.93	-4.09	-5.37	-6.89	-8.50

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18 **Figure S1.** SEM images of the bamboo pulp fibers (a) before and (b) after the
19 combined physical treatments, (c) the as-prepared PAMAM-g-CNFs

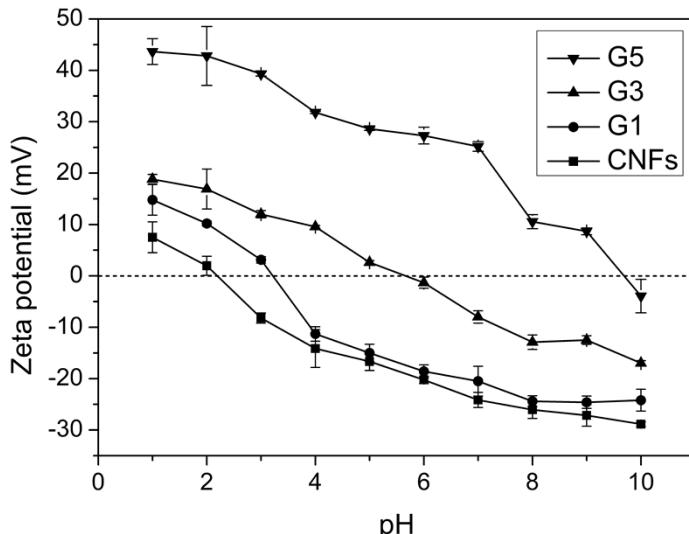
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23 **Figure S2.** XPS N1s core-level spectra of (a) CNFs, (b) the as-prepared G1, and (c)
24 the as-prepared G5.

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27 **Figure S3.** Zeta potential of the pristine CNFs and PAMAM-g-CNFs as a function of
28 solution pH.

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32 **Figure S4.** XPS spectra of the G5 before and after Cr(VI) adsorption.

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