Supporting Information for

“Layer-by-Layer Assembled Films of Cellulose Nanowires with Antireflective Properties”

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Supplementary Images:
Figure S.1 Cross-sectional analysis of individual CNWs. The cross-section reveals the diameter of the nanowires to be between 3-4 nm.

Figure S.2 Thickness of Chitosan/CNWs film as a function of a bilayer (Polymer+CNW) number.
Figure S.3 SEM images of 12 bilayers of PEI/CNWs at different magnifications showing uniformity of the coating: A) 2000x, B) 7000x, C) 30000x, and D) 240,000x.
Figure S.4 A) Backscattering setup for Brillouin scattering. $k_i$, $k_s$, and $k_r$ are the incident, scattered, and reflected beams; 1 and 2 directions are in the growth plane of the sample, and direction 3 is normal to the growth plane; $\alpha$ is the angle $k_i$ makes with the 3 direction; $q$ is the phonon propagation direction. B) Typical stress-strain response of a PAH/CNWs free-standing film. C) Elastic constants of CH and CH/CNWs films from Brillouin scattering experiments. HT indicates heat treatment of the sample.