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# Self-assembled chitin nanofiber templates for artificial neural networks

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## Supplementary Information

FTIR was performed to determine the degree of deacetylation of the prepared chitin nanofibers. Both the dried chitin nanofiber film and deacetylated chitin nanofiber film were ground into powder, mixed with KBr (sample/KBr 1:20 w/w), and compressed into pellets. FTIR spectra were then obtained with a Bruker Vector 33 FTIR spectrophotometer. The degree of deacetylation was evaluated from the spectra (Fig. S1) using the peak area ratios of 1560/1030 $cm^{-1}$ following previous literature procedures and indicated in the figure.[1] Specifically, the absorption intensities of amide II band at 1560 $cm^{-1}$ and the C-O stretching band at 1030 $cm^{-1}$ were measured on the baseline from 1900 to 1500 $cm^{-1}$ and the baseline from 1230 to 860 cm $cm^{-1}$, respectively. Values of 0.72 (6.0% deacetylation) and 0.61 (34.0% deacetylation) were accordingly obtained for the as-prepared chitin sample and the sample subjected to the deacetylation process with sodium hydroxide, respectively.