

Functional polymeric hybrid nanotubular materials derived from natural cellulose substances

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Electronic Supplementing Information

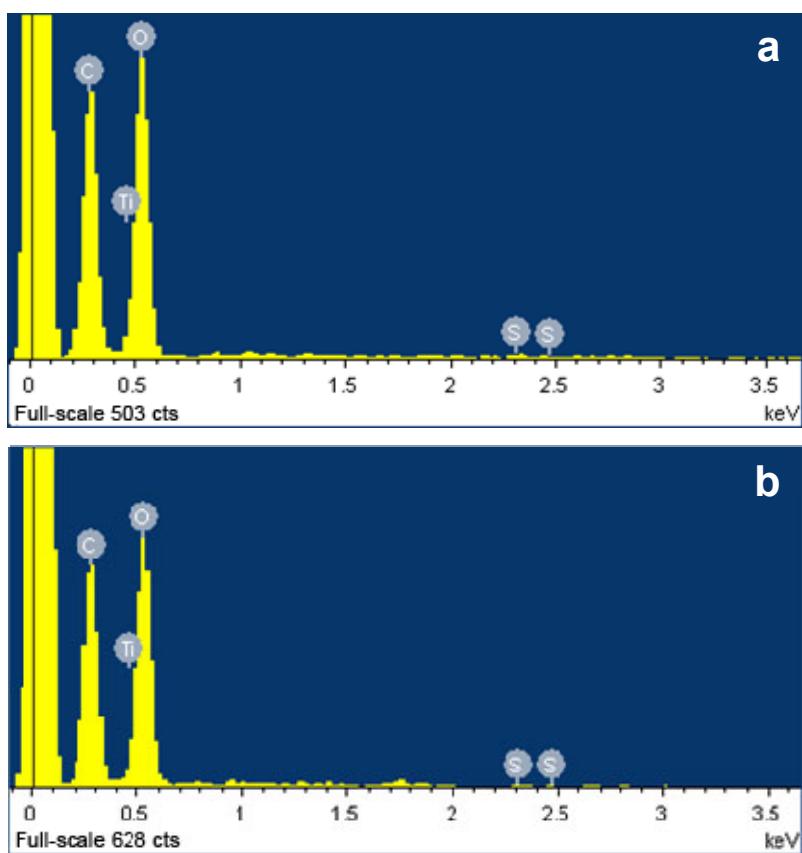


Fig. S1 EDX microanalysis reports of the resultant $(\text{titania/heparin})_{10}$ (a) and titania/(H-PVA)₅ (b) nanotubular hybrid materials; sulfur content of the corresponding sample is 0.65% and 0.12%, respectively. The analyses were carried out without any conductive metal coating of the samples.

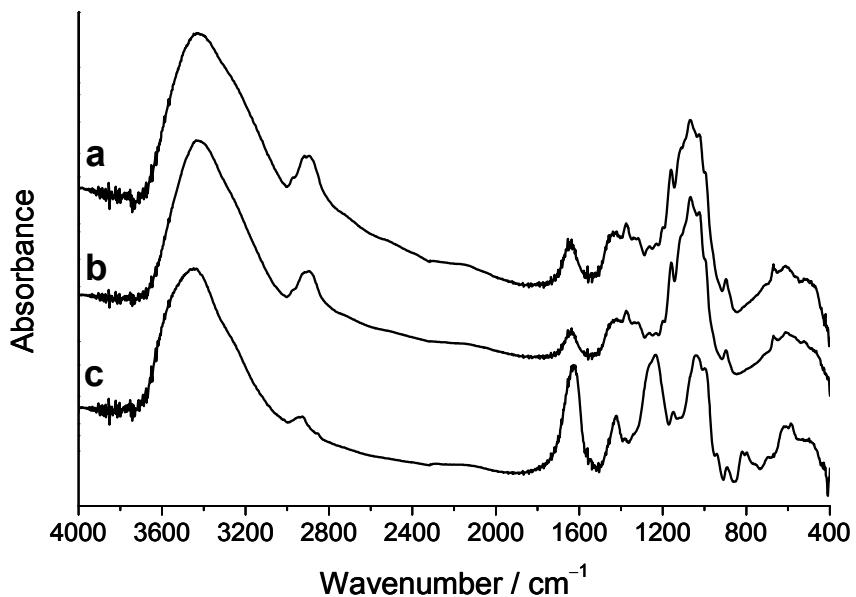


Fig. S2 FT-IR spectra of $(\text{titania/heparin})_{10}$ (a) and $(\text{titania/H-PVA})_5$ (b) nanotubular hybrid materials, and the raw heparin powder employed for the material fabrication (c).

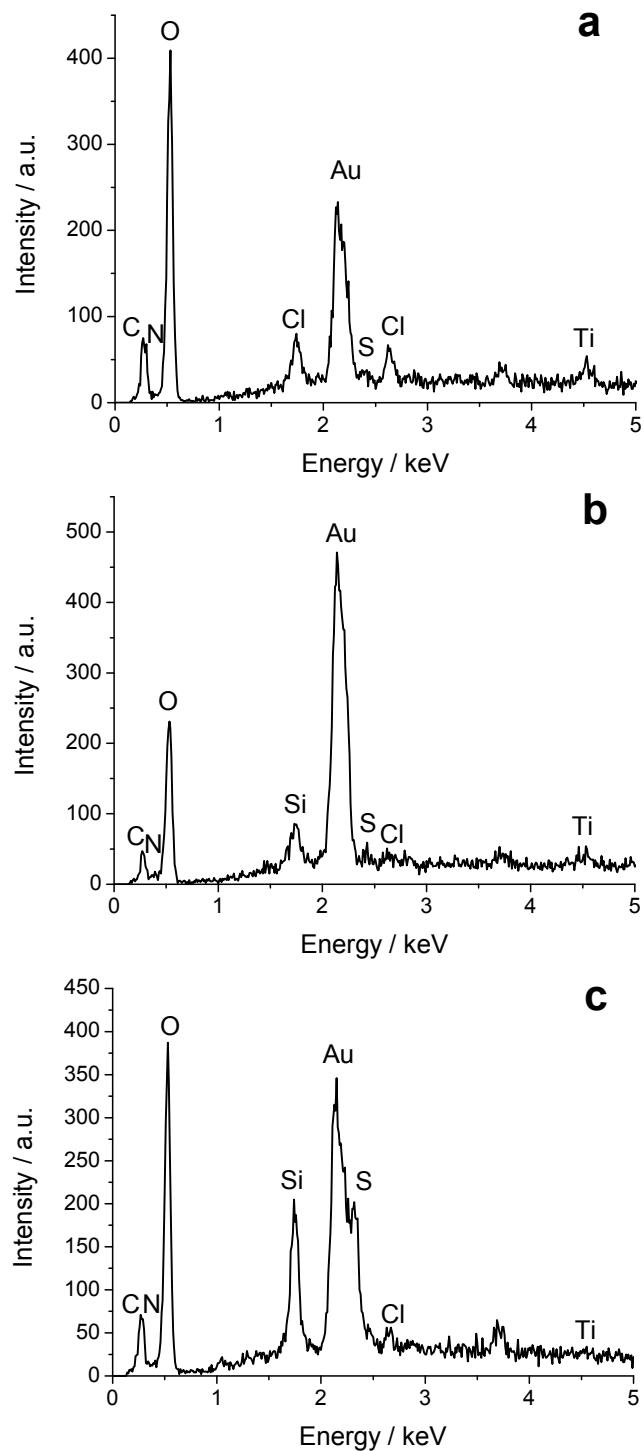


Fig. S3 Energy dispersive X-ray (EDX) microanalysis report of resultant nanotubular materials of titania/(PEI/PSS)₁₀ (a), titania/(PAH/PSS)₁₀ and titania/(PDPA/PSS)₁₀, showing titania, carbon, oxygen, nitrogen and sulfur component from the polyelectrolytes. Si peaks come from silicon wafer substrate to support the specimens, and Au peaks come from Au-coating used to increase conductivity to make SEM observations possible.