

## Supporting Information

### **Tannic Acid-Loaded Mesoporous Silica Particles as Tissue Adhesives for Enhanced Wound Healing**

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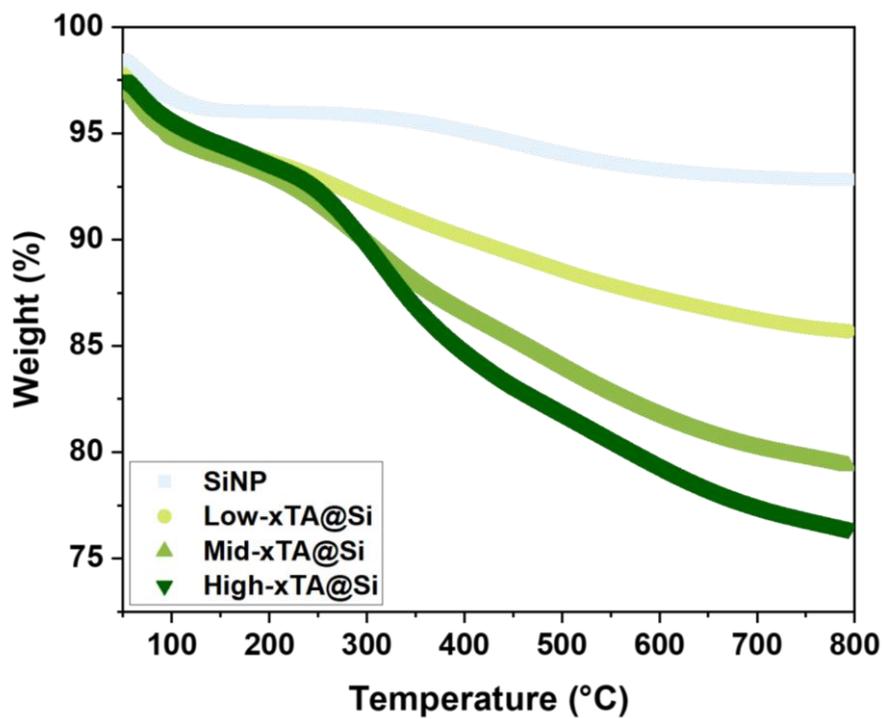
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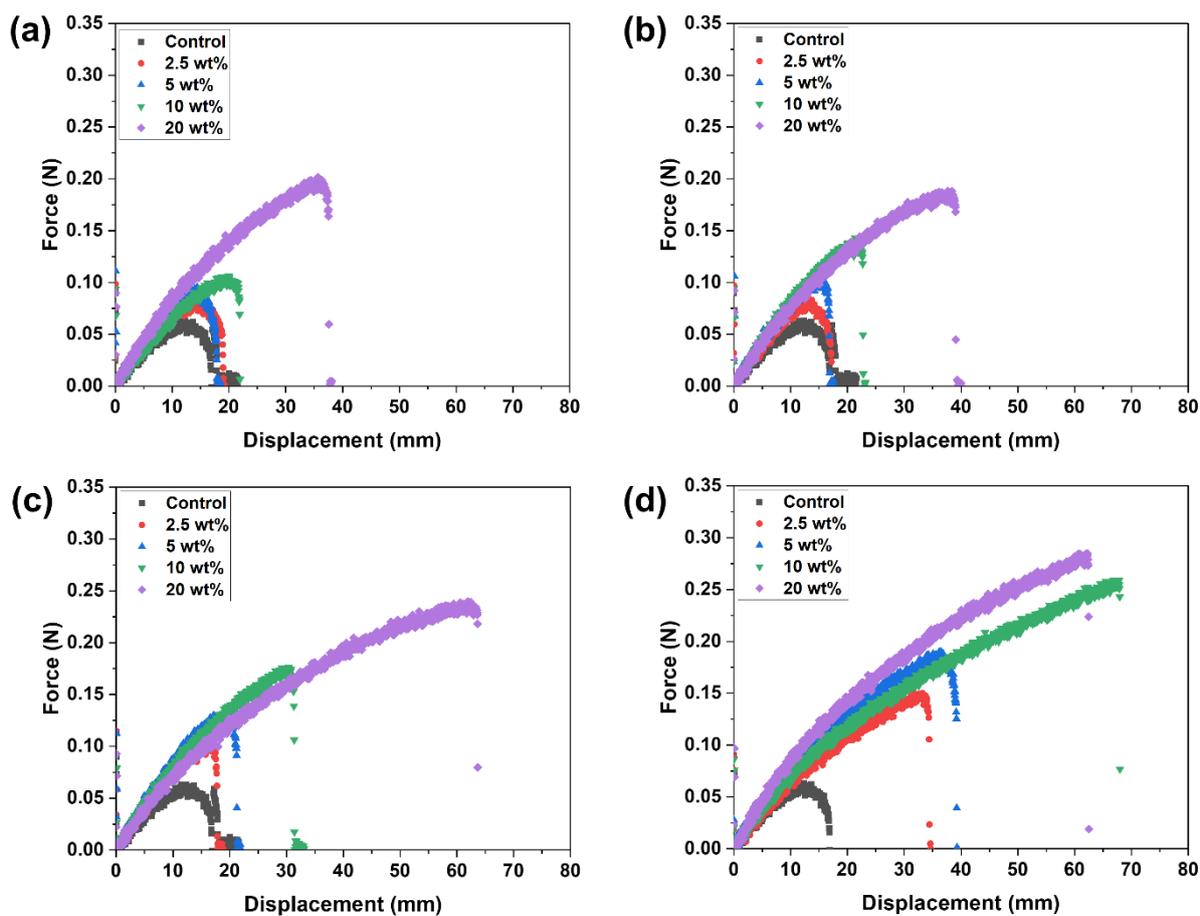
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**Table S1.** Primer sequences used for RT-qPCR.

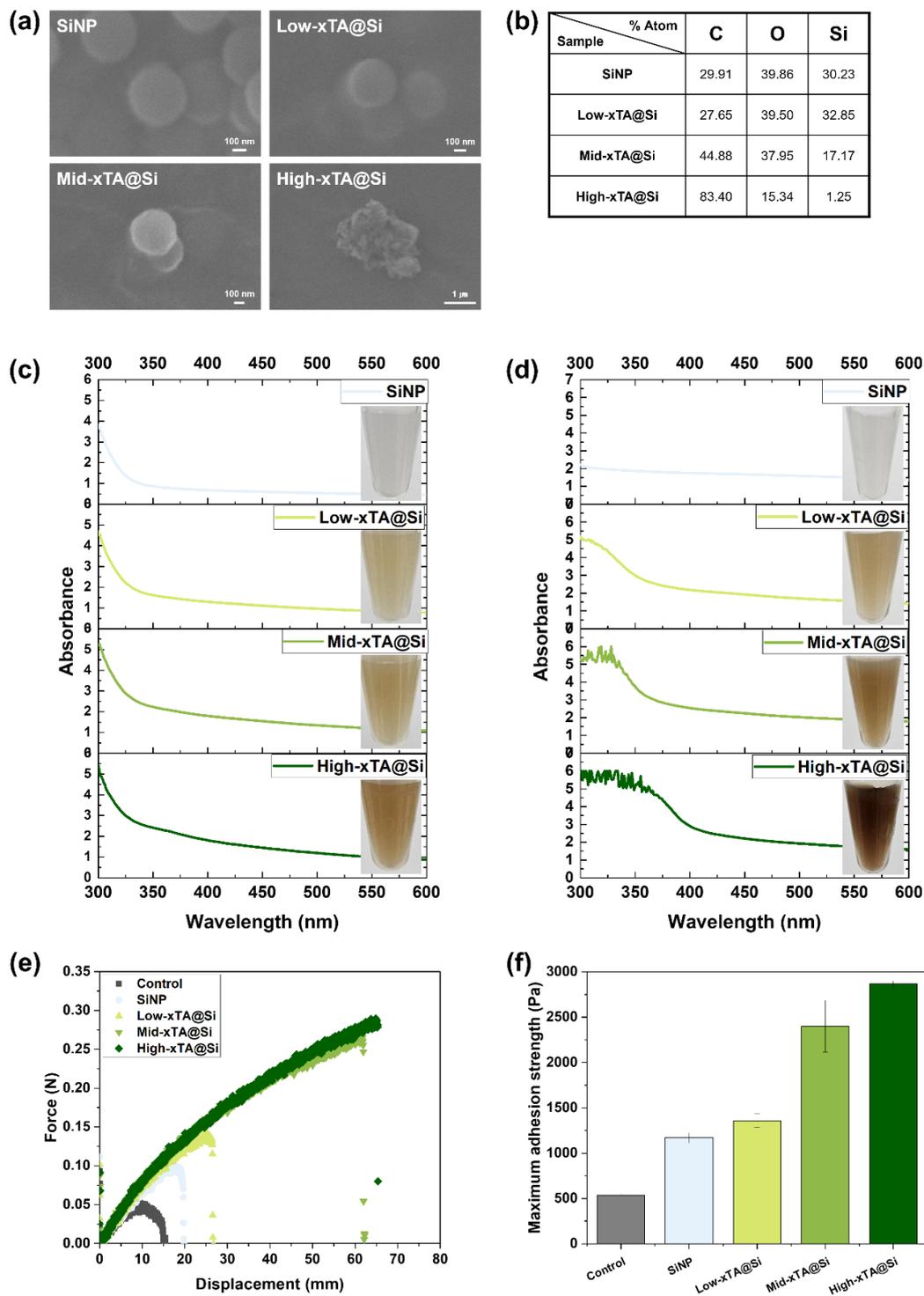
<b>Gene name</b>	<b>Sequence (from 5' to 3')</b>
IL-1 $\beta$	
Forward	CTACA GGCTC CGAGA TGAAC AAC
Reverse	TCCAT TGAGG TGGAG AGCTT TC
TNF- $\alpha$	
Forward	ATCCG CGACG TGGAA CTG
Reverse	ACCGC CTGGA GTTCT GGAA
TGF- $\beta$ 1	
Forward	GAGGT CACCC GCGTG CTA
Reverse	TGTGT GAGAT GTCTT TGGTT TTCTC
IL-6	
Forward	TTCCA TCCAG TTGCC TTCTT G
Reverse	GGGAG TGGTA TCCTC TGTGA AGTC
GAPDH	
Forward	GAGAC AGCCG CATCT TCTTG T
Reverse	CACAC CGACC TTCAC CATT T



**Figure S1.** Thermogravimetric analysis plots of SiNPs and xTA@Si.



**Figure S2.** Displacement-force curves obtained from the adhesion tests according to the concentration of (a) SiNP, (b) Low-xTA@Si, (c) Mid-xTA@Si and (d) High-xTA@Si.



**Figure S3.** (a) Scanning electron microscopy images of SiNPs and xTA@Si after NaIO<sub>4</sub> treatment. (b) Energy-dispersive X-ray spectroscopic elemental analysis of SiNPs and xTA@Si. UV-Vis absorption spectra of SiNP and xTA@Si (c) before and (d) after NaIO<sub>4</sub> treatment. (e) Representative displacement-force curves obtained from adhesion tests using the Control, SiNP, and xTA@Si after NaIO<sub>4</sub> treatment between the two PDMA hydrogels. (f)

Maximum adhesion strength of the 10 wt% Control, SiNP, and xTA@Si after NaIO<sub>4</sub> treatment. Data (n = 3) are presented as mean ± standard deviation (SD).