Supporting Information

Dopamine-assisted deposition and zwitteration of hyaluronic acid for nanoscale fabrication of low fouling surfaces

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Supplementary Figures

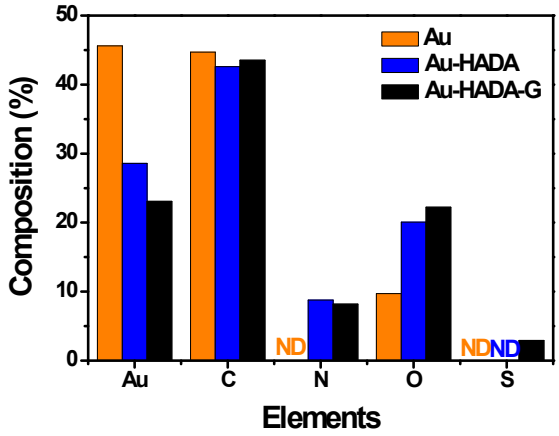

Fig. S1 XPS surface compositions. Percent elemental surface compositions of Au, C,O, N, and S for bare Au (orange), Au-HADA (blue) and Au-HADA-G (black) surfaces. Note: "ND" represents that no N1S and S2P peak was determined.

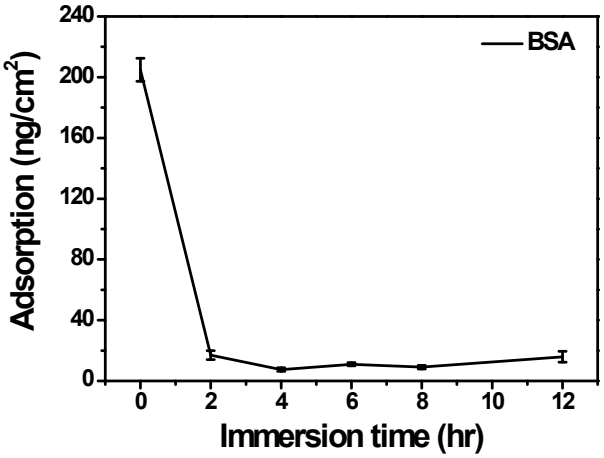

Fig. S2 The amount of protein adsorbed onto Au-HADA-G chips prepared using different immersion durations for HADA modification.

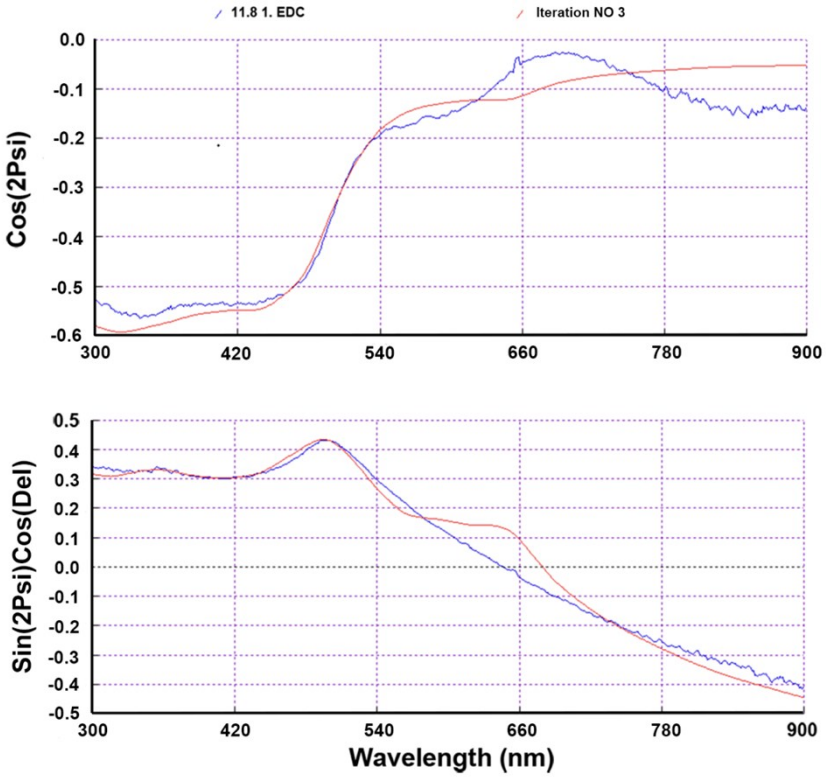

Fig. S3 Ellipsometer spectrum and fitting curves of HADA modified surfaces.(The goodness of fit is 0.9694).

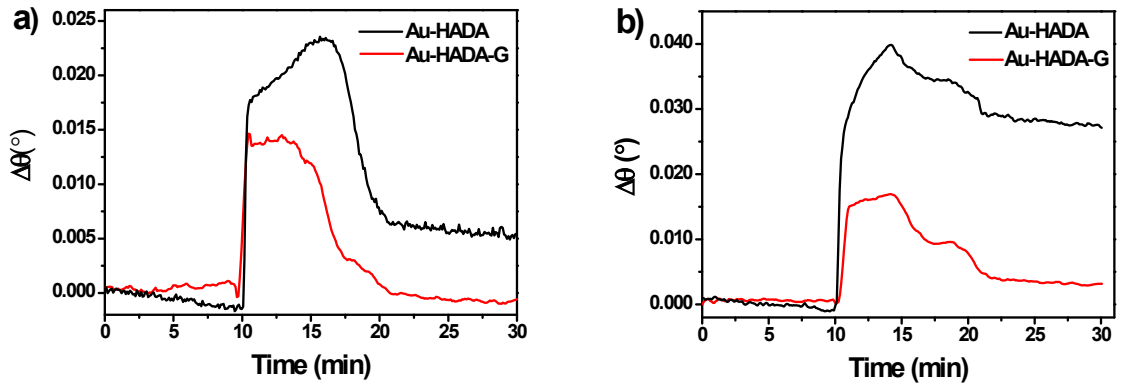

Fig. S4 SPR sensorgrams showing the non-specific protein adsorption from lysozyme (a) and β-lactoglobulin (b) onto Au-HADA and Au-HADA-G surfaces.

Supplementary Tables

Table S1 The thickness of Au and HADA films measured by ellipsometer.

Film	Thickness (nm) [a]
Au	47.96±1.247
HADA	0.85±0.171

[a] Data are presented as the mean ±SD (n=3).

Table S2 Properties of the proteins used for the adsorption assay

Protein	Molecular weight (kDa)	Isoelectric point	Net charge (pH 7.4)
BSA	66	4.7	-
Lysozyme	14.7	9.32	+
β-lactoglobulin	35	5.1~5.2	-
Cow milk	/	/	/

Table S3 The nonspecific adsorption from single protein solutions and protein complexes-containing media on bare Au surface

Sample	**Adsorption (ng/cm^2)[a]**
BSA	204.91±7.54
Lysozyme	37.87±3.54
β-lactoglobulin	90.58±6.63
Cow milk	373.80±26.54

[a] All the measurements were repeated for three times.