Supporting Information

Controlling the adsorption of osteopontin for cell behaviour by self-assembled monolayers with varying surface chemistry

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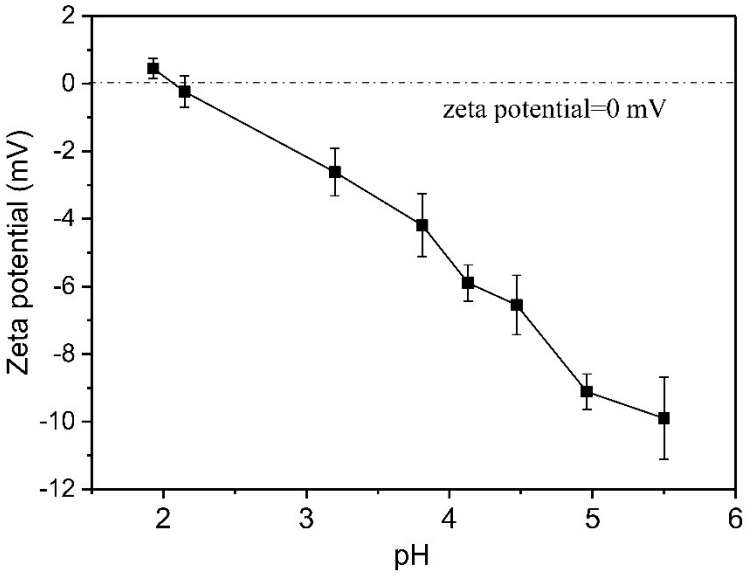

Figure S1. The effect of pH value on the zeta potential of OPN. The concentration of OPN was 10 μg/mL in PBS (n=6).

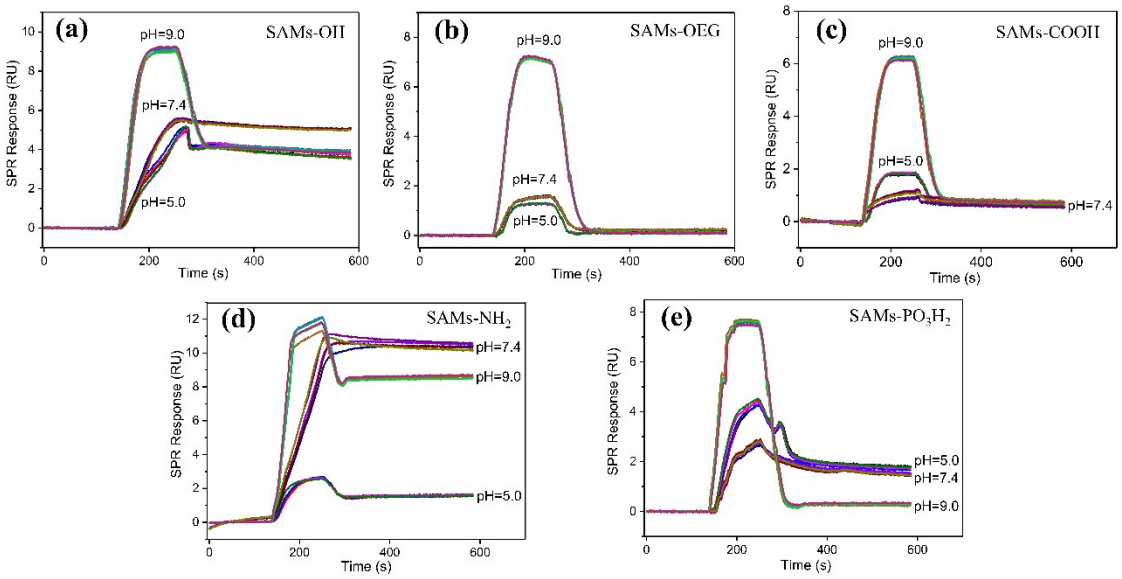

Figure S2. The real-time SPR sensorgrams results of OPN amount on the indicated SAMs substrates. The concentration of OPN was 10 μg/mL in PBS (n=15).

Table S1. Surface characterization, protein adsorption and cell adhesion of SAMs with different chemistry groups.

	SAMS-OH	SAMS-OEG	SAMs-COOH	SAMS-NH_2	SAMS-PO_3H_2
Water contact angle (deg.)	21.90±1.73	38. 30±1.37	38.78±3.31	68.30±2.31	70.20±5.44
Zeta potential (mV) (pH=7.4)	-59.95	-21.49	-83.63	-22.09	-55.82
OPN Mass (ng/cm^2)	20.44±4.73	3.39±0.63	7.23±1.02	89.01±13.62	8.50±1.98
Unit Mass of Bound mAb of OPN ($\times10^{-2}$)	2.93±0.60	10.69±0.61	7.46±0.36	0.91±0.04	7.71±0.25
BSA Mass (ng/cm^2)	3.49±0.27	0.13±0.07	7.72±0.54	53.83±1.62	32.26±1.26
Cell adhesion by CCK-8 OD value ($\times10^{-1}$)	0.83±0.19	0.50±0.01	1.77±0.13	1.79±0.14	1.82±0.06
Fold change of gene expression（α_v）	4.16±0.29	1.00±0.34	6.18±0.73	5.33±0.16	5.71±0.68
Fold change of gene expression（β_3）	8.24±0.81	1.00±0.14	13.29±1.30	11.08±1.15	11.21±2.51