SUPPORTING INFORMATION

Fabrication of Nanometer and Micrometer Scale Protein Structures by Site-Specific Immobilization of Histidine-Tagged Proteins to Aminosiloxane Films with Photoremovable Protein-Resistant Protecting Groups

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XPS ELEMENTAL COMPOSITION DATA

Table S1. Compositions as atomic % for APTES films following surface derivatization reactions, determined from XPS survey spectra.

	O1s	C1s	N1s	Si2p	Ni2p	F1s	Au4d
APTES	28 ± 3	16 ± 3	2.6 ± 0.2	53 ± 5	n/a	n/a	n/a
APTES + GA	29 ± 1	22 ± 2	1.5 ± 0.2	48 ± 2	n/a	n/a	n/a
APTES + GA + ABNTA	30 ± 2	19 ± 3	1.1 ± 0.1	50 ± 1	n/a	n/a	n/a
APTES + GA + ABNTA + Ni^{2+}	28 ± 1	25 ± 5	1.3 ± 0.4	45 ± 5	0.7 ± 0.4	n/a	n/a
APTES + GA + $NH_2CH_2CF_3$	16 ± 1	44 ± 4	4.9 ± 0.5	19 ± 6	n/a	16 ± 1	n/a
$HS(CH_2)_{11}EG_3NTA$	21 ± 1	66 ± 1	3.1 ± 0.2	n/a	n/a	n/a	10 ± 1

Table S2. Elemental ratios determined from XPS survey spectra (calculated values in parentheses).

	N/C	Ni/C	Ni/N	F/C	F/N	O/C
APTES	0.16 (0.33)	n/a	n/a	n/a	n/a	n/a
APTES + GA	0.07 (0.13)	n/a	n/a	n/a	n/a	n/a
APTES + GA + ABNTA	0.06 (0.17)	n/a	n/a	n/a	n/a	n/a
APTES + GA + ABNTA + Ni^{2+}	0.05 (0.17)	0.03 (0.06)	n/a	n/a	n/a	n/a
APTES + GA + $NH_2CH_2CF_3$	0.11 (0.20)	n/a	n/a	0.36 (0.20)	3.3 (1.5)	n/a
$HS(CH_2)_{11}EG_3NTA$	0.05 (0.07)	n/a	n/a	n/a	n/a	0.32 (0.37)

Table S3. Compositions as atomic % for OEG-NPEOC-APTES films following deprotection and surface derivatization reactions, determined from XPS survey spectra.

	O1s	C1s	N1s	Si2p	F1s
OEG-NPEOC-APTES	29 ± 1	26 ± 3	0.8 ± 0.1	44 ± 3	n/a
+ UV	28 ± 1	23 ± 2	1.8 ± 0.2	47 ± 2	n/a
+ UV + GA	30 ± 2	16 ± 2	1.7 ± 0.3	53 ± 2	n/a
+ UV + GA + ABNTA	29 ± 1	21 ± 2	1.3 ± 0.3	45 ± 5	n/a
+ UV + TFAA	29 ± 2	16 ± 1	1.6 ± 0.1	48 ± 2	2.9 ± 0.2

Table S4. Elemental ratios determined from XPS survey spectra (calculated values in parentheses).

	N/C	F/C	F/N	O/C
OEG-NPEOC-APTES	0.03 (0.07)	n/a	n/a	n/a
+ UV	0.08 (0.33)	n/a	n/a	n/a
+ UV + GA	0.11 (0.13)	n/a	n/a	n/a
+ UV + GA + ABNTA	0.06 (0.17)	n/a	n/a	n/a
+ UV + TFAA	0.10 (0.20)	0.18 (0.6)	1.80 (3.0)	n/a

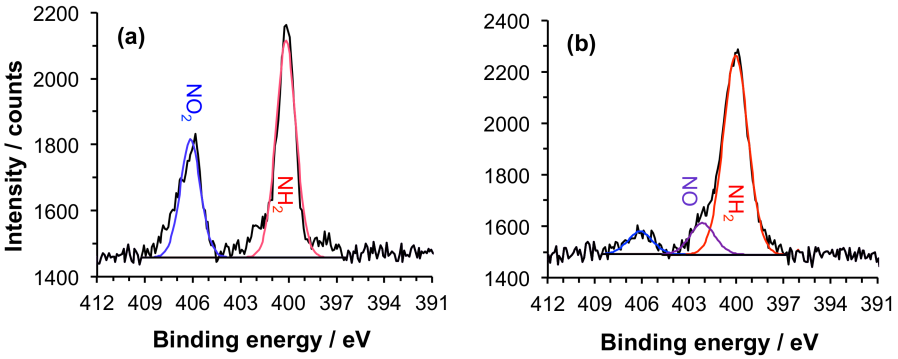

Figure S1. N1s spectra before (a) and after (b) exposure to 10 J cm^{-2} irradiation at 244 nm.