Tandem Surface Microfluidic Lithography and Activation to Generate Patch Pattern Biospecific Ligand and Cell Arrays

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Supporting Information



X-ray Photoelectron Spectroscopy Data

Figure S1. X-ray photoelectron spectroscopy (XPS) characterization of mixed EG₄SH and MeOEG₄SH SAMs reacted with Fc-ONH₂ before (black) and after (purple) oxidation with PCC. Ligand immobilization does not occur prior to surface oxidation with PCC, as shown by the lack of nitrogen signal in the black trace. During oxidation, the alcohol group in EG₄SH is converted to an aldehyde, which then chemoselectively reacts with oxyamine-containing ligands (RONH₂). The 1s nitrogen peak found at 398 eV, corresponds to the presence of ferrocene-oxyamine immobilized to the surface, as displayed in the purple trace.