**Fabrication of Oligonucleotide and Protein Arrays on Rigid and Flexible Substrates Coated with Reactive Polymer Multilayers**

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**Supporting Information**

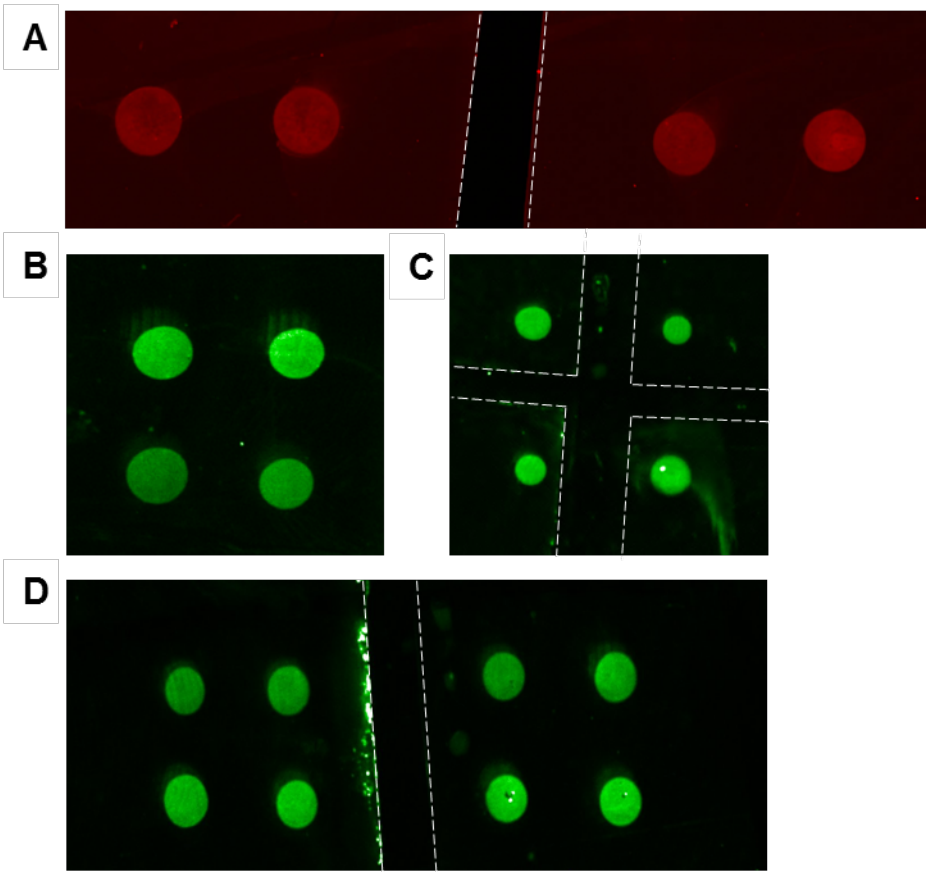


**Figure S1**: Representative fluorescence micrographs of arrays of oligonucleotide Probe 2 fabricated on a flexible PET substrate (panel A) and oligonucleotide Probe 1 fabricated on flexible heat-shrinkable polymer film substrates (panels B-D). Substrates were fabricated on reactive multilayer-coated substrates using spotting-based methods similar to those described in the main text. The resulting arrays were then bent manually by flexing the substrates end to end multiple times (no creases were formed). Arrays shown in panels A, C and D were then cut manually using scissors and separated into smaller pieces (the substrate in panel B was bent, but not cut). All arrays were then hybridized with either Complement 2 (panel A) or Complement 1

(panels B-D), using methods described in the main text prior to imaging. White dotted lines indicate locations where the samples were cut. Samples were physically separated after cutting, such that areas between the dotted lines in these images are devoid of substrate or film. The spots in these images are ~1 mm in diameter.

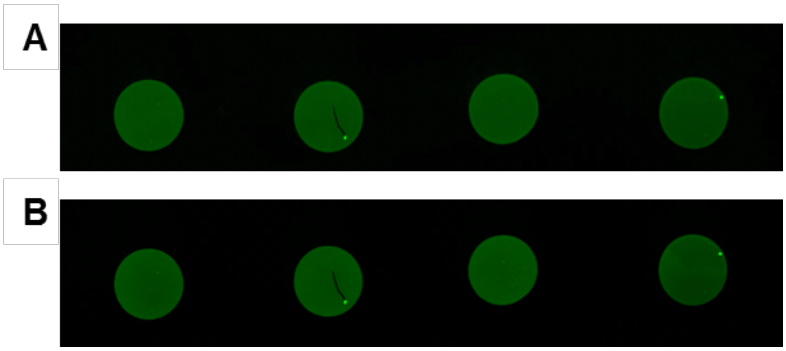


**Figure S2**: Representative fluorescence micrographs of an array of spots of FITC-labeled bovine serum albumin (BSA) fabricated on glass substrates coated with reactive multilayer films. The array was fabricated using spotting-based methods similar to those described in the main text. The image in panel A shows an array of four spots of BSA imaged directly after fabrication (see text). The image in panel B shows an image of the same array after soaking in a solution of the non-ionic surfactant Tween 20 (1 % v/v) in water for 30 minutes at room temperature.