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A Molecular Imprinting Strategy Employing Polyelectrolyte Multilayers SOLAR C. OLUGEBEFOLA, ANNE M. MAYES, MICHAEL F. RUBNER, Massachusetts Institute of Technology — Polyelectrolyte multilayers were assembled from poly(allylamine hydrochloride) (PAH), poly(acrylic acid) (PAA) and poly(acrylic acid-r-vinyl benzyl acetate) (xPAA), derivatized from PAA. The pHs of polymer assembly solutions were controlled to yield high surface area film morphologies for adsorption. Assembled films were photo crosslinked in the presence of adsorbed template molecules and the template removed to yield selective binding sites. Quartz crystal microbalance measurements of adsorption onto films templated with bovine serum albumin show higher affinity for BSA compared to films crosslinked with no templating.

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