

Supporting information:

Polystyrene-*block*-poly(acrylic acid) brushes grafted from silica surfaces: pH- and salt-dependent switching studies

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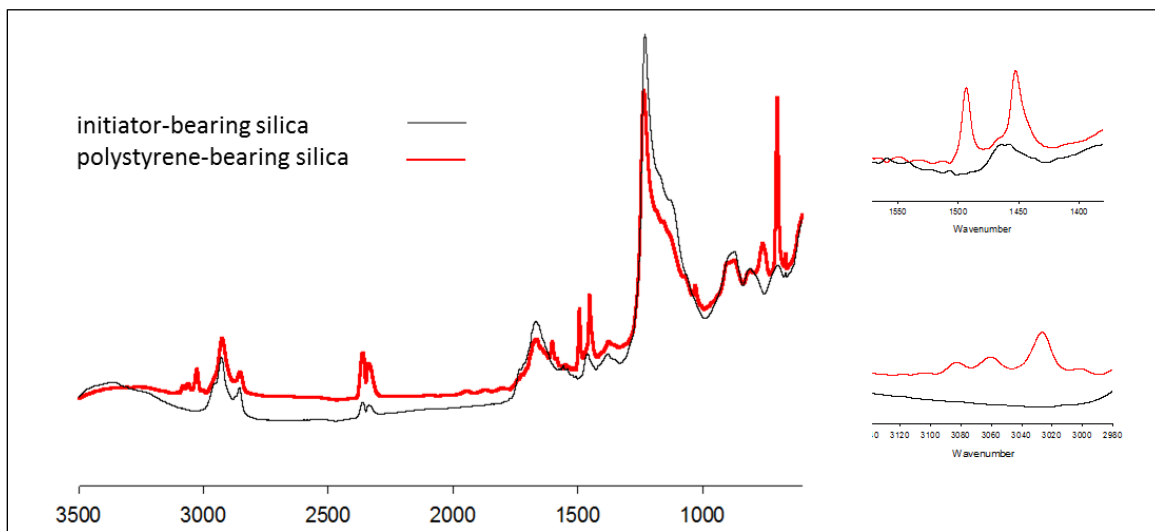


Figure S1. ATR-FTIR spectra of 10nm thick polystyrene brushes grafted from silica wafer.

	PtBA layer			PAA layer	
Sample	Degree of Polymerization (N) ^a	R_G of swollen coil (nm) ^b	Fully extended length, nm ^c	Thickness, nm ^d	PS/PAA thickness ratio
1	503	10	126	18.1	0.1
2	570	11	143	12.2	0.3
3	493	10	123	9.2	0.5
4	451	10	113	9.0	1.1
5	398	9	100	1.8	5.6

Table S1. Some parameters of PtBA and PAA layers. ^c calculated using formula: $N=Mn(polymer)/Mn(monomer)$; ^b calculated using equation $R_f \approx aN^{0.6}$, where $a=0.25$ is a characteristic dimension of each repeating unit; ^c calculated from equation $H=aN$; ^d measured in air using ellipsometry;