

Electronic Supplementary Information

Antifouling property of monothiol-terminated bottle-brush poly(methylacrylic acid)-graft-poly(2-methyl-2-oxazoline) copolymer on gold surfaces

Xiajun Zheng, Chong Zhang, Longchao Bai, Songtao Liu, Lin Tan, Yanmei Wang*

CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering,
University of Science and Technology of China, Hefei 230026, P. R. china

Table S 1. Characterization of PMAA and (PMAA-g-PMOXA)-SH.

Sample	\bar{M}_n^a (g mol ⁻¹)	<i>PDI</i>	\bar{M}_w (g mol ⁻¹)	\bar{M}_n (g mol ⁻¹)
PMAA ₄₀	3779	1.14 ^b	5280 ^b	4633 ^b
PMAA ₂₀	1916	1.13 ^b	3084 ^b	2713 ^b
(PMAA ₄₀ -g-PMOXA ₆)-SH	19131	1.16 ^c	22050 ^c	18980 ^c
(PMAA ₂₀ -g-PMOXA ₆)-SH	9595	1.27 ^c	14620 ^c	11480 ^c
(PMAA ₂₀ -g-PMOXA ₁₂)-SH	20152	1.22 ^c	25880 ^c	21240 ^c

a Calculated by ¹H NMR. The solvent was DMSO for bottle-brush copolymers.

b Obtained by GPC (phosphate buffer saline (pH=7.4) as the eluent, PEG calibration).

c Obtained by GPC/LLS (DMF containing 0.02M LiBr as the eluent).

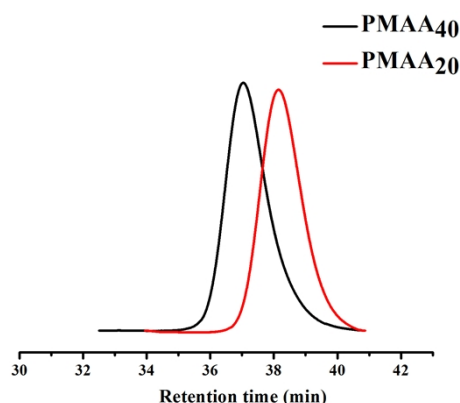


Fig S1. GPC trace of PMAA₄₀ (black solid) and PMAA₂₀ (red solid).

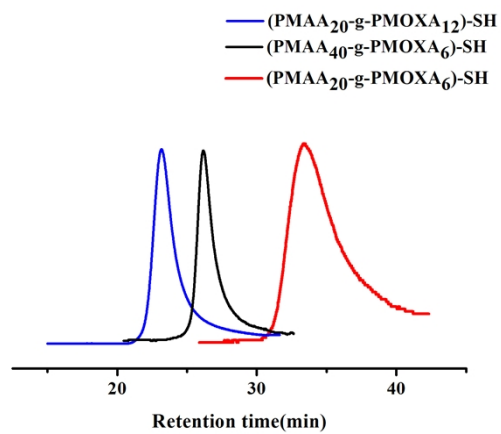


Fig S2. GPC trace of (PMAA₂₀-g-PMOXA₁₂)-SH (blue solid), (PMAA₄₀-g-PMOXA₆)-SH (black solid) and (PMAA₂₀-g-PMOXA₆)-SH (red solid), respectively.
