polymers

MDPI

Supplementary

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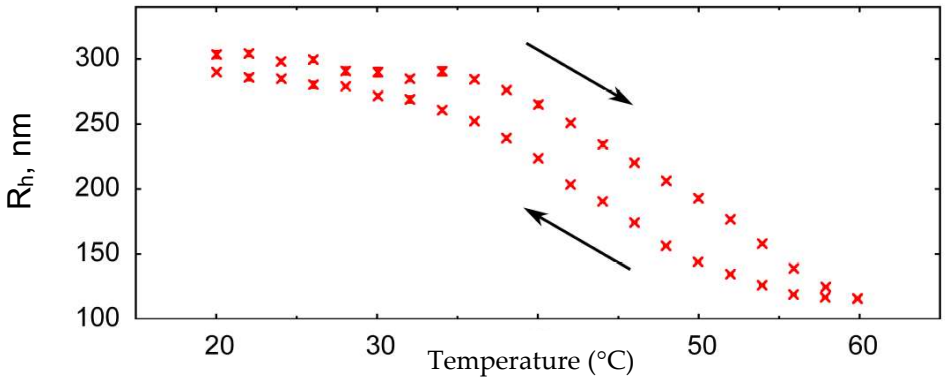

Figure S1. The temperature dependence of the hydrodynamic radius of poly(*N*-isopropylacrylamide-*co*-*N*-[3-(dimethylamino)propyl]methacrylamide) (P[NIPAM-*co*-DMAPMA]) microgel particles.

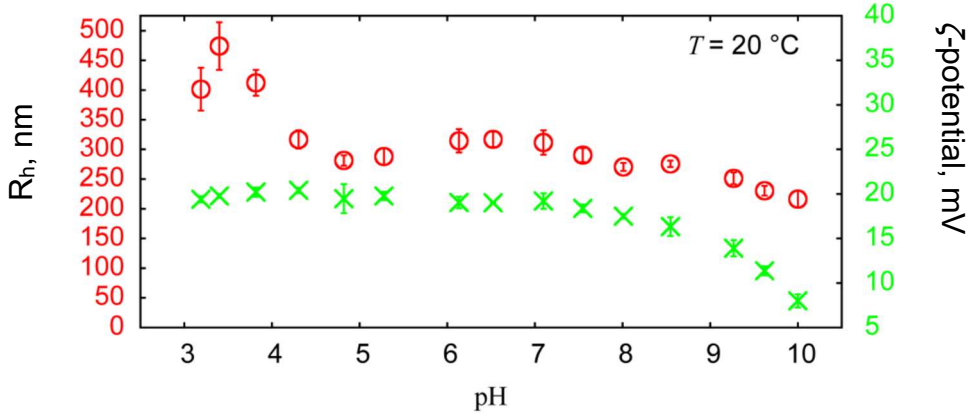

Figure S2. The pH-dependences of the hydrodynamic radius and ζ-potential of P(NIPAM-*co*-DMAPMA) microgel particles.

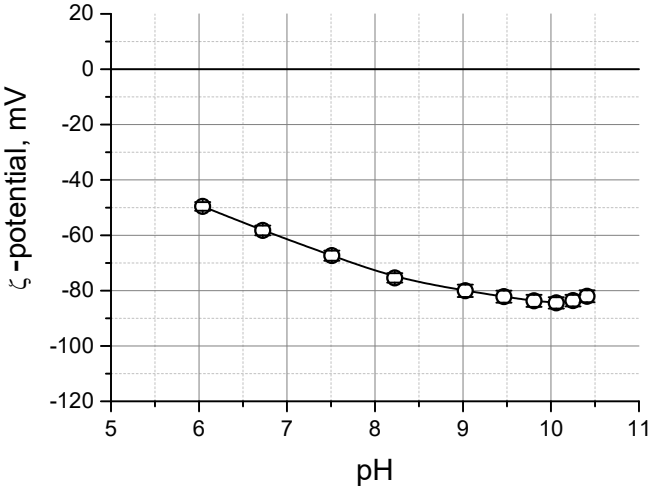

Figure S3. The pH-dependence of the surface ζ-potential of the poly(vinyl chloride) (PVC) film as measured by electrokinetic analysis (EKA).

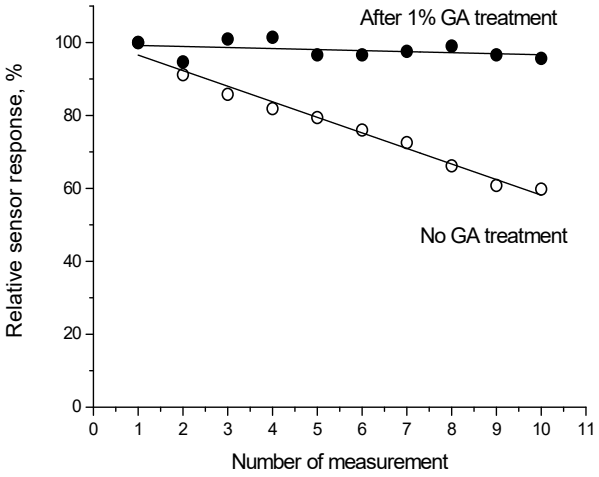

Figure S4. The relative biosensor responses of the screen-printed electrodes (SPE)/MnO_2/P(NIPAM-*co*-APMA)/ChO construct (open circles) and the SPE/MnO_2/P(NIPAM-*co*-APMA)/ChO construct cross-linked with glutar aldehyde (GA) (solid circles) to consecutive additions of choline solution, with the concentration of 5×10^{-5} M. The operational stability was characterized quantitatively as a percentage of change of the biosensor response per a single measurement, and was calculated according to the formula: $\Delta I = 100\% \times \mathrm{tg}I/I_1$, where tg$I$ is the slope of the dependence of the biosensor response on the number of measurements, normalized to the initial biosensor response I_1 and given in percent.