

Support Information for

Supramolecular aggregates from polyacrylates and Gd(III)-containing cationic surfactant as high-relaxivity MRI contrast agents

Yingying Chen^a, Qin Zhu^a, Yu Tian^b, Weijun Tang^c, Fei Pan^a, Rulin Xiong^a, Yuan Yuan^{*b} and Aiguo Hu^{*a}

^a Shanghai Key Laboratory of Advanced Polymeric Materials, School of Materials Science and Engineering, East China University of Science and Technology, Shanghai, 200237, China. Fax: 86-21-64253037; Tel: 86-21-64253037; E-mail: hagmhsn@ecust.edu.cn

^b The State Key Laboratory of Bioreactor Engineering East China University of Science and Technology, Shanghai, 200237, China. Fax: 86-21-64251358; Tel: 86-21-64251308; E-mail: yyuan@ecust.edu.cn

^c Department of Radiology, Huashan Hospital Affiliated to Fudan University, Shanghai, 200040, China.

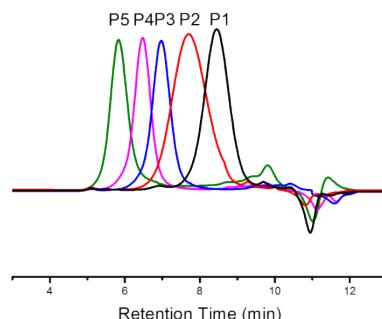


Figure S1. GPC curves of PtBA of different molecular weights

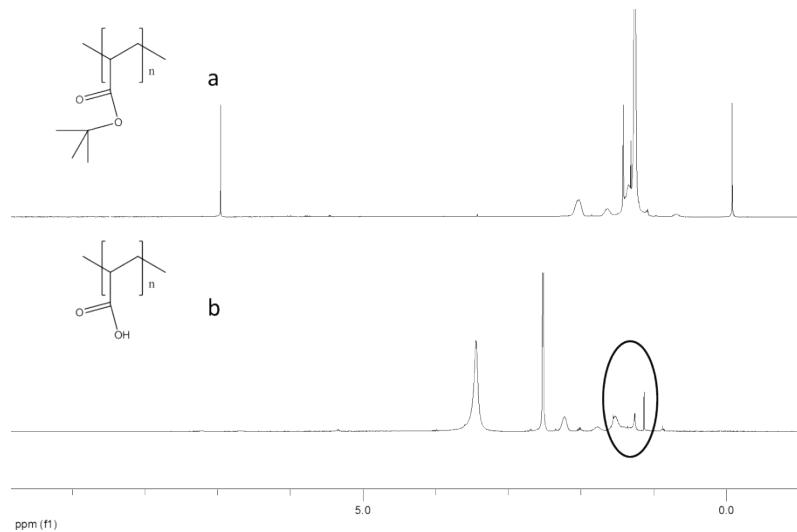


Figure S2. ^1H NMR spectra of PtBA (a) in CDCl_3 and PAA (b) in DMSO-d_6 .

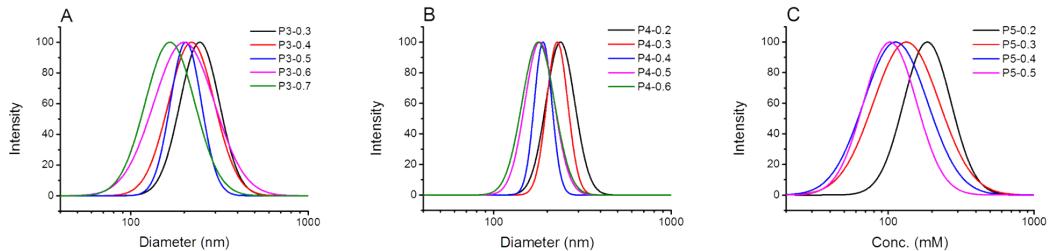


Figure S3. DLS spectra of the PAAS-MS mixtures, (A) P3-MS, (B) P4-MS, (C) P5-MS.

Table S1. R_h and PDI values of P1-MS PSCs in Figure 2B

z value	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1
R_h (nm)	169.3	182.0	176.3	170.1	207.9	182.3	190.5	197.6	207.9	178.6
PDI	0.162	0.236	0.060	0.069	0.080	0.050	0.058	0.065	0.091	0.054

Table S2. R_h and PDI values of P2-MS PSCs in Figure 2C

z value	0.2	0.3	0.4	0.5	0.6	0.7
R_h (nm)	292.8	273.2	267.3	259.3	236.6	224.6
PDI	0.013	0.045	0.036	0.053	0.093	0.114

Table S3. R_h and PDI values of P3-MS PSCs in Figure S3A

z value	0.3	0.4	0.5	0.6	0.7
R_h (nm)	252.7	229.8	208.5	215.7	175.0
PDI	0.066	0.089	0.041	0.154	0.104

Table S4. R_h and PDI values of P4-MS PSCs in Figure S3B

z value	0.2	0.3	0.4	0.5	0.6
R_h (nm)	238.0	226.4	190.8	181.7	176.8
PDI	0.162	0.141	0.092	0.124	0.126

Table S5. R_h and PDI values of P5-MS PSCs in Figure S4C

z value	0.2	0.3	0.4	0.5
R_h (nm)	184.8	134.5	113.1	102.9
PDI	0.114	0.146	0.142	0.133

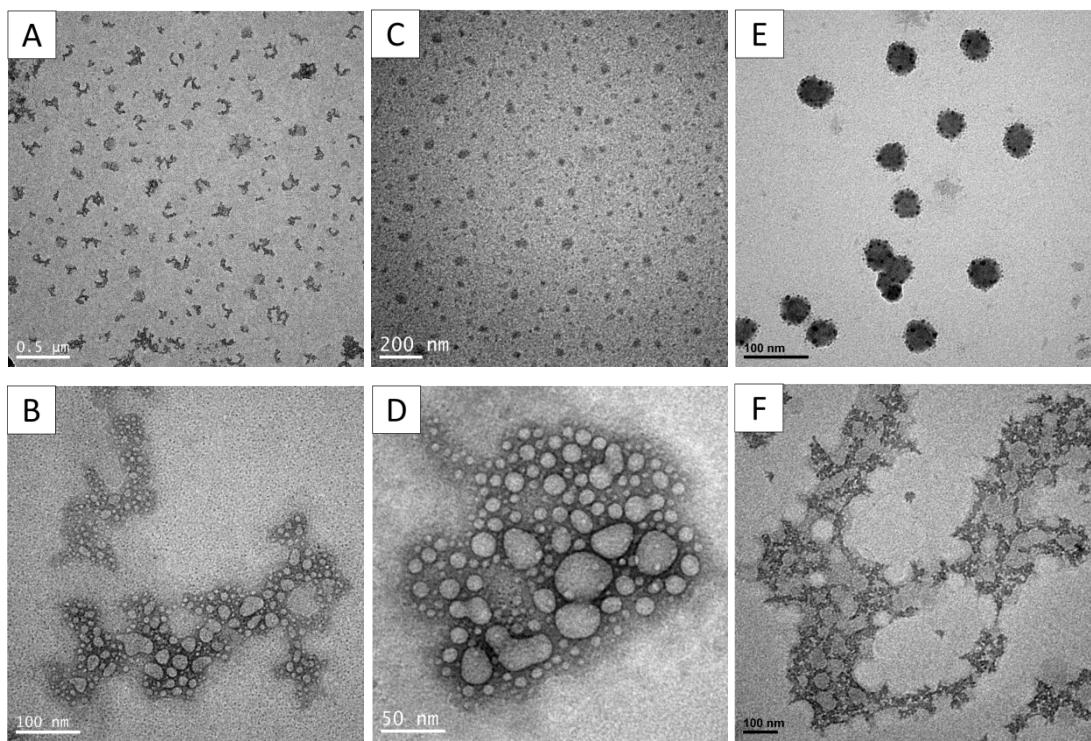


Figure S4. TEM images of PAAS-surfactant mixtures at different charge ratio, (A) P3-0.3 (B) P3-0.5 (C) P4-0.3 (D) P4-0.5 (E) P5-0.3 (F) P5-0.5.

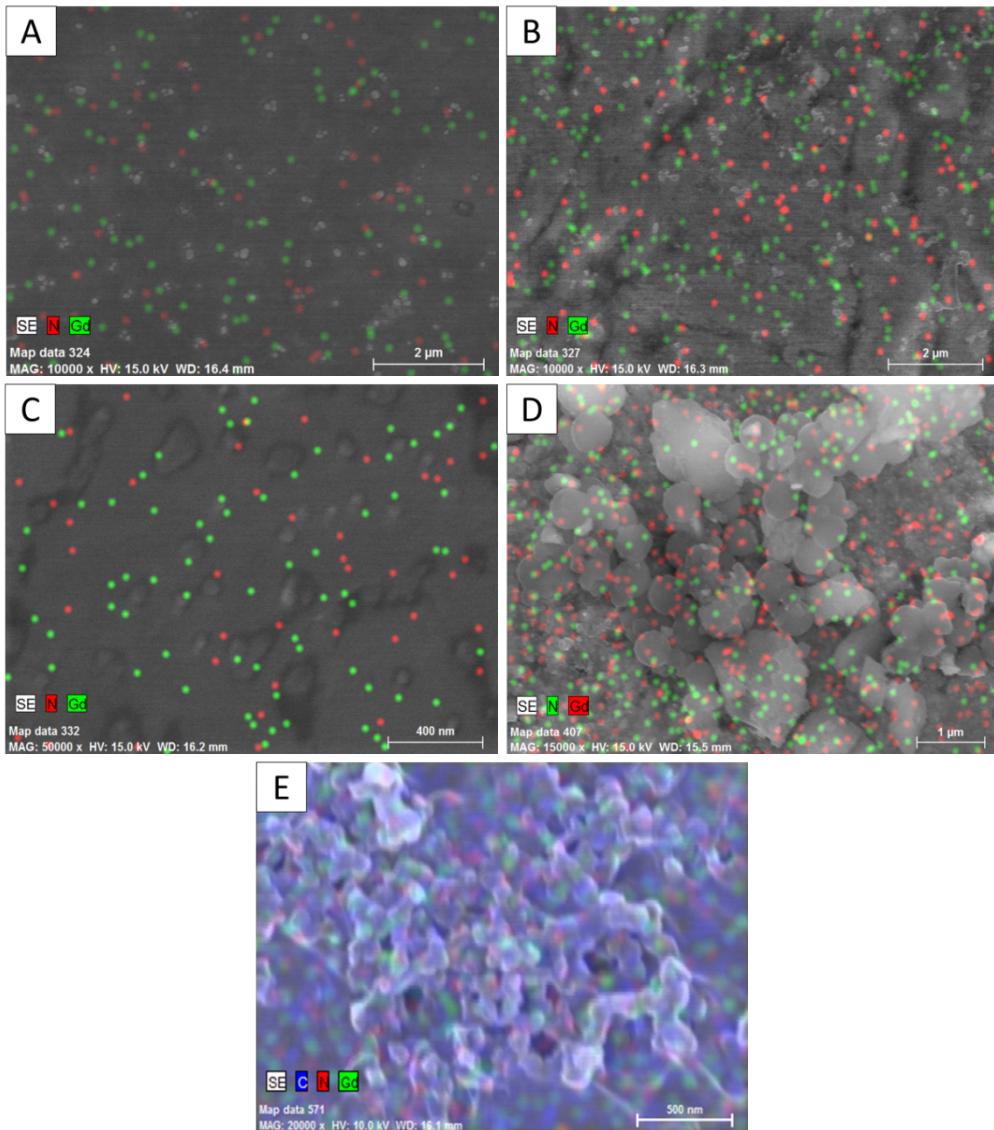


Figure S5. SEM element mapping of P1-MS (A), P2-MS (B), P3-MS (C), P4-MS (D) and P5-MS (E) at $z = 0.3$.

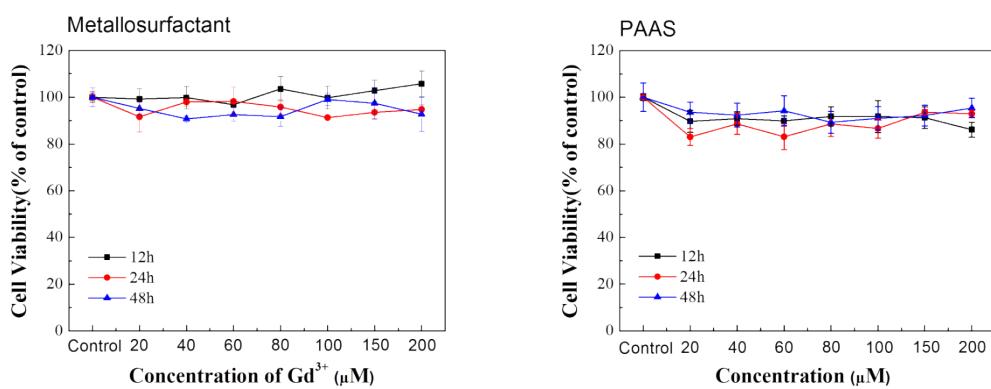


Figure S6. Relative cell viability (%) of HeLa cell after treated by pure metallosurfactant and PAAS.