

Exploring the interactions between protein coronated CdSe quantum dots and nanoplastics

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Supplementary Information

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Table S1. Mean hydrodynamic diameter of functionalized CdSe QDs in deionized water

Nanoparticle	Deionized water	DMEM medium
Carboxy=QDs	25.3±0.7	34.6±1.7
Amine-QDs	22.7± 1.2	32.3 ±1.3

Table S2. Percentage bound protein corona on functionalized CdSe QDs and mean hydrodynamic diameter

Amine-QDs		Carboxy=QDs	
Bound protein concentration (%)	MHD (nm)	Bound protein concentration (%)	MHD (nm)
20±1.1	42.3±1.7	27.3±1.9	43.6±2.7
65.6±2.3	87.5±2.8	52.8±1.3	71.5±2.3
63.7±1.4	94.5±2.9	45.5±2.8	82.1±2.8
61.9±0.9	97.8±3.8	43.7±2.9	87.3±2.5

Table S3. MHD and zeta potential measurement of functionalized QDs after protein coronation

Time (h)	Amine-QDs		Carboxy=QDs	
	MHD (nm)	Zeta-potential (mV)	MHD (nm)	Zeta-potential (mV)
5	42.3±1.7	+12.1	43.6±2.7	-21.3
0.5	87.5±2.8	+7.6	71.5±2.3	-17.5
12	94.5±2.9	-8.9	82.1±2.8	-22.5
24	97.8±3.8	-10.2	87.3±2.5	-27.3