Supporting Information

Surface Engineering of Graphene Quantum Dots and Their Applications as Efficient Surfactants

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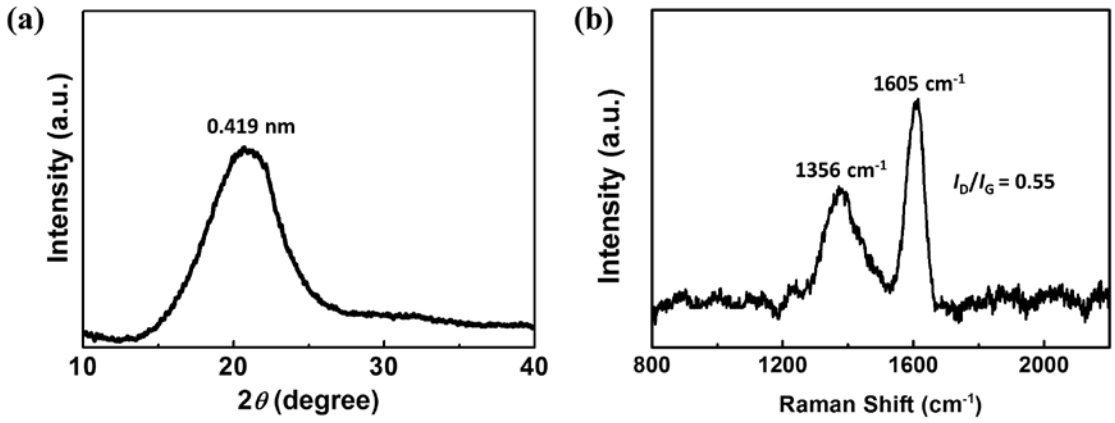

Figure S1. (a) XRD profile and (b) Raman spectrum under 514 nm laser of **GH0**, respectively.

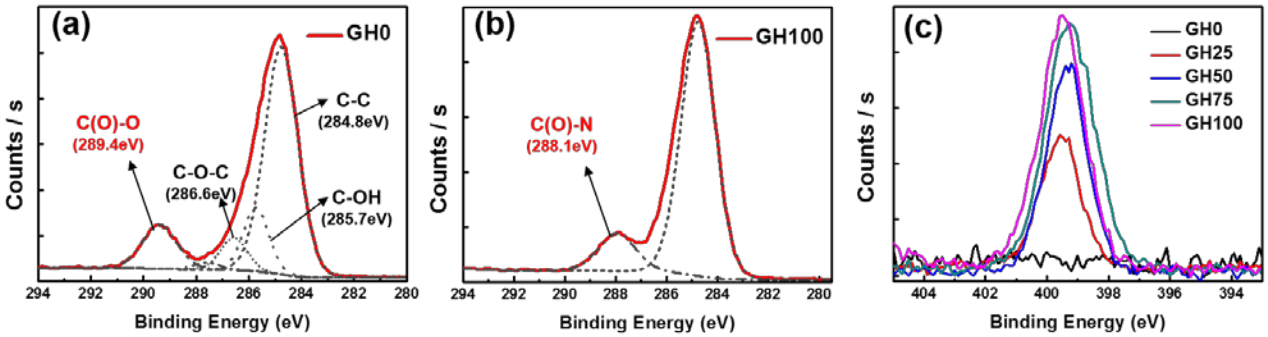

Figure S2. (a,b) Carbon 1s XPS spectra of **GH0** and **GH100**, respectively. (c) Nitrogen 1s XPS spectra of surface-modified GQDs.

Table S1. XPS analysis of **GH0**, **GH25**, **GH50**, **GH75**, and **GH100**

	GH0	**GH25**	**GH50**	**GH75**	**GH100**
C (%)	65.31	73.73	75.47	76.76	77.78
O (%)	34.69	20.60	18.24	15.69	13.12
N (%)	-	5.67	6.29	7.55	9.10

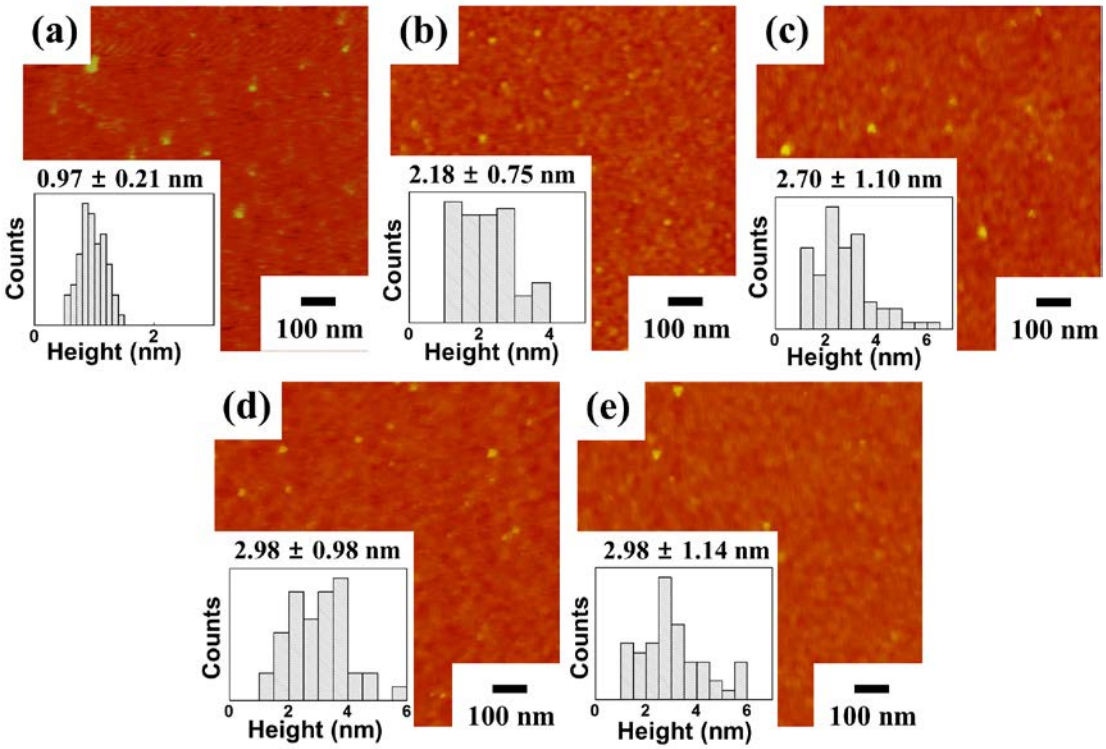

Figure S3. Atomic force microscopy (AFM) images of GQDs and the corresponding histograms of their height distribution: (a) **GH0**, (b) **GH25**, (c) **GH50**, (d) **GH75**, and (e) **GH100**.

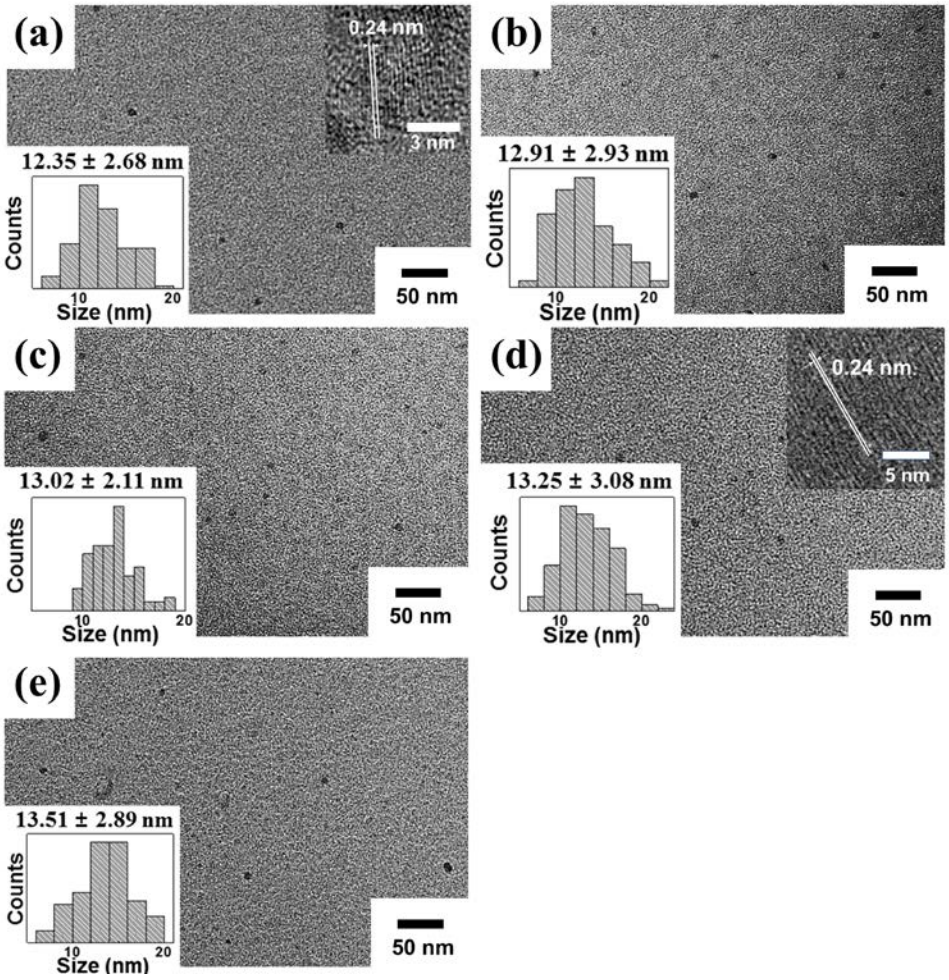

Figure S4. Transmission electron microscopy (TEM) images of GQDs and the corresponding histograms of their size distribution: (a) **GH0** (inset: HRTEM image of **GH0**), (b) **GH25**, (c) **GH50**, (d) **GH75** (inset: HRTEM image of **GH75**), and (e) **GH100**.

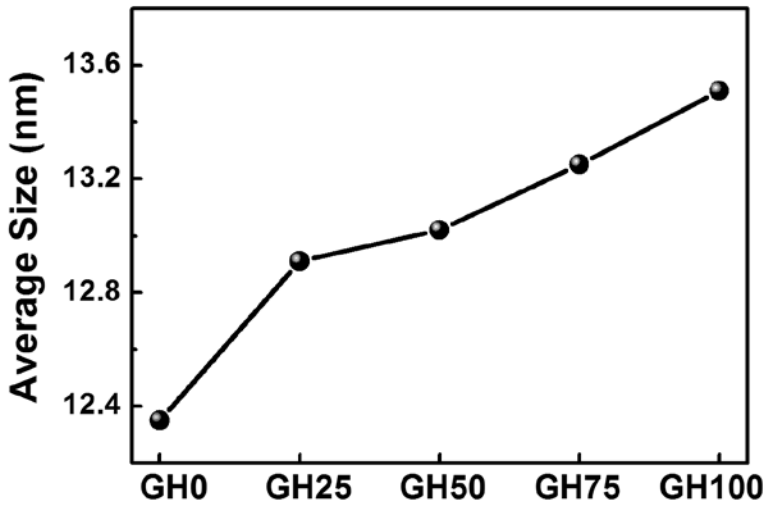

Figure S5. Average size of the synthesized GQDs measured from TEM images.

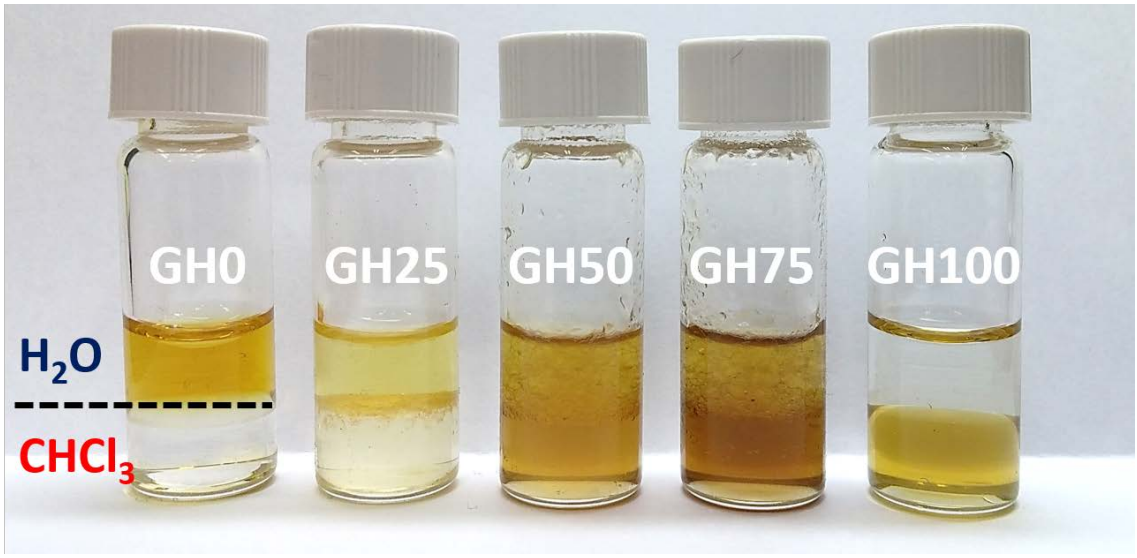

Figure S6. Photograph showing solubility of modified GQDs in a water/chloroform solvent system. 3 mg of each type of the five different GQDs were separately dissolved in 2 mL of a water/chloroform (1:1 v/v) mixture.

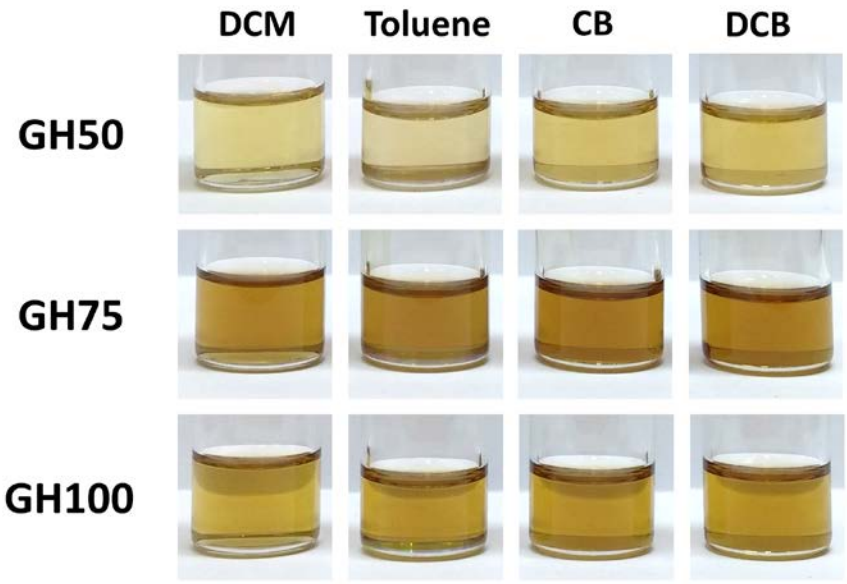

Figure S7. Photograph showing that solubility of **GH50**, **GH75**, and **GH100** were soluble in DCM, toluene, CB, and DCB, respectively.

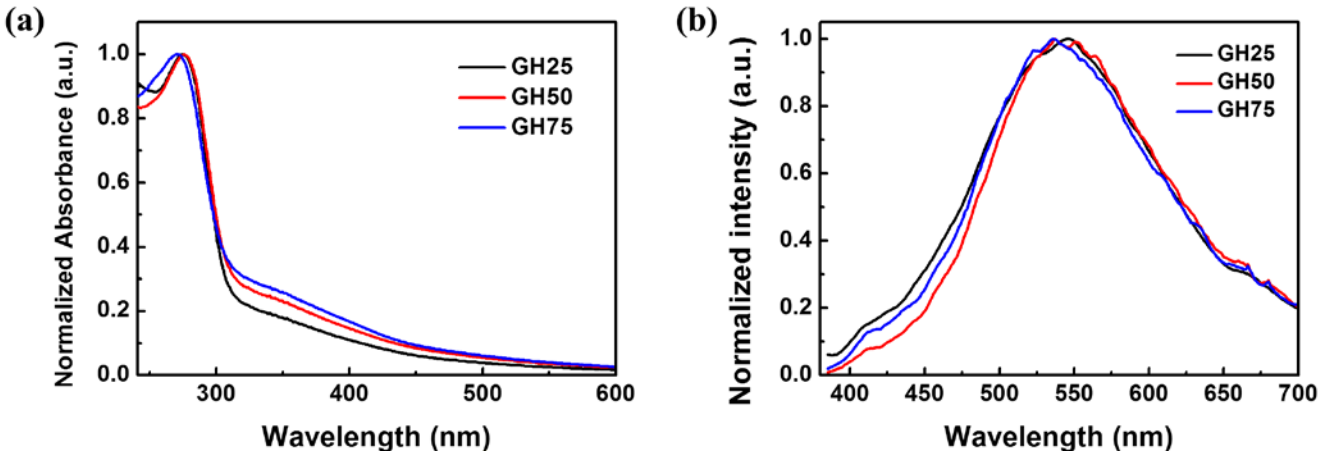

Figure S8. (a) UV−vis absorption spectra and (b) PL emission spectra of **GH25**, **GH50**, and **GH75** excited under 365 nm wavelength.

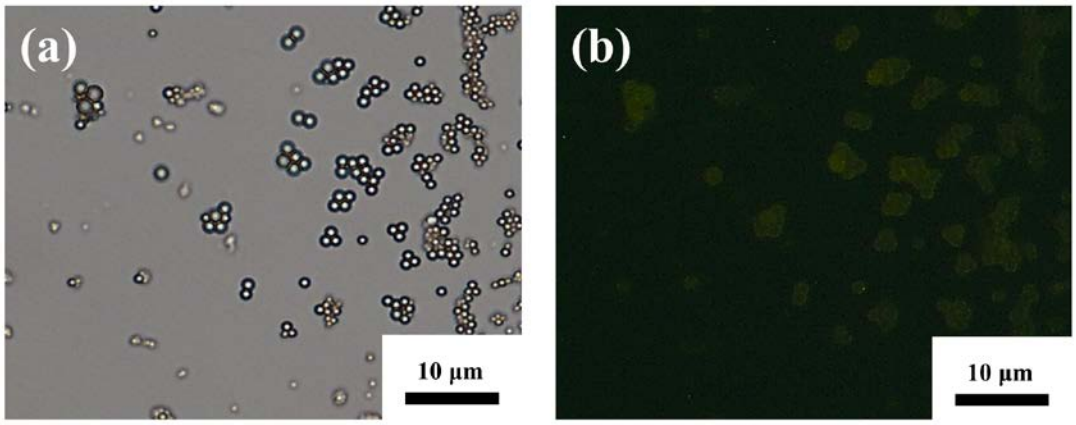

Figure S9. (a) Optical and (b) fluorescence microscopy images of PS colloidal particles stabilized by **GH25**. The excitation wavelength was 450 nm.