Supplementary Information

Exploring nonamphiphilic stabilizers as replacement of amphiphilic surfactants for electrochemically synthesized carbon dots

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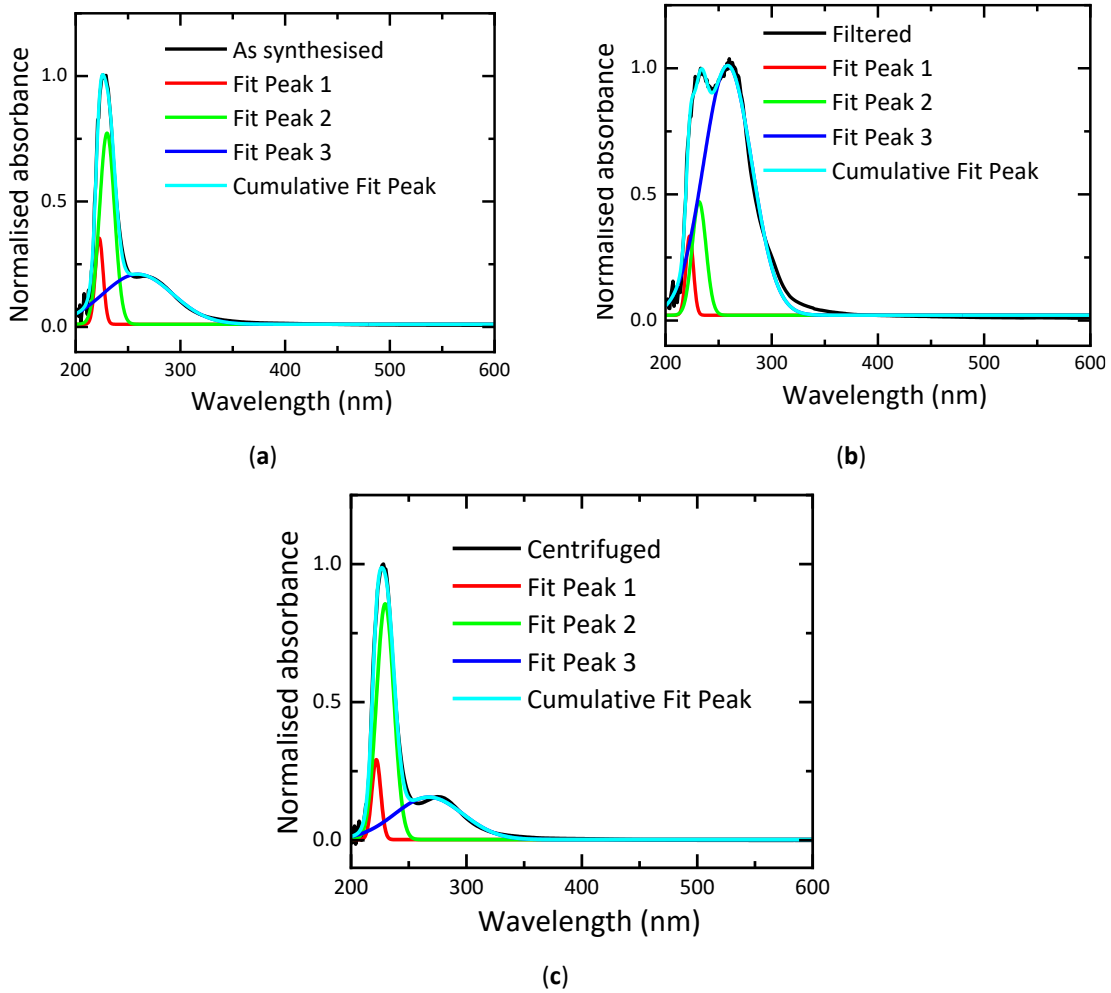


Fig. S1 Normed absorbance deconvolution of CD-X (**a**) As-synthesized, (**b**) filtered, and (**c**) centrifuged.

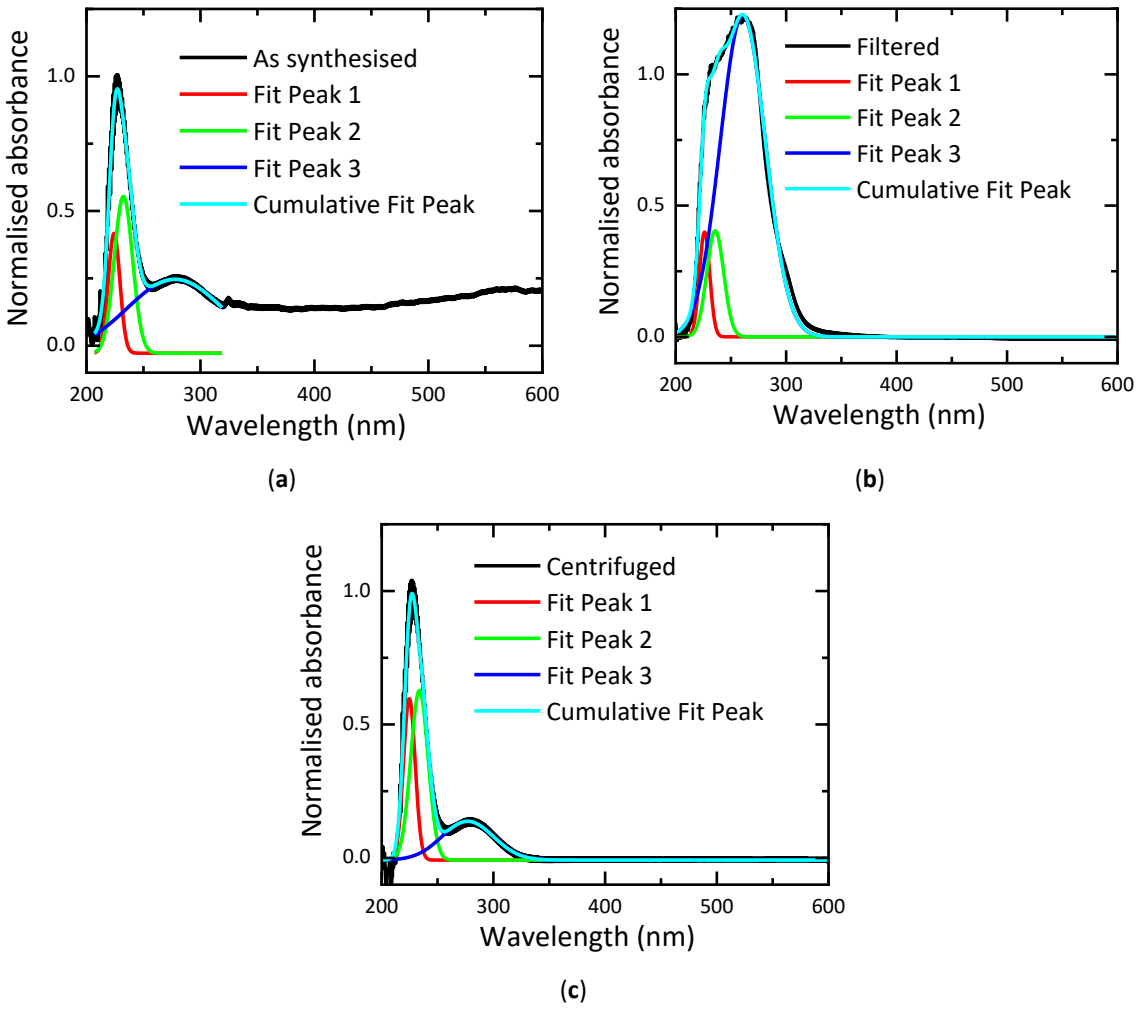


Fig. S2 Normed absorbance deconvolution of CD-Na (**a**) As-synthesized, (**b**) filtered, and (**c**) centrifuged.

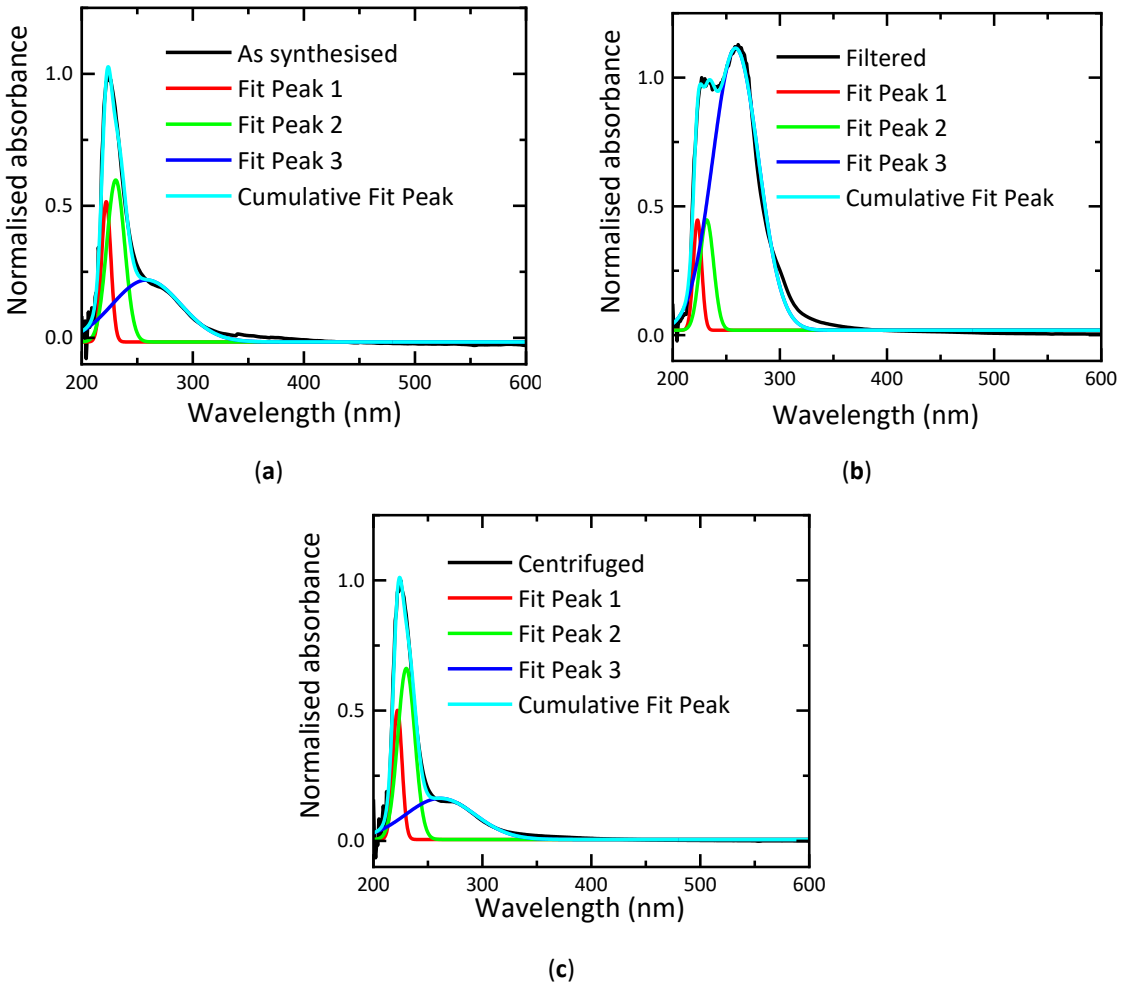


Fig. S3 Normed absorbance deconvolution of CD-SDS (**a**) As-synthesized, (**b**) filtered, and (**c**) centrifuged.

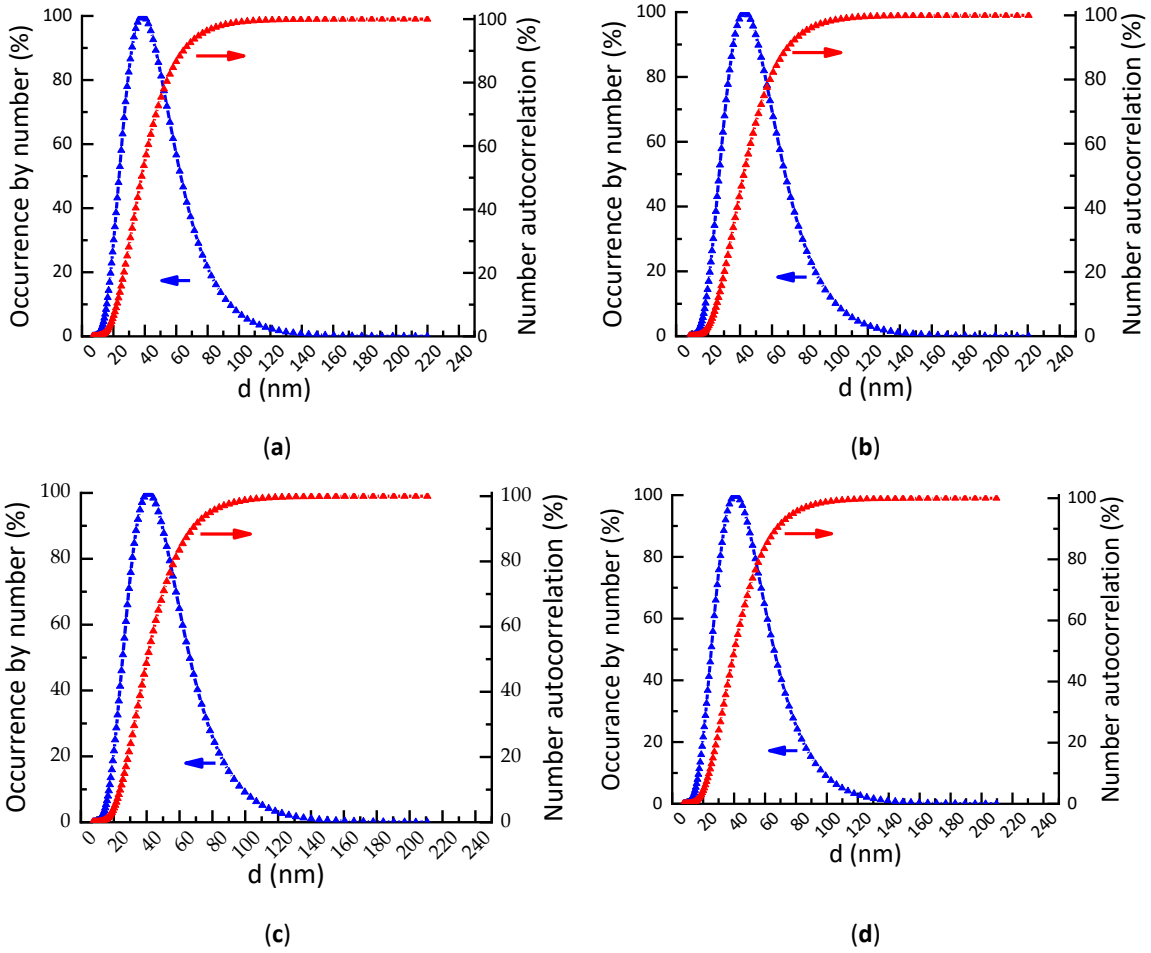


Fig. S4 DLS of CD-X centrifuged, 4 separate runs (**a**), (**b**), (**c**), and (**d**).

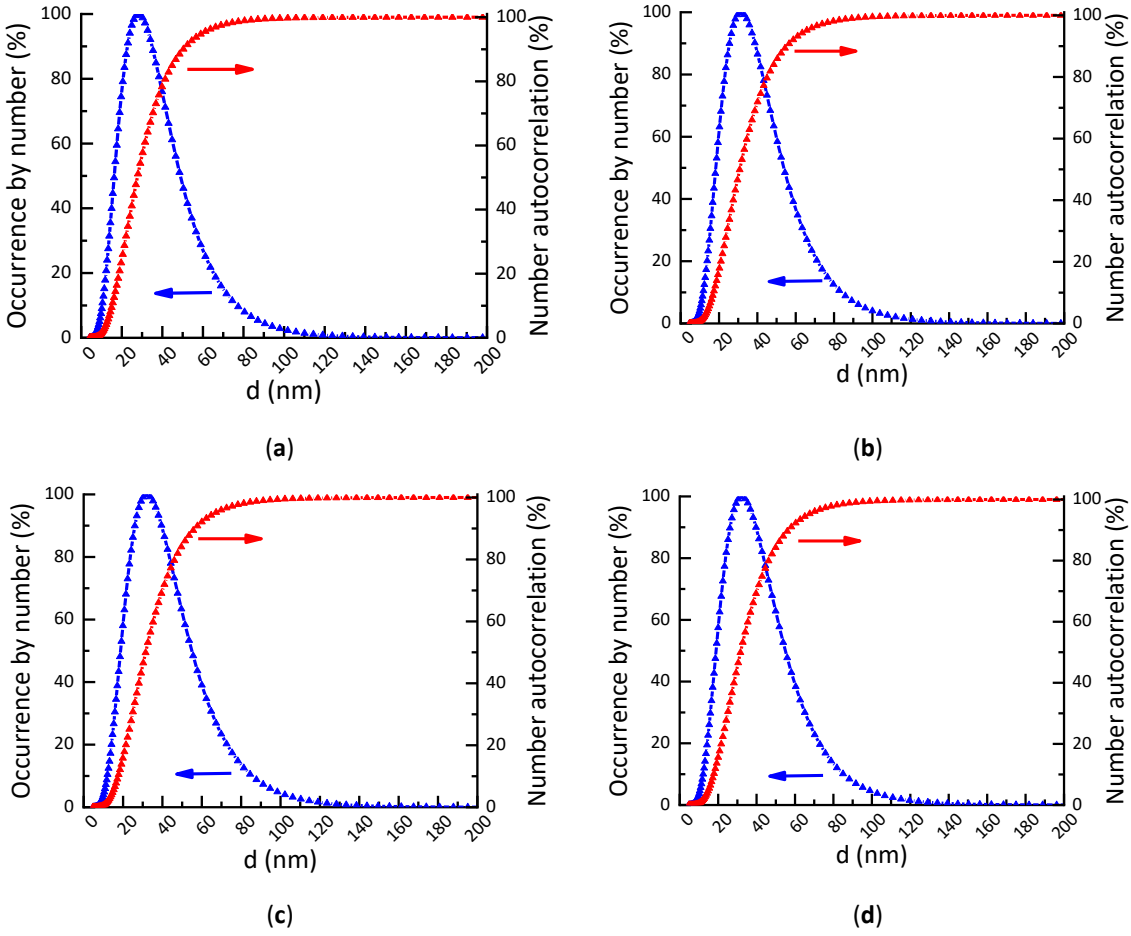


Fig. S5 DLS of CD-X filtered, 4 separate runs (**a**), (**b**), (**c**), and (**d**).

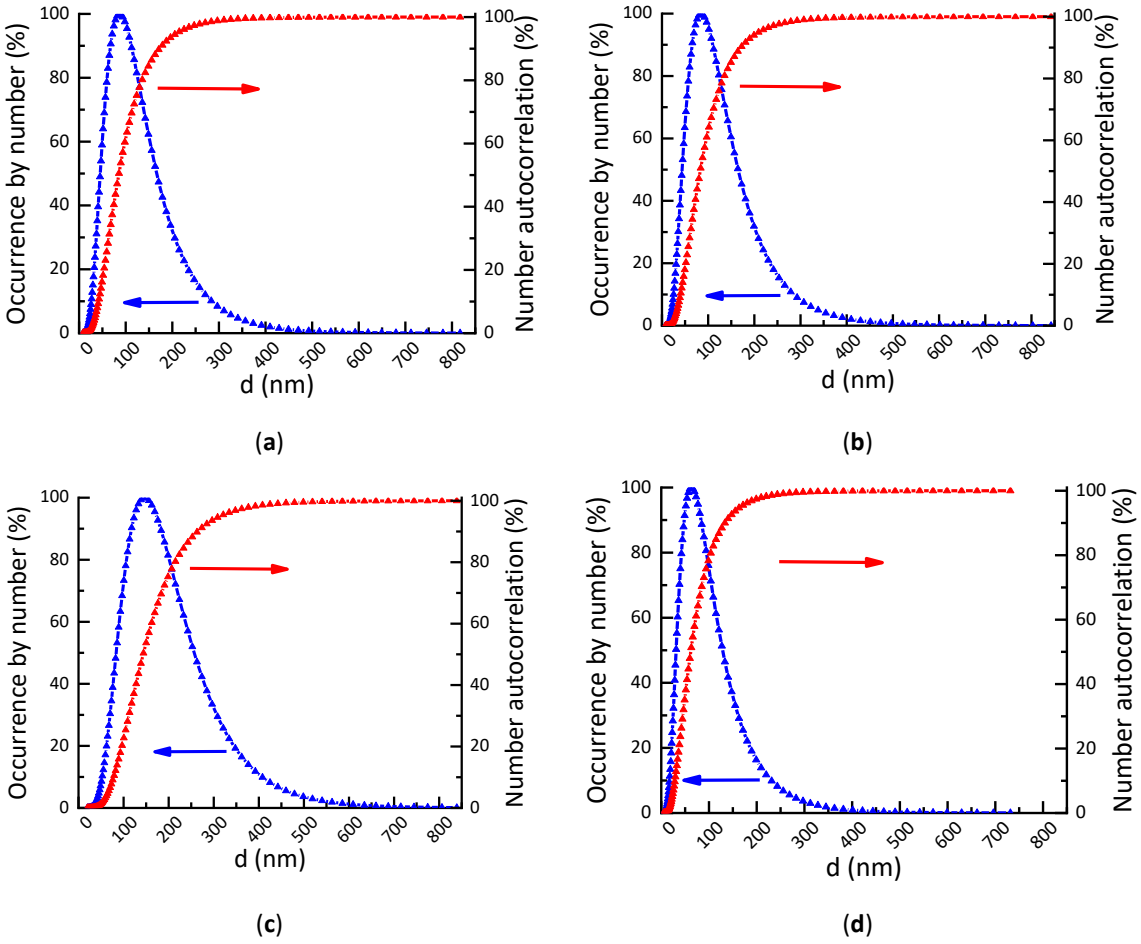


Fig. S6 DLS of CD-Na centrifuged, 4 separate runs (**a**), (**b**), (**c**), and (**d**).

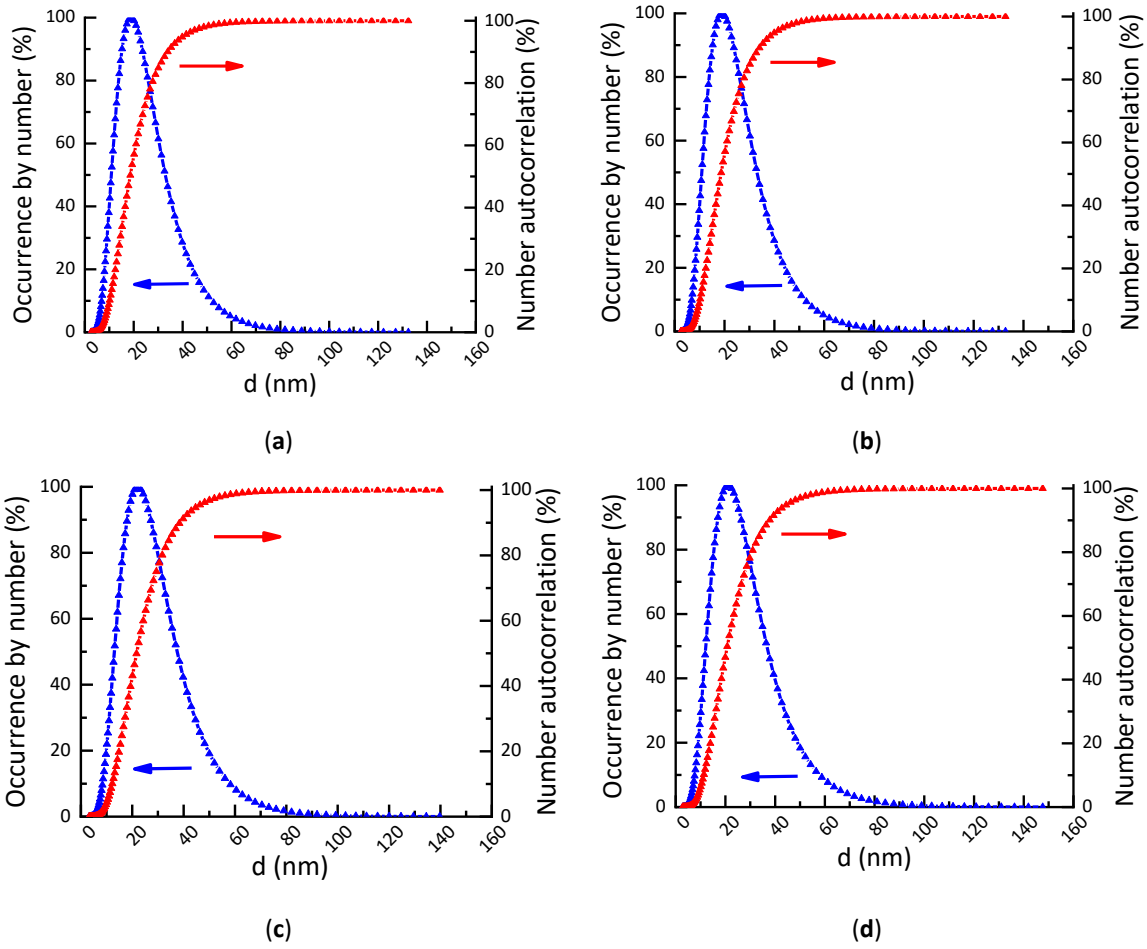


Fig. S7 DLS of CD-Na filtered 4 separate runs (**a**), (**b**), (**c**), and (**d**).

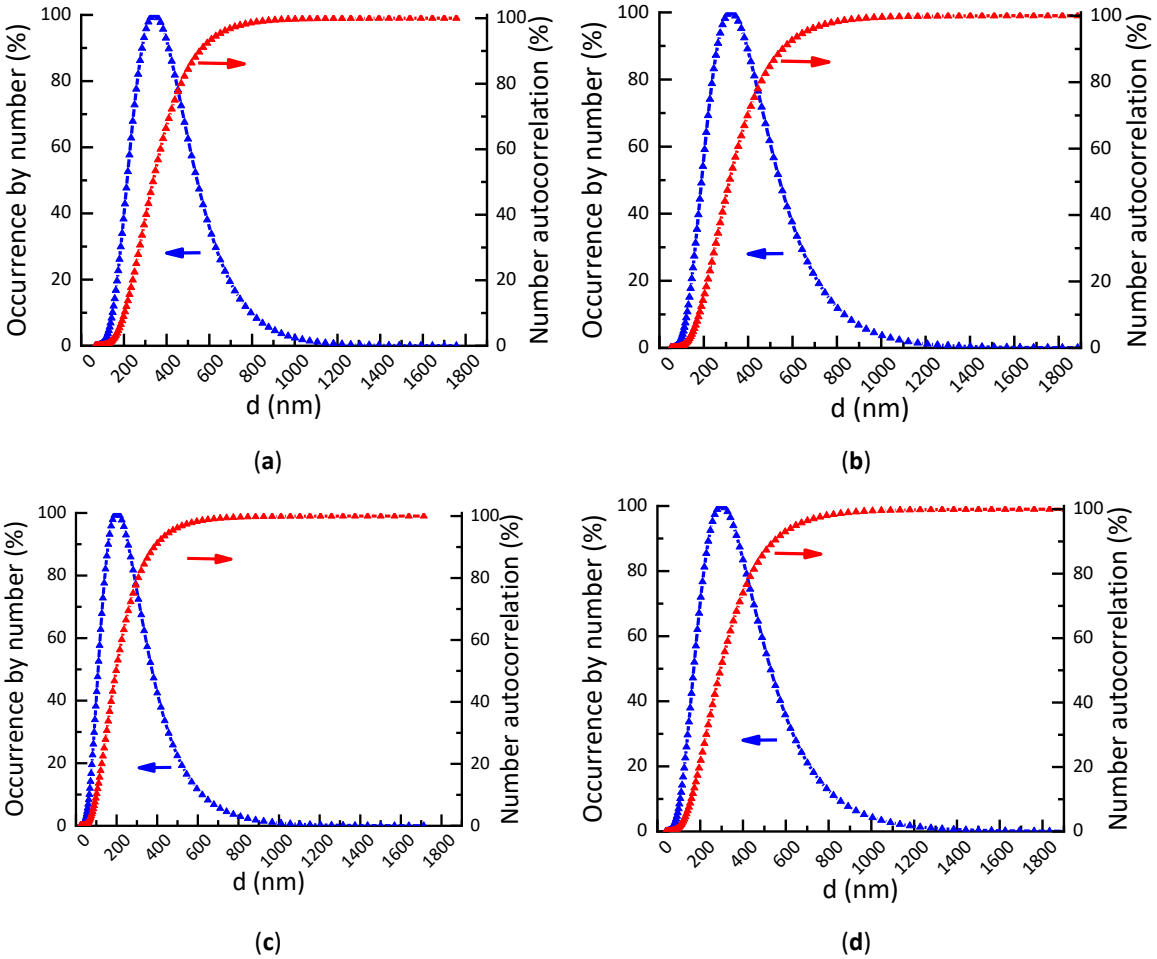


Fig. S8 DLS of CD-SDS centrifuged, 4 separate runs (**a**), (**b**), (**c**), and (**d**).

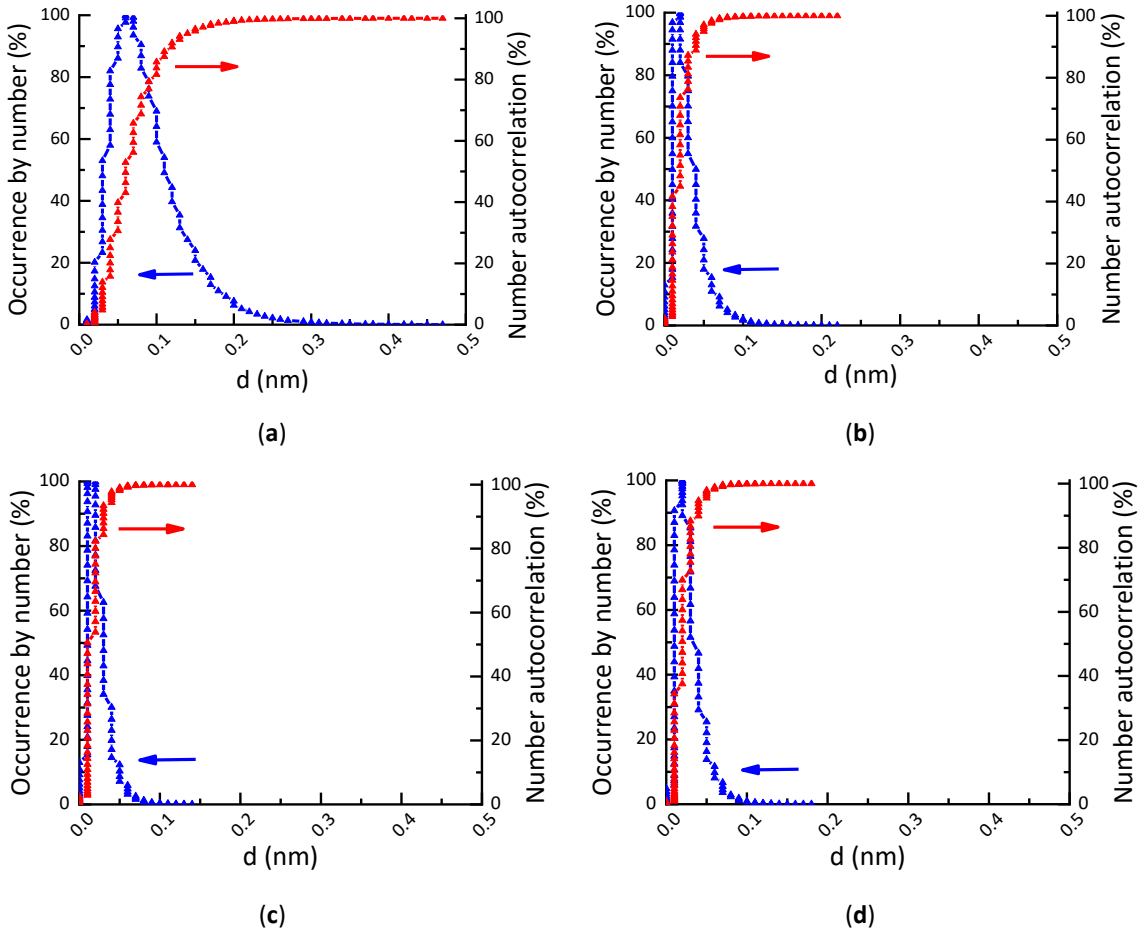
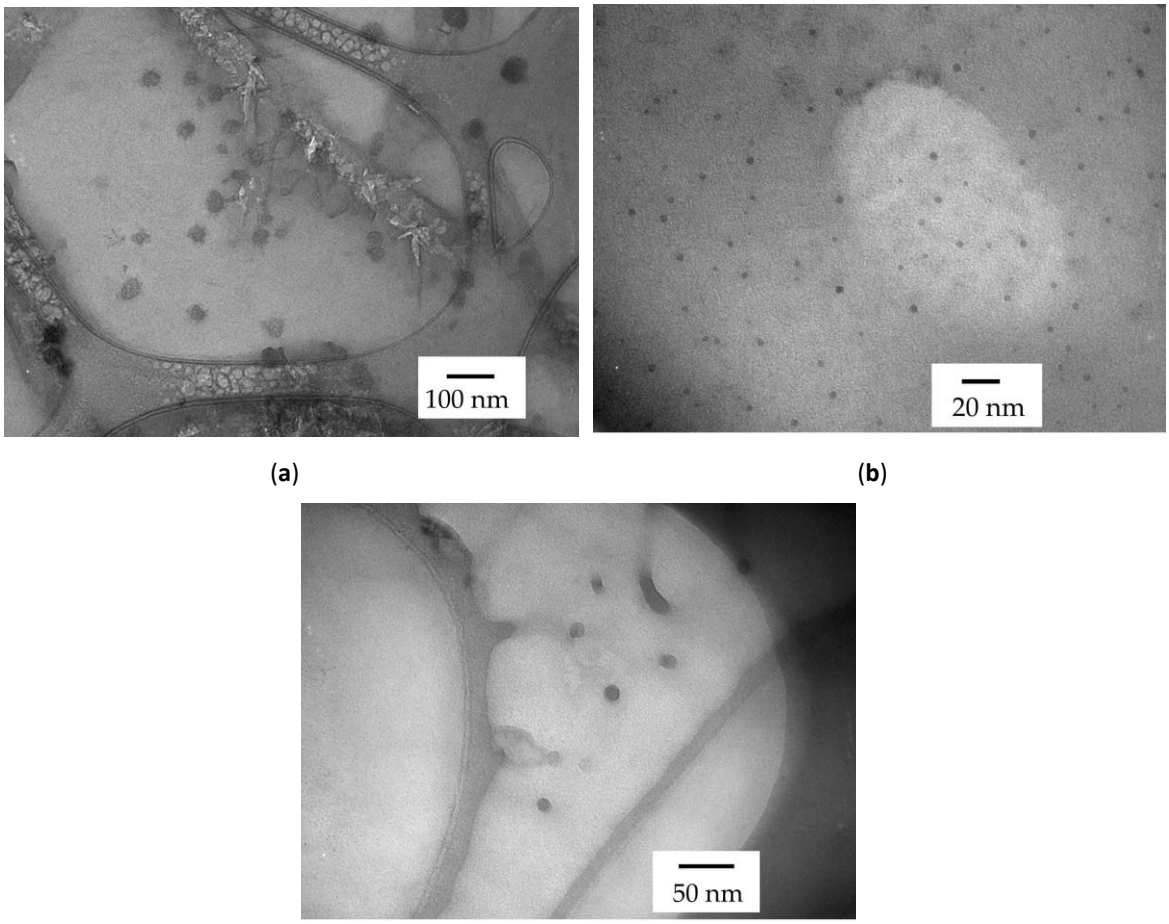


Fig. S9 DLS of CD-SDS filtered, 4 separate runs (**a**), (**b**), (**c**), and (**d**).

Table S1 Comparison of the average polydispersity index for CD solutions after centrifugation and post-treatment filtration.

CD sample	**Polydispersity index (-)**	
	centrifuged	filtered
CD-X	0.20	0.25
CD-Na	0.38	0.26
CD-SDS	0.26	*

* Concentration too low for reliable evaluation.



(**a**) (**b**)

(**c**)

Fig. S10 Higher magnification TEMs of a) CD-X, b) CD-Na, and c) CD-SDS filtered.

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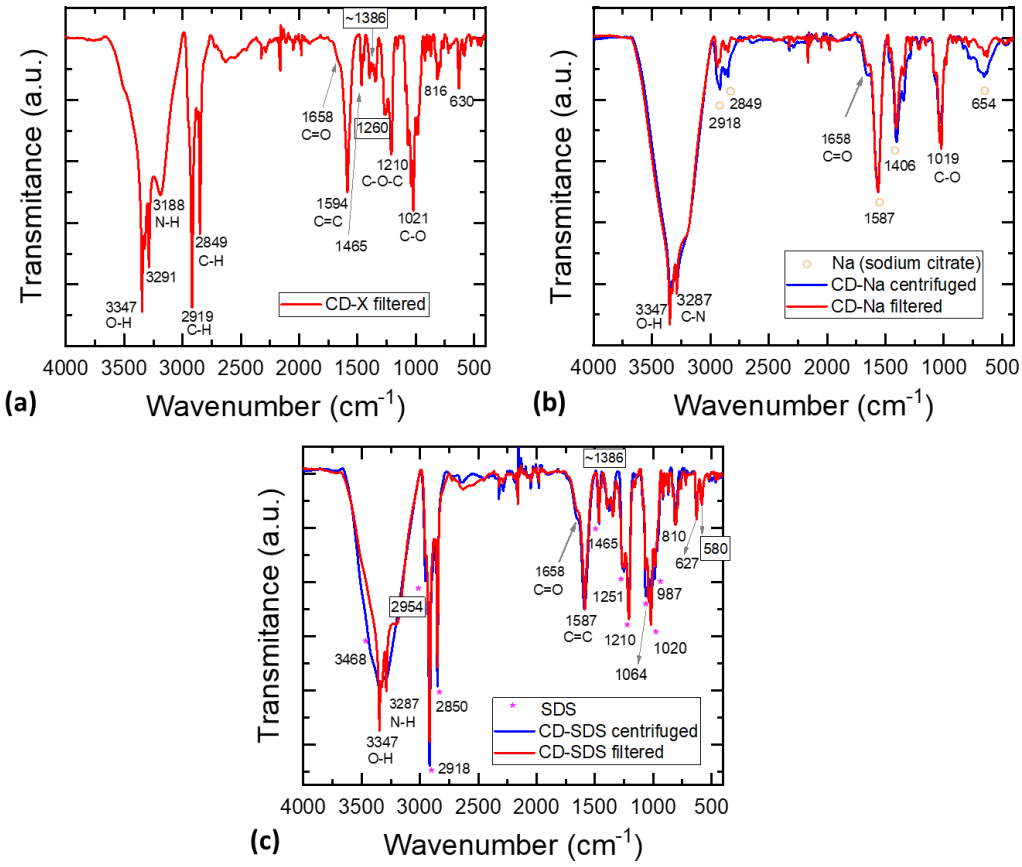

Fig. S11 FTIR of (**a**) CD-X filtered, (**b**) CD-Na, and (**c**) CD-SDS an ATR setup.

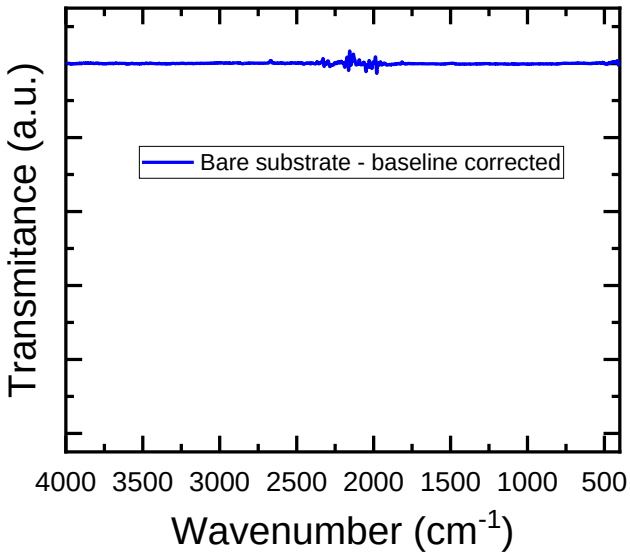

Fig. S12 FTIR of pure stainless-steel substrate in an ATR setup

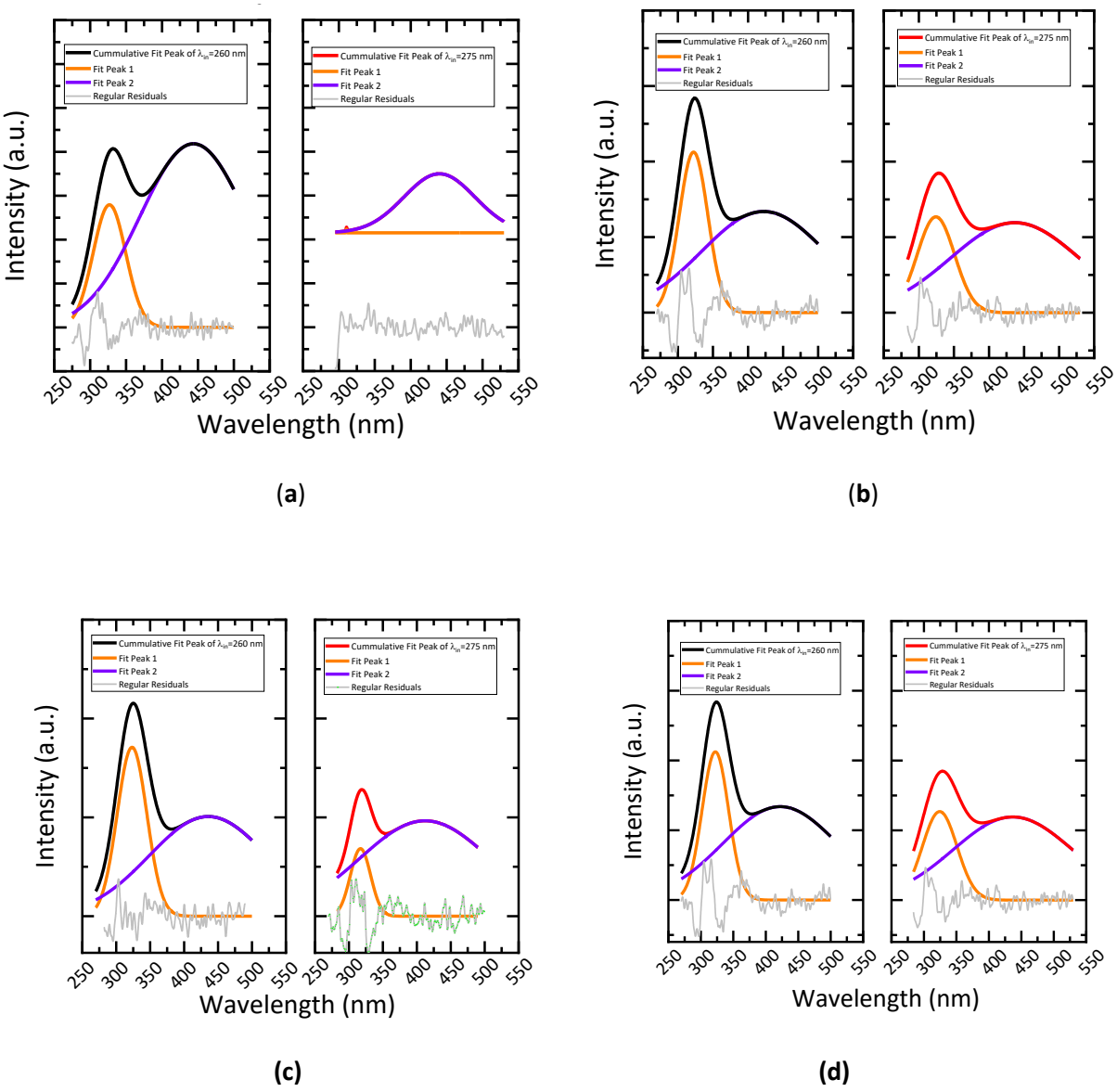

Fig. S13 (a) Fluorescence spectra deconvolution of centrifuged CD-SDS, (**b**) filtered CD-SDS, (**c**) filtered CD-X, and (**d**) filtered CD-Na. For centrifuged CD-SDS, Cumulative Fit Peak is almost identical to Fit Peak 2.