Supporting Information to

"Purification and structural elucidation of carbon dots by column chromatography"

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Fig. S1: ¹H-NMR spectra of a) TPDCA and b) CD_{mild} measured with the solvent d₆-DMSO.



Fig. S2: FTIR spectra of dried a) CD_{harsh} and b) CD_{very-harsh}.



Fig. S3: XRD pattern a) 200°C, 24 h, b) 250°C, 24 h, c) 200°C, 24 h (citric acid CDs).



Fig. S4: 3D PL mapping spectra of undiluted TPDCA in water.

Tab. S1: PL lifetimes of three different fractions of CD_{moderate} measured at 420nm emission wavelength upon excitation at 355 nm.

	$\lambda_{\rm Exc}$ = 355 nm $\lambda_{\rm Em}$ = 420 nm			
Retention time/ min	24	44	55	TPDCA
τ ₁ / ns	-	-	3.04 (18%)	-
τ ₂ / ns	9.91 (100%)	9.94 (100%)	8.94 (80%)	9.95 (100%)

two different fractions of $\rm CD_{moderate}$ measured upon excitation 405 and 420 nm and emission at 440 and 480 nm.

	λ_{Exc} = 405 nm		λ_{Exc} = 420 nm	
	λ_{Em} = 440 nm		λ_{Em} = 480 nm	
Retention time/ min	32	44		
τ ₁ / ns	0.82 (9%)	0.79 (10%)	1.28 (25%)	
τ ₂ / ns	4.41 (41%)	4.10 (53%)	4.86 (51%)	
τ ₃ / ns	11.7 (50%)	12.02 (37%)	13.61 (24%)	



Fig. S5: Life-time measurements in dependence on emission wavelength: CD_{mod} (24 min) and CD_{mod} (37min).

