

Supporting Information

Figure S1.

Fluorescence quenching of “blue” C-dots with iodine ion displayed as Stern-Volmer plots. Measurements were carried out at excitation 350 nm and emission 445 nm.

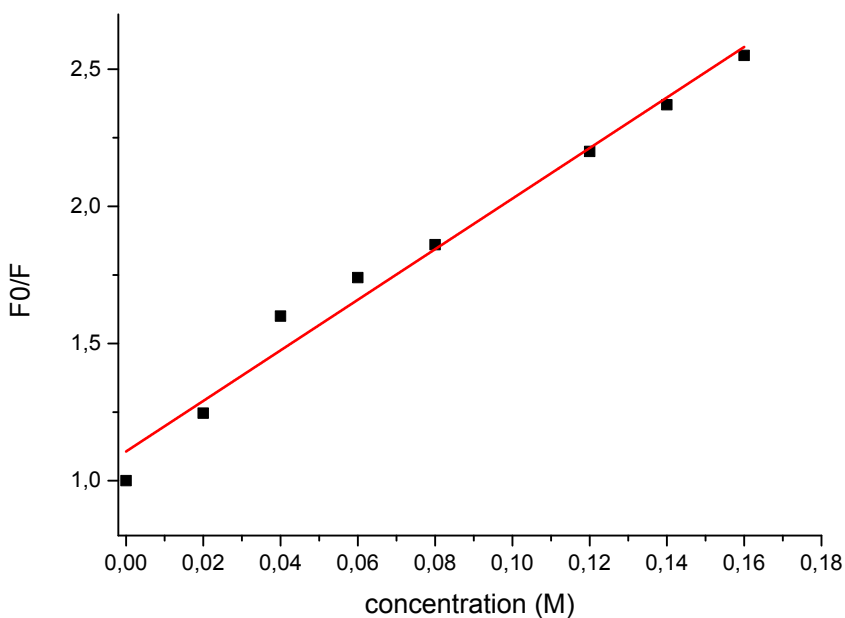


Figure S2. Fluorescence quenching of “green” C-dots with iodine ion displayed as Stern-Volmer plots. Measurements were carried out at excitation 420 nm and emission 525 nm.

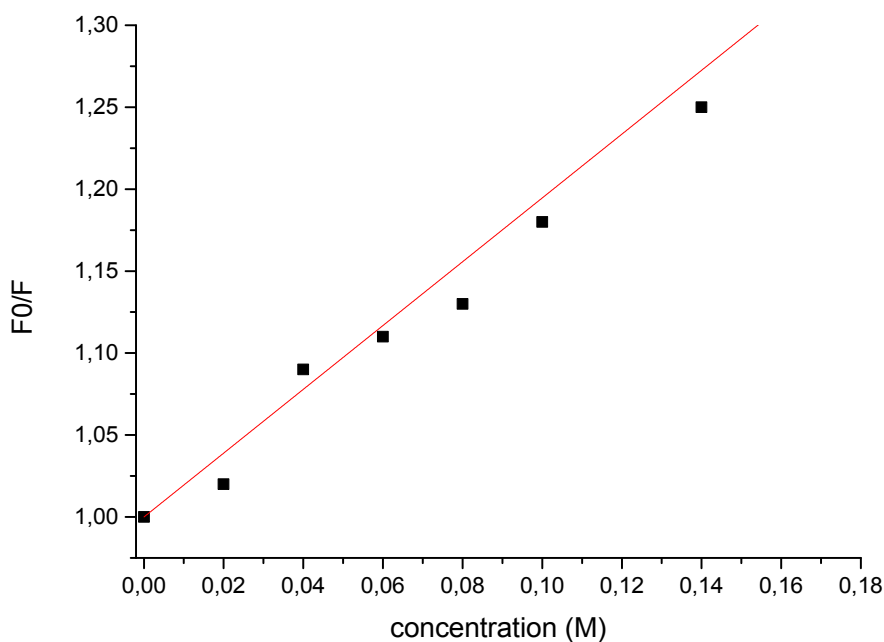
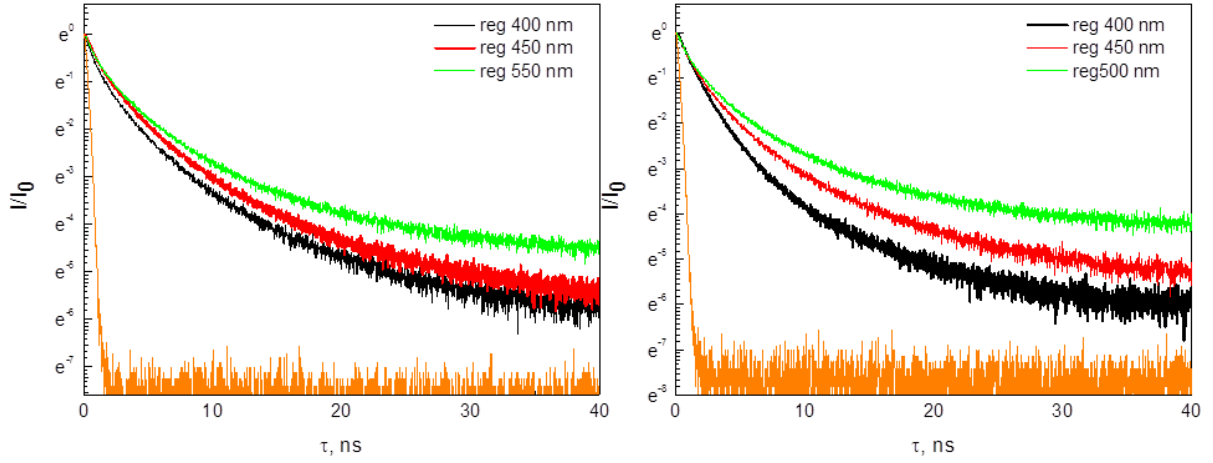


Figure S3. Fluorescence decays of “blue” C-dots at different emission wavelengths and their analysis. Excitations at 330 and 380 nm.

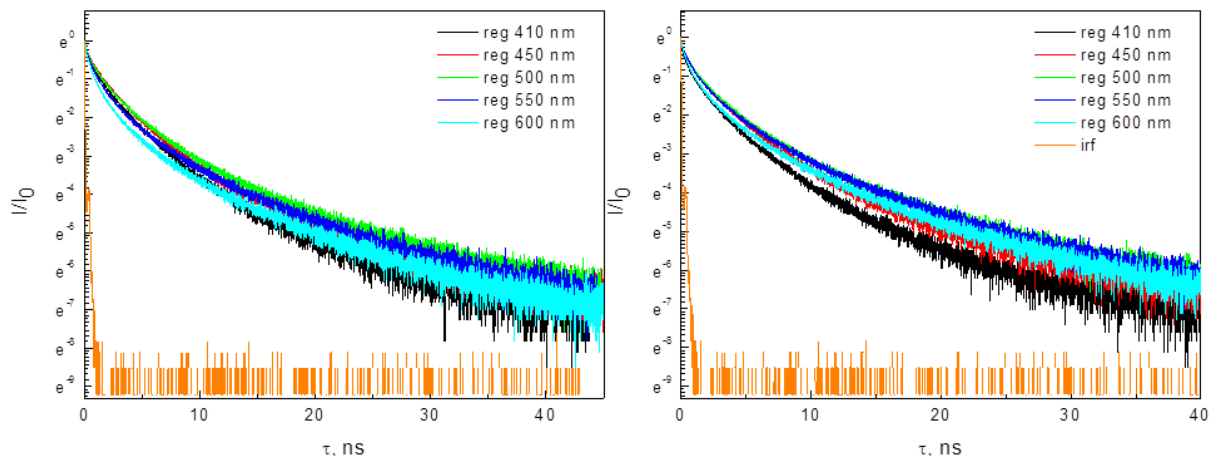
$$\lambda_{\text{exc}} = 330 \text{ nm}$$

with DEG (1:1)



$$\lambda_{\text{exc}} = 380 \text{ nm}$$

with DEG (1:1)



$$\lambda_{\text{exc}} = 330 \text{ nm}$$

		$\lambda_{\text{reg}} = 400 \text{ nm}$	$\lambda_{\text{reg}} = 450 \text{ nm}$	$\lambda_{\text{reg}} = 500 \text{ nm}$
τ_1		0,673	0,928	0,973
	DEG	0,703	0,713	0,830
β		0,513	0,542	0,522
	DEG	0,579	0,516	0,502

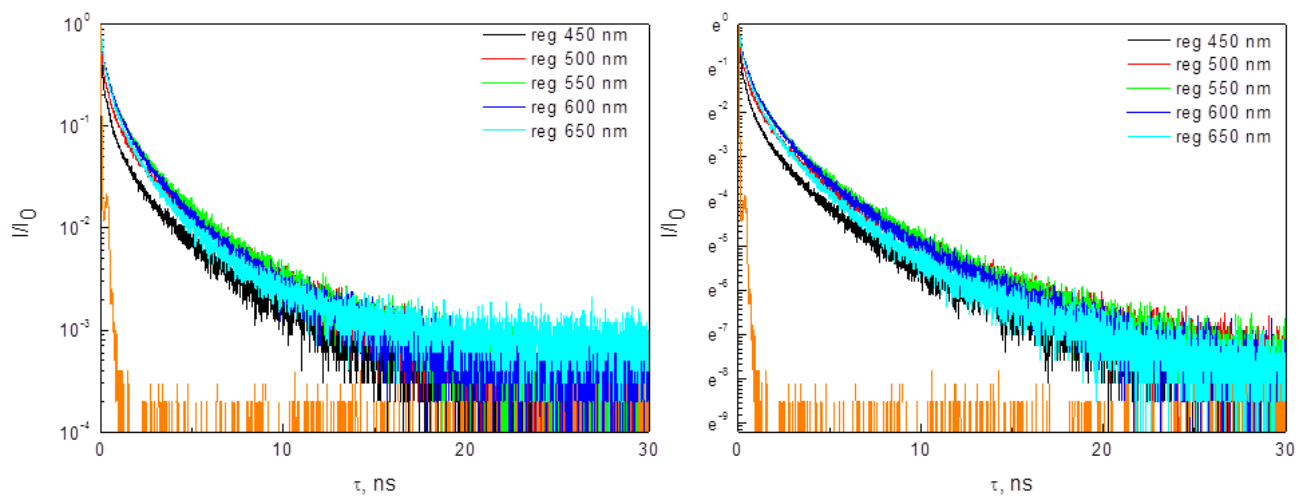
$$\lambda_{\text{exc}} = 380 \text{ nm}$$

		$\lambda_{\text{reg}} = 410 \text{ nm}$	$\lambda_{\text{reg}} = 450 \text{ nm}$	$\lambda_{\text{reg}} = 500 \text{ nm}$	$\lambda_{\text{reg}} = 550 \text{ nm}$	$\lambda_{\text{reg}} = 600 \text{ nm}$
τ_1		1,196	1,261	1,055	0,591	0,304
	DEG	0,889	1,139	0,989	0,761	0,457
β		0,609	0,597	0,537	0,466	0,413
	DEG	0,560	0,581	0,526	0,488	0,440

Figure S4. Fluorescence decays of “green” C-dots at different emission wavelengths and their analysis. Excitations at 380 nm and 440 nm.

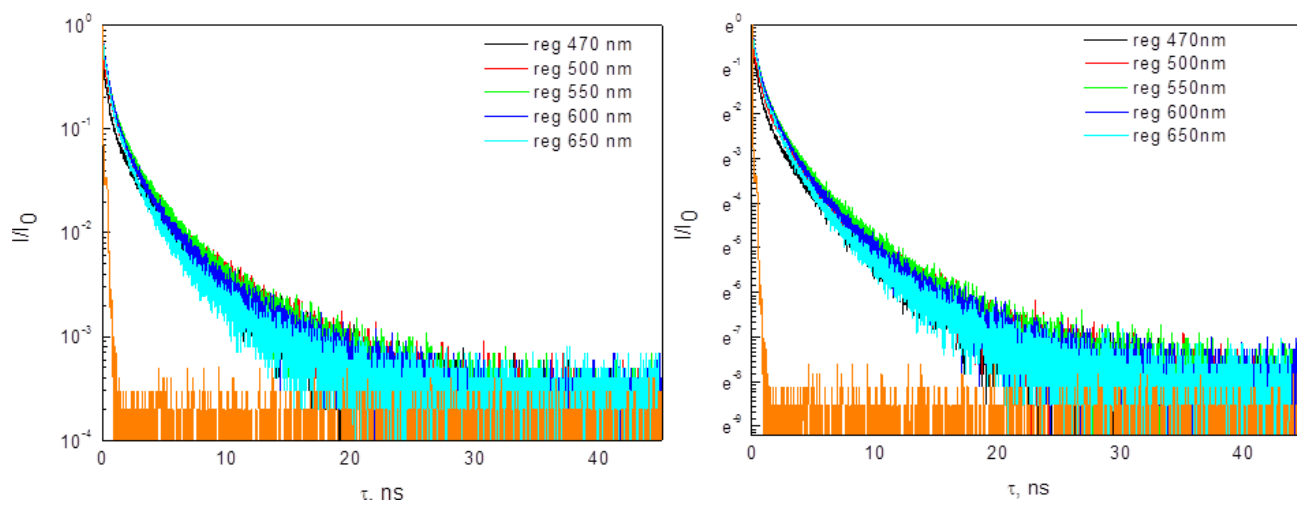
$\lambda_{\text{ex}} = 380 \text{ nm}$

with DEG (1:1)



$\lambda_{\text{ex}} = 440 \text{ nm}$

with DEG (1:1)



$\lambda_{exc}=380 \text{ nm}$

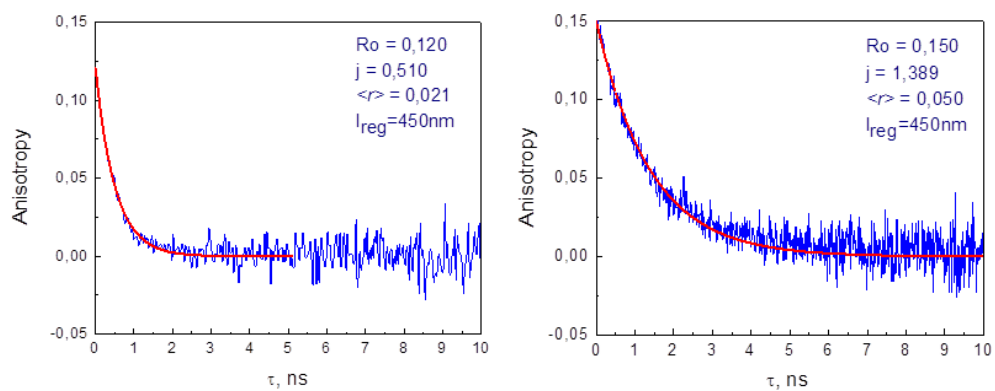
		$\lambda_{reg}=450 \text{ nm}$	$\lambda_{reg}=500 \text{ nm}$	$\lambda_{reg}=550 \text{ nm}$	$\lambda_{reg}=600 \text{ nm}$	$\lambda_{reg}=650 \text{ nm}$
τ_1		0,014	0,049	0,090	0,078	0,048
	DEG	0,077	0,113	0,186	0,184	0,111
β		0,299	0,347	0,390	0,391	0,371
	DEG	0,367	0,382	0,421	0,430	0,402

$\lambda_{exc}=440 \text{ nm}$

		$\lambda_{reg}=470 \text{ nm}$	$\lambda_{reg}=500 \text{ nm}$	$\lambda_{reg}=540 \text{ nm}$	$\lambda_{reg}=600 \text{ nm}$	$\lambda_{reg}=650 \text{ nm}$
τ_1		0,065	0,089	0,066	0,055	0,041
	DEG	0,096	0,155	0,096	0,182	0,124
β		0,361	0,381	0,371	0,371	0,364
	DEG	0,379	0,409	0,380	0,436	0,415

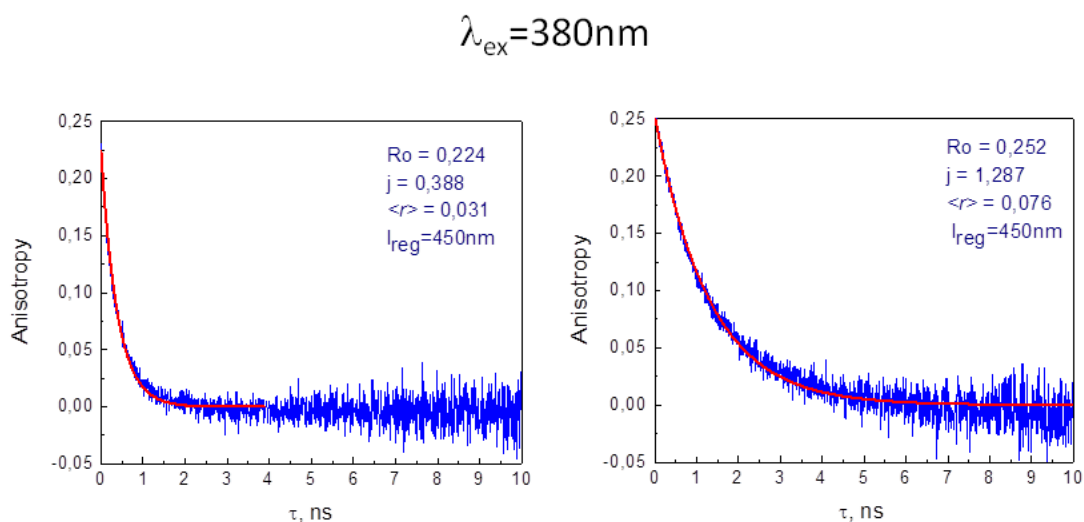
Figure S5. Anisotropy decays of “blue” carbon dots and their analysis. Excitation 330 nm.

$\lambda_{\text{ex}} = 330 \text{ nm}$



		$\lambda_{\text{reg}}=400 \text{ nm}$	$\lambda_{\text{reg}}=450 \text{ nm}$	$\lambda_{\text{reg}}=500 \text{ nm}$
R_0		0.131	0.120	0.099
	DEG	0.155	0.150	0.135
φ		0.481	0.510	0.618
	DEG	1.029	1.389	1.601
$\langle r \rangle$		0.026	0.021	0.017
	DEG	0.050	0.050	0.038

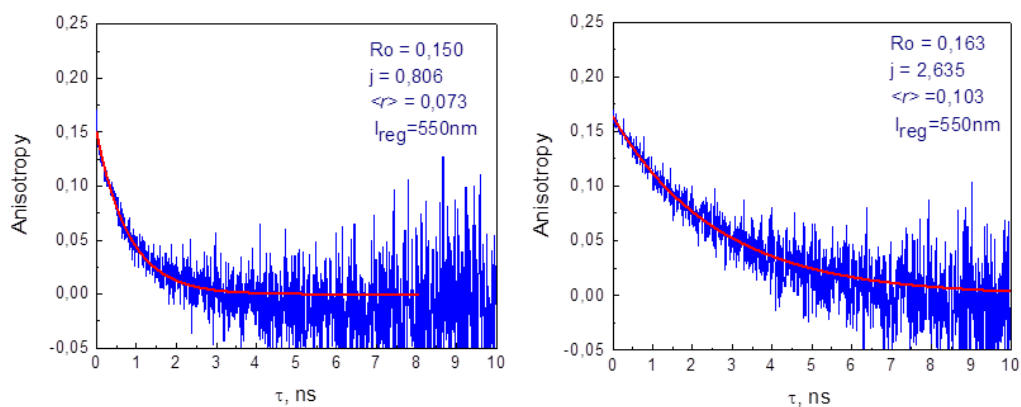
Figure S6. Anisotropy decays of “blue” carbon dots and their analysis. Excitation 380 nm.



		$\lambda_{reg}=410\text{ nm}$	$\lambda_{reg}=450\text{ nm}$	$\lambda_{reg}=500\text{ nm}$	$\lambda_{reg}=550\text{ nm}$	$\lambda_{reg}=600\text{ nm}$
R_0		0.187	0.224	0.206	0.162	0.145
	DEG	0.272	0.252	0.244	0.186	0.157
φ		0.358	0.388	0.404	0.432	0.457
	DEG	1.069	1.287	1.520	1.646	1.760
$\langle r \rangle$		0.027	0.031	0.030	0.027	0.027
	DEG	0.082	0.076	0.076	0.063	0.061

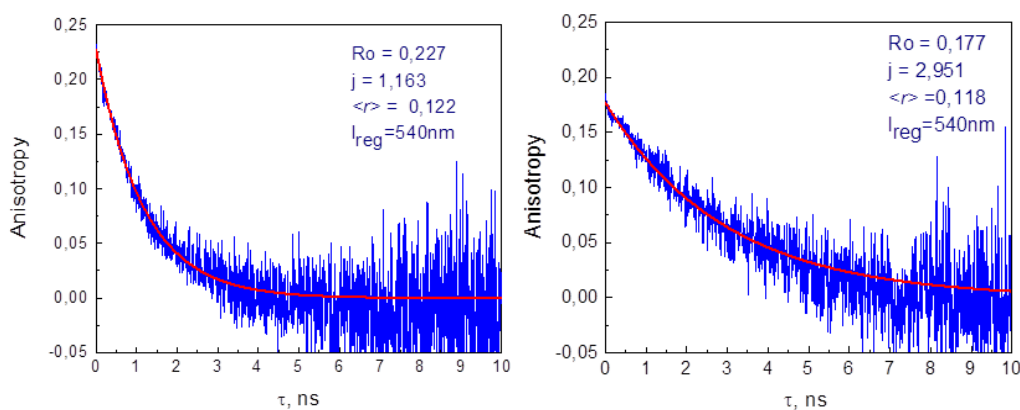
Figure S7. Anisotropy decays of “green” carbon dots and their analysis. Excitation at 380 and 440 nm.

$\lambda_{\text{ex}} = 380 \text{ nm}$



		$\lambda_{\text{reg}}=450 \text{ nm}$	$\lambda_{\text{reg}}=500 \text{ nm}$	$\lambda_{\text{reg}}=550 \text{ nm}$	$\lambda_{\text{reg}}=600 \text{ nm}$	$\lambda_{\text{reg}}=650 \text{ nm}$
R_0		0.141	0.170	0.150	0.131	0.125
	DEG	-	0.203	0.163	0.127	0.099
φ		0.831	0.788	0.806	0.771	1.032
	DEG	-	2.481	2.635	2.712	2.682
$\langle r \rangle$		0.087	0.087	0.073	0.063	0.067
	DEG	-	0.125	0.103	0.083	0.067

$\lambda_{\text{ex}} = 440 \text{ nm}$



		$\lambda_{\text{reg}}=500 \text{ nm}$	$\lambda_{\text{reg}}=540 \text{ nm}$	$\lambda_{\text{reg}}=600 \text{ nm}$	$\lambda_{\text{reg}}=650 \text{ nm}$
R_0		0.245	0.227	0.176	0.138
	DEG	0.204	0.177	0.145	0.109
φ		1.027	1.163	1.057	1.051
	DEG	2.864	2.951	2.830	2.662
$\langle r \rangle$		0.123	0.122	0.097	0.081
	DEG	0.137	0.118	0.098	0.076