

## Supporting Information

# Nonradiative Energy Transfer in Colloidal CdSe Nanoplatelet Films

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**Table S1.** Fluorescence decay components of the donor 4 ML NPLs.

TRF Decay Components								
Acceptor – Donor Ratio (A:D)	$\tau_1$ (ns)	$\tau_2$ (ns)	$\tau_3$ (ns)	$\tau_4$ (ns)	$A_1\tau_1$ (%)	$A_2\tau_2$ (%)	$A_3\tau_3$ (%)	$A_4\tau_4$ (%)
Only donor	64.0	11.8	1.8	0.25	27.6	31.8	23.6	17.0
0.01	63.0	10.9	1.7	0.22	27.9	30.9	23.2	18.0
0.06	60.0	10.4	1.5	0.20	27.1	29.8	22.8	20.2
0.28	59.1	10.5	1.6	0.22	22.5	28.2	25.3	24.0
0.56	55.0	9.4	1.4	0.16	23.3	27.4	23.6	25.6
1.12	53.0	8.8	1.2	0.14	21.5	27.3	25.5	25.7
1.69	49.0	8.2	1.3	0.16	20.8	28.2	25.4	25.5

**Table S2.** Fluorescence decay components of the acceptor 5 ML NPLs.

TRF Decay Components								
Acceptor – Donor Ratio (A:D)	$\tau_1$ (ns)	$\tau_2$ (ns)	$\tau_3$ (ns)	$\tau_4$ (ns)	$A_1\tau_1$ (%)	$A_2\tau_2$ (%)	$A_3\tau_3$ (%)	$A_4\tau_4$ (%)
Only acceptor	52.1	8.2	1.3	0.19	19.1	30.0	26.7	24.2
0.01	87.0	16.6	4.5	0.75	19.7	34.6	35.1	10.6
0.06	76.5	13.3	3.0	0.43	20.4	37.3	31.4	10.9
0.28	67.4	11.5	2.6	0.42	19.0	36.2	32.0	12.8
0.56	75.5	12.9	2.6	0.45	17.3	31.1	33.6	18.0
1.12	77.9	12.5	2.3	0.36	20.6	29.8	30.5	19.0
1.69	64.0	11.0	1.7	0.23	20.7	29.1	27.2	23.0

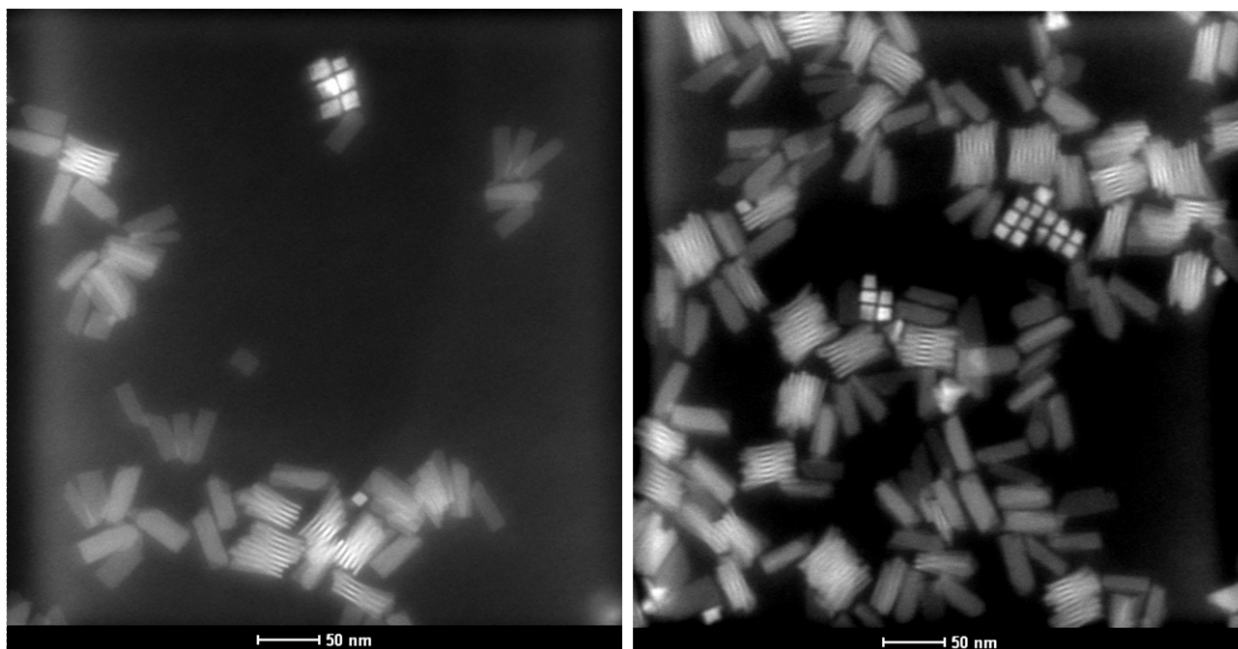


Figure S1. HAADF-TEM images of mixed NPL populations incorporating 2-3% 4 ML NPLs while the rest of the NPLs are 5 ML. 4 ML NPLs have the square-like shape with an average size of 10.81 nm ( $\pm$  0.53 nm) and 5 ML NPLs have the rectangle-like shape with an average size of 43.67 nm ( $\pm$  3.31 nm) and 12.94 nm ( $\pm$  1.51 nm).