**ADVANCED
OPTICAL
MATERIALS**

Supporting Information

Enhanced Directional Light Extraction from Patterned Rare-Earth Phosphor Films

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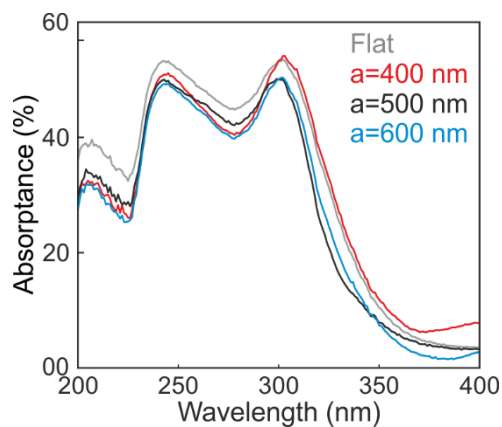*Elena Cabello-Olmo, Pau Molet, Agustín Mihi,[*] Gabriel Lozano,[*] Hernán Míguez*

Figure S1. Absorptance (defined as 100 - Reflectance - Transmittance) spectra of the reference (gray) and patterned samples: *a*=400nm (red), *a*=500nm (black) and *a*=600nm (blue).

Table S1. Absorptance values of the different samples at $\lambda = 285$ nm.

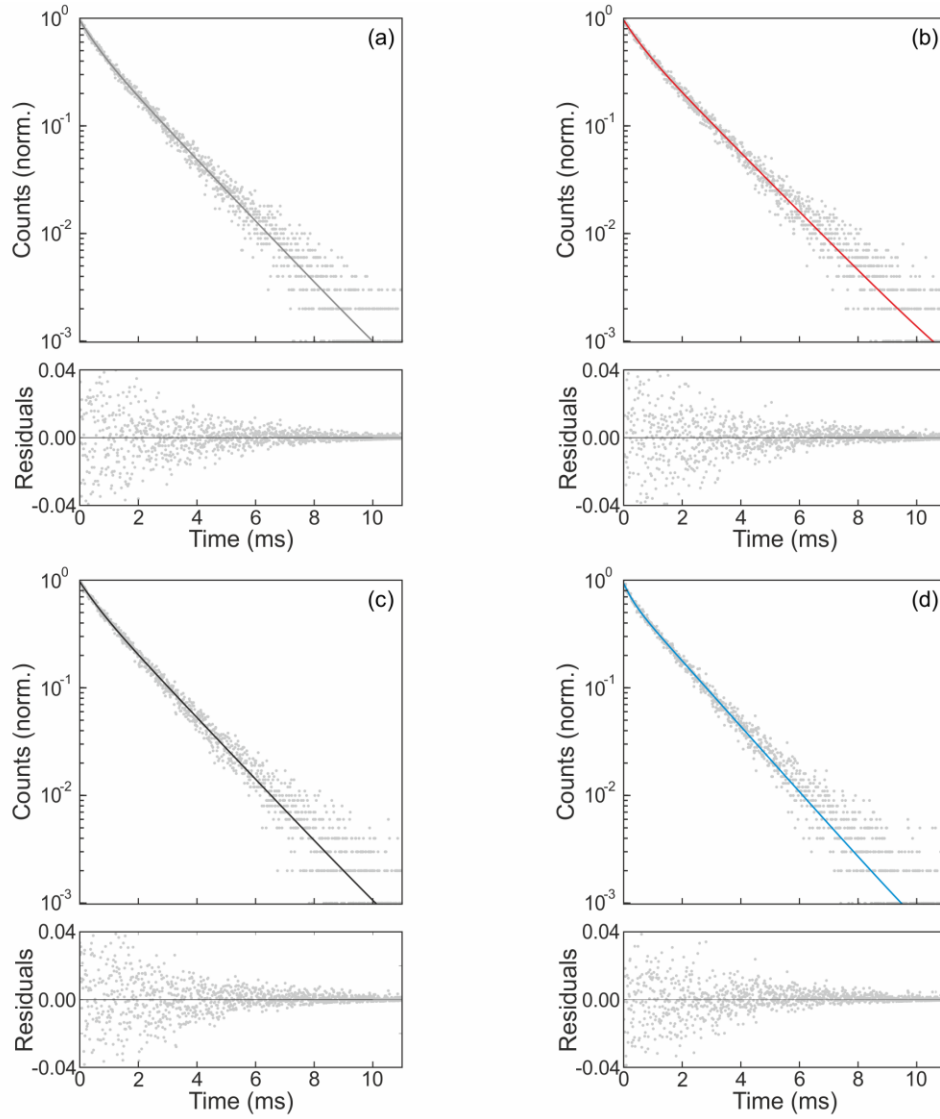| Sample	Absorptance (%)
Flat	46
a=400 nm	42
a=500 nm	44
a=600 nm	42

Figure S2. Time dependent photoluminescence at λ=619 nm for the flat (a) and patterned samples (b, c and d for *a*=400, 500 and 600 nm respectively). Solid curves represent the fitting as biexponential functions (N(t) = $A_1 \exp(-t/\tau_1) + A_2 \exp(-t/\tau_2)$)

Table S2. Fitting parameters of the time dependent photoluminescence measurements.

Sample	A_1	A_2	τ_1 (ms)	T_2 (ms)	τ_{aver} (ms)
Flat	0.28 (0.03)	0.67 (0.03)	0.52(0.05) [13%]	1.52(0.04) [87%]	1.39 (0.02)
a=400 nm	0.25 (0.03)	0.70 (0.03)	0.51(0.05) [10%]	1.58(0.03) [90%]	1.47 (0.02)
a=500 nm	0.23 (0.03)	0.74 (0.04)	0.54(0.07) [10%]	1.52(0.03) [90%]	1.42 (0.02)
a=600 nm	0.22 (0.01)	0.72 (0.01)	0.27(0.02) [5%]	1.43(0.02) [95%]	1.36 (0.01)