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Lamellar mono-amidosil hybrids incorporating monomethynecyanines

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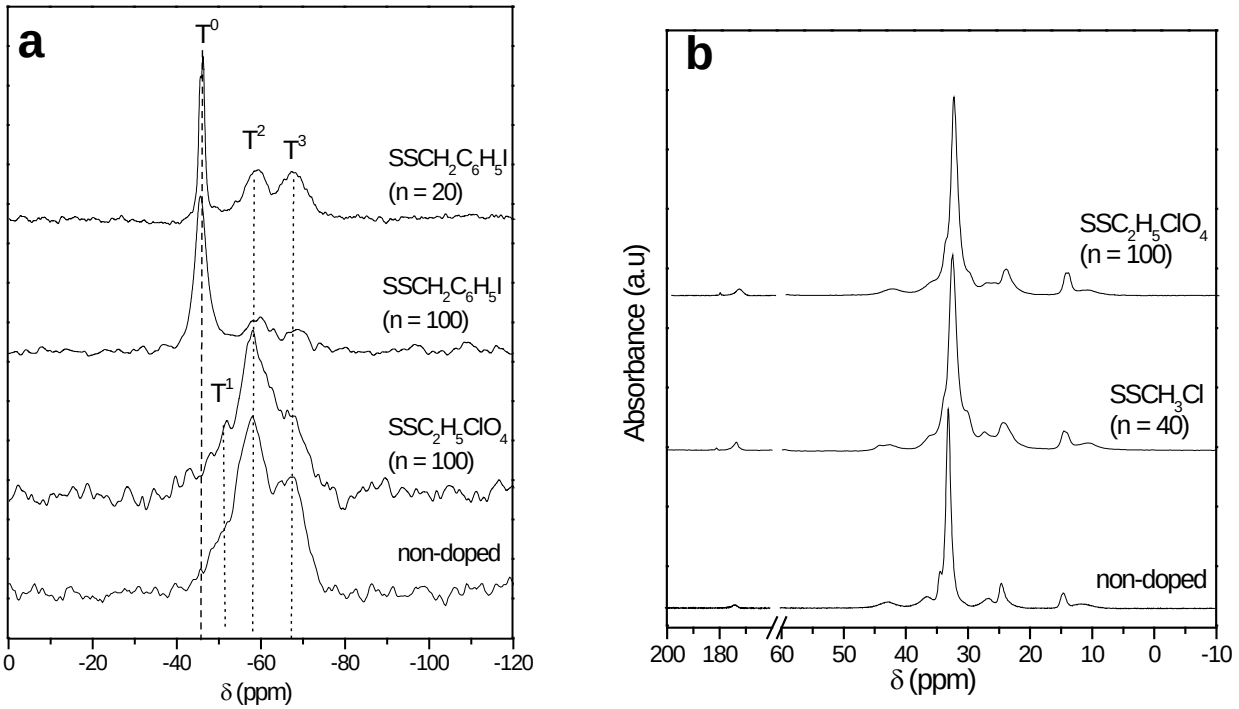

Figure S1. ^{29}Si MAS (a) and ^{13}C CP/MAS (b) NMR spectra of m-A(14)[40] and of the ***SSRZ***-doped m-A(14) mono-amidosils.

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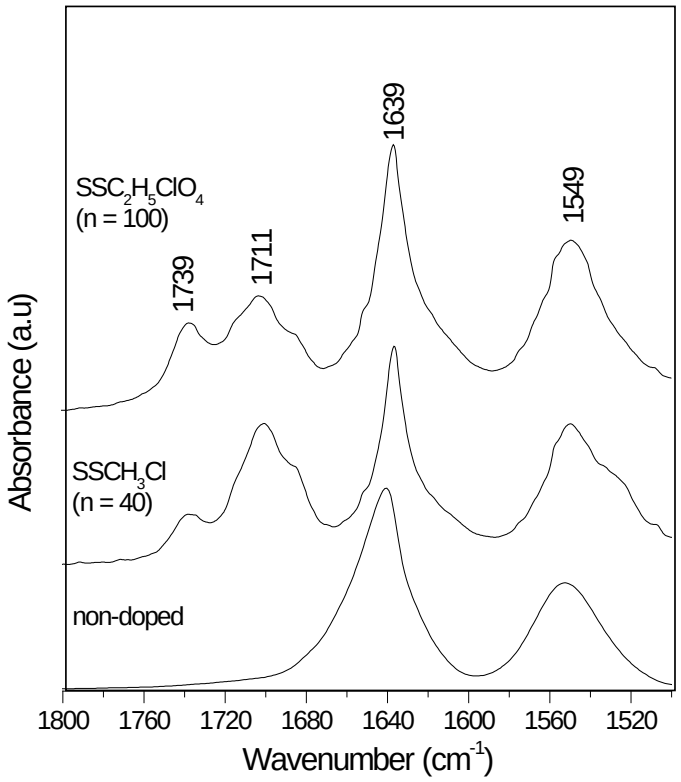

Figure S2. FT-IR spectra of m-A(14)[40] and of the ***SSRZ***-doped m-A(14) mono-amidosils in the amide I and amide II regions.

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Table S1: Components of the FT-IR amide I and amide II bands of the m-A(14)$_n$***SSRZ*** mono-amidosils.

m-A(14)$_n$***SSRZ***				Attribution[40,81,82]	
non-doped[40]	$SSCH_3Cl$ (n = 40)	$SSC_2H_5ClO_4$ (n = 100)	$SSC_2H_5ClO_4$ (n = 20)		
ν (fwhm) (area)					
	1731 (18) (4.5)	1732 (20) (15)	1741 (34) (17)	C=O ····· S	amide I
	1706 (20) (23)	1706 (22) (12)	1718 (17) (3.8)		
	1691 (21) (14)	1689 (25) (6.5)	1686 (15) (1.0)	F	
1651 (27) (24)	1648 (20) (5.1)	1648 (18) (6.6)	1649 (23) (8.6)	D1	
1639 (17) (33)	1637 (11) (18)	1637 (10) (20)	1637 (16) (19)	O1	
1625 (15) (5.4)	1623 (21) (7.8)	1624 (25) (13)	1623 (26) (14)	O2	
1560 (24) (23)	1558 (15) (6.8)	1564 (24) (7.7)	1560 (18) (8.2)	amide II	
1545 (25) (15)	1546 (19) (17)	1554 (18) (16)	1545 (23) (19)		
	1527 (19) (7.1)	1540 (18) (5.1)	1524 (25) (9.0)		

Table S2. Energy (*E*, cm^{-1}) and full-width-at-half-maximum (*fwhm*, cm^{-1}) of the emission components estimated from a multi-Gaussian fit (parameters error < 1%) to the emission spectra excited at 360 and 380 nm for $SSC_2H_5ClO_4$ and m-A(14)$_{100}SSC_2H_5ClO_4$, respectively.

Sample	
$SSC_2H_5ClO_4$	m-(14)$_{100}SSC_2H_5ClO_4$
15828/1750	15828/1000
16462/605	16548/715
19029/2200	19029/2473
20184/1065	20180/1500
-	21859/805

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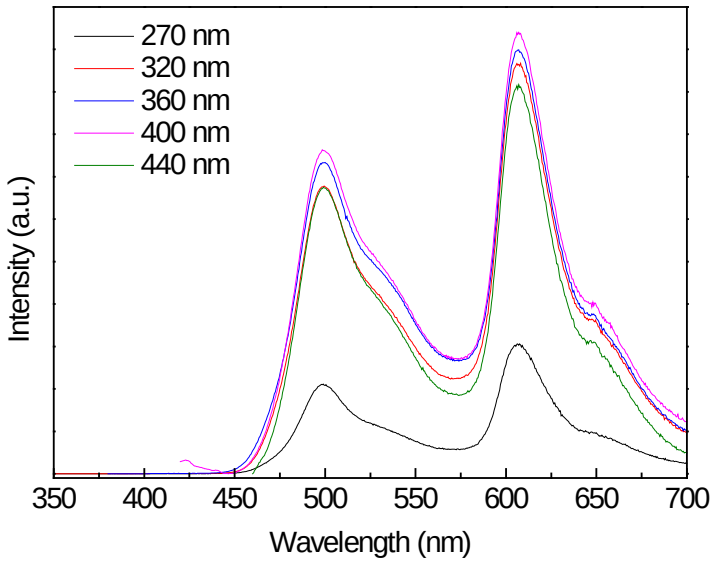

Figure S3. Emission spectra of the $SSC_2H_5ClO_4$ monomethynecyanine excited between 270 and 440 nm.

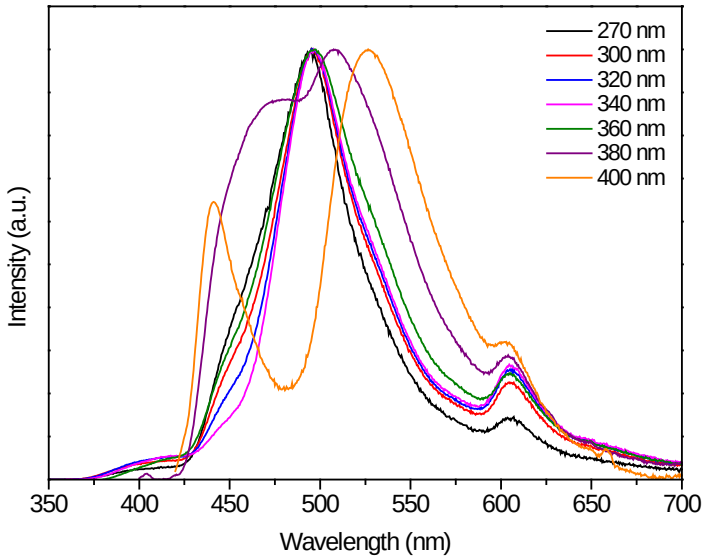

Figure S4. Emission spectra of the m-$A(14)_{100}SSC_2H_5ClO_4$ mono-amidosil excited between 270 and 440 nm.

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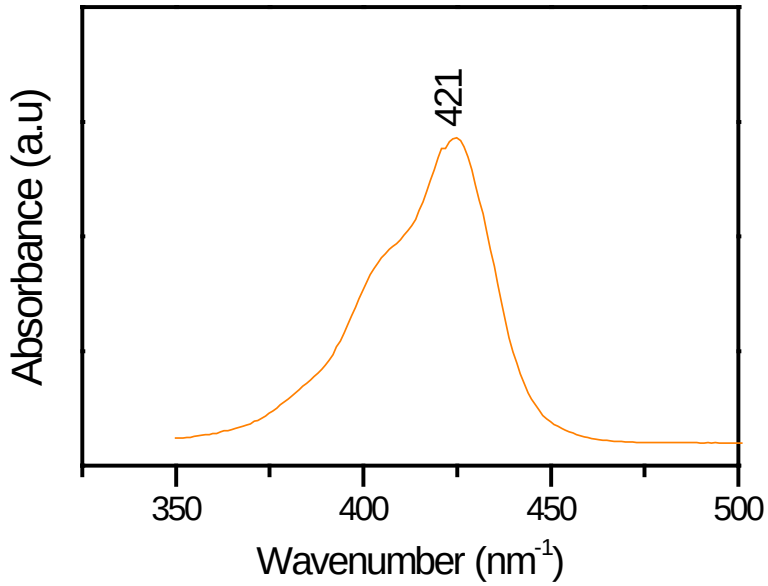

Figure S5. Absorption spectra of the $SSC_2H_5ClO_4$ monomethynecyanine in ethanol (SSRZ concentration: 2×10^{-5} M).