Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting information

Crystallization-promoted emission enhancement of poly(L-lactide) containing a fluorescent salicylideneazine center with aggregation-enhanced emission property

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Table S1 Quantum yield (Φ_F)[a] of CN-PPLA(21) and (145) solution with different concentration of the fluorescent CN unit in THF.

A. CN-PLLA(21)	
concentration	Φ_F
10^{-3} M	0.093
10^{-4} M	0.013
10^{-5} M	0.006
10^{-6} M	0.004
B. CN-PLLA(145)	
Concentration	Φ_F
10^{-3} M	0.109
10^{-4} M	0.031
10^{-5} M	0.018
10^{-6} M	0.004

[a] determined by using quinine sulfate standard solution.

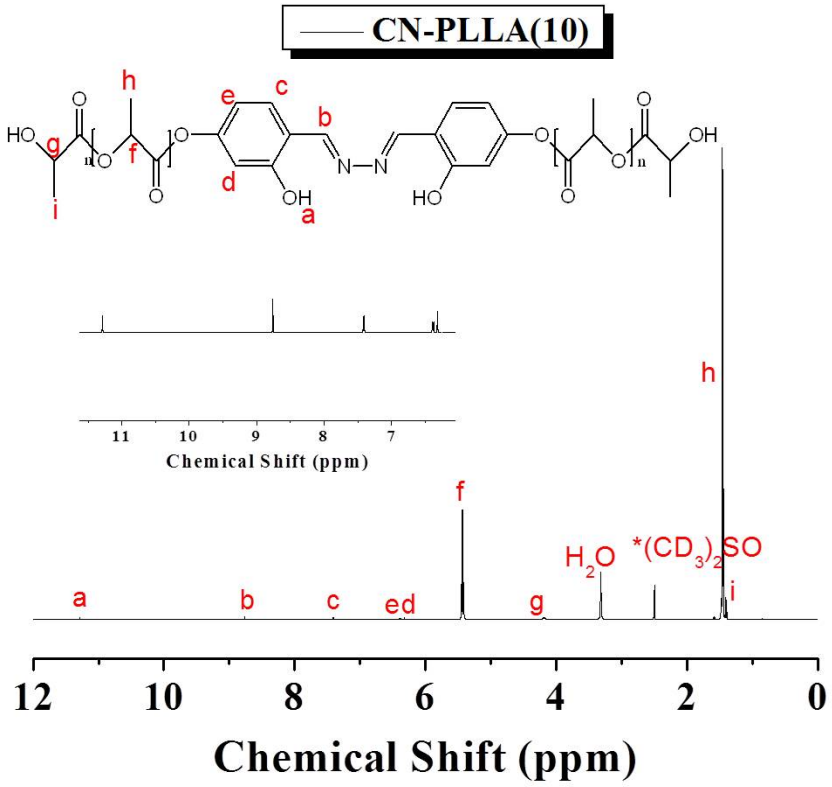

Figure S1. ^{1}H NMR of CN-PLLA(10). (d_6-DMSO)

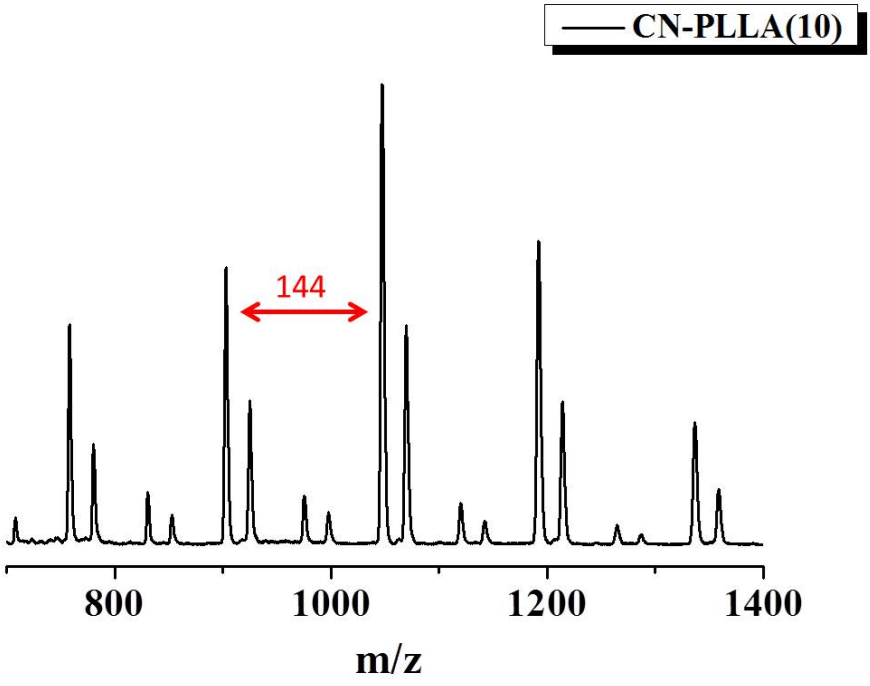

Figure S2. Mass spectra of CN-PLLA(10).

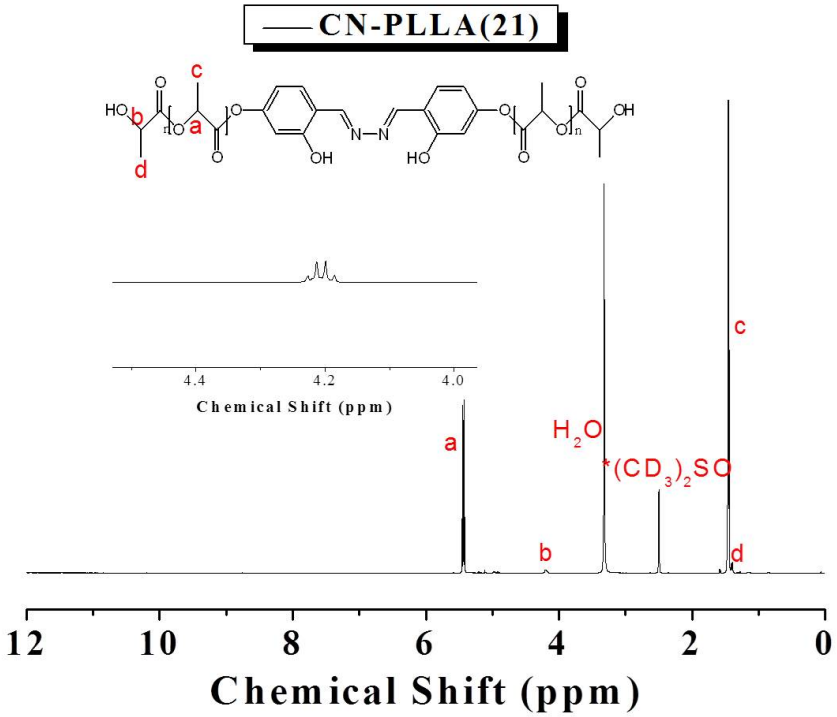

Figure S3. ^{1}H NMR of CN-PLLA(21). (d_6-DMSO)

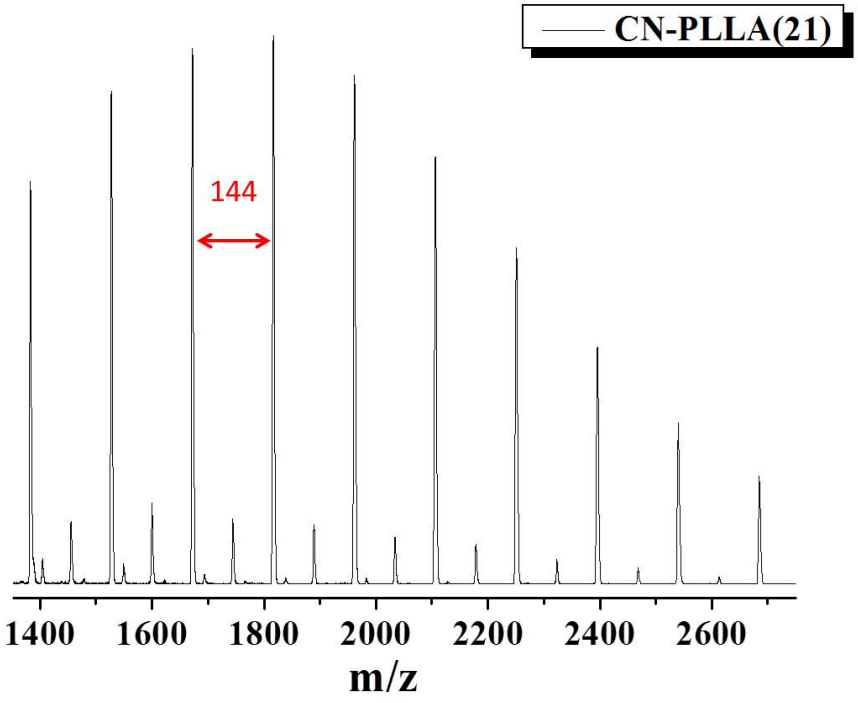

Figure S4. Mass spectra of CN-PLLA(21).

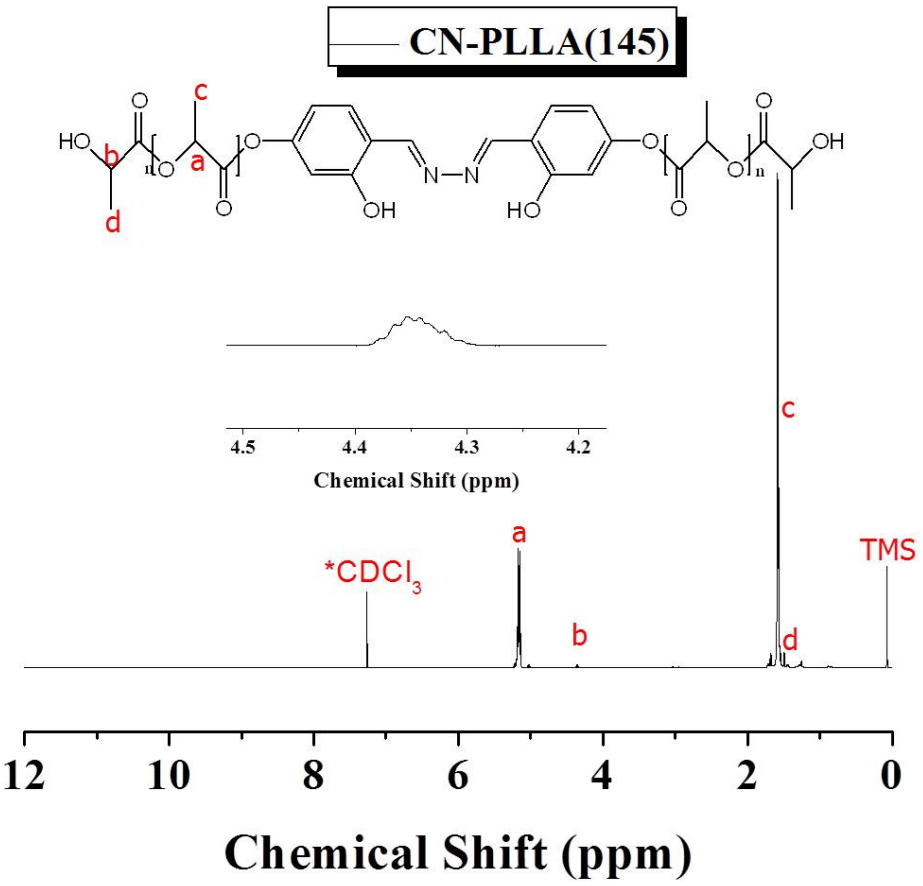

Figure S5. ^{1}H NMR of CN-PLLA(145). ($CDCl_3$)

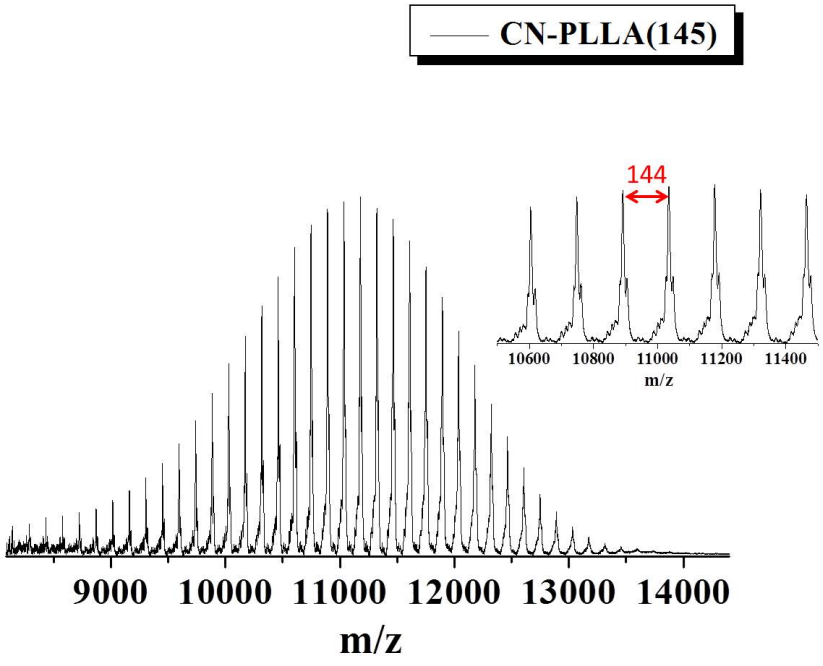

Figure S6. Mass spectra of CN-PLLA(145).

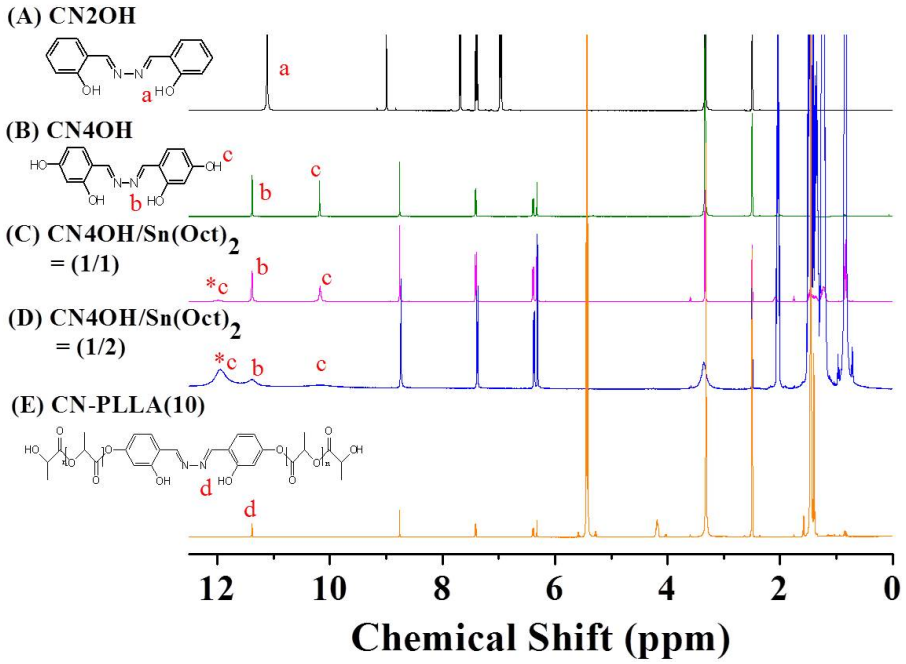

Figure S7. ^{1}H NMR of (A) CN2OH, (B) CN4OH, (C) CN4OH/Sn(Oct)$_2$(1/1), (D) CN4OH/Sn(Oct)$_2$(1/2) and (E) CN-PLLA(10).

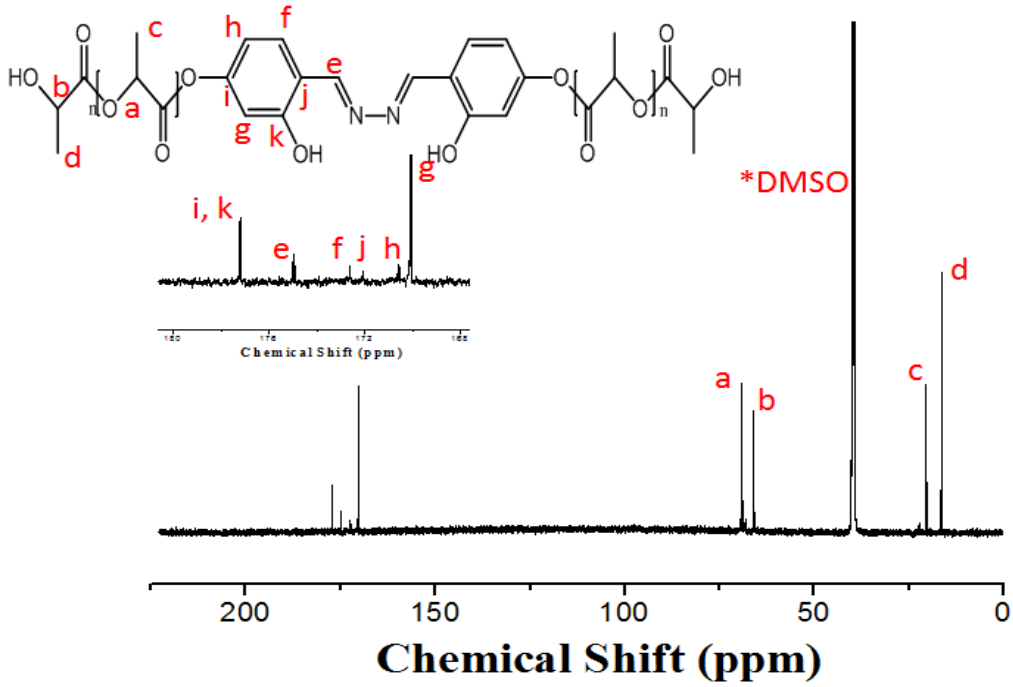

Figure S8. ^{13}C NMR of CN-PLLA(21). (d_6-DMSO)

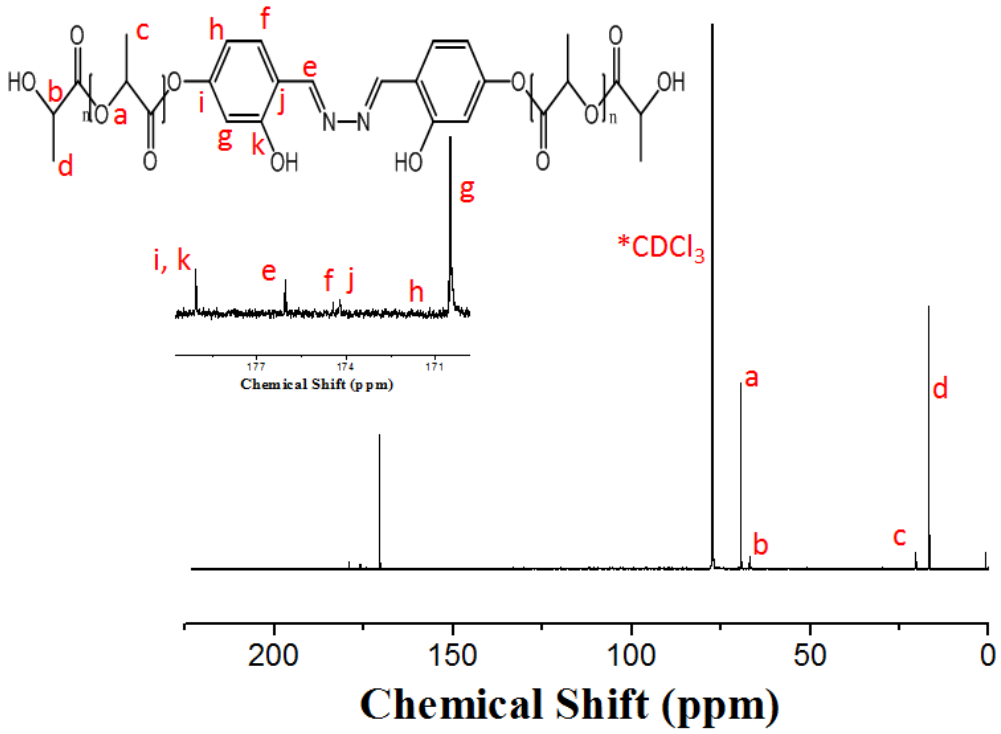

Figure S9. ^{13}C NMR of CN-PLLA(21). (d_6-DMSO)

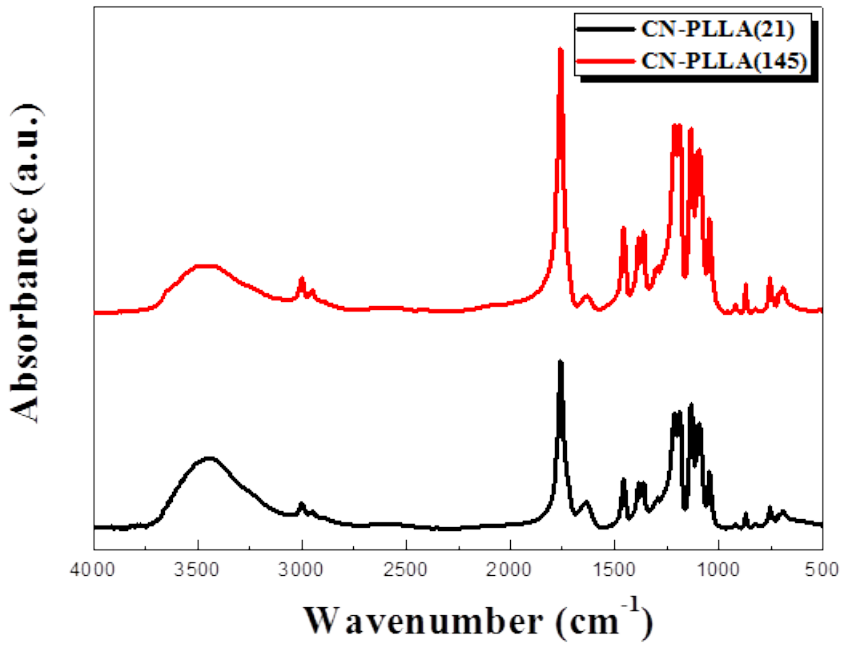

Figure S10. FTIR spectra of CN-PLLA(21) and CN-PLLA(145).

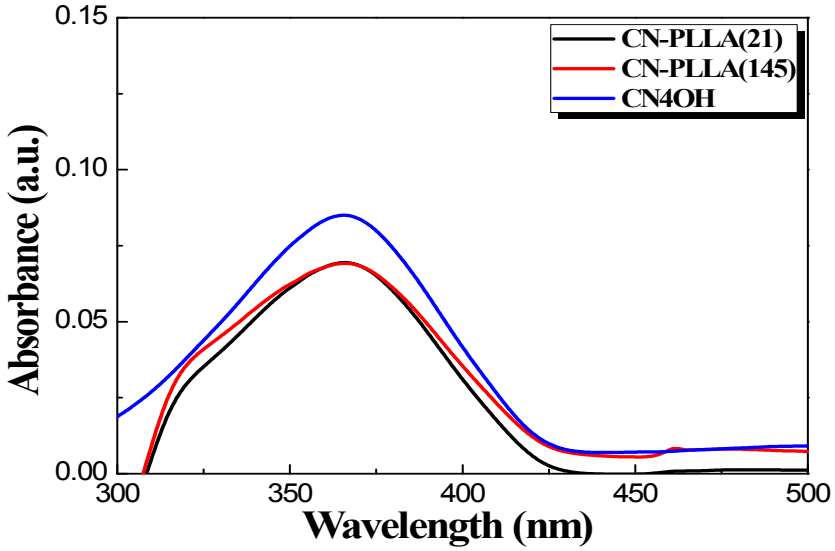

Figure S11. UV-Vis absorption spectra of CN4OH, CN-PLLA(21) and CN-PLLA(145). (in THF with the fluorophore's concentration kept at 10^{-4} M)

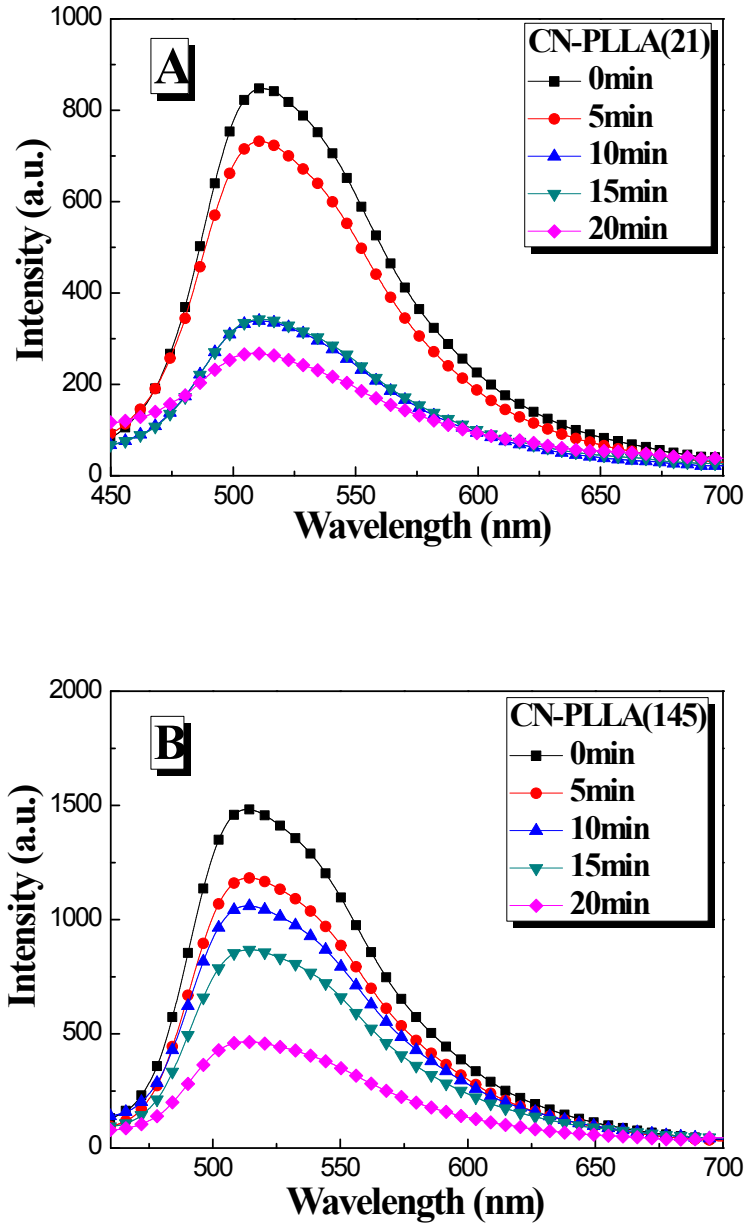

Figure S12. Emission spectra of (A) CN-PLLA(21) and (B) CN-PLLA(145) after exposure to methylene chloride vapour for different times. (λ_{ex} = 365 nm).

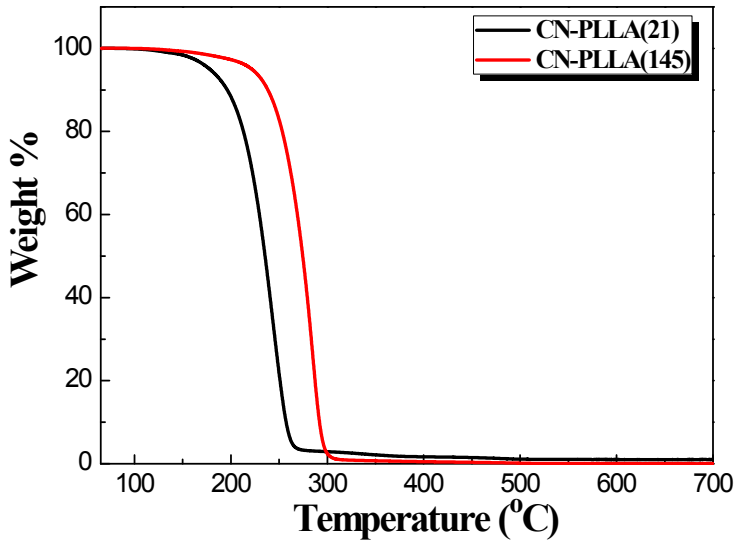

Figure S13. TGA thermograms of CN-PLLA(21) and CN-PLLA(145). (heating rate = 10 ◦C/min)

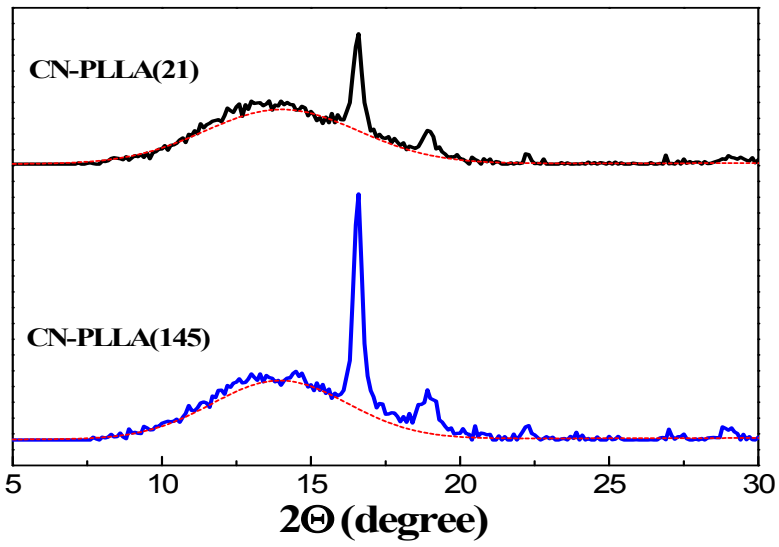

Figure 14. Deconcoluted WAXD spectra of CN-PLLA(21) and (145). (Dashed lines indicate the amorphous background after deconvolution)

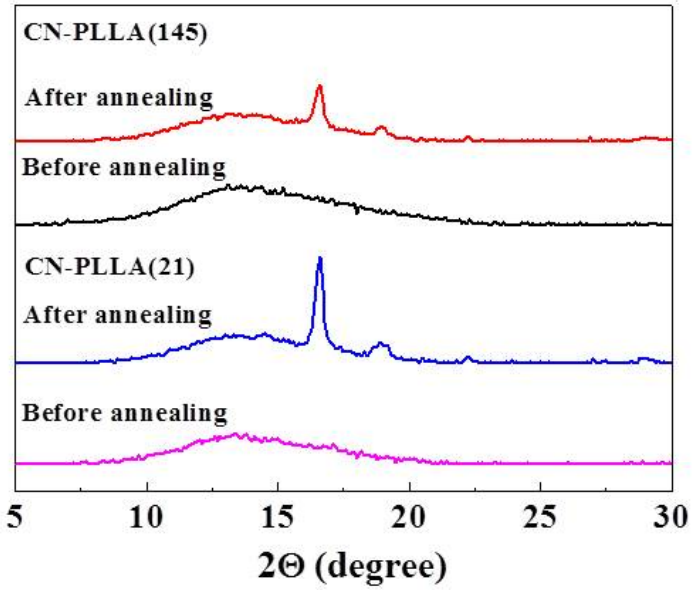

Figure S15 Variations on the WAXD spectra of amorphous CN-PLLA(n)s after fumed with ethanol.