

Support information

NMR samples were prepared by dissolving the purified CL and oxidizing CL caused by silver nitrate and oxygen to give a sample with concentration of 10mg/ml in CDCl₃. Solution ¹³C NMR spectra were collected on a VNMRS 600 MHz NMR. A 5-mm NMR probe was used with an average of 2,000 scans to give sufficient signal-to-noise signals. The chemical shift was recorded in relation to TMS.

Figure. 1S ¹³C NMR spectra of pure CL (a) and CL after oxidation by silver nitrate (b) and oxygen (c).