

Cationic quaternary ammonium salts catalyzed LED-induced living radical polymerization with in situ halogen exchange

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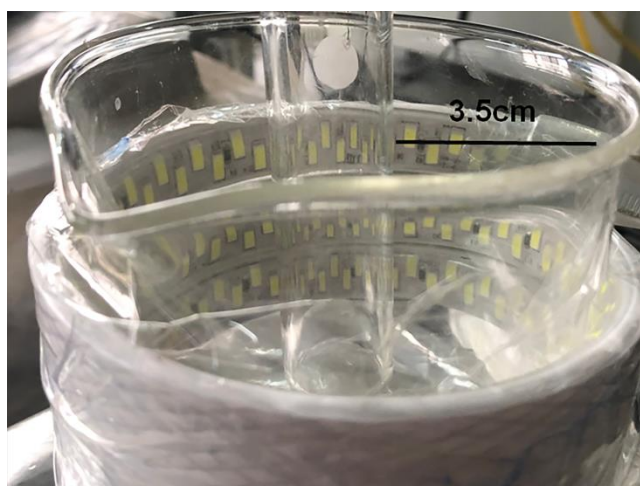


Figure S1. The picture of white LED light (380 -780 nm, 13 W/m, 1.5 mW/cm²): actual light intensity (at the position of the reaction solution) experimentally measured by a luminometer.

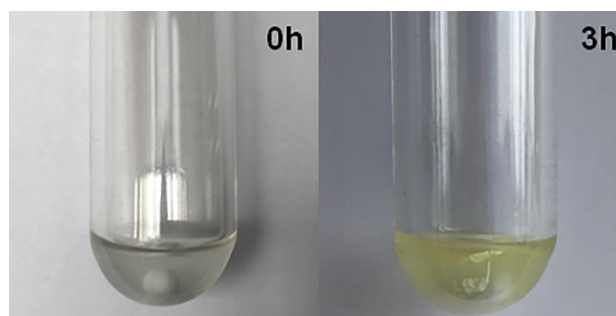


Figure S2. The state changes in the procedure of reaction. Polymerization condition was in figure 2.

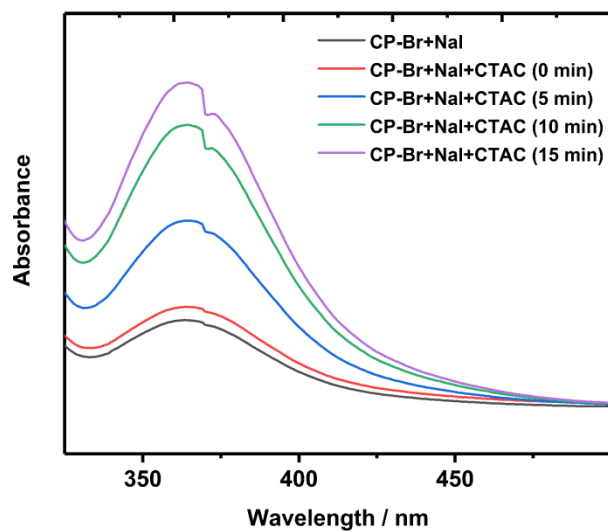


Figure S3. UV-vis spectra of CP-Br (0.02 mmol) with NaI (0.021 mmol) (black line), and then CTAC (0.02 mmol) was added to this solution (red line), then irradiated with a white LED for 5 min (blue line), 10 min (green line), and 15 min (purple line). The solvent was MMA in all cases.

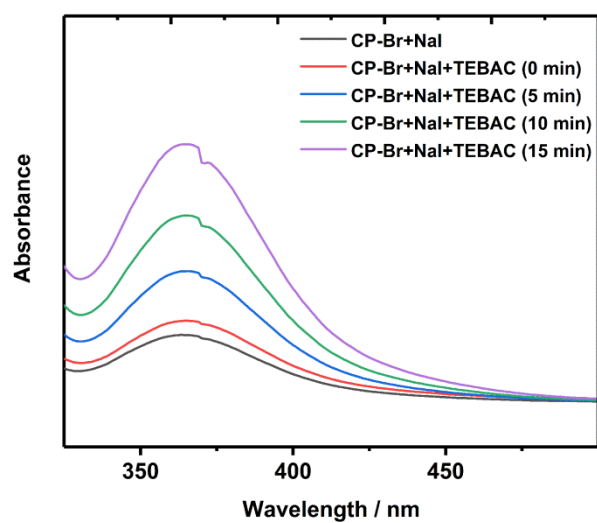


Figure S4. UV-vis spectra of CP-Br (0.02 mmol) with NaI (0.021 mmol) (black line), and then TEBAC (0.02 mmol) was added to this solution (red line), then irradiated with a white LED for 5 min (blue line), 10 min (green line), and 15 min (purple line). The solvent was MMA in all cases.