Supporting Information

Visible-Light-Sensitive Polymerizable and Polymeric Triazine-Based Photoinitiators with Enhanced Migration Stability

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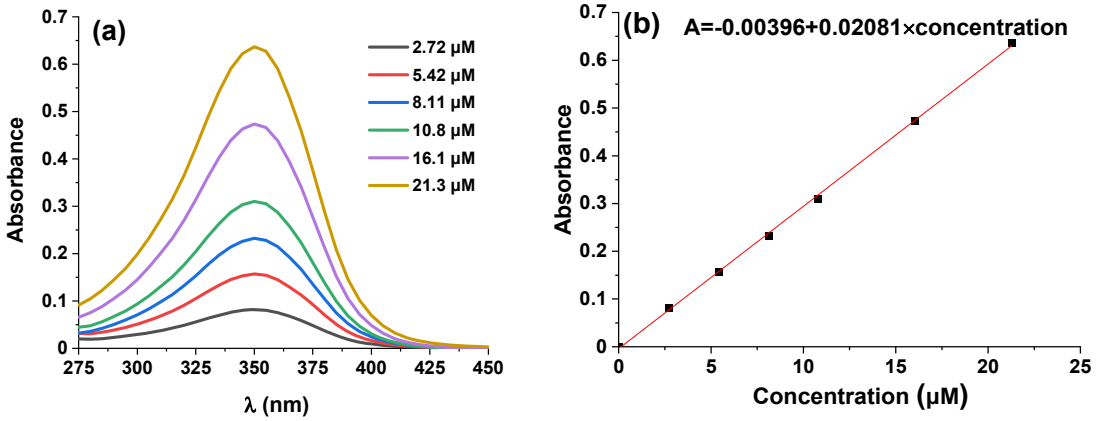

Figure S1. (**a**) UV-vis spectra of different concentrations of CT and (**b**) calibration curve of CT (absorbance at 350 nm vs concentration) in DMF.

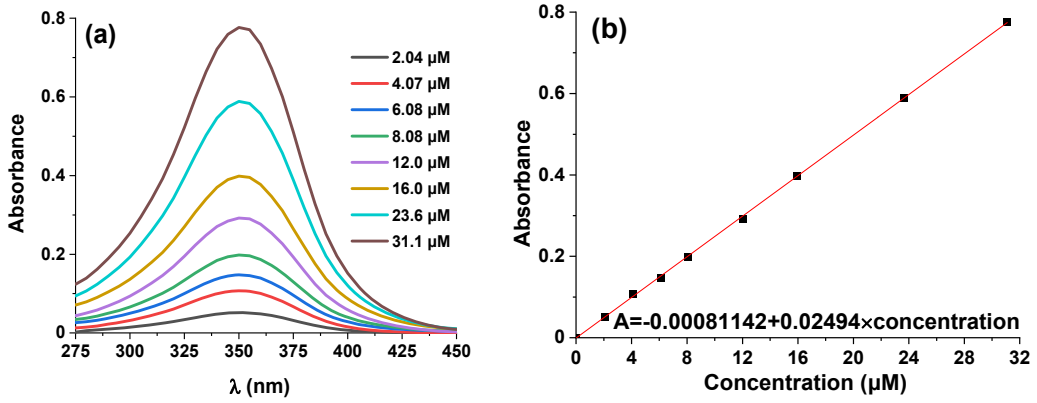

Figure S2. (−) UV-vis spectra of pCT with different concentrations of triazine moiety and (−) calibration curve of pCT (absorbance at 350 nm vs concentration of triazine moiety) in DMF.

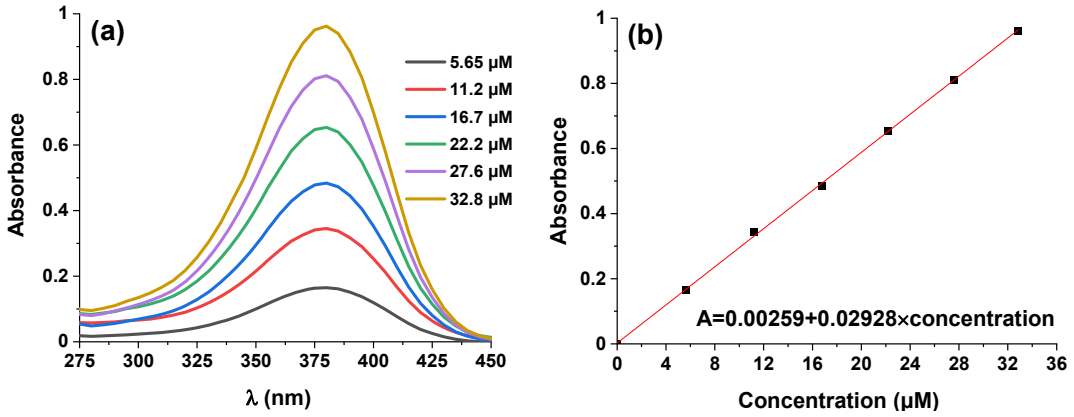

Figure S3. (−) UV-vis spectra of different concentrations of MT and (−) calibration curve of MT (absorbance at 380 nm vs concentration) in DMF.

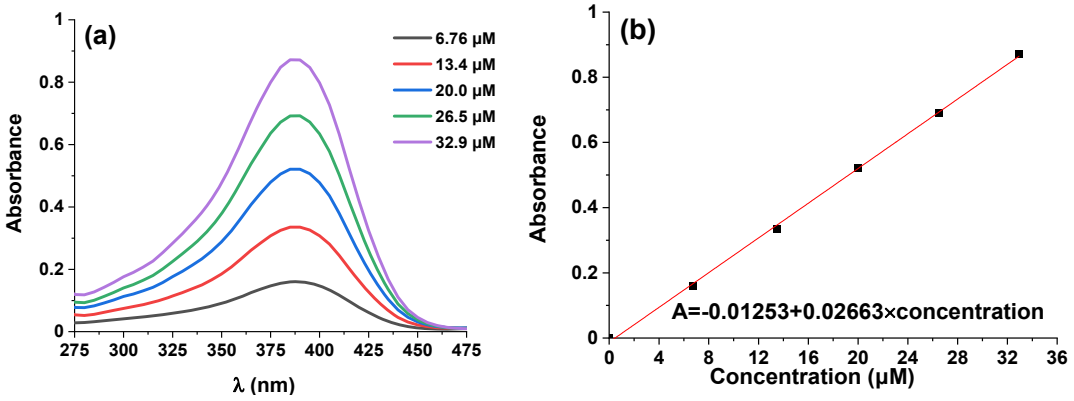

Figure S4. (−) UV-vis spectra of different concentrations of PT and (−) calibration curve of PT (absorbance at 385 nm vs concentration) in DMF.

Migration concentration:

The migration concentration (c) was calculated based on the calibration curve of each photoinitiator as the function of absorbance (A).

CT: c = (A+0.00396)/ 0.02081

PT: c = (A+0.01253)/ 0.02663

MT: c = (A-0.00259)/ 0.02928

pCT: c = (A+0.00081142)/ 0.02494

Samples prepared under the irradiation of LED@410 nm:

c_{PT} = 12.36 μM, c_{CT} = 1.61 μM, c_{MT} = 3.89 μM, c_{pCT} = 0.63 μM

Samples prepared under the irradiation of LED@400 nm:

c_{PT} = 75.65 μM, c_{CT} = 13.86 μM, c_{MT} = 42.59 μM, c_{pCT} = 2.99 μM

Migration ratio:

The migration ratio (R) was calculated based on the formula

R = migration concentration/original concentration

Original concentration= triazine concentration × weight of sample/volume = 10 μmol/g×41.5 mg /4 mL= 103.8 μM

Samples prepared under the irradiation of LED@410 nm:

R_{PT} = 11.91%, R_{CT} = 1.55%, R_{MT} = 3.75%, R_{pCT} = 0.61%

Samples prepared under the irradiation of LED@400 nm:

R_{PT} = 72.88%, R_{CT} = 13.35%, R_{MT} = 41.03%, R_{pCT} = 2.88%

Table S1. Migration concentrations of photoinitiators from the photocured samples in DMF.

Photoinitiators	**LED@400 nm**	**LED@410 nm**
MT (μM)	42.59	3.89
PT (μM)	75.65	12.36
CT (μM)	13.86	1.61
pCT (μM)	2.99	0.63