

Supporting information Annex

Correlating Nano Black Spots and Optical Stability in Mixed Halide Perovskite Quantum Dots

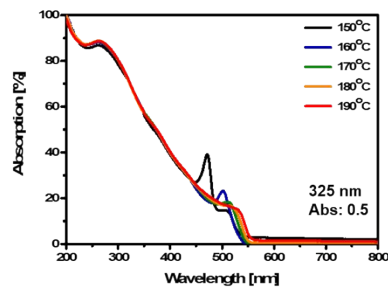
Yun-Hyuk Ko,^{a,b} Prem Prabhakaran,^b Mohammed Jalalah,^a Seung-Jae Lee,^a Kwang-Sup Lee,^{*b} and Jea-Gun Park^{*a}

^a*Department of Electronics and Computer Engineering, Hanyang University, Seoul 133–791, Republic of Korea. E-mail: parkjgL@hanhyang.ac.kr; Fax: +82-2-2220-1179; Tel: +82-2-2220-0234*

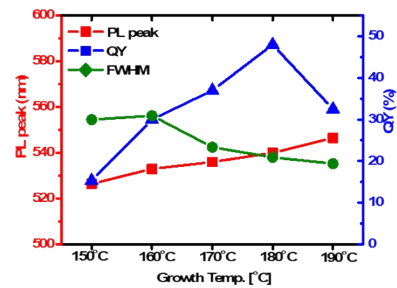
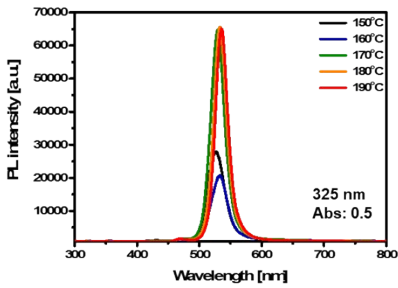
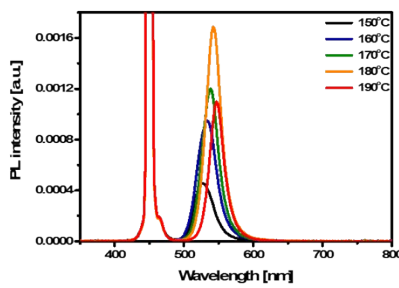
^b*Department of Advanced Materials, Hannam University, Daejeon 305-811, Republic of Korea. E-mail: kslee@hnu.kr; Fax: +82-42-629-8854; Tel: +82-42-629-8857*

Optical Properties of CsPbBr₂I₁ synthesized at different temperatures: Day 1

☉ Absorption ($\lambda_{exc.}$: 325 nm)

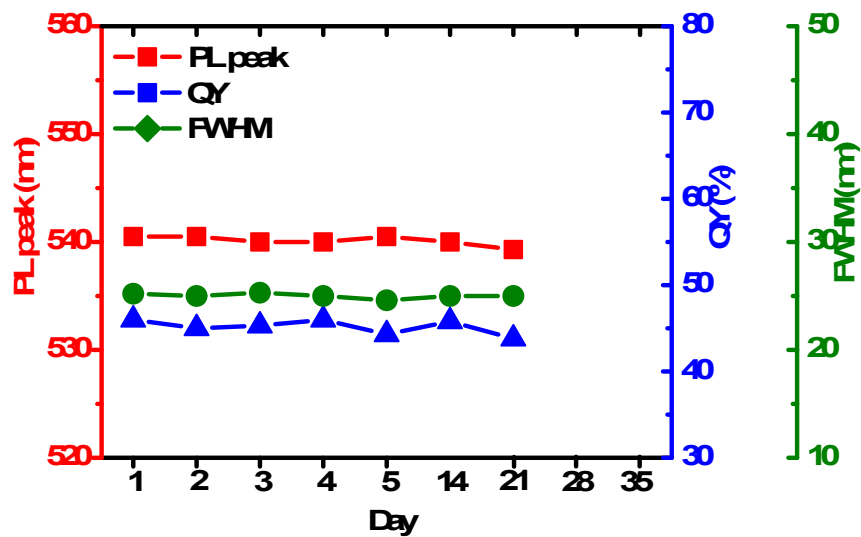


☉ PL ($\lambda_{exc.}$: 325 nm)

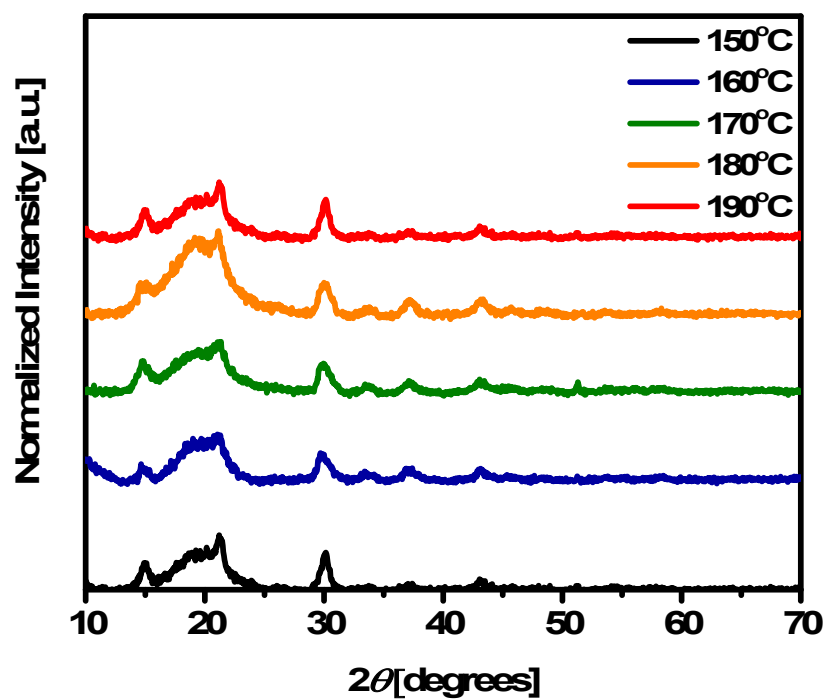


Structure	CsPbBr ₂ I ₁				
	Growth temp.				
	150 °C	160 °C	170 °C	180 °C	190 °C
Emission peak (nm)	526.4	533	536	540	546.5
FWHM (nm)	31.8	32.5	27	25.2	24.1
QY (%)	15.3	30	37	48	32.5

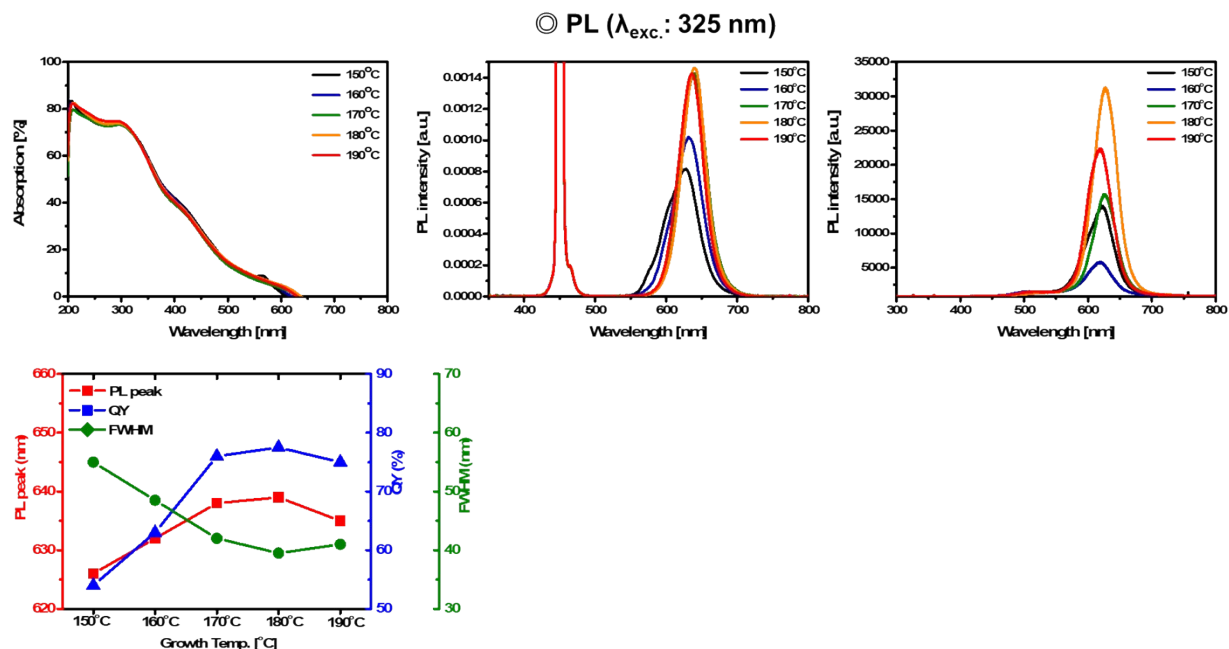
Stability of CsPbBr₂I₁ over 21 days



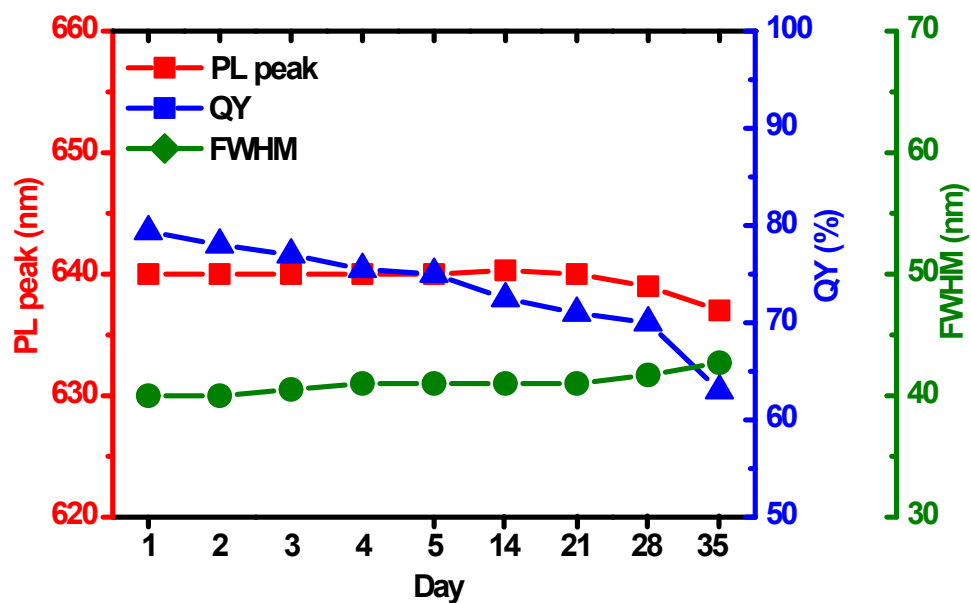
PXRD data of CsPbBr₂I₁ synthesized at different temperatures



Optical Properties of CsPbBr₁I₂ synthesized at different temperatures: Day 1



Stability of CsPbBr₁I₂ over 35 days



PXRD data of CsPbBr₁I₂ synthesized at different temperatures

