

Electronic Supplementary Information

RSC Advances

Photoluminescence color stability of Greene-emitting InP/ZnS core/shell quantum dots embedded in silica prepared via hydrophobic routes

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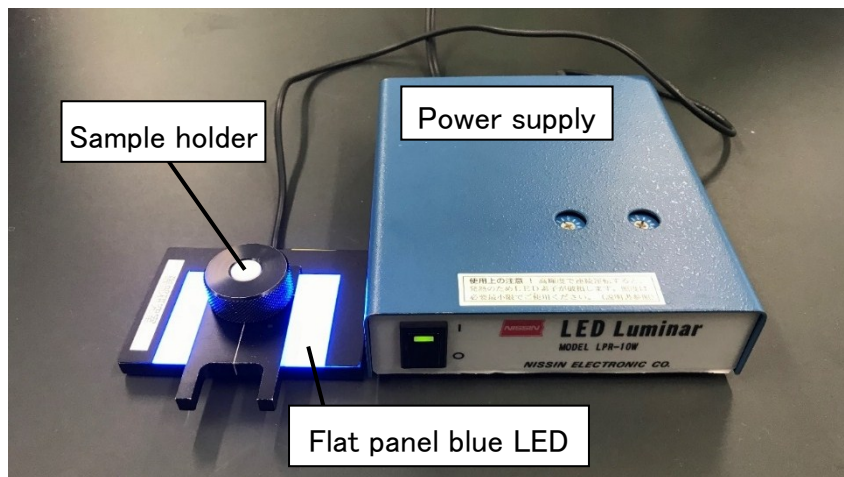


Fig. S1 Photograph showing blue light irradiation of a sample. The actual experiment was performed in the dark.

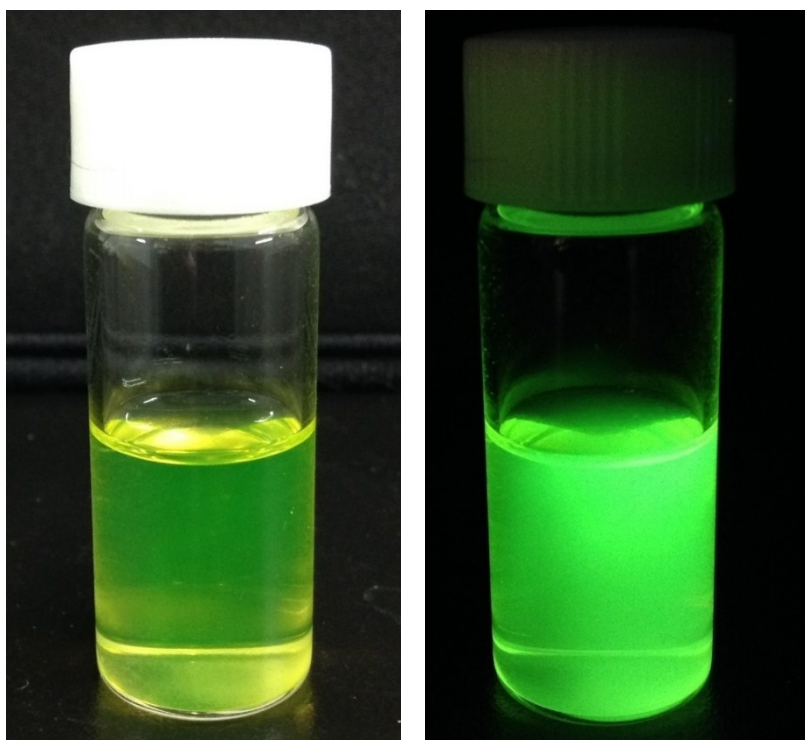


Fig. S2 Photographs of TEOS dispersion of InP/ZnS QDs at 9.3 mg mL^{-1} under (left) white light and (right) 365-nm near-UV light. The images were captured immediately after mixing.

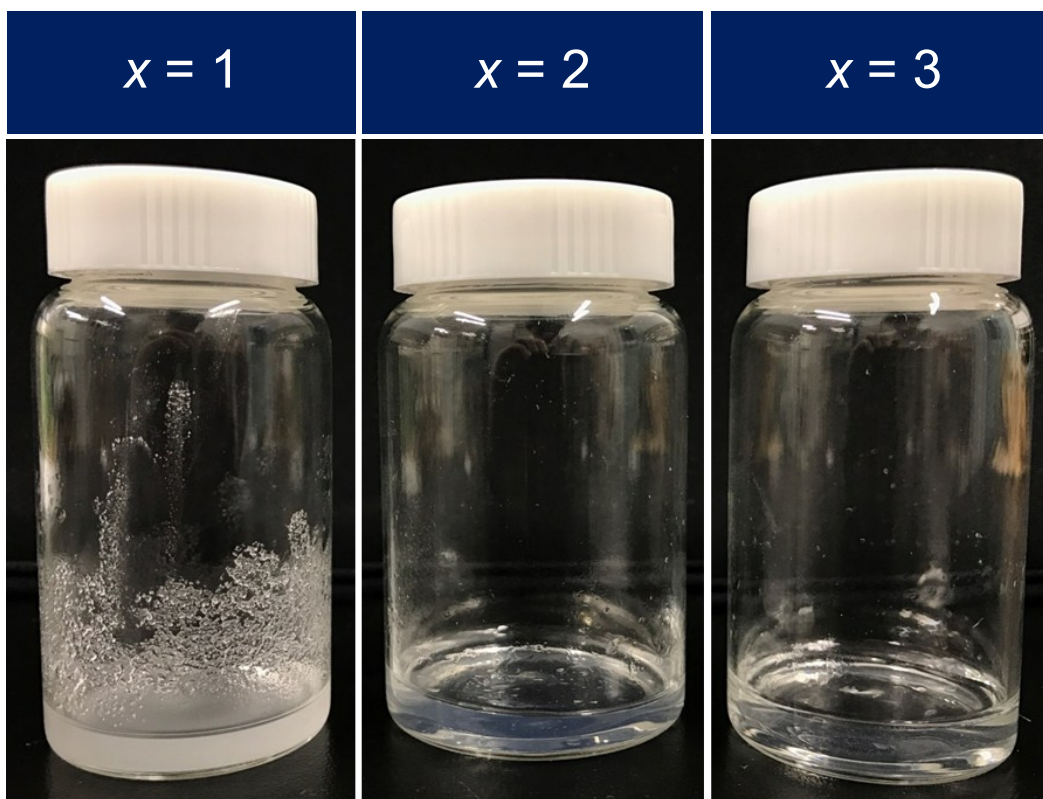


Fig. S3 Photographs of mixtures of TEOS (3 mL) and lactic acid (x mL) after gelation.

Table S1 Detailed values of the color coordinates plotted in Figs. 3 and 8.

		Color coordinate
Fig. 3	(a)	(0.2438, 0.6830)
	(b)	(0.2500, 0.6747)
	(c)	(0.3198, 0.6239)
Fig. 8	(a)	(0.2333, 0.6916)
	(b)	(0.2225, 0.6957)
	(c)	(0.2221, 0.6941)

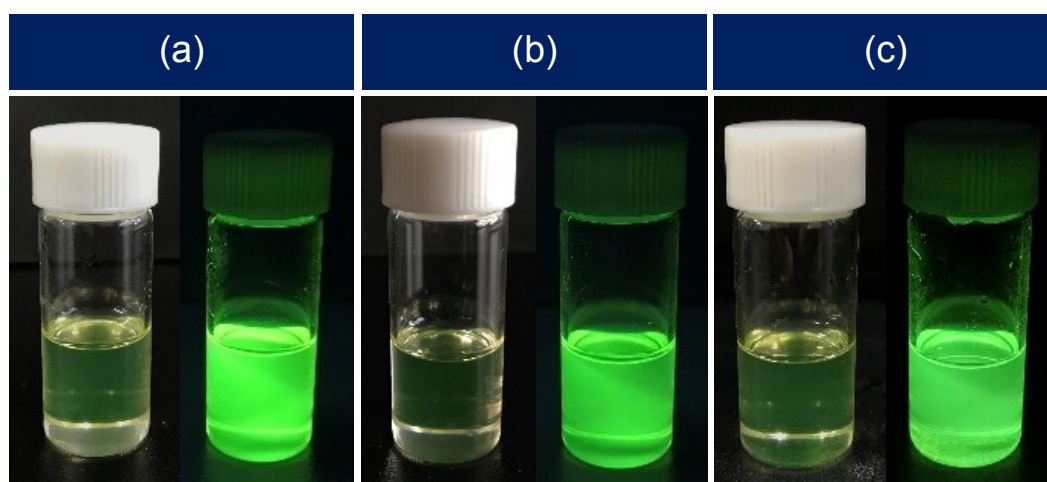


Fig. S4 Photographs of 0.5-mg mL^{-1} toluene dispersions of (a) as-received InP/ZnS QDs, (b) TMOS-modified InP/ZnS QDs (20 h), and (c) TMOS-modified InP/ZnS QDs (7 d) under (left) white light and (right) 365-nm UV light.

Table S2 PLQYs of toluene dispersions of the as-received InP/ZnS QDs without TMOS

after stirring for a certain time. $\lambda_{\text{ex}} = 468.3$ nm.

Stirring duration	QY (%)
(Immediately after dispersion)	67
20 h	61
7 days	55

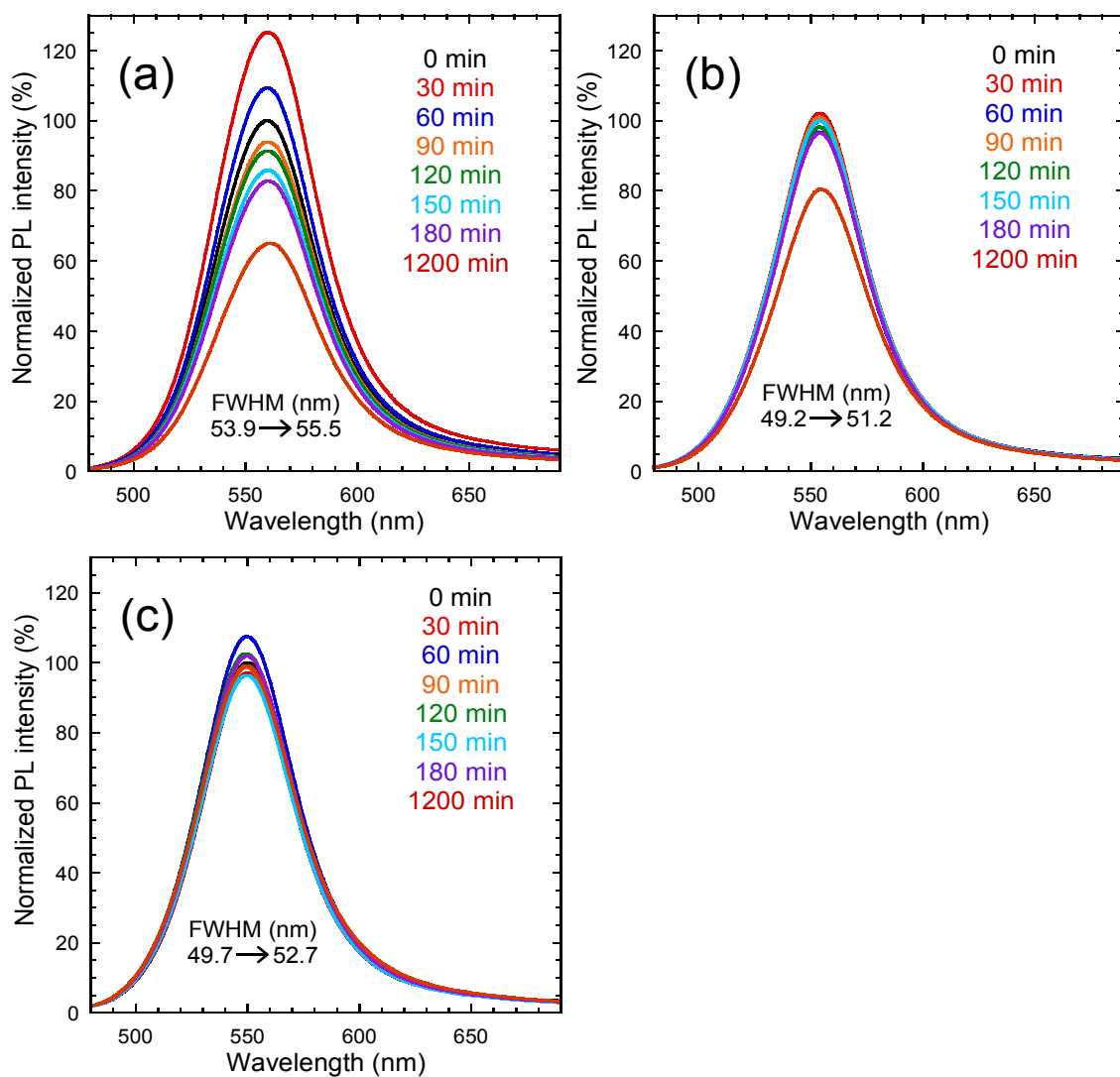


Fig. S5 Changes in the PL spectra under continuous irradiation by the flat panel blue LED. (a) As-received InP/ZnS QDs, (b) TMOS-modified InP/ZnS QDs (20 h), and (c) TMOS-modified InP/ZnS QDs (7d). $\lambda_{\text{ex}} = 468.3$ nm.