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 |
|--------|------------------|
| (a)    | (0.2438, 0.6830) |
| Fig. 3 |                  |
| (b)    | (0.2500, 0.6747) |
| (c)    | (0.3198, 0.6239) |
| (a)    | (0.2333, 0.6916) |
| Fig. 8 |                  |
| (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. $\lambda_{ex} = 468.3$ 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.