Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information for

Preparation of $CsPbBr_3$@PS composite microspheres with high stability by electrospray

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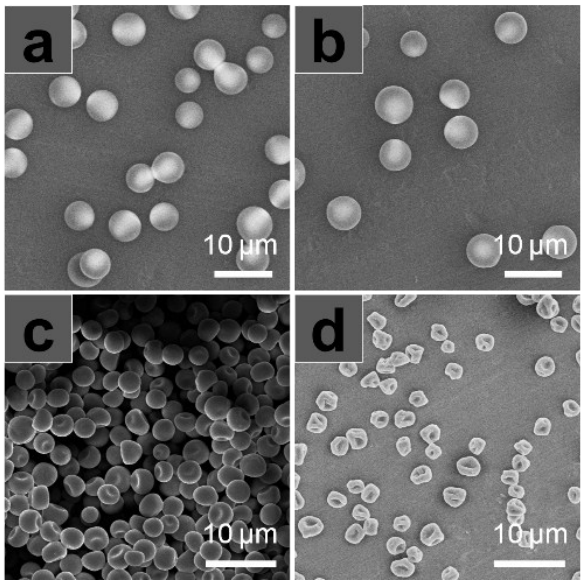

Figure S1. SEM images of $CsPbBr_3$@PS composite microspheres electrosprayed at different polystyrene concentrations. (a) 20%, (b) 15%, (c) 10% and (d) 5%.

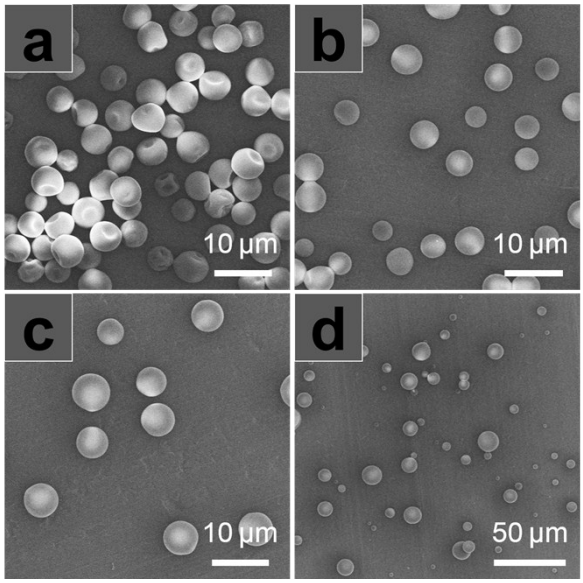

Figure S2. SEM images of $CsPbBr_3$@PS composite microspheres electrosprayed at different voltages. (a) 15 kV, (b) 20 kV, (c) 25 kV and (d) 30 kV.

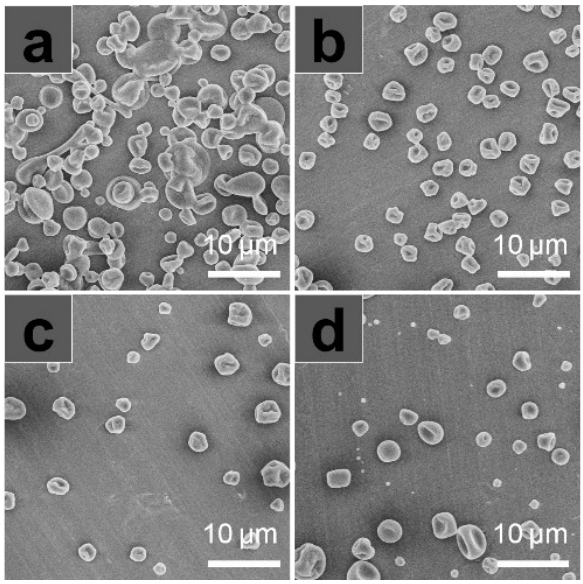

Figure S3. SEM images of electrosprayed $CsPbBr_3$@PS composite microspheres with different electric spraying distance. (a) 10 cm, (b) 15 cm, (c) 20 cm and (d) 25 cm.

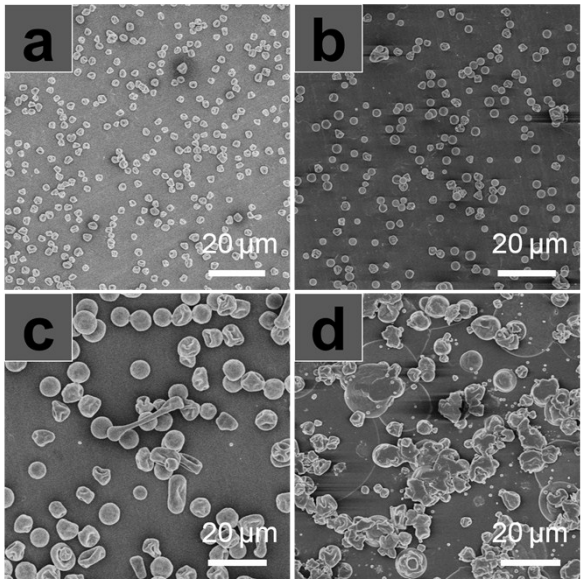

Figure S4. SEM images of $CsPbBr_3$@PS composite microspheres electrosprayed at different push speeds. (a) 5 μL/min, (b) 10 μL/min, (c) 15 μL/min and (d) 20 μL/min.

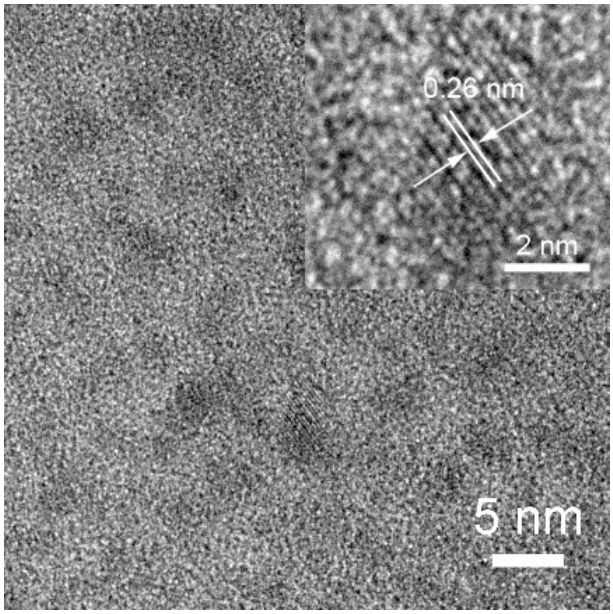

Figure S5. Enlarged image with $CsPbBr_3$ QDs encapsulated in $CsPbBr_3$@PS microspheres and HRTEM (inset) images of $CsPbBr_3$ QDs.

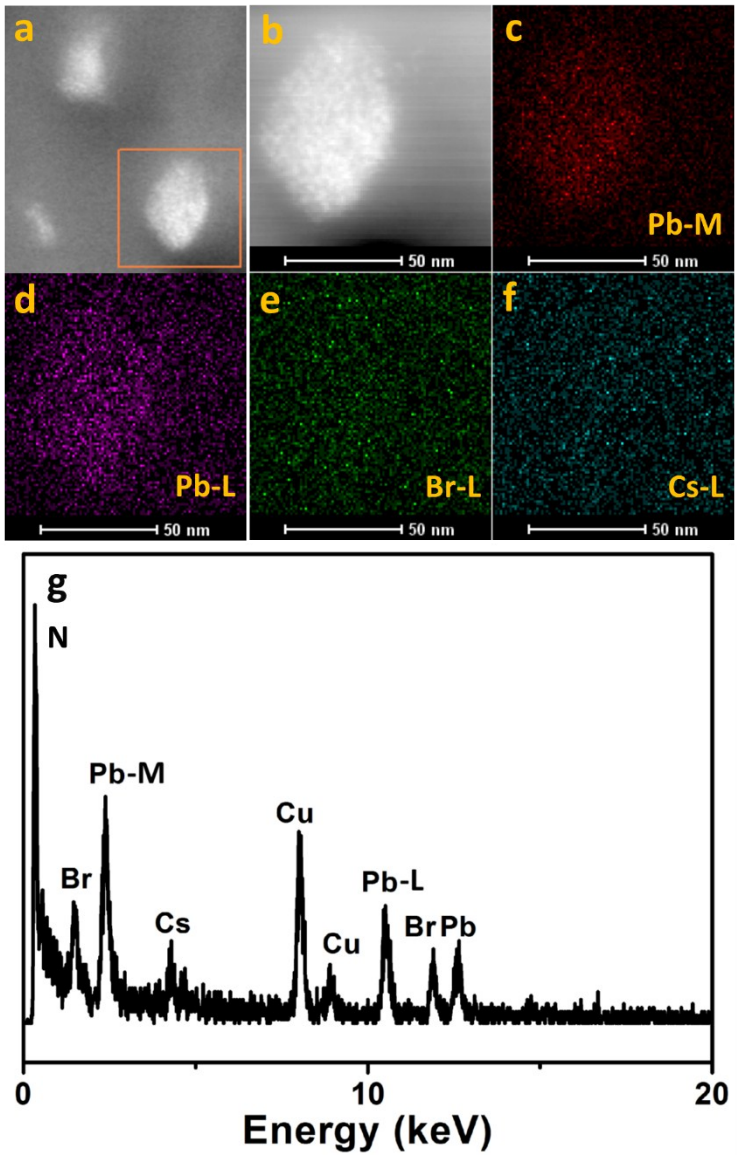

Figure S6. (a, b) STEM-HAADF images and corresponding EDX elemental colored maps of (c) Pb-M, (d) Pb-L, (e) Br-L, (f) Cs-L, and (g) EDS spectrum of as-prepared $CsPbBr_3$@PS microspheres.

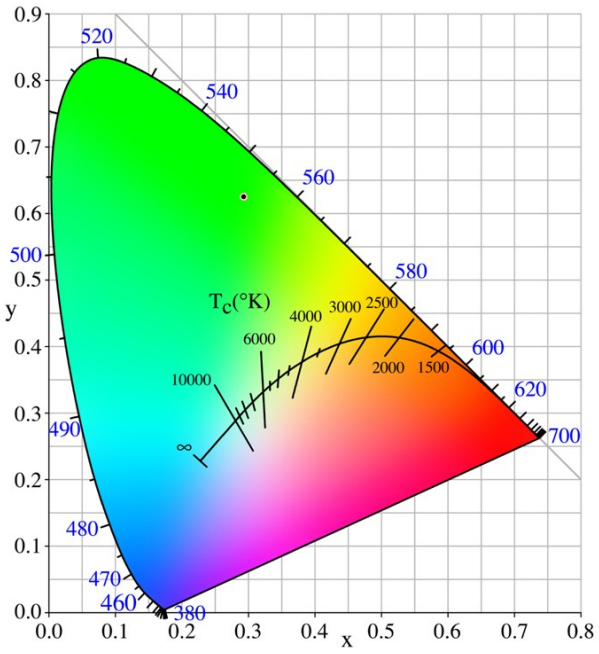

Figure S7. Down-converter layers plotted on a CIE1931 diagram.