

*Supporting Information*

**Achieving Highly Saturated Single-Color and High Color-Rendering-Index White Light-Emitting Electrochemical Cells by CsPbX<sub>3</sub> Perovskite Color Conversion Layers**

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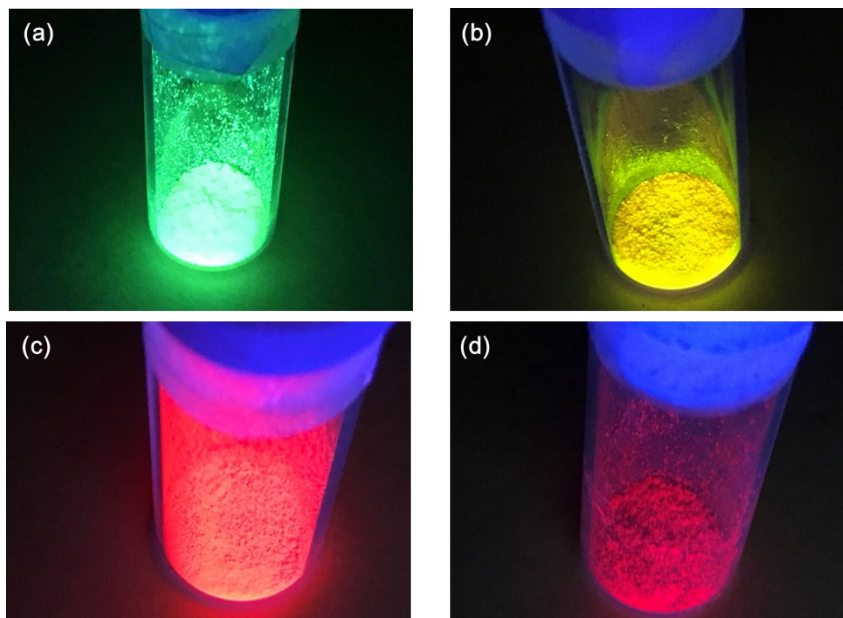


Figure S1 The photographs of powder form for different color perovskite nanocrystals embedded in silica matrix: (a) green, (b) yellow, (c) red and (d) deep red.

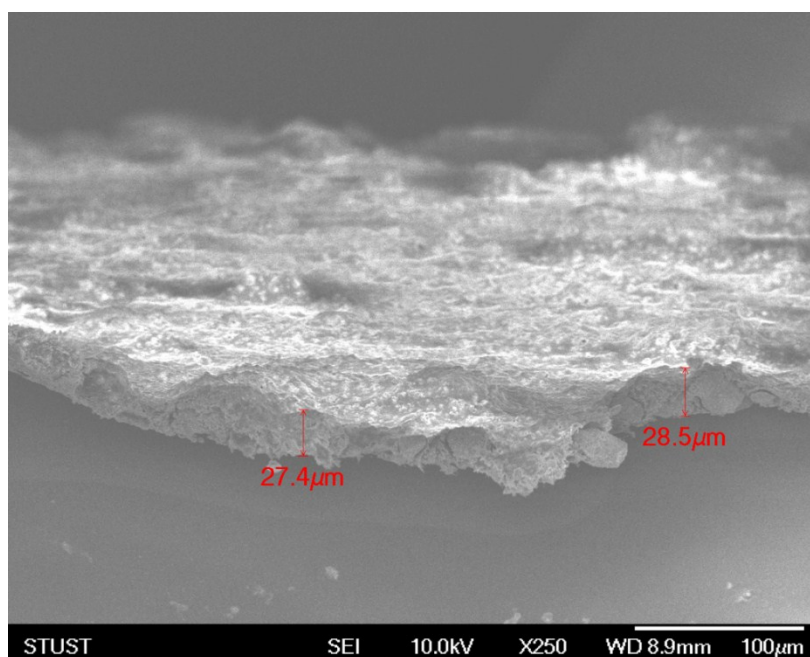


Figure S2 The cross sectional SEM image of the white CCL.

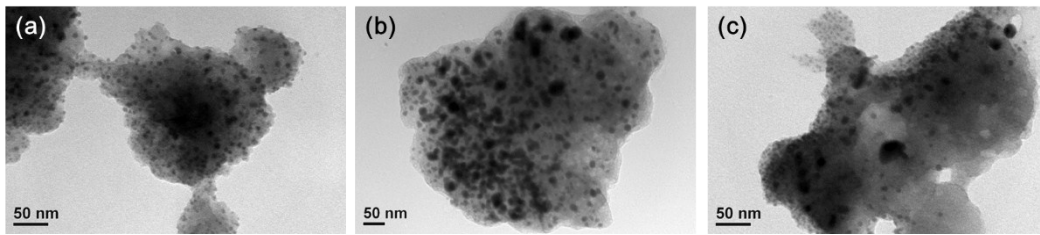


Figure S3 TEM images for (a) green, (b) yellow and (c) deep red perovskites nanocrystals embedded in silica matrix.