Supplementary Information

Printable $CsPbBr_3$ Perovskite Quantum Dot Ink for Coffee Ring-Free Fluorescent Microarrays Using Inkjet Printing

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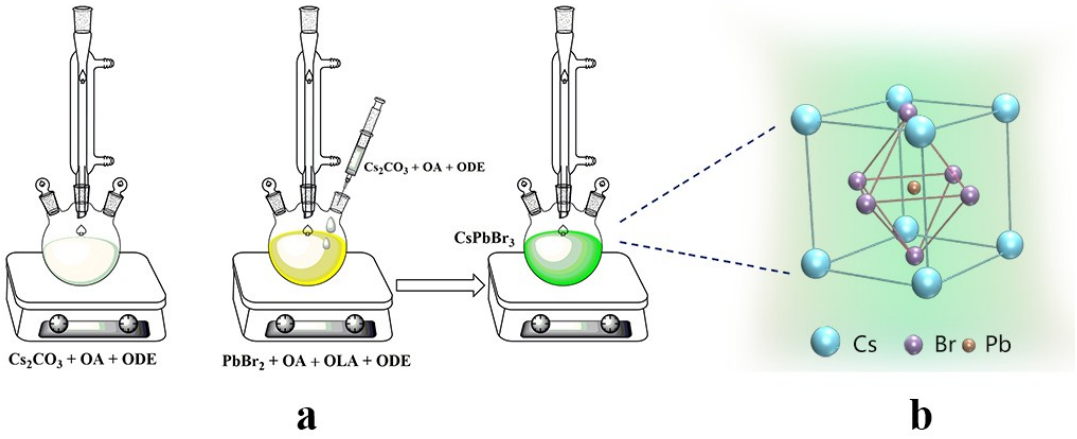

Figure S1. (a) Synthesis of $CsPbBr_3$ perovskite quantum dots by thermal injection. (b) Cubic structure of $CsPbBr_3$ nanocrystals.

Table S1. The values of ST (γ)and Visc. (η) of each mixed ink.

Ink	Surface Tension(mN/m)	Viscosity(cP)
1	25.390	0.63
2	25.205	0.68
3	25.000	0.71
4	24.979	0.75
5	24.773	0.82
6	24.609	0.90
7	24.567	0.99
8	24.382	1.09
9	23.971	1.24

Table S2. The values of $\Delta\gamma$ and Δγ/η of each mixed ink.

Ink	Δγ(mN/m)	Δγ / η
1	1.810	2.873
2	1.625	2.390
3	1.420	2.000
4	1.399	1.865
5	1.193	1.455
6	1.029	1.143
7	0.987	0.997
8	0.802	0.736
9	0.391	0.315

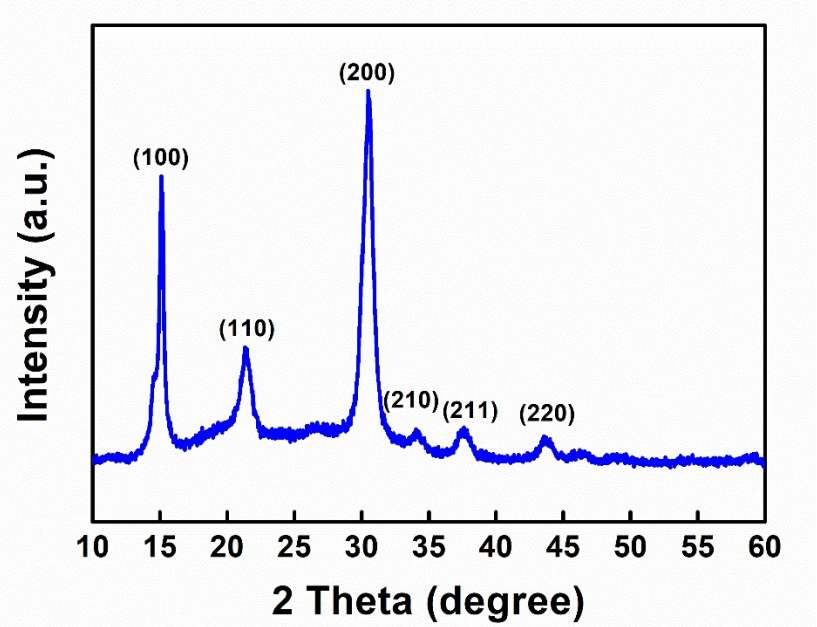

Figure S2. The XRD pattern of $CsPbBr_3$ perovskites quantum dots.

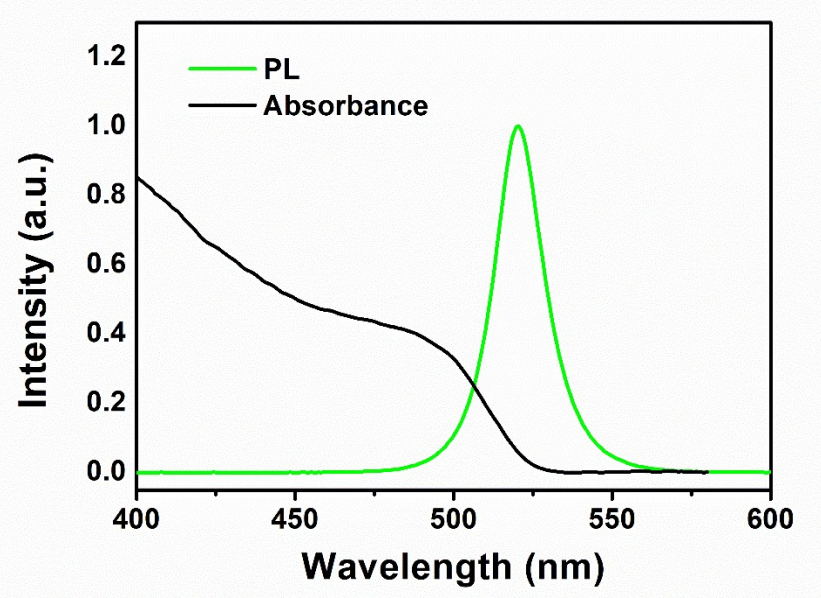

Figure S3. Absorption and PL spectra of $CsPbBr_3$ perovskites quantum dots.

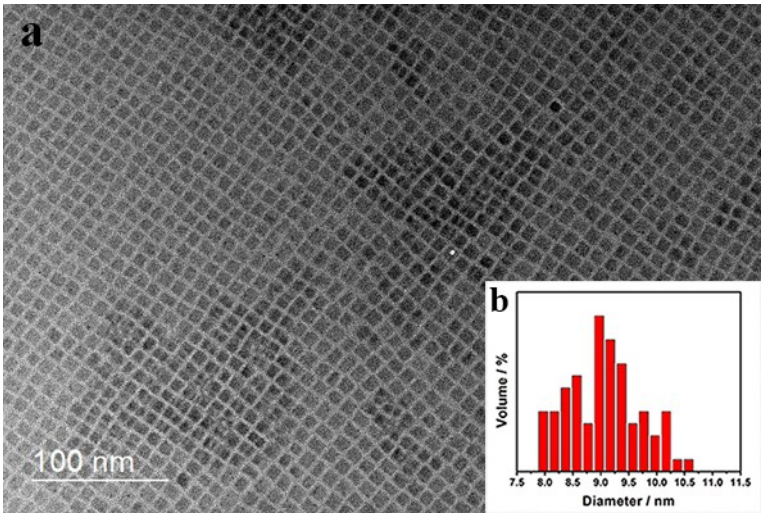

Figure S4. (a) TEM image of $CsPbBr_3$ perovskites quantum dots. (b) The DLS measurement of the ink of perovskites quantum dots .

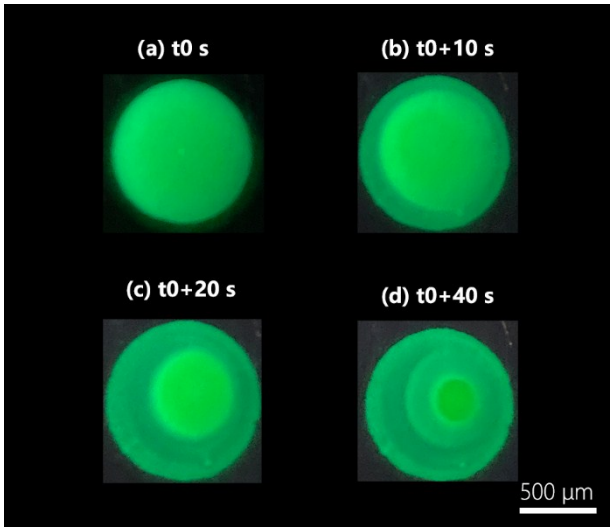

Figure S5. Drying process of enlarged droplets on PVK layer.

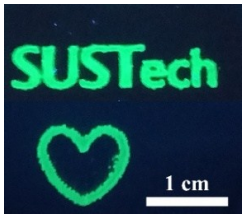

Figure S6. Solid pattern printed inkjet printer at the present stage.