Supplementary Information

Post-hot cast annealing deposition of perovskite films with infused multifunctional organic molecules to enhance the performance of large-area light-emitting devices

Ching-Ho Tien[1,2,*], Jun-Qing Liu[3], and Lung-Chien Chen[3,*]

[1]*Department of Electronic Engineering, Ming Chi University of Technology, No. 84, Gungjuan Rd., New Taipei City 24301, Taiwan; chtien@mail.mcut.edu.tw (C.-H.T.)*

[2]*Organic Electronics Research Center, Ming Chi University of Technology, No. 84, Gungjuan Rd., New Taipei City 24301, Taiwan.*

[3]*Department of Electro-Optical Engineering, National Taipei University of Technology, No. 1, Sec. 3, Chung-Hsiao E. Rd., Taipei 10608, Taiwan; mango51103@gmail.com (J.-Q.L.)*

Corresponding Author

*E-mail: chtien@mail.mcut.edu.tw and ocean@ntut.edu.tw

Table S1. Optical properties of $CsPbBr_{2.5}Cl_{0.5}$ films with different preparation methods and different doping APDO contents.

Sample	PL (nm)	FWHM (nm)	PLQY(%)	Lifetime (ns)
Spin coating (SC)	507	19.80	7.22	0.742
Hot-casting (HC)	508	18.74	9.0	0.964
HC-1mg APDO	508	18.39	10.44	0.839
HC-2mg APDO	508	18.03	14.45	1.137
HC-3mg APDO	508	18.31	11.82	1.001

Table S2. Optoelectronic performance of the $CsPbBr_{2.5}Cl_{0.5}$ PeLEDs with different preparation methods and different doping APDO contents.

	V_{on} (V)	Max. L (cd/m^2)	Max. CE (cd/A)	Max. EQE (%)	EL/FWHM (nm)
SC-PeLED	3	263	0.207	0.074	510/20.3
HC-PeLED	2.5	1177	3.88	1.38	510/20.5
HC-1mg APDO PeLED	2.5	2118	5.39	2.21	508/21.9
HC-2mg APDO PeLED	2.5	2659	6.86	2.81	506/21.8
HC-3mg APDO PeLED	2.5	1477	3,64	1.49	508/21.6