Supporting Information

Broadband and Warm White Emission in $Cs_2In_{1-x}Cl_5 \cdot H_2O:xAg^+$ Phosphors Enabled by H_3PO_2 -Mediated Stabilization

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Figure:

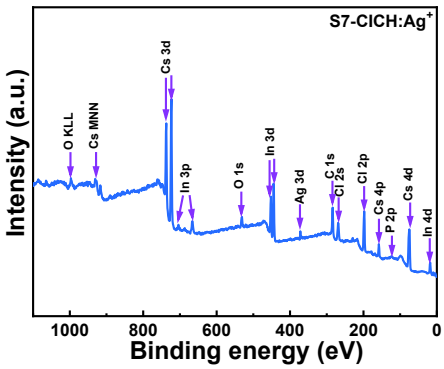

Fig. S1 XPS full spectrum of S7-CICH:Ag^{+}.

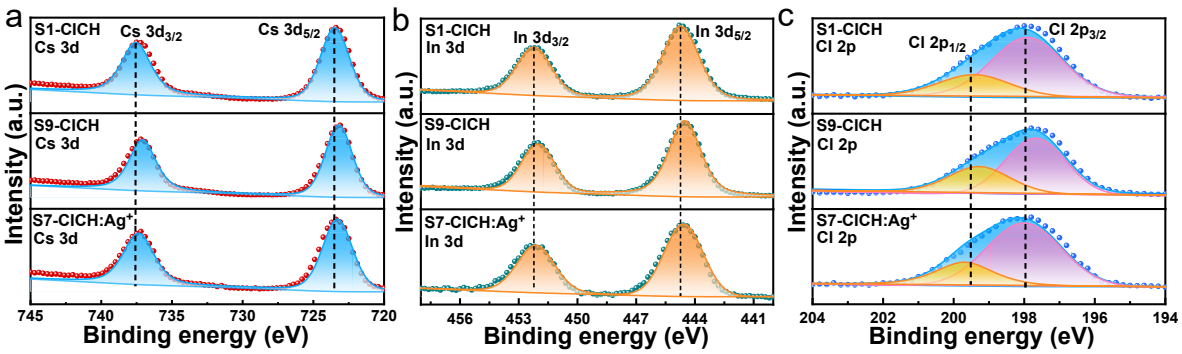

Fig. S2 High-resolution XPS spectra of Cs 3d, In 3d and Cl 2p in S1-CICH, S9-CICH and S7-CICH:Ag^{+}.

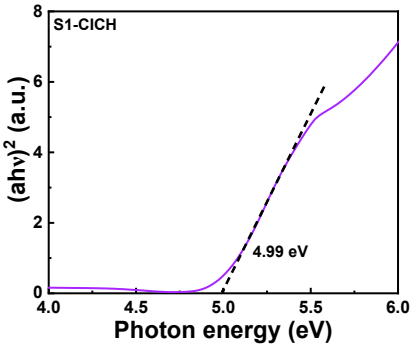

Fig. S3 Tauc-plot of the UV-vis absorption spectrum of S1-CICH.

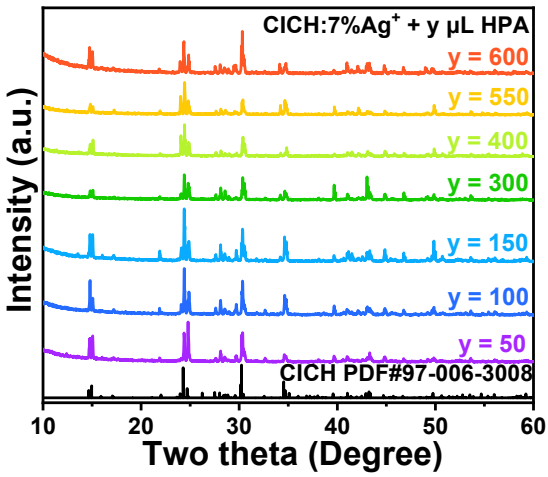

Fig. S4 XRD patterns of CICH:7%Ag^+ at different HPA levels.

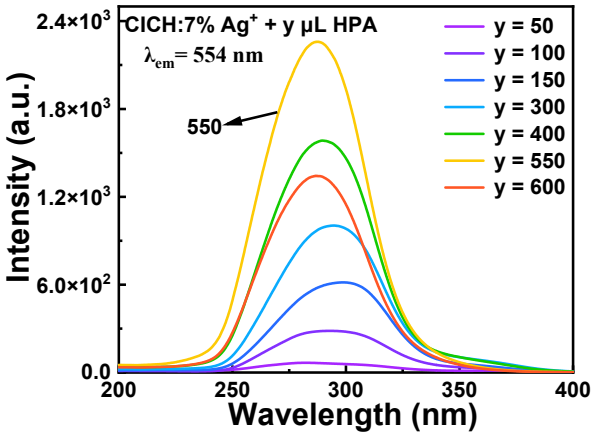

Fig. S5 PLE spectra of CICH:7%Ag^+ at different HPA levels under 554 nm emission.

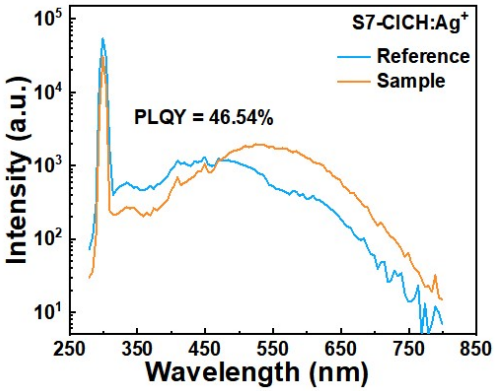

Fig. S6 PLQY measurement of S7-CICH:Ag^+ crystals in an integrated sphere with 299 nm excitation source.

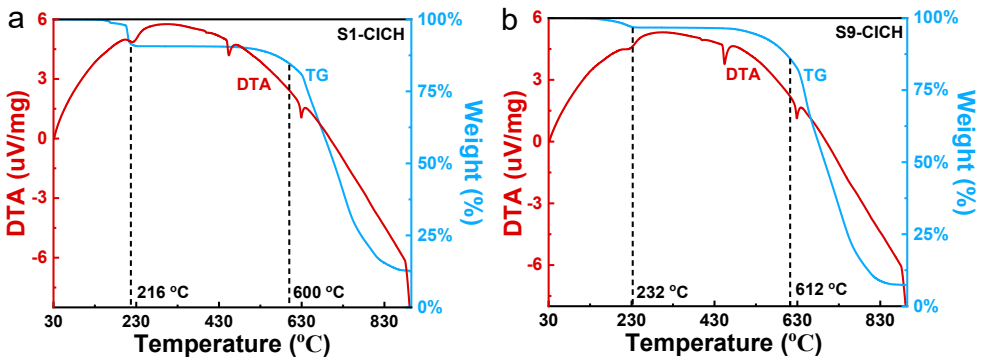

Fig. S7 TG-DTA curves of (a) S1-CICH and (b) S9 sample.

Table：

Table. S1 The result ICP-OES measurements for CICH:7%Ag^{+} at different mounts of HPA levels

Volume (μL)	Actual In concentration (mg/mL)	Actual Ag concentration (mg/mL)	Actual Ag to In molar ratio
150	197.45	1.16	0.6%
400	195.69	2.34	1.2%
550	182.62	5.12	2.8%
600	179.15	7.31	4.1%