Supporting Information

Self-Trapped Exciton Emission in Sn(II)-Doped All-Inorganic Zero-Dimensional Zinc Halide Perovskite Variant

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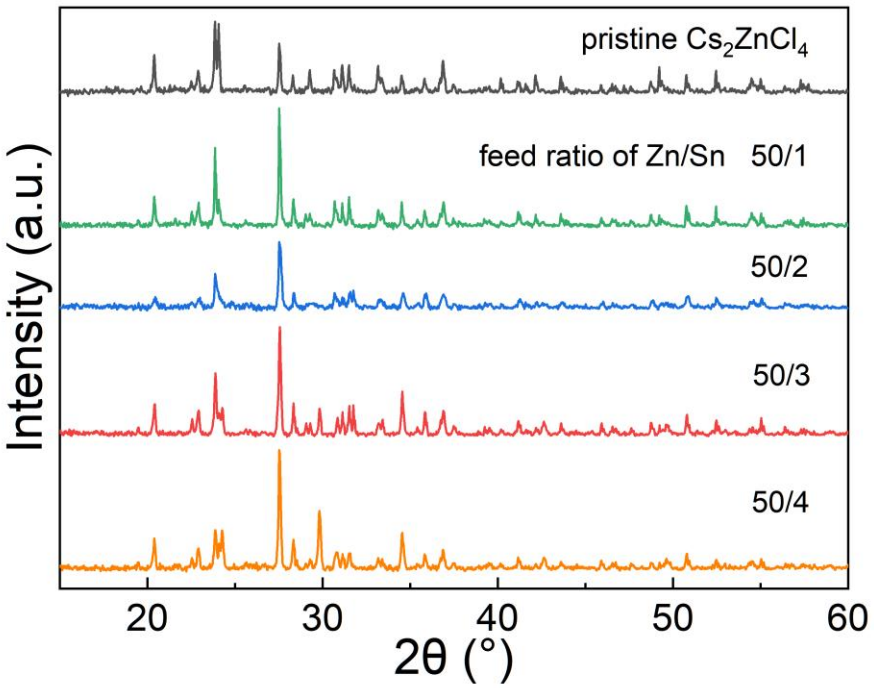

Figure S1. PXRD patterns of the pristine and Sn(II)-doped Cs_2ZnCl_4 with different Zn/Sn feed ratio in synthesis.

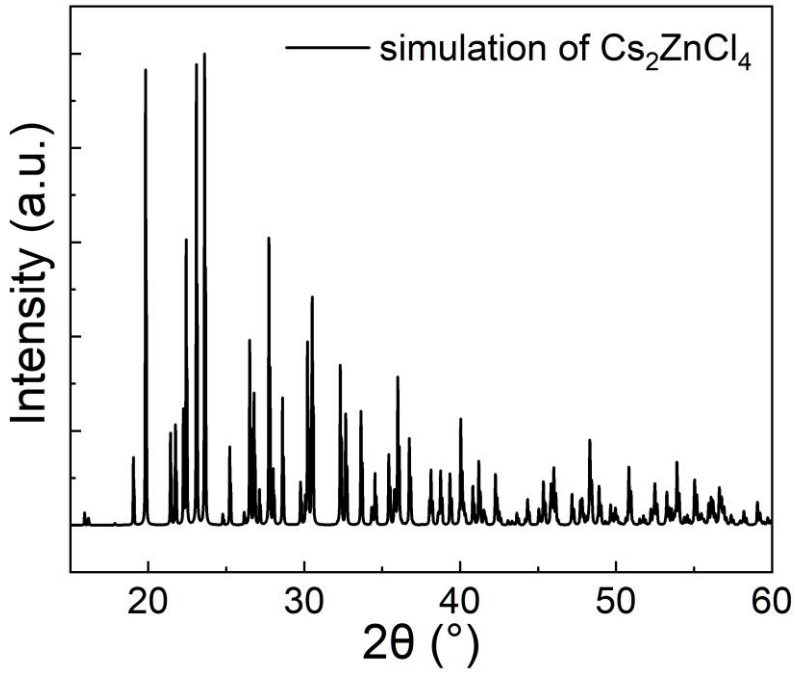

Figure S2. Simulated PXRD patterns of the pristine Cs_2ZnCl_4.

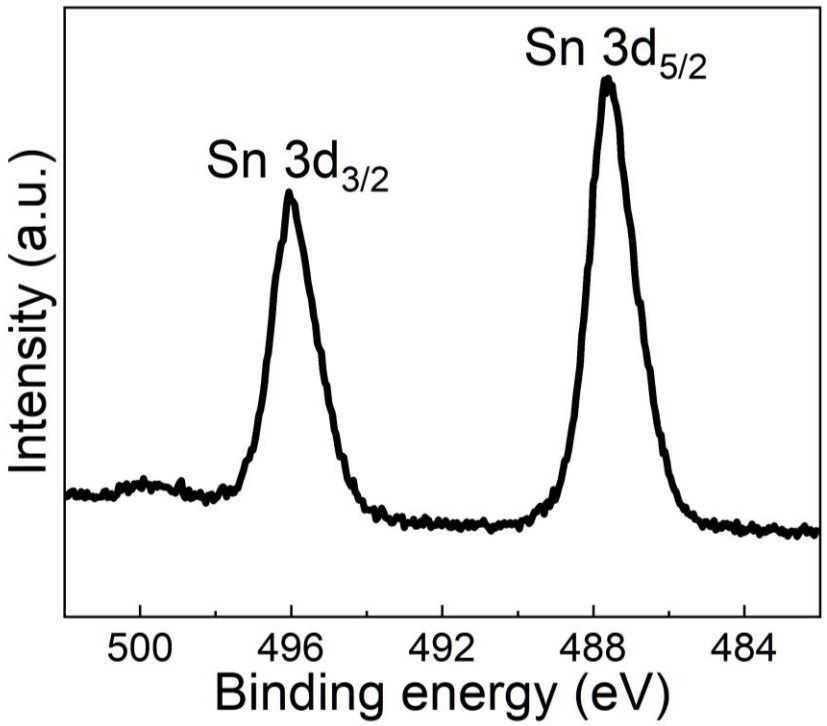

Figure S3. The high-resolution XPS spectrum of Sn 3d of the Sn(II)-doped Cs_2ZnCl_4.

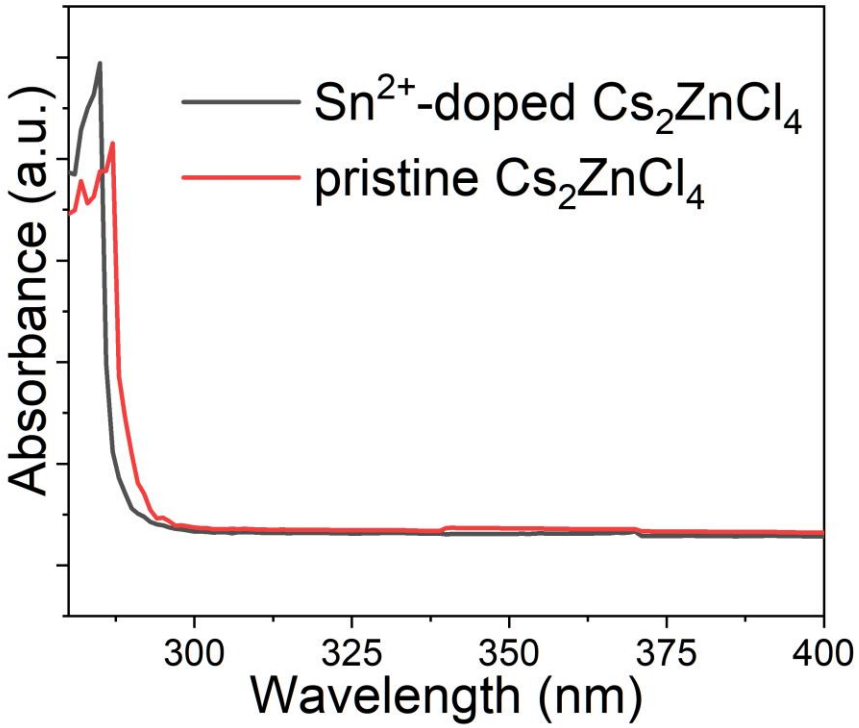

Figure S4. Absorption spectra for the pristine and Sn(II)-doped Cs_2ZnCl_4 crystals.

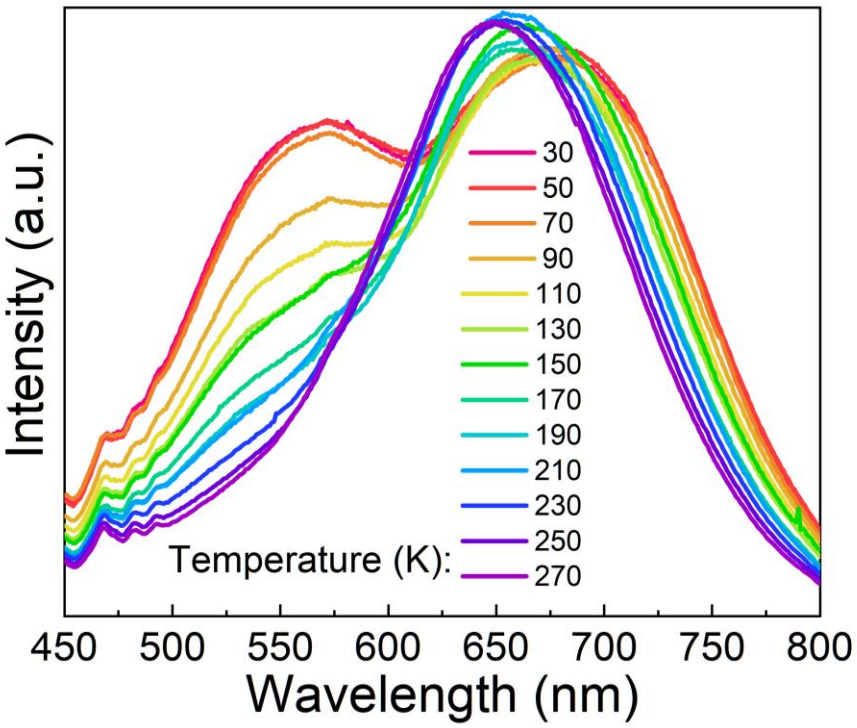

Figure S5. Temperature-dependent PL spectra of the Sn(II)-doped Cs_2ZnCl_4. The temperature change interval is 20 K.

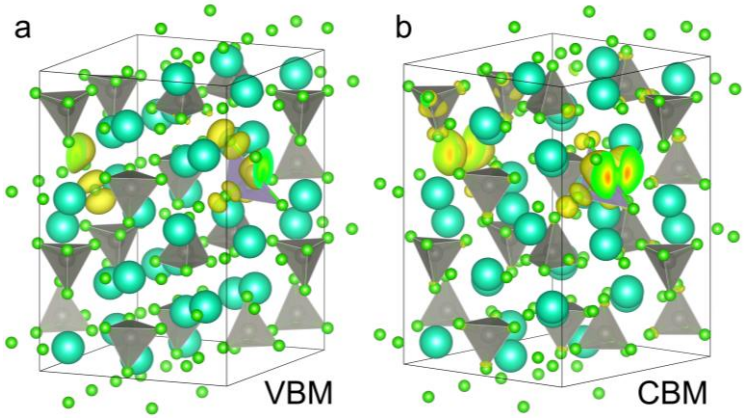

Figure S6. Partial charge densities of (a) VBM and (b) CBM at respective atomic sites for the Sn(II)-doped Cs_2ZnCl_4.