Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Excitation wavelength-dependent tunable color Te^{4+} doped Cs_2ZrCl_6 vacancy-ordered perovskite for optical anti-counterfeit

Yu Qi [a,1], *Chengyue Xin* [a, 2], *Wenjun Zhang** [a,3], *Zhongfa Li* [a,4], *Zihan Chen* [a, 5], *Zhongyu Duan* [a, 6]

[a] School of Chemical Engineering, Hebei University of Technology
Tianjin, 300130, China.

*** E-mail: wjzhang@hebut.edu.cn**
*** E-mail: zyduan@hebut.edu.cn**

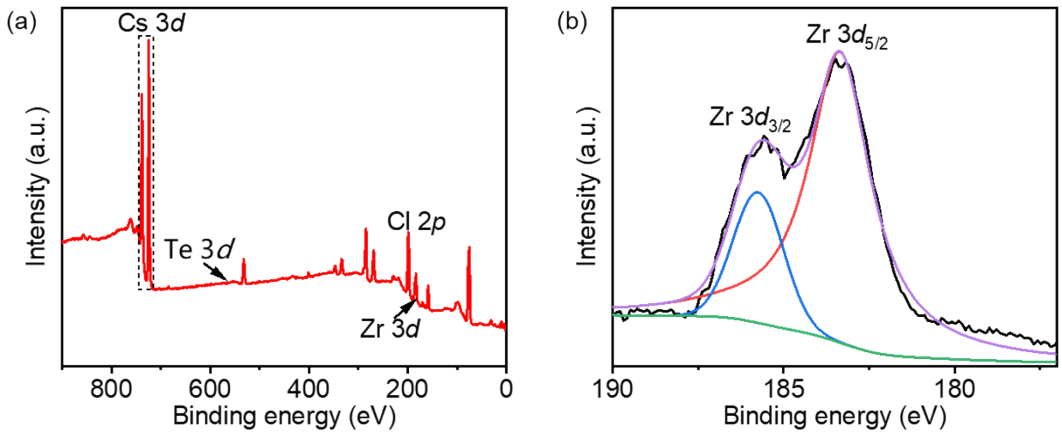

Figure S1. (a) XPS survey spectrum of 0.15% Te^{4+} doped Cs_2ZrCl_6; (b) XPS spectra and peak fitting for Zr 3d.

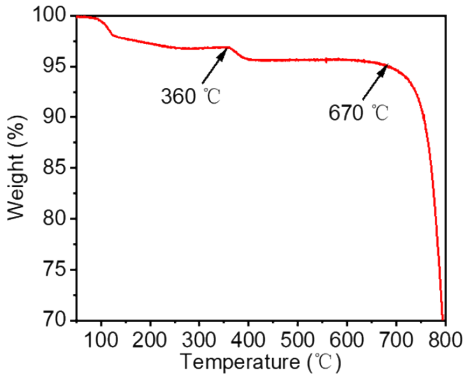

Figure S2. TGA spectra for 0.15% Te^{4+} doped Cs_2ZrCl_6.

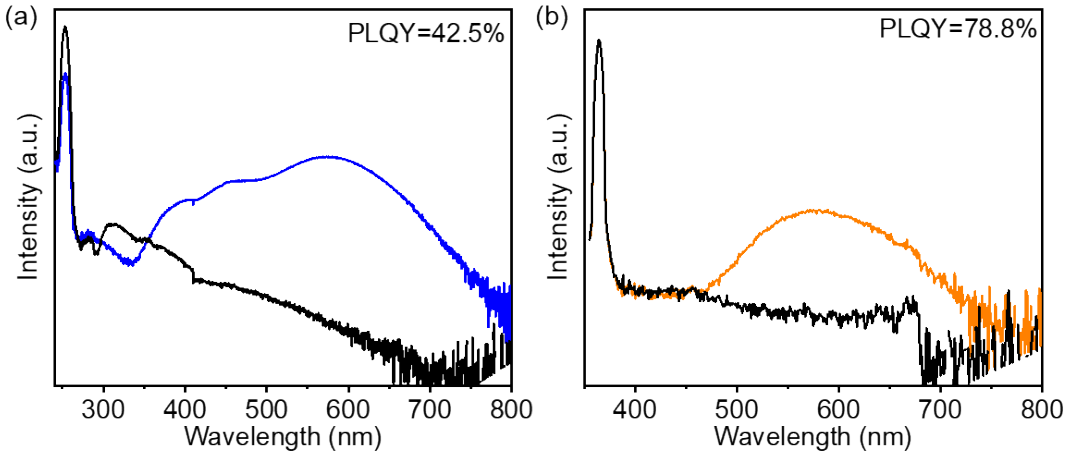

Figure S3. PL spectra for PLQY of 0.15% Te^{4+} doped Cs_2ZrCl_6: (a) excitation by 254 nm; (b) excitation by 365 nm.