Supporting Information

Hydrochloric Acid-Mediated Mechanical Synthesis of Red-Emitting All-Inorganic Zinc

Halides

Siyu Li, ^a Jiali Yao, ^a Dayang Wang, ^a Keke Huang, ^a Wensheng Yang, ^{ab} and Renguo Xie *a

^a State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry Jilin University, Changchun 130012, China.

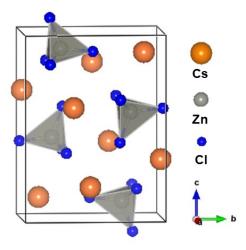


Figure S1. Single crystal structures of Cs₂ZnCl₄.

Table S1. Fitting parameters for the PL decay lifetime of hydrochloric acid-treated Cs₂ZnCl₄.

Parameter	Value	Std. Dev.	Rel%
<i>T</i> ₁	4.203E-006 s	1.0204E-007 s	
7 ₂	1.171E-005 s	1.4318E-007 s	
B ₁	7272.120	121.1099	43.79
B_2	3351.017	127.7683	56.21
Α	0.417		
X ²	0.511		

^b Engineering Center for Nanomaterials, Henan University, Kaifeng, 475004, China

^{*}E-mail: renguoxie@jlu.edu.cn

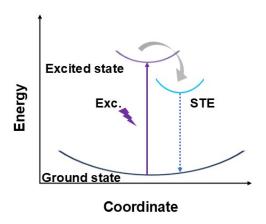


Figure S2. Possible luminescence mechanism of Cs₂ZnCl₄.

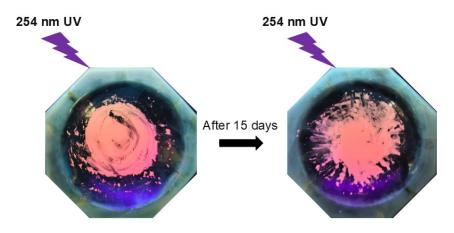


Figure S3. Photographs of luminescence of acid-treated Cs₂ZnCl₄ under 254 nm UV light before and after 15 days of placement.