

Supplementary Information

Synthesis and optical properties of lead-free single-phase white-light-emitting complexes

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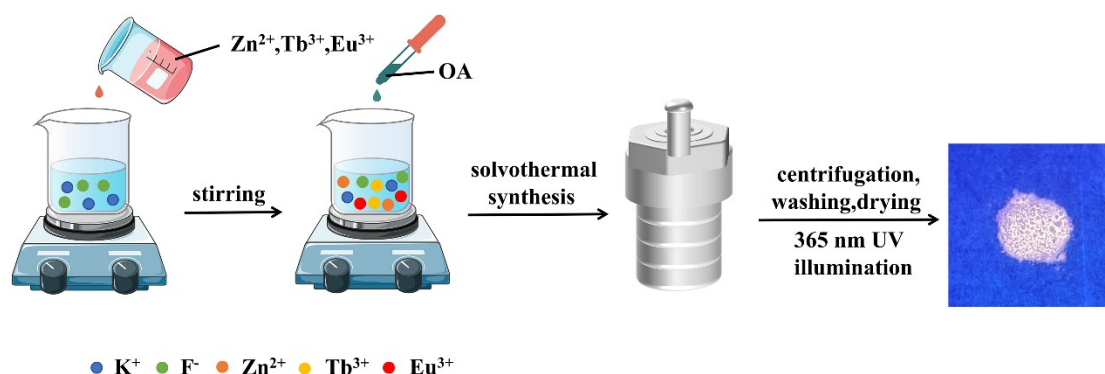


Fig.S1. The schematic diagram for synthesis of the KZnF₃: Eu³⁺, Tb³⁺/OA complexes

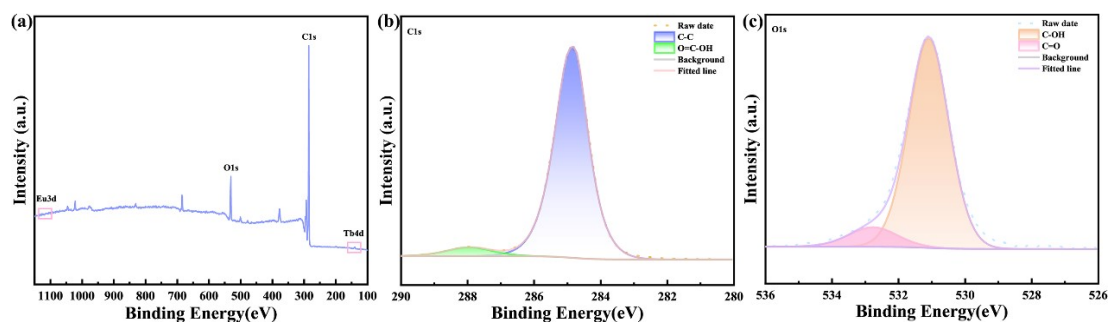


Fig. S2. (a) XPS survey spectrum of KZnF₃: Eu³⁺, Tb³⁺/OA complexes and the high-resolution spectrum of (b) C 1s and (c) O 1s

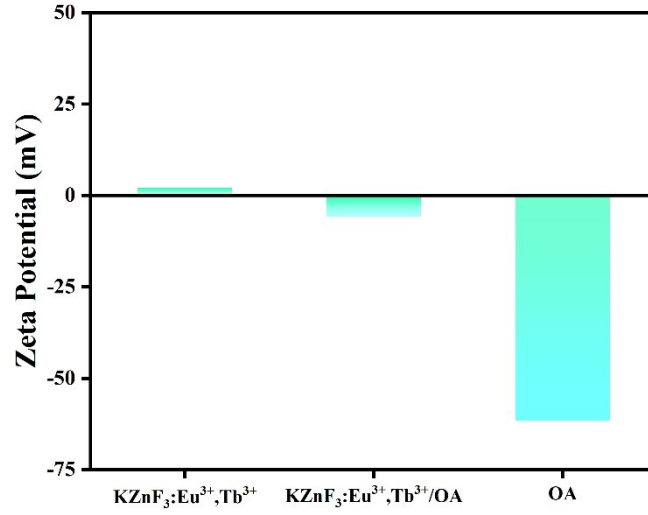


Fig. S3. The zeta potentials of the KZnF₃: Eu³⁺, Tb³⁺, KZnF₃: Eu³⁺, Tb³⁺/OA and OA.

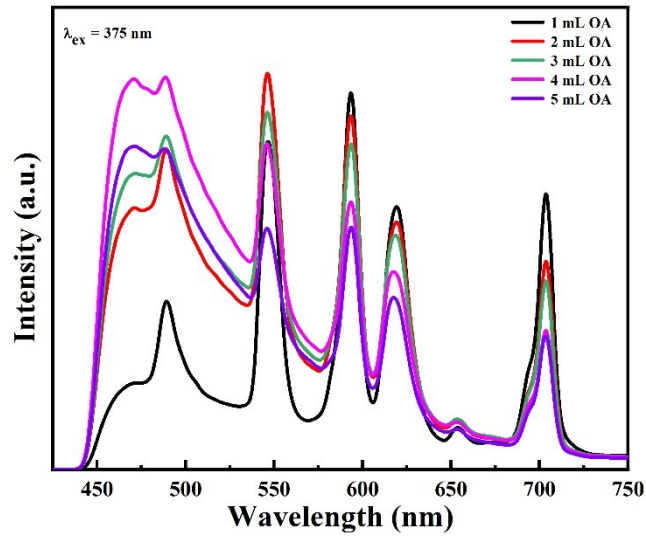


Fig. S4. PL spectra of KZnF₃: Eu³⁺, Tb³⁺/OA complexes with varying OA content.

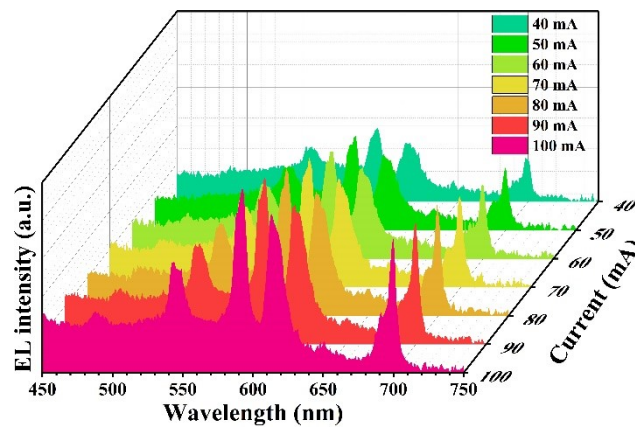


Fig. S5. EL spectra of KZnF₃: Eu³⁺, Tb³⁺/OA complexes under the different forward-bias currents.

Table S1 CIE color coordinates of KZnF₃: Eu³⁺, Tb³⁺/OA complexes under the different forward-bias currents

Currents (mA)	40	50	60	70	80	90	100
CIE color coordinates	(0.353,0.369)	(0.356,0.364)	(0.358,0.361)	(0.359,0.355)	(0.364,0.349)	(0.363,0.343)	(0.363,0.339)