

<Electronic Supplementary Information>

Single crystals of cyclodimeric zinc(II) complexes containing 9,10-bis((isoquinolin-5-yloxy)methyl)anthracene: reversible adsorption of targeting molecules and recognition of CH₂I₂ in SCSC mode

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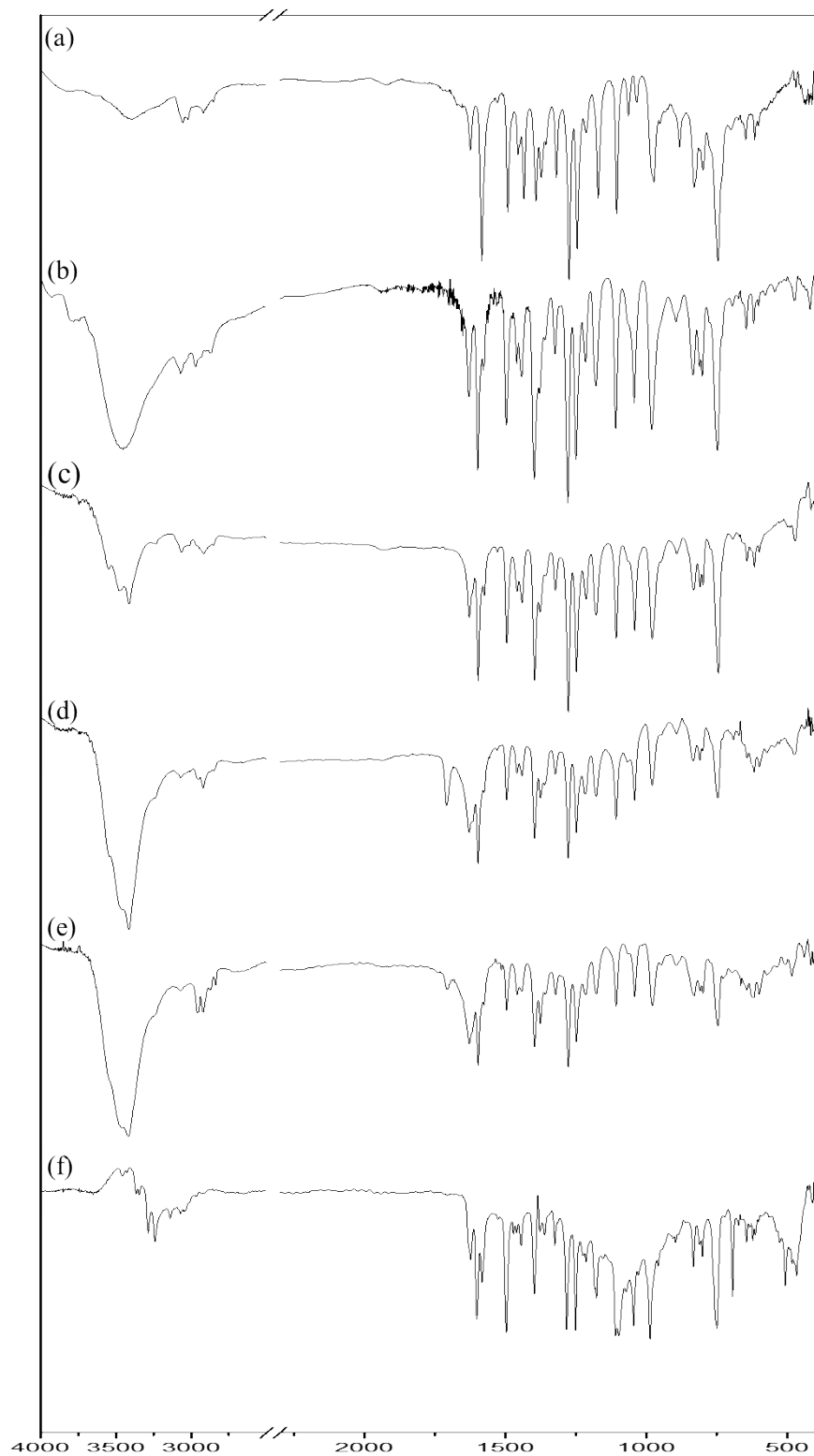


Fig. S1. IR spectra of L (a), $[\text{ZnCl}_2\text{L}]_2 \cdot 5\text{C}_4\text{H}_8\text{O}$ (b), $[\text{ZnCl}_2\text{L}]_2 \cdot 4o\text{-X} \cdot 2\text{C}_4\text{H}_8\text{O} \cdot 0.5\text{CH}_2\text{Cl}_2$ (c), $[\text{ZnCl}_2\text{L}]_2 \cdot 4m\text{-X}$ (d), $[\text{ZnCl}_2\text{L}]_2 \cdot 4p\text{-X}$ (e), and $[\text{Zn}_2\text{Cl}_4\text{L}(\text{C}_6\text{H}_5\text{NH}_2)_2] \cdot 2\text{C}_6\text{H}_5\text{NH}_2$ (f).

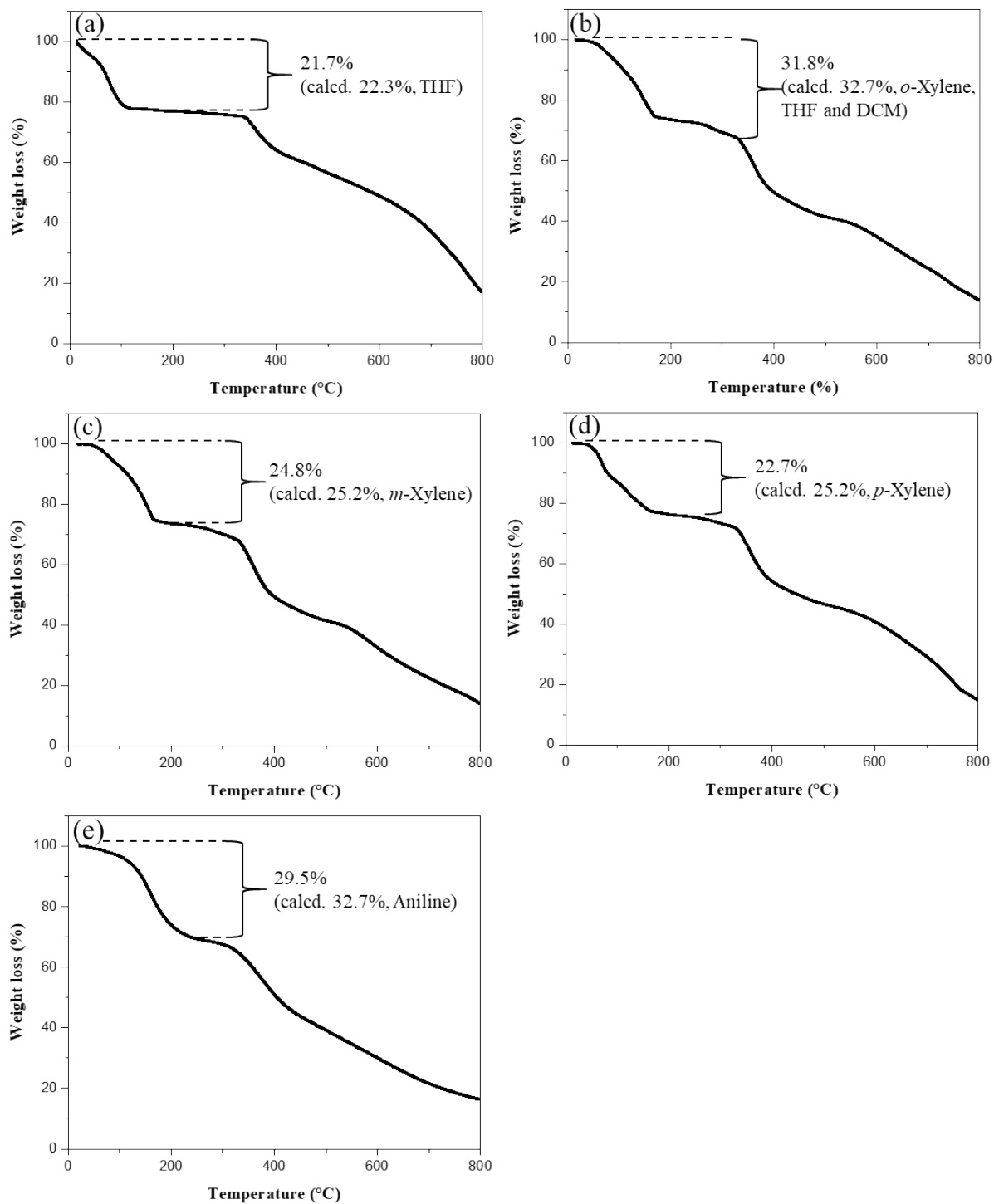


Fig. S2. TG curves of $[\text{ZnCl}_2\text{L}]_2 \cdot 5\text{C}_4\text{H}_8\text{O}$ (a), $[\text{ZnCl}_2\text{L}]_2 \cdot 4o\text{-X} \cdot 2\text{C}_4\text{H}_8\text{O} \cdot 0.5\text{CH}_2\text{Cl}_2$ (b), $[\text{ZnCl}_2\text{L}]_2 \cdot 4m\text{-X}$ (c), $[\text{ZnCl}_2\text{L}]_2 \cdot 4p\text{-X}$ (d), and $[\text{Zn}_2\text{Cl}_4\text{L}(\text{C}_6\text{H}_5\text{NH}_2)_2] \cdot 2\text{C}_6\text{H}_5\text{NH}_2$ (e).

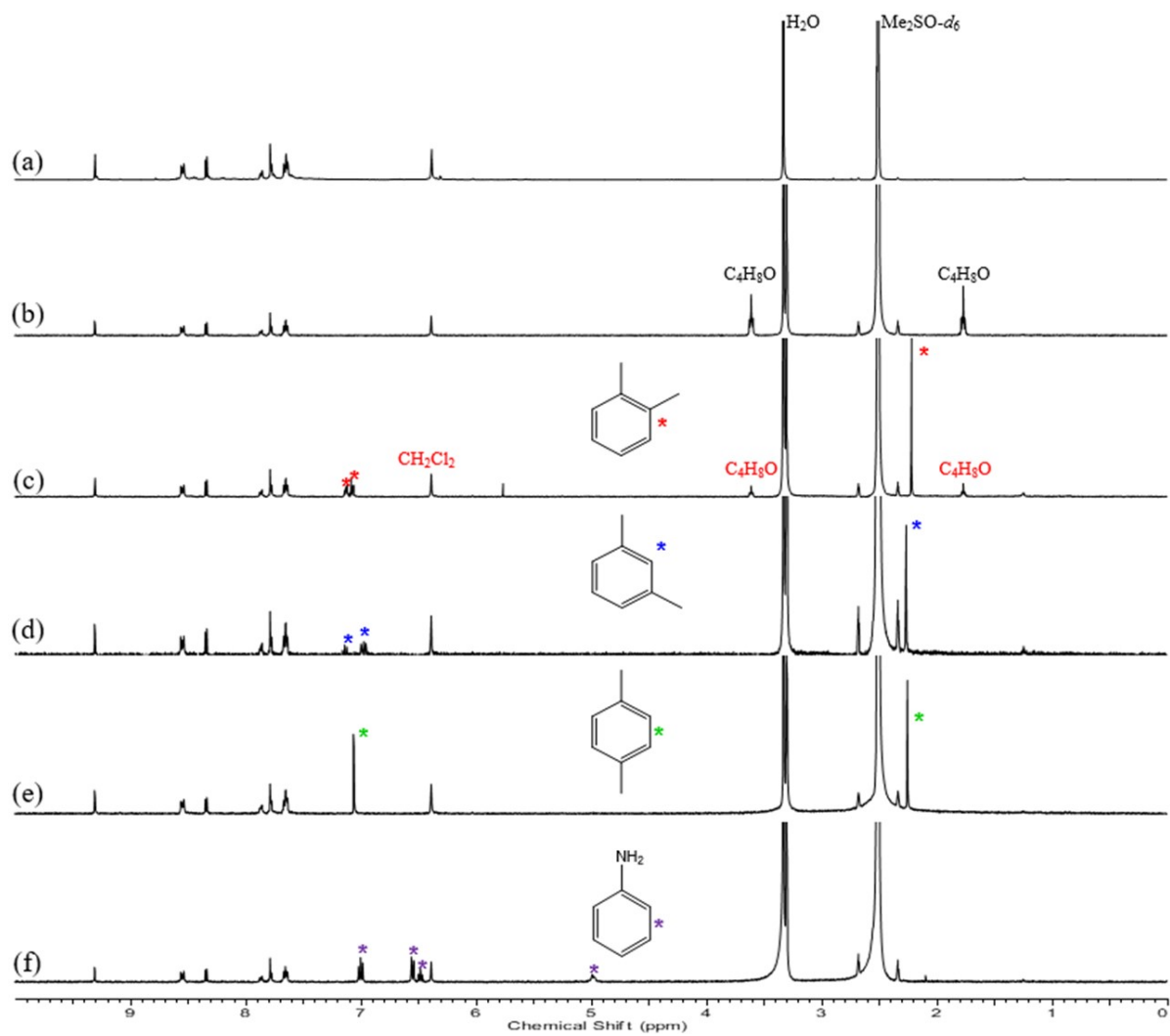


Fig. S3. ^1H NMR spectra (dissociated in $\text{Me}_2\text{SO}-d_6$) of L (a), $[\text{ZnCl}_2\text{L}]_2 \cdot 5\text{C}_4\text{H}_8\text{O}$ (b), $[\text{ZnCl}_2\text{L}]_2 \cdot 4o\text{-X} \cdot 2\text{C}_4\text{H}_8\text{O} \cdot 0.5\text{CH}_2\text{Cl}_2$ (c), $[\text{ZnCl}_2\text{L}]_2 \cdot 4m\text{-X}$ (d), $[\text{ZnCl}_2\text{L}]_2 \cdot 4p\text{-X}$ (e), and $[\text{Zn}_2\text{Cl}_4\text{L}(\text{C}_6\text{H}_5\text{NH}_2)_2] \cdot 2\text{C}_6\text{H}_5\text{NH}_2$ (f).

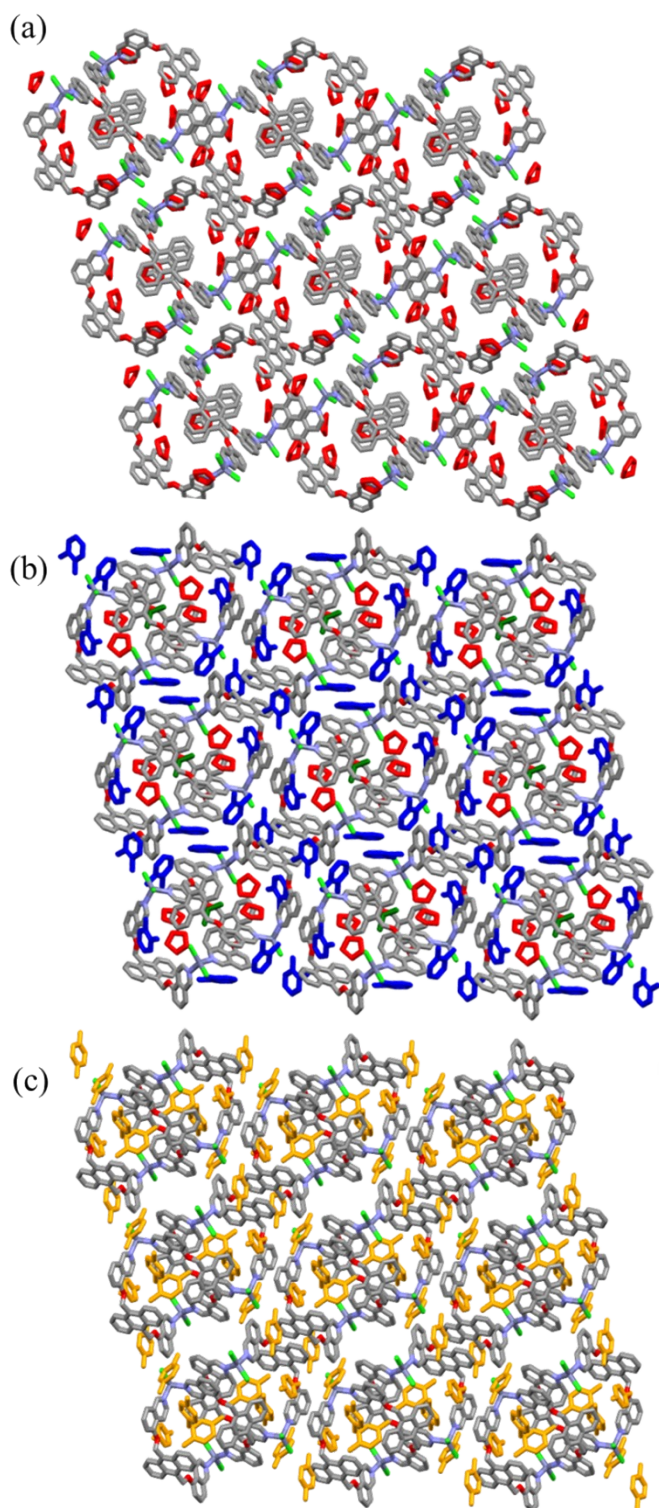


Fig. S4. Packing structures of [ZnCl₂L]₂·5C₄H₈O (a), [ZnCl₂L]₂·4*o*-X·2C₄H₈O·0.5CH₂Cl₂ (b), and [ZnCl₂L]₂·4*p*-X (c). C₄H₈O (red), CH₂Cl₂ (green), *o*-X (blue), and *p*-X (yellow).

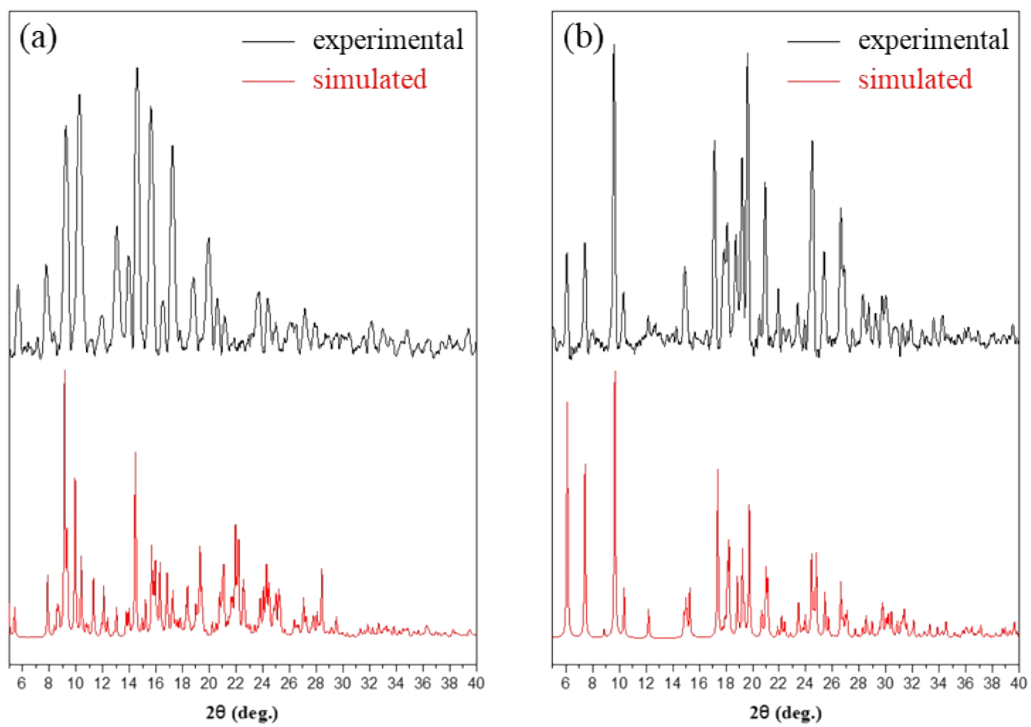


Fig. S5. PXRD patterns of $[\text{ZnCl}_2\text{L}]_2 \cdot 5\text{C}_4\text{H}_8\text{O}$ (a) and $[\text{Zn}_2\text{Cl}_4\text{L}(\text{C}_6\text{H}_5\text{NH}_2)_2] \cdot 2\text{C}_6\text{H}_5\text{NH}_2$ (b).

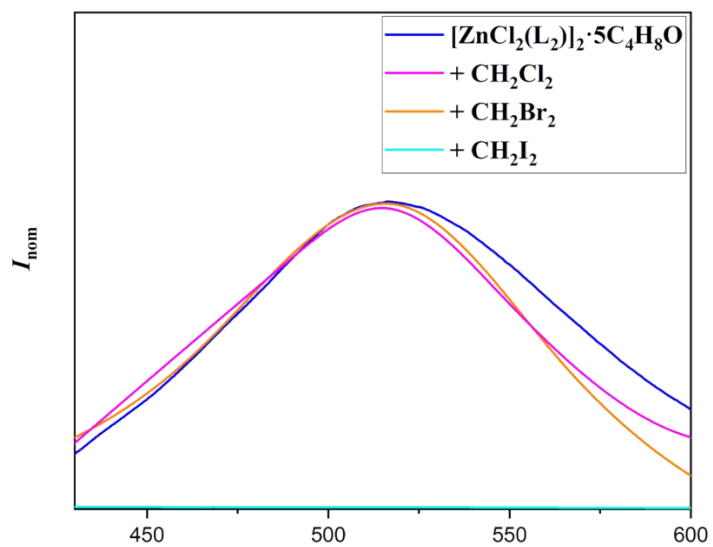


Fig. S6. Solid PL spectra at $\lambda_{\text{ex}} = 350$ nm of crystals of $[\text{ZnCl}_2\text{L}]_2 \cdot 5\text{C}_4\text{H}_8\text{O}$ (blue line), the crystals + one drop (20 μL) of the CH_2Cl_2 (pink line), the crystals + one drop of the CH_2Br_2 (orange line), and the crystals + one drop of the CH_2I_2 (sky blue line).