Supporting Information

Cyclotriphosphazene (P_3N_3) hybrid framework with an aggregation induced photocatalytic hydrogen evolution and degradation of rhodamine B

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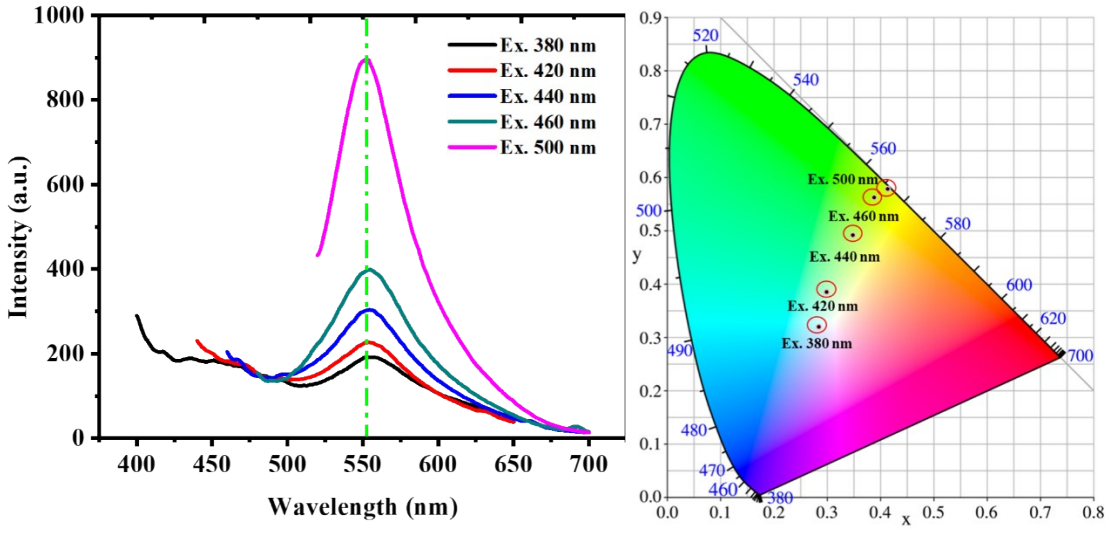

Fig. S1. Solid-state PL emission spectrums of the P_3N_3-CIOF and their corresponding CIE coordinates.

Table S1. Comparison of the photocatalytic activity of P_3N_3-CIOF with the with other organic polymers and covalent organic frameworks.

Photocatalyst	Conditions	Hydrogen evolution (μmol)	References
CTF-S10	> 420 nm TEOA 1 wt.% Pt	40 1h	[1]
N3-COF	> 420 nm TEOA 3 wt.% Pt	8.5 1h	[2]
CTF-1	>420 nm TEOA 2.01 wt.% Pt	275 1h	[3]
TFPT-COF	> 420 nm TEOA	19.7 1h	[4]
CTF-HS$_{0.75}$	> 420 nm TEOA 3 wt. % Pt	302 1h	[5]
P_3N_3-CIOF	Full spectrum TEOA 3 wt.% Pt	98 4h	**This work**

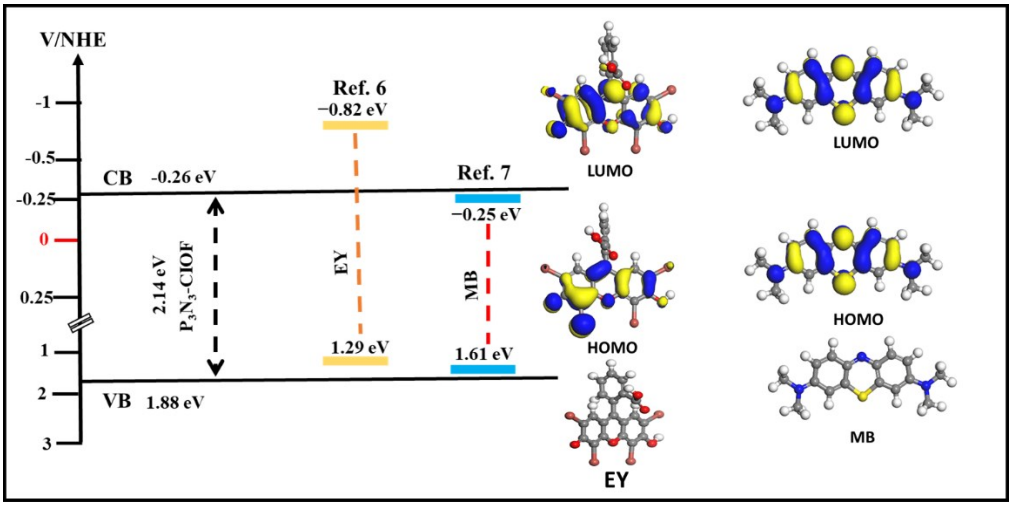

Fig. S2. The projected capability of photodegradation P_3N_3-CIOF for Eosin Y (EY) [6] and methylene blue (MB) [7] by hole transfer mechanism [8] and frontier electron densities of EY and MB.

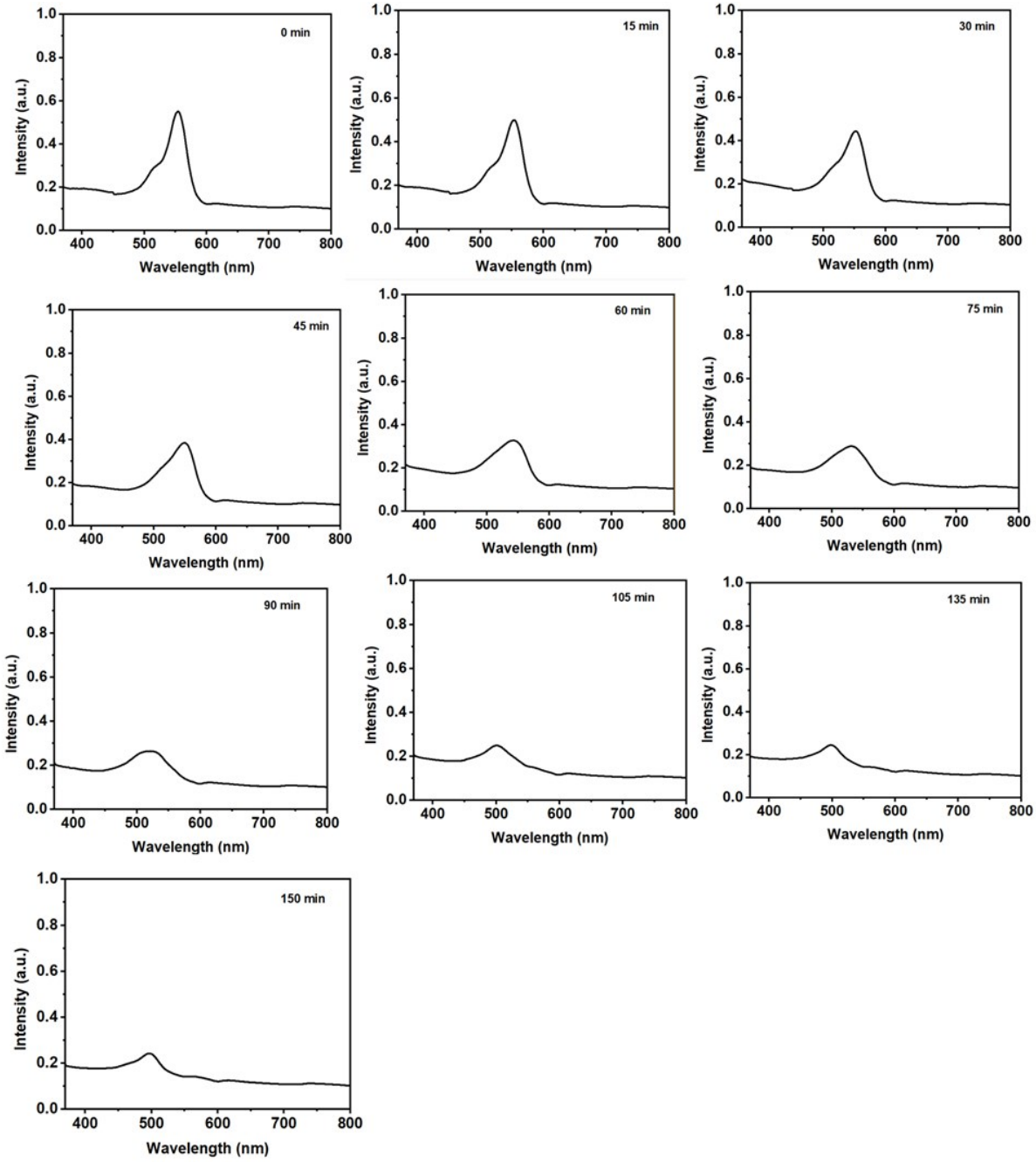

Fig. S3 *Spectrums showing photocatalytic degradation of rhodamine B with P_3N_3-CIOF at various time intervals under visible light irradiation (≥ 420 nm).*

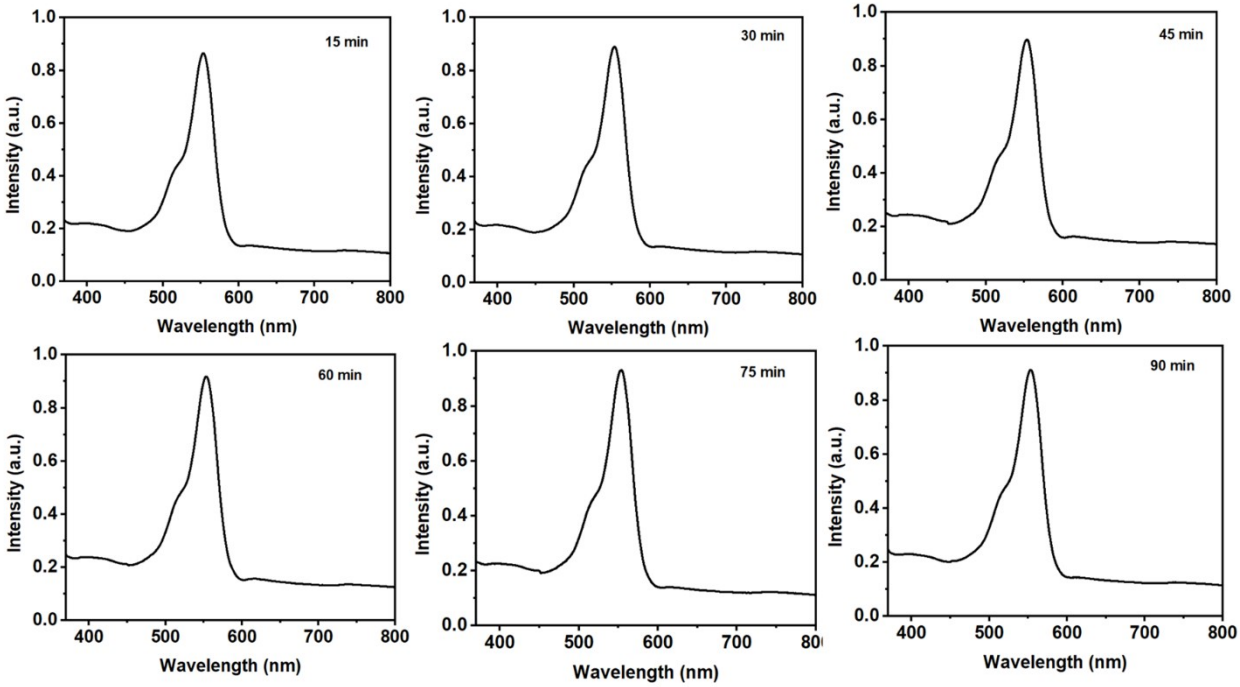

Fig. S4 *Spectrums showing rhodamine B at various time intervals under visible light irradiation (≥ 420 nm).*

References

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