Supplementary Material

Dual MOFs and $CuInS_2$ Constructed Dual Z-Scheme Heterojunctions for Enhanced Photocatalytic Hydrogen Production and Methylene Blue Degradation

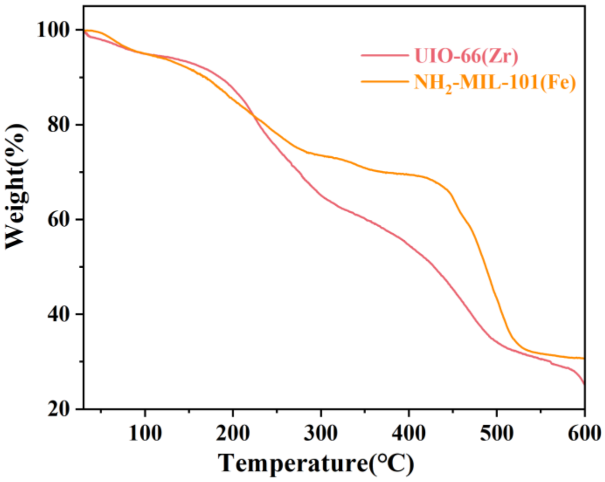

Figure S1.TGA curves for U66 and NM101

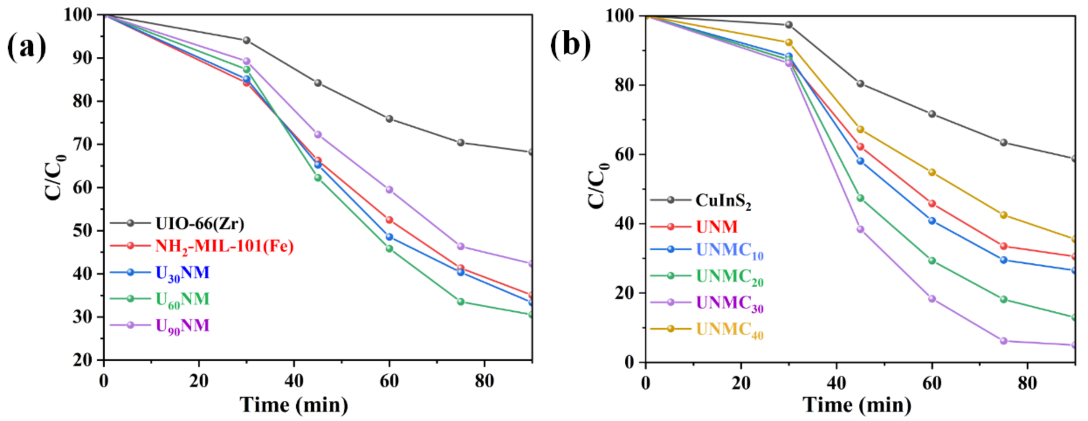

Figure S2. The effect of different proportion of photocatalyst on the catalytic effect

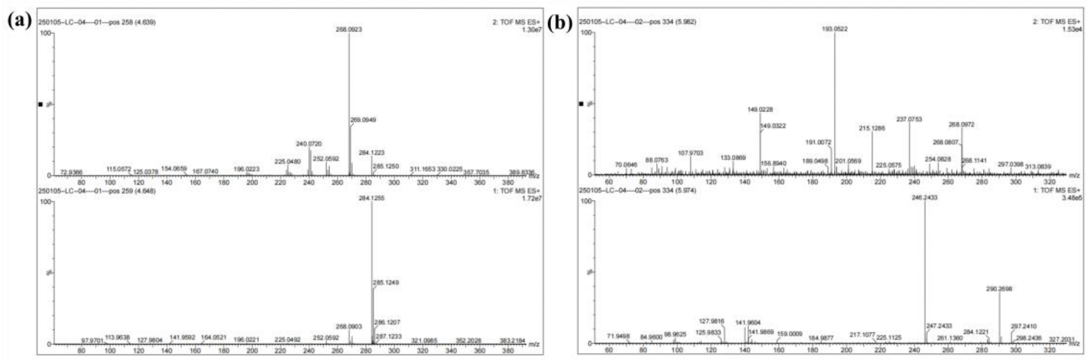

Figure S3. Mass spectrum of MB before and after degradation

From Figure S3, it can be seen that MB is decomposed from large molecules into small molecules.

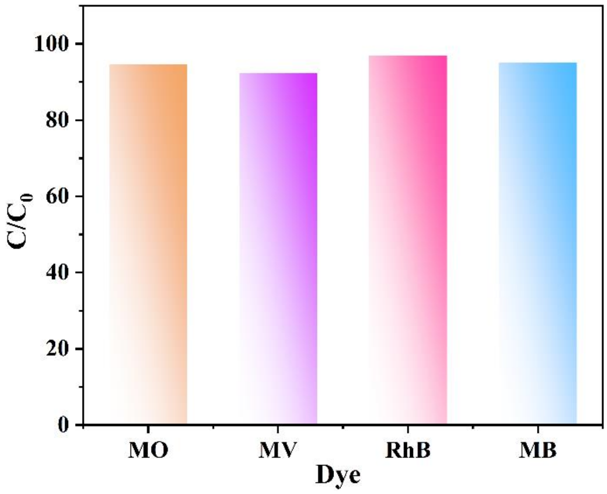

Figure S4. Degradation effects of samples on different pollutants

UNMC has carried out explanatory tests on different dyes, all of which show high degradation efficiency.

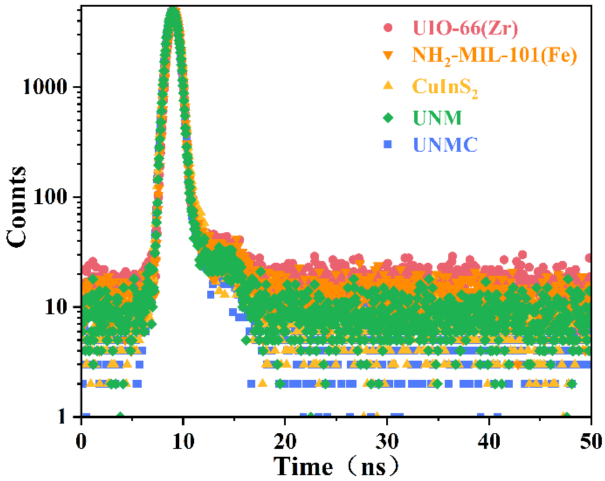

Figure S5. TRPL curve of the sample

Table S1. Comparison of degradation performance with other photocatalysts.

Photocatalysts	Reaction Time	Removal Efficiency (%)	Refs.
ZnO/MIL-101（Fe）	300min	RhB 97.1	[50]
α-DMACoPc/TiO_2/MIL-101（Fe）	150min	RhB 94	[51]
MIL-101(Fe)/Ce/g-C_3N_4	75min	RhB 90.36 MB 88.17	[52]
MoS2-Cu/CuO@GN	30min	MB 93.8	[53]
Cu：CdS	260min	MB 89 MV 97	[54]
UNMC	60min	MB 95.03	**This work**

Table S2. Comparison of hydrogen production performance with other photocatalysts.

Photocatalysts	Photocatalyst mass (mg)	Sacrificial Reagent	H_2 Production Efficiency	Refs.
CNNS/CQDs	50	triethanolamine	116.1 μmol h^{-1}	[55]
ZnO@ZnS	10	Na_2S/Na_2SO_3	24.61 μmol h^{-1}	[56]
NiO/g-C_3N_4	50	clactic acid	169.5 μmol h^{-1}	[57]
UNMC	100	triethanolamine	888 μmol h^{-1}	**This work**

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