Supporting Information

Enhancing the Catalytic Efficiency and Stability of Photoenzymes Using Hydrogen-bonded Organic Framework Material HOF-101

Guohua Li[a,b], Xifeng Lv[b], Wei Ji[b], Yegui Zhou[b], Zhiwen Lin

Hui Cao[b,#], Tianwei Tan[a,b,#]

a Beijing Advanced Innovation Center for Soft Matter Science and Engineering, Beijing University of Chemical Technology, Beijing, 100029 China.

b National Energy R&D Center for Biorefinery, Beijing Key Laboratory of Bioprocess, Beijing University of Chemical Technology. Beijing, 15th, Beisanhuan East Road, Beijing,100029，PR China.

Corresponding authors: Tianwei Tan (twtan@mail.buct.edu.cn) , Hui Cao(caohui@mail.buct.edu.cn). 15th, Beisanhuan East Road, Beijing, PR China.

Principal author: Guohua Li (16622881217@163.com)，ORCID：0000-0002-7829-9941

Supporting table

Table S1 B Solution type and configuration method

Type of Solution B	TCPP	M	LDH
HOF-101	0	0	0
T@HOF-101	0.2	0	0
TM@HOF-101	0.2	0.2	0
TML@HOF-101	0.2	0.2	0.2

Solution B was prepared by dissolving in 18ML methanol according to the formula in Table S1. The units of values in this table are mg/mL.

Table S2 The photocatalytic regeneration performance of NADH by different photocatalysts.

Photocatalyst	Concentration of photocatalyst (g L^{-1})	Mediator	Reaction equilibrium time (min)	Yield (%)	TOF (h^{-1})
TM@HOF-101 (our study)	1	Rh[a]	40	74.5	6.36
PCN@TA/PEI-Rh[4]	0.5	Rh	20	37.8	70.82
SiPP@CPNL-Rh[5]	1	Rh	28	39.6	44.8
GCN@M/TiO_2[6]	2.5	Rh	20	58	42.67
Co1/C_3N_4[7]	2	Rh	10	98	33.01
Rh-NU-1006[8]	1	Rh	120	28	20.69
DBTS-CMP_1[9]	1	Rh	45	84	3.75
ACN[10]	2	Rh	60	62.3	3.36
ATCN-DSCN[1]	0.7	Rh	15	74	2.95
TCPP/SiO_2/Rh HNPs[11]	2	Rh	180	75	1.67
CTF[12]	-	Rh	120	75.9	0.76
AM/M/BP HNSs[13]	0.2	Rh	180	89	0.5

[a] Rh is $[Cp^*Rh(bpy)H_2O]^{2+}$.

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