

Supporting Information

Synthesis of ultra-thin Ni-membranes/ZnO-nanorods grass clumps-like composite and its enhanced photocatalysis

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Table S1 Element composition and content of Ni-membranes.

Element	Wt.%	%
O K	18.65	45.69
Ni L	81.35	54.31

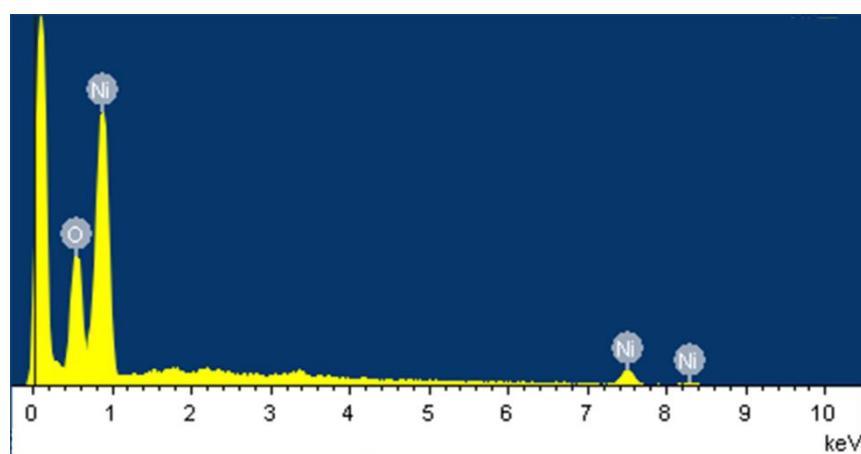


Fig. S1 EDS diagram of Ni-membranes.

Table S2 Element composition and content of Ni-membranes/ZnO-nanorods.

Element	Wt.%	%
O K	29.92	63.49
Ni K	1.95	1.13
Zn L	68.13	35.39

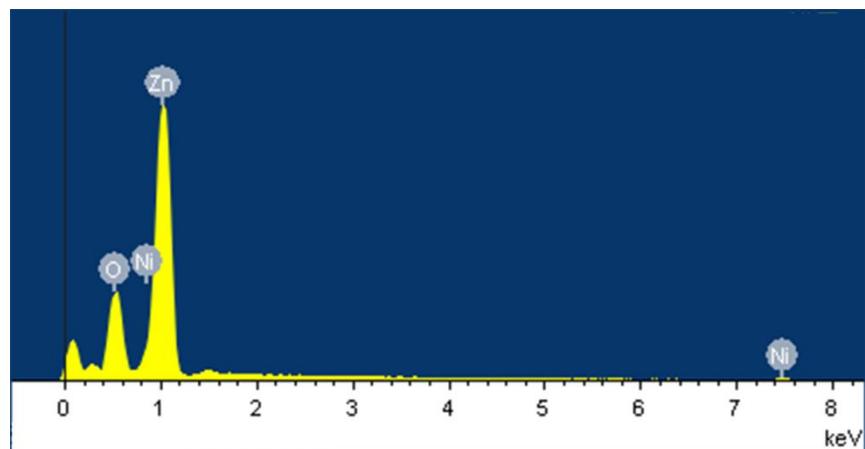


Fig. S2 EDS diagram of Ni-membranes/ZnO-nanorods.

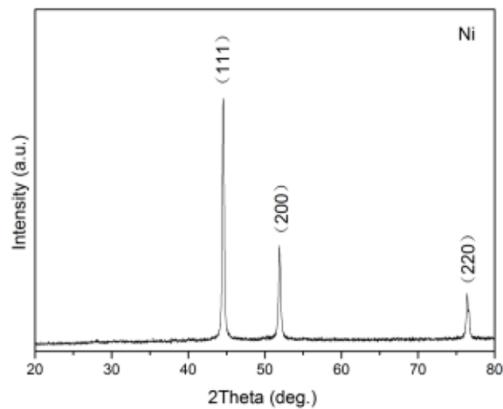


Fig. S3 XRD patterns of nickel film calcined in nitrogen at 873K for 1h.

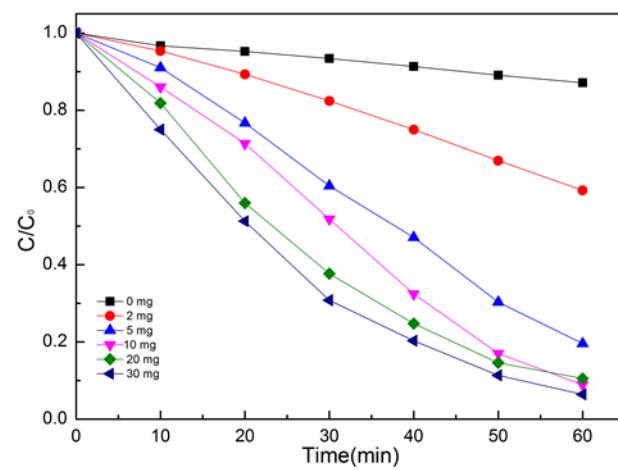


Fig. S4 Effect of different Ni-membrane/ZnO-nanorods dosages in MO degradation.

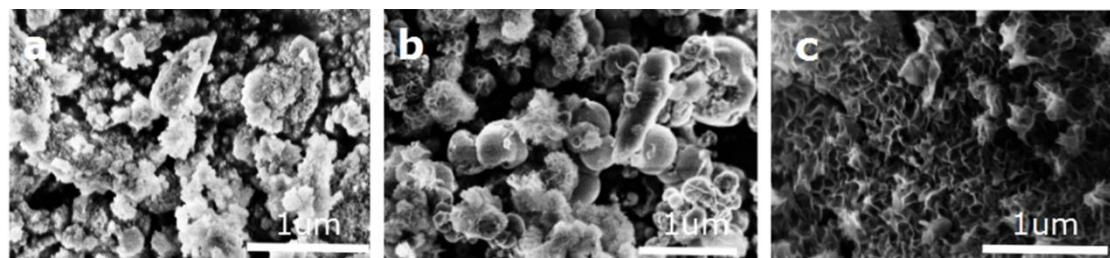


Fig. S5 SEM images of Ni-membrane under different conditions. (a) Without collodion membrane, (b) with collodion membrane contains bubbles, c) with good collodion membrane.

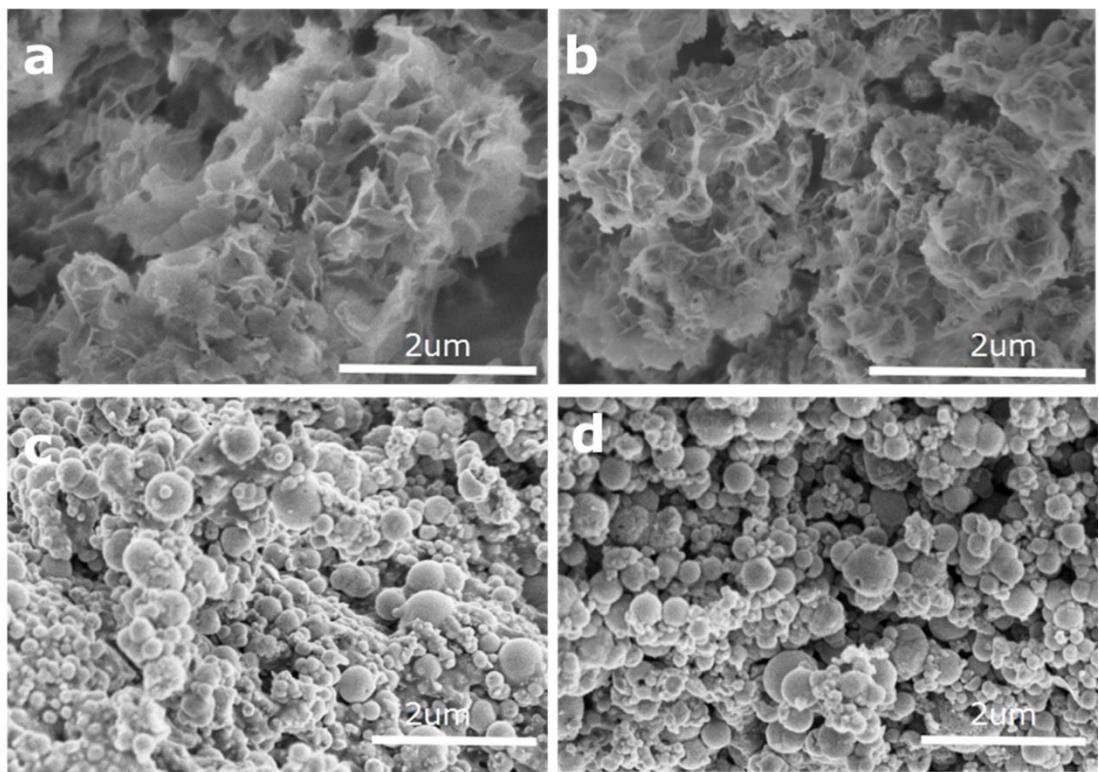


Fig. S6 Morphology of Ni-membrane under different use times of collodion membrane (a) 1st; (b) 2nd; (c) 3rd; (d) 4th.

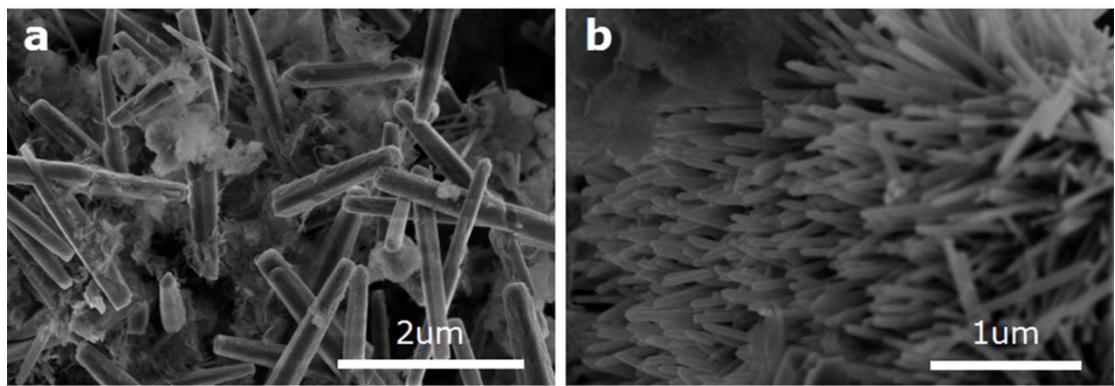


Fig. S7 SEM images of Ni-membrane/ZnO-nanorods, (a) without ZnO seed; (b) with ZnO seed.

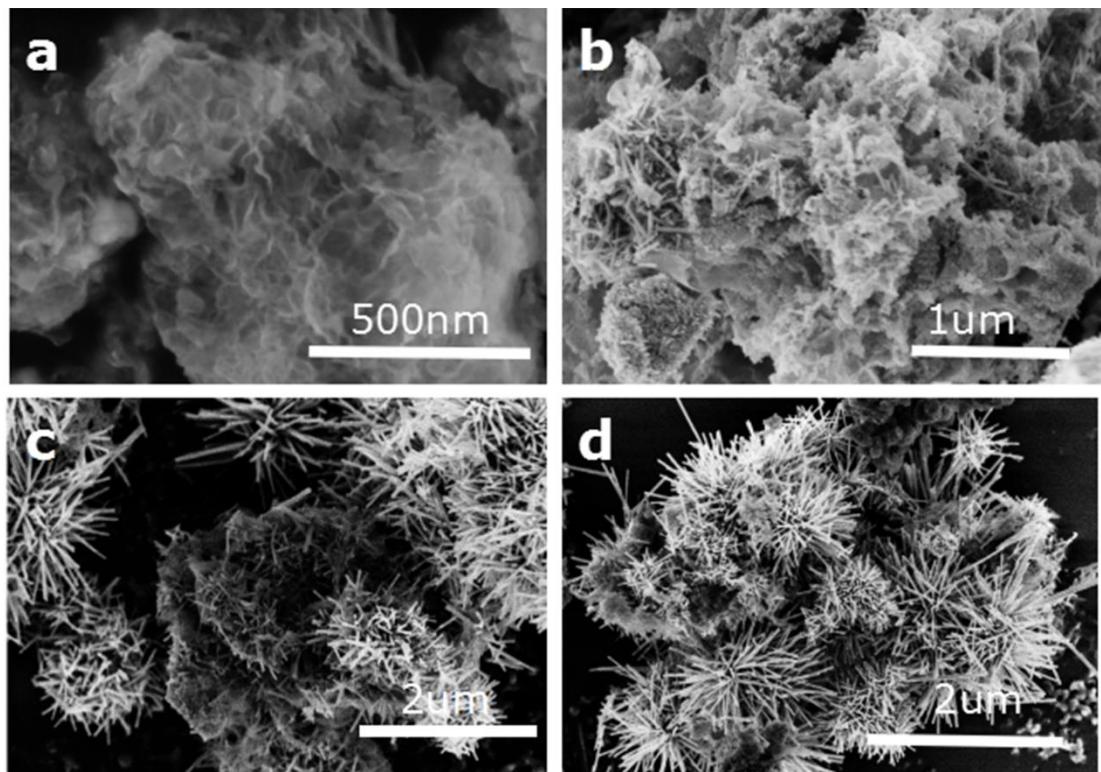


Fig. S8 SEM images of Ni-membrane/ZnO-nanorods composites under different hydrothermal time (a) 0 h; (b) 2 h; (c) 4h; (d) 8h.

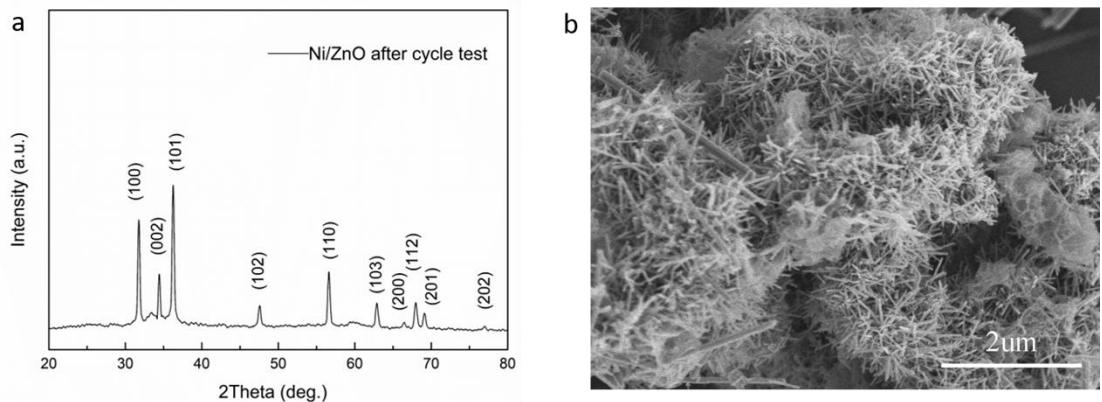


Fig.S9 xrd (a), sem (b) of composite after five cycles.