Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information

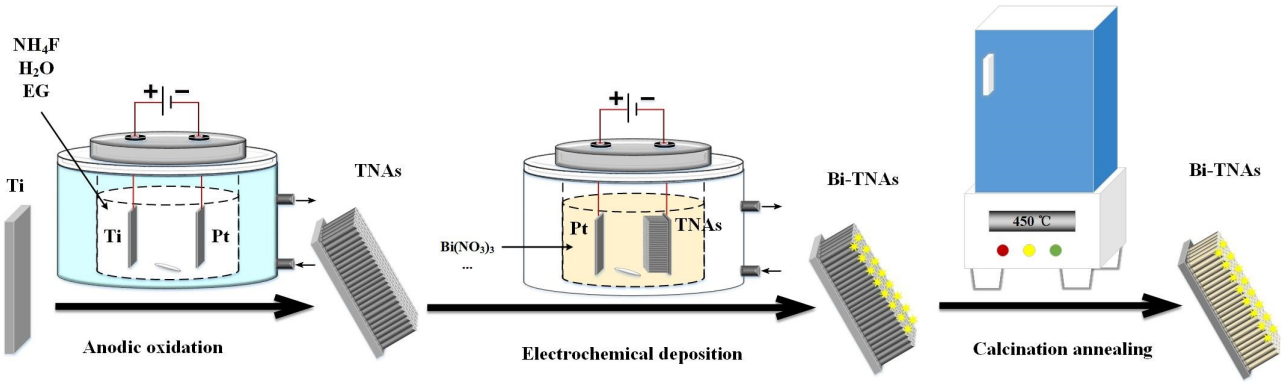
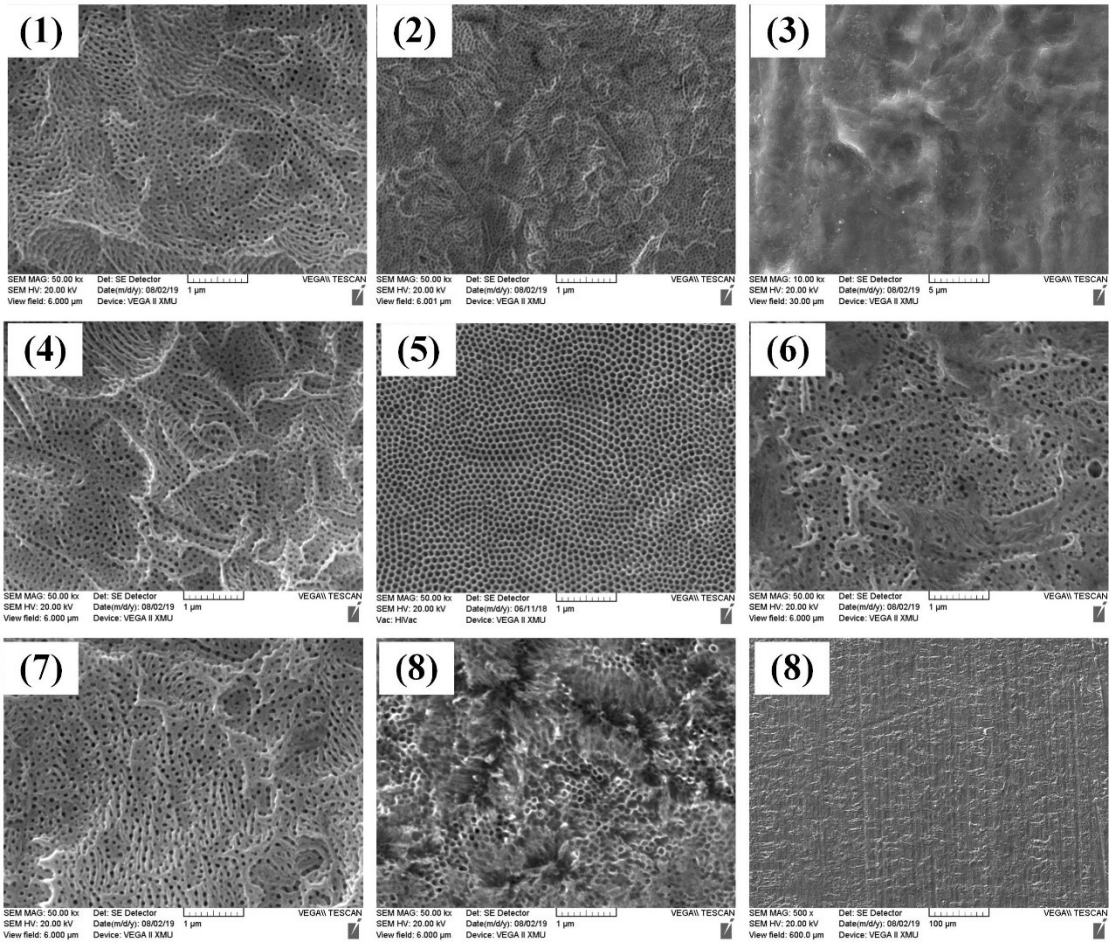


Figure S1. Schematic diagram of material preparation process.



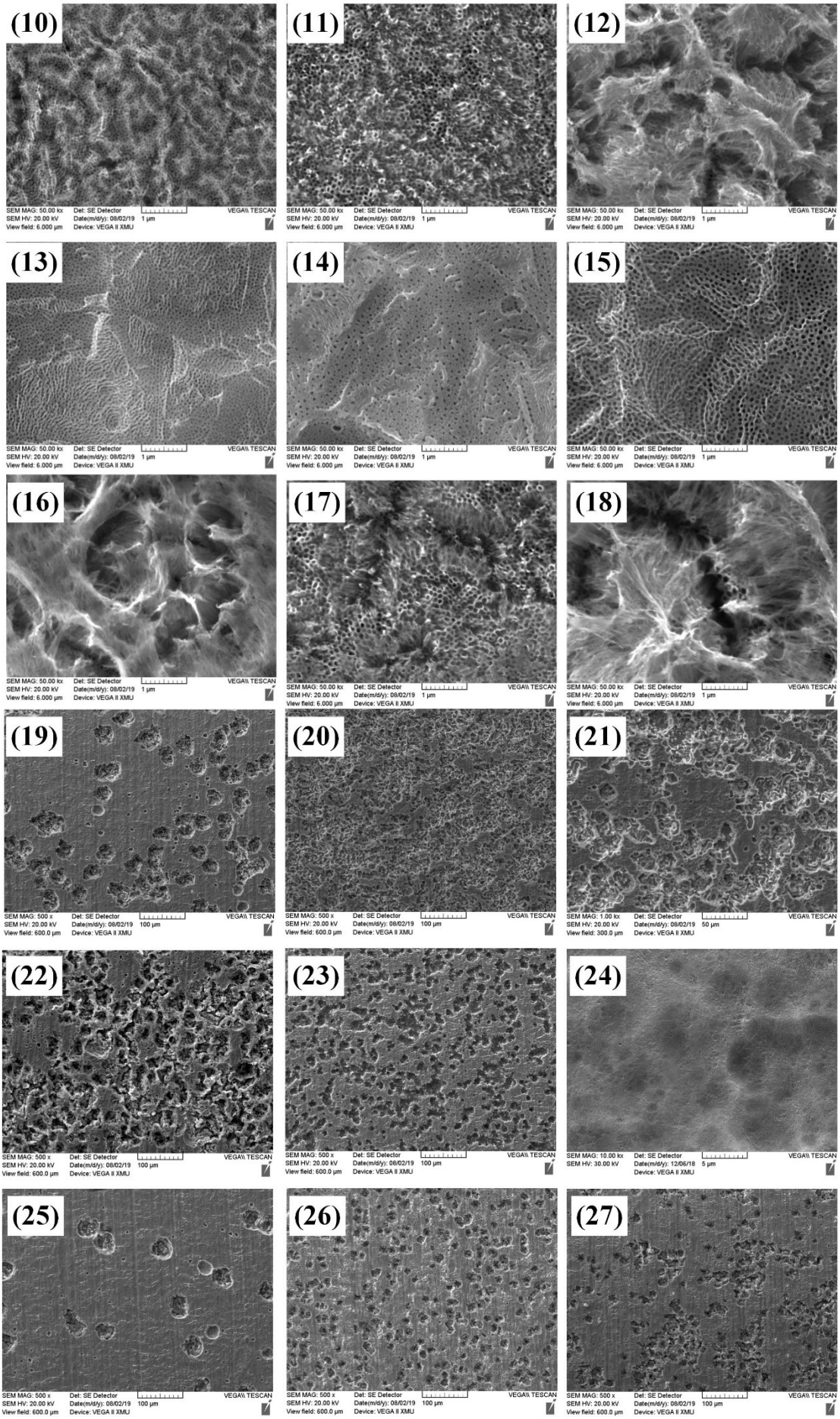


Figure S2. SEM images of TNAs orthogonal experiment samples

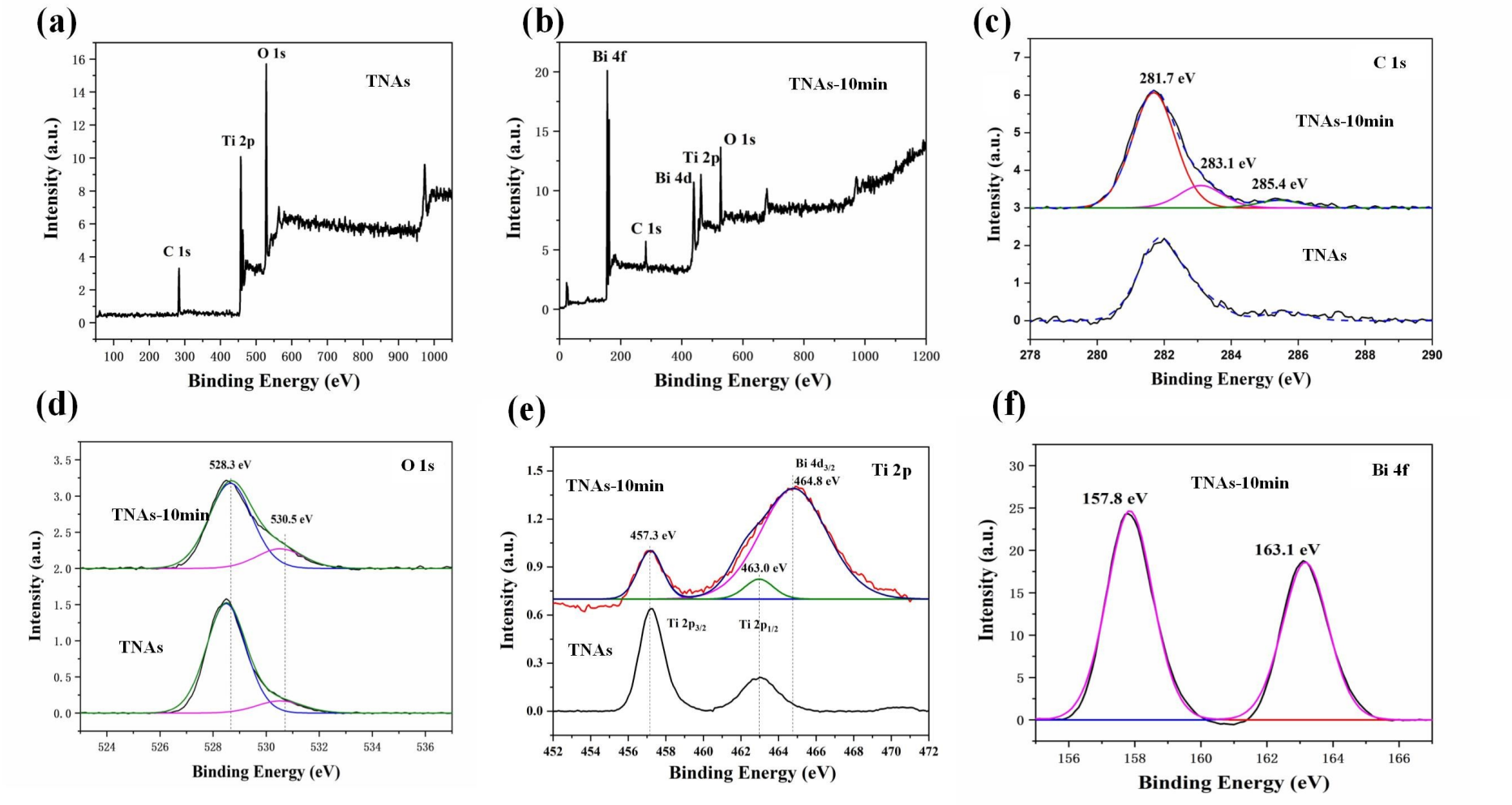


Figure S3 XPS Spectra of TNAs and TNAs-10.

(a) Survey of TNAs, (b) Survey of TNAs-10, (c) C 1s, (d) O1s, (e) Ti 2p, (f) Bi 4f

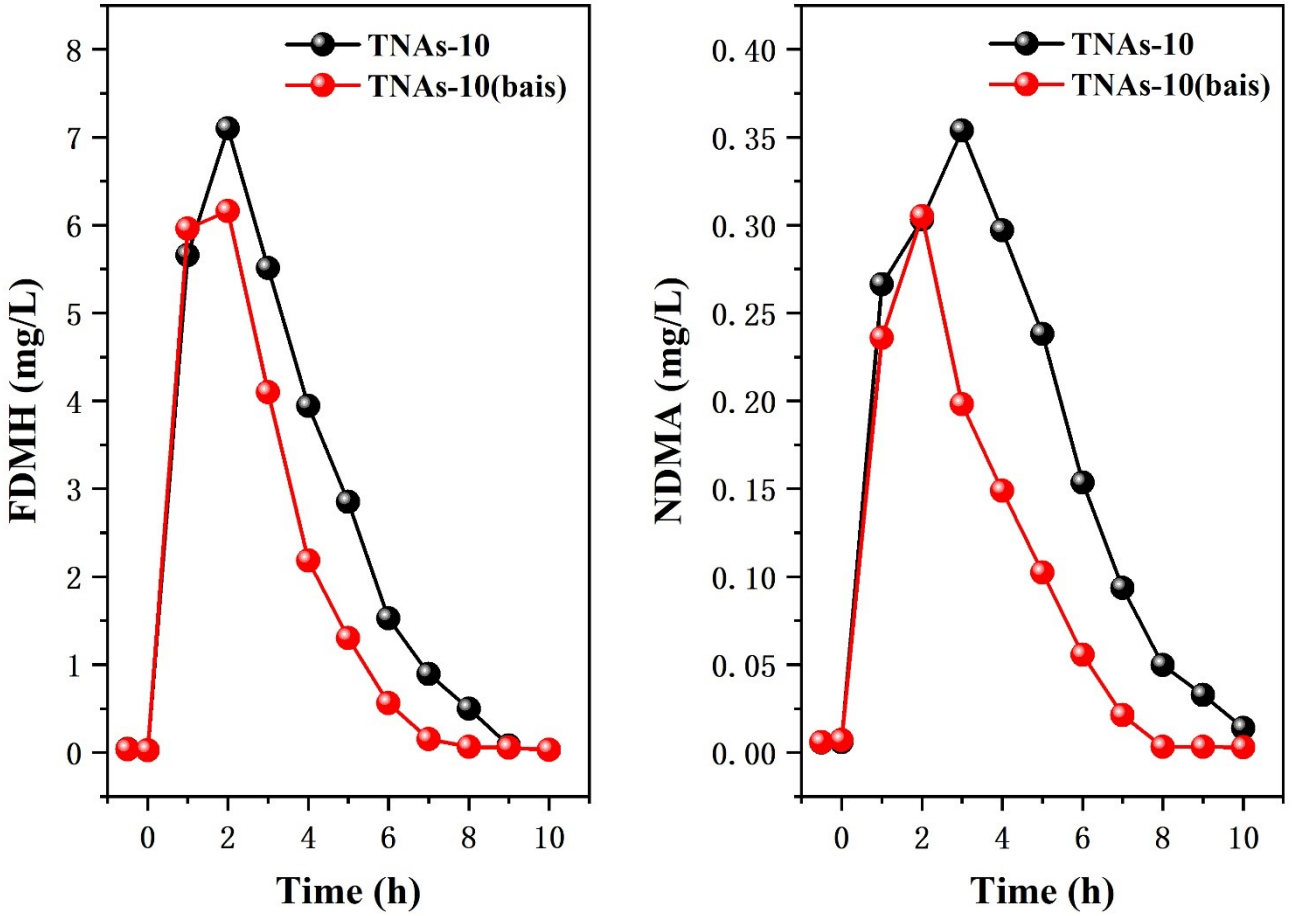


Figure S4 Degradation of FDMH and NDMA on TNAs-10 and TNAs-10 (bais)

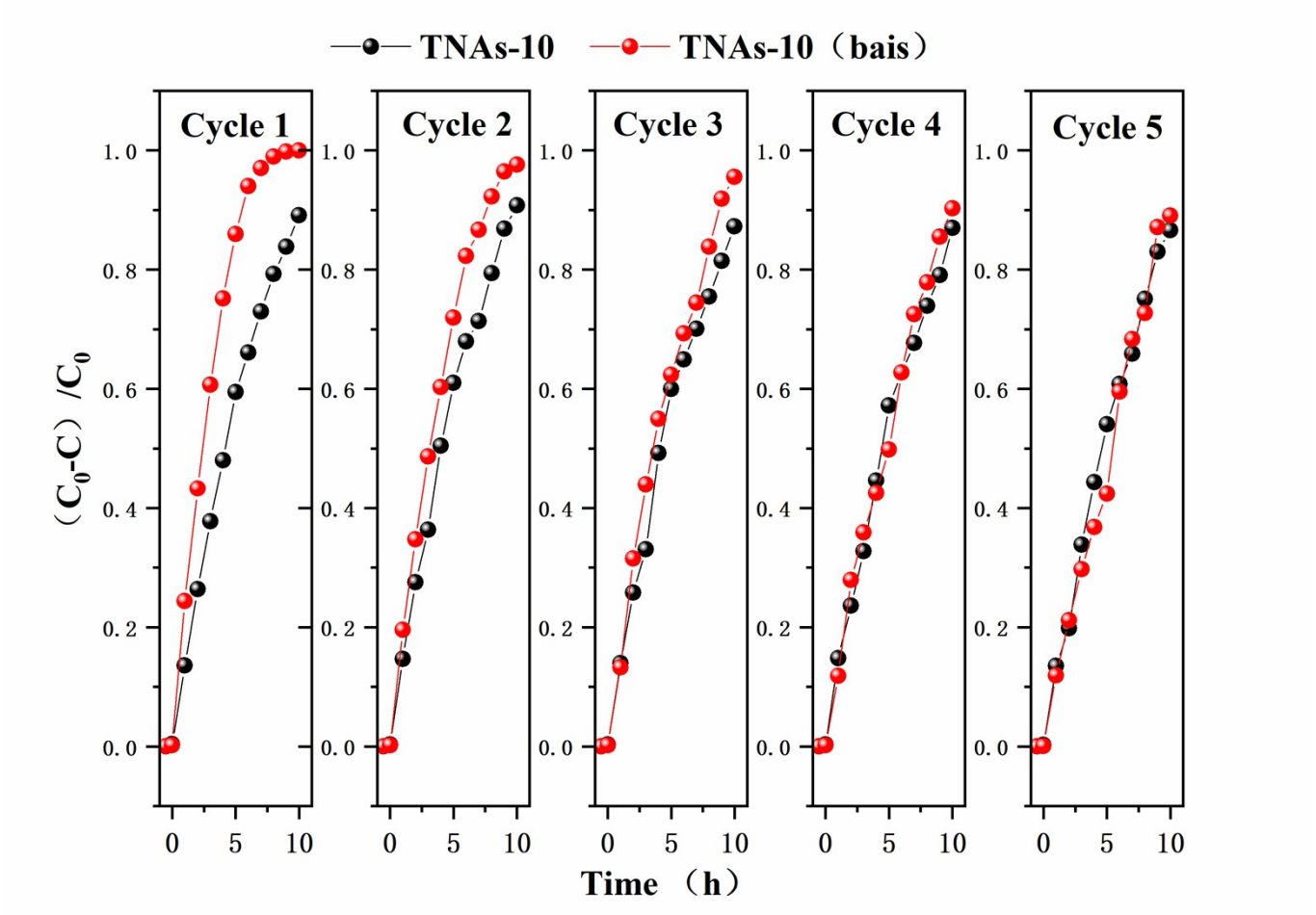


Figure S5 Cyclic photodegradation of UMDH on TNAs-10 and TNAs-10(bais) for five cycles

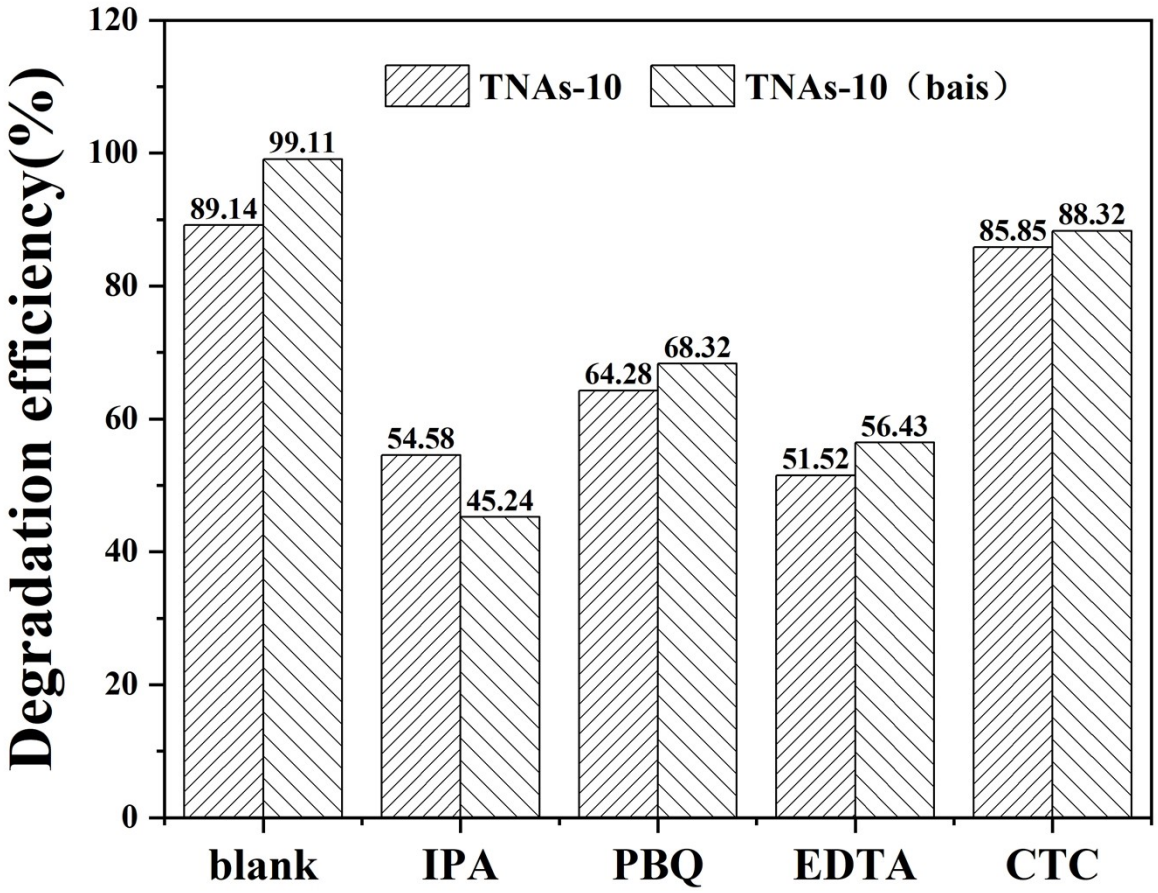


Figure S6 Active species capture experiments.

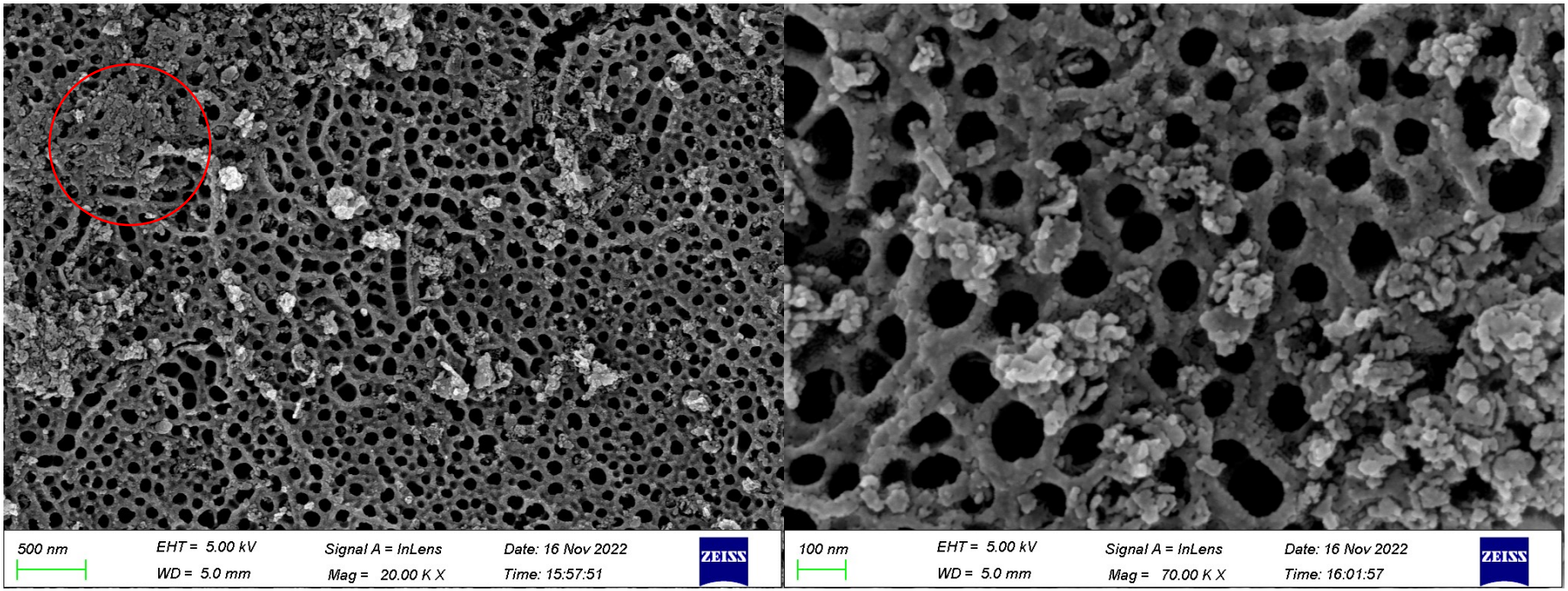


Figure S7 SEM of the TNAs-10(bias) after stability test.

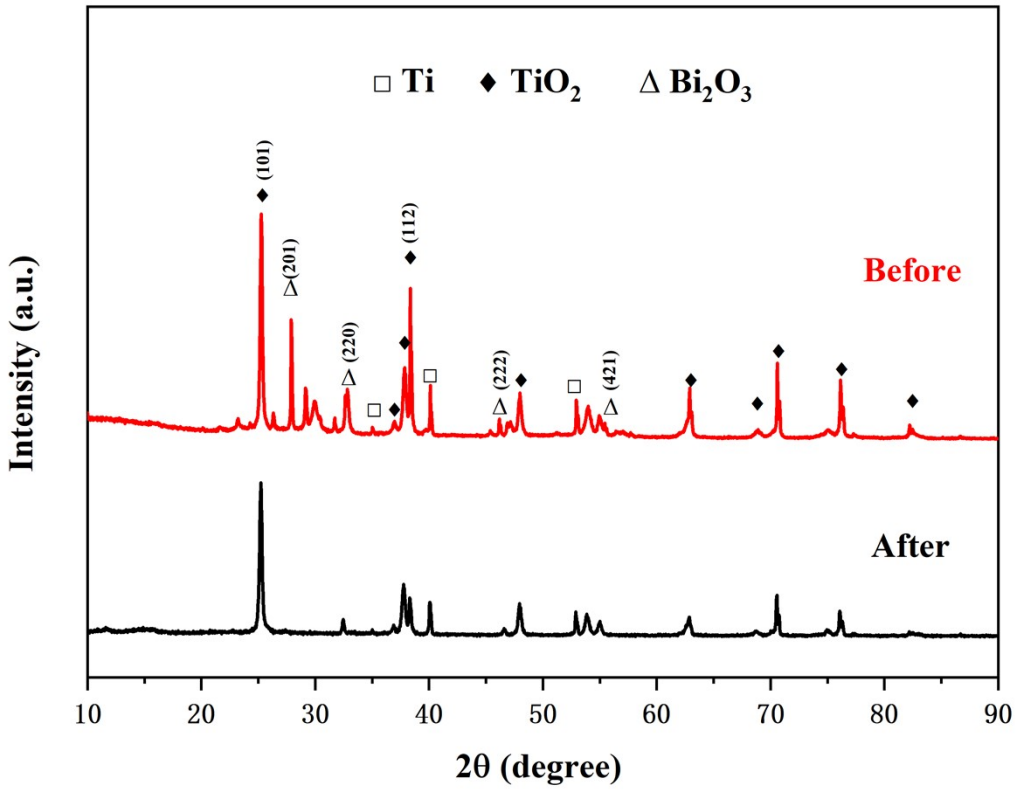


Figure S8 XRD of the TNAs-10(bias) after stability test.

Table S1 Intuitive analysis of photocurrent density on TNAs orthogonal experiments.

Factor number	Solute	Concentration	H_2O	pH	Voltage	Interval	Temperature	Time	Calcination					*i* (mA/cm^2)
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.1451
2	1	1	1	1	2	2	2	2	2	2	2	2	2	0.0942
3	1	1	1	1	3	3	3	3	3	3	3	3	3	0.0491
4	1	2	2	2	1	1	1	2	2	2	3	3	3	0.1076
5	1	2	2	2	2	2	2	3	3	3	1	1	1	0.0999
6	1	2	2	2	3	3	3	1	1	1	2	2	2	0.0324
7	1	3	3	3	1	1	1	3	3	3	2	2	2	0.0325
8	1	3	3	3	2	2	2	1	1	1	3	3	3	0.0741
9	1	3	3	3	3	3	3	2	2	2	1	1	1	0.0484
10	2	1	2	3	1	2	3	1	2	3	1	2	3	0.0896
11	2	1	2	3	2	3	1	2	3	1	2	3	1	0.1186
12	2	1	2	3	3	1	2	3	1	2	3	1	2	0.0419
13	2	2	3	1	1	2	3	2	3	1	3	1	2	0.1327
14	2	2	3	1	2	3	1	3	1	2	1	2	3	0.0726
15	2	2	3	1	3	1	2	1	2	3	2	3	1	0.0462
16	2	3	1	2	1	2	3	3	1	2	2	3	1	0.0636
17	2	3	1	2	2	3	1	1	2	3	3	1	2	0.0848
18	2	3	1	2	3	1	2	2	3	1	1	2	3	0.0690
19	3	1	3	2	1	3	2	1	3	2	1	3	2	0.0928
20	3	1	3	2	2	1	3	2	1	3	2	1	3	0.1026
21	3	1	3	2	3	2	1	3	2	1	3	2	1	0.0549
22	3	2	1	3	1	3	2	2	1	3	3	2	1	0.0995
23	3	2	1	3	2	1	3	3	2	1	1	3	2	0.1003
24	3	2	1	3	3	2	1	1	3	2	2	1	3	0.0372
25	3	3	2	1	1	3	2	3	2	1	2	1	3	0.0436
26	3	3	2	1	2	1	3	1	3	2	3	2	1	0.0974
27	3	3	2	1	3	2	1	2	1	3	1	3	2	0.0362
Mean value 1	0.108	0.088	0.083	0.080	0.090	0.083	0.077	0.110	0.107	0.118	0.084	0.082	0.086	
Mean value 2	0.080	0.113	0.107	0.111	0.094	0.076	0.073	0.090	0.074	0.073	0.096	0.104	0.104	
Mean value 3	0.074	0.061	0.073	0.071	0.079	0.104	0.112	0.062	0.081	0.071	0.082	0.076	0.072	
Range	0.034	0.052	0.034	0.040	0.015	0.028	0.039	0.048	0.033	0.047	0.014	0.028	0.032	