

Electronic Supporting Information

Fabrication of coral/double-wall TiO₂ nanotube arrays film electrode with higher photoelectrocatalytic activity under sunlight

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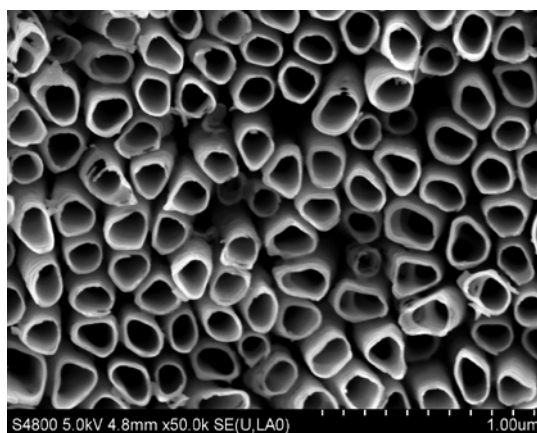


Figure S1. TiO₂ nanotube arrays formed at 60 V in 0.6 wt% NH₄F-10 vol% H₂O-EG electrolyte for 20 min.

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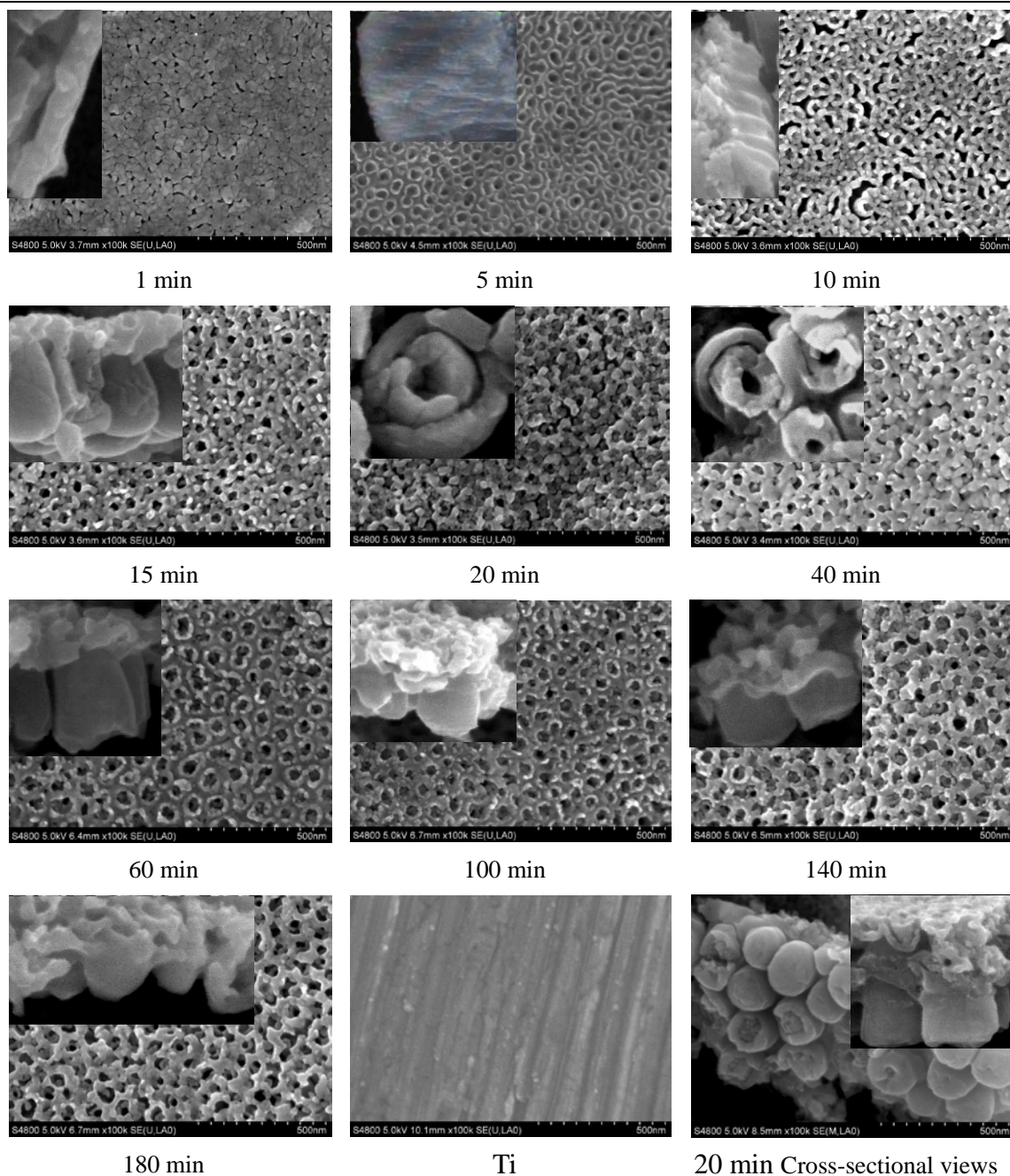


Figure S2. FE-SEM top-views of as-prepared Coral/DWNTs TiO_2 films at 60 V in 0.6 wt% [BMIM][BF_4]/10 vol% H_2O /EG electrolyte at different anodization time: 1 min, 5 min, 10 min, 15 min, 20 min, 40 min, 60 min, 100 min, 140 min, 180 min.

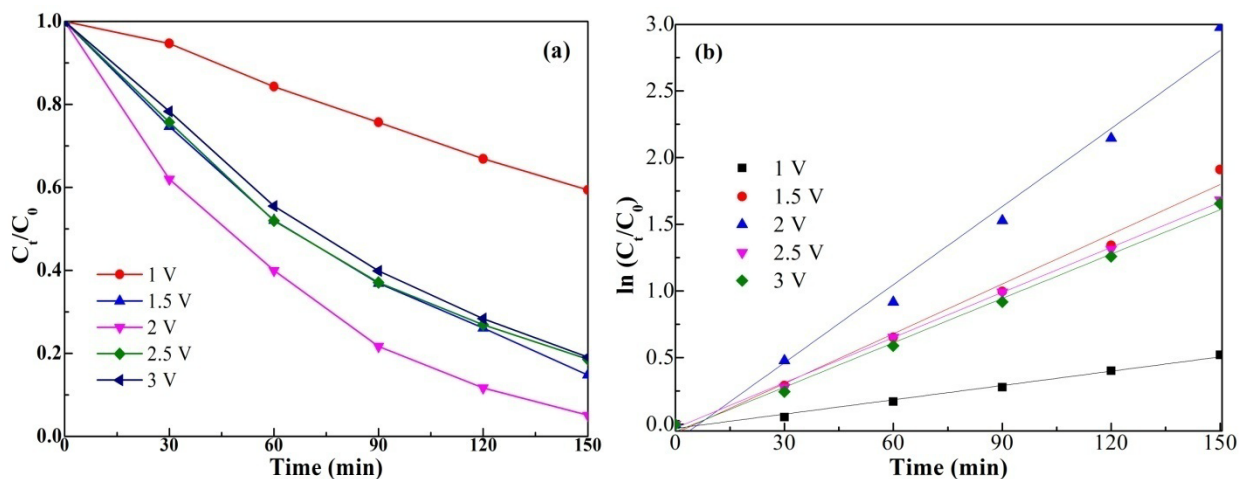


Figure S3 (a) PEC degradation of MO at different bias voltage. (b) $\ln(C_0/C_t)$ as a function of irradiation time in PEC degradation of MO at different bias voltage.

Table S1 Kinetic constants and regression coefficients for PEC degradation at different bias voltage

Bias voltage (V)	Kinetic constant (min^{-1})	R^2
1.0	0.002208	0.9651
1.5	0.005553	0.9954
2.0	0.009748	0.9840
2.5	0.006215	0.9857
3.0	0.005643	0.9986