Supporting Information for

Direct synthesis of superlong Pt|Te mesoporous nanotubes for electrocatalytic oxygen reduction

Hongjing Wang, Shuli Yin, Chunjie Li, Kai Deng, Ziqiang Wang, You Xu, Xiaonian Li,

Hairong Xue,* and Liang Wang*

State Key Laboratory Breeding Base of Green-Chemical Synthesis Technology,

College of Chemical Engineering, Zhejiang University of Technology, Hangzhou,

Zhejiang 310014, P.R. China.

E-mail: xuehairong@zjut.edu.cn; wangliang@zjut.edu.cn



Fig. S1 SEM image of the Te NWs.



Fig. S2 XRD pattern of the Pt|Te MNTs.



Fig. S3 SEM images of the Pt|Te NTs prepared (a) with PVP and (b) without F127 under the typical synthesis condition.



Fig. S4 SEM images of the Pt|Te NTs prepared without AA under the typical synthesis condition.



Fig. S5 CVs of the catalysts recorded in a N_2 -saturated 0.1 M HClO₄ solution at a sweep rate of 50 mV s⁻¹.



Fig. S6 LSVs of the samples in N₂-saturated (dotted line) and O₂-saturated (solid line) 0.1 M HClO₄: (a) Pt|Te MNTs, (b) Pt|Te NTs, and (c) Pt/C.



Fig. S7 (a) ORR polarization curves of the Pt/C with different RDE rotation rates. (b) The electron transfer numbers at different potentials.



Fig. S8 The ORR polarization curves before and after durability test for commercial Pt/C.

Catalyst	Eonset (V vs. RHE)	<i>E</i> _{1/2} (V vs. RHE)	Ref.
Pt Te MNTs	1.00	0.92	This work
Porous PtAg hollow	0.933	0.857	1
chain-like networks			
PtAu nanoparticles	0.98	0.83	2
PtCo nanomyriapods	0.92	0.82	3
Nanoporous Pt	0.85	/	4
Pt nanoparticles	0.85	/	5
PtPd networks	0.89	/	6
MCS Au@PtNi NPs	/	0.838	7
Dodecahedral CuPt nanoframes	/	0.87	8

Table S1. The comparisons of the ORR performance of the Pt|Te MNTs with the recently reported Pt-based catalysts.

References

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