

Supporting information for

The role of nanopores constructed on micropitted titanium surface on immune responses of macrophages and the potential mechanisms

Ruiyue Hang^a, Yuyu Zhao^a, Yi Zhang^a, Runhua Yao^a, Xiaohong Yao^{a, *}, Yonghua Sun^{a, b, *}, Di Huang^{c, d}, Ruiqiang Hang^{a, *}

a Shanxi Key Laboratory of Biomedical Metal Materials, College of Materials Science and Engineering, Taiyuan University of Technology, Taiyuan 030024, China

b College of Safety and Emergency Management Engineering, Taiyuan University of Technology, Taiyuan 030024, China

c Department of Biomedical Engineering, Research Center for Nano-biomaterials & Regenerative Medicine, College of Biomedical Engineering, Taiyuan University of Technology, Taiyuan 030024, China

d Shanxi-Zheda Institute of Advanced Materials and Chemical Engineering, Taiyuan 030032, China

* Corresponding authors.

E-mail: xhyao@tyut.edu.cn (X.H. Yao); sunyonghua@tyut.edu.cn (Y.H. Sun);
hangruiqiang@tyut.edu.cn (R.Q. Hang)

Volume ratio of H₂SO₄ and H₂O₂
1:3 3:1

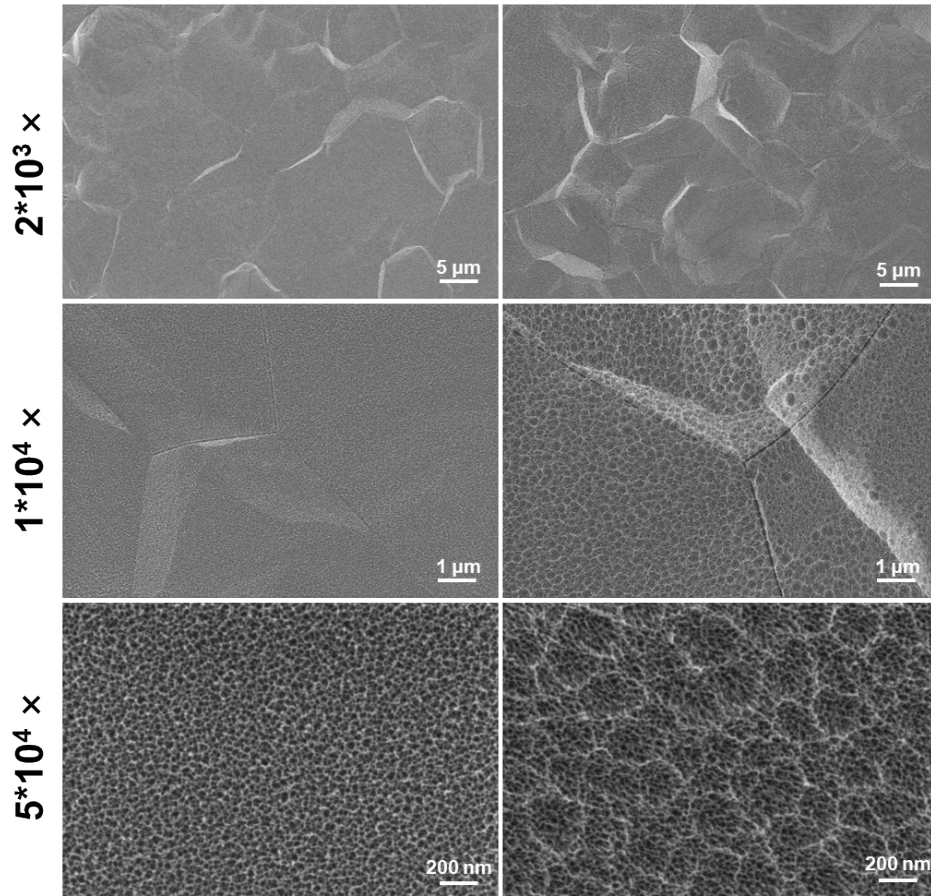


Figure S1 Surface SEM images of the specimens acid etched at room temperature in H₂SO₄ and H₂O₂ solutions with different volume ratios.

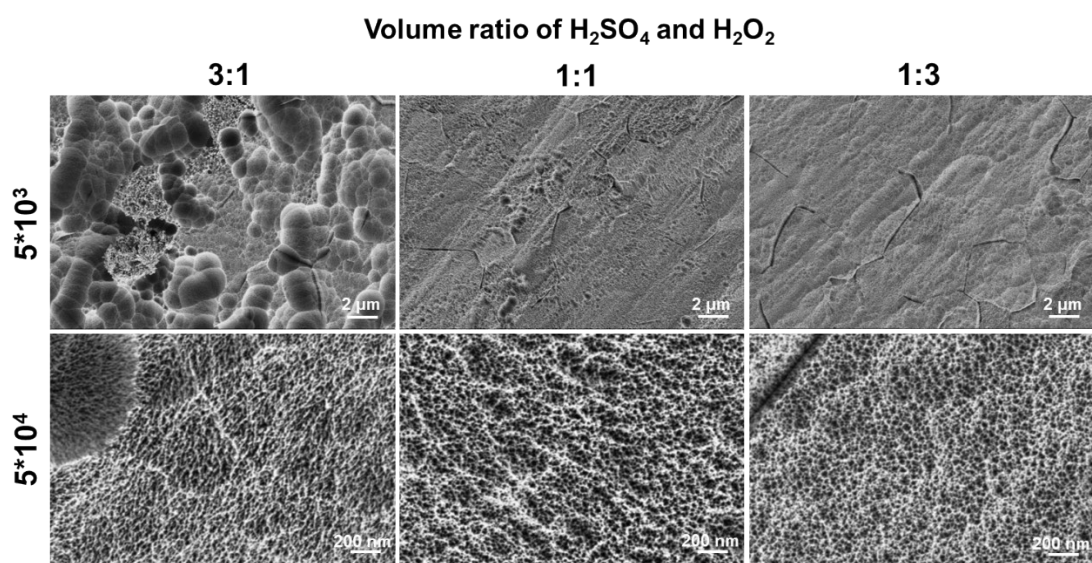


Figure S2 Surface SEM images of the specimens acid etched at 50 °C in H₂SO₄ and H₂O₂ solutions with different volume ratios.

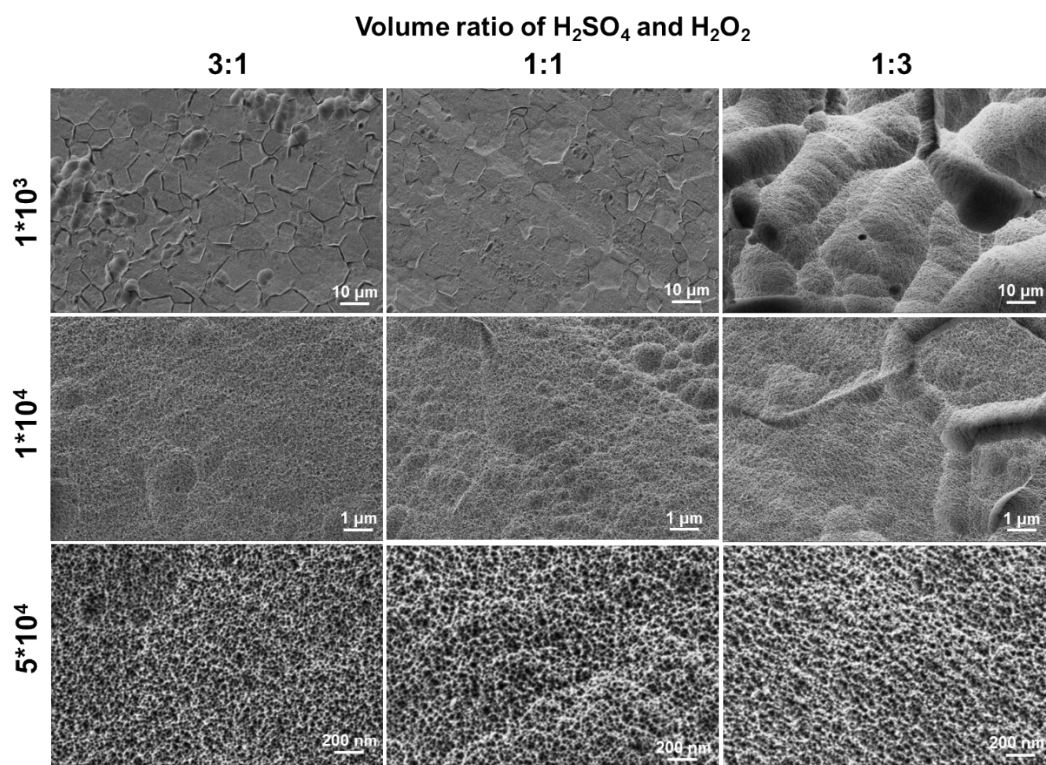


Figure S3 Surface SEM images of the specimens acid etched at 80 °C in H₂SO₄ and H₂O₂ solutions with different volume ratios.

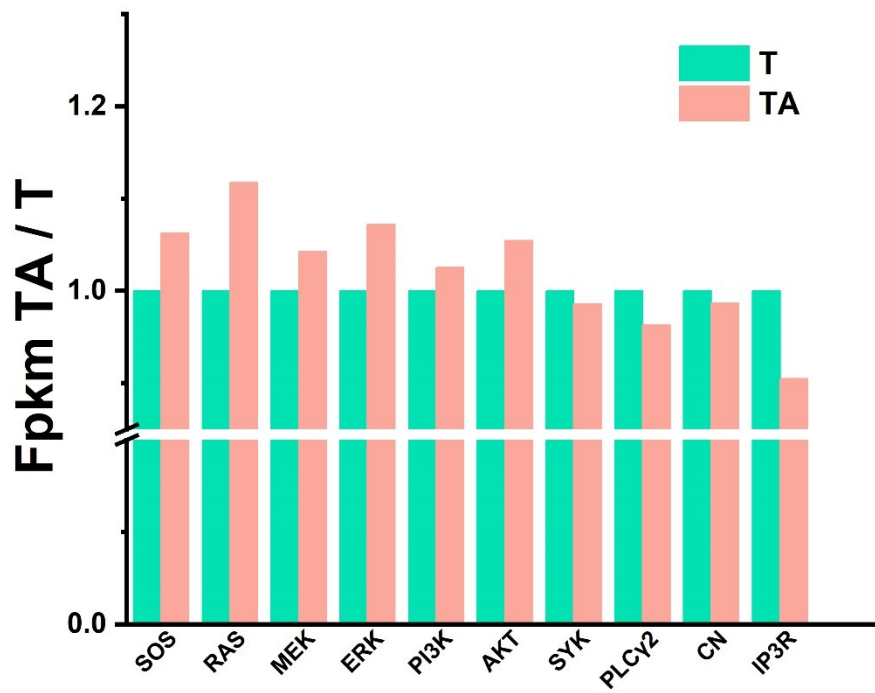


Figure S4 Expression levels of other key genes

Table S1 Elemental composition of the specimen surfaces determined by XPS

Specimen	Atomic concentrations (at.%)		
	Ti	O	C
T	16.42	45.48	38.10
TA	14.10	40.84	45.06