

Multi-leg TiO₂ nanotube photoelectrodes modified by platinized cyanographene with enhanced photoelectrochemical performance

Mahdi Shahrezaei ¹, Seyyed Mohammad Hossein Hejazi ¹, Yalavarthi Rambabu ¹, Miroslav Vavrecka ¹, Aristides Bakandritsos ¹, Selda Oezkan ², Radek Zboril ¹, Patrik Schmuki ^{1,2}, Alberto Naldoni ¹ and Stepan Kment ^{1,*}

¹. Regional Centre of Advanced Technologies and Materials, Faculty of Science, Palacky University Olomouc, 17. listopadu 1192/12, 771 46 Olomouc, Czech Republic

². Department of Materials Science and Engineering, University of Erlangen-Nuremberg, Martensstrasse 7, D-91058 Erlangen, Germany

* Correspondence: stepan.kment@upol.cz

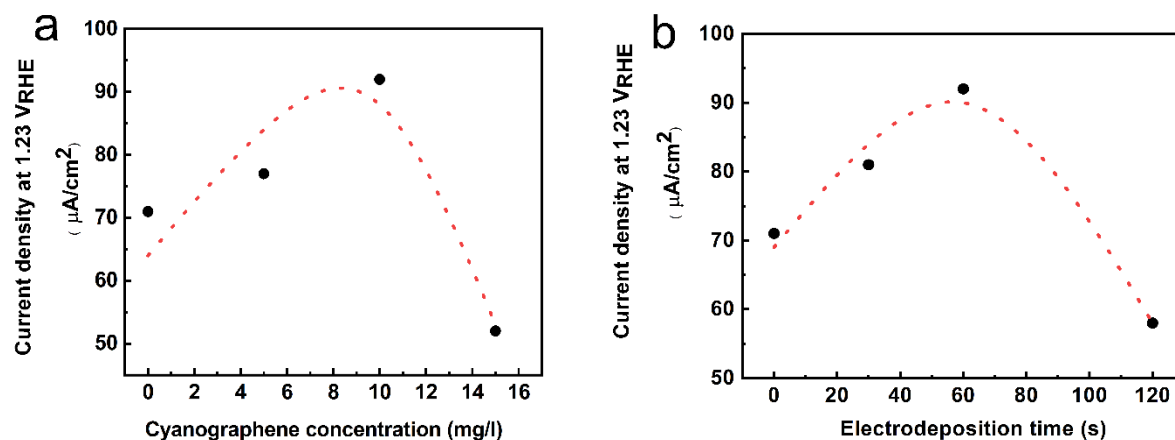


Figure S1. The effect of (a) cyanographene concentration and (b) electrodeposition time on the PEC-WS.

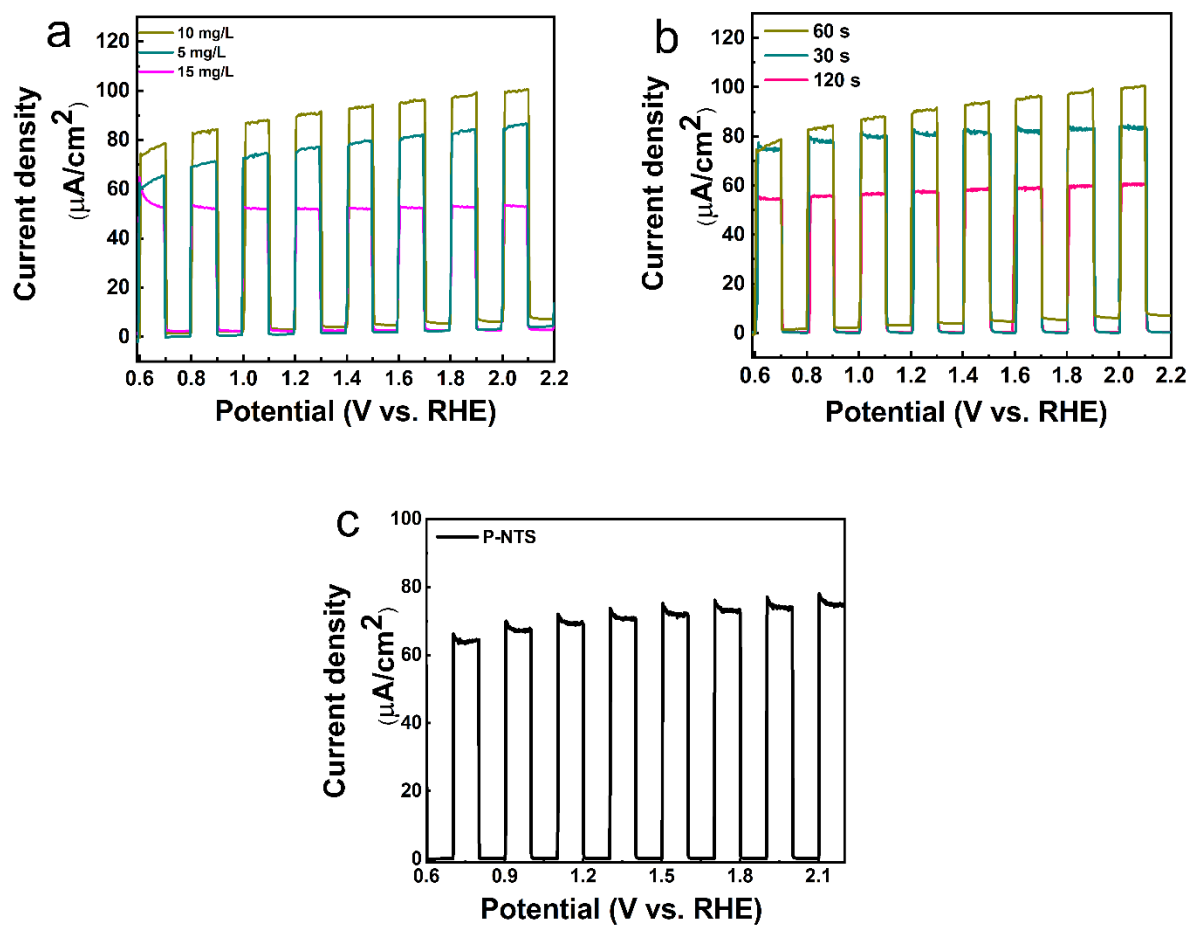


Figure S2. Photoelectrochemical response of synthesized samples measured under 1 sun illumination (100 mW/cm²-AM1.5 G) in 1 M NaOH solution at (a) different concentration of cyanographene, (b) different electrodeposition time, and (c) pure NTs.