

Broadband nanoplasmonic photodetector fabricated in ambient condition

Debika Banerjee^{1a}, Ivy Asuo^{1, 2, a}, François-Xavier Fortier¹, Alain Pignolet², and Sylvain G. Cloutier^{1*}

¹*Dept. of Electrical Engineering, École de Technologie Supérieure, 1100 Notre-Dame Ouest,*

Montréal, QC, H3C 1K3 Canada

²*Institut National de la Recherche Scientifique (INRS), Énergie Matériaux Télécommunications Research Centre, 1650 Boul. Lionel Boulet, Varennes (QC), J3X 1S2, Canada*

^a*Authors contributed equally*

**Address correspondence to sylvain.g.cloutier@etsmtl.ca.*

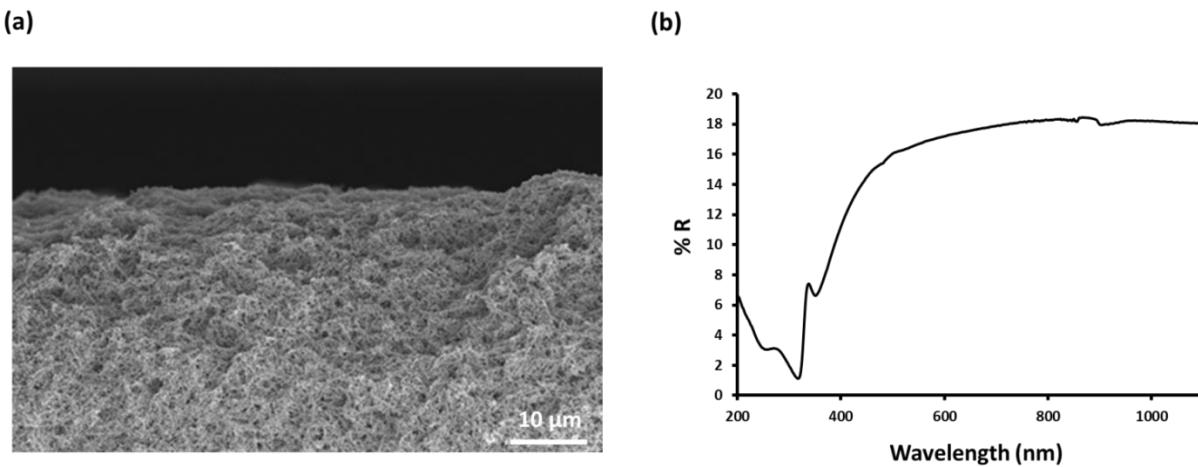


Figure S1: (a) SiNWs covered by dendrite layers of Ag, (b) Optical reflectance of SiNWs arrays covered with dendrite layers of Ag.

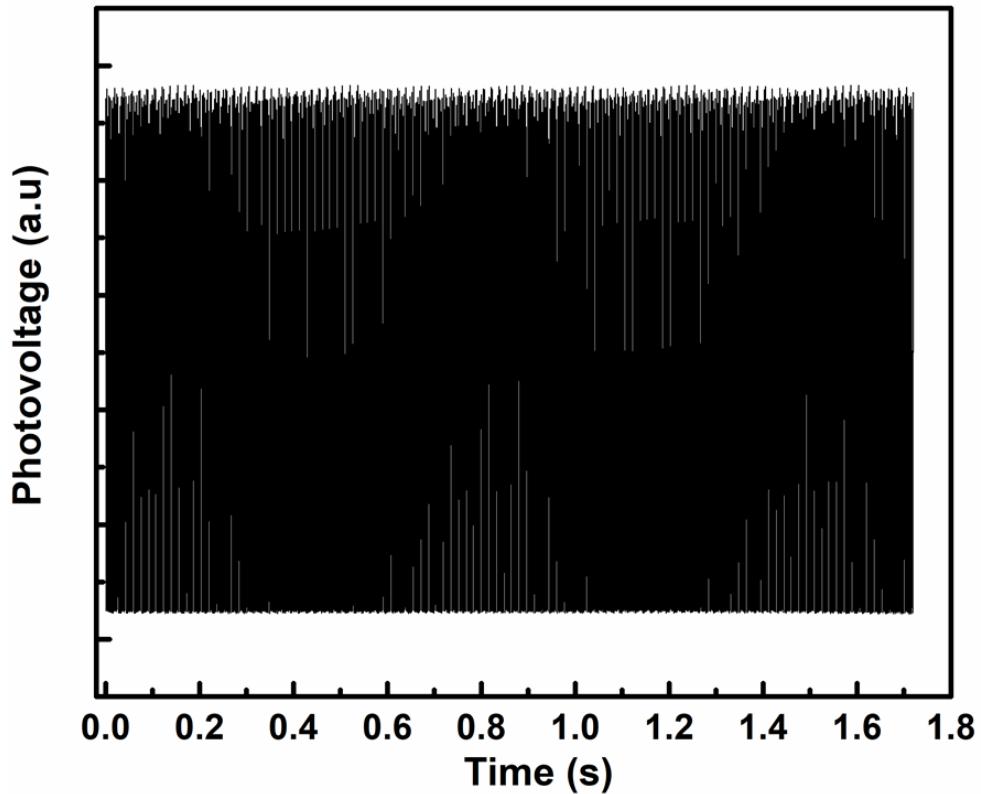


Figure S2: Stability measurement of the signal before the I-T measurements.

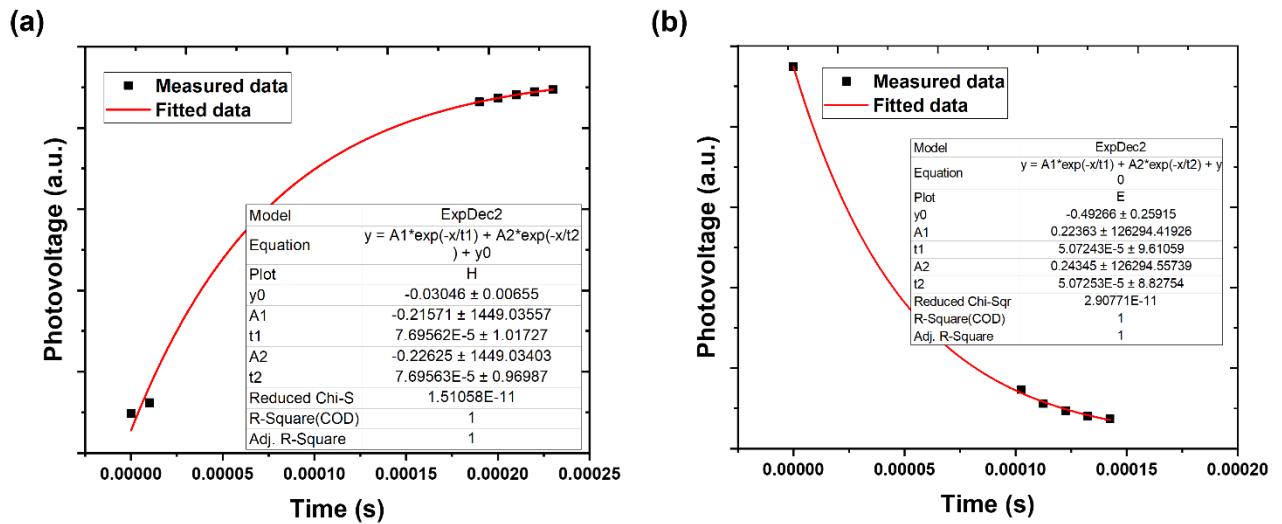


Figure S3: (a) Rise time calculation, and (b) Decay time calculation.