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Authors: C. Rodriguez, V. Torres Costa, O. Ahumada, V. Cebrián, C. Gómez-Abad, A. Díaz, M. Manso Silván



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Gold nanoparticle triggered dual optoplasmonic-impedimetric sensing of prostate-specific antigen on interdigitated porous silicon platforms

C. Rodríguez^{1,2}, V. Torres Costa^{1,3}, O. Ahumada², V. Cebrián², C. Gómez-Abad², A. Díaz², M Manso Silván^{1*}

¹Departamento de Física Aplicada and Instituto de Ciencia de Materiales Nicolás Cabrera, Universidad Autónoma de Madrid, 28049, Madrid, Spain

²Mecwins S.L., Parque Científico de Madrid PTM, C/Santiago Grisolia 2, Tres Cantos, 28760, Madrid, Spain

³Centro de Microanálisis de Materiales, Universidad Autónoma de Madrid, 28049, Madrid, Spain

*corresponding author: chloe.rodriguez@uam.es, tel: +34 914974919

Highlights

- Impedimetric platform based on interdigitated NiCr/porous silicon platforms
- Sandwich bioassay for detection of prostate specific antigen
- Au nanoparticle decreases equivalent series resistance at increasing biomarker concentration
- Dark field microscopy analysis allows a parallel optoplasmonic detection
- Dual sensing allows biomarker detection with an internal control

Abstract

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