

Supplementary Information

Electrical Immunosensor Made with Antigenic Peptide NS5A-1 Immobilized onto Silk Fibroin for Diagnosing Hepatitis C

*Lais R. Lima,^a Alem-Mar B. Goncalves,^b Fernando V. Paulovich,^c
Oswaldo N. Oliveira Jr.,^d Sidney J. L. Ribeiro^a and Marli L. Moraes^{*e}*

^a*Instituto de Química, Universidade Estadual Paulista, 14800-060 Araraquara-SP, Brazil*

^b*Instituto de Física, Universidade Federal do Mato Grosso do Sul,
CP 549, 79070-900 Campo Grande-MS, Brazil*

^c*Instituto de Ciências Matemáticas e de Computação and ^dInstituto de Física de São Carlos,
Universidade de São Paulo, 13566-590 São Carlos-SP, Brazil*

^e*Instituto de Ciência e Tecnologia, Universidade Federal de São Paulo,
12231-280 São José dos Campos-SP, Brazil*

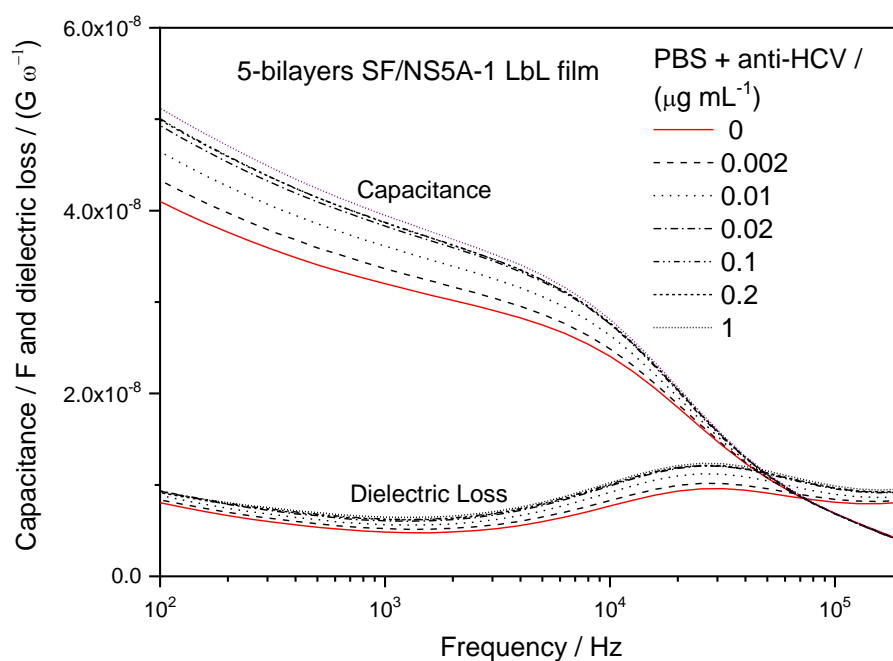


Figure S1. Capacitance and dielectric loss vs. frequency curves for 5-bilayers LbL film of SF/NS5A-1, in the absence and presence of different concentrations of anti-HCV.

*e-mail: marli.moraes@gmail.com

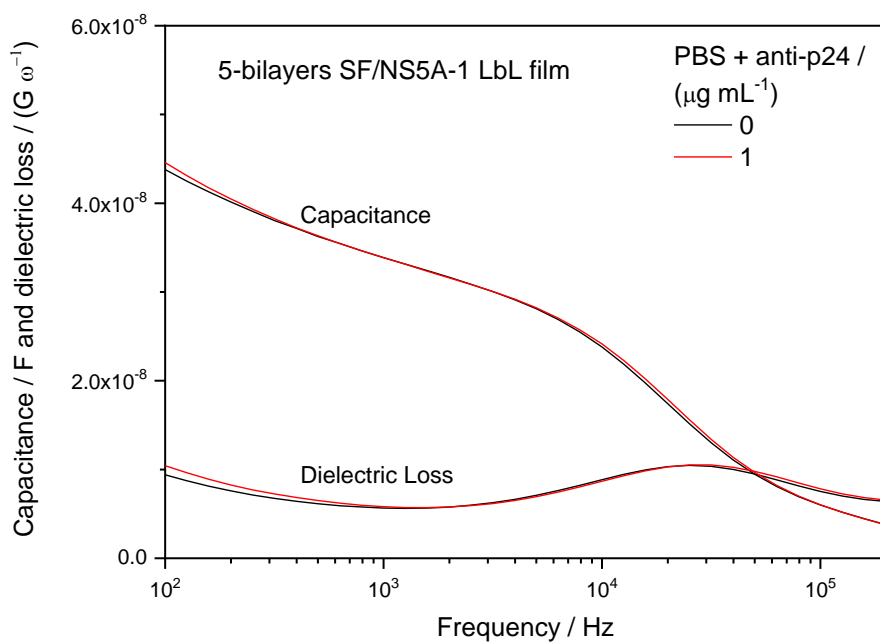


Figure S2. Capacitance and dielectric loss vs. frequency curves for a 5-bilayers LbL film of SF/NS5A-1, in the absence and presence of anti-p24 (HIV-1).

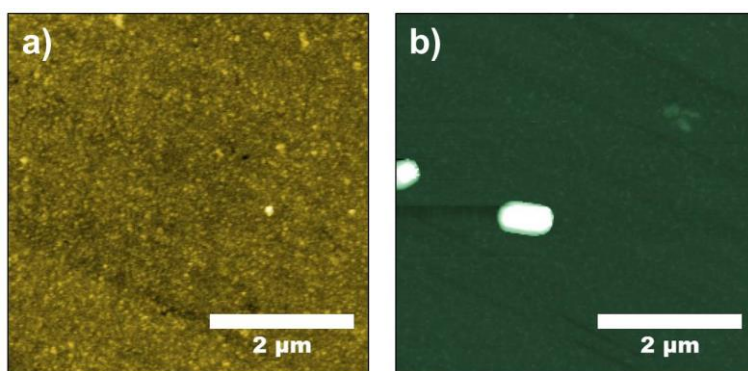


Figure S3. AFM topography images of interdigitated electrodes coated with SF/NS5A-1 in the (a) absence and (b) presence of anti-p24 (HIV-1). After exposition, it is possible to see some blobs, but the surface is almost the same. The RMS roughness for before and after exposition to HIV antibody are $R_{\text{RMS}} = 2.16$ and 1.90 nm, respectively.