

Decomposition of thimerosal and dynamics of thiosalicylic acid attachment on (001) GaAs surface observed with *in-situ* photoluminescence

Palani Arudra,¹ Yves Nguiffo-Podie,¹ Eric Frost,² and Jan J. Dubowski^{1,*}

*¹Laboratory for Quantum Semiconductors and Photon-Based BioNanotechnology,
Department of Electrical and Computer Engineering, Université de Sherbrooke,
Sherbrooke, Québec J1K 2R1, Canada*

*²Department of Microbiology and Infectiology, Faculty of Medicine and Health
Sciences, Université de Sherbrooke, Sherbrooke, Québec J1H 5N4, Canada*

SUPPORTING INFORMATION

Angle-Resolved XPS data (ToA 60°) of the Ga 3d peak region for GaAs (001) surface

* Author to whom correspondence should be addressed. Tel: 819-821-8000; Fax: 819-821-7937; www.dubowski.ca

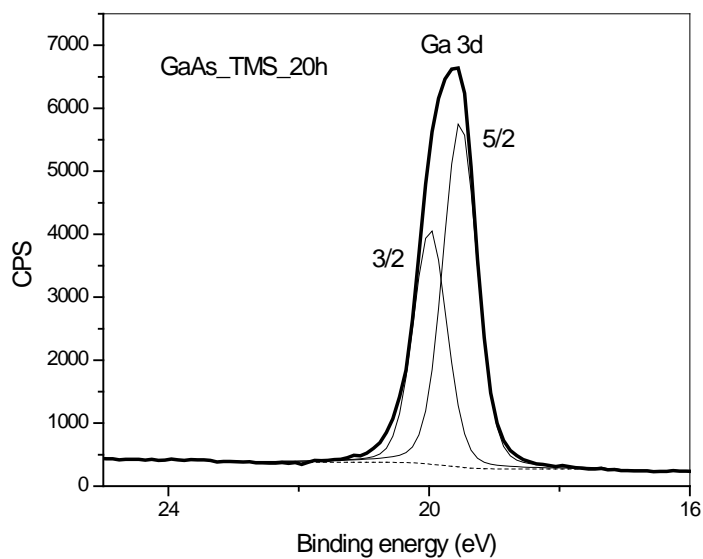
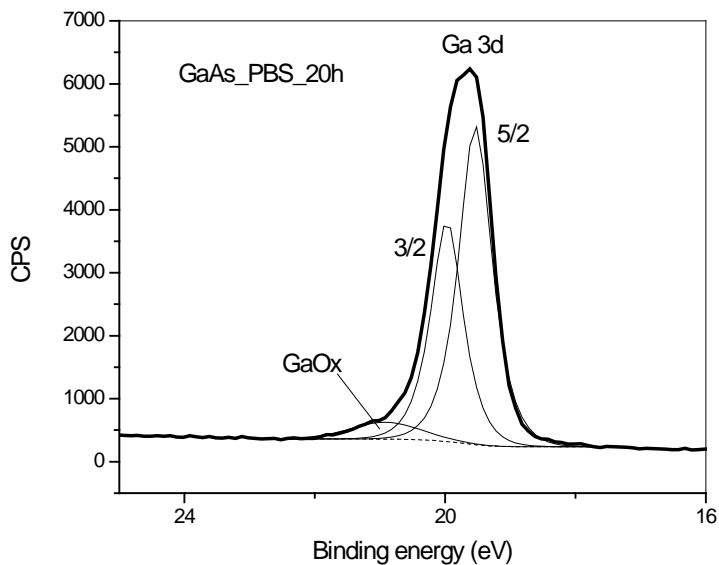


Figure S1: Angle-Resolved XPS data of the Ga 3d peak region for GaAs (001) surface treated with PBS only (top) and with thimerosal (0.1mg/ml) in PBS solution at pH = 7.4 (bottom). The Ga 3d spectrum of the PBS exposed GaAs (001) surface shows the presence GaO_x peak. However, due to passivation of the GaAs surface with TSA molecule, this peak is not detectable in GaAs (001) exposed to the TMS in PBS solution.