

ISMAEL JIMÉNEZ GALLARDO

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EDUCATION

- 2003 **Student of Computer Science Engineering** at the Open University of Catalonia (Spain)
- 2001 *September: Advanced Studies Degree (M.Sc.) in Electronics Engineering and Technology* from the Faculty of Physics, University of Barcelona (Spain)
- 1999 *September: Degree in Physics* from the Faculty of Physics, University of Barcelona (Spain)

GRANTS, STAYS AND RESEARCH ACTIVITIES

- 2002 *December: Stay at the **Institute of Materials Science of Seville** (Spain): FTIR-Drift study of the interaction of NH_3 with catalytically modified WO_3*
- July-September: Stay at the **Materials Science Department, University of Nagasaki** (Japan): TPD study of the NH_3 and H_2S desorption products on pure and catalysed WO_3 for gas sensing applications.*
- 2001 *May – July: Stay at the **Materials Science Department, University of Milano-Bicocca** (Italy): Surface chemistry of nanopowdered WO_3 in gas sensing reactions with NO and NO_2*
- November-December: Stay at the **Institute of Materials Science of Seville** (Spain): FTIR-Drift study of the interaction of NH_3 with catalytically modified WO_3*
- 2000 *January: **Predocorial grant from the government of Catalonia** (Spain). Ph-D student at the Electronics Department of the University of Barcelona. Topic of research: WO_3 nanoparticles applied to gas sensors.*
- 1999 *June – September: **Socrates grant - Stay at LAAS-CNRS of Toulouse** (France): Study of an amplification circuit for ISFET chemical sensors.*

Appendix 3. Curriculum Vitae

September – December: **Assistant lecturer at the Faculty of Physics, University of Barcelona** (Spain). Subjects: Applied Electronics (Physics degree), Electronic circuits (Electronics Engineering).

1998-1999 *September 1998 – June 1999: Collaboration grant at the Electronics Department, Physics Faculty, University of Barcelona* (Spain): *Development of a system for pulverisation coating of nanoparticles for gas sensors*

PUBLICATIONS

2003 **I. Jiménez**, M.A. Centeno, R. Scotti, F. Morazzoni, A. Cornet, J.R. Morante, *NH₃ interaction with catalytically modified nano WO₃ powders for gas sensing applications*. Journal of The Electrochemical Society, 150 (2003) H72-H80.

I. Jiménez, J. Arbiol, G. Dezanneau, A. Cornet and J.R. Morante, *Crystalline structure, defects and gas sensor response to NO₂ and H₂S of tungsten trioxide nanopowders*. Sens. and Actuators B 93 (2003) 475-485.

I. Jiménez, A. Vilà, A. Cornet and J.R. Morante, *Gas-sensing properties of catalytically modified WO₃ with copper and vanadium for NH₃ detection*. To be published in IEEE Sensors Journal.

R. Ferro, J. A. Rodríguez, **I. Jiménez**, A. Cirera, J. Cerdà, J. R. Morante, *Gas sensing properties of sprayed films of (ZnO)_x(CdO)_{1-x} mixed oxide*. Under review

I. Jiménez, T. Hyodo, Y. Shimizu, A. Cornet, J.R. Morante, M. Egashira, *H₂S interaction with chromium-catalysed WO₃: sensor response and desorption behaviour*. Under review.

2002 **I. Jiménez**, J. Arbiol, A. Cornet and J.R. Morante, *Structural and gas sensing properties of WO₃ nanocrystalline powders obtained by a sol-gel method from tungstic acid*. IEEE Sensors Journal, Vol 2, No. 4 (2002) 329-335.

I. Jiménez, A. Cirera, A. Cornet, J.R. Morante, I. Gràcia. C. Cané. *Pulverisation method for active layer coating on microsystems*. Sens. and Actuators B 84 (2002) 78-82.

2001 **I. Jiménez**, A. Cirera, J. Folch, A. Cornet and J.R. Morante, *Innovative method of pulverisation of prestabilized nanopowders for mass production of gas sensors*. Sens. and Actuators B 78 (2001) 78-82.