

# Raffaele Vallauri

Both Italian and French nationality

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## WORK EXPERIENCE

### **January 2002 – present:**

Responsible for the start-up of *NESS – Laboratory for Nanometric Epitaxial Structures on Silicon*, Politecnico of Milan and Milano-Bicocca Inter-university Centre based in Como.

### **January 2000 – December 2001**

*MBE Engineer* at Pirelli Componenti Ottici S.p.A. (now Corning OTI S.p.A). Working on GaAs based laser pumps and epitaxial growths process in the R&D semiconductor devices dept.

*Responsible* of a multiwafer MBE machine installation and start-up group (three people) from January to July 2001.

*Project leader* in the *New Signal Generation Materials and Devices Group* since August 2001, working on Lithium Niobate electro-optic modulators.

#### **Courses:**

- 1) “*MBE nitride growths (GaN)*” - *INFM TASC Lab* (Trieste, Italy).
- 2) “*Statistical Process Control*” - “Piero Pirelli” institute (Milan, Italy).

#### **Main technical skills acquired:**

Installation, use and maintenance of MBE and UHV semiconductor processing equipment. New clean rooms’ layout and hook up.

Interpretation of PL, HRXRD, SEM, AFM, SIMS, FTIR analysis. Use of Mass Spectrometer and RHEED.

### **April 1998 – December 1999**

*Research assistant* at the Applied Chemistry and Physics Department - Politecnico University of Milan.

Electrodeposition of copper for on-chip interconnections and of GMR (Giant Magnetoresistance) nanometric multilayers.

Papers presented at international congresses.

#### **Main technical skills acquired:**

Thin films electrodeposition, structural and morphological characterization.

## SCHOLARSHIPS

“*Advanced Ceramic Materials*”, AIMAT school, Italian Materials Engineering Association (1999 – Bergamo, Italy).

“*Structural design with Aluminum*” advanced specialization course - AIM, the Italian Metallurgical Association (1999 - Milan, Italy).

***“Productive System check-up”, “Industrial Production Management” and “Factory towards year 2000” scholarship at SDA, the Bocconi University School of Management, (1998 - Milan, Italy).***

**HIGHER EDUCATION**

***Materials Engineers (Master degree) graduation*** at Politecnico University of Milan. Final mark: **100 out of 100.** ( April 1998).

Master Thesis title: *“Giant Magnetoresistance in Cu/CoNi(Cu) nanometric multilayers made by electrodeposition”* .

**“Maturità Classica”** (Humanities High school degree - 5 years) obtained at “Liceo Classico B.ZUCCHI”, Monza (MI). Final mark: **52 points out of 60.** (July 1992).

**LANGUAGE SKILLS**

**French and Italian** mother tongue.

**English:** fluent.

- November 1999: two weeks spent at State College, Pennsylvania, USA.
- November 1998: one month spent in Boston and San Diego, USA.
- June 1997: “First Certificate in English” Cambridge Exam.

**COMPUTER SKILLS**

- Very good knowledge of Windows (3.xx, 95, 98 and NT).
- MS Office; Publisher; Adobe Photoshop, Paint Shop Pro, AutoCAD R14; Matlab 5.0; Macromedia Dreamweaver.
- Basic knowledge of C language and of SAP R3.

**PERSONAL DATA**

*Marital Status:* Married  
*National Service:* Accomplished

**PERSONAL ACTIVITIES**

Sports: swimming, trekking and sailing.  
Member of “Glénans”, a French sailing organization.  
Hobbies: meteorology and good readings.