Curriculum Vitae
Dr. rer. nat. Oliver S. Gröning

Personal data

Name:	Oliver Sauro Gröning
Title:	Doctor rerum naturalium (experimental physics)
From:	Gerlafingen, Switzerland
Born:	20th of April 1969 in Solothurn, Switzerland
Nationality:	Swiss
Civil status:	Unmarried
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Languages:	CH,D,E,F fluently spoken and written, I fluently spoken

Education

1976-1984:	Primary and secondary school in Gerlafingen
1984-1988:	Natural science grammar school in Solothurn Baccalaureate Type C
1989-1994:	Study of physics and mathematics at the University of Fribourg (Switzerland), graduated with the diploma thesis entitled: “Characterization of thermionic electron emitters by photoelectron spectroscopy”
1994-1999:	Dissertation in the solid state research group of Prof. Louis Schlapbach at the University of Fribourg. Thesis title: “Field emission properties of carbon thin films and carbon nanostructures”, degree earned with decoration of the jury.

Professional Experience

1994-1999:	Doctoral work at the University of Fribourg - Supervision of student lab courses - Supervision of exercises - Assistance for Ph.D. and diploma students
1993-1995:	Collaboration within a CTI sponsored project with Thomson Elektronenröhren AG, Lenzburg on the development of new thorium-free thermoemission cathodes.

1995-1999: Collaboration with **Motorola Inc. Res. (Tempe, USA)** on the field emission characterization of diamond like carbon field emission cathodes.

1999-2000: Post-Doc work in the Solid State research group of Prof. Louis Schlapbach at the University of Fribourg.

- Development of an UHV scanning anode field emission microscope
- Microscopic investigations of the field electron emission properties of carbon nanotubes
- Controlled growth of carbon nanotubes
- Investigations of hydrogen-carbon interactions
- Holding lectures in the frame work of the BENEFRI materials science and technology course.

2001-2003: Project leader at the EMPA Thun

- Management of the CTI-funded project "Controlled growth of carbon nanotubes in chemical vapour deposition"
- Management of a work package in the 5th frame work EU-Project CANVAD "Carbon Nanotube for Microwave Vacuum Devices"
- Evaluation and installation of a UHV LT-STM system at the EMPA in Thun.
- Preparation of the creation of the new section 127 "nanotech@surfaces" at the EMPA in Thun, which became operational 3.1.2003.

2004-to this day: Group leader at the EMPA Thun with research focus on:

- Field emission of carbon nanostructures with emphasis on technology transfer. Collaborations with: **COMET AG (Flamatt, Switzerland)**; **SONY Res. Lab. (Atsugi, Japan)**; **Thales S.A. (Paris)**; **Mapper Lithography (Delft, Netherlands), Philips Research (Aachen)**
- Investigation of carrier lifetime engineering in high power silicon PIN diodes in collaboration with **TOYOTA Europe (Brussels, Belgium) and TOYOTA Motorcompany (Japan)**
- Investigation of electronically active defects on carbon nanotubes
- Molecular self-assembly on nano-template surfaces
- Surface properties of quasicrystals and complex metallic alloys
- Properties of organic thin films on ultra-thin insulators
- On-surface synthesis
- Atomic- <-> Electronic-structure relationship in carbon nanostructures

2006-2014: Member of the scientific advisory committee for the development of the Swiss free electron laser Swiss-FEL at the Paul Scherrer Inst.

1.1.2007: Promotion to Senior Scientist at EMPA

Since 10.2010: Ombudsperson at EMPA for issues of ethics in science and good scientific conduct.

1.1.2011: Promotion to deputy section head of the EMPA laboratory nanotech@surfaces.

1.7.2014 Appointment to Distinguished Senior Researcher at Empa