


# CURRICULUM VITAE

## PERSONAL DETAILS

Name	Dr. Tobias Cramer	
Address	Via di Campiano 9 40067 Bologna	
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Email	<a href="mailto:tobias.cramer@unibo.it">tobias.cramer@unibo.it</a>	
Nationality	German	
Date of birth	28.9.1976, Osnabrück (D)	

## PROFESSIONAL EXPERIENCE

Since Mai 2017	Tenure-track Professor, Department of Physics and Astronomy, Bologna, Italy. Work in the semiconductor physics group. Focus on flexible and stretchable semiconductors for bioelectronics and photonic applications. Teaching of the course "Laboratory of Nanoscience and Technology" in the Master Degree "Materials Physics and Nanoscience (MANO)"
April 2014 - April 2017	Researcher, Department of Physics and Astronomy, University of Bologna, Italy. Work on organic semiconductors as photonic sensors within the European project IFLEXIS; responsible for the Atomic Force Microscopy lab; development of stretchable sensors for bioelectronics
March 2011 - April 2014	Postdoctoral research in the group of Prof. F. Biscarini, Centro Nazionale delle Ricerche (CNR), Bologna, Italy; focus on organic electronics and sensor device physics, measurement setup and data analysis for research in organic bioelectronics and neuronal interfaces, workpackage leader in European Project I-ONE-FP7 and Italian project Nanomax-Chem.
September 2010 - January 2011	Consultant and translator, E4 Computer Engineering, Scandiano, Italy; High Performance Computing.
October 2009 - February 2011	Programmer (part-time) in the group of C. Helma, Institute for Advanced Studies, University of Freiburg, Germany; Machine Learning and Data Analysis. Work in the framework of the EU-research project OpenTox.
July 2009 - August 2009	Visiting scientist in the group of David A. Case, The Scripps Research Institute, San Diego, USA. Modelling of Charge Transfer Phenomena at the liquid-solid Interface
January 2007 - December 2009	Postdoctoral research in the group of Prof. F. Zerbetto, University of Bologna, Italy; research on organic electronics, biosensors (within the EU-research project BIODOT), interfacial water

## EDUCATION

January 2009 - July 2010	Trainee teacher for physics, chemistry and technology at the Scheffel-Gymnasium Lahr (high-school), Germany; German State Examination for Teaching (grade: 'sehr gut' - equivalent to A)
January 2004 - Mai 2006	PhD degree (grade: 'summa cum laude'); thesis: 'DNA Charge Transfer: An Atomistic Model'; supervisors: Prof. T. Koslowski, Institute for Physical Chemistry and Prof. A. Blumen, Institute for Physics, University of Freiburg, Germany
October 1997 - November 2003	'Diplom' in Chemistry (equivalent to Master Degree, grade: 'sehr gut' - equivalent to A); thesis: 'Structural Analysis of Surface Bound Polymer Films'; thesis supervisors: Prof. J. R��he, Institute for Chemistry and Physics of Interfaces, Freiburg, Germany

**INVITED SCIENTIFIC TALKS; TEACHING ACTIVITY; CONFERENCE ORGANIZATION**

since 2017	teaching: Laboratory of Nanoscience and technology, University of Bologna, Italy
2014 - 2016	teaching: Laboratory course condensed matter physics, University of Bologna, Italy
July 2017	invited: "Atomic Force Microscopies to study Electronic Properties and Strain in Thin Films for Flexible Electronics."; 3 <sup>rd</sup> Bologna SPM workshop, Italy.
May 2017	invited: "Materials for BioElectronics: A Drift-Diffusion Research Experience", Excellence in Research Day, University of Linköping, Sweden
May 2017	Co-organizer of the Symposium "Electronic Textiles" at the European Materials Research Society Meeting, Strassbourg, France
February 2017	invited: "Organic electronics: From the physics of charge transport to life science applications", Seminar Lecture, Scuola Nazionale Superiore Pisa, Italy
October 2016	invited: "Organic electronics: From the physics of charge transport to life science applications", Adolph Merckle Institute, Fribourg, Switzerland
Mach 2016	Organizing Committee Bioel2016 – International Winterschool on Bioelectronics, Kirchberg in Tirol, Austria
September 2015	invited: "PEDOT:PSS in bioelectronics: an electrical, chemical and biomechanical interface", Orbitaly 2015, Modena, Italy
June 2015	invited: "Organic Transistors on Resorbable Bioscaffold for Bioelectric Recording and Stimulation: From in-vitro to in-vivo", Obelix Workshop 2015, Milano, Italy
March 2015	invited: "Organic Transistors on Resorbable Bioscaffold for Bioelectric Recording and Stimulation: From in-vitro to in-vivo", Bioelectronics Winterschool 2015, Kirchberg in Tirol, Austria
June 2014	invited: "Transducing Bioelectric Signals with Implantable Organic Transistors", International Conference on Organic Electronics (ICOE), Modena, Italy
April 2014	invited: "Soft and Bioresorbable Electronic Interfaces for Bioelectric Recordings", Coffee Talk ISOF CNR, Italy

**SCIENTIFIC OUTPUT**

currently	<p>+45 articles and book chapters, h-index: 17, +800 citations (WOS 8/02/2018)</p> <p>2 patents in the field of flexible electronics: PCT/IT2017/000050: "Sensitive field effect device and manufacturing method thereof"; EP17160942.3 "Active implantable multifunctional device on biodegradable/bioresorbable scaffold for loco-regional therapy of neurodegenerative diseases"</p> <p>Review activity for Advanced Materials, Small, ACS Materials and Interfaces and more (+10 different material science journals) see <a href="https://publons.com/a/1305626/">publons.com/a/1305626/</a></p>
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Bologna, 9/2/2018



Dr. Tobias Cramer