

INFORMAZIONI PERSONALI

Campani Marco

Data di nascita 05/10/1961 | Nazionalità Italiana

ESPERIENZA
PROFESSIONALE

01/02/2010–alla data attuale

Responsabile dell'Ufficio per il Supporto Tecnico Amministrativo agli Istituti SPIN, IOM e NANO di Genova

Consiglio Nazionale delle Ricerche
Piazzale Aldo Moro, 7, 00185 Roma (Italia)
<http://www.cnr.it>

Coordinamento attività ufficio (Servizi Generali, Gare e Appalti, Gestione Progetti di Ricerca, Reclutamento Personale, Consulenza Fiscale)

Attività o settore Ente pubblico di ricerca

06/2010–05/2012

Membro del CdA della Società Columbus Superconductors SpA

Consiglio Nazionale delle Ricerche, Roma (Italia)

2003–2014

Consulente servizi e infrastrutture ICT (supporto alla realizzazione della manifestazione)

Associazione Festival della Scienza, Genova (Italia)

Supporto tecnico-logistico per la progettazione e realizzazione di collegamenti dati/fonia per i diversi allestimenti della manifestazione. Supporto tecnico-logistico per i sistemi di web ticketing, e-commerce e pos.

01/02/2010–31/12/2011

Responsabile per gli adempimenti di chiusura dell'ex Centro di Responsabilità Scientifica di primo livello INFM - CNR

Consiglio Nazionale delle Ricerche, Roma (Italia)

Gestione del trasferimento delle disponibilità finanziarie verso altre strutture CNR; organizzazione della suddivisione del patrimonio;

01/12/2009–31/01/2010

Direttore f.f. Istituto Nazionale della Fisica della Materia - CNR

Consiglio Nazionale delle Ricerche, Roma (Italia)

Coordinamento gestione amministrativa

01/02/2009–30/11/2009

Responsabile delegato Istituto Nazionale per la Fisica della Materia - CNR - Sede di Genova

Consiglio Nazionale delle Ricerche, Roma (Italia)

Coordinamento funzionale delle attività della sede (gestione amministrativa, del personale e delle attività di supporto alla rete scientifica)

04/2008–07/2010

Membro commissione Spin-Off progetto UNI.T.I.

Consorzio UNI.T.I.

Via Balbi, 5 c/o Università degli Studi di Genova, 16100 Genova (Italia)
<http://www.progettouniti.it/>

Attività di valutazione di progetti per il trasferimento tecnologico e la creazione di spin off accademici; valutazione di business plan finalizzati alla creazione di impresa

Attività o settore Promozione del trasferimento tecnologico

09/2004–12/2005

Consulente ICT

Fondazione Istituto Italiano di Tecnologia
Via Morego, 30, 16163 Genova (Italia)
<http://www.iit.it>

Analisi e progettazione dei servizi ICT collegati alla fase di start-up della Fondazione IIT

Attività o settore Ente pubblico di ricerca

01/10/2010–31/01/2009

Coordinatore responsabile nazionale ICT dell'Istituto Nazionale per la Fisica della Materia

Istituto Nazionale per la Fisica della Materia (in seguito Consiglio Nazionale delle Ricerche)
Corso F. M. Perrone, 24, 16152 Genova (Italia)

Responsabile progettazione e sviluppo servizi ICT su rete geografica distribuita; coordinamento gestione banche dati; coordinamento attività di formazione e aggiornamento su tematiche ICT. Da gennaio 2006 incaricato anche del coordinamento dell'Area Servizi Generali INFN (supporto giuridico, coordinamento amministrativo).

Attività o settore Ricerca scientifica

2006–alla data attuale

Gare e Appalti - Impianti e strumentazione scientifica

In qualità di esperto, nell'ambito dell'UO Supporto Giuridico Appalti e Gare dell'Ufficio per il Supporto Tecnico Amministrativo agli Istituti SPIN, IOM e NANO del CNR, svolge le seguenti attività:

- Supporto alla definizione e stesura di Capitolati
- Supporto alla definizione di contratti
- Partecipazione a Commissioni di Gara (oltre 50 alla data odierna)

01/12/1996–30/09/2000

Responsabile dipartimentale servizi ICT - Dipartimento di Fisica

Università degli Studi di Genova, Genova (Italia)

Gestione ed amministrazione dei servizi ICT su rete locale e rete distribuita; progettazione e sviluppo reti dei servizi ICT; coordinamento del personale tecnico di supporto

01/10/1992–30/11/1996

Ricercatore

Istituto Nazionale per la Fisica della Materia
Corso F. M. Perrone, 24, 16152 Genova (Italia)

Attività di ricerca focalizzata sia nelle tecniche di imaging e di misura ottiche presso il gruppo di biofisica INFN - Università di Genova sia nel settore della machine vision presso il locale Gruppo di robotica ed intelligenza artificiale

Attività o settore Ente pubblico di ricerca

10/1992–06/1996

Docente universitario a contratto

Università degli Studi di Genova, Genova (Italia)

Attività di docenza sia in moduli del corso di Riconoscimento Automatico delle Forme - Corso di Laurea in Informatica - Facoltà di Scienza M.F.N. sia in corsi seminari sulla programmazione e sui sistemi di elaborazione dati

1986–1992 **Consulente ICT**

Assitecno s.n.c, Genova (Italia)

Attività di consulenza e sviluppo nel settore ICT prestate ad operatori pubblici e privati (progettazione e sviluppo di sistemi per la gestione amministrativa; progettazione e sviluppi di sistemi per l'analisi di mercato; progettazione e sviluppo di sistemi di controllo per la produzione).

ISTRUZIONE E FORMAZIONE

 09/2010 **None - 3rd Summer School on Network and Information Security**

Foundation for Research and Technology - Institute of Computer Science, Heraklion (Grecia)

 10/1980–12/1990 **Laurea in Fisica**

Università degli Studi di Genova, Genova (Italia)

COMPETENZE PERSONALI

Lingua madre italiano

Altre lingue

	COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
inglese	B2	C2	B2	B2	B2

Livelli: A1 e A2: Utente base - B1 e B2: Utente autonomo - C1 e C2: Utente avanzato

[Quadro Comune Europeo di Riferimento delle Lingue](#)

Competenze comunicative Ottime capacità relazionali e comunicative; buona capacità di adattamento in ambienti multiculturali favorita dal costante contatto con una comunità ampia di collaboratori.

Competenze organizzative e gestionali Buone capacità di coordinamento di persone (attualmente responsabile di un gruppo di 21 persone) e gestione progetti, maturate in tutte le esperienze lavorative su tematiche anche profondamente differenti. Buone capacità organizzative maturate nel contesto lavorativo. Buone esperienze di gestione del bilancio acquisite nel contesto lavorativo (logistica, facility management).

Competenze professionali Competenza in contabilità pubblica e nel settore gare e appalti acquisite nel contesto lavorativo. Esperienza nel controllo di gestione amministrativa e contabile, nel monitoraggio della spesa e nella programmazione.

Competenza digitale Networking - dalla progettazione alla direzione della realizzazione ed al collaudo di cablaggi strutturati. Installazione e configurazione di apparati attivi (Router, Switch, Access Point) e relativi servizi (aggregazione di banda, failover, redundant path, ...); segmentazione del traffico ed instradamento. Installazione e configurazione di appliance (VoIP, Firewall, Proxy, VPN).

SysAdm - dall'analisi delle necessità alla progettazione ed implementazione del parco server. Dimensionamento delle risorse Hardware e Software. Configurazione ed installazione di Server (Directory Server, Email, Web, FTP, PBX VoIP, NAS, SAN) sia utilizzando tecnologie proprietarie (Microsoft, Apple) sia tecnologie Open Source.

Database, Middleware, System Integration -dall'analisi delle esigenze alla proposta delle piattaforme applicative. Installazione ed amministrazione di DBMS e sistemi Web based (ERP, Propone le piattaforme applicative più adatte alle esigenze del cliente. Installa ed amministra DBMS e sistemi evoluti Web Based (ERP, ECM, CMS, CRM).

ULTERIORI INFORMAZIONI

Pubblicazioni

1) Learning To Recognize Visual Dynamic Events From Examples

Pittore M, Campani M, Verri A

INTERNATIONAL JOURNAL OF COMPUTER VISION

2000, VL 38 IS 1 PP 35-44

DOI: 10.1023/A:1008114700759

2) The Use Of Optical Flow For Road Navigation

Giachetti A, Campani M, Torre V

IEEE TRANSACTIONS ON ROBOTICS AND AUTOMATION

1998, VL 14 IS 1 PP 34-48

DOI: 10.1109/70.660838

3) Ccd Imaging Of The Electrical Activity In The Leech Nervous System

Canepari M, Campani M, Spadavecchia L, Torre V

EUROPEAN BIOPHYSICS JOURNAL WITH BIOPHYSICS LETTERS

1996, VL 24 IS 6 PP 359-370

DOI: 10.1007/BF00576708

4) Electrical Activity In The Leech Nervous System Can Be Studied Using A Ccd Imaging Technique

Canepari M, Campani M

NEUROBIOLOGY: IONIC CHANNELS, NEURONS, AND THE BRAIN

NATO SCIENCE SERIES A 1996, VL 289 PP 265-275

5) Robust Method For Road Sign Detection And Recognition

Piccioli G, De Micheli E, Parodi P, Campani M

IMAGE AND VISION COMPUTING

1996, VL 14 IS 3 PP 209-223

DOI: 10.1016/0262-8856(95)01057-2

6) Optic Flow And Autonomous Navigation

Campani M, Giachetti A, Torre V

PERCEPTION 1995, VL 24 IS 3 PP 253-267

DOI: 10.1068/p240253

7) Color Cues For Traffic Scene Analysis

De Micheli E, Prevete R, Piccioli G, Campani, M

IEEE Intelligent Vehicles Symposium 1995, Proceedings PP 466-471

8) Artificial Systems And Complex Behaviours

Martinengo A, Campani M, Torre V

IROS 1994 – Intelligent Robots and Systems PP 194-201

9) Complex Tasks And Control Strategies Of Robots

Martinengo A, Campani M, Torre V

1994 IEEE INTL Conference on Robotics and Automation PP 861-866

DOI: 10.1109/ROBOT.1994.351381

10) Robust Road Sign Detection And Recognition From Image Sequences

Piccioli G, De Micheli E, Parodi P, Campani M

IEEE Intelligent Vehicles Symposium 1994, Proceedings PP 278-283

11) Recovery Of Optical Flow For Intelligent Cruise Control

Giachetti A., Campani M., Sanni R., Succi A.,

IEEE Intelligent Vehicles Symposium 1994, Proceedings PP 91-96

12) Detection Of Lane Boundaries, Intersections And Obstacles

Cappello M., Campani M., Succi A.

IEEE Intelligent Vehicles Symposium 1994, Proceedings PP 284-289

13) The Use Of Optical Flow For Autonomous Navigation

Giachetti, A; Campani, M; Torre, V

Proceedings of ECCV 1994 Springer Lecture Notes in Computer Science

PP 146-151 DOI: 10.1007/3-540-57956-7_16

14) **A Robust Method For Road Sign Detection And Recognition**

Piccioli, G.; De Micheli, E.; Campani, M.

Proceedings of ECCV 1994 Springer Lecture Notes in Computer Science

PP 493-500 DOI: 10.1007/3-540-57956-7_55

15) **Extraction Of Vanishing Points From Images Of Indoor And Outdoor Scenes**

Straforini, M; Coelho, C; Campani, M

IMAGE AND VISION COMPUTING

1993 VL 11 IS 2 PP 91-99

DOI: 10.1016/0262-8856(93)90075-R

16) **Complex Tasks And Robots**

Martinengo, A; Campani, M; Torre, V.

International Conference on Artificial Neural Networks PP 319

DOI: 10.1007/978-1-4471-2063-6_75

17) **Visual Routines For Outdoor Navigation**

Campani, M.; Cappello, M.; Piccioli, G.; Reggi, E.; Straforini, M.; Torre, V.

IEEE Intelligent Vehicles Symposium 1993, Proceedings PP 107-112

DOI: 10.1109/IVS.1993.697306

18) **Complex Tasks And Robots**

Martinengo A, Campani M, Torre, V

IEEE Intelligent Vehicles Symposium 1993, Proceedings

PP 267-270 DOI: 10.1109/IVS.1993.697334

19) **Identifying Multiple Motions From Optical-Flow**

Rognone, A; Campani, M; Verri, A

Proceedings of ECCV 1992 Springer Lecture Notes in Computer Science 1992 VL 588 PP 256-266

20) **Motion Analysis From 1St-Order Properties Of Optical-Flow**

Campani, M; Verri, A

CVGIP-IMAGE UNDERSTANDING 1992 VL 56 IS 1

PP 90-107 DOI: 10.1016/1049-9660(92)90088-K

21) **Organic Cation Selectivity Of The Cgmp-Activated Channel In Retinal Rods**

Menini, A; Picco, C; Campani, M

FASEB JOURNAL 1992 VL 6 IS 1 PP A427

22) **The Recovery And Understanding Of A Line Drawing From Indoor Scenes**

Straforini, M; Coelho, C; Campani, M; Torre, V

IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE

1992 VL 3 PP 121-137

DOI: 10.1109/34.121797

23) **The Use Of Optical-Flow For The Autonomous Navigation**

Malisia, A; Baghino, A; Campani, M; Straforini, M; Torre, V

INTERNATIONAL JOURNAL OF NEURAL SYSTEMS

1992 VL 3 PP 121-137

DOI: 10.1142/S0129065792000450

24) **A Quantitative Model Of Phototransduction And Light Adaptation In Amphibian Rod Photoreceptors**

Torre V., Straforini M., Campani M.,

Seminars in Neuroscience 1992 VL 4 IS 1 PP 5-13

25) **A 1St Order Differential Technique For Optical-Flow**

Campani, M; Straforini, M; Verri, A

MOBILE ROBOTS V - Proceedings of SPIE - The International Society for Optical Engineering

1991 VL 1388 PP 409-414

DOI: 10.1117/12.48095

26) **A Fast And Precise Method To Extract Vanishing Points**

Coelho, C; Straforini, M; Campani, M

MOBILE ROBOTS V - Proceedings of SPIE - The International Society for Optical Engineering

1991 VL 1388 PP 398-408

DOI: 10.1117/12.48094

27) A Fast And Precise Method To Extract Vanishing Points

Straforini, M; Coelho, C; Campani, M

CLOSE-RANGE PHOTOGRAMMETRY MEETS MACHINE VISION, PTS 1 AND 2 1990 VL 1395
PP 266-274

28) Computing Optical-Flow From An Overconstrained System Of Linear Algebraic Equations

Campani, M; Verri, A

THIRD INTERNATIONAL CONFERENCE ON COMPUTER VISION - ICCV 90 PP 22-26

29) Model Of Phototransduction In Retinal Rods

Torre, V; Forti, S; Menini, A; Campani, M

COLD SPRING HARBOR SYMPOSIA ON QUANTITATIVE BIOLOGY

1990 VL 55 PP 563-573

DOI: 10.1101/SQB.1990.055.01.054

30) Using Geometrical Rules And A Priori Knowledge For The Understanding Of Indoor Scenes

Coelho, C; Straforini, Marco; Campani, M

Proceedings of the British Machine Vision Conference - BMVC 1990

PP 41.1-41.6

DOI: <http://dx.doi.org/10.5244/C.4.41>

CURRICULUM VITAE

Federico Cilento

PERSONAL INFORMATION

Name, Surname	Federico Cilento
Address	.
Date of Birth	24-04-1983
Place of Birth	
Nationality	Italian
Phone	
Mobile	
Skype	.
E-Mail	.
Personal Webpage	.
Institution	Elettra – Sincrotrone Trieste S.C.p.A., Strada Statale 14, km 163.5, 34149 Basovizza, Trieste, Italy

EDUCATION

1997-2002	Diploma di Maturità Scientifica Liceo Scientifico Statale "G. Aselli" – Cremona Grade: 98/100
2002-2005	Bachelor Degree in Physics Università Cattolica del Sacro Cuore – Brescia Thesis Title: "Dinamiche Strutturali di Nanosistemi Ordinati Eccitati da Impulsi Laser Ultracorti" Supervisor and Assistant Supervisor: Dr. Gabriele Ferrini, Prof. Fulvio Parmigiani Grade: 110/110 with 'Lode' – Link to PDF version
2005-2007	Master Degree in Physics Università Cattolica del Sacro Cuore – Brescia Thesis Title: "Dinamiche Elettroniche Fotoindotte in Superconduttori ad Alta Temperatura Critica" Supervisor and Assistant Supervisor: Dr. Gabriele Ferrini, Dr. Claudio Giannetti Grade: 110/110 with 'Lode' – Link to PDF version
2009-2011	PhD in Physics c/o the University of Trieste – Physics Department Research Activity performed c/o the Elettra Synchrotron (T-ReX), Basovizza, Trieste Title: "Non-equilibrium phase diagram of Bi2212 cuprate superconductors revealed by ultrafast optical spectroscopy" Supervisor: Prof. Fulvio Parmigiani – Link to PDF version

WORKING EXPERIENCES

2008	Collaboration Contract c/o the Università Cattolica del Sacro Cuore – Brescia (DMF, Department of Mathematics and Physics, Elphos Laboratory) Activity: Setting-up and characterization of a system for ultrafast time-resolved (pump/probe) optical spectroscopy with supercontinuum probe.
2012	Collaboration Contract c/o the Elettra Synchrotron, Basovizza, Trieste Activity: Study of surface states and Fermi surfaces in materials with a strong electronic correlation, particularly HTSC and topological insulators, through time-resolved ARPES (Angular Resolved PhotoEmission Spectroscopy). Development of optical systems, control electronics and TOF (time-of-flight) detector.

2012-2016	<p>Four-Years Postdoc Position at the T-ReX Laboratory, FERMI@Elettra Project, Elettra – Sincrotrone Trieste S.C.p.A. (Trieste, Italy).</p> <p>Aim of the position was to develop ultrafast, time-resolved optical and photoelectron spectroscopies that will be part of the new T-ReX facility, opened to users in 2016/2017. During the project, the design and specifications of the new T-ReX facility in the FERMI Experimental Hall has been developed. The T-ReX Laboratory has been moved in the new place and successfully commissioned. Several upgrades to the scientific instrumentation have been performed, including the laser sources and the hemispherical analyzer. An ultrafast 9.3 eV photon source has been developed, and an advanced HHG source is currently under design. The scientific activity included the study of cuprate and iron-based superconductors with both optical and photoelectronic ultrafast probes, TR-ARPES studies on graphene and on topological insulators, as well as the development of a novel laser-driven UV source for TR-ARPES studies. These studies have led to the publication of more than 15 papers on peer-reviewed journals. Several proposals for access to national and international facilities have been written and obtained beamtime. The scientific results have been presented at international conferences and workshops.</p>
Since 2016	<p>Scientist in charge of the T-ReX Laboratory and Facility, Elettra – Sincrotrone Trieste S.C.p.A. (Trieste, Italy).</p>

RESEARCH INTERESTS

My research activity concerns the study of the physical properties displayed by materials characterized by strong electronic correlations (Cuprates, Pnictides, CuGeO_3 , VO_2), leading to unusual and interesting ordered phases (like superconductivity and magnetism). My approach to face the problem exploits time-resolved spectroscopies, both optical and photoelectronic, based on ultrashort (<100 fs) laser pulses combined in a pump-and-probe scheme. In particular, I demonstrated that the study of states of matter under non-equilibrium conditions can reveal new and interesting phenomena about the material under scrutiny, that are hidden at equilibrium. My research activities are based on novel time resolved spectroscopies, including time-resolved optical spectroscopy with broadband probe (covering the visible and near infrared spectral regions) and time- and angle-resolved photoelectron spectroscopy (TR-ARPES) with probe in the near- and extreme-ultraviolet, that I developed and commissioned. In particular, I developed a novel ultrafast source producing ≈ 9 eV ultrashort pulses at 50-250 kHz, and a HHG beamline at high-repetition rate for TR-ARPES studies. These sources will be important for the study of the non-equilibrium electronic properties of complex materials over their entire Brillouin Zone.

RESEARCH EXPERIENCE

- Study of time-resolved, non-equilibrium optical properties of superconducting materials (Copper and Iron Oxides) and in general of systems with a strong electronic correlation.
- Development of mathematical models for the interpretation of the optical properties of a material under non-equilibrium conditions.
- Deep knowledge and experience as operator and user of several kinds of laser systems (oscillators, amplified systems) and optical devices, design of pump-probe setups, ultrafast spectroscopy with laser radiation in the UV, visible, near-IR and mid-IR spectral regions, high-harmonic generation.
- Knowledge and design of systems for Angular-Resolved-Photoelectron-Spectroscopy (ARPES), also in combination with high-harmonic generation sources for TR-ARPES studies.
- Experience as a user at facilities based on high-harmonic generation and familiarity with experiments at beamlines exploiting synchrotron and free-electron-laser radiation.

SCHOOLS, CONFERENCES AND WORKSHOPS

1. (2009) "XIV Training course on the physics of strongly correlated systems"
Vietri sul Mare (SA, Italy), 5-16 October 2009, <http://scs.physics.unisa.it/TCXIV/>
2. (2010) "XV Training course on the physics of strongly correlated systems"
Vietri sul Mare (SA, Italy), 4-15 October 2010, <http://scs.physics.unisa.it/TCXV/>
3. LEES 2010 (Low Energy Electrodynamics in Solids)
Les Diablerets (Switzerland), 5-10 July 2010
4. NGSCES 2012 (New Generation in Strongly Correlated Electronic Materials)
Portoroz (Slovenia), 25-29 June 2012
5. ICES2012 (12th International Conference on Electronic Structure and Spectroscopy)
Saint Malo (France), 16-21 September 2012
6. NGSCES 2013 (New Generation in Strongly Correlated Electronic Materials)
Sestri Levante (Italy), 30 June – 05 July 2013
7. ICTP, *Conference on Ultrafast Dynamics of Correlated Materials*
Trieste (Italy), 14-18 October 2013
8. ICTP, *Conference on Frontiers of Condensed Matter Physics*
Trieste (Italy), 11-15 November 2014
9. REGINA, *Workshop on Research on Graphene: Growth, Characterization and Applications*
Trieste (Italy), 3-4 December 2013
10. PIPT5 (Photoinduced Phase Transitions and Cooperative Phenomena)
Bled (Slovenia), 8-13 June 2014
11. NGSCES 2014 (New Generation in Strongly Correlated Electronic Materials)
Nice (France), 16-20 June 2014
12. LEES 2014 (Low Energy Electrodynamics in Solids)
Loire Valley (France), 29 June – 04 July 2014
13. SuperFOx 2014 (Superconductivity and Functional Oxides)
Rome (Italy), 24-26 September 2014
14. ICTP, *Workshop on Probing and Understanding Exotic Superconductors and Superfluids*
Trieste (Italy), 27-31 October 2014
15. Elettra, *Workshop on INTEGRATING TABLE-TOP LASER, SEEDED-FREE ELECTRON LASER AND STORAGE RING SOURCES FOR TIME RESOLVED SPECTROSCOPIES (NFFA/T-REX)*
Trieste (Italy), 1-2 December 2014

16. SCSR 2014, Workshop on Novel Superconductors and Synchrotron Radiation: state of the art and novel perspectives
Trieste (Italy), 10-11 December 2014
17. M2S 2015 (Materials and Mechanisms of Superconductivity)
Geneva (Switzerland), 23-28 August 2015
18. TRENDOXIDES 2015, Workshop on New TRENDS in Correlated OXIDES and Interfaces
Brescia (Italy), 16-18 November 2015
19. Krvavec 2015, Workshop on Non-Equilibrium Phenomena in Quantum Matter: new observations and new theories
Krvavec (Slovenia), 13-16 December 2015
20. GRC 2016, Ultrafast Phenomena in Cooperative Systems (Gordon Research Conference)
Revealing Coupled Interactions in Complex Matter – Towards Control of Material Properties
Barga (Lucca, Italy), 14-19 February 2016
21. SNS 2016, Spectroscopies in Novel Superconductors
Ludwigsburg (Stuttgart, Germany), 19-24 June 2016
22. Science@FELs 2016
Trieste (Italy), 5-7 September 2016
23. SuperFOx 2016
Torino (Italy), 19-21 September 2016
24. NGSCES 2016 (New Generation in Strongly Correlated Electronic Materials)
Trieste (Italy), 26-30 September 2016
25. UDSCS 2016 (Second Workshop on Ultrafast Dynamics in Strongly Correlated Systems)
Villigen (Switzerland), 10-12 October 2016
26. Krvavec 2016, Workshop on Non-Equilibrium Phenomena in Quantum Systems
Krvavec (Slovenia), 17-21 December 2016
27. TPES 2017, Time-resolved Photoelectron Spectroscopy from tabletop UV and HHG laser sources, Synchrotrons and FELs: experiments and challenges
Trieste (Italy), 25-27 January 2017

TALKS

1. Invited Talk at TRR-80, Augsburg University (May 2012)
The Phase Diagram of $\text{Bi}_2\text{Sr}_2\text{Ca}_{0.92}\text{Y}_{0.08}\text{Cu}_2\text{O}_{8+\delta}$ cuprate superconductors revealed by non-equilibrium optical spectroscopy.
2. Contributed Talk at NGSCES 2013 (July 2013)
Drawing a Phase Diagram for High-Tc Cuprates by out-of-equilibrium spectroscopies.

3. Contributed Talk at PIPT5 (June 2014)
Photo-Enhanced Antinodal Conductivity in the Pseudogap Phase of High-Tc cuprates.
4. Contributed Talk at NGSCES 2014 (June 2014)
Photo-Enhanced Antinodal Conductivity in the Pseudogap Phase of High-Tc cuprates.
5. Contributed Talk at LEES 2014 (July 2014)
Photo-Enhanced Antinodal Conductivity in the Pseudogap Phase of High-Tc cuprates.
6. Contributed Talk at SuperFOx 2014 (September 2014)
Photo-Enhanced Antinodal Conductivity in the Pseudogap Phase of High-Tc cuprates.
7. Invited Talk at SCSR 2014 (December 2014)
Photo-Enhanced Antinodal Conductivity in the Pseudogap Phase of High-Tc cuprates.
8. Contributed Talk at M²S 2015 (August 2015)
Photo-Enhanced Antinodal Conductivity in the Pseudogap Phase of High-Tc cuprates.
9. Invited Talk at TRENDOXIDES 2015 (November 2015)

Time-resolved XUV photoemission: a new clue for understanding the ultrafast dynamics in copper oxides.
10. Invited Talk at KRVAVEC 2015 (December 2015)

Time-resolved XUV photoemission: a new clue for understanding the ultrafast dynamics in copper oxides.
11. Contributed Talk at GRS (Gordon Research Seminar) 2016 (February 2016)
Time-resolved XUV photoemission: a new clue for understanding the ultrafast dynamics in copper oxides.
12. Contributed Talk at SNS 2016 (June 2016)
Time-resolved XUV photoemission: a new clue for understanding the ultrafast dynamics in copper oxides.
13. Contributed Talk at Science@FELs 2016 (September 2016)
Table-top ultrafast optical and photoelectron spectroscopies provide a new clue for understanding the relaxation dynamics in copper oxides.

ACCEPTED PROPOSALS AT INTERNATIONAL FACILITIES

1. Manipulation of the superconducting gap in high-temperature superconductors via short THz pulses.
FELBE @ HZDR, Dresden (Germany)
2. Time resolved ARPES study of out-of-equilibrium topological insulator: photo-induced phase transition between non trivial-to-trivial topology.
ARTEMIS @ CLF @ RAL, Didcot, Oxfordshire (United Kingdom)
3. Addressing the electron-phonon coupling in graphene in the time-domain.
ARTEMIS @ CLF @ RAL, Didcot, Oxfordshire (United Kingdom)
4. Directly observing the ultrafast dynamics of massive Dirac fermions in bilayer graphene.
ARTEMIS @ CLF @ RAL, Didcot, Oxfordshire (United Kingdom)

5. Unveiling the role of the Mott-like electronic excitations in high-temperature superconductivity by time-resolved photoemission.
ARTEMIS @ CLF @ RAL, Didcot, Oxfordshire (United Kingdom)
6. Unveiling the electron dynamics at the quantum critical point in copper oxides.
HFML, Nijmegen (The Netherlands)
7. Tr-ARPES study of anatase TiO₂: Electron-hole timing in a photoactive material.
ARTEMIS @ CLF @ RAL, Didcot, Oxfordshire (United Kingdom)
8. Unfolding the relation between charge order and the dynamics of quasiparticles and oxygen states in cuprate superconductors.
ARTEMIS @ CLF @ RAL, Didcot, Oxfordshire (United Kingdom)

LANGUAGE SKILLS

Italian mother tongue, English fluent.

COMPUTER AND ELECTRONIC COMPETENCES

Excellent knowledge of Computer Hardware and Software (PC-Mac-Linux). Of peculiar relevance for my research activity in Physics I can mention: Wavemetrics Igor Pro, Mathworks Matlab, National Instruments Labview, LaTeX, Gimp, Office, OpenOffice. Excellent knowledge of the fundamentals of Electronics and Data Acquisition. In particular, I designed, developed, build and tested several apparatus to perform time-resolved optical measurement, from both the optical, electronic and data acquisition points of view. I am able to program National Instruments and Spectrum acquisition devices.

TEACHING ACTIVITIES

Tutor for the experimental activities of Bachelor, Master and PhD students at the T-ReX Laboratory, FERMI@Elettra, Elettra – Sincrotrone Trieste.

Correlator of two Bachelor Students at the Physics Department – University of Trieste:

- Damir Kopic, Title: Dinamiche elettroniche fuori equilibrio in un superconduttore a base di ferro.
- Enrico D’Incecco, Title: Studio delle proprietà ottiche dei sistemi superconduttori $Sr_{1-x}La_xFBiS_2$ mediante spettroscopia infrarossa.

PUBLICATIONS

To June 09, 2016: 34 publications; 638 citations, h Index 15 (Scopus); 956 citations, h Index 17 (Scholar)

- F. Novelli, G. Giovannetti, A. Avella, **F. Cilento**, L. Patthey, M. Radovic, M. Capone, F. Parmigiani, and D. Fausti
Localized vibrations in superconducting YBa₂Cu₃O₇ revealed by ultrafast optical coherent spectroscopy
Phys. Rev. B **95**, 174524 (2017)

- A. Sterzi, G. Manzoni, L. Sbuelz, **F. Cilento**, M. Zacchigna, Ph. Bugnon, A. Magrez, H. Berger, A. Crepaldi, and F. Parmigiani
Bulk diffusive relaxation mechanisms in optically excited topological insulators
Phys. Rev. B **95**, 115431 (2017)
- A. Crepaldi, G. Autès, A. Sterzi, G. Manzoni, M. Zacchigna, **F. Cilento**, I. Vobornik, J. Fujii, Ph. Bugnon, A. Magrez, H. Berger, F. Parmigiani, O. V. Yazyev, and M. Grioni
Persistence of a surface state arc in the topologically trivial phase of MoTe_2
Phys. Rev. B **95**, 041408(R) (2017)
- M. Dell'Angela, F. Hieke, M. Malvestuto, L. Sturari, S. Bajt, I. V. Kozhevnikov, J. Ratanapreechachai, A. Caretta, B. Casarin, F. Glerean, A. M. Kalashnikova, R. V. Pisarev, Y.-D. Chuang, G. Manzoni, **F. Cilento**, R. Mincigrucci, A. Simoncig, E. Principi, C. Masciovecchio, L. Raimondi, N. Mahne, C. Svetina, M. Zangrando, R. Passuello, G. Gaio, M. Prica, M. Scarcia, G. Kourousias, R. Borghes, L. Giannessi, W. Wurth, and F. Parmigiani
Extreme ultraviolet resonant inelastic X-ray scattering (RIXS) at a seeded free-electron laser
Scientific Reports **6**, 38796 (2016)
- G. Manzoni, L. Gragnaniello, G. Autès, T. Kuhn, A. Sterzi, **F. Cilento**, M. Zacchigna, V. Enenkel, I. Vobornik, L. Barba, F. Bisti, Ph. Bugnon, A. Magrez, V. N. Strocov, H. Berger, O. V. Yazyev, M. Fonin, F. Parmigiani, and A. Crepaldi
Evidence for a Strong Topological Insulator Phase in ZrTe_5
Phys. Rev. Lett. **117**, 237601 (2016)
- G. Manzoni, A. Crepaldi, G. Autès, A. Sterzi, **F. Cilento**, A. Akrap, I. Vobornik, L. Gragnaniello, Ph. Bugnon, M. Fonin, H. Berger, M. Zacchigna, O.V. Yazyev, and F. Parmigiani
Temperature dependent non-monotonic bands shift in ZrTe_5
J. Electr. Spectrosc. Relat. Phenom. (<http://dx.doi.org/10.1016/j.elspec.2016.09.006>, 2016)
- M. Malvestuto, A. Caretta, B. Casarin, **F. Cilento**, M. Dell'Angela, D. Fausti, R. Calarco, B. J. Kooi, E. Varesi, J. Robertson, and F. Parmigiani
Ultrafast Ge-Te bond dynamics in a phase-change superlattice
Phys. Rev. B **94**, 094310 (2016)
- A. Sterzi, A. Crepaldi, **F. Cilento**, G. Manzoni, E. Frantzeskakis, M. Zacchigna, E. van Heumen, Y. K. Huang, M. S. Golden, and F. Parmigiani
 SbB_6 electron-phonon coupling constant from time- and angle-resolved photoelectron spectroscopy
Phys. Rev. B **94**, 081111(R) (2016)
- **F. Cilento**, A. Crepaldi, G. Manzoni, A. Sterzi, M. Zacchigna, Ph. Bugnon, H. Berger, and F. Parmigiani
Advancing non-equilibrium ARPES experiments by a 9.3 eV coherent ultrafast photon source
J. Electr. Spectrosc. Relat. Phenom. **207**, 7 (2016)
- G. Manzoni, A. Sterzi, A. Crepaldi, M. Diego, **F. Cilento**, M. Zacchigna, Ph. Bugnon, H. Berger, A. Magrez, M. Grioni, and F. Parmigiani
Ultrafast Optical Control of the Electronic Properties of ZrTe_5
Phys. Rev. Lett. **115**, 207402 (2015)

- S. Ulstrup, J. C. Johannsen, **F. Cilento**, A. Crepaldi, J. A. Miwa, M. Zacchigna, C. Cacho, R. T. Chapman, E. Springate, F. Fromm, C. Raidel, T. Seyller, P. D. C. King, F. Parmigiani, M. Grioni, and P. Hofmann
Ramifications of Optical Pumping on the Interpretation of Time-Resolved Photoemission Experiments on Graphene
J. Electron. Spectrosc. Relat. Phenom. **200**, 340 (2015)
- J. C. Johannsen, G. Autes, A. Crepaldi, S. Moser, B. Casarin, **F. Cilento**, M. Zacchigna, H. Berger, A. Magrez, Ph. Bugnon, J. Avila, M. C. Asensio, F. Parmigiani, O. V. Yazyev, and M. Grioni
Engineering the Topological Surface States in the $(Sb_2)_m-Sb_2Te_3$ Superlattice Series
Phys. Rev. B **91**, 201101(R) (2015)
- S. Ulstrup, J. C. Johannsen, A. Crepaldi, **F. Cilento**, M. Zacchigna, C. Cacho, R. T. Chapman, E. Springate, F. Fromm, C. Raidel, T. Seyller, F. Parmigiani, M. Grioni, and P. Hofmann
Ultrafast Electron Dynamics in Epitaxial Graphene Investigated with Time- and Angle-Resolved Photoemission Spectroscopy
J. Phys.: Condens. Matter **27**, 164206 (2015)
- C. Cacho, A. Crepaldi, M. Battiato, J. Braun, **F. Cilento**, M. Zacchigna, M. C. Richter, O. Heckmann, E. Springate, Y. Liu, S. S. Dhesi, H. Berger, Ph. Bugnon, K. Held, M. Grioni, H. Ebert, K. Hricovini, J. Minár, and F. Parmigiani
Momentum-Resolved Spin Dynamics of Bulk and Surface Excited States in the Topological Insulator Bi_2Se_3
Phys. Rev. Lett. **114**, 097401 (2015) and <http://arxiv.org/abs/1409.5018>
- J. C. Johannsen, S. Ulstrup, A. Crepaldi, **F. Cilento**, M. Zacchigna, J. A. Miwa, C. Cacho, R. T. Chapman, E. Springate, F. Fromm, C. Raidel, T. Seyller, P. D. C. King, F. Parmigiani, M. Grioni, and P. Hofmann
Tunable Carrier Multiplication and Cooling in Graphene
Nano Letters **15**, 326 (2015)
- F. Novelli, G. De Filippis, V. Cataudella, M. Esposito, I. Vergara, **F. Cilento**, E. Sindici, A. Amaricci, C. Giannetti, D. Prabhakaran, S. Wall, A. Perucchi, S. Dal Conte, G. Cerullo, M. Capone, A. Mishchenko, M. Grüninger, N. Nagaosa, F. Parmigiani, and D. Fausti
Witnessing the formation and relaxation of dressed quasi-particles in a strongly correlated electron system
Nature Communications **5**, 5112 (2014) and <http://arxiv.org/abs/1403.1704>
- **F. Cilento**, S. Dal Conte, G. Coslovich, S. Peli, N. Nembrini, S. Mor, F. Banfi, G. Ferrini, H. Eisaki, M. K. Chan, C. J. Dorow, M. J. Veit, M. Greven, D. van der Marel, R. Comin, A. Damascelli, L. Rettig, U. Bovensiepen, M. Capone, C. Giannetti, and F. Parmigiani
Photo-enhanced antinodal conductivity in the pseudogap state of high- T_c cuprates
Nature Communications **5**, 4353 (2014) and <http://arxiv.org/abs/1405.5462>

- S. Ulstrup, J. C. Johannsen, **F. Cilento**, J. A. Miwa, A. Crepaldi, M. Zacchigna, C. Cacho, R. Chapman, E. Springate, S. Mammadov, F. Fromm, C. Raidel, T. Seyller, F. Parmigiani, M. Grioni, P. D. C. King, and P. Hofmann

Ultrafast Dynamics of Massive Dirac Fermions in Bilayer Graphene
 Phys. Rev. Lett. **112**, 257401 (2014) and <http://arxiv.org/abs/1403.0122>
This paper was selected for a Viewpoint: Tracking Electron Movements in Bilayer Graphene
<http://physics.aps.org/articles/v7/68>
- M. Esposito, F. Benatti, R. Floreanini, S. Olivares, F. Randi, K. Titimbo, M. Pividori, F. Novelli, **F. Cilento**, F. Parmigiani, and D. Fausti

Pulsed homodyne Gaussian quantum tomography with low detection efficiency
 New J. Phys. **16**, 043004 (2014) and <http://arxiv.org/abs/1301.2471>
- A. Crepaldi, **F. Cilento**, M. Zacchigna, M. Zonno, J.C. Johannsen, C. Tournier-Colletta, L. Moreschini, I. Vobornik, F. Bondino, E. Magnano, H. Berger, A. Magrez, Ph. Bugnon, G. Autès, O.V. Yazyev, M. Grioni, and F. Parmigiani

Momentum and photon energy dependence of the circular dichroic photoemission in the bulk Rashba semiconductors BiTe X (X= I, Br, Cl)
 Phys. Rev. B **89**, 125408 (2014) and <http://arxiv.org/abs/1409.5025>
- F. Cilento**, S. Dal Conte, G. Coslovich, F. Banfi, G. Ferrini, H. Eisaki, M. Greven, A. Damascelli, D. van der Marel, F. Parmigiani, and C. Giannetti

In search for the pairing glue in cuprates by non-equilibrium optical spectroscopy
 J. Phys.: Conf. Ser. **449**, 012003 (2013) and <http://arxiv.org/abs/1303.2893>
Invited manuscript for the proceedings of the 10th International Conference on "Materials and Mechanisms of Superconductivity" (M2S-X), Washington, 2012.
- A. Crepaldi, **F. Cilento**, B. Ressel, C. Cacho, J. C. Johannsen, M. Zacchigna, H. Berger, Ph. Bugnon, C. Grazioli, I. C. E. Turcu, E. Springate, K. Kern, M. Grioni, and F. Parmigiani

Evidence of reduced surface electron-phonon scattering in the conduction band of Bi₂Se₃ by non-equilibrium ARPES
 Phys. Rev. B **88**, 121404(R) (2013) and <http://arxiv.org/abs/1310.4279>
- J. C. Johannsen, S. Ulstrup, **F. Cilento**, A. Crepaldi, M. Zacchigna, C. Cacho, I. C. E. Turcu, E. Springate, F. Fromm, C. Raidel, T. Seyller, F. Parmigiani, M. Grioni, and P. Hofmann

Direct View of Hot Carrier Dynamics in Graphene
 Phys. Rev. Lett. **111**, 027403 (2013) and <http://arxiv.org/abs/1304.2615>
- G. Coslovich, C. Giannetti, **F. Cilento**, S. Dal Conte, T. Abebaw, D. Bossini, G. Ferrini, H. Eisaki, M. Greven, A. Damascelli, and F. Parmigiani

Competition Between the Pseudogap and Superconducting States of Bi₂Sr₂Ca_{0.92}Y_{0.08}Cu₂O_{8+δ} Single Crystals Revealed by Ultrafast Broadband Optical Reflectivity
 Phys. Rev. Lett. **110**, 107003 (2013) and <http://arxiv.org/abs/1302.0248>
- A. Crepaldi, B. Ressel, **F. Cilento**, M. Zacchigna, C. Grazioli, H. Berger, Ph. Bugnon, K. Kern, M. Grioni, and F. Parmigiani

Ultrafast photodoping and effective Fermi-Dirac distribution of the Dirac particles in Bi₂Se₃
 Phys. Rev. B **86**, 205133 (2012) and <http://arxiv.org/abs/1212.3494>

- F. Novelli, D. Fausti, J. Reul, **F. Cilento**, P. H. M. van Loosdrecht, A. A. Nugroho, T. T. M. Palstra, M. Gruninger, and F. Parmigiani
Ultrafast optical spectroscopy of the lowest energy excitations in the Mott insulator compound YVO_3 : Evidence for Hubbard-type excitons
Phys. Rev. B **86**, 165135 (2012) and <http://arxiv.org/abs/1205.4609>
- S. Dal Conte, C. Giannetti, G. Coslovich, **F. Cilento**, D. Bossini, T. Abebaw, F. Banfi, G. Ferrini, H. Eisaki, M. Greven, A. Damascelli, D. van der Marel, and F. Parmigiani
Disentangling the Electronic and Phononic Glue in a High-Tc Superconductor
Science **335**, 1600 (2012) and <http://arxiv.org/abs/1203.0588>
- C. Giannetti, **F. Cilento**, S. Dal Conte, G. Coslovich, G. Ferrini, H. Molegraaf, M. Raichle, R. Liang, H. Eisaki, M. Greven, A. Damascelli, D. van der Marel, and F. Parmigiani
Revealing the high-energy electronic excitations underlying the onset of high-temperature superconductivity in cuprates
Nature Communications **2**, 353 (2011) and <http://arxiv.org/abs/1105.2508>
- G. Coslovich, C. Giannetti, **F. Cilento**, S. Dal Conte, G. Ferrini, P. Galinetto, M. Greven, H. Eisaki, M. Raichle, R. Liang, A. Damascelli, and F. Parmigiani
Evidence for a photoinduced nonthermal superconducting-to-normal-state phase transition in overdoped $Bi_2Sr_2Ca_{0.92}Y_{0.08}Cu_2O_{8+\delta}$ by ultrashort laser pulses
Phys. Rev. B **83**, 052907 (2011) and <http://arxiv.org/abs/1005.4320>
- G. Galimberti, S. Pagliara, S. Ponzoni, S. Dal Conte, **F. Cilento**, G. Ferrini, S. Hofmann, M. Arshad, C. Cepek, and F. Parmigiani
The photoinduced charge transfer mechanism in aligned and unaligned carbon nanotubes
Carbon **49**, 5246 (2011)
- **F. Cilento**, C. Giannetti, G. Ferrini, S. Dal Conte, T. Sala, G. Coslovich, M. Rini, A. Cavalleri, and F. Parmigiani
Ultrafast insulator-to-metal phase transition as a switch to measure the spectrogram of a supercontinuum light pulse
Appl. Phys. Lett. **96**, 021102 (2010) and <http://arxiv.org/abs/0910.3785>
- G. Coslovich, C. Giannetti, **F. Cilento**, G. Ferrini, and F. Parmigiani
Quasi-particles dynamics in underdoped $Bi2212$ under strong optical perturbation
AIP Conference Proceedings **1162**, pp. 177-185 (2009)
- C. Giannetti, G. Coslovich, **F. Cilento**, G. Ferrini, H. Eisaki, N. Kaneko, M. Greven, and F. Parmigiani
Discontinuity of the ultrafast electronic response of underdoped superconducting $Bi_2Sr_2CaCu_2O_{8+\delta}$ strongly excited by ultrashort light pulses
Phys. Rev. B **79**, 224502 (2009) and <http://arxiv.org/abs/0804.4822>
This paper was selected for the Virtual Journal of Applications of Superconductivity.
This paper was selected for the Virtual Journal of Ultrafast Science.

- C. Giannetti, B. Revaz, F. Banfi, M. Montagnese, G. Ferrini, **F. Cilento**, S. Maccalli, P. Vavassori, G. Oliviero, E. Bontempi, L.E. Depero, V. Metlushko, and F. Parmigiani
Thermo-mechanical behavior of surface acoustic waves in ordered arrays of nanodisks studied by near infrared pump-probe diffraction experiments
Phys. Rev. B **76**, 125413 (2007) and <http://arxiv.org/abs/cond-mat/0701666>
This paper was selected for the Virtual Journal of Nanoscale Science & Technology.
This paper was selected for the Virtual Journal of Ultrafast Science.

Federico Cilento

Last Update: Trieste, 09-06-2017

CURRICULUM VITAE

PERSONAL DATA

Name, Surname Albano Cossaro
Birth Place, Date Udine, 1974 May the 12th
e-mail

EDUCATION AND WORKING EXPERIENCES

2011 –TODAY Principal Investigator of the FIRB 2010 project ANCHOR. Responsible of the ANCHOR Laboratory at the CNR-IOM

2002 –TODAY Development scientist at IOM Institute of CNR, Trieste, Italy

2005 PhD in Physics at University of Trieste

2001-2002 Information Technology Consultant at P@rtners, Milano, Italy

2001 Information Technology Consultant at Accenture, Milano

1998 Degree in Physics (110/110 cum laude) at University of Trieste, Italy

SCIENTIFIC INTEREST AND ACTIVITIES

I'm beamline scientist at the ALOISA beamline of the Elettra Synchrotron in Trieste, Italy. My research activity is mainly dedicated to the study of self assembly process of small molecules on metal and semiconductor surfaces. In particular, the attention is focused on the chemical, morphological and structural properties of the Self Assembled Monolayers (SAMs), as the result of the interplay between molecule-molecule and molecule-substrate interactions. Among the scientific results we obtained in this field, in collaboration with the group of prof. Giacinto Scoles, in 2008 we have described the S-Au interface in the Alkanethiols SAMs grown on gold, which has obtained a large interest from the scientific community (Science 2008). We have then contributed to reveal the chemistry of the assembly of amino-acids (PNAS 2007, ACS NANO 2010), revealing that the tendency the molecules have to form zwitterions drive the formation of long range ordered structures on the surfaces.

Since 2011 I coordinate the ANCHOR research project, financed by Italian Ministry of Research (MIUR) in 2011 with 683 KEuros. The project aims at characterizing the interaction on surfaces between amino-terminated molecules and molecules with other functional groups (carboxylic, boronic). The research combines the X-Ray based spectroscopy with STM techniques in order to give a complete description of the systems. We have demonstrated the possibility of exploiting the amino-carboxylic interaction to anchor molecules on top of amino-functionalized surfaces (Journal of Physical Chemistry Letters 2011) and to control the morphology of the resulting organic architecture (PCCP 2012, Invited paper). Within this project, I designed and setup a new experimental chamber which has been set up on the benchline of the ALOISA beamline. The end-station is operative since 2013 and allows to perform X-Ray spectroscopy on in-situ grown systems, both with Synchrotron light and Laboratory photons sources. In 2014 the first experiments from molecules in gas phase have

been successfully performed as well.

At the ALOISA beamline I'm in charge of the development of the acquisition program for the three end-stations and I give scientific and technical support to the external users in performing the experiments.

I'm referee for the following journals: Journal of Physical Chemistry (ACS), Langmuir (ACS), Physical Review B (APS), Surface Science (Elsevier), Chemical Physics Letters (Elsevier), Journal of Nanotechnology (Beilstein).

I'm an external referee for the National Research Council of Romanian Government, for the Swiss National Science Foundation and for the Italian Ministry of Research (MIUR).

In 2013 I obtained the qualification to Associate Professor (Abilitazione Nazionale, 02/B1).

I'm co-author of more than 70 publications in peer-reviewed Journals. My h-index is 25 (Scholar Google).

CONFERENCES AS INVITED SPEAKER

2010 Nanobiotechnology Workshop at JRC Ispra, Ispra, Italy

2012 XCVIII SIF National Congress, Naples, Italy

2015 EMN EAST MEETING 2015, BEIJING, CHINA

2015 ECASIA'15 International Conference, Granada, Spain

PUBLICATIONS

77. Alippi P, Lanzilotto V, Paoletti AM, Mattioli G, Zanotti G, Pennesi G, Filippone F, Cossaro A, Verdini A, Morgante A, Bonapasta AA (2017). A Ru-Ru pair housed in ruthenium phthalocyanine: the role of a "cage" architecture in the molecule coupling with the Ag(111) surface. **PHYSICAL CHEMISTRY CHEMICAL PHYSICS**, vol. 19, p. 1449-1457, ISSN: 1463-9076, doi: 10.1039/c6cp06094c

76. Cvetko D, Fratesi G, Kladnik G, Cossaro A, Brivio GP, Venkataraman L, Morgante A (2016). Ultrafast electron injection into photo-excited organic molecules. **PHYSICAL CHEMISTRY CHEMICAL PHYSICS**, ISSN: 1463-9076, doi: 10.1039/c6cp04099c

75. Di Giovannantonio M, Tomellini M, Lipton-Duffin J, Galeotti G, Elrahimi M, Cossaro A, Verdini A, Kharche N, Meunier V, Vasseur G, Fagot-Revurat Y, Perepichka DF, Rosei F, Contini G (2016). Mechanistic Picture and Kinetic Analysis of Surface-Confined Ullmann Polymerization. **JOURNAL OF THE AMERICAN CHEMICAL SOCIETY**, vol. 138, p. 16696-16702, ISSN: 0002-7863, doi: 10.1021/jacs.6b09728

74. Wardrip A G, Mazaheripour A, Hüsken N, Jocson JM, Bartlett A, Lopez R C, Frey N, Markegard C B, Kladnik G, Cossaro A, Floreano L, Verdini A, Burke A M, Dickson M N, Kymissis I, Cvetko D, Morgante A, Sharifzadeh S, Nguyen H D, Gorodetsky A A (2016). Length-Independent Charge Transport in Chimeric Molecular Wires. **ANGEWANDTE CHEMIE. INTERNATIONAL EDITION**, ISSN: 1433-7851, doi: 10.1002/ange.201605411

73. Dri C, Fronzoni G, Balducci G, Furlan S, Stener M, Feng Z, Comelli G, Castellarin-Cudia C, Cvetko D, Kladnik G, Verdini A, Floreano L, COSSARO A. (2016). Chemistry of the Methylamine Termination at a Gold Surface: From Autorecognition to Condensation. **JOURNAL OF PHYSICAL CHEMISTRY C**, vol. 120; p. 6104-6115, ISSN: 1932-7447, doi: 10.1021/acs.jpcc.6b00604

72. Borghetti P, de Oteyza D G, Rogero C, Goiri E, Verdini A, COSSARO A., Floreano L, Ortega J E (2016). Molecular-Level Realignment in Donor-Acceptor Bilayer Blends on Metals. **JOURNAL OF PHYSICAL CHEMISTRY. C**, vol. 120; p. 5997-6005, ISSN: 1932-7447, doi: 10.1021/acs.jpcc.5b11373

71. de Oteyza D, Garcia-Lastra J M, Toma Francesca M., Borghetti P, Foreano L, Verdini A, COSSARO A., Pho

- Toan V, Wudl F, Enrique Ortega J (2016). Decacyclene Trianhydride at Functional Interfaces: An Ideal Electron Acceptor Material for Organic Electronics. **THE JOURNAL OF PHYSICAL CHEMISTRY LETTERS**, vol. 7; p. 90-95, ISSN: 1948-7185, doi: 10.1021/acs.jpcclett.5b02562
70. Kladnik G, Puppini M, Coreno M, de Simone M, Floreano L, Verdini A, Morgante A, Cvetko D, COSSARO A. (2016). Ultrafast Charge Transfer Pathways Through A Prototype Amino-Carboxylic Molecular Junction. **NANO LETTERS**, vol. 16; p. 1955-1959, ISSN: 1530-6984, doi: 10.1021/acs.nanolett.5b05231
69. Adak O, Kladnik G, Bavdek G, Cossaro A, Morgante A, Cvetko D, Venkataraman L (2015). Ultrafast Bidirectional Charge Transport and Electron Decoherence at Molecule/Surface Interfaces: A Comparison of Gold, Graphene, and Graphene Nanoribbon Surfaces. **NANO LETTERS**, vol. 15, p. 8316-8321, ISSN: 1530-6984, doi: 10.1021/acs.nanolett.5b03962
68. Feng Z, Velari S, COSSARO A., Castellarin-Cudia C, Verdini A, Vesselli E, Dri C, Peressi M, De Vita A, Comelli G (2015). Trapping of Charged Gold Adatoms by Dimethyl Sulfoxide on a Gold Surface. **ACS NANO**, vol. 9; p. 8697-8709, ISSN: 1936-0851, doi: 10.1021/acsnano.5b02284
67. Salomon E, Beato-Medina D, Verdini A, COSSARO A., Cvetko D, Kladnik G, Floreano L, Angot T (2015). Correlation between Charge Transfer and Adsorption Site in CoPc Over layers Adsorbed on Ag(100). **JOURNAL OF PHYSICAL CHEMISTRY C**, vol. 119; p. 23422-23429, ISSN: 1932-7447, doi: 10.1021/acs.jpcc.5b05999
66. Mangione G, Pandolfo L, Sambì M, Ligorio G, Nardi MV, Cossaro A., Floreano L, Casarin M. Ligand-Field Strength and Symmetry-Restricted Covalency in Cu-II Complexes - a Near-Edge X-ray Absorption Fine Structure Spectroscopy and Time-Dependent DFT Study. **EUROPEAN JOURNAL OF INORGANIC CHEMISTRY**;2015, p. 2707-2713, ISSN: 1434-1948, doi: 10.1002/ejic.201500222
65. Olivieri G, Cossaro A., Capria E, Benevoli L, Coreno M, De Simone M, Prince KC, Kladnik G, Cvetko D, Fraboni B, Morgante A, Floreano L, Fraleoni-Morgera A. Intermolecular Hydrogen Bonding and Molecular Orbital Distortion in 4-Hydroxycyanobenzene Investigated by X-ray Spectroscopy. **JOURNAL OF PHYSICAL CHEMISTRY. C, NANOMATERIALS AND INTERFACES**, 2015, vol. 119; p. 121-129, ISSN: 1932-7447, doi: 10.1021/jp5100878
64. Balducci G, Romeo M, Stener M, Fronzoni G, Cvetko D, Cossaro A., Dell'Angela M, Kladnik G, Venkataraman L, Morgante A (2015). Computational Study of Amino Mediated Molecular Interaction Evidenced in N 1s NEXAFS: 1,4-Diaminobenzene on Au (111). **JOURNAL OF PHYSICAL CHEMISTRY. C, NANOMATERIALS AND INTERFACES**, 2015, vol. 119; p. 1988-1995, ISSN: 1932-7447, doi: 10.1021/jp512146t
63. Feng ZJ, Cudia CC, Floreano L, Morgante A, Comelli G, Dri C, Cossaro A. . A competitive amino-carboxylic hydrogen bond on a gold surface. **CHEMICAL COMMUNICATIONS**, 2015, vol. 51; p. 5739-5742, ISSN: 1359-7345, doi: 10.1039/c4cc10271a
62. Bavdek G, Verdini A, Cossaro A., Morgante A, Floreano L, Cvetko D . Characterization of early growth stages of Pb/Ge(001). **SURFACE SCIENCE**, 2014, vol. 630; p. 260-264, ISSN: 0039-6028, doi: 10.1016/j.susc.2014.08.004
61. Basagni A, Colazzo L, Sedona F, Di Marino M, Carofiglio T, Lubian E, Forrer D, Vittadini A, Casarin M, Verdini A, Cossaro A., Floreano L, Sambì M . Stereoselective Photopolymerization of Tetraphenylporphyrin Derivatives on Ag(110) at the Sub-Monolayer Level. **CHEMISTRY-A EUROPEAN JOURNAL**, 2014, vol. 20; p. 14296-14304, ISSN: 0947-6539, doi: 10.1002/chem.201403208
60. Di Giovannantonio M, El Garah M, Lipton-Duffin J, Meunier V, Cardenas L, Fagot-Revurat Y, Cossaro A., Verdini A, Perepichka DF, Rosei F, Contini G . Reply to "Comment on 'Insight into Organometallic Intermediate and Its Evolution to Covalent Bonding in Surface-Confined Ullmann Polymerization'". **ACS NANO**, 2014, vol. 8, p. 1969-1971, ISSN: 1936-0851, doi: 10.1021/nn500322r
59. Artiglia L., Agnoli S., Vittadini A., Verdini A., Cossaro A., Floreano L., Granozzi G., Atomic structure and special reactivity toward methanol oxidation of vanadia nanoclusters on TiO₂(110), **Journal of the American Chemical Society** **2013**, 135 (46)
58. Di Giovannantonio M., El Garah M., Lipton-Duffin J., Meunier V., Cardenas L., Fagot Revurat Y., Cossaro A., Verdini A., Perepichka D.F., Rosei F., Contini G. Insight into organometallic intermediate and its evolution to covalent bonding in surface-confined ullmann polymerization, **ACS Nano** **2013**, 7 (9), pp. 8190-8198.
57. Carrera A., Cristina L.J., Bengió S., Cossaro A., Verdini A., Floreano L., Fuhr J.D., Gayone J.E., Ascolani H.

- Controlling carboxyl deprotonation on Cu(001) by surface Sn alloying, *Journal of Physical Chemistry C* **2013**, 117 (33), pp. 17058-17065.
56. Kladnik G., Cvetko D., Batra A., Dell'Angela M., Cossaro A., Kamenetska M., Venkataraman L., Morgante A. Ultrafast charge transfer through noncovalent Au-N interactions in molecular systems, *Journal of Physical Chemistry C* **2013**, 117 (32), pp. 16477-16482.
55. Petrov A.Yu., Torrelles X., Verna A., Xu H., Cossaro A., Pedio M., Garcia-Barriocanal J., Castro G.R., Davidson B.A., Surface octahedral distortions and atomic design of perovskite interfaces, *Advanced Materials* **2013**, 25 (29), pp. 4043-4048.
54. Schiros T., Kladnik G., Prezzi D., Ferretti A., Olivieri G., Cossaro A., Floreano L., Verdini A., Schenck C., Cox M., Gorodetsky A.A., Plunkett K., Delongchamp D., Nuckolls C., Morgante A., Cvetko D., Kymissis I., Donor-acceptor shape matching drives performance in photovoltaics, *Advanced Energy Materials* **2013**, 3 (7), pp. 894-902.
53. Pinardi A.L., Otero-Irurueta G., Palacio I., Martinez J.I., Sanchez-Sanchez C., Tello M., Rogero C., Cossaro A., Preobrajenski A., Gómez-Lor B., Jancarik A., Stará I.G., Starý I., Lopez M.F., Méndez J., Martín-Gago J.A., Tailored formation of n-doped nanoarchitectures by diffusion-controlled on-surface (Cyclo)Dehydrogenation of heteroaromatics, *ACS Nano* **2013**, 7 (4), pp. 3676-3684.
52. Fuhr J.D., Carrera A., Murillo-Quirós N., Cristina L.J., Cossaro A., Verdini A., Floreano L., Gayone J.E., Ascolani H., Interplay between hydrogen bonding and molecule-substrate interactions in the case of terephthalic acid molecules on Cu(001) surfaces, *Journal of Physical Chemistry C* **2013**, 117 (3), pp. 1287-1296.
51. Caprile L., Cossaro A., Falletta E., Della Pina C., Cavalleri O., Rolandi R., Terreni S., Ferrando R., Rossi M., Floreano L., Canepa M., Interaction of l-cysteine with naked gold nanoparticles supported on HOPG: A high resolution XPS investigation, *Nanoscale* **2012**, 4 (24), pp. 7727-7734.
50. Sedona F., Di Marino M., Forrer D., Vittadini A., Casarin M., Cossaro A., Floreano L., Verdini A., Sambri M., Tuning the catalytic activity of Ag(110)-supported Fe phthalocyanine in the oxygen reduction reaction, *Nature Materials* **2012**, 11 (11), pp. 970-977.
49. Lipton-Duffin J., Miwa J.A., Urquhart S.G., Contini G., Cossaro A., Casalis L., Barth J.V., Floreano L., Morgante A., Rosei F., Binding geometry of hydrogen-bonded chain motif in self-assembled gratings and layers on Ag(111), *Langmuir* **2012**, 28 (40), pp. 14291-14300.
48. Cossaro A., Cvetko D., Floreano L.; Amino-carboxylic recognition on surfaces: from 2D to 2D+1 nanoarchitectures. *PHYSICAL CHEMISTRY CHEMICAL PHYSICS* **2012**, vol. 14, p. 13154-13162
Invited Paper
47. Di Santo G., Sfiligoj C., Castellarin-Cudia C., Verdini A., Cossaro A., Morgante A., Floreano L., Goldoni A.; Changes of the Molecule-Substrate Interaction upon Metal Inclusion into a Porphyrin. *CHEMISTRY-A EUROPEAN JOURNAL* **2012**, vol. 18, p. 12619-12623
46. Garcia-Lekue A, Gonzalez-Moreno R, Garcia-Gil S, Pickup DF, Floreano L, Verdini A, Cossaro A., Martín-Gago JA, Arnau A, Rogero C. Coordinated H-Bonding between Porphyrins on Metal Surfaces. *JOURNAL OF PHYSICAL CHEMISTRY. C* **2012**, vol. 116, p. 15378-15384
45. Borghetti P., Ghosh P., Castellarin-Cudia C., Goldoni A., Floreano L., Cossaro A., Verdini A., Gebauer R., Drera G., Sangaletti L. . Functional K-doping of eumelanin thin films: Density functional theory and soft x-ray spectroscopy experiments in the frame of the macrocyclic protomolecule model. *THE JOURNAL OF CHEMICAL PHYSICS* **2012**, vol 136, 204703
44. de Oteyza DG., Sakko A., El-Sayed A., Goiri E., Floreano L., Cossaro A., Garcia-Lastra J.M., Rubio A., Ortega J.E. . Inversed linear dichroism in F K-edge NEXAFS spectra of fluorinated planar aromatic molecules. *PHYSICAL REVIEW. B* **2012**, vol. 86
43. Chambon C., Coati A., Sauvage-Simkin M., Garreau Y., Creuze J., Verdini A., Cossaro A., Floreano L., Morgante A. . Early stages of formation of the Ag-Ni(111) interface studied by grazing incidence x-ray diffraction and x-ray photoelectron diffraction. *PHYSICAL REVIEW. B* **2011**, vol. 84
42. Fanetti M, Calzolari A, Vilmercati P, Castellarin-Cudia C, Borghetti P, Di Santo G, Floreano L, Verdini A, Cossaro A., Vobornik I, Annese E, Bondino F, Fabris S, Goldoni A . Structure and Molecule-Substrate Interaction in a Co-octaethyl Porphyrin Monolayer on the Ag(110) Surface. *JOURNAL OF PHYSICAL CHEMISTRY. C*

41. Cossaro A., Puppini M, Cvetko D, Kladnik G, Verdini A, Coreno M, de Simone M, Floreano L, Morgante A. Tailoring SAM-on-SAM Formation. **THE JOURNAL OF PHYSICAL CHEMISTRY LETTERS** 2011, vol. 2, p. 3124-3129
40. M. Kamenetska, M. Dell'angela, J.R. Widawsky, G. Kladnik, A. Verdini, A. Cossaro, D. Cvetko, A. Morgante, L. Venkataraman, Structure and energy level alignment of tetramethyl benzenediamine on Au(111) **Journal of Physical Chemistry C** 2011, 115 (25), pp. 12625-12630.
39. R. González-Moreno, C. Sánchez-Sánchez, M. Trelka, R. Otero, A. Cossaro, A. Verdini, L. Floreano, M. Ruiz-Bermejo, A. García-Lekue, J.A. Martín-Gago, C. Rogero, Following the metalation process of protoporphyrin IX with metal substrate atoms at room temperature, **Journal of Physical Chemistry C** 2011, 115 (14), pp. 6849-6854.
38. Borghetti P, Goldoni A, Castellarin-Cudia C, Casalis L, Herberg F, Floreano L, Cossaro A., Verdini A, Gebauer R, Ghosh P, Sangaletti L. Effects of Potassium on the Supramolecular Structure and Electronic Properties of Eumelanin Thin Films. **LANGMUIR**, 2010 ISSN: 0743-7463, doi: 10.1021/la102973u
37. Jia Z, Lee V.W, Kymissis I, Floreano L, Verdini A, Cossaro A., Morgante A. In situ study of pentacene interaction with archetypal hybrid contacts: Fluorinated versus alkane thiols on gold. **PHYSICAL REVIEW. B, CONDENSED MATTER AND MATERIALS PHYSICS**, 2010, vol. 82 (12); p. 125457, ISSN: 1098-0121
36. Betti M. G, Gargiani P, Frisenda R, Biagi R, Cossaro A, Verdini A, Floreano L, Mariani C. Localized and Dispersive Electronic States at Ordered FePc and CoPc Chains on Au(110). **JOURNAL OF PHYSICAL CHEMISTRY. C** 2010, vol. 114 (49), p. 21638-21644
35. A. Cossaro, M. Dell'Angela, A. Verdini, M. Puppini, G. Kladnik, M. Coreno, M. de Simone, A. Kivimaki, D. Cvetko, M. Canepa, L. Floreano, **J. Phys. Chem. C**, 2010, 114 (35), 15011–15014
34. M. Dell'Angela, G. Kladnik, A. Cossaro, A. Verdini, M. Kamenetska, I. Tamblin, S. Y. Quek, J. B. Neaton, D. Cvetko, A. Morgante and L. Venkataraman, **Nano Letters**, 2010, 10 (7), 2470–2474
33. W. Auwärter, K. Seufert, F. Klappenberger, A. Weber-Bargioni, J.V. Barth, A. Verdini, D. Cvetko, M. Dell'Angela, L. Floreano, A. Cossaro, G. Bavdek, A. Morgante, A.P. Seitsonen, Site-specific geometric and electronic interface structure of Co-tetraphenyl-porphyrin layers on a Ag(111) surface, **Physical Review B**, 2010, 81, 245403, selected as **Editors' Suggestion**.
32. C. Castellarin-Cudia, P. Borghetti, G. Di Santo, M. Fanetti, R. Larciprete, C. Cepek, P. Vilmercati, L. Sangaletti, A. Verdini, A. Cossaro, L. Floreano, A. Morgante and A. Goldoni, Influence of Zn-tetraphenyl-porphyrin absorption in interface model systems for induced electron transfer, **Chem. Phys. Chem.**, 2010, 11, 2248.
31. Reichert, J., Schiffrin, A., Auwärter, W., Weber-Bargioni, A., Marschall, M., Dell'Angela, M., Cvetko, D., Bavdek, G., Cossaro A., Morgante, A., Barth, J.V.: L-tyrosine on Ag(111): Universality of the amino acid 2D zwitterionic bonding scheme? **ACS Nano**, 2010, 4 (2), pp. 1218-1226.
30. Sangaletti, L., Borghetti, P., Ghosh, P., Pagliara, S., Vilmercati, P., Castellarin-Cudia, C., Floreano, L., Cossaro A., Verdini, A., Gebauer, R., Goldoni, A. Polymerization effects and localized electronic states in condensed-phase eumelanin, **Physical Review B**, 2009, 80 (17), 174203.
29. Evangelista, F., Ruocco, A., Gotter, R., Cossaro A., Floreano, L., Morgante, A., Crispoldi, F., Betti, M.G., Mariani, C. Electronic states of CuPc chains on the Au(110) surface, **Journal of Chemical Physics**, 2009 131 (17), 174710.
28. Cossaro A., Floreano, L., Verdini, A., Casalis, L., Morgante, A.: Comment on "local methylthiolate adsorption geometry on au(111) from photoemission core-level shifts", **Physical Review Letters**, 2009, 103 (11), 119601.
27. Schiffrin, A., Reichert, J., Pennec, Y., Auwarter, W., Alexander Weber-Bargioni, Marschall, M., Angela, M.D., Cvetko, D., Bavdek, G., Cossaro A., Morgante, A., Barth, J.V.: Self-assembly of l-methionine on cu(111): Steering chiral organization by substrate reactivity and thermal activation, **Journal of Physical Chemistry C**, 2009, 113 (28), 12101-12108.
26. Vilmercati, P., Cvetko, D., Cossaro A., Morgante, A.: Heterostructured organic interfaces probed by resonant photoemission, **Surface Science**, 2009, 603 (10-12), 1542-1556.

25. Beccari, M., Kanjilal, A., Betti, M.G., Mariani, C., Floreano, L., Cossaro, A., Di Castro, V.: Characterization of benzenethiolate self-assembled monolayer on Cu(1 0 0) by XPS and NEXAFS, *Journal of Electron Spectroscopy and Related Phenomena*, **2009**, 172 (1-3), 64-68.
24. Cossaro, A., Mazzarello, R., Rousseau, R., Casalis, L., Verdini, A., Kohlmeyer, A., Floreano, L., Scandolo, S., Morgante, A., Klein, M.L., Scoles, G.: X-ray diffraction and computation yield the structure of alkanethiols on gold(111), *Science*, **2008**, 321 (5891),943-946.
23. Floreano, L., Cossaro, A., Gotter, R., Verdini, A., Bavdek, G., Evangelista, F., Ruocco, A., Morgante, A., Cvetko, D. Periodic arrays of Cu-Phthalocyanine chains on Au(110), *Journal of Physical Chemistry C*, **2008**, 112 (29), 10794-10802.
22. Chiodi, M., Gavioli, L., Beccari, M., Di Castro, V., Cossaro, A., Floreano, L., Morgante, A., Kanjilal, A., Mariani, C., Betti, M.G.: Interaction strength and molecular orientation of a single layer of pentacene in organic-metal interface and organic-organic heterostructure, *Physical Review B*, **2008**, 77 (11), 115321.
21. Verdini, A., Cossaro, A., Floreano, L., Morgante, A., Goldoni, A., Ghidoni, D., Sepe, A., Pagliara, S., Sangaletti, L.: Local coordination of Mn atoms at the Mn:Ge(111) interface from photoelectron diffraction experiments, *Physical Review B*, **2008**, 77 (7), 075405, .
20. Bavdek, G., Cossaro, A., Cvetko, D., Africh, C., Blasetti, C., Esch, F., Morgante, A., Floreano, L.: Pentacene nanorails on Au(110), *Langmuir*, **2008**, 24 (3), 767-772.
19. Krüger, P., Bourgeois, S., Domenichini, B., Magnan, H., Chandesris, D., Le Fèvre, P., Flank, A.M., Jupille, J., Floreano, L., Cossaro, A., Verdini, A., Morgante, A.: Defect states at the TiO₂(110) surface probed by resonant photoelectron diffraction, *Physical Review Letters*, **2008**, 100 (5), 055501.
18. Krüger, P., Bourgeois, S., Domenichini, B., Magnan, H., Chandesris, D., Le Fèvre, P., Floreano, L., Cossaro, A., Verdini, A., Morgante, A.: Defects at the TiO₂(1 0 0) surface probed by resonant photoelectron diffraction, *Surface Science*, **2007**, 601 (18), 3952-3955.
17. Salomon, E., Papageorgiou, N., Angot, T., Verdini, A., Cossaro, A., Floreano, L., Morgante, A., Giovanelli, L., Le Lay, G.: Lead phthalocyanine films by near edge X-ray absorption fine structure spectroscopy, *Journal of Physical Chemistry C*, **2007**, 111 (33), 12467-12471.
16. Schiffrin, A., Riemann, A., Auwärter, W., Pennec, Y., Weber-Bargioni, A., Cvetko, D., Cossaro, A., Morgante, A., Barth, J.V.: Zwitterionic self-assembly of L-methionine nanogratings on the Ag(111) surface, *PNAS*, **2007**, 104 (13), 5279-5284.
15. Mazzarello, R., Cossaro, A., Verdini, A., Rousseau, R., Casalis, L., Danisman, M.F., Floreano, L., Scandolo, S., Morgante, A., Scoles, G.: Structure of a CH₃S monolayer on Au(111) solved by the interplay between molecular dynamics calculations and diffraction measurements, *Physical Review Letters*, **2007**, 98 (1), 016102.
14. Cossaro, A., Terreni, S., Cavalleri, O., Prato, M., Cvetko, D., Morgante, A., Floreano, L., Canepa, M.: Electronic and geometric characterization of the L-cysteine paired-row phase on Au(110), *Langmuir*, **2006**, 22 (26), 11193-11198.
13. Vilmercati, P., Cudia, C.C., Larciprete, R., Cepek, C., Zampieri, G., Sangaletti, L., Pagliara, S., Verdini, A., Cossaro, A., Floreano, L., Morgante, A., Petaccia, L., Lizzit, S., Battocchio, C., Polzonetti, G., Goldoni, A.: Molecular orientations, electronic properties and charge transfer timescale in a Zn-porphyrin/C70 donor-acceptor complex for solar cells, *Surface Science*, **2006**, 600 (18), pp. 4018-4023.
12. Verdini, A., Cossaro, A., Floreano, L., Morgante, A., Goldoni, A., Ghidoni, D., Sepe, A., Pagliara, S., Sangaletti, L.: Surface and electronic properties of the Mn:Ge(1 1 1) interface at the early stages of growth, *Surface Science*, **2006**, 600 (18), pp. 4369-4374.
11. Cudia, C.C., Vilmercati, P., Larciprete, R., Cepek, C., Zampieri, G., Sangaletti, L., Pagliara, S., Verdini, A., Cossaro, A., Floreano, L., Morgante, A., Petaccia, L., Lizzit, S., Battocchio, C., Polzonetti, G., Goldoni, A.: Electronic structure and molecular orientation of a Zn-tetra-phenyl porphyrin multilayer on Si(1 1 1), *Surface Science*, **2006**, 600 (18), 4013-4017.
10. Floreano, L., Cossaro, A., Cvetko, D., Bavdek, G., Morgante, A.: Phase diagram of pentacene growth on Au(110) *Journal of Physical Chemistry B*, **2006**, 110 (10), pp. 4908-4913.

9. Gonella, G., Terreni, S., Cvetko, D., Cossaro, A., Mattera, L., Cavalleri, O., Rolandi, R., Morgante, A., Floreano, L., Canepa, M.: Ultrahigh vacuum deposition of L-cysteine on Au(110) studied by high-resolution X-ray photoemission: From early stages of adsorption to molecular organization, *Journal of Physical Chemistry B*, **2005**, 109 (38), 18003-18009.
8. Cvetko, D., Ratto, F., Cossaro, A., Bavdek, G., Morgante, A., Floreano, L.: Displacive phase transition at the 5/3 monolayer of Pb on Ge(001), *Physical Review B*, **2005**, 72 (4), 045404.
7. Sangaletti, L., Ghidoni, D., Pagliara, S., Goldoni, A., Morgante, A., Floreano, L., Cossaro, A., Mozzati, M.C., Azzoni, C.B.: Electronic properties of the ordered metallic Mn:Ge(111) interface, *Physical Review B*, **2005**, 72 (3), 035434.
6. Cossaro A., Cvetko D., Bavdek G., Floreano L., Gotter R., Morgante A., Evangelista F., Ruocco A. Copper-phthalocyanine induced reconstruction of Au(110). **JOURNAL OF PHYSICAL CHEMISTRY. B**, 2004, vol. 108, ISSN: 1520-6106
5. Terreni, S., Cossaro, A., Gonella, G., Mattera, L., Duò, L., Ciccacci, F., Cvetko, D., Floreano, L., Morgante, A., Verdini, A., Canepa, M.: Surfactant effect and dissolution of ultrathin Fe films on Ag(001), *Physical Review B*, **2004**, 70 (11), 115420.
4. Rizzi, G.A., Cossaro, A., Petukhov, M., Sedona, F., Granozzi, G., Bruno, F., Cvetko, D., Morgante, A., Floreano, L. Pseudomorphic-to-bulk fcc phase transition of thin Ni films on Pd(100), *Physical Review B*, **2004**, 70 (4), 045412
3. Floreano, L., Cvetko, D., Bruno, F., Bavdek, G., Cossaro, A., Gotter, R., Verdini, A., Morgante, A.: Quantum size effects in the low temperature layer-by-layer growth of Pb on Ge(0 0 1), *Progress in Surface Science*, **2003**, 72 (5-8), 135-159.
2. Bondino, F., Vesselli, E., Baraldi, A., Comelli, G., Verdini, A., Cossaro, A., Floreano, L., Morgante, A., Molecular orientation of CN adsorbed on Pd(110), *Journal of Chemical Physics*, **2003**, 118 (23), 10735-10740.
1. Bruno, F., Terreni, S., Floreano, L., Cossaro, A., Cvetko, D., Luches, P., Mattera, L., Morgante, A., Moroni, R., Repetto, M., Verdini, A., Canepa, M.: Pseudomorphic to orthomorphous growth of Fe films on Cu₃Au(001), *Physical Review B*, **2002**, 66 (4), 045402.

**TRATTAMENTO DEI DATI
PERSONALI, INFORMATIVA E
CONSENSO**

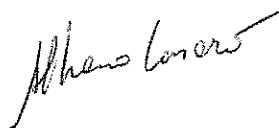
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In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente curriculum vitae e nella documentazione della quale fa parte integrante

(barrare la casella)

Si, acconsento



Europass Curriculum Vitae

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Nationality(-ies)

Date of birth

Gender

Desired employment/ Occupational field

Work experience

Dates

Occupation or position held

Main activities and
responsibilities

Name and address of employer

Dates

Occupation or position held

Main activities and
responsibilities

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Principal subjects/Occupational skills covered	State of matter: low temperature physics, quantum electronics, optics, spectroscopic techniques
Name and type of organization providing education and training	Università degli studi di Firenze, thesis performed at the European Laboratory for non Linear Spectroscopy (LENS), via N.Carrara 1, 50019 Sesto Fiorentino (FI)

Research Activity

My research activity during the PhD at the European Laboratory for non Linear Spectroscopy (LENS) was devoted to the characterization of acoustic, structural and thermal properties of simple and confined liquids by means of laser-based non linear spectroscopy (see publications 30, 33, 34, 35, 36, 37, 38, 39, 40). After this period, I moved to the Elettra synchrotron Trieste, where I was appointed responsible for the TIMER Laser lab. My main research activity was focused to the extension of a laser-based four wave mixing technique towards the extreme ultraviolet region, developing new optical setups for applying such a technique to free electron lasers (see 31-32), but also extending the actual limits with classical lasers, showing applications to the electronic and acoustic behaviour of liquids and solids (see 14). Following these results, I participated to the planning, the construction, the test and, finally, to the first experiments of a new beamline based on the previous technique (see 1, 2, 5, 8, 12, 15), and also to experiments on warm dense matter based on lasers and free electron lasers (see 3, 13, 16, 26, 28, 29). These experiments were also used for characterization of the FERMI parameters and test its current performances (6, 19, 25, 27). I worked on experiments on liquids with impulsive stimulated Raman scattering (see 20) and continuum Raman scattering (7, 9, 21, 22, 23, 24). Moreover, I worked in synergy with the electronic workshop for the characterization of new electronic devices based on quantum wells (see 10, 11, 18).

After this experience, I moved to the University of Nova Gorica, as responsible of the new high harmonic generation laser based laboratory for the studies of properties of light and application to the gas phase. At the same time, I was also appointed as beam line scientist for the Low Density Matter beamline on a research program devoted to electron photo-emission spectroscopy, ion time of flight and mass spectroscopy on He nanodroplets and sequential ionization of noble gases. I participated to the first and highly challenging experiments on coherent control of light from free electron laser radiation (see 4).

Presently, I am the scientific responsible of the SPRINT lab at CNR-IOM for generation of high harmonics, ultrafast spectroscopy and for time resolved non linear experiments. The research activities range from angle resolved photo-emission spectroscopy, to spin spectroscopy and to generation and detection of spin waves by using four wave mixing techniques on magnetic materials.



