**CURRICULUM VITAE**

**PERSONAL INFORMATION**

Family name, First name: Lamberti, Andrea Date of birth: 28/02/1984

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**EDUCATION**

* February 2013 PhD In Electronic Devices *(*Title of the thesis “Metal-Oxide Nanostructures for Energy Applications”), Department of Electronics, Politecnico di Torino, Italy
* April 2009 Master degree in Physical engineering – Final evaluation 110L/110, Department of Physics, Politecnico di Torino, Italy

**CURRENT POSITIONS**

* December 2016 – Present: Assistant Professor, Sector: Experimental Physics of Matter, Applied Science and Technology Department (DISAT), Politecnico di Torino, Italy.
* October 2016 – Present: Affiliated External Researcher, Center for Sustainable Futures, Istituto Italiano di Tecnologia, Italy

**PREVIOUS POSITIONS**

* July 2013 – November 2016: Post Doc Research Assistant, Applied Science and Technology Department (DISAT), Politecnico di Torino, Italy.
* February 2013 – June 2013: Post Doc Fellow Researcher, Center for Space Human Robotics, Istituto Italiano di Tecnologia, Italy.

**FELLOWSHIPS AND AWARDS**

* **Scholarship** during PhD period January 2010 – December 2012, Applied Science and Technology Department (DISAT), Politecnico di Torino, Italy.
* **Certificate PREMIO LEVI 2015 –** the article “A. Lamberti et al. *Sci. Rep.* 5 (2015) 7808” was judged one of the best 10 paper under evaluation by the award committee.

**SUPERVISION OF STUDENTS**

**Co-supervisor of Master Degree (MD) students:** 2010-2011 Daniele Flore (MD in Electronic Engineering); 2012-2013 Matteo Gerosa (MD in Nanotechologies for ICTs); 2014-2015 Amjid Rafique (MD in Textile Engineering); 2015-2016 Alessandro Pedico (MD in Nanotechologies for ICTs)

**Co-supervisor of** **Bachelor Degree (BD) students:** 2009-2010 Julien Armando Philippe (BD in Nanotechologies for ICTs); 2010-2011 Balaji Krishnan (BD in Nanotechologies for ICTs); 2012-2013 Francesca Rivello (BD in Physical Engineering), 2012-2013 Francesca Sorba (BD in Physical Engineering)

**TEACHING ACTIVITIES**

**2013/2014, 2014/2015, 2015/2016** Collaborator for the course “Introduzione alle Nanotecnologie”, Politecnico di Torino, Torino, Italia (8 hours lab each year)

**2014/2015** Teacher in the “Master in Ingegneria dei Sistemi di Propulsione”, Module: “sensoristica MEMS”, Politecnico di Torino, Torino, Italia (8 hours frontal lessons)

**2015/2016, 2016/2017** Teacher in the “Master in Additive Manufacturing”, Module: “Advanced sensors for additive manufacturing systems”, Politecnico di Torino, Torino, Italia (20 hours frontal lessons each year)

**2015/2016, 2016/2017** Teacher for the course “Tecnologie per le nanoscienze”, Politecnico di Torino, Torino, Italia (9 hours frontal lessons, 20 hours lab each year)

**2016/2017** Collaborator for the course “Fisica I”, Politecnico di Torino, Torino, Italia (18 hours classroom exercices)

**ORGANISATION OF SCIENTIFIC MEETINGS**

* Organizer of the Nanotechnology@PoliTO stand at “9° edizione del salone Affidabilità e Tecnologia” 22-23 April 2015, Lingotto Fiere, Torino, Italy
* Organizer and chairman of the symposium “Graphene for energetic applications” at NanoItaly2015 congress, 21-24 Settembre 2015, Università La sapienza, Roma, Italy
* Organizer and chairman of the symposium “Materials and Technologies for Additive Manufacturing” at AIV2017-XXIII Conference of Italian Association of Science and Technology,5-7 April 2017, Firenze, Italy

**COMMISSIONS OF TRUST**

* **Assistant editor** “Advanced Smart Materials”, De Gruyter Open, Sp. z o.o. Bogumiła Zuga 32A St. 01-811, Warsaw, Poland
* **Member of the scientific board** AIV2017-XXIII Conference of Italian Association of Science and Technology,5-7 April 2017, Firenze, Italy
* **Guest Editor** for Journal of Vacuum Science & Technology B - Special Issue "Selected Papers from the 2017 Italian Association of Science and Technology XXIII Conference"
* **Reviewer for international peer-review journal** such asAdvanced Materials, Nanotechnology, Applied Energy, Microfluidics and Nanofluidics, Thin solid films, Microelectronic Engineering, ACS Applied Materials and Interfaces, Small, Scientific Reports, RSC Advances, Journal of Materials Chemistry C,…

**MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

* Member of the Executive Committee of the AIV - Italian Association of Science and Technology
* Associate Member of the SCI – Italian chemical society, Young section (under 35 years old).

**COLLABORATIONS**

**Collaboration with research centers/universities**

* **King Abdullah University of Science and Technology - KAUST (Saudi Arabia),** Contact: Dr. Andrea Falqui. Topic: *in situ* TEM characterization of nanostructures for energy applications.
* **IBM Almaden Research Center,** Contact: Dr. Ho-Cheol Kim. Topic: Energy storage materials and devices.
* **University of Lubjana (Slovenia),** Contact: Prof. Barbara Malic. Topic: Sol-gel piezoelectric thin film deposition for MEMS applications.
* **Curie research center, Paris (France),** Contact: Dr. Ivan Ferrante. Topic: Graphene-based substrates for neuronal cell growth.
* **University Politechnica of Bucharest (Romania),** Contact: Prof. Anca Ionescu. Topic: modeling and characterization of dye-sensitized solar cells.
* **National Centre for Physics, Islamabad (Pakistan),** Contact: Dr. Nadia Shahzad. Topic: fabrication and characterization of innovative dye-sensitized solar cell materials.
* **University of Southampton (UK)**, Contact: Prof. Guy Denuault. Topic: multiphysics numerical simulations of capacitive mixing devices.

**Collaboration with companies**

**ENI** (Contacts: Dr. Massimo Zampato, Dr. Stefano Carminati), **Edison** (Dr. Paolo Tosco), **Thetis** (contact: Dr. Emanuele Barborini), **Vishay** (contact: Ing. Luigi Merlin), **Cyanine Technologies** (contact: Dr. Giuseppe Caputo), **Ribes Ricerche** (contact: Dott. Alessandro Farano), **Microla Optoelectronics** (contact: Ing. Sergio Ferrero e Ing. Luciano Scaltrito), **Marchi&Fildi** (contact: Ing. Luca Cinguino), **Informatica systems** (contact: Dott. Umberto Bena), **Proplast**-Plastic Innovation Pole (contact: Dott. Marco Monti).

Publications on International journal - Source: Scopus (EXPORT DATE:22 Feb 2017)

1. Massa, A., Hernández, S., Lamberti, A., Galletti, C., Russo, N., Fino, D.

Electro-oxidation of phenol over electrodeposited MnOx nanostructures and the role of a TiO2 nanotubes interlayer

(2017) Applied Catalysis B: Environmental, 203, pp. 270-281.

1. Conti, D., Lamberti, A., Porro, S., Rivolo, P., Chiolerio, A., Pirri, C.F., Ricciardi, C.

Memristive behaviour in poly-acrylic acid coated TiO2 nanotube arrays

(2016) Nanotechnology, 27 (48), art. no. 485208, .

1. Lamberti, A., Pirri, C.F.

TiO2 nanotube array as biocompatible electrode in view of implantable supercapacitors

(2016) Journal of Energy Storage, 8, pp. 193-197.

1. Chiadò, A., Novara, C., Lamberti, A., Geobaldo, F., Giorgis, F., Rivolo, P.

Immobilization of Oligonucleotides on Metal-Dielectric Nanostructures for miRNA Detection

(2016) Analytical Chemistry, 88 (19), pp. 9554-9563.

1. Novara, C., Dalla Marta, S., Virga, A., Lamberti, A., Angelini, A., Chiadò, A., Rivolo, P., Geobaldo, F., Sergo, V., Bonifacio, A., Giorgis, F.

SERS-active Ag nanoparticles on porous silicon and PDMS substrates: A comparative study of uniformity and Raman efficiency

(2016) Journal of Physical Chemistry C, 120 (30), pp. 16946-16953.

1. Lamberti, A., Gigot, A., Bianco, S., Fontana, M., Castellino, M., Tresso, E., Pirri, C.F.

Self-assembly of graphene aerogel on copper wire for wearable fiber-shaped supercapacitors

(2016) Carbon, 105, pp. 649-654.

1. Lamberti, A., Fontana, M., Bianco, S., Tresso, E.

Flexible solid-state CuxO-based pseudo-supercapacitor by thermal oxidation of copper foils

(2016) International Journal of Hydrogen Energy, 41 (27), pp. 11700-11708.

1. Shahzad, N., Lamberti, A., Pugliese, D., Shahzad, M.I., Tresso, E.

Real time monitoring of ultrafast sensitization for Dye-Sensitized Solar Cell photoanodes

(2016) Solar Energy, 130, pp. 74-80.

1. Lamberti, A., Clerici, F., Fontana, M., Scaltrito, L.

A highly stretchable supercapacitor using laser-induced graphene electrodes onto elastomeric substrate

(2016) Advanced Energy Materials, 6 (10), art. no. 1600050.

1. Clerici, F., Fontana, M., Bianco, S., Serrapede, M., Perrucci, F., Ferrero, S., Tresso, E., Lamberti, A.

In situ MoS2 Decoration of Laser-Induced Graphene as Flexible Supercapacitor Electrodes

(2016) ACS Applied Materials and Interfaces, 8 (16), pp. 10459-10465.

1. Muñoz-Tabares, J.A., Bejtka, K., Lamberti, A., Garino, N., Bianco, S., Quaglio, M., Pirri, C.F., Chiodoni, A.

Nanostructural evolution of one-dimensional BaTiO3 structures by hydrothermal conversion of vertically aligned TiO2 nanotubes

(2016) Nanoscale, 8 (12), pp. 6866-6876.

1. Bella, F., Lamberti, A., Nair, J.R., Bianco, S., Gerbaldi, C., Tresso, E., Pirri, C.F.

Nanostructured photoelectrodes and polymeric nanointerfaces engineering: The critical transition from rigid to flexible dye-sensitized solar cells

(2015) IEEE-NANO 2015 - 15th International Conference on Nanotechnology, art. no. 7388893, pp. 1378-1381.

1. Sacco, A., Lamberti, A., Bianco, S., Tresso, E.

Anodically grown TiO2 nanotube membranes: Synthesis, characterization, and application in dye-sensitized solar cells

(2016) Handbook of Nanoelectrochemistry: Electrochemical Synthesis Methods, Properties, and Characterization Techniques, pp. 1299-1326.

1. Novara, C., Lamberti, A., Chiadò, A., Virga, A., Rivolo, P., Geobaldo, F., Giorgis, F.

Surface-enhanced Raman spectroscopy on porous silicon membranes decorated with Ag nanoparticles integrated in elastomeric microfluidic chips

(2016) RSC Advances, 6 (26), pp. 21865-21870.

1. Cauda, V., Stassi, S., Lamberti, A., Morello, M., Fabrizio Pirri, C., Canavese, G.

Leveraging ZnO morphologies in piezoelectric composites for mechanical energy harvesting

(2015) Nano Energy, 18, pp. 212-221.

1. Lamberti, A., Fontana, M., Bianco, S., Tresso, E.

Flexible solid-state CuxO-based pseudo-supercapacitor by thermal oxidation of copper foils

(2016) International Journal of Hydrogen Energy, . Article in Press.

1. Ricciardi, S., Frascella, F., Angelini, A., Lamberti, A., Munzert, P., Boarino, L., Rizzo, R., Tommasi, A., Descrovi, E.

Optofluidic chip for surface wave-based fluorescence sensing

(2015) Sensors and Actuators, B: Chemical, 215, pp. 225-230.

1. Lamberti, A., Virga, A., Chiadò, A., Chiodoni, A., Bejtka, K., Rivolo, P., Giorgis, F.

Ultrasensitive Ag-coated TiO2 nanotube arrays for flexible SERS-based optofluidic devices

(2015) Journal of Materials Chemistry C, 3 (26), pp. 6868-6875.

1. Lamberti, A., Virga, A., Rivolo, P., Angelini, A., Giorgis, F.

Easy Tuning of Surface and Optical Properties of PDMS Decorated by Ag Nanoparticles

(2015) Journal of Physical Chemistry B, 119 (25), pp. 8194-8200.

1. Hernández, S., Hidalgo, D., Sacco, A., Chiodoni, A., Lamberti, A., Cauda, V., Tresso, E., Saracco, G.

Comparison of photocatalytic and transport properties of TiO2 and ZnO nanostructures for solar-driven water splitting

(2015) Physical Chemistry Chemical Physics, 17 (12), pp. 7775-7786.

1. Garino, N., Lamberti, A., Gazia, R., Chiodoni, A., Gerbaldi, C.

Cycling behaviour of sponge-like nanostructured ZnO as thin-film Li-ion battery anodes

(2014) Journal of Alloys and Compounds, 615 (S1), pp. S454-S458.

1. Lamberti, A., Sacco, A., Laurenti, M., Fontana, M., Pirri, C.F., Bianco, S.

Sponge-like ZnO nanostructures by low temperature water vapor-oxidation method as dye-sensitized solar cell photoanodes

(2014) Journal of Alloys and Compounds, 615 (S1), pp. S487-S490.

1. Lamberti, A., Angelini, A., Ricciardi, S., Frascella, F.

A flow-through holed PDMS membrane as a reusable microarray spotter for biomedical assays

(2015) Lab on a Chip - Miniaturisation for Chemistry and Biology, 15 (1), pp. 67-71.

1. Lamberti, A.

Microfluidic photocatalytic device exploiting PDMS/TiO<inf>2</inf> nanocomposite

(2015) Applied Surface Science, 335, pp. 50-54.

1. Lamberti, A., Virga, A., Giorgis, F.

Microfluidic electrochemical growth of vertically aligned TiO2 nanotubes for SERS optofluidic devices

(2015) RSC Advances, 5 (127), pp. 105484-105488.

1. Lamberti, A., Virga, A., Angelini, A., Ricci, A., Descrovi, E., Cocuzza, M., Giorgis, F.

Metal-elastomer nanostructures for tunable SERS and easy microfluidic integration

(2015) RSC Advances, 5 (6), pp. 4404-4410.

1. Lamberti, A., Garino, N., Sacco, A., Bianco, S., Chiodoni, A., Gerbaldi, C.

As-grown vertically aligned amorphous TiO2 nanotube arrays as high-rate Li-based micro-battery anodes with improved long-term performance

(2014) Electrochimica Acta, 151, pp. 222-229.

1. Lamberti, A., Chiodoni, A., Shahzad, N., Bianco, S., Quaglio, M., Pirri, C.F.

Ultrafast room-temperature crystallization of TiO2 nanotubes exploiting water-vapor treatment

(2015) Scientific Reports, 5, art. no. 7808, .

1. Sacco, A., Pugliese, D., Lamberti, A., Castellino, M., Chiodoni, A., Virga, A., Bianco, S.

A long-term analysis of Pt counter electrodes for Dye-sensitized Solar Cells exploiting a microfluidic housing system

(2015) Materials Chemistry and Physics, 161, art. no. 18111, pp. 74-83.

1. Sacco, A., Lamberti, A., Gerosa, M., Bisio, C., Gatti, G., Carniato, F., Shahzad, N., Chiodoni, A., Tresso, E., Marchese, L.

Toward quasi-solid state Dye-sensitized Solar Cells: Effect of γ-Al2O3 nanoparticle dispersion into liquid electrolyte

(2015) Solar Energy, 111, pp. 125-134.

1. Bella, F., Lamberti, A., Sacco, A., Bianco, S., Chiodoni, A., Bongiovanni, R.

Novel electrode and electrolyte membranes: Towards flexible dye-sensitized solar cell combining vertically aligned TiO2 nanotube array and light-cured polymer network

(2014) Journal of Membrane Science, 470, pp. 125-131.

1. Lamberti, A., Di Donato, M., Chiappone, A., Giorgis, F., Canavese, G.

Tunable electromechanical actuation in silicone dielectric film

(2014) Smart Materials and Structures, 23 (10), art. no. 105001, .

1. Vacca, M., Graziano, M., Di Crescenzo, L., Chiolerio, A., Lamberti, A., Balma, D., Canavese, G., Celegato, F., Enrico, E., Tiberto, P., Boarino, L., Zamboni, M.

Magnetoelastic Clock System for Nanomagnet Logic

(2014) IEEE Transactions on Nanotechnology, 13 (5), art. no. 6846334, pp. 963-973.

1. Sacco, A., Porro, S., Lamberti, A., Gerosa, M., Castellino, M., Chiodoni, A., Bianco, S.

Investigation of transport and recombination properties in graphene/titanium dioxide nanocomposite for dye-sensitized solar cell photoanodes

(2014) Electrochimica Acta, 131, pp. 154-159.

1. Lamberti, A., Gazia, R., Sacco, A., Bianco, S., Quaglio, M., Chiodoni, A., Tresso, E., Pirri, C.F.

Coral-shaped ZnO nanostructures for dye-sensitized solar cell photoanodes

(2014) Progress in Photovoltaics: Research and Applications, 22 (2), pp. 189-197.

1. Cauda, V., Pugliese, D., Garino, N., Sacco, A., Bianco, S., Bella, F., Lamberti, A., Gerbaldi, C.

Multi-functional energy conversion and storage electrodes using flower-like Zinc oxide nanostructures

(2014) Energy, 65, pp. 639-646.

1. Ottone, C., Lamberti, A., Fontana, M., Cauda, V.

Wetting behavior of hierarchical oxide nanostructures: TiO2 nanotubes from anodic oxidation decorated with ZnO nanostructures

(2014) Journal of the Electrochemical Society, 161 (10), pp. D484-D488.

1. Lamberti, A., Marasso, S.L., Cocuzza, M.

PDMS membranes with tunable gas permeability for microfluidic applications

(2014) RSC Advances, 4 (106), pp. 61415-61419.

1. Pugliese, D., Lamberti, A., Bella, F., Sacco, A., Bianco, S., Tresso, E.

TiO2 nanotubes as flexible photoanode for back-illuminated dye-sensitized solar cells with hemi-squaraine organic dye and iodine-free transparent electrolyte

(2014) Organic Electronics: physics, materials, applications, 15 (12), pp. 3715-3722.

1. Angelini, A., Lamberti, A., Ricciardi, S., Frascella, F., Munzert, P., De Leo, N., Descrovi, E.

In-plane 2D focusing of surface waves by ultrathin refractive structures

(2014) Optics Letters, 39 (22), pp. 6391-6394.

1. Lamberti, A., Garino, N., Bejtka, K., Bianco, S., Stassi, S., Chiodoni, A., Canavese, G., Pirri, C.F., Quaglio, M.

Synthesis of ferroelectric BaTiO3 tube-like arrays by hydrothermal conversion of a vertically aligned TiO2 nanotube carpet

(2014) New Journal of Chemistry, 38 (5), pp. 2024-2030.

1. Gazia, R., Canavese, G., Chiodoni, A., Lamberti, A., Stassi, S., Sacco, A., Bianco, S., Virga, A., Tresso, E., Pirri, C.F.

Novel spongelike nanostructured ZnO films: Properties and applications

(2014) Journal of Alloys and Compounds, 586 (SUPPL. 1), pp. S331-S335.

1. Vacca, M., Graziano, M., Chiolerio, A., Lamberti, A., Laurenti, M., Balma, D., Enrico, E., Celegato, F., Tiberto, P., Boarino, L., Zamboni, M.

Electric clock for NanoMagnet Logic circuits

(2014) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8280 LNCS, pp. 73-110.

1. Pugliese, D., Shahzad, N., Sacco, A., Musso, G., Lamberti, A., Caputo, G., Tresso, E., Bianco, S., Pirri, C.F.

Fast TiO2 sensitization using the semisquaric acid as anchoring group

(2013) International Journal of Photoenergy, 2013, art. no. 871526, .

1. Pugliese, D., Bella, F., Cauda, V., Lamberti, A., Sacco, A., Tresso, E., Bianco, S.

A chemometric approach for the sensitization procedure of ZnO flowerlike microstructures for dye-sensitized solar cells

(2013) ACS Applied Materials and Interfaces, 5 (21), pp. 11288-11295.

1. Shahzad, N., Risplendi, F., Pugliese, D., Bianco, S., Sacco, A., Lamberti, A., Gazia, R., Tresso, E., Cicero, G.

Comparison of hemi-squaraine sensitized TiO2 and ZnO photoanodes for DSSC applications

(2013) Journal of Physical Chemistry C, 117 (44), pp. 22778-22783.

1. Gazia, R., Motto, P., Stassi, S., Sacco, A., Virga, A., Lamberti, A., Canavese, G.

Photodetection and piezoelectric response from hard and flexible sponge-like ZnO-based structures

(2013) Nano Energy, 2 (6), pp. 1294-1302.

1. Cappelluti, F., Ma, S., Pugliese, D., Sacco, A., Lamberti, A., Ghione, G., Tresso, E.

Consistent static and small-signal physics-based modeling of dye-sensitized solar cells under different illumination conditions

(2013) Physical Chemistry Chemical Physics, 15 (35), pp. 14634-14646.

1. Lamberti, A., Sacco, A., Bianco, S., Manfredi, D., Armandi, M., Quaglio, M., Tresso, E., Pirri, C.F.

An easy approach for the fabrication of TiO2 nanotube-based transparent photoanodes for Dye-sensitized Solar Cells

(2013) Solar Energy, 95, pp. 90-98.

1. Shahzad, N., Pugliese, D., Lamberti, A., Sacco, A., Virga, A., Gazia, R., Bianco, S., Shahzad, M.I., Tresso, E., Pirri, C.F.

Monitoring the dye impregnation time of nanostructured photoanodes for dye sensitized solar cells

(2013) Journal of Physics: Conference Series, 439 (1), art. no. 012012, .

1. Lamberti, A., Garino, N., Sacco, A., Bianco, S., Manfredi, D., Gerbaldi, C.

Vertically aligned TiO2 nanotube array for high rate Li-based micro-battery anodes with improved durability

(2013) Electrochimica Acta, 102, pp. 233-239.

1. Cicero, G., Musso, G., Lamberti, A., Camino, B., Bianco, S., Pugliese, D., Risplendi, F., Sacco, A., Shahzad, N., Ferrari, A.M., Ballarin, B., Barolo, C., Tresso, E., Caputo, G.

Combined experimental and theoretical investigation of the hemi-squaraine/TiO2 interface for dye sensitized solar cells

(2013) Physical Chemistry Chemical Physics, 15 (19), pp. 7198-7203.

1. Lamberti, A., Sacco, A., Bianco, S., Quaglio, M., Manfredi, D., Fabrizio Pirri, C.

Enhancement of electron lifetime in dye-sensitized solar cells using Anodically grown TiO2 Nanotube/Nanoparticle composite Photoanodes

(2013) Microelectronic Engineering, 111, pp. 137-142.

1. Lamberti, A., Sacco, A., Bianco, S., Manfredi, D., Cappelluti, F., Hernandez, S., Quaglio, M., Pirri, C.F.

Charge transport improvement employing TiO2 nanotube arrays as front-side illuminated dye-sensitized solar cell photoanodes

(2013) Physical Chemistry Chemical Physics, 15 (7), pp. 2596-2602.

1. Lamberti, A., Sacco, A., Hidalgo, D., Bianco, S., Manfredi, D., Quaglio, M., Tresso, E., Pirri, C.F.

TiO2 nanotube array as effcient transparent photoanode in dye-sensitized solar cell with high electron lifetime

(2013) Acta Physica Polonica A, 123 (2), pp. 376-379.

1. Sacco, A., Lamberti, A., Berardone, I., Bianco, S., Gazia, R., Pugliese, D., Quaglioa M., Tresso, E., Pirri, C.F.

Sponge-like porous zno photoanodes for highly effcient dye-sensitized solar cells

(2013) Acta Physica Polonica A, 123 (2), pp. 386-389.

1. Lamberti, A., Destro, M., Bianco, S., Quaglio, M., Chiodoni, A., Pirri, C.F., Gerbaldi, C.

Facile fabrication of cuprous oxide nanocomposite anode films for flexible Li-ion batteries via thermal oxidation

(2012) Electrochimica Acta, 86, pp. 323-329.

1. Sacco, A., Lamberti, A., Gazia, R., Bianco, S., Manfredi, D., Shahzad, N., Cappelluti, F., Ma, S., Tresso, E.

High efficiency dye-sensitized solar cells exploiting sponge-like ZnO nanostructures

(2012) Physical Chemistry Chemical Physics, 14 (47), pp. 16203-16208.

1. Gazia, R., Chiodoni, A., Bianco, S., Lamberti, A., Quaglio, M., Sacco, A., Tresso, E., Mandracci, P., Pirri, C.F.

An easy method for the room-temperature growth of spongelike nanostructured Zn films as initial step for the fabrication of nanostructured ZnO

(2012) Thin Solid Films, 524, pp. 107-112.

1. Sacco, A., Lamberti, A., Pugliese, D., Chiodoni, A., Shahzad, N., Bianco, S., Quaglio, M., Gazia, R., Tresso, E., Pirri, C.F.

Microfluidic housing system: A useful tool for the analysis of dye-sensitized solar cell components

(2012) Applied Physics A: Materials Science and Processing, 109 (2), pp. 377-383.

1. Descrovi, E., Frascella, F., Ballarini, M., Moi, V., Lamberti, A., Michelotti, F., Giorgis, F., Pirri, C.F.

Surface label-free sensing by means of a fluorescent multilayered photonic structure

(2012) Applied Physics Letters, 101 (13), art. no. 131105, .

1. Lamberti, A., Quaglio, M., Sacco, A., Cocuzza, M., Pirri, C.F.

Surface energy tailoring of glass by contact printed PDMS

(2012) Applied Surface Science, 258 (23), pp. 9427-9431.

1. Chiolerio, A., Quaglio, M., Lamberti, A., Celegato, F., Balma, D., Allia, P.

Magnetoelastic coupling in multilayered ferroelectric/ferromagnetic thin films: A quantitative evaluation

(2012) Applied Surface Science, 258 (20), pp. 8072-8077.

1. Lamberti, A., Destro, M., Bianco, S., Quaglio, M., Chiodoni, A., Pirri, C.F., Gerbaldi, C.

Facile fabrication of cuprous oxide nanocomposite anode films for flexible Li-ion batteries via thermal oxidation

(2012) Electrochimica Acta, 70, pp. 62-68.

1. Sacco, A., Lamberti, A., Quaglio, M., Bianco, S., Tresso, E., Alexe-Ionescu, A.-L., Pirri, C.F.

Electric characterization and modeling of microfluidic-based dye-sensitized solar cell

(2012) International Journal of Photoenergy, 2012, art. no. 216780, .

1. Pasquardini, L., Potrich, C., Quaglio, M., Lamberti, A., Guastella, S., Lunelli, L., Cocuzza, M., Vanzetti, L., Pirri, C.F., Pederzolli, C.

Solid phase DNA extraction on PDMS and direct amplification

(2011) Lab on a Chip - Miniaturisation for Chemistry and Biology, 11 (23), pp. 4029-4035.

1. Lamberti, A., Sacco, A., Bianco, S., Giuri, E., Quaglio, M., Chiodoni, A., Tresso, E.

Microfluidic sealing and housing system for innovative dye-sensitized solar cell architecture

(2011) Microelectronic Engineering, 88 (8), pp. 2308-2310.

1. Balma, D., Lamberti, A., Marasso, S.L., Perrone, D., Quaglio, M., Canavese, G., Bianco, S., Cocuzza, M.

Piezoelectrically actuated MEMS microswitches for high current applications

(2011) Microelectronic Engineering, 88 (8), pp. 2208-2210.

BOOK Chapters

1. Sacco, A., Lamberti, A., Bianco, S., Tresso, E.

Anodically grown TiO2 nanotube membranes: Synthesis, characterization, and application in dye-sensitized solar cells

(2016) pp. 1299-1326.

1. Vacca, M., Graziano, M., Chiolerio, A., Lamberti, A., Laurenti, M., Balma, D., ... & Zamboni, M.

(2014). Electric clock for NanoMagnet logic circuits. In Field-Coupled Nanocomputing (pp. 73-110). Springer Berlin Heidelberg.

1. Lamberti, A.

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PATENTS

1. Italian patent deposited (28/09/2009): n. TO2009A000735 (Assignee: Polytechnic of Turin and CNR-INFM) "SISTEMA A VENTOSA PER SIGILLATURA REVERSIBILE DI DISPOSITIVI MICROFLUIDICI POLIMERICI ELASTOMERICI" (“Suction cap system for the reversible sealing of elastomeric microfluidic devices”).

Authors: A. Lamberti, E. Giuri, S.L. Marasso, M. Quaglio, G. Canavese, D. Perrone, C.F. Pirri, M. Cocuzza

1. Italian patent deposited (XX/04/2015): n. XXXX (Assignee: Polytechnic of Turin) “Dispositivo microfluidico SERS multicamera integrante membrane di silicio poroso e relativo processo di fabbricazione”

Authors: GIORGIS Fabrizio – GEOBALDO Francesco - LAMBERTI Andrea - NOVARA Chiara - VIRGA Alessandro - RIVOLO Paola - CHIADO’ Alessandro

***Invited presentations***

* A. Lamberti, "Nanomaterial integration and micro-fabrication technologies for sensing, energy production and storage"

Invited talk to the third International Conference “NanotechItaly2014 - Cross-Cutting KETs for Responsible Innovations”, 26-28 November 2014, Venice (Italy)

* A. Lamberti, “Fiber-shaped supercapacitor by hydrothermal self-assembly of graphene on copper wires”

Invited talk to NanoItaly2015, 21-24 September 2015, University La sapienza, Rome (Italy)

* A. Lamberti, " Nanomaterials and nanotechnologies for energy harvesting and storage"

Invited seminar to the Helmholtz Institute Ulm (HIU), 3 March 2017, Ulm (Germany)