Martino Giaquinto

About me: Martino Giaquinto received (cum laudae) his Master Degree in Electronic Engineering in 2014 from Università degli Studi di Napoli Federico II (Italy). In April 2018 he received his PhD from Università degli Studi del Sannio (Italy), with a dissertation about the development of Lab-on-Fiber devices integrated with stimuli-responsive microgels. Currently Martino Giaquinto is a Post Doctoral researcher at Optoelectronics Group of Università degli Studi del Sannio, and his research interests include the development of multifunctional optical fiber devices based on Lab-on-Fiber Technology, with a particular focus on bio-medical applications.

WORK EXPERIENCE

06/2020 – CURRENT – Benevento , Italy

POSTDOCTORAL RESEARCH FELLOW – UNIVERSITÀ DEGLI STUDI DEL SANNIO

Assegno di Ricerca per lo svolgimento dell'attività di ricerca dal titolo "Supporto alla validazione di microgeli funzionalizzati per il rilascio di farmaci loco regionale " connessa alla realizzazione del Progetto "NeON - Nanofotonica per nuovi approcci diagnostici e terapEutici in Oncologia e Neurologia" - CUP F26C18000170005 - PNR 2015/2020 - SSD ING-INF/01 "Elettronica"

04/2019 – 05/2020

POSTDOCTORAL RESEARCH COLLABORATOR – CENTRO REGIONALE INFORMATION COMMUNICATION TECHNOLOGY - CERICT SCRL

Contratto di Collaborazione Coordinata e Continuativa per attività da realizzare nell'ambito del progetto di ricerca VISCOPEL - CUP: B83D18000180007
Rinnovo con contratto a tempo determinato - Impiegato con funzioni di coordinamento e specializzazione relative alla attività di ricerca e sviluppo del CeRICT – Livello 8Q CCNL per i lavoratori del settore METALMECCANICI PICCOLA INDUSTRIA.

Benevento, Italy

01/2019 – 12/2019

POSTDOCTORAL RESEARCH FELLOW – UNIVERSITÀ DEGLI STUDI DI NAPOLI "FEDERICO II"

Assegno di Ricerca per lo svolgimento dell'attività di ricerca con riferimento al progetto dal titolo "Fast integrable solutions supporting thermal-aware electronic design" - CUP: E22F15000600005 - DIETI 07/2018 - SSD ING/INF 01

Napoli, Italy

07/2018 – 12/2018

RESEARCH FELLOW – UNIVERSITÀ DEGLI STUDI DEL SANNIO

Borsa di studio per lo svolgimento di attività di ricerca dal titolo "Supporto per lo sviluppo di sensori plasmonici in fibra ottica basati sull'integrazione di microgeli sulla terminazione della fibra" - SSD ING-INF 01 "Elettronica"

Benevento, Italy

11/2017 – 06/2018

RESEARCH FELLOW – UNIVERSITÀ DEGLI STUDI DEL SANNIO

Borsa di studio per lo svolgimento di attività di ricerca dal titolo "Piattaforme integrate con microgeli per il label free biosensing" - SSD ING-INF 01 "Elettronica"

Benevento, Italy

11/2014 – 10/2017

PHD FELLOW – UNIVERSITÀ DEGLI STUDI DEL SANNIO

- Research fellowship for PHD course in Information Technologies for Engineering (Cycle XXX)
- Research project: Stimuli-responsive microgels for advanced Lab-on-Fiber optrodes

Benevento, Italy

10/2016 – 12/2016

RESEARCH COLLABORATOR – CENTRO REGIONALE INFORMATION COMMUNICATION TECHNOLOGY - CERICT SCRL

Contratto di collaborazione coordinata e continuativa per attività da realizzare nell'ambito del progetto di ricerca "Tecnologie optoelettroniche innovative per il monitoraggio e la diagnostica dell'infrastruttura ferroviaria" - PON03PE_00155_1 - CUP: B68F12001050005

Benevento, Italy

10/2015 – 11/2015

RESEARCH COLLABORATOR – CENTRO REGIONALE INFORMATION COMMUNICATION TECHNOLOGY - CERICT SCRL

Contratto di collaborazione coordinata e continuativa per attività da realizzare nell'ambito del progetto di ricerca "Tecnologie optoelettroniche innovative per il monitoraggio e la diagnostica dell'infrastruttura ferroviaria" - PON03PE_00155_1 - CUP: B68F12001050005

Benevento, Italy

EDUCATION AND TRAINING

11/2014 – 04/2018 – Benevento, Italy

PHD IN INFORMATION TECHNOLOGIES FOR ENGINEERING – Department of Engineering, Optoelectronic Division of the University of Sannio - Italy

- Final Dissertation: "Stimuli-responsive microgels for advance Lab-on-Fiber Optrodes" (*Supervisors: Prof. Andrea Cusano, Prof. Antonello Cutolo, Dr. Armando Ricciard*i)
- PHD Schools attended:
  - *International School On Light Sciences And Technologies (June 20-24 2016, Santander, Spain)*
  - *School Of Photonics 2016: Plasmonics And Nano-Optics (July 10-14 2016, Cortona, Italy)*
  - *10th Advanced Study Course On Optical Chemical Sensors (June 20-27 2017, Třešť , Czech Repubblic)*

09/2012 – 07/2014 – Napoli, Italy

MASTER'S DEGREE IN ELECTRONIC ENGINEERING – Università degli Studi di Napoli "Federico II"

- Integrated photonics, Methods and applications for optics and hyperfrequencies, Optical devices, Solid sate physic, Microelectronics, Electronic measurements, Automatic controls, Analogic integrated circuits, Solar devices.
- Final Dissertation: Lab-o-Fiber Technology for Ultrasound Detection (*Supervisors: Prof. Antonello Cutolo and Dr. Armando Ricciardi*)
- Final Mark: 110/110 cum laudae

09/2009 – 09/2014 – Napoli, Italy

BSC IN ELECTRONIC ENGINEERING – Università degli Studi di Napoli "Federico II"

- Electronics (analogic, digital, optoelettronics), Electromagnetic Fields, Optics, Computer Science, Signals Theory, Mathematics, Physics.
- Final Dissertation: Generazione Laser di Ultrasuoni (*Supervisor: Prof. Antonello Cutolo)*
- Final Mark: 110/110 cum laudae

09/2004 – 07/2009 – Marigliano (NA), Italy
SCIENTIFIC HIGH SCHOOL DIPLOMA – Liceo Scientifico “Cristoforo Colombo”

- Final Mark: 100/100

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B1	B2	B2	B1	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PUBLICATIONS

F. Gambino, P. Cicatiello, M. Giaquinto, A. M. Cusano, A. Aliberti, A. Micco, A. Iele, E. Iaccarino, M. Ruvo, A. Ricciardi, A. Cusano, "Lab on fiber nano-cavity integrated with charge responsive microgels for biosensing", Sensors and Actuators B: Chemical, 353, 131149, 2022

2022

M.A. Cutolo, C. Cafiero, L. Califano, M. Giaquinto, A. Cusano, A. Cutolo, "Feasibility analysis of an ultrasound on line diagnostic approach for oral and bone surgery", Scientific Reports, 12(1), 1-9, 2022

2022

F. Gambino, M. Giaquinto, A. Ricciardi, A. Cusano, "A review on dielectric resonant gratings: Mitigation of finite size and Gaussian beam size effects", Results in Optics, 6, 100210, 2022

2022
Invited paper

F. Piccirillo, M. Giaquinto, A. Ricciardi, A. Cusano, "Miniaturized lenses integrated on optical fibers: towards a new milestone along the lab-on-fiber technology roadmap", Results in Optics, 6, 100203, 2022

2022
Invited paper

M. Giaquinto, S. Principe, A. Micco, G.V. Persiano, A. Ricciardi, A. Cusano, "Analysis of thermo-plasmonic lab-on-fiber probes in liquid environments", Smart Materials and Structures 30 (12), 2021, 125007

2021

M. Giaquinto, "Stimuli-responsive materials for smart Lab-on-Fiber optrodes", Results in Optics, 2, 2021

2021
Invited paper

F. Gambino, M. Giaquinto, A. Aliberti, A. Micco, M. Ruvo, A. Cutolo, A. Ricciardi, A. Cusano, "Lab-on-Fiber Optrodes Integrated with Smart Cavities", Sensors and Microsystems: Proceedings of the AISEM 2020 Regional Workshop, 2021

2021

S. Principe, M. Giaquinto, A. Micco, M. A. Cutolo, M. Riccio, G. Breglio, A. Irace, A Ricciardi, A. Cusano, "Thermo-Plasmonic Lab-on-Fiber Optrodes", Optics & Laser Technology, 132, 106502, 2020

2020

M. Giaquinto, A. Aliberti, A. Micco, F. Gambino, M. Ruvo, A. Ricciardi, A. Cusano, "Multifunctional Cavity Enhanced Lab-on-Fiber optrodes", (2020, June). Multifunctional Cavity Enhanced Lab-on-Fiber optrodes. In Optical Fiber Sensors (pp. Th1-3). Optical Society of America

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2020

M. Giaquinto, A. Aliberti, A. Micco, E. Bobeico, M. Ruvo, A. Ricciardi, A. Cusano, "Multiresponsive microgels integration onto lab-on-fiber devices", roceedings Volume 11199, Seventh European Workshop on Optical Fibre Sensors, 111991F, 2019

2019

G. Quero, P. Vaiano, F. Fienga, M. Giaquinto, V. Di Meo, G. Gorine, P. Casolaro, L. Campajola, G. Breglio, A. Crescitelli, E. Esposito, A. Ricciardi, A. Cutolo, F. Ravotti, S. Buontempo, M. Consales, A. Cusano, "Innovative lab on fiber dosimeters for ionizing radiation monitoring at ultra-high doses", Proceedings Volume 11199, Seventh European Workshop on Optical Fibre Sensors, 111990I, 2019

2019

M. Giaquinto, A. Aliberti, A. Micco, F. Gambino, M. Ruvo, A. Ricciardi, A. Cusano, "Cavity-Enhanced Lab-on-Fiber Technology: Toward Advanced Biosensors and Nano-Opto-Mechanical Active Devices", ACS Photonics, 6(12), 2019

2019

M. Giaquinto, A. Ricciardi, A. Aliberti, A. Micco, E. Bobeico, V. La Ferrara, M. Ruvo, A. Cusano, "Light-Microgel Interaction in Resonant Nanostructures", Scientific Reports, 8 (1), 2018

2018

G. Quero, P. Vaiano, F. Fienga, M. Giaquinto, V. Di Meo, G. Gorine, P. Casolaro, L. Campajola, G. Breglio, A. Crescitelli, E. Esposito, A. Ricciardi, A. Cutolo, F. Ravotti, S. Buontempo, M. Consales, A.Cusano, "A novel Lab-on-Fiber Radiation Dosimeter for Ultra-high Dose Monitoring", Scientific Reports, 8(1), 2018

2018

M. Giaquinto, A. Micco, A. Aliberti, E. Bobeico, M. Ruvo, A. Ricciardi, and A. Cusano, "Engineering of Microgel Assisted Lab-on-Fiber Platforms", 26th International Conference on Optical Fiber Sensors, Optical Society of America, p. TuE3, 2018

2018

M. Giaquinto, A, Micco, A. Aliberti, E. Bobeico, V. La Ferrara, M. Ruvo, A. Ricciardi, A. Cusano, "A Time-Efficient Dip Coating Technique for the Deposition of Microgels onto the Optical Fiber Tip", Fibers, 6 (4), 2018

2018

M. Giaquinto, A. Ricciardi, A. Cutolo, A. Cusano, "Microgels assisted Lab-on-fiber optrode", Scientific Reports, 7(1), 2017

2017

M. Giaquinto, A. Micco, A. Aliberti, E. Bobeico, V. La Ferrara, M. Ruvo, A. Ricciardi, A. Cusano, "Optimization Strategies for Responsivity Control of Microgel Assisted Lab-On-Fiber Optrodes", Sensors, 18(4), 2018

2017

M. Giaquinto, A. Micco, A. Aliberti, A.Ricciardi, M. Ruvo, A. Cutolo, A. Cusano, "Microgel Photonics and Lab on Fiber Technology for Advanced Label-Free Fiber Optic Nanoprobes", Sixth European Workshop on Optical Fibre Sensors (EWOFS'2016). International Society for Optics and Photonics, 2016

2016

M. Giaquinto, A. Ricciardi, A. Cutolo, A. Cusano, "Lab-on-fiber Plasmonic Probes for Ultrasound Detection: A Comparative Study", Journal of Lightwave Technology, 34 (22), 2016

2016

M. Giaquinto, A. Micco, A. Aliberti, A.Ricciardi, M. Ruvo, A. Cutolo, A. Cusano, "Lab on Fiber Biosensors Integrated with Microgels", Asia-Pacific Optical Sensors Conference, W1A. 4, 2016

2016

A. Ricciardi, A. Aliberti, M. Giaquinto, A. Micco, A. Cusano, "Microgel photonics: a breathing cavity onto optical fiber tip", International Conference on Optical Fibre Sensors (OFS24). International Society for Optics and Photonics, 2015

2015

M. Giaquinto, A. Ricciardi, A. Cutolo, A. Cusano, "Lab-on-fiber platforms for ultreasound detection: a comparative study", Proc. SPIE 9634, 24th International Conference on Optical Fibre Sensors, 96343H, 2015

2015

CONFERENCES AND SEMINARS

Rome (Italy), June 17th–20th, 2019
M. Giaquinto, A. Ricciardi, A. Aliberti, A. Micco, E. Bobeico, M. Ruvo, A. Cusano, "Stimuli-Responsive Microgels for Advanced Lab-On-Fiber Optrodes", PhotonIcs & Electromagnetics Research Symposium (PIERS), 2019

Lecce (Italy), May 23th-25th, 2018
M. Giaquinto, A. Micco, A. Aliberti, E. Bobeico, V. La Ferrara, M. Ruvo, A. Ricciardi, A. Cutolo, A. Cusano, "Engineering of Microgel Assisted Lab-on-Fiber Platforms" Fotonica 2018 - 20th Edition, Convegno Italiano delle Tecnologie Fotoniche, 2018

Best Poster Award

Capri, Italy, September 10th-14th, 2017
M. Giaquinto, A. Ricciardi, A. Micco, A. Aliberti, E. Bobeico, V. La Ferrara, M. Ruvo, A. Cutolo, A. Cusano, "Lab-on-Fiber bio-probes integrated with Microgels", Invited Talk at 7th EOS Topical Meeting on Optical Microsystems (OμS'17), 2017

Invited talk

PROJECTS

Guest Editor for a Special Issue in the journal "Results in Optics" (Elsevier)

https://www.sciencedirect.com/science/journal/26669501/vsi/10S7DDF838X
Special Issue Title: Nanophotonics and optical fibers: new avenues for sensing and active devices

HONOURS AND AWARDS

06/2018
PhD Thesis Award – Società Italiana di Elettronica

Thesis Title: "Stimuli-responsive Microgels for Advanced Lab-on-Fiber Optrodes"

06/2018
Best Poster Award – Fotonica 2018 - Congresso Italiano delle tecnologie fotoniche, 20a Edizione, Lecce

Work Presented: "Engineering of Microgel Assisted Lab-on-Fiber platforms"

Other Grants

Student Grant during Master's Degree course
September 2014, Society Tenaris-Dalmine s.p.a., in the ambit of "Roberto Rocca Education Program"

Student Grant during Master's Degree course
September 2014, Society Autostrade per l'Italia s.p.a., in the ambit of project "Autostrade per la Conoscenza"

ORGANISATIONAL SKILLS

Management of research activities linked to the projects I am involved in

Organization of research activities shared with other colleagues in the team

Supervision of master's degree theses

COMMUNICATION AND INTERPERSONAL SKILLS

Speaker at conferences and lectures

Teaching experiences

Continuous and constant interaction with colleagues in a multidisciplinary working team

JOB-RELATED SKILLS

Experiences in the following fields:

Nanotechnology, photonics, plasmonics, thermoplasmonics, metamaterials, biosensing, optoelectronics, electronics, optical sensors, smart polymers.

Ability with:

Test and characterization of optical devices, design and modelling, numerical simulation, optical and atomic force microscopy, ellipsometry infrared thermal camera, optical fibers

Good knowledge of the following software and programming:

Matlab, Comsol Multiphysics, LabView, SPICE

TEACHING SKILLS

2020 – CURRENT
Cultore della materia

Elettronica per le telecomunicazioni

Teaching Experiences at Università degli Studi del Sannio:

- Optoelectronics and Photonics
- Electronics for Telecommunications
- Electronics for Automation

DICHIARAZIONE SOSTITUTIVA DI ATTO DI NOTORIETA'
(art. 46 e 47 del D.P.R. 28/12/2000 n. 445)

Il sottoscritto GIAQUINTO MARTINO nato codice fiscale
e residente a

sotto la propria esclusiva responsabilità e consapevole della responsabilità penale conseguente a dichiarazioni non veritiere e falsità negli atti, ai sensi dell' art. 76 del D.P.R. 28/12/2000 n. 445;
consapevole, inoltre, delle conseguenze amministrative in merito alla decadenza dei benefici eventualmente conseguenti al provvedimento emanato sulla base di dichiarazioni non veritiere**;**

D I C H I A R A

di aver fornito informazioni veritiere nel Curriculum Vitae presentato.

Si autorizza il trattamento dei dati personali contenuti nel curriculum vitae in base art. 13 del D. Lgs. 196/2003

DICHIARANTE

Benevento 17 Febbraio 2022 firma