



PERSONAL INFORMATION

Surname(s) / First name(s)	Conoci Sabrina
Address(es)	
Telephone(s)	
E-mail	
Nationality	Italian
Date of birth	
Gender	Female

WORK EXPERIENCE

Date	From Oct 2019 To date
	<ul style="list-style-type: none"> - Full professor of Physics (FIS03) at University of Messina, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences and at University of Bologna, Department of Chemistry G.Ciamician. - Rector Delegate to Technology Transfer at University of Messina; - Head of Joint Research Laboratory between STMicroelectronics (Multinational Semiconductor Industry, www.st.com) and University of Messina whose purpose is to carry out research activities, industrial exploitation of results and technology transfer; - Head of the Research Unit at Third Parties (URT) of the Department of Physical Sciences and Technologies of Matter (DSFTM) of the National Research Council (CNR) - Lab SENS- Beyond Nano, at the University of Messina (UNIME) - Co-founder (June 2020) of Spin off (Innovative Start Up) Innova Medical Biotechnologies (IBMTech - www.ibmtech.it) which addresses products / services related to: (a) medical devices; (b) artificial intelligence algorithms for medical imaging analysis; (c) molecular diagnostic devices (c) Nutraceutical; - Member of the Strategic and Advisory Council of the Graphene Flagship (https://graphene-flagship.eu/project/management/Pages/Strategic-Advisory-Board.aspx) chaired by the Nobel Prize Prof Konstantin Novoselov (University of Manchester, Manchester, UK); - Member of the Biomedical District Council for High Technology-Sicily - Scientific Advisor for Health Programs of Distretto Tecnologico Micro e Nanosistemi Sicilia (http://www.distrettomicronano.it/en/); - Scientific Advisor for STMicroelectronics in the field of advanced research on innovative sensors.
	From March 1999 -To Sept 2019
Name and address of employer	STMicroelectronics , Stradale Primosele 50, 95121 Catania, Italy - www.st.com
Type of business or sector	Semiconductor
	Several positions in the R&D area have been held as following detailed. <i>from April 2009 to sept 2019</i>
Occupations or positions held	Advanced Devices and Sensors R&D Manager -ADG Central R&D Group
Main activities and responsibilities	<u>Role:</u> management of R&D activities centred on the development of sensors technological platforms integrated in Silicon. <u>Responsibilities:</u>

- a) *Team Management.* Responsible for technical coordination of multidisciplinary research group composed by senior scientists with background in Molecular Biology, Biochemistry, Physics, Chemistry, Electronic Eng., Microfluidic, Optics. This responsibility development and coaching of group members, working on the profiles, attitudes and skills of group members for building a motivated multidisciplinary team that optimizes capability, strength and interfaces to other groups of researchers.
- b) *Project Management.* This responsibility includes: a) planning and organizing the resources and time necessary for successful completion of projects; b) project weekly meeting; c) cost and budget management.
- c) *System Qualification Activity Management.* This responsibility includes: (a) Definition of system verification and validation Master Plan; (b) management of all the technical activities for the achievement of system maturity levels;
- d) *System roadmap Definition.* Responsible for defying the Healthcare Systems Technology roadmap according to the internal Group Roadmap. This responsibility is founded on a deep knowledge of the state-of-the art of Healthcare Systems together with multidisciplinary competences (chemistry, biology, optics, microfluidic..).
- e) *Customer Support.* Responsible to support the Healthcare Systems customers in the development of products. This responsibility includes: (a) Diversified Competences to talk with IVD customers; (b) Ability to build good relationship with the customers; (c) Competence to translate the application customer requests into technological specifications;
- f) *Funding Support.* Responsible for coordinating and defining the content of Project applied for funding according to the Healthcare Systems Technology Roadmap (see Additional information/Project section).

In 2012 becomes Senior Member of ST Technical Staff Carrier *"The Technical Staff Community gathers employees having a specific and recognized expertise level in the technical core business functions. This community aims at creating an environment which fosters continuous shared knowledge and innovation to strengthen ST technological competitive advantage."*

From April 2005 to March 2009

Occupation or position held
Main activities
and responsibilities

BioWare R&D Section Manager - LabonChip R&D – MF Division

Role: management of R&D activities centred on the development and qualification of biotechnology based PCR-end point and Microarray for Lab-On-Chip Devices (In-Check Product).

Responsibilities:

- a) *Team Management.* Responsible for a research group composed by Molecular Bio-Application and Chemistry Technology Process sub-units, including researchers (among these 4 Ph.D) with background in Molecular Biology, Biochemistry, Physics and Chemistry. This responsibility includes job description, performance appraisals, career planning, hiring, development and coaching of group members. Working on the profiles, attitudes and skills of group members for building a motivated multidisciplinary team that optimizes capability, strength and interfaces to other groups of researchers.
- b) *Project Management.* This responsibility includes: a) planning and organizing the resources and time necessary for successful completion of projects; b) project weekly meeting; c) cost and budget management.
- c) *Development and Qualification Activity Management.* Responsible for defining, together with the IVD (In-vitro Diagnostic) quality& regulatory manager, the procedures for the PCR-MA product (BioTechnology) qualification. This responsibility includes the definition of the internal procedure (Local Operating Procedure LOP) *Lab-On-Chip (LoC) BIOTECHNOLOGY Design Development and Qualification Procedures*, according to the CLSI (formerly NCCLS) recommendation for IVD devices
- d) *Roadmap. Definition and Research Activities Management.* Responsible for the definition of roadmap and management of the research activities related to both Molecular Biology Applications and Chem Technology Process Development areas. In particular: (a) Define Research program according to the Biotechnology roadmap; (b) Managing all the technical activities for the achievement of Biotechnology maturity levels; (c) Define and manage Projects in cooperation with academic partnership; (d) Funded project application.

From April 2002 to April 2005

Occupation or position held

Molecular Nano Devices Group Leader

Si-Optics&post Silicon Technologies Corporate R&D

Role: management of research activities centred on the development of Innovative Devices based on Molecules - Organic and Carbon Nanotubes (CNTs)- included on silicon compatible materials (Hybrid Architectures).

Responsibilities:

a) *Team Management:* responsible for a research group composed by 5 Ph.D researchers, with background in Physics, Engineering and Chemistry. This responsibility included job description, performance appraisals, hiring and coaching of group members.

b) *R&D Activities and Project Management:* responsible for defining both objectives and Roadmap of the group with the aim to produce novel products generating additional ST revenue. Planning and coordinating the R&D activities according to Objectives and Roadmap of group. Compiling and applying for funding specific advanced research projects to Italian Minister or European Community. Communication of the most relevant technical/scientific results by writing scientific papers and/or communication to scientific congress.

EDUCATION AND TRAINING

Date	may1998 -march 2001
Title of qualification awarded	Ph.D in Materials Engineer (awarded on march 2001)
Principal subjects/Occupational skills covered	Research and postgraduate studies in the fields of Chemical Sensor. Thesis Title: Pyrrol derivatives as active substrates for chemical sensors Supervisor: Prof. G. Vasapollo From September 1998 to April1999 – PhD student at the Department of Chemistry University of Ottawa (Canada) in the framework of PhD program at the University of Lecce, Italy. Supervisor: Prof. Sandro Gambarotta <u>Technical Competences:</u> <i>organic and metallorganic synthesis; analytical techniques of Absorption and Fluorescence Spectroscopies, FTIR, GC-GM, X-Ray, NMR; material characterization techniques of SEM, TEM, XPS, AFM, SPR.</i>
Name and type of organisation providing education and training	University of Lecce, Italy
Level in national or international classification	ISCED 6
Date	Feb 1996 - may 1998
Title of qualification awarded	High Level Qualification Fellowship Industrial Researcher
Principal subjects/Occupational skills covered	Specific Training for a period of 26 months related to "vocational training of high level researchers able to manage scientific programs for both industrial process and product innovation with high managerial and entrepreneurial competences " ["formazione di Ricercatori, ad alto livello, capaci di gestire programmi scientifici di innovazione di processi e di prodotti in ambito industriale e con elevate competenze manageriali ed imprenditoriali"]. The training was carried out in the frame of "Programma Nazionale di Ricerca sui Materiali Innovativi Avanzati (PNR-MIA)", funded by Ministero dell'Università e della Ricerca scientifica e Tecnologica (MURST) under the coordination of Enitecnologie (already Eniricerche). The specific theme that the training was centred on was the "Tribological Properties of monolithic and multi-laminated ceramic materials" [Proprietà tribologiche di materiali ceramici monolitici e multilaminati]
Name and type of organisation providing education and training	The places of the training were: <ul style="list-style-type: none"> – February- 1996 -October 1997 at CNR-IRTEC in Faenza (Ravenna, Italy); Supervisor: Dr. Goffredo de Portu – In September 1997, 2 weeks at Massachussets University (USA). – October 1997 - April 1998 at Eniricerche s.p.a. in S. Donato Milanese (Milano, Italy) Supervisor: Dr. Giuseppe Giunta <p><u>Technical Competences:</u> <i>knowledge of physical-chemical techniques for the characterization of mechanical and structural properties of inorganic materials (SEM, SAW, measurement of material strength, hardness, toughness...)</i></p> <p>Enitecnologie (already Eniricerche) San Donato Milanese, Milano (Italy)</p>

Date	November 1995
Title of qualification awarded	Laurea <i>summa cum laude</i> in Industrial Chemistry
Principal subjects/Occupational skills covered	Thesis title: Activation of diazoalkanes with Au(I) and Ru(II) complexes. Supervisor: Prof. Luigi Busetto
Name and type of organisation providing education and training	Faculty of Industrial Chemistry, University of Bologna (Italy)
Level in national or international classification	ISCED 5A
 <u>Courses and Schools</u>	
Date	October 17–18, 2011 (New York)
Title of qualification	Professional Course
Principal subjects/Occupational skills covered	Design Control and Product Validation for Medical Devices
Name and type of organisation providing education and training	CFPA (The Center for Professional Advancement Accredited Technical Training Worldwide) http://www.cfpa.com
Date	Sept 2011
Title of qualification	Professional Course
Principal subjects/Occupational skills covered	CORSO AVANZATO DI BIOTECNOLOGIE E DIAGNOSTICA MOLECOLARE
Name and type of organisation providing education and training	San Raffaele Hospital (MI), 7-10 settembre, 2010
Date	October 27-29 th , 2008 (Berlin)
Title of qualification awarded	Professional Course
Principal subjects/Occupational skills covered	Process Validation for Medical Devices
Name and type of organisation providing education and training	CFPIE (The Center for Professional Innovation&Education) http://www.cfpie.com
Date	May 2006
Title of qualification awarded	Professional Course
Principal subjects/Occupational skills covered	Il Sistema di gestione per la Qualita' secondo il Modello ISO 13485:2003
Name and type of organisation providing education and training	Consulenza tecnica Aziendale – Ing. Luca Radice - Milano
Date	September 1999
Title of qualification awarded	School of Material Science (2 weeks duration),
Principal subjects/Occupational skills covered	VIII National School of Material Science, Genova, Italy.
Name and type of organisation providing education and training	INFM (Istituto Nazionale per la Fisica della Materia) e INSTM (Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali)
Date	September 1998
Title of qualification awarded	School on Sensors and Microsystems (2 weeks duration)
Principal subjects/Occupational skills covered	National School on Sensors and Microsystems (2 weeks duration), Castro (LE), Italy.
Name and type of organisation providing education and training	AISEM (Associazione Italiana Sensori e Microsistemi)

Date	Academic year 1996-1997
Title of qualification awarded	Specialization Course (1 year duration, awarded on June 1997)
Principal subjects/Occupational skills covered	Specialization Course in Chemistry and Technology of Inorganic Materials
Name and type of organisation providing education and training	University of Bologna (Italy)
Level in national or international classification	ISCED 5A
Date	Academic year 1995-1996
Title of qualification awarded	Specialization Course (1 year duration, awarded on June 1996)
Principal subjects/Occupational skills covered	Specialization Course in Environmental Chemistry and Engineer
Name and type of organisation providing education and training	University of Padova (Italy)
Level in national or international classification	ISCED 5A

PERSONAL SKILLS AND COMPETENCES

Mother tongue(s) **Italian**

Other language(s)

Self-assessment

European level ()*

Language: English

Language: French

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1 Proficient User	C1 Proficient User	C1 Proficient User	C1 Proficient User	C1 Proficient User
B1 Independent User	B1 Independent User	B1 Independent User	B1 Independent User	B1 Independent User

(*) Common European Framework of Reference (CEF) level

Social and communication skills

Excellent networking skills; good ability to adapt to multicultural environments gained through my work experience abroad; ability to work within a team, coordinate teamwork; good communication skills gained through my experience as marketing engineering and speaker in international congress

Organisational / managerial skills

Leadership (responsible for teams from 6 to 30 people); excellent experience in project or team management

Job-related skills

Organic and metallorganic synthesis; very good knowledge of analytical techniques related to solid and liquid samples (FTIR, GC-GM, X-Ray, SPR, Electrophoresis, Absorption and Emission Spectroscopy, NMR, AFM, SEM, TEM, XPS); good knowledge of (RT)-PCR protocol set up and optimization; good command of statistical process control (SPC) and quality control (QC); knowledge of DOE methodology.

ADDITIONAL INFORMATION

Scientific Activity

The research activity is documented by **230 Contributions**:
146 Papers (peer review papers (ISI): 108, 35 as corresponding author
Communication to Congress: 133
International Patents: 26

hindex= 29

Citations: 1287

(Scopus)

Publications

- 146 M Pennisi, I Kavasidis, C Spampinato, V Schinina, S. Palazzo, F. Proietto Salanitri, G. Bellitto, F. Rundo, M., M. Cristofaro, P. Campioni, E. Pianura, F. Di Stefano, A. Petrone, F. Albarello, G. Ippolito, S. Cuzzocrea, Sabrina Conoci, An explainable AI system for automated COVID-19 assessment and lesion categorization from CT-scans, *Artificial Intelligence In Medicine*, 2021, 118 , 102114
- 145 Morganti D, Leonardi A.A., Lo Faro M.J., Leonardi G., Salvato G., Fazio B., Musumeci P., Livreri P., Conoci S., Neri G., Irrera A., Ultrathin silicon nanowires for optical and electrical nitrogen dioxide detection, *Nanomaterials*, 2021, 11, 1767, Doi: 10.3390/nano11071767 – ISSN 20794991
- 144 Nocito, G., Calabrese, G., Forte, S., Petralia, S., Puglisi, C., Campolo, M., Esposito, E., Conoci, S. Carbon dots as promising tools for cancer diagnosis and therapy, *Cancers*, 2021, 13-9, 1991, Doi: 10.3390/cancers13091991 (Cover Page)
- 143 Petralia, S., Forte, G., Aiello, M., Nocito, G., Conoci, S., Photothermal-triggered system for oligonucleotides delivery from cationic gold nanorods surface: A molecular dynamic investigation, *Colloids and Surfaces B: Biointerfaces*, 2021, 201, 111654, Doi: 10.1016/j.colsurfb.2021.111654
- 142 Calabrese, G., Ardizzone, A., Campolo, M., Conoci, S., Esposito, E., Paterniti, I. Beneficial effect of tempol, a membrane-permeable radical scavenger, on inflammation and osteoarthritis in in vitro models, *Biomolecules*, 2021, 11, 3, 352, 1-12, Doi: 10.3390/biom11030352
- 141 Franco, D., Calabrese, G., Petralia, S., Neri, G., Corsaro, C., Forte, L., Squarzone, S., Guglielmino, S., Traina, F., Fazio, E., Conoci, S., Antimicrobial effect and cytotoxic evaluation of MG-doped hydroxyapatite functionalized with au-nano rods, 2021, *Molecules*, 2021, 26, 4, 1099, Doi: 10.3390/molecules26041099
- 140 David Perpetuini , Antonio Maria Chiarelli , Daniela Cardone, Chiara Filippini , Sergio Rinella, Simona Massimino , Francesco Bianco , Valentina Bucciarelli , Vincenzo Vinciguerra , Piero Fallica, Vincenzo Perciavalle, Sabina Gallina, Sabrina Conoci and Arcangelo Merla, Prediction of state anxiety by machine learning applied to photoplethysmography data, *PeerJ* 9:e10448, 2021, DOI 10.7717/peerj.10448
- 139 Emanuele L. Sciuto, Salvatore Petralia, Jan R. van der Meer and Sabrina Conoci*, Miniaturized electrochemical biosensor based on whole-cell for heavy metal ions detection in water, *Biotechnology and Bioengineering*. 2020;1–10.; DOI: 10.1002/bit.27646
- 138 Rizzo, M.G, Carnazza, S., De Plano*, L.M., Franco, D, Nicolò, M.S., Zammuto, V., Petralia, S., Calabrese, G., Gugliandolo, C., Conoci, S.*, Guglielmino, S.P.P. , Rapid detection of bacterial pathogens in blood through engineered phages-beads and integrated Real-Time PCR into MicroChip, *Sensors and Actuators, B: Chemical*, 2021, 329, 10.1016/j.snb.2020.129227
- 137 Francesco Rundo , Giuseppe Luigi Banna, Luca Prezzavento, Francesca Trenta, Sabrina Conoci and Sebastiano Battiato, 3D Non-Local Neural Network: A Non-Invasive Biomarker for Immunotherapy Treatment Outcome Prediction. Case-Study: Metastatic Urothelial Carcinoma, *J. Imaging* 2020, 6, 133; doi:10.3390/jimaging6120133
- 136 Calabrese, G., Petralia, S., Franco, D., Nocito, G., Fabbì, C., Forte, L., Guglielmino, S., Squarzone, S., Traina, F., Conoci, S., A new Ag-nanostructured hydroxyapatite porous scaffold: Antibacterial effect and cytotoxicity study, *Materials Science and Engineering C*, 2021, 118, 111394, Doi:10.1016/j.msec.2020.111394,
- 135 Calabrese, G., Petralia, S., Fabbì, C., Forte, S., Franco, D., Guglielmino, S., Esposito, E., Cuzzocrea, S., Traina, F., Conoci, S., Au, Pd and maghemite nanofunctionalized hydroxyapatite scaffolds for bone regeneration, *Regenerative Biomaterials*, 2020, 7, 5, 461-469 – DOI: 10.1093/rb/rbaa033,
- 134 De Plano, L.M., Carnazza, S., Franco, D., Rizzo, M.G., Conoci, S., Petralia, S., Nicoletti, A., Zappia, M., Campolo, M., Esposito, E., Cuzzocrea, S., Guglielmino, S.P.P., Innovative IgG Biomarkers Based on Phage Display Microbial Amyloid Mimotope for State and Stage Diagnosis in Alzheimer's Disease, *ACS Chemical Neuroscience*, 2020, 11, 7, 1013-1026. DOI: 10.1021/acscchemneuro.9b00549
- 133 Granata, G., Petralia, S., Forte, G., Conoci, S., Consoli, G.M.L., Injectable supramolecular nanohydrogel from a micellar self-assembling calix[4]arene derivative and curcumin for a sustained drug release, *Materials Science and Engineering C*, 2020, 111, 110842, DOI: 10.1016/j.msec.2020.110842
- 132 Sciuto, E.L., Petralia, S., Conoci, S., Innovative Lab-on-Disk Technology for Rapid and Integrated Analysis of Pathogen Nucleic Acids, *Lecture Notes in Electrical Engineering*. 2020, 629, 215-220, DOI: 10.1007/978-3-030-37558-4_32
- 131 Petralia, S., Nocito, G., Conoci, S., Sortino, S., Enhancement of PCR Reaction Efficiency by Gold-Nanoparticles Immobilized at Microreactor Surface, *Lecture Notes in Electrical Engineering*, 2020, 629, 183-187, DOI: 10.1007/978-3-030-37558-4_27
- 130 Rundo, F., Conoci, S., Trenta, F., Battiato, S., Car-Driver Drowsiness Monitoring by Multi-layers Deep Learning Framework and Motion Analysis, *Lecture Notes in Electrical Engineering*, 2020, 629, 169-175, DOI: 10.1007/978-3-030-37558-4_25
- 129 Sciuto, E.L., Petralia, S., Calabrese, G., Conoci, S., An integrated biosensor platform for extraction and detection of nucleic acids, *Biotechnology and Bioengineering*, 2020, 117, 5, 1554-1561, DOI: 10.1002/bit.27290
- 128 Salvatore Petralia, Giuseppe Forte, Massimo Zimbone and Sabrina Conoci, The cooperative

- interaction of triplex forming oligonucleotides on DNA triplex formation at electrode surface: Molecular dynamics studies and experimental evidences, *Colloids and Surfaces B: Biointerfaces*, 2020, 187, 110648, DOI: 10.1016/j.colsurfb.2019.110648
- 127 Mario Urso; Salvatore Gianluca Leonardi; Giovanni Neri; Salvatore Petralia; Sabrina Conoci; Francesco Priolo; Salvo Mirabella, Acetone sensing and modelling by low-cost NiO nanowalls", *Material Letter*, 2020, 262, 127043 – DOI: <https://doi.org/10.1016/j.matlet.2019.127043>
- 126 Nocito, G., Petralia, S., Malanga, M., Béni, S., Calabrese, G., Parenti, R., Conoci, S., Sortino, S., Biofriendly Route to Near-Infrared-Active Gold Nanotriangles and Nanoflowers through Nitric Oxide Photorelease for Photothermal Applications, *ACS Applied Nano Materials* 2019, 2, 12, 7916-7923 – DOI: 10.1021/acsnm.9b01925
- 125 Perez-Lloret, M., Fraix, A., Petralia, S., Conoci, S., Tafani, V., Cutrone, G., Vargas-Berenguel, A., Gref, R., Sortino, S., One-Step Photochemical Green Synthesis of Water-Dispersible Ag, Au, and Au@Ag Core-Shell Nanoparticles, *Chemistry - A European Journal* 2019, 25, 14638-14643 – DOI: 10.1002/chem.201903076
- 124 Urso, M., Leonardi, S.G., Neri, G., Petralia, S., Conoci, S., Priolo, F., Mirabella, S., Room temperature detection and modelling of sub-ppm NO₂ by low-cost nanoporous NiO film, *Sensors and Actuators, B: Chemical*, 2019, 305, 127481 – DOI: 10.1016/j.snb.2019.127481
- 123 Rundo, F., Spampinato, C., Banna, G.L., Conoci, S., Advanced deep learning embedded motion radiomics pipeline for predicting anti-PD-1/PD-L1 immunotherapy response in the treatment of bladder cancer: Preliminary results, *Electronics*, 2019, 8, 1134; doi: 10.3390/electronics8101134. - ISSN: 2079-9292
- 122 Francesco Rundo, Giuseppe Luigi Banna and Sabrina Conoci, Bio-Inspired Deep-CNN Pipeline for Skin Cancer Early Diagnosis, *Computation* 2019, 7, 44; doi:10.3390/computation7030044
- 121 Francesco Rundo, Concetto Spampinato and Sabrina Conoci, Ad-Hoc Shallow Neural Network to Learn Hyper Filtered PhotoPlethysmographic (PPG) Signal for Efficient Car-Driver Drowsiness Monitoring, *Electronics*, 2019, 8, 890; doi:10.3390/electronics8080890. - ISSN: 2079-9292
- 120 Anna Dolcimascolo, Giovanna Calabrese, Sabrina Conoci, Rosalba Parenti, *Innovative Biomaterials for Tissue Engineering, Biomaterials in Regenerative Medicine*, ISBN 978-953-51-7393-9.
- 119 Trenta, F., Conoci, S., Rundo, F., Battiato, S., Advanced motion-tracking system with multi-layers deep learning framework for innovative car-driver drowsiness monitoring, *Proceedings - 14th IEEE International Conference on Automatic Face and Gesture Recognition, FG 2019* - DOI: 10.1109/FG.2019.8756566
- 118 Francesco Rundo, Alessandro Ortis, Sebastiano Battiato and Sabrina Conoci, Advanced Multi-Neural System for Cuff-less Blood Pressure Estimation Through Nonlinear HC-Features, *Proceedings of the 16th International Joint Conference on e-Business and Telecommunications - Volume 1: SIGMAP*, 321-325, 2019, Prague, Czech Republic – ISBN: 978-989-758-378-0- DOI: 10.5220/0007909403210325 -
- 117 Salvatore Petralia*, Daniele Motta e Sabrina Conoci*, EWOD silicon biosensor for multiple nucleic acids analysis, *Biotechnology and Bioengineering*. 2019, 116:2087-2094.; DOI: 10.1002/bit.26987
- 116 Simone Battaglia, Salvatore Petralia*, Nunzio Vicario, Daniela Cirillo*, and Sabrina Conoci*, An Innovative Silicon-chip for Sensitive Real Time PCR Improvement in Pathogens Detection, *Analyst*, 2019, 144, 2353-2358; doi: 10.1039/C9AN00006B
- 115 F. Rundo, S.Rinella, S.Massimino, M. Coco, G. Fallica, R. Parenti*, S.Conoci* and V. Perciavalle, An Innovative Deep Learning Algorithm for Drowsiness Detection from EEG Signal, *Computation* 2019, 7, 13; doi:10.3390/computation7010013
- 114 Sabrina Conoci, Francesco Rundo, Giorgio Fallica, Davide Lena, Irene Buraioli, Danilo Demarchi Live Demonstration of Portable Systems Based on Silicon Sensors for the Monitoring of Physiological Parameters of Driver Drowsiness and Pulse Wave Velocity, 2018 IEEE Biomedical Circuits and Systems Conference (BioCAS), Cleveland, Ohio (USA) Oct 17-19 2018 – doi: 10.1109/BIOCAS.2018.8584709
- 113 Iemmolo Rosario, Guarnaccia Maria, Petralia Salvatore, Cavallaro Sebastiano and Conoci Sabrina Lab-on-Disk Platform for KRAS Mutation Testing, In: Andò B. et al. (eds) *Sensors. CNS 2018. Lecture Notes in Electrical Engineering*, Springer, Cham, 2019, vol 539, 437-444. ISSN: 1876-1100 -DOI https://doi.org/10.1007/978-3-030-04324-7_53
- 112 Roberto Verardo, Salvatore Petralia, Claudio Schneider, Enio Klaric, Maria Grazia Amore, Giuseppe Tosto and Sabrina Conoci, A Silicon-Based Biosensor for Bacterial Pathogens Detection, In: Andò B. et al. (eds) *Sensors. CNS 2018. Lecture Notes in Electrical Engineering*, Springer, Cham, 2019, vol 539, 141-145. -ISSN: 1876-1100 -DOI https://doi.org/10.1007/978-3-030-04324-7_19
- 111 Messina M.A., Raudino F., Fiumara A., Conoci S., Petralia S., A Novel Paper-Based Biosensor for Urinary Phenylalanine Measurement for PKU Therapy Monitoring, In: Andò B. et al. (eds) *Sensors. CNS 2018. Lecture Notes in Electrical Engineering*, Springer, Cham 2019, vol 539, 195-200. ISSN: 1876-1100 -DOI https://doi.org/10.1007/978-3-030-04324-7_26
- 110 Sciuto E.L., Petralia S., Conoci S., A Novel Lab-on-Disk System for Pathogen Nucleic Acids Analysis in Infectious Diseases, In: Andò B. et al. (eds) *Sensors. CNS 2018. Lecture Notes in Electrical Engineering*, Springer, Cham, 2019, vol 539, 117-124. ISSN: 1876-1100 -DOI https://doi.org/10.1007/978-3-030-04324-7_16
- 109 Petralia S., Sciuto E.L., Mirabella S., Priolo F., Rundo F., Conoci S., Nickel Based Biosensor for Biomolecules Recognition, In: Andò B. et al. (eds) *Sensors. CNS 2018. Lecture Notes in Electrical Engineering*, Springer, Cham, 2019, vol 539, 105-109. ISSN: 1876-1100- DOI https://doi.org/10.1007/978-3-030-04324-7_14

- 108 Petralia S., Sciuto E.L., Messina M.A., Francesca Santangelo M., Libertino S., Conoci S. An Innovative Optical Chem-Sensor Based on a Silicon Photomultiplier for the Sulfide Monitoring, In: Andò B. et al. (eds) Sensors. CNS 2018. Lecture Notes in Electrical Engineering, Springer, Cham, 2019, vol 539, 75-81 - ISSN: 1876-1100 - DOI https://doi.org/10.1007/978-3-030-04324-7_11
- 107 Rundo F., Petralia S., Fallica G., Conoci S., A Nonlinear Pattern Recognition Pipeline for PPG/ECG Medical Assessments, In: Andò B. et al. (eds) Sensors. CNS 2018. Lecture Notes in Electrical Engineering, Springer, Cham, 2019, vol 539, 473-480. ISSN: 1876-1100 -DOI https://doi.org/10.1007/978-3-030-04324-7_57
- 106 Emanuele Luigi Sciuto, Corrado Bongiorno, Antonino Scandurra, Salvatore Petralia, Tiziana Cosentino, Sabrina Conoci, Fulvia Sinatra and Sebania Libertino, Functionalization of Bulk SiO₂ Surface with Biomolecules for Sensing Applications: Structural and Functional Characterizations, Chemosensors 2018 -, 6, 59; doi:10.3390/chemosensors6040059
- 105 A.A. Leonardi, M.J. Lo Faro, S. Petralia, B. Fazio, P. Musumeci, S. Conoci*, A. Irrera*, F. Priolo* Ultrasensitive Label- and PCR-free Genome Detection based on Cooperative Hybridization of Silicon Nanowires Optical Biosensors
ACS Sensors, 2018, Accepted - doi:10.1021/acssensors.8b00422
- 104 Salvatore Petralia*, Nunzio Vicario, Giovanna Calabrese, Rosalba Parenti and Sabrina Conoci*, An Advanced, Silicon-Based Substrate for Sensitive Nucleic Acids Detection, Sensors, 2018, 18, 3138; - doi:10.3390/s18093138- ISSN 1424-8220
- 103 Francesco Rundo, Alessandro Ortis, Sebastiano Battiato and Sabrina Conoci
Advanced Bio-Inspired System for Noninvasive Cuff-less Blood Pressure Estimation from Physiological Signal Analysis
Computation, 2018, 6, 46 - doi:10.3390/computationxx010001
- 102 Francesco Rundo, Sabrina Conoci, Giuseppe L. Banna, Alessandro Ortis, Filippo Stanco, Sebastiano Battiato, Evaluation of Levenberg–Marquardt neural networks and stacked autoencoders clustering for skin lesion analysis, screening and follow-up,
IET Computer Vision, Opp. – Vol. 12 Iss. 7, pp. 957-962 -doi: 10.1049/iet-cvi.2018.5195, Print ISSN 1751-9632, Online ISSN 1751-9640
- 101 Hanna Thomsen, Nino Marino, Sabrina Conoci, Salvatore Sortino, and Marica B. Ericson
Confined photo-release of nitric oxide with simultaneous two-photon fluorescence tracking in a cellular system
Scientific Report, 2018, 8, 9753 - ISSN: 1751-1097- DOI:10.1038/s41598-018-27939-4
- 100 Salvatore Petralia*, Emanuele Luigi Sciuto, M. F. Santangelo, S. Libertino, M. A. Messina and Sabrina Conoci*
Sulphide Species Optical Monitoring by Miniaturized Silicon Photomultiplier
Sensors, 2018, 18, 727; - ISSN 1424-8220 doi:10.3390/s18030727
- 99 Salvatore Petralia*, Emanuele L. Sciuto, Maria Anna Messina, Antonino Scandurra, Salvatore Mirabella, Francesco Priolo and Sabrina Conoci*
Miniaturized and multi-purpose electrochemical sensing device based on thin Ni oxides Sensor and Actuator B, 2018, 263 10–19 - ISSN: 0925-4005, DOI: <https://doi.org/10.1016/j.snb.2018.02.114>
- 98 Francesco Rundo, Sabrina Conoci, Alessandro Ortis and Sebastiano Battiato,
Advanced Bio-Inspired PhotoPlethysmography (PPG) and ECG Pattern Recognition System for Medical Assessment
Sensors 2018, 18, 405; ISSN 1424-8220 - doi:10.3390/s18020405;
- 97 M. A. Messina, C. Meli, S. Conoci and S. Petralia,
A facile method for urinary phenylalanine measurement on paper-based lab-on-chip for PKU therapy monitoring,
Analyst, 2017, 142, 4629–4632 — ISSN 0003-2654 (print) 1364-5528 (web) - DOI:
- 96 Salvatore Petralia*, Francesco Rundo and Sabrina Conoci*, Maria L. Di Pietro, Emanuele L. Sciuto and Salvatore Mirabella
Electrochemical biosensor for PCR free nucleic acids detection: A novel biosensor containing three planar microelectrodes for melocular diagnostic applications Circuit Theory and Design (ECCTD), 2017 European Conference on - DOI: 10.1109/ECCTD.2017.8093334 - Electronic ISSN: 2474-9672
- 95 Salvatore Petralia*, Francesco Rundo and Sabrina Conoci*, Emanuele L. Sciuto, Salvatore Mirabella and Francesco Priolo
Miniaturized electrochemical cells for sensing applications: Silicon device containing three planar microelectrodes for electrochemical sensing
Circuit Theory and Design (ECCTD), 2017 European Conference on - DOI: 10.1109/ECCTD.2017.8093335 - Electronic ISSN: 2474-9672
- 94 Salvatore Petralia*, Maria Grazia Amore, Maria Eloisa Castagna, Giuseppe Tosto and Sabrina Conoci*, Electrically actuated microfluidic biosensors: A novel silicon 48 microwells device for biosensing applications, Circuit Theory and Design (ECCTD), 2017 European Conference on - DOI: 10.1109/ECCTD.2017.8093339- Electronic ISSN: 2474-9672
- 93 Francesco Rundo, Sabrina Conoci, Salvatore Petralia and Giuseppe Luigi Banna, Advanced Bio-inspired Point of Care for Skin Cancer Early Detection,
SL Clin Med Oncol. 2017; 1(1):111
- 92 Damien Afonso, Sabrina Valetti, Aurore Fraix, Claudia Bascetta, Salvatore Petralia, Sabrina Conoci,

- Adam Feiler, and Salvatore Sortino, Multivalent mesoporous silica nanoparticles photo-delivering nitric oxide with carbon dots as fluorescent reporters, *Nanoscale*, 2017, 9, 13404- ISSN: 2040-3364 - DOI: 10.1039/C7NR04832G
- 91 Salvatore Petralia* and Sabrina Conoci*, PCR Technologies for Point of Care Testing: Progress and Perspectives, *ACS Sensors*, 2017, 2, 876-891 -ISSN 2379-3694 - DOI 10.1021/acssensors.7b00299
- 90 N. Giambianco* S.Petralia, S. Conoci *, C. Messineo a and G. Marletta, KRAS Single DNA base Mutation Discrimination by Surface Plasmon Resonance, *Colloids and Surfaces B: Biointerfaces*, 2017, 158, 41-46 ISSN: 0927-7765, doi: <http://dx.doi.org/10.1016/j.colsurfb.2017.06.021>
- 89 S. Petralia, T. Cosentino, F. Sinatra, M.Favetta, P. Fiorenza, C. Bongiorno, E.L. Sciuto, S. Conoci* and S. Libertino*, Silicon Nitride Surfaces as Active Substrate for Electrical DNA Biosensors, *Sensors and Actuators B: Chemical*, 2017, 252, 492-502, ISSN: 0925-4005, doi: <http://dx.doi.org/10.1016/j.snb.2017.06.023>
- 88 C. Zhou, D. Afonso, S. Valetti, A.Feiler, V. Cardile, A. C. E. Graziano, S. Conoci, S. Sortino, Targeted Photodynamic Therapy with a Folate/Sensitizer Assembly Produced from Mesoporous Silica, *Chemistry: An European Journal*, 2017, 23, 7672-7676 - ISSN: 0947-6539 DOI: 10.1002/chem.201701432
- 87 Sabrina Conoci, Salvatore Petralia, Francesco Rundo, Sebastiano Battiato, Sistemi "Point of Care" per le Indagini Genetiche in Ambito Forense, *Sicurezza e Giustizia*, I / MMXVII, p.46-48
- 86 Maria Eloisa Castagna, Salvatore Petralia, Angela Beninato, Valentina Sinatra, Salvatore Baglio and Sabrina Conoci*, Integrated Thermal-Magnetic Biosensor for Molecular Detection, *Bionanoscience* (2017) – doi: 10.1007/s12668-017-0410-6
- 85 S. Petralia* E. L. Sciuto, M. L. Di Pietro, M.Zimbone, M G Grimaldi and S.Conoci*, Innovative Chemical Strategy for PCR-free Genetic Detection of Pathogens by an Integrated Electrochemical Biosensor, *Analyst* (2017) DOI: 10.1039/C7AN00202E (Cover Page)
- 84 S. Scalese, S. Baldo, D. D'Angelo, S. Filice, C. Bongiorno, R. Reitano, E. Fazio, S. Conoci, A. La Magna, Electrical properties and oxygen functionalities in ethanol-treated and thermally modified graphene oxide, *Journal of Applied Physics* 2017, 121, 155105 - DOI: 10.1063/1.4981888
- 83 Maria Guarnaccia , Rosario Iemmolo, Salvatore Petralia, Sabrina Conoci* and Sebastiano Cavallaro*, Miniaturized Real Time PCR on Q3 system for rapid KRAS genotyping, *Sensors* 2017, 17, 831-; doi:10.3390/s17040831
- 82 Gábor Benkovics, Damien Afonso, András Darcsi, Szabolcs Béni, Sabrina Conoci, Éva Fenyvesi, Lajos Szente, Milo Malanga and Salvatore Sortino, Novel β -Cyclodextrin-Eosin Conjugates, *Belstein Journal of Organic Chemistry*, 2017, 13, 543-551 - doi:10.3762/bjoc.13.52
- 81 S.Petralia, S. Mirabella, V. Strano and S.Conoci*, A miniaturized electrochemical system based on Nickel oxide species for sensing applications, *Bionanoscience* 2017, 7:58-63 doi:10.1007/s12668-017-0399-x
- 80 Konstantin Chegaev, Aurore Fraix, Elena Gazzano, Gamal Eldein F. Abd-Ellatef, Marco Blangetti, Barbara Rolando, Sabrina Conoci, Chiara Riganti, Roberta Fruttero, Alberto Gasco and Salvatore Sortino, Light-Regulated NO Release as a Novel Strategy to Overcome Doxorubicin Multidrug Resistance, *ACS Med. Chem. Lett.* 2017, 8, 361-365 -DOI: 10.1021/acsmchemlett.7b00016 (Cover Page)
- 79 Salvatore Petralia, Emanuele Luigi Sciuto and Sabrina Conoci* , A Novel Miniaturized Biofilter based on Silicon Micropillars for Nucleic Acid Extraction, *Analyst*, 2017, 142, 140 – 146 - DOI: 10.1039/C6AN02049F
- 78 Angela Beninato*, Valentina Sinatra, Giuseppe Tosto, Maria Eloisa Castagna, Salvatore Petralia, Sabrina Conoci* and Salvatore Baglio, Inductive integrated biosensor with dual detection approach for extended operating range in magnetic immune-assay, *IEEE Transaction on Instrumentation and Measurement*, 2016, 69, 1-12 – ISSN 0018-9456 - DOI 10.1109/TIM.2016.2619000
- 77 Ivana Di Bari, Aurore Fraix, Roberta Picciotto, Anna R. Blanco, Salvatore Petralia, Sabrina Conoci, Giuseppe Granata, Grazia M. L. Consoli and Salvatore Sortino, Supramolecular activation of the photodynamic properties of porphyrinoid photosensitizers by calix[4]arene nanoassemblies, *RSC Advances*, 2016, 6, 105573-105577 - - ISSN 20462069 - DOI 10.1039/c6ra23492e
- 76 S. Petralia e S.Conoci, Il ruolo della chimica nello sviluppo dei Lab-on-chip *La Chimica e l'Industria*, Num 5, 2016 – , DOI: <http://dx.medra.org/10.17374/CI.2016.98.5.40>- ISSN 0009-4315 (cartacea), ISSN 2283-5458 (web), ISSN 2283-544X (online)
- 75 Nino Marino, Salvatore Petralia, Marta Perez-Lloret, Jiri Mosinger, Sabrina Conoci* and Salvatore Sortino *, Graphene oxide nanohybrid photoreleasing nitric oxide, *Journal Material Chemistry B*, 2016, 4, 5763-5948 (Cover Page) - ISSN (print) 2050-750X ISSN (online) 2050-7518 -DOI: 10.1039/C6TB01599A –
74. S. Petralia, M. E. Castagna, D. Motta, S. Conoci*, Miniaturized electrically-actuated microfluidic system for sensor applications., *Bionanoscience*, 2016, Volume 6, Issue2, pp 139-145 - ISSN (print) 2191-1630 ISSN (online) 2191-1649 - DOI: 10.1007/s12668-016-0204-2
- 73 Sabrina Conoci, Le nuove tecnologie portatili per l'analisi del DNA, *Sapere* -aprile 2016 - ISSN 0036-4681- anno 82°, n. 2 - 978-88-220-9418-6
- 72 S. Petralia, M. E. Castagna, M. O. Spata, M.G. Amore and S. Conoci*, A Point of Care Real Time PCR Platform based on Silicon Technology, *Biosensors Journal*, 2016, 5: 136 - ISSN 2090-4967 - DOI:10.4172/2090-4967.1000136
- 71 Sabrina Conoci, Tecnologie integrate in silicio a servizio dell'analisi del DNA, *DA Per la ricerca e l'innovazione* n.44, 2015, 34-37

- 70 M.F. Santangelo, E.L. Sciuto, A.C. Busacca, S. Petralia, S. Conoci* and S. Libertino* Novel Si-based technologies for bio-sensing applications, *IEEE Journal of Selected Topics in Quantum Electronics*, 2016, Volume 22, Issue: 3, 6900307, ISSN - 1077260X - DOI:10.1109/JSTQE.2015.2504979
- 69 M.Favetta, A.Valletta, G.Fortunato, M.E.Castagna, S.Conoci, E.L.Sciuto, T.Cosentino, F.Sinatra, S.Libertino, Development of Si-based Electrical Biosensors: simulations and first experimental results, *Sensing and Biosensing Research*, 2015, 6, 72-78- ISSN 22141804 -doi:10.1016/j.sbsr.2015.11.012
- 68 Massimo Spata, Maria Eloisa Castagna and S.Conoci*, Image Data Analysis in qPCR: an method for smart analysis of DNA amplification, *Sensing and Biosensing Research*, 2015, 6, 79-84 – ISSN 22141804 - doi:10.1016/j.sbsr.2015.10.006
- 67 Maria Eloisa Castagna*, Salvatore Petralia, Maria Grazia Amore, Emanuele Cappello, Angela Beninato, Valentina Sinatra, Salvatore Baglio and S.Conoci*, A novel silicon based mags-biosensor for nucleic acid detection by magnetoelectronic transduction, *Sensing and Biosensing Research*, 2015, 6, 85-89 – ISSN 22141804 -doi:10.1016/j.sbsr.2015.10.003
- 66 S. Petralia*, M. E. Castagna, E. Cappello, Fausto Puntoriero, Emanuela Trovato, Antonio Gagliano and S.Conoci*, A miniaturized silicon based device for Nucleic Acids electrochemical Detection, *Sensing and Biosensing Research*, 2015, 6, 90-94 – ISSN 22141804 -doi:10.1016/j.sbsr.2015.09.006
- 65 M.F. Santangelo, E.L.Sciuto, A.C.Busacca, S. Petralia, S.Conoci and S.Libertino, SiPM as miniaturised optical biosensor for DNA-microarray applications, *Sensing and Biosensor Research*, 2015, 6, 95-98 - ISSN 22141804 -doi:10.1016/j.sbsr.2015.08.003
- 64 Nicoletta Giambianco*, Sabrina Conoci*, Dario Russo and Giovanni Marletta, Single-Step Label-Free Hepatitis B Virus Detection by Piezoelectric Biosensor, *RSC Advances Adv.*, 2015,5, 38152-38158 - - ISSN 20462069 - DOI: 10.1039/C5RA03467A
- 63 Santangelo MF, S. La Cono, P.Vasquez, G. Fallica, S. Conoci S, A.C Busacca, R Pagano, EL Sciuto, S Lombardo and S Libertino, CY5 Fluorescence measured with Silicon Photomultipliers, *Biomedical Circuits and Systems Conference (BioCAS)*, 2014 IEEE, pag. 284 – 287 - ISSN :2163-4025, DOI:10.1109/BioCAS.2014.6981718
- 62 Yi-Wei Tang, Sherry A.Dunbar, Joseph D.C.Yao, Sridar V.Chittur, Sabrina Conoci, Judy A.Daly, Subhash Dhawan, Shuguang Huang, Francisco Martinez-Murillo, Steven A. Miller, Li Li, Greg Peterson, Teresa J. Raiich, Mark Poritz, Wanda C, Reygaert, Hossein Salimnia, MM2-A Microarray for Diagnosis and Monitoring of Infectious Diseases; Approved Guideline, *Clinical and Laboratory Standard Institute Vol 34, No 3 – February 2014- ISBN 1-56238-951-3 (print) - ISBN 1-56238-952-1 (electronic)*
- 61 Libertino S, Conoci S, Santangelo MF, Pagano R, Sciuto EL, Sinatra F, Sanfilippo D, Fallica G and Lombardo S, Optical and Electrical Si-Based Biosensors: Fabrication and Trasduction Issues, *Analytical & Bioanalytical Techniques 2014, S12- ISSN: 2155-9872, DOI: 10.4172/2155-9872.S12-007*
- 60 Sabrina Conoci*, Angela Mascali and Francesco Pappalardo, Synthesis, DNA binding properties and electrochemistry to an electrode-bound DNA of a novel anthracene-viologen conjugate, *RSC Advances* 2014, 4, 2845-2850 - ISSN: 2046-2069, DOI: 10.1039/c3ra45247f
- 59 Giancane G, Borovkov V, Inoue Y, Conoci S and Valli L, Syn-anti conformation switching of a bis-porphyrin derivative at the air-water interface and in the solid state as an effective tool for chemical sensing, *Soft Matter*, 2013, 9, 2302-2307 - ISSN: 1744-683X, DOI: 10.1039/c2sm27141a
- 58 S. Libertino, , S. Conoci, A. Scandurra and C. Spinella, Biosensor integration on Si-based devices: feasibility studies and examples, *Sensors and Actuators B* 179 (2013) 240– 251 - ISSN: 0925-4005, DOI: 10.1016/j.snb.2012.09.108
- 57 Mastromatteo, U.; Alzati, A.; Brioschi, R.; Conoci, S.; De Fazio, M.; Magni, P.; Maierna, A.; Marchi, M.; Palmieri, M.; Shaw, M.; Suardi, M.; Ziglioli, F., Electronic packaging for bio-diagnostic microfluidics application, *Microelectronics and Packaging Conference (EMPC)*, 2011 18th European - Publication Year: 2011, Page(s): 1 – 8 - IEEE CONFERENCE PUBLICATIONS – ISBN 978-1-4673-0694-2
56. Barbara Foglieni, Angela Brisci, Floriana San Biagio, Patrizia Di Pietro, Salvatore Petralia, Sabrina Conoci, Maurizio Ferrari, Laura Cremonesi, Integrated PCR amplification and Detection Processes on a Lab-on-Chip platform: a new advanced solution for molecular diagnostics, *Clinical Chemistry and Laboratory Medicine*, 2010, 48: 329-336 - ISSN: 1434-6621, DOI: 10.1515/CCLM.2010.063
55. M.G. Manera, L.Valli, S.Conoci, R.Rella, Thin layer porphyrinogen for alcohol-vapor optical sensors, *Journal of Porphyrins and Phthalocyanines*, 2009- 13:3-8 - ISSN: 1088-4246, DOI: 10.1142/S1088424609001431
54. Fiorella L. Callari Salvatore Petralia Sabrina Conoci and Salvatore Sortino, Light-triggered DNA release by dynamic monolayer films, *New J. Chem.* 2008, 32(11), 1899-1903 (Hot Paper and Cover Page) - ISSN: 1144-0546, DOI: 10.1039/b808118b
53. Garramone Gaetano, Pietrangeli Daniela, Ricciardi Giampaolo, Conoci Sabrina, Guascito Maria Rachele, Malitesta Cosimino, Cesari Daniela, Casilli Serena, Giotta Livia, Giancane Gabriele, Valli Ludovico, Electrochemical and Spectroscopic Behavior of Iron(III) Porphyrines in Langmuir-Schafer Films, *Journal of Physical Chemistry B* 2008, 112(37), 11517-11528 - ISSN: 1520-6106, DOI: 10.1021/jp803418b
52. Michele Palmieri, Enrico Alessi, Sabrina Conoci, Mauro Marchi, Gaetano Panvini, Develop the "In-Check" platform for diagnostic applications, *Proc. SPIE* 2008 Vol. 6886, Microfluidics, BioMEMS, and Medical Microsystems VI, 6886-01 - ISBN 9780819470614 - doi:10.1117/12.778331
51. Tanese M. Cristina; Pignataro Bruno; Farinola Gianluca, Colangiuli Donato, Valli, Ludovico, Giotta

- Livia, Sabrina Conoci, Marinelli Francesco, Ieva Eliana, Babudri Francesco, Naso Francesco, Sabbatini Luigia, Zambonin P. Giorgio, Torsi Luisa, Nanostructural depth-profile and field-effect properties of poly(alkoxyphenylene-thienylene) Langmuir-Schaefer thin-films, *Thin Solid Films* 2008, 516(10), 3263-3269 - ISSN: 0040-6090, DOI: 10.1016/j.tsf.2007.08.036.
50. Caruso Elisa B., Petralia Salvatore, Conoci Sabrina, Giuffrida Salvatore, Sortino Salvatore, Photodelivery of Nitric Oxide from Water-Soluble Platinum Nanoparticles, *Journal of the American Chemical Society*, 2007, 129(3), 480-481 - ISSN: 0002-7863, DOI: 10.1021/ja067568d.
49. Sgobba Vito, Giancane Gabriele, Conoci Sabrina, Casilli Serena, Ricciardi Giampaolo, Guldi Dirk M., Prato Maurizio, Valli Ludovico, Growth and Characterization of Films Containing Fullerenes and Water Soluble Porphyrins for Solar Energy Conversion Applications., *Journal of the American Chemical Society* , 2007, 129(11), 3148-3156 - ISSN: 0002-7863, DOI: 10.1021/ja0655789
48. Valli Ludovico; Giancane Gabriele; Mazzaglia Antonino; Scolaro Luigi Monsu; Conoci Sabrina, Sortino Salvatore, Photoresponsive multilayer films by assembling cationic amphiphilic cyclodextrins and anionic porphyrins at the air/water interface, *Journal of Materials Chemistry* , 2007, 17(17), 1660-1663 - ISSN: 0959-9428, DOI: 10.1039/b703067c
47. Sortino Salvatore, Conoci Sabrina,* Yildiz Ibrahim, Tomasulo Massimiliano, Raymo Francisco M., Self-assembling and electrochromic films of bipyridinium building blocks, *Journal of Materials Chemistry* 2006, 16(31), 3171-3173 - ISSN: 0959-9428, DOI: 10.1039/b608356k
46. Conoci Sabrina*, Di Pietro Patrizia, Petralia Salvatore, Amore Maria Grazia, San Biagio Floriana, Alaimo Georgia, Iacono Giuseppe, Alessi Enrico, Ricceri Daniele, Di Trapani Giovanni, Di Francesco Flavio, Palmieri Michele, Fast and efficient nucleic acid testing by ST's In-Check Lab-on-Chip Platform, *Proceeding of NSTI Nanotech* 2006, 2 562-565 - ISBN: 0-9767985-9-X
45. Tanese Maria C., Farinola Gianluca M., Pignataro Bruno, Valli Ludovico, Giotta Livia, Conoci Sabrina, Lang Philippe, Colangiuli Donato, Babudri Francesco, Naso Francesco, Abbatini Luigia, Zambonin Pier Giorgio, Torsi Luisa, Poly(alkoxyphenylene-thienylene) Langmuir-Schaefer Thin Films for Advanced Performance Transistors, *Chemistry of Materials* 2006, 18(3), 778-784 - ISSN: 0897-4756, DOI: 10.1021/cm0524291
44. Valli Ludovico, Casilli Serena, Giotta Livia, Pignataro Bruno, Conoci Sabrina, Borovkov Victor V., Inoue Yoshihisa, Sortino Salvatore, Ethane-Bridged Zinc Porphyrin Dimers in Langmuir-Schaefer Thin Films: Structural and Spectroscopic Properties, *Journal of Physical Chemistry B* 2006, 110(10), 4691-4698 - ISSN: 1520-6106, DOI: 10.1021/jp054974v
43. Giuffrida Salvatore, Ventimiglia Giorgio, Petralia Salvatore, Conoci Sabrina, Sortino Salvatore, Facile Light-Triggered One-Step Synthesis of Small and Stable Platinum Nanoparticles in an Aqueous Medium from a α -Cyclodextrin Host-Guest Inclusion Complex, *Inorganic Chemistry* 2006, 45(2), 508-510 - ISSN: 0020-1669, DOI: 10.1021/ic0517366
42. Conoci Sabrina,* Petralia Salvatore, Samori Paolo, Raymo Francisco M., Di Bella Santo, Sortino Salvatore, Optically transparent, ultrathin Pt films as versatile metal substrates for molecular optoelectronics, *Advanced Functional Materials* 2006, 16(11), 1425-1432 - ISSN: 1616-301X, DOI: 10.1002/adfm.200500893
41. Sortino Salvatore, Di Bella Santo, Conoci Sabrina,* Petralia Salvatore, Tomasulo Massimiliano, Pocsial Eden J., Raymo Francisco M., Electrochemical switching of chromogenic monolayers self-assembled on transparent platinum electrodes, *Advanced Materials (Weinheim, Germany)* 2005, 17(11), 1390-1393 - ISSN: 0935-9648, DOI: 10.1002/adma.200500200.
40. Pirovano, A., Sotgiu, R., Conoci, Sabrina*, Petralia, S., Buonocore, F., Organic electrically bistable materials for non-volatile memory applications, *Solid-State Electronics* 2005, 49(11), 1820-1825 - ISSN: 0038-1101, DOI: 10.1016/j.sse.2005.10.010
39. Sabrina Conoci and Salvo Coffa, Nanomolecular Hybrid Devices: The New Perspective of Microelectronic Industry Nanotec IT newsletter, 2004, n.2, 15-16
38. G.M. Farinola, M.C. Tanese, L. Torsi, D. Colangiuli, S. Conoci, L. Valli, S. Casilli, B. Pignataro, F. Babudri, F. Naso, and P.G. Zambonin, Tailored Conjugated Polymer Langmuir-Schäfer Thin Films in Sensing Transistors, *PROCEEDINGS OF SPIE, THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING*, Vol. 5522, PP 36-40 (SPIE, Bellingham, WA, 2004), 0277-786X/04/\$15 doi: 10.1117/12.559691
37. Serena Casilli, Cosimino Malitesta, Sabrina Conoci, Salvatore Petralia, Salvatore Sortino, Ludovico Valli, Piezoelectric sensor functionalised by a self-assembled bipyridinium derivative: characterisation and potential applications in the detection of heavy metal ion, *Biosensors & Bioelectronics*, 2004, 20 1190-1195 - ISSN: 0956-5663, DOI: 10.1016/j.bios.2004.04.028.
36. S.Di Bella, S. Di Bella, Sabrina Conoci, S. Petralia, S. Casilli, L. Valli, Langmuir-Schäfer Films of an Amphiphilic Ruthenium Complex Bearing an "Almost-Naked" Multi-Charged Head-Group, *Inorganic Chemistry*, 2004, 43, 5668-5672 - ISSN: 0020-1669, DOI: 10.1021/ic049381y
35. Sabrina Conoci, Dirk M. Guldi, Sara Nardis, Roberto Paolesse, Kostantinos Kordatos, Maurizio Prato, Giampaolo Ricciardi, M. Graça H. Vicente, and Israel Zilbermann, Ludovico Valli, Langmuir-schaefer transfer of fullerenes and porphyrins: Formation, deposition, and application of versatile films, *Chemistry: An European Journal*, 2004, 10, 6523-6530 - ISSN: 0947-6539, DOI: 10.1002/chem.200400520.
34. Victor V. Borovkov, Serena Casilli, Sabrina Conoci, Yoshihisa Inoue, Salvatore Sortino and Ludovico Valli, Molecular Organization and Syn-Anti Conformational Changes in Ethane-Bridged Bis(Zinc Porphyrin) at the Air-Water, *Surface Science*, 2004, 572, 66-76. - ISSN: 0039-6028, DOI: 10.1016/j.susc.2004.08.022

33. S.Sortino, S.Petralia, S.Conoci and S. Di Bella, Monitoring photoswitching of azobenzene-based self-assembled monolayers on ultrathin platinum films by UV-Vis spectroscopy in the transmission mode, *Journal of Material Chemistry*, 2004, 14, 811-813. - ISSN: 0959-9428, DOI: 10.1039/b314710j
32. S.Sortino, S.Petralia, G.Condorelli, S.Conoci and S. Di Bella, Commutatori Molecolari Nanostrutture e Sistemi Fotocontrollati di Complessi di Rutenio Multifunzionali, *La Chimica e L'Industria*, Issue Dic. 2003. - ISSN: 0009-4315
- 31 S.Sortino, S.Petralia, S.Conoci and S. Di Bella, Redox switchable self-assembled monolayers of functional ruthenium(III/II) complexes on optically transparent platinum electrodes, *Material Science & Eng. C*, 2003, 857-860.- ISSN: 0928-4931, DOI: 10.1016/j.msec.2003.09.145
30. D.Ricceri, G.Scicolone, O.Di Marco, S.Conoci, B.Pignataro and S.Coffa, Photoelectric Response of Self Assembled Films of Bacterio-Rhodopsin Purple Membrane Integrated onto Silicon Surface, *Mat. Res. Soc. Symp. Proc.* 2003, Vol. 774, Materials Research Society O5.4.1 - ISSN: 0272-9172
29. G. Panzera, S.Conoci, S.Coffa, B.Pignataro, S. Sortino, G.Marletta, L.Valli, V.V. Borovkov, Y.Inoue, Structural and Spectroscopic Study of Langmuir-Schäfer Films of Bis Zn-Ethane-Bridged Porphyrins Dimer, *Mat. Res. Soc. Symp. Proc.* 2003, Vol. 771, Materials Research Society L7.29.1 - ISSN: 0272-9172
28. S.Sortino, S.Petralia, B.Pignataro, G.Marletta, S.Conoci and L.Valli, Langmuir-Schaefer Films of a New Calix[4]pyrrole-based Macrocycle Exhibiting Induced Chirality upon Differentiated Binding with Chiral Alcohol Vapours, *Proceeding of VIII National Conference on Sensors and Microsystems*, 2003, pp 103-108 - ISBN: 981-238-747-1
27. S.Sortino, S.Petralia, B.Pignataro, G.Marletta, S.Conoci* and L.Valli, Langmuir-Schäfer films of a new calix[4]pyrrole-based macrocycle exhibiting induced chirality upon binding with chiral alcohol vapours, *New Journal of Chemistry*, 2003, 27, 615-618 - ISSN: 1144-0546, DOI: 10.1039/b209136d
26. S.Sortino, S.Petralia, S.Conoci and S. Di Bella, Novel Self-Assembled Monolayers of Dipolar Ruthenium(III/II) Pentammine(4,4'-Bipyridinium) Complexes on Ultrathin Platinum Films as Redox Molecular Switches, *Journal American Chemical Society*, 2003, 125, 1122-1123 - ISSN: 0002-7863, DOI: 10.1021/ja029258a
25. S.Sortino, S.Petralia, G.G.Condorelli, S.Conoci and G.Condorelli, Novel Photoactive Self-Assembled Monolayer for Immobilization and Cleavage of DNA, *Langmuir*, 2003, 19, 536-539 - ISSN: 0743-7463, DOI: 10.1021/la0264365
24. F.San Biagio, O.Di Marco, P-Di Pietro, L.La Magna, M.Renna, S. Conoci and S.Coffa, DNA Immobilization on Silicon-Compatible Materials, *Proceeding of XVI Congresso Nazionale Scienza e Tecnologia del Vuoto*, 2002, pp.53-56 – ISBN 88:7794-370-X
23. O.Di Marco, D.Ricceri, G.Scicolone, S. Conoci, S.Coffa, S. Petralia and S.Sortino, Bacterio-Rhodopsin Thin Films as Active Layers in Optical Memory Devices, *Proceeding of XVI Congresso Nazionale Scienza e Tecnologia del Vuoto*, 2002, pp.57-60 -- ISBN 88:7794-370-X
22. S. Conoci, G. Panzera, S.Coffa, B.Pignataro, S. Sortino, L.Valli, V.V. Borovkov, and Y.Inoue, Optical and Morphological Properties of Langmuir-Schaefer Films of bis Zn-Ethane Bridge-Porphyrins Dimer, *Proceeding of XVI Congresso Nazionale Scienza e Tecnologia del Vuoto*, 2002, pp. 61-64 -- ISBN 88:7794-370-X
21. S. Conoci, S.Coffa, S. Sortino, G. Marletta, S. Petralia, B.Pignataro and L.Valli, Molecular Recognition of Alcohol Vapours by Novel Langmuir-Schaefer Calix[4]pyrrole Thin Films, *Proceeding of XVI Congresso Nazionale Scienza e Tecnologia del Vuoto*, 2002, pp.91-94 -- ISBN 88:7794-370-X
20. S. Conoci, L. Valli, R. Rella, G. Compagnini, R.S.Cataliotti, A SERS Study of Self Assembled (4-methylmercapto)benzaldehyde Thin Films: a Base Monolayer for Organic Derivation on Inorganic Materials, *Material Science & Engineering C.*, 22, 2002 183-186 - ISSN: 0928-4931, DOI: 10.1016/S0928-4931(02)00175-3
19. Sortino, S.Petralia, G.Condorelli, S.Conoci, L.Valli, R.Rella, Langmuir-Schaefer Films of a Tailored Calix[4]Pyrrole as a Chemical Sensor, *Proceeding of New Developments of Sensors for Environmental Control*, 2002, pp. 79-83 - ISBN: 981-238-338-7
18. S.Conoci, L.Valli, R.Rella, M.Palumbo, Sensing Performances of LB Calix[4]Pyrrole Films in Alcohol Vapours Recognition, *Proceeding of New Developments of Sensors for Environmental Control*, 2002, pp. 74-78 - ISBN: 981-238-338-7
17. S.Sortino, S.Petralia, G.Compagnini, S.Conoci and G.Condorelli, Light-Controlled Nitric Oxide Generation from a Novel Self-Assembled Monolayer on Gold Surface, *Angew. Chem. Int. Ed.* 2002 – 41/11, 1914-1917 - ISSN: 1433-7851, DOI: 10.1002/1521-3773(20020603)41:11<1914::AID-ANIE1914>3.0.CO;2-J
16. B. Pignataro, S. Conoci, L. Valli, R. Rella, G. Marletta, Structural study of meso-octaethyl Calix [4]pyrrole Langmuir-Blodgett films used as gas sensors, *Material Science & Engineering C.* 2002, C19, 27-31 - ISSN: 0928-4931, DOI: 10.1016/S0928-4931(01)00418-0
15. S.Conoci, M.Palumbo, B.Pignataro, R.Rella, L.Valli, G. Vasapollo, Optical Recognition of Organic Vapours through Ultrathin Calix[4]pyrrole Films, *Colloids and Surfaces A*, 2002, 869-873 - ISSN: 0927-7757, DOI: 10.1016/S0927-7757(01)01013-5
14. S.Conoci, G.Compagnini, L.Valli, R. Rella, Self Assembled Dipyrrolmethane Thin Films: SERS Characterization and Application in Methanol Vapours Recognition through SPR Technique, *Proceeding of VI Italian Conference on Sensors and Microsystems*, 2001, pp.69-75 - ISBN: 981-02-4895-4
13. S.Conoci, L.Valli, B.Pignataro, G.Marletta, R. Rella, Atomic Force Microscopy Inspection of

- Langmuir-Blodgett Films of Calix[4]Pyrrole for Optical recognition of Alcohol Vapours, Proceeding of VI Italian Conference on Sensors and Microsystems, 2001, pp. 81-87 - ISBN: 981-02-4895-4
12. Maryam Tayebani, Sabrina Conoci, Khalil Feghali, Sandro Gambarotta and Glenn P. A. Yap, Tri- and Tetravalent and Mixed-Valence Niobium Complexes Supported by a Tripodal Tripyrrolylmethane Trianion, *Organometallics* 2000; 19, 4568-4574 - ISSN: 0276-7333, DOI: 10.1021/om000501t
 11. T. Dubè, S. Conoci, S. Gambarotta, G.P.A. Yap, Tetrametallic Divalent Samarium Cluster Hydride and Dinitrogen Complex, *Organometallics*, 2000, 19, 3716 - ISSN: 0276-7333, DOI: 10.1021/om000502l
 10. S. Sortino and S. Conoci, Selective binding of 2-Anthrylmethylpyrrole with fluoride: fluorescence and theoretical studies, *Chem. Phys. Letters*, 323(2000), 389-392 - ISSN: 0009-2614, DOI: 10.1016/S0009-2614(00)00538-8
 9. S. Conoci and S. Sortino, 2-Anthrylmethylpyrrole as a new fluorescent indicator for fluoride, *Proceedings of V Italian Conference on Sensors and Microsystems*, 2000, pp.107-111. - ISBN 981-238-338-7
 8. S. Conoci, M. Palumbo, L. Valli, G. Vasapollo, R. Rella and P. Siciliano, Meso-octaethylporphyrinogen LB film in molecular recognition of alcohols vapours by Surface Plasmon Resonance, *Proceedings of V Italian Conference on Sensors and Microsystems*, 2000, pp.113-115 - ISBN 981-238-338-7
 7. T. Dubè, S. Conoci, S. Gambarotta, G.P.A. Yap, Divalent and Mixed-valence Samarium Clusters supported by Dipyrrolyl Ligand, *Organometallics*, 2000, 19, 1182 - ISSN: 0276-7333, DOI: 10.1021/om990901k
 6. T. Dubè, D. Freckmann, S. Conoci, S. Gambarotta, G.P.A. Yap, Monomeric and Octameric Divalent Ytterbium Complexes of Diphenylmethyl Dipyrrolyl Dianion, *Organometallics*, 2000, 19, 209 - ISSN: 0276-7333, DOI: 10.1021/om990798z
 5. T. Dubè, S. Conoci, S. Gambarotta, G.P.A. Yap, Preparation and Characterization of two Mixed-valence Samarium Octameric Clusters, *Organometallics*, 2000, 19, 115 - ISSN: 0276-7333, DOI: 10.1021/om990758v
 4. T. Dubè, S. Conoci, S. Gambarotta, G.P.A. Yap and G. Vasapollo, Tetrametallic Reduction of Dinitrogen: Formation of a Tetranuclear Samarium Dinitrogen Complex, *Angew. Chem. Int. Ed. Engl.*, 1999, 38, 3657 - ISSN: 1433-7851, DOI: 10.1002/(SICI)1521-3773(19991216)38:24<3657::AID-ANIE3657>3.0.CO;2-A
 3. S. Conoci, C. Melandri, G. de Portu, Wear of 3Y-TZP Containing Compressive Residual Stresses at the Surface, *Journal Mat. Science*, 1999, 34, 1009 - ISSN: 0022-2461
 2. S. Conoci, C. Melandri, G. de Portu, Effect of the Surface Residual Stress on Surface Crack Behaviour and Wear of 3Y-TZP, *Key Engineering Materials* 1997, 132-136, 1997, pp. 1501-1504 - ISSN: 1013-9826, DOI: 10.4028/www.scientific.net/KEM.132-136.1501
 1. G. de Portu, S. Conoci, Simplified Equation for Evaluating the Influence of Surface Residual Stresses on Toughness of Zirconia Ceramics, *Journal of American Ceramic Society*; 1997, 80 3242 - ISSN: 0002-7820.

Patents

1. **Conoci S**, Petralia S, Sotgiu R, Pirovano A (2005). Organic electrically bistable material and its use for producing a memory switch. EP1724851A1/ US20070007513/US8017221
2. **Conoci S**, Petralia S (2006). Method and system for producing optically transparent noble metal films. US7902070
3. **Conoci S**, Petralia S (2006). Method for producing optically transparent noble metal films . EP1717334 A1/EP2275586A2/EP2275586A3
4. **Conoci S**, Sortino S, Petralia S (2006). USE OF NITROANILINE DERIVATIVES FOR THE PRODUCTION OF NITRIC OXIDE. EP2051935 A1/ US20090191284
5. **Conoci S**, Sortino S (2007). 1-{4-[2-(9-anthrylmethoxy)ethyl]benzyl}-1'-methyl-4,4'-bipyridinium salts and related compounds as bifunctional compounds with an intercalating and a signal emitting unit for the detection of nucleic acids . EP1914226A1/ US20080118405/US7799912
6. **Conoci S**, Ferrari P (2013). Microfluidic device with integrated stirring structure and manufacturing method thereof TO2013A000299/US US 20140308738
7. **Conoci S**, Castagna M.E., Spata M.O, (2013) Microreattore e metodo per caricare un liquido nel microreattore, TO2013A000264
8. **Conoci S**, Castagna M.E., Spata M.O., Russo D. (2013) Kit per analisi biochimiche e metodo per eseguire un processo biochimico di tipo migliorato TO2013A000940
9. **Conoci S**, Castagna M.E., Spata M.O. (2014) Microreactor and method for loading a liquid US 20140291152
10. Andrea LAZZARA, Maria Eloisa CASTAGNA, Roberta GIUFFRIDA **Sabrina CONOCI**, Miniaturised LabonChip for Bio-Chem Analysis, TO2015A000135 (feb 2015)
11. Massimo Spata, Anna Rita Blanco e Sabrina Conoci, Metodo per l'analisi bio-informatica per la valutazione del rischio di insorgenza della degenerazione maculare legata all'età, deposito Italian patent office submission number 102016000098461 (2016)
12. Francesco RUNDO, Piero Giorgio FALLICA, Sabrina CONOCI, Salvatore PETRALIA, Massimo Cataldo MAZZILLO, *Processing of electrophysiological signals*, Italian patent office submission number IT 102017000081018 (18 luglio 2017)
13. Francesco Rundo, Sabrina Conoci, Piero Giorgio Fallica, A method of processing

- electrophysiological signals, corresponding system, vehicle and computer program product, Italian patent office submission number IT Patent N. 102017000120714 (24 ottobre 2017)
14. Francesco Rundo, Sabrina Conoci, *Processing of electrophysiological signals*, Italian patent office submission number IT Patent N. 102017000136598 (28 novembre 2017)
 15. Francesco Rundo, Piergiorgio Fallica, Sabrina Conoci, R.Parenti, V. Perciavalle , *A Method of Processing Electrophysiological Signals, Corresponding System, Vehicle And Computer Program Product*, Italian patent office submission number IT Patent N. 102018000005512 (18 maggio 2018)
 16. Francesco RUNDO, Sabrina CONOCI, Giuseppe Luigi BANNA, *Image processing method, corresponding system and computer program product*, IT Patent N. 102018000010833 (05 dicembre 2018) - Applicant: STMicroelectronics
 17. Rundo Francesco, Trenta Francesca, Conoci Sabrina, Battiato Sebastian *"Image processing method, corresponding system, vehicle and computer program product"* IT Patent N. 102019000000133 (01 gennaio 2019 - Applicant: STMicroelectronics
 18. Rundo Francesco Conoci Sabrina e Concetto Spampinato, *"Procedimento Di Elaborazione Di Segnali Elettrofisiologici Per Calcolare Una Chiave Virtuale Di Veicolo, Dispositivo, Veicolo E Prodotto Informatico Corrispondenti"* Inventori:, IT Patent N. 102019000015926 (09 settembre 2019) - Applicant: STMicroelectronics
 19. Conoci Sabrina, Petralia Salvatore e Traina Francesco , *Metodo per il Trattamento Antibatterico di una Superficie Solida"* IT Patent N. 102020000030230 (09 dicembre 2020) - Applicant: Inova Biomedical Technology S.R.L.
 20. Conoci Sabrina e Traina Francesco, *"Metodo Di Classificazione di Immagini, In Particolare Immagini Mediche, ad Esempio Immagini Radiografiche"* IT Patent N. 102020000031289 (17 dicembre 2020) Applicant: Inova Biomedical Technology S.R.L.
 21. Conoci Sabrina, Traina Francesco e Salvatore Guglielmino *"Metodo per la Determinazione della Presenza di un Microorganismo Bersaglio In Un Campione Biologico"* IT Patent N. 102021000005363 (8 marzo 2021) - Applicant: Inova Biomedical Technology S.R.L.
 22. Rundo Francesco, Giancarlo Asnaghi e Conoci Sabrina, *"Procedimento Di Elaborazione Di Segnali Indicativi Di Un Livello Di Attenzione Di Un Individuo Umano,Corrispondenti Sistema, Veicolo E Prodotto Informatico"* IT Patent N. 102021000008915 (09 aprile 2021) Applicant: STMicroelectronics
 23. : CONOCI Sabrina – RAMPAZZO Enrico – VALENTI Giovanni – PAOLUCCI Francesco – ZANUT Alessandra – PRODI Luca– PETRALIA Salvatore, *Method of Detecting a Target Genome"* IT Patent N. 102021000018422 (13.07. 2021) - Applicant: Università degli Studi di Messina e Università degli Studi di Bologna
 24. Conoci Sabrina – Guglielmino Salvatore – Fazio Enza – Calvaresi Matteo – Di Giosia Matteo – Danielli Alberto – Petrosino Annapaola – Prodi Luca, *"Sistemi Biotecnologici Innovativi per la Rilevazione di Analiti Cellulari o Molecolari"* Inventori:., IT Patent N. 102021000024185 (21.09 2021) - Applicant: Università degli Studi di Messina e Università degli Studi di Bologna
 25. Guglielmino Salvatore, Rizzo Maria Giovanna, Franco Domenico, De Plano Laura Maria, Conoci Sabrina, Cuzzocrea Salvatore, Esposito Emanuela, Paterniti Irene, Campolo Michela IT Patent N 102022000001400 (27/01/2022)- Applicant: Università degli Studi di Messina

- Projects**
- **WP Leader of ECCLIPSE** Pathfinder PATHFINDEROPEN-01 - ECLIPSE ECL-based Infectious Pathogen (bio)Sensor - Proposal number: 101046787 - Duration (months): 42– Starting Date: 01.05.2022 - funded for 3.1 Me
 - **PI of Research Unit Project** "Graphene Flagship Core Project 3 - GrapheneCore3", Call: H2020-SGA-FET-GRAPHENE-2019 – Starting Date: 01.04.2020 - funded for £261,001.
 - **PI of the research Project PON- ADAS +** - Development of advanced technologies and systems for car safety through ADAS platforms - Sustainable Mobility Sector – No. ARS01_00459 funded for 9.1 Me by MIUR, Project Coordinator: ST (12 Partners) – Start date: July 2018 - end: June 21.
 - **PI of the research Project PON BONE ++** - Development of Micro and Nanotechnologies for Predictivity, Diagnosis, Therapy and Regenerative Treatments of Pathological Bone and Osteo-Articular Alterations - Health Sector – N. ARS01_00693 Project Coordinator: Distretto Tecnologico Sicilia Micro e Nano (18 Partners), approved for funding for 9.6 Me by MIUR (start date: June 2020)
 - **PI of POR Project - LiverSmartDrug** - Innovative micro and nanosystems for the effective treatment of Liver Cancer – N. Project 087219090463 approved for 3.0 Me of funding by Sicilian

- Region (start date: June 2019)
- **Research Unit Project ASTONISH** Title: Advancing Smart Optical Imaging and Sensing for Health - Call H2020-ECSEL-2015-1-RIA-two-stage, Topic: ECSEL-04-2015 -Proposal number: 692470-2, Project Coordinator: Philips Medical Systems (24 partners) - 2.4 M€ ST funding quote- (2016 – 2019).
 - **PI Project DNA on Disk** - Piattaforma e kit diagnostici per la salute dell'uomo in ambito oncologico, neurologico, infettivologico e delle malattie legate alla povertà" ALISEI Cluster CTN01_00177_817708- funded for 11.4 M€ by MIUR, Project Coordinator: ST (7 Partners)- 2014-2016.
 - **PI PON HIPPOCRATES:** Sviluppo di Micro e Nano-Tecnologie e Sistemi Avanzati per la Salute dell'uomo" -PON02_00355_2964193, Project Coordinator: Distretto Tecnologico Sicilia Micro e Nano (14 Partners) funded for 20 M€ by MIUR. The project ranked first in the peer reviewed ranking.
 - **WP Leader "EasyCHIP PCR"** French research program ADNA (Avances Diagnostiques pour de Nouvelles Approches Therapeutiques) Code Project 3: Easy Chip - PCR / target prep sub-project EasyChip PCR , Project Coordinator: Biomerieux Inc (2011-2012), funded by French OSEO (2.5 M€ ST funding quote)
 - Participation as researcher to Research Project in the frame **GPS Program (Gran Progetto Strategico, DM 28950)** entitled "*Piattaforma microfluidica multifunzionale per applicazioni biomedicali basata sull'analisi di acidi nucleici*" (riferimento al programma strategico n.3. "Nuove applicazioni dell'industria biomedicale"), applied to MIUR on 2006 and approved for funding (9.7 M€) on February 200
 - Participation as researcher to European **Collaborative Project** (Large-scale integrating project) entitled **Hypergenes HEALTH-2007-2.1.1-2: Molecular epidemiological studies in existing well characterised European(and/or other) population cohort**, coordinated by Prof. Daniele Cusi Department of Scienze e Tecnologie Biomediche, University of Milan and funded by European Community (14.6 M€) on 2008.
 - participation as researcher to European **Collaborative Project** (Small or medium-scale focused research project) entitled **TM-REST A new platform for fast molecular detection of MDR and XDR resistant strains of M. tuberculosis and of drug resistant malaria** coordinated by Prof.ssa Daniela Maria Cirillo - Fondazione Centro San Raffaele del Monte Tabor and funded by European Community (4.07 M€) on 2008.
 - coordination of ST contribution to **Specific Targeted Research Or Innovation Project (STREP)** - entitled Novel Scalable Memory Concepts and Technologies **NOSCE MEMORIAS** coordinated by IMEC and funded by European Community on 2003.
 - participation as "Personale Extrauniversitario Dipendente" to "**PRIN 2002: Organizzazione Supramolecolare di Porfirine Naturali e Sintetiche**" (Area Scientifico Disciplinare: Scienze Chimiche Coordinatore AGOSTIANO ANGELA (Università di BARI)) – durata 24 mesi"

► **Author of 105 Communication to Congresses**

► **Principal Organizer** Symposium " Workshop "**Nanotechnologies for Innovative Medicine**" tenutosi il 13 Settembre presso *Faculty of Civil and Industrial Engineering, Sapienza University of Rome, Via Eudossiana 18, Rome, Italy*
[http://www.nanoinnovation.eu/2018/index.php/workshops/nanotechnologies-for-innovative-medicine:](http://www.nanoinnovation.eu/2018/index.php/workshops/nanotechnologies-for-innovative-medicine)

► **Principal Organizer** Symposium "Materials and Biosensor Systems for in vitro diagnostic applications" **E-MRS SPRING MEETING 2015** (Maggio 2015, Lille (France)), together with the co-organizers:

Dr. Sebania Liberto- CNR- IMM Catania (Italy),

Prof. Anthony P F Turner - Linköping University-Sweden

Prof. Wolfgang.Knoll -AIT Austrian Institute of Technology – Donau (Austria)

<http://www.emrs->

[strasbourg.com/index.php?option=com_content&task=view&Itemid=1652&id=816&PHPSESSID=b6624346d803e7335cbef3253cb52605](http://www.emrs-strasbourg.com/index.php?option=com_content&task=view&Itemid=1652&id=816&PHPSESSID=b6624346d803e7335cbef3253cb52605)

► **Member of Steering Committee** IEEE Convegno Nanotechnology Materials and Devices Conference October 12-15, 2014 ACI CASTELLO, ITALY (<http://www.ieee-nmdc2014.org/index.php/organizers-committees/organizers>)

► **Member of Technical Committee MiNaB-ICT** International Workshop on "Micro-Nano-Bio-ICT Convergence" Current Research and Future Trends 13/15 July 2015 – Otranto (Lecce), Italy (<http://www.minabict.eu/committees>)

Member of Technical Committee ISOCS-MiNaB-ICT-MNBS 2016 Sensing for Smart Anything Everywhere: Materials, Technologies, Applications – 25-29 June 2016 – Otranto (Lecce), Italy <http://www.minabict.eu/committees/>

Member of Scientific Committee 5th Conference on Bio-Sensing Technology – 7-10 May 2017 – Riva del Garda (TN), Italy <https://www.elsevier.com/events/conferences/international-conference-on-bio-sensing-technology/about>

Honours and awards

Hot Paper and Cover Page paper Light-triggered DNA release by dynamic monolayer films - Fiorella L. Callari Salvatore Petralia **Sabrina Conoci** and Salvatore Sortino, *New J. Chem.* 2008, 32(11), 1899-1903

STMicronic internal Award Best Laurea and Ph.D Thesis (June 7th 2005) for the Laurea thesis entitled "*Preparazione di Self Assembled Monolayers foto & elettro-attivi su films di Pt ultrasottile*" - Callari Fiorella Lucia – Chemistry, University of Catania (Italy)– Laurea on 2005-04-22

TEAM NOMINEE AWARD STAR 2009 (internal STMicronic award) for the accomplishment of the 1st *Design, Development and Qualification procedure* compliance with FDA requirements for IVD device (**LOP 8127736 - Lab-on-Chip Biotechnology Design, Development and Qualification**).

STMicronic internal Patent Award (Oct 6th, 2011) for the US patent 7,799,912 entitled "Bifunctional Chemical, Preparation and Use for Detecting Nucleic Acid "

STMicronic internal Patent Award (Oct 11th, 2012) for the US patents: 7902070 entitled "METHOD FOR PRODUCING OPTICALLY TRANSPARENT NOBLE METAL FILMS " 8017221 entitled "ORGANIC ELECTRICALLY BISTABLE MATERIAL AND ITS USE FOR PRODUCING MEMORY SWITCH

STMicronic internal Patent Award (Nov 14th, 2014) for the US patents: 8440849 entitled "USE OF NITROANILINE DERIVATIVES FOR THE PRODUCTION OF NITRIC OXIDE "

STMicronic internal Patent Award (Nov 2015) for the US patents: 8766006 entitled "USE OF NITROANILINE DERIVATIVES FOR THE PRODUCTION OF NITRIC OXIDE "

Cover Page paper *Graphene oxide nanohybrid photoreleasing nitric oxide* by Nino Marino, Salvatore Petralia, Marta Perez-Lloret, Jiri Mosinger, Sabrina Conoci* and Salvatore Sortino *Journal Material Chemistry B*, 2016, 4, 5763–5948 - ISSN (print) 2050-750X ISSN (online) 2050-7518 -DOI: 10.1039/C6TB01599A

STMicronic Corporate "Star Bronze Award" for the project "Technical Staff Italy: Open Innovation Seed" in the frame of STAR2016 Program

Cover Page paper *Innovative Chemical Strategy for PCR-free Genetic Detection of Pathogens by an Integrated Electrochemical Biosensor*, by S. Petralia E. L. Sciuto, M. L. Di Pietro, M.Zimbone, M G Grimaldi and S.Conoci*, *Analyst* (2017) DOI: 10.1039/C7AN00202E.



europass According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Messina, February 13, 2022