

PERSONAL INFORMATION

Viviana Scognamiglio



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🌐 <http://www.ic.cnr.it/ic4/en/biosensoristica/>

Sex FEMALE | Date of birth 24/04/1975 | Nationality ITALIAN

10/2011 Permanent researcher at Institute of Crystallography, National Research Council

EDUCATION

01/ 2008 PhD in Industrial Biotechnology at the University of Naples “Federico II”. Thesis title: “Fluorescent protein-based biosensors for sugars”, Tutor Prof. Mosè Rossi.

12/2002 Master Degree in Molecular Biology at the University of Naples “Federico II”. Tutor Prof. Simonetta Bartolucci.

WORK EXPERIENCE

The research interests include i) the selection and characterization of proteins/microorganisms by circular dichroism and fluorescence spectroscopy for biosensing, ii) the development of Bioassay and Biosensor systems, Optical and Electrochemical (bio)sensors, Biosensors modified with Nanomaterials, Paper based (bio)sensors; iii) the biosensor prototyping and validation for real analyses of clinical, food and environmental samples.

The research activity carried out was published in several papers as follows:
 - 80 articles in ISI high impact peer-reviewed journals.

H-index: 24, with 2013 total citations (Scopus, August 2022).

Editor together with F. Arduini, G. Rea and G. Palleschi of the book entitled "Biosensors for Sustainable Food-New Opportunities and Technical Challenges", Elsevier 2016, ISSN 9780444635808 (electronic)

2011 - on going: permanent position as III level researcher at Institute of Crystallography, National Research Council of Rome.

2010 - 2011: researcher contract within SENSBIO SYN project grants for the realisation of electro-optical biosensors for nutraceutical application, at Institute of Crystallography, National Research Council of Rome.

2008 - 2010: researcher contract within FILAS grants “art. 41 comma 1 LR 9 del 17/02/2005” for the realisation of a biosensor/bioreactor for nutraceutical application (BIO-NUTRA project) at Institute of Crystallography, National Research Council of Rome.

2008: fellowship within MULTITASK project for the development of optical biosensors for agrifood application, at Institute of Crystallography, National Research Council of Rome.

2007: Habilitation in Biology Sez. A.

2004 - 2008: grants within a PhD project in Industrial Biotechnology for the development of optical biosensors for the detection of glucose for diabetic patients for biomedical

application, at Institute of Protein Biochemistry, National Research Council of Naples.

2003 - 2004: grants from BioTekNet within the project “Esperti in Applicazioni Industriali delle Biotecnologie”, at Institute of Protein Biochemistry, National Research Council of Naples.

PERSONAL SKILLS

She worked in collaboration with several research institutes, universities and R&D companies, within the frame of national / international projects for the development of biosensors for environmental, security, biomedical and agrifood sectors.

Mother tongue(s)

Italian

Other language(s)

English

| UNDERSTANDING | | SPEAKING | | WRITING |
|---------------|---------|--------------------|-----------|---------|
| Listening | Reading | Spoken interaction | Listening | Reading |
| C1 | C1 | C1 | C1 | C1 |

ADDITIONAL INFORMATION

Awards "Top downloaded publication" for the article "Scognamiglio, V. (2013) Nanotechnology in glucose monitoring: Advances and challenges in the last 10 years. Biosensors and Bioelectronics 47: 12-25 "(IF 10.5).

Cover January 2018 on Trends in Analytical Chemistry for the article: Antonacci A. and Scognamiglio V. (2017) Nanostructured (Bio) sensors for smart agriculture TrAC 98, 95-103 (IF 10.5).

Projects **2021-2022.** POR FESR Progetti Gruppi di Ricerca. Titolo del Progetto: Biosensori su carta wireless per la telemedicina in oncologia e la misura di emocromo ed elettroliti. Acronimo: E-CROME. Coordinatore: Prof. Fabiana Arduini, Università di Roma Tor Vergata. **Responsible IC-CNR: Viviana Scognamiglio.**

2019-2020. INTERREG Ita-Hr Axis 3 OS 3.3 “Managed use of treated urban wastewater for the Quality of the Adriatic Sea (AdSWiM)”. **Responsible of the Italian Unit.**

2018-2019. Bilateral project CNR/CNRST (Italy-Morocco) “Photosynthetic algae and cost-effective carbon black nanomaterial in a joint combination to develop miniaturised electrochemical sensor for a sustainable monitoring of herbicide in surface water (AlgaeCB)”. **Responsible of the Italian Unit.**

2017-2020. ERANETMED RQ3-2016 Climate/demographic change and Environment “Integrated nanotechnologies for sustainable sensing water and sanitation” (NanoSWS)”. **Coordinator.**

2017-2019. POR FESR 2014-2020 LIFE 2020 “Health Age, Rapid detection of cardiovascular emergencies (HA-R2EC)”. **Responsible of the Italian Unit.**

2016. Prin 2016 - MIUR. Securing and ensuring sustainable use of agriculture waste, co- and by-products: an integrated analytical approach combining mass spectrometry with health effect-based biosensing. Unità di ricerca di Prof. Moscone Dinia Danila Palma (Università Tor Vergata) - Coordinatore: Prof. Roda Aldo (Università di Bologna). **Collaborator.**

2016. MIUR-DAAD Joint Mobility Program (PPP Italien). Rapid detection of salmonella using a smart multiplexed impedimetric paper-based sensor. Unità di ricerca di Dr. Fabiana Arduini (Università Tor Vergata) - Coordinatore: Prof. Olfa Kanoun (Technische Universität Chemnitz, Germania). **Collaborator.**

2013-2016. PRNA 11.3.2013, n. 417. Ministero dell'Istruzione, dell'Università e della Ricerca. Titolo: Physiological, biochemical and transcriptomic adaptive responses to harmful UV radiation and temperature increases in Antarctic meiofaunal organisms: a walk from genes to organisms. **Collaborator.**

2011-2015. COST Action TD1102: “Photosynthetic proteins for Biotechnological applications: biosensors and biochips. Acronimo: PHOTOTECH. **Collaborator.**

2014. Adesione al Functional Food Network (FUFONET™). Dipartimento Scienze Bio-Agroalimentari. **Collaborator.**

2013-2014. Progetto BioTTasa – Trasferimento Tecnologico e integrazione di Biotecnologie per la Salute, l’Alimentazione e l’Ambiente. Ministero dello Sviluppo Economico, Bando RIDITT. **Collaborator.**

2010-2012. FILAS. “Sistema integrato di micro-nano biosensori per il monitoraggio remoto della contaminazione da pesticidi e metalli pesanti nelle falde acquifere del Lazio”. Acronimo: MICROBIOSIS. **Collaborator.**

2009-2012. FILAS. “Sistema biosensoristico per la determinazione di contaminanti pericolosi per la salute umana in prodotti agro-alimentari”. Acronimo: BIOAL, prot. N. 27/2009 del 15/01/09. **Collaborator.**

2009-2011. EU FP7-SME-2008-1. Biosensors and Sensors for the industrial biosynthesis process of widely used commercial antioxidants: nutraceuticals as additives for food and aquaculture promoting public health and safety”. Acronimo: SENSBIO SYN, ID: 232522. **Collaborator.**

2009-2011. EU FP7-SME-2008-1. “Bio-sensor for Effective Environmental Protection and Commercialization – ENhanced”. Acronimo: BEEP-C-EN, ID: 232082. **Collaborator.**

2008-2010. ETB-2007-34. “Una nuova piattaforma biotecnologia per biosensori multifunzionali” Ministero dello Sviluppo Economico”. Acronimo: MULTIBIOPLAT. **Collaborator.**

2007-2010. FILAS. “Realizzazione di un bioreattore automatizzato”. Acronimo: BIO-NUTRA. **Collaborator.**

2006-2009. EU FP6. Priority 5, Food quality and safety. NUTRA-SNACK. Ready to eat food for breakfast and sport activity with high content of nutraceuticals reducing a disease risk and promoting public health. **Collaborator.**

2006-2009. ASI 2005 MoMa: Dalle Molecole all’Uomo: La Ricerca Spaziale applicata al miglioramento della Qualità della Vita della popolazione anziana. **Collaborator.**

2005-2011. MIUR. “Ricerca industriale per la realizzazione di biosensori per il monitoraggio dell’inquinamento da diserbanti in agroalimentare”. Acronimo: AGROBIOSENS. **Collaborator.**

2005-2009. MISE. “Innovazione di un prodotto biosensoristico nella realizzazione di un sistema base denominato Biosensore Multitasks e sua applicazione in agrofood basata su brevetto CNR” Acronimo: MULTITASKS. **Collaborator.**

Editorials

2021. Guest Editor Special Issue “The Impact of Treated Urban Wastewaters and Flood Discharge on the Quality of the Bathing Water” Water (IF 3)
https://www.mdpi.com/journal/water/special_issues/treated_urban_wastewater

2020/2021. Guest Editor Journal of Nanobiotechnology (IF 10.5)

2020/2021. Topic Editor Nanomaterials (IF 5)
https://www.mdpi.com/journal/nanomaterials/topic_editors

2020. Viviana Scognamiglio and Leonardo Fraceto (UNESP, Brasile) are Guest Editor of the Special Issue “Towards nanotechnology in agrifood sciences” on Journal of Nanobiotechnology
<https://www.biomedcentral.com/collections/agrifood>

2019. Editor Special Issue Sensors (ISSN 1424-8220) “Development of Enzymatic Electrochemical Biosensors and Applications” in the Section “Biosensors”
http://www.mdpi.com/journal/sensors/special_issues/enzymatic_biosensors

2018. Editor Special Issue Chemosensors (ISSN 2227-9040) “Electrochemical Biosensors for Environmental,

Agrifood and Biomedical Applications". https://www.mdpi.com/journal/chemosensors/special_issues/EBEABA

Publications H-index: 24, 77 articles with 2013 total citations (Scopus, August 2022) on high impact factor journals:

Nanotoday IF 20.7
Trends in Biotechnology IF 19.5
Trends in Analytical Chemistry IF 12.3
Biosensors and Bioelectronics IF 10.6
Journal of Nanobiotechnology IF 10.4

63 articles in the period 2012-2022 (last 10 years)

- Main articles**
- Antonacci, A., Arduini, F., Attaallah, R., Amine, A., Giardi, M. T., & Scognamiglio, V. (2022). A Proof-of-Concept Electrochemical Cytosensor Based on *Chlamydomonas reinhardtii* Functionalized Carbon Black Screen-Printed Electrodes: Detection of *Escherichia coli* in Wastewater as a Case Study. *Biosensors*, 12(6), 401.
- Susmel, S., Girolametti, F., Fonti, V., Figueredo, F., Scognamiglio, V., Antonacci, A., & Annibaldi, A. (2022). The Interreg Project AdSWiM: Managed Use of Treated Wastewater for the Quality of the Adriatic Sea. *Water*, 14(16), 2460.
- Khashayar, P., Al-Madhagi, S., Azimzadeh, M., Scognamiglio, V., & Arduini, F. (2022). New frontiers in microfluidics devices for miRNA analysis. *TrAC Trends in Analytical Chemistry*, 116706.
- Bartolucci, C., Scognamiglio, V., Antonacci, A., & Fraceto, L. F. (2022). What makes nanotechnologies applied to agriculture green?. *Nano Today*, 43, 101389.
- De Falco, M., Porritiello, A., Rota, F., Scognamiglio, V., Antonacci, A., Del Monaco, G., & De Felice, M. (2022). The Finely Coordinated Action of SSB and NurA/HerA Complex Strictly Regulates the DNA End Resection Process in *Saccharolobus solfataricus*. *International journal of molecular sciences*, 23(5), 2582.
- De Felice, M., De Falco, M., Zappi, D., Antonacci, A., & Scognamiglio, V. (2022). Isothermal amplification-assisted diagnostics for COVID-19. *Biosensors and Bioelectronics*, 114101.
- Antonacci, A., Zappi, D., Giardi, M. T., & Scognamiglio, V. (2021). Photosynthesis-based biosensors for environmental analysis of herbicides. *Case Studies in Chemical and Environmental Engineering*, 4, 100157.
- Antonacci, A., Attaallah, R., Arduini, F., Amine, A., Giardi, M. T., & Scognamiglio*, V. (2021). A dual electro-optical biosensor based on *Chlamydomonas reinhardtii* immobilised on paper-based nanomodified screen-printed electrodes for herbicide monitoring. *Journal of nanobiotechnology*, 19(1), 1-13.
- Scognamiglio, V., Giardi, M. T., Zappi, D., Touloupakis, E., & Antonacci*, A. (2021). Photoautotrophs–Bacteria Co-Cultures: Advances, Challenges and Applications. *Materials*, 14(11), 3027.
- Antonacci*, A., Bertalan, I., Giardi, M. T., Scognamiglio, V., Turemis, M., Fisher, D., & Johanningmeier, U. (2021). Enhancing resistance of *Chlamydomonas reinhardtii* to oxidative stress fusing constructs of heterologous antioxidant peptides into D1 protein. *Algal Research*, 54, 102184.
- Giardi, M. T., Zappi, D., Turemis, M., Varani, G., Celso, F. L., Barone, G., ... & Scognamiglio*, V. (2021). Quantum dots functionalised artificial peptides bioinspired to the D1 protein from the Photosystem II of *Chlamydomonas reinhardtii* for endocrine disruptor optosensing. *Talanta*, 224, 121854.
- Antonacci, A., Celso, F. L., Barone, G., Calandra, P., Grunenber, J., Moccia, M., & Scognamiglio*, V. (2020). Novel atrazine-binding biomimetics inspired to the D1 protein from the photosystem II of

Chlamydomonas reinhardtii. *International Journal of Biological Macromolecules*, 163, 817-823.

Attaallah, R., Antonacci, A., Mazzaracchio, V., Moscone, D., Palleschi, G., Arduini, F., & Scognamiglio*, V. (2020). Carbon black nanoparticles to sense algae oxygen evolution for herbicides detection: Atrazine as a case study. *Biosensors and Bioelectronics*, 112203.

Castrovilli, M. C., Bolognesi, P., Chiarinelli, J., Avaldi, L., Cartoni, A., Calandra, P., & Scognamiglio*, V. (2020). Electrospray deposition as a smart technique for laccase immobilisation on carbon black-nanomodified screen-printed electrodes. *Biosensors and Bioelectronics*, 112299.

Antonacci*, A., & Scognamiglio*, V. (2020). Biotechnological advances in the design of algae-based biosensors. *Trends in Biotechnology*, 38(3), 334-347.

Bartolucci, C., Antonacci, A., Arduini, F., Moscone, D., Fraceto, L., Campos, E., & Santander, J. M. P. (2020). Green nanomaterials fostering agrifood sustainability. *TrAC Trends in Analytical Chemistry*, 125, 115840.

Arduini, F., Micheli, L., Scognamiglio, V., Mazzaracchio, V., & Moscone, D. (2020). Sustainable materials for the design of forefront printed (bio) sensors applied in agrifood sector. *TrAC Trends in Analytical Chemistry*, 115909.

Arduini, F., Cinti, S., Mazzaracchio, V., Scognamiglio, V., Amine, A., & Moscone, D. (2020). Carbon black as an outstanding and affordable nanomaterial for electrochemical (bio) sensor design. *Biosensors and Bioelectronics*, 156, 112033.

Antonacci, A., Scognamiglio, V., Mazzaracchio, V., Caratelli, V., Fiore, L., Moscone, D., & Arduini, F. (2020). Paper Based Electrochemical Devices for the Pharmaceutical Field: State of the Art and Perspectives. *Frontiers in Bioengineering and Biotechnology*, 8.

Attaallah, R., Antonacci, A., Arduini, F., Amine, A., & Scognamiglio*, V. (2020). Nanobiosensors for Bioclinical Applications: Pros and Cons. In *Green Nanoparticles* (pp. 117-149). Springer, Cham.

Cacciotti, I., Pallotto, F., Scognamiglio, V., Moscone, D., & Arduini, F. (2020). Reusable optical multi-plate sensing system for pesticide detection by using electrospun membranes as smart support for acetylcholinesterase immobilisation. *Materials Science and Engineering: C*, 111, 110744.

Attaallah, R., Antonacci, A., Arduini, F., Amine, A., Scognamiglio* V. (2019) Nanobiosensors for bioclinical applications: pros and cons, in *Green Nanoparticles - Synthesis and Biomedical Applications*, Eds. Jayanta Kumar Patra, Gitishree Das, Leonardo F. Fraceto, Estefânia Vangelie Ramos Campos, published by Springer Nature Switzerland (in press).

Arduini, F., Cinti, S., Scognamiglio, V., Moscone, D. (2019) Nanomaterial based-sensors, in *Handbook of Nanomaterials in Analytical Chemistry*, Ed. Chaudhery Mustansar Hussain, published by Elsevier, pp.329-355.

Scognamiglio* V., Arduini F. (2019). The technology tree in the design of glucose biosensors. *TrAC Trends in Analytical Chemistry*, 115642.

Castrovilli, M. C., Bolognesi, P., Chiarinelli, J., Avaldi, L., Calandra, P., Antonacci, A., Scognamiglio*, V. (2019). The convergence of forefront technologies in the design of laccase-based biosensors-an update. *TrAC Trends in Analytical Chemistry*.

Pagliarini, V., Neagu, D., Scognamiglio, V., Pascale, S., Scordo, G., Volpe, G., & Moscone, D. (2019). Treated Gold Screen-Printed Electrode as Disposable Platform for Label-Free Immunosensing of Salmonella Typhimurium. *Electrocatalysis*, 10(4), 288-294.

Antonacci A., Scognamiglio* V. (2019). Photosynthesis-based hybrid nanostructures: electrochemical sensors and photovoltaic cells as case studies. *TrAC Trends in Analytical Chemistry*. 115, 100-109.

Scognamiglio* V., Antonacci, A., Arduini, F., Moscone, D., Campos, E. V., Fraceto, L. F., Palleschi, G. (2019). An eco-designed paper-based algal biosensor for nanoformulated herbicide optical detection. *Journal of Hazardous Materials*. 373, 483-492

Arduini, F., Scognamiglio V., Cinti, S., Amine, A., Antonacci, A., Vasiljevic, J., & Palleschi, G. (2019). Enzyme-Based Materials. *Handbook of Smart Materials in Analytical Chemistry*, 179-209.

Antonacci, A. Lambreva M.D., Arduini F., Moscone, D., Palleschi G., Scognamiglio* V. (2018). A whole cell optical bioassay for the detection of chemical warfare mustard agent simulants. *Sensors and actuators B: Chemical* 257, 658-665.

Cinti, S., Scognamiglio V., Moscone, D., Arduini, F. (2018). Efforts, Challenges, and Future Perspectives of Graphene-Based (Bio) sensors for Biomedical Applications. In *Graphene Bioelectronics* (pp. 133-150). Elsevier.

Pagliarini V., Neagu D., Scognamiglio V., Pascale S., Scordo G., Volpe G., Delibato E., Pucci E., Notargiacomo A., Pea M., Moscone D., Arduini* F. (2018). Treated gold screen-printed electrode as disposable platform for label free immunosensing of Salmonella Typhimurium. *Electrocatalysis*, 1-7.

Antonacci A., Arduini F., Scognamiglio* V. (2018). Vanguard Nano(bio)sensor Technologies Fostering the Renaissance of Agriculture, in *Emerging Trends, in Agri-Nanotechnology* (Eds. H.B. Singh, S. Mishra, L.F. Fernandes Fraceto, Renata de Lima) CABI Book, UK
<https://www.cabi.org/bookshop/book/9781786391445>

Arduini F., Scognamiglio V., Cinti S., Amine A., Antonacci A., Vasiljevic J., Favaretto G., Moscone D., Palleschi G. (2018). Enzyme-based materials, in *Handbook of Smart Materials in Analytical Chemistry* (vol. 1) (Eds. Miguel de la Guardia and Francesc A. Esteve-Turrillas) WILEY

Antonacci A., Arduini F., Moscone D., Palleschi G., V. Scognamiglio*. (2018) Nanostructured (bio)sensors for smart agriculture. *TrAC, Trends in Analytical Chemistry* 98, 95-103.

Antonacci A., Lambreva M.D., Arduini F., Moscone D., Palleschi G., Scognamiglio* V. (2018) A whole cell optical bioassay for the detection of chemical warfare mustard agent simulants. *Sensors and actuators B: Chemical* 257, 658-665.

Arduini, F., Cinti, S., Scognamiglio, V., Moscone, D., Palleschi, G. (2017). How cutting-edge technologies impact the design of electrochemical (bio) sensors for environmental analysis. A review. *Analytica Chimica Acta* 959, 15-42.

Zobnina V., Lambreva M.D., Rea G., Campi G., Antonacci A., Scognamiglio V., Giardi M.T., Polticelli F. (2017). The plastoquinol-plastoquinone exchange mechanism in photosystem II. Insight from molecular dynamics simulations. *Photosynthesis Research* 1-16.

Scognamiglio* V., Antonacci A., Lambreva M.D., Arduini F., Palleschi G., Litescu S.C., Rea, G. (2016). Application of Biosensors for Food Analysis. *Food Safety*, 395-434.

Scognamiglio* V., Antonacci A., Patrolecco L., Lambreva M.D., Litescu S.C., Ghuge S.A., Rea G. (2016). Analytical tools monitoring endocrine disrupting chemicals. *TrAC Trends in Analytical Chemistry*, 80, 555-567.

Antonacci A., Arduini F., Moscone D., Palleschi G., Scognamiglio* V. (2016). Commercially Available (Bio) sensors in the Agrifood Sector. In *Biosensors for Sustainable Food - New Opportunities and Technical Challenges* (pp. 315-340). Elsevier.

Scognamiglio* V., Antonacci A., Lambreva M.D., Litescu S.C., Rea G. (2015) Synthetic biology and biomimetic chemistry as converging technologies fostering a new generation of smart biosensors. *Biosensor and Bioelectronics* 74:1076-1086.

Arduini F., Neagu D., Scognamiglio V., Patarino S., Moscone D., Palleschi G. (2015) Automatable Flow

System for Paraoxon Detection with an Embedded Screen-Printed Electrode Tailored with Butyrylcholinesterase and Prussian Blue Nanoparticles. *Chemosensors* 3 (2), 129-145.

Arduini F., Scognamiglio V., Covaia C., Amine A., Moscone D., Palleschi, G. (2015). A choline oxidase amperometric bioassay for the detection of mustard agents based on screen-printed electrodes modified with prussian blue nanoparticles. *Sensors*, 15(2), 4353-4367.

Scognamiglio* V., Arduini, F., Palleschi, G., Rea, G. (2014). Biosensing technology for sustainable food safety. *TrAC Trends in Analytical Chemistry*, 62, 1-10.

Janssen, P. J., Lambreva, M. D., Plumeré, N., Bartolucci, C., Antonacci, A., Buonasera, K., Scognamiglio V., Rea, G. (2014). Photosynthesis at the forefront of a sustainable life. *Frontiers in chemistry*, 2, 36.

Lambreva D.M., Russo D., Polticelli F., Scognamiglio V., Antonacci A., Zobnina V., Rea G. (2014). Structure/function/dynamics of photosystem II plastoquinone binding sites. *Current Protein and Peptide Science*, 15(4), 285-295.

Scognamiglio* V. (2013). Nanotechnology in glucose monitoring: advances and challenges in the last 10 years. *Biosensors and bioelectronics*, 47, 12-25.

Scognamiglio* V., Stano, P., Polticelli, F., Antonacci, A., Lambreva, M. D., Pochetti, G., Rea, G. (2013). Design and biophysical characterization of atrazine-sensing peptides mimicking the *Chlamydomonas reinhardtii* plastoquinone binding niche. *Physical Chemistry Chemical Physics*, 15(31), 13108-13115.

Scognamiglio* V., Pezzotti, I., Pezzotti, G., Cano, J., Manfredonia, I., Buonasera, K., Giardi, M. T. (2013). A new embedded biosensor platform based on micro-electrodes array (MEA) technology. *Sensors and Actuators B: Chemical*, 176, 275-283.

Scognamiglio* V., Pezzotti, I., Pezzotti, G., Cano, J., Manfredonia, I., Buonasera, K., Giardi, M. T. (2012). Towards an integrated biosensor array for simultaneous and rapid multi-analysis of endocrine disrupting chemicals. *Analytica chimica acta*, 751, 161-170.

Rea, G., Polticelli, F., Antonacci, A., Lambreva, M., Pastorelli, S., Scognamiglio, V., Giardi, M. T. (2011). Computational biology, protein engineering, and biosensor technology: a close cooperation for herbicides monitoring. *Herbicides, Theory and Applications*. INTECH Publisher, Vienna, 93-120.

Scognamiglio* V., Pezzotti, G., Pezzotti, I., Cano, J., Buonasera, K., Giannini, D., Giardi, M. T. (2010). Biosensors for effective environmental and agrifood protection and commercialization: from research to market. *Microchimica Acta*, 170(3-4), 215-225.

Di Pietrantonio, F., Zaccari, I., Benetti, M., Cannatà, D., Verona, E., Crescenzo, R., Scognamiglio V., D'Auria, S. (2010). Surface Acoustic Wave Biosensor Based on a Recombinant Bovine Odorant-Binding Protein. In *Sensors and Microsystems* (pp. 201-205). Springer, Dordrecht.

Buonasera, K., Pezzotti, G., Scognamiglio, V., Tibuzzi, A., Giardi, M. T. (2009). New platform of biosensors for prescreening of pesticide residues to support laboratory analyses. *Journal of agricultural and food chemistry*, 58(10), 5982-5990.

Giardi, M. T., Scognamiglio, V., Rea, G., Rodio, G., Antonacci, A., Lambreva, M., Johanningmeier, U. (2009). Optical biosensors for environmental monitoring based on computational and biotechnological tools for engineering the photosynthetic D1 protein of *Chlamydomonas reinhardtii*. *Biosensors and Bioelectronics*, 25(2), 294-300.

Rea, G., Polticelli, F., Antonacci, A., Scognamiglio, V., Katiyar, P., Kulkarni, S. A., Giardi, M. T. (2009). Structure-based design of novel *Chlamydomonas reinhardtii* D1-D2 photosynthetic proteins for herbicide monitoring. *Protein Science*, 18(10), 2139-2151.

Scognamiglio* V., Raffi, D., Lambreva, M., Rea, G., Tibuzzi, A., Pezzotti, G., Giardi, M. T. (2009). *Chlamydomonas reinhardtii* genetic variants as probes for fluorescence sensing system in detection of

pollutants. Analytical and bioanalytical chemistry, 394(4), 1081.

Oral talks Viviana Scognamiglio. Biosensor technology for environmental and biomedical sectors. Invited talk at webinar for IBBR-CNR. March, 9 2022.

Viviana Scognamiglio. Crosscutting technologies in biosensing for agro-environmental and biomedical applications. Invited talk at Jointed Workshop between the Institute of Crystallography–CNR and the Institute of Materials Science, Technische Universität (TU) Dresden. July, 1 2022.

Viviana Scognamiglio. Pathogens detection by innovative biosensors-based approaches. AdSWiM Project - The 6th Joint Project Steering Committee and General Assembly Online Meeting and Final Project Event. 14 December 2021 on line.

Viviana Scognamiglio. Photosynthesis-based biosensors towards the environmental protection. ECOMAP Event “Biodiversità e specie aliene tra mare e zona costiera: fruizione e mantenimento. 19 November 2021 on line.

Viviana Scognamiglio. Algal biosensors for environmental monitoring. Workshop “Photosynthetic microorganisms for sustainable development” 15-17 December 2021 (on line).

Amina Antonacci, Pietro Calandra, Giampaolo Barone, Fabrizio Lo Celso, Viviana Scognamiglio*. Bioinspired herbicide binding proteins from *Chlamydomonas reinhardtii* as novel synthetic biomimetics for sensing applications. Biosensors 2021 “30th Anniversary World Congress on Biosensors” 26-29 Luglio 2021 (oral communication).

Viviana Scognamiglio*. Algal biosensors for environmental monitoring. Green Christmas Session “Photosynthetic microorganisms for sustainable development”. 16-17 Dicembre 2021 (oral communication su invito).

Viviana Scognamiglio*, Amina Antonacci. Algae-Based Biosensors. Conferenza di Istituto “1st Conference on Crystallography, Structural Chemistry and Biosystems”, Catania (on line) 4-6 ottobre 2021 (oral communication).

Viviana Scognamiglio*. Algae based biosensors and total toxicity. Workshop Remtech EXPO (on line) 24 settembre 2021 (oral communication su invito).

Sabina Susmel, Federico Figueredo, Fabiana Arduini, Amina Antonacci, Viviana Scognamiglio*. Innovative (bio)sensors in the frame of Interreg Italy-Croatia AdSWiM Project “Managed use of treated urban wastewater for the quality of the Adriatic Sea”. Workshop Progetto DESIR responsabile Dr. Lorenzo Avaldi, ISM-CNR, 25 Febbraio 2021 (oral communication su invito).

Lezione sui biosensori dal titolo “Algae biotechnology towards the design of sustainable biosensors for the environmental protection” nell’ambito del Corso di Dottorato presso l’Università di San Paolo, Brasile, UNESP, su invito del Prof. Leonardo Fraceto, 21 settembre 2021.

Lezione sui biosensori dal titolo “Biosensori e loro applicazioni nel controllo ambientale, monitoraggio della sicurezza, analisi agroalimentare e diagnosi biomedica” per il Liceo ISIS De Nicola di Napoli, 16 aprile 2021.

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Supervision and didactics

Stage for Miss Raouia Attahallah from University of Casablanca Hassan II, within the Bilateral Project Bilaterale Italy-Morocco 2018-2019 entitled "Photosynthetic algae and cost-effective carbon black nanomaterial in a joint combination to develop miniaturised electrochemical sensor for a sustainable monitoring of herbicide in surface water (AlgaeCB)". March-June and October-November 2019

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Links

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 RESEARCH GATE: https://www.researchgate.net/profile/Viviana_Scognamiglio
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