

# CURRICULUM VITAE ET STUDIORUM

Name Serena Fiocchi

Home Address

Work Address

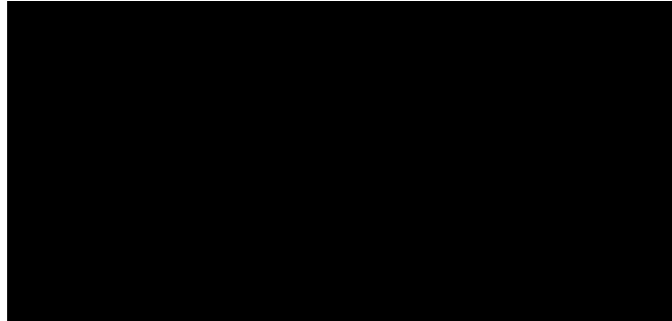
Telephone

E-mail

Website

Nationality

Date of birth



## EDUCATION

- 04/2013 Ph.D. degree in Bioengineering and European Doctorate at the Polytechnic of Milan, Italy.
- 04/2009 M Sc. degree in Biomedical Engineering at the Polytechnic of Milan, Italy. (110/110)

## EMPLOYMENT AND RESEARCH EXPERIENCE

- 01/2023-ongoing Senior Researcher at the Institute of Electronics, Computers and Telecommunication Engineering of the National Research Council (IEIIT-CNR).
- 04/2018-12/2022 Research Scientist at IEIIT-CNR.
- 09/2013-03/2018 Post-Doctoral Research Fellowship at IEIIT-CNR
- 01/2013-08/2013 Post-Doctoral Research Fellowship at the Institute of Biomedical Engineering of the National Research Council (ISIB-CNR)
- 01/2010-12/2012 PhD student at Polytechnic of Milan, Department of Bioengineering
- 07/2010-01/2012 Visiting Student at the Department of Physics of the Aristotle University of Thessaloniki in the framework of European Cooperation in Science and Technology COST action BM0704 "Emerging EMF Technologies and Health Risk Management", Thessaloniki Greece
- 08/2009 - 12/2009 Research Fellowship at ISIB-CNR for the European Project "EFHRAN - European Health Risk Assessment Network on EMF exposure"

## NATIONAL AND INTERNATIONAL GRANTS

### Main Role in EU Projects

- Horizon EU CENTRIC – "Towards an AI-native, user-centric air interface for 6G networks" - 2022-2027, G.A. 101096379; Role: WP member
- Horizon EU GOLIAT - 5G expOsure, causal effects, and risk perception through citizen engagement" (G.A. 101057262), 22 Partners, Budget € 8.000.000. Role: WP member.
- COST Action CA17115 "European network for advancing ElectroMagnetic hyperthermic medical technologies (MyWave)" (2018-2022, MoU 026/18) Role: WG member.

- EU H2020 “CUPIDO - Ultraefficient nanoParticles for Inhalation of Drug prOducts”,(2017-2021, Grant Agreement N. 720834). Role: WP member.
- COST Action BM1309 “European network for innovative uses of EMFs in biomedical applications (EMF-MED)” (2014-2018, MoU COST 049/13). Role: WG member.
- EU FP7 GERONIMO – “Generalised EMF Research using Novel Methods - an integrated approach: from research to risk assessment and support to risk management” - 2014-2018, Grant agreement N. 603794. Role; WP member.
- EU FP7 ARIMMORA – “Advanced Research on Interaction Mechanisms of electroMagnetics exposure with Organisms for Risk Assessment”, 2011-2014, Contract N. 282891; Role: WP member.
- EC EHC “EFHRAN - European Health Risk Assessment Network on Electromagnetic Fields Exposure”, EC Directorate Executive Agency for Health and Consumers (EAHC) 2009-2012, Contract N. 20081106; Role: WP member.

#### Main Role in Other Projects

- PROMETEO - PRotocol Optimization through Morphological Estimations for Tdcs Effective Outcomes - A multidisciplinary approach for the definition of the stimulation dose for transcranial electrical stimulation tuned by individual brain variability – 2022CYRMAT - PRIN -2022 financed by Ministero dell’Università e della Ricerca, (oct 2023- oct 2025) Role: PI
- ESPOJAM - Valutazione dell’ESPOsizione a campi RF generati da Jammer Militari” Piano Nazionale della Ricerca Militare - PNRM a2018.102 (PHASE 2: nov 2022-dic nov 2023). Role: Coordinator, PI
- CHILD 5G “dEterministic and stochastic eXposure and temperature rise assessment Of children and pregnant women at emerging 5G frequencies” financed by ANSES (2024-206). Role: WP member
- RESTART “RESearch and innovation on futureTelecommunications systems and networks, to make Italy more smart” Italian National Recovery and Resilience Plan – PNRR PE00000001 (Jan 23- Dec 25). Role: Unit coordinator
- Fit4MedRob “Fit for Medical Robotics” Piano Nazionale Complementare (PNC) al PNRR- PNC0000007 Role: Spoke member
- “RFBIO - Biological Effects of Radiofrequency Electromagnetic Fields”, financed by EDA (2020-2023, Contract N. B 0987 IAP2 GP). Role: WP member
- “EXPOAUTO - Cumulative real smart car exposure to radiofrequency electromagnetic fields in people of different ages from new technologies in automotive services and connected objects” financed by ANSES (2020-2023). Role: WP member
- “ESPOJAM - Valutazione dell’ESPOsizione a campi RF generati da Jammer Militari” Piano Nazionale della Ricerca Militare - PNRM a2018.102 (PHASE 1: dic 2019-dic 2021). Role: Coordinator, PI
- “RIMAGSTIM - Modellizzazione e simulazione delle interazioni tra il dispositivo AlphaDBS e la Risonanza Magnetica” Bando Regione Lombardia POR FESR 2014-2020 (aug 2020- aug 2021). Role: PI of the research unit
- “GREAM 3 - Genotossicità delle Radiazioni elettromagnetiche nelle applicazioni militari – PNRM (PHASE 1- feb 2020- apr 2021, PHASE 2: nov 2024 - ongoing), Role: PI of the research unit
- “SARDBS - SAR calculation during data transmission and recharging of AlphaDBS system” research contract with Newronika SRL (jan-apr 2019), Role: PI
- “5G e livelli di esposizione: standard internazionali e normativa italiana” (feb-jun 2019) research contract with Politecnico di Milano – DEIB, Role: PI
- “EPITECH - EpiTech/IEIIT Research Plan”, Research Contract with EpiTech Mag Ltd, Israel (2019-2021). Role: WP member
- “AMPERE - Advanced MapPing for the residential ExposuRE to RF- EMF sources” financed by Anses (2016-2020, 2016-RF-04,). Role: WP member

- “FISM - Transcutaneous spinal cord and transcranial direct current stimulation as tools to improve spasticity in multiple sclerosis”, financed by FISM (2017-2019, cod. 2017/R/21,). Role: WP member
- “ELFSTAT - In depth evaluation of children’s exposure to ELF (40 – 800 Hz) magnetic fields and implications for health risk of new technologies” financed by Anses (2015-2019, cod. 2015/01/202,). Role: WP member

## **BIBLIOMETRIC INDEXES (Scopus)**

H-index: 19

#Citations: 1157

#Documents: 102

## **NATIONAL AND INTERNATIONAL ACKNOWLEDGMENTS**

- Member of the WHO Task Group on Radiofrequency Fields and Health Risks (Jan 2023 – ongoing)
- National Qualification for the profession of Engineer (Polytechnic of Milan) (2009)
- Member IEEE and member IEEE EMBS (2013)
- Founding partner of the National Group of Bioengineering GNB (from 2019-ongoing)
- Member of the Interuniversity centre ICEMB (Interazioni tra Campi Elettromagnetici e Biosistemi) (from 2009) as delegate of IEIIT CNR, associated to ICEMB
- Member of the Applied Computational Electromagnetic Society ACES (2017)
- Chair of the session “Magnetoelectric nanoparticles: principles and applications in medicine and biology”, 2<sup>nd</sup> annual conference of BioEM, Oxford, UK, June 18-23, 2023
- Chair of the session “5G Systems – Technologies and Exposure Assessment”, V Convegno Nazionale “Interazione tra Campi Elettromagnetici e Biosistemi”, Fisciano (SA) , Italy, November, 28-30, 2018
- Organizing committee of the “VI National congress of Bioengineering GNB2018” Polytechnic of Milan, June 25-27, 2018;
- Chair of the session “Biomedical applications”, IEEE “Advanced in Magnetism” AIM 2018. La Thuile, february 4-7, 2018
- Organizing committee of the “IV Convegno Nazionale Interazioni tra Campi Elettromagnetici e Biosistemi ICeMB”, Milan July 4-6, 2016.
- Lifeability Award, by “Lions Club Milano Bramante Cinque Giornate” with the project “RFGLU - Monitoraggio Continuo Glicemico” category “BIOENGINEERING” she got a Stage with the technology sponsot “CA Technologies Spa”, not taken because of incompatibility with the phd grant
- 15th EU contest for Young Scientists “I giovani e le Scienze” by FAST (Federazione delle Associazioni Scientifiche e Tecniche). 2<sup>nd</sup> place FAST (taken on 15/04/2003) with the project “Mathematical-numerical modeling of the circulatory system”

## Main Invited Speakers in national or international congresses

- “International seminar on 5G and Health”, Ljubljana, Slovenia. Title of the presentation: “EMF exposure assessment in 5G scenario by stochastic approaches”
- 37<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Milan, Italy, August 25-29 2015. Title of the Presentation: “Modeling cerebellar transcranial direct current stimulation in children: potential for future applications” in the session “Noninvasive brain stimulation: modeling, techniques and mechanisms”.
- COST (European Cooperation in Science and Technology) BM0704 “Emerging EMF Technologies and Health Risk Management, Round-up workshop, Technical University of

Lisbon, Portugal, April 19-20 2012. Title of the Presentation: “Near-field exposure assessment of UHF RFID reader systems”.

- CST European User Group Meeting, Darmstadt, Germany, April 19-21, 2010. Title of the Presentation: “Estimation of electromagnetic fields generated by RFID devices for identity reconfirmation of newborns”.
- CST workshop Series 2010, Thales Alenia Space, Rome, Italy, May 11, 2010. Title of the Presentation: “Estimation of electromagnetic fields generated by RFID devices for identity reconfirmation of newborns”.

## **TEACHING and SUPERVISING ACTIVITIES**

Teacher assistant (AA 2009/10, 2010/11, 2018/19) and tutoring (AA 2010/11, 2016/17) for the course “Bioelectromagnetism and Biomedical Instrumentation” (Polytechnic of Milan, Prof. Paolo Ravazzani and Prof. Giancarlo Ferrigno)

Supervising activity: 1 phd student, 4 MSc student, 8 BSc students in Biomedical Engineering, Polytechnic of Milan; 20 Undergraduate students for the project “School@DEIB”, Polytechnic of Milan

## **EDITING AND REFEREE ACTIVITIES**

- Guest Editor – “International Journal of Environmental Research and Public Health” - Special Issue: “Assessment of Public and Occupational Electromagnetic Field Exposure in New and Emerging Connectivity Exposure Scenarios” (2021-2022)
- Guest Editor “Frontiers in Bioengineering and Biotechnology” – Research Topic: “Magnetoelectric nanodevices as smart nano-tools in biology, medicine and biorobotics”
- Guest Editor “Applied Science” – “Electromagnetic Fields (EMF) Applications in Medicine” (2023)

Reviewer activity for the following journals: Scientific Reports, Physics in Medicine and Biology, Brain Stimulation, Journal of Neural Engineering, Frontiers in Public Health, Computer Communications, Frontiers in Human Neuroscience, IEEE Open Journal of Antennas and Propagation, IEEE Transactions on Microwave Theory and Techniques, Biomedical Physics & Engineering Express, IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, Computational and Mathematical Methods in Medicine, Plos ONE, Bioelectromagnetics, Environment International, IEEE Transactions on Biomedical Engineering, International Journal of Environmental Research and Public Health, Applied Sciences, Journal of Healthcare Engineering, International Journal for Numerical Methods in Biomedical Engineering

## **PUBLICATIONS**

She is author of about 70 publications on peer-reviewed journals, 4 book chapters and more than 100 contributions on peer-reviewed conference.

*I hereby authorize the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data"*

Milan, 16/12/2024



SERENA FIOCCHI  
16.12.2024  
12:06:12  
GMT+02:00