University Academic Curriculum Vitae

Education since leaving school
(Attached certificates)

- 2016 - Bachelor's degree in Biomedical Engineering; Università degli studi di Napoli, Federico II
- 2018 - Master's degree in Industrial Bioengineering; Università degli studi di Napoli, Federico II
- 2022 - MBA Fundamentals Program; Karlsruhe Institute of Technology (funded by Hector Fellow Academy)
- 2023 - PhD in Mechanical Science and Engineering, Technische Universität Dresden. Title: Dr.-Ing.

Present appointment

AR: Freie Universität Bozen

Professional experience

From / to	Job title	Name of academic Institution	Academic level	responsibilities
06-2019/08-2019	Scholarship	Università degli studi di Roma, Tor Vergata	Master's degree	Carry out research in the field of optoelectronics and photoelectrical excitation
11-2019/8-2023	Wissenschaftlicher Mitarbeiter	Technische Universität Dresden	PhD and Postdoc	carry out scientific research in the field of organic electronics, bioelectronics and sensing.
10-2023/ Present	Assistente di Ricerca	Freie Universität Bozen	AR	carry out scientific research in the field of sensing

Research and scholarships

Hector Fellow Academy: Young Researcher
Major details about the project in the scope of the scholarship can be found at: https://hector-fellow-academy.de/interdisciplinary-projects/hochaufloesende-optogenetik-mit-organischen-leuchtdioden-oleds/

Hector Fellow Academy (30000619). In the scope of this scholarship, I have published a paper in the journal Advanced Functional Materials (IF: 19.924), which is listed below. Another paper has been published in Advanced Optical Materials (IF: 9.0 in 2022). The two papers revolve around the use of bioelectronic platforms for bio-interfacing. Other papers have been published that branch into other related fields.

Publications

- *Polino, G., Lubrano, C., **Ciccone, G.**,* & Santoro, F. (2018). Photogenerated electrical fields for biomedical applications. Frontiers in Bioengineering and Biotechnology, 6, 167. DOI:10.3389/fbioe.2018.00167

- *Polino, G.*, Lubrano, C., Scognamiglio, P., Mollo, V., De Martino, S., **Ciccone, G**., ... & Santoro, F. (2020). Synthesis and characterization of PEDOT-PEGDA blends for

bioelectronic applications: Surface properties and effects on cell morphology. Flexible and Printed Electronics, 5(1), 014012. DOI: 10.1088/2058-8585/ab71e1

- *Cucchi, M*., Kleemann, H., Tseng, H., **Ciccone, G**., Lee, A., Pohl, D., & Leo, K. (2021). Directed growth of dendritic polymer networks for organic electrochemical transistors and artificial synapses. *Advanced Electronic Materials*, *7*(10), 2100586. DOI: 10.1002/aelm.202100586

- ***Ciccone, G.,*** Meloni, I., Fernandez Lahore, R. G., Vierock, J., Reineke, S., Kleemann, H., ... & Murawski, C. (2022). Tailoring Organic LEDs for Bidirectional Optogenetic Control via Dual-Color Switching. *Advanced Functional Materials*, *32*(12), 2110590. DOI: 10.1002/adfm.202110590

- *Cucchi*, M., Abreu, S., **Ciccone, G**., Brunner, D., & Kleemann, H. (2022). Hands-on reservoir computing: a tutorial for practical implementation. Neuromorphic Computing and Engineering. DOI:10.1088/2634-4386/ac7db7

- ***Ciccone, G.***, Cucchi, M., Gao, Y., Kumar, A., Seifert, L. M., Weissbach, A., ... & Leo, K. (2022). Growth and design strategies of organic dendritic networks. Discover Materials, 2(1), 7. DOI: 10.1007/s43939-022-00028-0

- *Tseng, H.*, Weissbach, A., Kucinski, J., Solgi, A., Nair, R., Bongartz, L. M., **Ciccone, G.**,… & Kleemann, H. (2022). Threshold Voltage Control in Dual-Gate Organic Electrochemical Transistors. Advanced Materials Interfaces, 2201914. DOI:10.1002/admi.202201914

- **Ciccone, G**., Weber, J. P., Meloni, I., Kleemann, H., Leo, K., & Murawski, C. (2023). Multiplexed Optogenetics with Striped Organic LEDs. *Advanced Optical Materials*, 2301340.

- *Ciocca, M*., **Ciccone, G**., Mariani, P., Petti, L., & Lugli, P. Engineered bio-hybrid photo-electrode surface based on semiconducting polymers and carbon nanotubes for living cells photo-capacitive stimulation, 2023 IEEE Nanotechnology Materials and Devices, 2023.

Conferences

- MRS Fall 2021 (Boston, USA) – Selected Talk
- Optogen 2022 (Paris, France) – Selected Poster
- DPG Fall 2022 (Regensburg, Germany) – Selected Talk
- IFETC 2024 (Bologna, Italy) – Selected Talk

Prizes
(Attached certificates)

- **Meiss Award for the best publication in IAPP**: Tailoring Organic LEDs for Bidirectional Optogenetic Control via Dual-Color Switching, of which I am the leading author. Awarded in December 2022.

- **GISELA AND ERWIN SICK FOUNDATION UNIVERSITY PRIZE FOR MEASUREMENT TECHNOLOGY.** Awarded in May 2024.

Entrepreneurship

MBA Fundamentals Program: Additional information on https://www.hectorschool.kit.edu/mba-fundamentals-program.php

Mentoring	During my career I have had the possibility of supervising bachelor and master students.
Teaching	I have been appointed as teaching assistant for 2 subjects at Unibz: Fondamenti di Elettronica and Electronic Circuit Design.
Language competence	Italian (mother tongue), English (fluent), German (basic)