

Eleni Stavrinidou

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ACADEMIC APPOINTMENTS

2023 – present	Senior Associate Professor Dept. of Science and Technology, Linköping University
2021 – present	Associated Group Leader Umeå Plant Science Center
2020 – 2023	Associate Professor Dept. of Science and Technology, Linköping University
2020	Docent in Applied Physics (habilitation) Institute of Technology, Linköping University
2017 – 2020	Assistant Professor Dept. of Science and Technology, Linköping University
2016 – 2017	Principal Research Engineer Dept. of Science and Technology, Linköping University (Advisor Prof. M. Berggren)
2014 – 2016	Postdoctoral Scholar Dept. of Science and Technology, Linköping University (Advisor Prof. M. Berggren)
2014	Research Associate Dept. of Materials, Imperial College (Advisor Prof. M. Stevens)

EDUCATION

2014	Ph.D. in Microelectronics Ecole Nationale Supérieure des Mines de St.-Étienne Dissertation: “Understanding and engineering ion transport in conducting polymers” Advisor: Prof. George Malliaras
2010	M.Sc. in Nanotechnology Aristotle University of Thessaloniki
2008	B.Sc. in Physics Aristotle University of Thessaloniki

HONORS AND AWARDS

- 2024 **“Science she says”**- Europe region
Italian Ministry of Foreign Affairs and International Cooperation
- 2024 **Journal of Materials Chemistry B Emerging Investigator**
Royal Society of Chemistry
- 2023 **Tage Erlander Prize for Natural Sciences and Technology**, Topic: Biology
The Royal Swedish Academy of Sciences
200 000SEK personal award and 75 000SEK for the organization of a workshop
- 2022 **Visiting Professor**
University of Cagliari
- 2021 **Materials Horizons Emerging Investigator**
Royal Society of Chemistry
- 2021 **Materials Horizons Outstanding Paper Award**
Royal Society of Chemistry
- 2019 **L'OREAL-UNESCO For Women in Science Award** (Sweden)
Swedish Young Academy, L'OREAL, UNESCO
150 000 SEK
- 2016 **Young Researchers Challenge**, Marcus Wallenberg Prize Ceremony and
Symposium, Sweden
- 2015 **Best oral presentation** in Symposium CC – Organic Bioelectronics – From
Biosensing Platforms to Implantable Devices, MRS Fall Meeting 2015, Boston
700USD

RESEARCH INTERESTS

- Development of bioelectronic technologies to enable new discoveries in plant science that can lead to more sustainable food production and to plants that can thrive in the changing climate.
- Development of biohybrid technologies and living materials based on photosynthetic organisms to achieve new technological concepts that maintain living characteristics and more sustainable technologies.

BIBLIOMETRICS

- ORCID: 0000-0002-9357-776X
- <https://scholar.google.com/citations?user=zcq2oqsAAAAJ&hl=en>
- 59 publications with 7127 citations (Google Scholar, May 2025)
- h-index 33 (Google Scholar)

RESEARCH GRANTS

Grants as main applicant (1SEK = 0.092Euro = 0.10USD)

- **ERC-Starting Grant**, European Research Council, PI, 1.5 MEuros, 2022-2027
Most prestigious individual grant in Europe, supporting frontier research based on scientific excellence.
- **VR-Consolidator Grant**, Swedish Research Council, PI, 8.2 MSEK, 2025-2029
Most competitive Swedish individual grant for basic research for scientists at the consolidating stage of their career.
- **SSF-Future Research Leaders SSF-FFL 7**, Swedish Foundation for Strategic Research, PI, 12 MSEK, 2020-2025
One of the most prestigious Swedish individual grants for research with high potential for innovation, includes an extensive leadership program.
- **EU-FET-OPEN**, Horizon 2020-European Commission, PI-Coordinator, 3.3 MEuros between 5 partners (LiU share was 1.1 MEuros), 2018-2021
Highly competitive EU collaborative grant for high-risk high-gain projects.
- **Wallenberg Initiative on Materials Science for Sustainability - Postdoc Grant**, Knut and Alice Wallenberg Foundation, PI, 2 MSEK, 2025-2027
- **Carl Tryggers Stiftelse Equipment grant**, Carl Tryggers Stiftelse, PI, 0.7 MSEK, 2025-2027
- **VR- Project Grant**, Swedish Research Council, PI, 3.6 MSEK, 2023-2027
- **Wallenberg Initiative on Materials Science for Sustainability - PhD Student Grant**, Knut and Alice Wallenberg Foundation, PI, 4.3 MSEK, 2023-2026
- **Wallenberg Wood Science Center - PhD Student Grant**, Knut and Alice Wallenberg Foundation, PI, 4.3 MSEK, 2023-2026
- **AFM 2023 Research Grant**, Strategic Research Environment on Advanced Functional Materials (SRA, SFO), PI, 1.5 MSEK, 2023-2025
- **AFM 2020 Research Grant**, Strategic Research Environment on Advanced Functional Materials (SRA, SFO), PI, 1.5 MSEK, 2020-2022
- **AFM 2018 Strategic Grant**: Strategic Research Environment on Advanced Functional Materials (SRA, SFO), PI, 1 MSEK, 2018-2019
- **VR-Starting Grant**, Swedish Research Council, PI, 5.2 MSEK, 2018-2022
- **Marie Skłodowska Curie Individual Fellowship**, Horizon 2020-European Commission, Fellow, (2016-2018)

Grants as co-applicant

- **KAW-Project Grant**, Knut and Alice Wallenberg Foundation, co-PI, total 32 MSEK-share 6 MSEK, 2022-2026
Highly competitive Swedish collaborative grant for basic science, applicants are nominated by universities after internal evaluation.

Strategic funding from Linköping University

- Targeted support from the Vice Chancellor and Dean of Engineering for further development of research activities, PI, 4 MSEK, 2023-2026
- AFM PI grant, Strategic Research Environment on Advanced Functional Materials (SRA, SFO), PI, 2.55 MSEK, 2025-2027

MENTORING AND ADVISING

Ph.D. students as main advisor

- Elli Magkouta, 2025 – present
- Xiaowen Li, 2024 – present
- Erica Colaprico, 2022 – present
- Alexandra Sandéhn, 2023 – present
- Abdul Manan Dar, 2022 – present
- Daniela Parker, 2020 – present
- Cyril Routier
Dissertation: “Plant Nanobionics: From Localized Carbon Capture to Precision Molecular Delivery”, 2019 – 2024
- Vasileios Oikonomou
Dissertation: “Cellulose-based Conducting 3D and 2D Composites for Applications in Plant Science and Responsive Systems”, 2019 – 2023
- Gwennael Dufil
Dissertation: “Living biohybrid systems via in-vivo polymerization of conjugated oligomers”, 2018 – 2022

Ph.D. students as co-advisor

- Chiara Diacci
Dissertation: “Organic bioelectronic devices for selective biomarker sensing: Towards integration with living systems”, 2017 – 2021
- Johannes Gladisch
Dissertation: “Investigating volume change and ion transport in conjugated polymers”, 2015 – 2021

Postdoctoral researchers as main advisor

- Rustamzhon Melikov, 2025 – present
- Denise Pagliara, 2025 – present
- Prasanna Vijayarouthu, 2024 – present
- Cyril Routier, 2024 – present
- Mahdi Rezayati Charan, 2024
- Gwennael Dufil, 2023
- Iwona Bernacka-Wojcik, 2018 – 2024
- Ilaria Abdel Aziz, 2020 – 2022
- Adam Armada-Moreira, 2020 – 2022
- Miriam Huerta, 2018 – 2020
- Jee-woong Lee, 2018 – 2020

Postdoctoral researchers as co-advisor

- Gabor Mehes, 2017 – 2020
- Yusuf Mulla, 2016 – 2018

M.Sc. students as thesis examiner

- Alexandra Sandéhn, MSc in Applied Physics, Linköping University, 2021
- Abdul Manan Dar, MSc in Biomedical Engineering, Linköping University, 2020
- Jennifer Sundström, MSc in Industrial Biotechnology and Production, Linköping University, 2020

M.Sc. students as thesis supervisor

- Daniela Parker, MSc in Organic and Molecular Electronics, TU Dresden, 2019

TEACHING EXPERIENCE**Course coordinator**

2019 – present Organic Electronics 2, 6 ECTs, Graduate Level

Lecturer

2017 – present Organic Electronics 2, 6 ECTs, Graduate Level
Plant bioelectronics and biohybrids systems, Wood-based functional materials and devices, project work

2017 – present Organic Electronics 1, 6 ECTs, Graduate Level
Organic bioelectronics, Applications and market of organic electronics

SERVICE AND LEADERSHIP**Department and University Service**

2024 – present Vice Head, Division Laboratory of Organic Electronics

2023 – present Advisory Council Member, Doctoral School Forum Scientium

2022 – present Steering Group Member, Strategic Research Environment on Advanced Functional Materials (AFM)

2019 – present Leader (Enhetschef), Electronic Plants (E-Växt) Unit

2017 – present Management Group Member, Division Laboratory of Organic Electronics

2024 Main Organizer and Chair, Laboratory of Organic Electronics Symposium

2023 Search Committee Member, Faculty recruitment at the Laboratory of Organic Electronics connected to the Wallenberg Wood Science Center

2023 Organizer, Laboratory of Organic Electronics Colloquium Series

2022 – 2023 Spin-out Group Member, Laboratory of Organic Electronics

2021 – 2023 Member of the AFM committee for gender balance in materials science, Strategic Research Environment on Advanced Functional Materials (AFM)

2021 Speaker, Grant writing workshop for early career stage researchers, Department of Science and Technology

2021 Speaker, Horizon Europe week, Grants Office, Linköping University

2019 – 2020	Search Committee Member, Faculty recruitment in Organic Chemistry, Laboratory of Organic Electronics
2018	LiU Representative, The Forestry Industries Research and Innovation Committee visit at Linköping University

Professional Service

Editorial and Advisory Roles

2025 – present	Program Committee Member, SPIE Optics and Photonics, Organic and Hybrid Sensors and Bioelectronics XVIII
2024 – present	Scientific Board Member, LOPEC-Large-area, Organic & Printed Electronics Convention
2023 – present	Associate Editor, Science Advances, AAAS
2023 – present	International Advisory Board Member, International Conference on Science and Technology of Synthetic Electronic Materials
2023 – present	Editorial Advisory Board Member, Materials Science and Engineering: R: Reports, Elsevier
2023 – present	Editorial Advisory Board Member, Device, Cell Press
2021 – present	Senior Conference Editor, nanoGe conferences
2020 – present	Editorial Advisory Board Member, ASC Omega, ACS
2024	Speaker, Grant writing workshop, Forum Scientium Doctoral School, Linköping University
2022 – 2023	Editorial Advisory Board Member, ASC Applied Electronic Materials, ACS
2020 – 2023	Editorial Advisory Board Member, Applied Physics Letters, AIP
2022	Speaker, Workshop for ERC-Starting Grants, Swedish Research Council
2019	Guest Editor, Special issue on Bioelectronics – Advanced Materials Technologies, Wiley-VCH

Reviewer / Evaluator Roles

2017 – present	Reviewer for Nature Materials, Nature Nanotechnology, Nature Sustainability, Nature Communications, Nature Electronics, Science, Science Advances, Science Robotics, Advanced Materials, Advanced Functional Materials, Advanced Science, ACA Nano, Small, Angewandte Chemie and others
2024	Proposal Reviewer, Dutch Research Council – NWO
2024	Expert advisor for the appointment of an Associate Professor in Physics with focus on Organic Electronics, Umeå University
2024	Evaluator, Visiting Professor Call, Strategic Research Environment on Advanced Functional Materials - Linköping University
2023 – 2024	Evaluator, AFM Project Grants call, Strategic Research Environment on Advanced Functional Materials - Linköping University

2023 – 2024	H2020-FETOPEN Project Progress Expert Reviewer, European Innovation Council and SMEs Executive Agency
2021	Proposal Reviewer, Strategic Research Environment on Advanced Functional Materials - Linköping University
2020	Proposal Reviewer, Federal Ministry of Education and Research – Germany
2019	Proposal Reviewer, Helmholtz Association – Germany
2018	Evaluator, Poster Award at GRC Electronic Processes in Organic Materials, Italy

Ph.D. Dissertation opponent

- Åbo Akademi – Finland, 2025

Ph.D. Dissertation examiner

- Scuola Superiore Sant'Anna – Italy, 2024
- Tel Aviv University – Israel, 2023
- University of South Australia – Australia, 2023
- University of Bari – Italy, 2022
- Politecnico di Milano – Italy, 2022
- University of Graz – Austria, 2020
- University of Bari – Italy, 2019
- University of South Australia – Australia, 2018

Ph.D. Dissertation Defence Committee Member

- Heinrich Heine University Düsseldorf– Germany, 2025
- Lund University – Sweden, 2024
- Linköping University – Sweden, 2023
- Linköping University – Sweden, 2023
- Linköping University – Sweden, 2022
- Linköping University – Sweden, 2022
- Linköping University – Sweden, 2021
- Linköping University – Sweden, 2020
- Linköping University – Sweden, 2020
- Umeå University – Sweden, 2020
- Chalmers University of Technology – Sweden, 2019

Conference Organization

- Lead Conference Organizer, Conference Chair, CyBioEl, Cyprus, nanoGe conference on “Bioelectronic Interfaces: Materials, Devices and Applications”, 2024
- Symposium Co-Organizer, Symposium on “Electrifying Biomaterials – Frontiers of Biohybrid Devices”, MRS Fall Meeting, Boston, USA, 2024

- Symposium Main Organizer, Symposium on “Biohybrids materials and devices for sensing, robotics, energy, and biomedicine”, MRS Spring Meeting, Seattle, USA, 2024
- Symposium Co-Organizer, Symposium on “Biohybrid & Soft Functional Interfaces”, MRS Fall Meeting, Boston, USA, 2023
- Lead Conference Organizer, Conference Chair, Materials for Sustainable Development Conference, MAT-SUS Fall, Torremolinos, Spain, 2023
- Symposium Main Organizer, Symposium on “Fundamentals of organic bioelectronic devices”, nanoGe Spring Meeting, Online, 2022
- Symposium Co-Organizer Symposium on “Unpaired electron materials in organic electronics” nanoGe Spring Meeting, Online, 2021
- Symposium Main Organizer, Symposium on “Smart Materials, Devices and Systems for Interface with Plants and Microorganisms”, MRS Fall Meeting, Boston, USA, 2019
- Symposium Main Organizer, Symposium on “Electronic Photosynthesis”, European Society for Photobiology – International Union of Photobiology World Congress, Barcelona, Spain, 2019
- Conference Co-Organizer, International Winter school on Bioelectronics – BioEl2019, Austria 2019
- Lead Conference Organizer, Conference Chair, International Winter school on Bioelectronics – BioEl2018, Austria 2018
- Discussion leader of Organic Bioelectronics session, Gordon Research Conference on Electronic Processes in Organic Materials, Lucca, Italy, 2018

PROFESSIONAL MEMBERSHIPS

- PI, Wallenberg Initiative on Materials Science for Sustainability, 2023 – present
- Member, Strategic Research Environment on Advanced Functional Materials, Linköping University, 2018 – present
- Member, National Research Network “*Treesearch*” (collaboration platform between academia, industry, and private foundations), 2019 – present
- PI, Wallenberg Wood Science Centre, 2018 – present,
- Member, Materials Research Society, 2012 – present

INVITED TALKS

Conferences

- “Biohybrid photosynthetic living materials and devices”, **MRS Spring Meeting**, Seattle, USA, 2025
- “Electrochemical modulation of mechanical properties and volume of glycolated polythiophenes”, **MRS Spring Meeting**, Seattle, USA, 2025
- “Plant bioelectronics for decoding and stimulating plant signalling”, **MRS Fall Meeting**, Boston, USA, 2024

- “Biohybrid photosynthetic living materials and devices”, **MRS Fall Meeting**, Boston, USA, 2024
- “Plant bioelectronics for decoding and stimulating plant signalling”, **OrbItaly**, Bologna, Italy, 2024
- “Plant bioelectronics for high resolution monitoring and electronic control of plant processes”, **E-MRS**, Strasburg, France, 2024
- “Plant bioelectronics for decoding and stimulating plant signalling”, **SPIE Optics and Photonics**, San Diego, USA, 2024
- “In-vivo polymerization of conjugated polyelectrolytes in plants and animals”, **MRS Fall Meeting**, Boston, USA, 2023
- “Controlling volume and mechanical properties of polythiophenes via electrochemical doping”, **MRS Fall Meeting**, Boston, USA, 2023
- “Plant bioelectronics for high resolution monitoring and electronic control of plant processes”, **ECME - 16th European Conference on Molecular Electronics**, Bari, Italy, 2023, **Keynote presentation**
- “Plant based biohybrid systems”, **Living Machines**, Genoa, Italy, 2023, **Plenary presentation**
- “Plant based biohybrid systems for energy applications”, **International Materials Research Congress**, Cancun, Mexico, 2023
- “Plant bioelectronics for high resolution monitoring and electronic control of plant processes”, **F- π 15**, Raleigh, USA, 2023
- “Plant bioelectronics for high resolution monitoring and electronic control of plant processes”, **MRS Spring Meeting**, San Francisco, USA, 2023
- “Plant based biohybrid systems for energy applications”, **MRS Fall Meeting**, Boston, USA, 2022
- “Plant bioelectronics for real time monitoring of plant physiology”, **SPIE Optics and Photonics**, San Diego, USA, 2022
- “Controlling volume and mechanical properties of polythiophenes via electrochemical doping”, **OrbItaly**, Erice, Italy, 2022
- “Plant Bioelectronics”, **G.R.C. on Electronic Processes in Organic Materials**, Italy, 2022
- “Plant bioelectronics for real time monitoring and dynamic regulation of plant physiology”, **PacificChem**, Online, 2021
- “In-vivo polymerization of conjugated oligomers for self organized electronics in plants and animals” **MRS Fall Meeting**, Online, 2021
- “Monitoring plant physiology with organic electrochemical transistors”, **APS March Meeting**, Online, 2021
- “Controlled and reversible volume change in conjugated polymers via electrochemical addressing”, **MRS Spring Meeting**, Online, 2021
- “Plant bioelectronics – regulating and monitoring plant physiology in-vivo”, **SPIE Optics and Photonics**, Online, 2020
- “Monitoring plant physiology with organic electrochemical transistors”, **71st Annual Meeting of the International Society of Electrochemistry**, Online, 2020
- “Plants – electronics interface”, **Inno-LAE Innovations in Large-Area Electronics Conference**, Cambridge, UK, 2020

- “Bioelectronics for monitoring and controlling plant physiology”, **European Society for Photobiology – International Union of Photobiology World Congress**, Barcelona, Spain, 2019
- “Plants – electronics interface”, **International Conference of Young Researchers on Advanced Materials**, Adelaide, Australia, 2018
- “Plants – electronics interface”, **Asilomar Bioelectronics Symposium**, Asilomar, USA, 2018
- “Electronic Interface with Plants”, **SPIE Optics and Photonics**, San Diego, USA, 2018
- “Electronic Interface with Plants”, **CIMETC**, Perugia, Italy, 2018
- “Electronic plants”, **Orbitaly**, Cagliari, Italy, 2017
- “Electronic plants”, **International Winter school on Bioelectronics – BioEl2017**, Austria, 2017
- “Organic electronic materials and devices interfacing with plants”, **Gordon Research Seminar on Electronic Processes in Organic Materials**, Lucca, Italy, 2017

Seminars

- “Plant bioelectronics and sustainable biohybrids”, UC Irvine, Samueli School of Engineering, 2025
- “Plant bioelectronics and sustainable biohybrids”, Cornell University, Smith School of Chemical and Biomolecular Engineering, 2024
- “Plant bioelectronics and sustainable biohybrids”, University of Cyprus, Department of Chemistry, 2024
- “Plant bioelectronics for high resolution monitoring and electronic control of plant processes”, University of Milan, Department of Biosciences, 2024
- “Plant bioelectronics for high resolution monitoring and electronic control of plant processes”, Heinrich-Heine-Universität Düsseldorf, CEPLAS Cluster of Excellence in Plant Sciences, Plant Biology Seminar, 2023
- “Plant bioelectronics and biohybrid systems”, KTH Royal Institute of Technology, SciLife Lab, 2023
- “Plant bioelectronics and biohybrid systems”, University of the Basque Country UPV/EHU, POLYMAT, 2023
- “In-vivo polymerization of conjugated oligomers for plant based biohybrid systems” University of Cambridge, Yusuf Hamied Department of Chemistry, 2022
- “Plant bioelectronics and biohybrids”, University of Cagliari, Department of Electrical and Electronic Engineering, 2022
- “In-vivo polymerization of conjugated oligomers for self-organized electronics in plants and animals”, University of Cambridge, Department of Chemical Engineering and Biotechnology, 2021
- “Plant bioelectronics and plant biohybrids”, University of California, Santa Barbara, Center for Polymers and Organic Solids, Online, 2021
- “Plant bioelectronics and plant biohybrids”, University of Southampton, Centre for Electronics Frontiers Series of Seminars, Online, 2021
- “Plant bioelectronics and plant biohybrids”, FORTH - Foundation for Research and Technology - Hellas, Online, 2021

- “Plant bioelectronics and plant biohybrids”, University of Cambridge, Department of Engineering, 2020
- “Plants – electronics interface”, MIT, Department of Chemical Engineering, 2019

Workshops (selected)

- “Plant bioelectronics for decoding and stimulating plant signalling”, UCSB Center for Polymers and Organic Solids (CPOS) and the Georgia Tech Center for Organic Photonics and Electronics (COPE) workshop, Santa Barbara, USA, 2024
- “Plant bioelectronics and plant biohybrids”, National Academies of Sciences, Engineering, and Medicine workshop on Biohybrid Materials and Technologies for Today and Tomorrow, Online, 2023
- “Plants based biohybrid systems”, NSF Engineering Research Visioning Alliance (ERVA)-visioning event - Leveraging Biology to Power Engineering Impact, Online, 2022

PATENTS

1. “Electronically controllable device and method”, EP3660868B1, **E. Stavrinidou**, J. Gladisch, M. Berggren, I Zozoulenko, S. Gosh, Granted 2023
2. “Electronic component with organic part”, EP3118613A1, M. Berggren, D. Simon, X. Crispin, R. Gabrielsson, E. Gomez, **E. Stavrinidou**, Granted 2020

OUTREACH

- Several Interviews in printed and online press in Sweden and worldwide for our research (among others New York Times, National Geographic, Ny Teknik, Norrköpings Tidningar Filter Magazinet, Linköpings Posten), 2015 – present
- Popular science video about Plant Bioelectronics, SSF – Swedish Foundation for Strategic Research, 2024
- Participation in the children’s book “Forskardrömmar” published by the Swedish Young Academy, 2021
- Invited talk at the Outreach Event: Rosalind Franklin Conference, University of Cambridge, 2021
- Participation in Linköping University’s Library exhibition for the public “Wood is life” with demonstrators of plant bioelectronic devices and interview printed in posters, 2021
- Participation in Open Day Events in Linköping and Norrköping Campus of Linköping University, demonstrations and lectures, 2017 – 2020
- Video for women in science and Electronic Plants research, L’Oreal – UNESCO – Swedish Young Academy, 2019
- Invited presentation in the popular science event Pint of Science, Linköping, 2019
- Invited presentaion in X-Festival 2018, a festival where art-science and technology meet, Belgium, www.x-festival.be , 2018
- Popular science video about Electronic Plants, Linköping University, 2017
- Participation in German Pop-Science TV-program Galileo, 2017

- Collaboration with industrial designer Mick Geerits that resulted in a video and a booklet related to our research on e-Plants, <http://mickgeerits.com/plantbionics.html>, 2017
- Participation in Vallastaden exhibition in Linköping with demonstrations about the Electronic Plants Research, 2017

PROFESSIONAL TRAINING

- SSF-Future Research Leader awardee that includes an extensive leadership training. The Leadership course is mandatory and corresponds to 10 two-day sessions and a study trip. The course covers a range of topics including theory of leadership, coaching sessions, building successful teams and management theory. 2020 – 2023
- Course on Course Design and Implementation (6 ECTS). The course is primarily aimed at persons who have responsibility as course coordinators or examiners. 2020
- Course on Research supervision – Advanced Course in Higher Education Pedagogy (4 ECTS). The course includes a cross-faculty and faculty specific part, and it is aimed at persons with supervisory roles. 2018

MAJOR CURRENT COLLABORATORS

- Prof. Alex Costa, Plants stress responses, University of Milan, Italy
- Prof. Iain McCulloch, Conjugated polymers, Princeton University, USA
- Dr. Dion Khodagholy, Electrophysiology, UC-Irvine, USA
- Dr. Peter Marhavy, Plants wounding responses, Umeå Plant Science Centre, Sweden
- Prof. Åsa Strand, Plants cell culture, photosynthesis, Umeå Plant Science Centre, Sweden
- Dr. Martin Bech, Structural characterization, Lund University, Sweden
- Dr. Claudia Tortiglione, Hydra animal model, CNR, Italy
- Dr. Maria-Rosa Antognazza, Bioelectronic cell stimulation, IIT, Italy
- Dr. Daniele Mantione, Conjugated trimers, POLYMAT Basque Country, Spain
- Dr. Michael Wudick, Plants stress responses, Heinrich Heine University Düsseldorf, DE
- Prof. Annalisa Bonfiglio, Wearable devices, Scuola Universitaria Superiore, Pavia, Italy
- Prof. Klas Tybrandt, Bioelectronics, Linköping University, Sweden

PUBLICATION LIST

Bibliometric Information

- h-index = 33
- Total number of citations = 7127
- Database used: Google Scholar, (May 2025)
- <https://scholar.google.com/citations?user=zcq2oqsAAAAJ&hl=en>
- ResearcherID: I-8526-2016
- ORCID: 0000-0002-9357-776X

Summary of publications

- Peer-reviewed original articles: 52
- Peer-reviewed review articles: 7
- Editorials: 1
- Books (as editor): 1
- Book Chapters: 2

Peer-reviewed original articles

1. “Powering a molecular delivery system by harvesting energy from the leaf motion in wind” S. Armiento, I. Bernacka-Wojcik, A. Manan Dar, F. Meder*, **E. Stavrinidou***, and B. Mazzolai* **Bioinspiration & Biomimetics**, 20, 016023 (2025)
2. “Investigating the Effect of Syringe Infiltration on *Nicotiana tabacum* (Tobacco)” C. Routier, C. Hermida-Carrera, and **E. Stavrinidou*** **ACS Agricultural Science & Technology**, 5, 28–35, (2025)
3. “eSoil: A low-power bioelectronic growth scaffold that enhances crop seedling growth” V. K. Oikonomou, M. Huerta, A. Sandéhn, T. Dreier, Y. Daguerre, H. Lim, M. Berggren, E. Pavlopoulou, T. Näsholm, M. Bech, and **E. Stavrinidou*** **PNAS**, e2304135120 (2024)
4. “Glucose-Sensitive Biohybrid Roots for Supercapacitive Bioanodes” G. Dufil,* J. Pham, C. Diacci, Y. Daguerre, D. Mantione, S. Zrig, T. Näsholm, M. J. Donahue, V. K. Oikonomou, V. Noël, B. Piro, and **E. Stavrinidou*** **ACS Applied Biomaterials**, 7, 8632–8641 (2024)
5. “Electrochemical modulation of mechanical properties of glycolated polythiophene” I. Abdel Aziz, J. Gladisch, C. Musumeci, M. Moser, S. Griggs, C. J. Kousseff, M. Berggren, I. McCulloch, and **E. Stavrinidou***, **Materials Horizons**, 11, 2021–2031 (2024)
6. “Drug delivery via a 3D electro-swellable conjugated polymer hydrogel” I. Abdel Aziz, J. Gladisch, S. Griggs, M. Moser, H. Biesmans, A. Beloqui, I. McCulloch, M. Berggren, and **E. Stavrinidou***, **Journal of Materials Chemistry B**, 12, 4029–4038 (2024)
7. “Biohybrid Energy Storage Circuits Based on Electronically Functionalized Plant Roots” D. Parker, A. Manan Dar, A. Armada-Moreira, I. Bernacka Wojcik, R. Rai, D. Mantione, and **E. Stavrinidou*** **ACS Applied Materials and Interfaces**, 16, 61475–61483 (2024)
8. “Sequencing complex plants on a budget: The development of *Kalanchoë blossfeldiana* as a C3, CAM comparative tool” D. Cowan-Turner*, B. A. Morris, A. Sandéhn, I. Bernacka-Wojcik, **E. Stavrinidou**, R. F. Powell, I. J. Leitch, J. Taylor, M. Walker, O. Nwokeocha, M. V. Kapralov*, and A. M. Borland **Plants People Planet**, 1–15 (2024)
9. “Single-walled Carbon Nanotubes Wrapped with Charged Polysaccharides Enhance Extracellular Electron Transfer” T. Shiraki,* Y. Niidome, A. Roy, M. Berggren, D. T. Simon, **E. Stavrinidou**, and G. Méhes* **ACS Applied Biomaterials**, 7, 5651–5661(2024)
10. “Plant electrophysiology with conformable organic electronics: Deciphering the propagation of Venus flytrap action potentials” A. Armada-Moreira, A. Manan Dar, Z. Zhao, C. Cea, J. Gelinas, M. Berggren, A. Costa, D. Khodagholy*, and **E. Stavrinidou*** **Science Advances**, 9, eadh4443 (2023)
11. “In vivo neuromodulation of animal behavior with organic semiconducting oligomers” G. Tommasini, M. De Simone, S. Santillo, G. Dufil, M. Iencharelli, D. Mantione, **E. Stavrinidou**, A. Tino, and C. Tortiglione* **Science Advances**, 9, eadi5488 (2023)

12. "Chitosan-Modified Polyethyleneimine Nanoparticles for Enhancing the Carboxylation Reaction and Plants' CO₂ Uptake" C. Routier, L. Vallan, Y. Daguerre, M. Juvany, E. Istif, D. Mantione, C. Brochon, G. Hadziioannou, Å. Strand, T. Näsholm, E. Cloutet, E. Pavlopoulou, and **E. Stavrinidou*** *ACS Nano*, 17, 3430–3441 (2023)
13. "Flexible Organic Electronic Ion Pump for Flow-Free Phytohormone Delivery into Vasculature of Intact Plants" I. Bernacka-Wojcik, L. Talide, I. Abdel Aziz, J. Simura, V. K. Oikonomou, S. Rossi, M. Mohammadi, A. M. Dar, M. Seitanidou M. Berggren, D. T. Simon K. Tybrandt, M.P. Jonsson, K. Ljung, T. Niittylä, and E. **Stavrinidou*** *Advanced Science*, 2206409, (2023)
14. "Long-distance turgor pressure changes induce local activation of plant glutamate receptor-like channels" M. Grenzi, S. Buratti, A. S. Parmagnani, I. Abdel Aziz, I. Bernacka-Wojcik, F. Resentini, J. Simura, F. G. Doccia, A. Alfieri, L. Luoni, K. Ljung, M. C. Bonza, **E. Stavrinidou**, and A. Costa* *Current Biology*, 33, 1–17, (2023)
15. "Metabolite-induced in vivo fabrication of substrate-free organic bioelectronics" X. Strakosas, H. Biesmans, T. Abrahamsson, K. Hellman, M. Silverå Ejneby, M. J. Donahue, P. Ekström, F. Ek, M. Savvakis, M. Hjort, D. Bliman, M. Linares, C. Lindholm, **E. Stavrinidou**, J. Y. Gerasimov, D. T. Simon, R. Olsson, and M. Berggren*, *Science*, 379, 6634, 795-802 (2023)
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