Stanford



Alberto Salleo

Hong Seh and Vivian W. M. Lim Professor, Professor of Photon Science, and Senior Fellow at the Precourt Institute for Energy

Materials Science and Engineering

CONTACT INFORMATION

- **Administrator**

  Naomi Tudor - Administrative Associate

  Email ntudor@stanford.edu

Bio

BIO

Novel materials and processing techniques for large-area and flexible electronic/photonic devices. Polymeric materials for electronics, bioelectronics, and biosensors. Electrochemical devices for neuromorphic computing. Defects and structure/property studies of polymeric semiconductors, nano-structured and amorphous materials in thin films. Advanced characterization techniques for soft matter.

ACADEMIC APPOINTMENTS

- Professor, Materials Science and Engineering
- Professor, Photon Science Directorate
- Senior Fellow, Precourt Institute for Energy
- Member, Bio-X
- Affiliate, Precourt Institute for Energy
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Deputy Director for Science and Technology, SLAC National Accelerator Laboratory, (2025- present)
- Department Chair, Stanford University/Materials Science and Engineering, (2019-2025)

HONORS AND AWARDS

- Fellow, National Academy of Inventors (2024)
- Fellow, American Association for the Advancement of Science (2024)
- MRS Fellow, Materials Research Society (2023)
- Member of Academia Europaea, Academia Europaea (2022)
- Member of the European Academy of Sciences, EURASC (2021)
- Walter J. Gores Award for Excellence in Teaching, Stanford University (2016)
- Highly Cited Researcher in Materials Science, ISI/Clarivate (2015-)
- Tau Beta Pi Award for Excellence in Undergraduate Teaching, Stanford University (2013)

- Early Career Award, SPIE (2010)
- CAREER Award, NSF (2007-2011)
- Untenured Faculty Award, 3M (2007-2009)
- Outstanding Performance Award, PARC (2003, 2004)
- Award for Outstanding Students Abroad, Italian University Council (1997)
- John Tyssowski Memorial Fellow, UC Berkeley (1997)
- Fellow, Fulbright (1995-2000)

PROGRAM AFFILIATIONS

- Stanford SystemX Alliance

PROFESSIONAL EDUCATION

- PhD, UC Berkeley , Materials Science (2001)

LINKS

- Lab Site: https://salleo.stanford.edu

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Novel materials and processing techniques for large-area and flexible electronic/photonic devices. Polymeric materials for electronics, bioelectronics, and biosensors. Electrochemical devices for neuromorphic computing. Defects and structure/property studies of polymeric semiconductors, nano-structured and amorphous materials in thin films. Advanced characterization techniques for soft matter.

Teaching

COURSES

2026-27

- Thermodynamics and Phase Equilibria: MATSCI 181 (Aut)
- Thermodynamics and Phase Equilibria: MATSCI 211 (Aut)

2025-26

- Thermodynamics and Phase Equilibria: MATSCI 181 (Aut)
- Thermodynamics and Phase Equilibria: MATSCI 211 (Aut)

2024-25

- Thermodynamics and Phase Equilibria: MATSCI 181 (Aut)
- Thermodynamics and Phase Equilibria: MATSCI 211 (Aut)

2023-24

- Thermodynamics and Phase Equilibria: MATSCI 181 (Aut)
- Thermodynamics and Phase Equilibria: MATSCI 211 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Michal Gala, Junyoung Lee, Kelly Liu, Max Schrock, Xintong Xu

Postdoctoral Faculty Sponsor

Changbai Li, Lucrezia Maini, Si En Ng, Yael Tsarfati

Doctoral Dissertation Advisor (AC)

Ruth Arwani, Jaden Cramlet, Katherine Lei, Yeongmin Park, Kalee Rozylowicz

Doctoral Dissertation Co-Advisor (AC)

Daniel Cudzich, Mrinalni Iyer, Zhiqiao Jiang, Linda Lin, Nicholas Marchese, Alison Shad, Matti Thurston

Postdoctoral Research Mentor

Yael Tsarfati

Publications

PUBLICATIONS

- **Functionalized near-infrared absorbing diketopyrrolopyrrole-based push-pull copolymers for semitransparent organic photovoltaics** *ORGANIC ELECTRONICS*
  Valkeneers, K., Leten, L., Iven, M., Liu, Q., Vanderspikken, J., Magni, A., Arwani, R., Siegmund, B., Gielen, S., Mertens, S., Kumar, R., Lutsen, L., Salleo, et al
  2026; 156

- **Charging Mechanisms in PEDOT:PSS Electrodes** *ACS APPLIED ELECTRONIC MATERIALS*
  Dijk, G., Siemons, N., Mele, L., Glowacki, E., Salleo, A.
  2026

- **Proton Conduction in Hydrogen-Bonded Networks Enables High-Speed PEDOT:PSS Devices.** *ACS applied materials & interfaces*
  Rozylowicz, K., Quill, T., Magni, A., LeCroy, G., Salleo, A.
  2026

- **Knowledge gaps for neuromorphic ionic computing.** *Science (New York, N.Y.)*
  Aluru, N. R., Darling, S. B., Elam, J. W., Gang, O., Salleo, A., Siwy, Z., Talin, A. A., Noy, A.
  2026; 392 (6798): 592-601

- **Solution-state nanoconfined aggregation and microstructure evolution in blends of conjugated polymers and elastomers.** *Proceedings of the National Academy of Sciences of the United States of America*
  Peña-Alcántara, A. E., Ghasemi, M., Cheng, C., Chaney, T. P., Coffey, A. H., Ponte, E., Ji, X., Michalek, L., Wu, Y., Schrock, M., Ngaruka, G., Gala, M. L., Zhu, et al
  2026; 123 (18): e2516186123

- **Optimizing the open-circuit voltage and overall performance for indoor organic photovoltaics via wide-gap polymeric donor materials** *ORGANIC ELECTRONICS*
  Theunissen, D., Jiang, X., Vanderspikken, J., Arwani, R., Marks, A., Kumar, R., Leten, L., Valkeneers, K., Mertens, S., Lutsen, L., Salleo, A., Vandewal, K., Maes, et al
  2026; 152

- **Side Chains Override Crystallinity in n-Type Organic Mixed Conductors.** *Advanced materials (Deerfield Beach, Fla.)*
  Hidalgo Castillo, T. C., Ponder, J. F., Feng, K., Magni, A., Marks, A., Arcangeli, D., Uribe, J., Emwas, A. H., Sheelraamanthula, R., Cowen, L. M., Schroeder, B. C., McCulloch, I., Guo, et al
  2026: e21048

- **pH Controls Charge Localization in Redox-Active Ladder Polymers.** *Journal of the American Chemical Society*
  De La Fuente Durán, A., Siemons, N., Marks, A., Magni, A., Dijk, G., Chueh, W. C., Salleo, A., Mefford, J. T.
  2026

- **Revealing the Full Potential of Glycolated Mixed Ionic-Electronic Semiconductors - Symmetric Monomer Polymerization to Boost Electrochemical Transistor Performance.** *Journal of the American Chemical Society*
  Bynens, L., Mantegazza, P., Marks, A., Park, Y., Goossens, A., Moro, S., Quill, T. J., Lecroy, G., Cheng, C., Magni, A., Lutsen, L., Vanderspikken, J., Spencer, et al

2026

- **Reproducible High-Impedance Supported Lipid Bilayers on PEDOT:PSS** *ADVANCED FUNCTIONAL MATERIALS*
  Treiber, J., Chao, Z., McCoy, R., Lu, Z., Wheeler, A., Thiburce, Q., Owens, R. M., Daniel, S., Salleo, A.
  2026
- **Additive-Induced Morphology Change of Polymer Film Enables Enhanced Charge Mobility and Faster Organic Electrochemical Transistor Switching.** *ACS applied polymer materials*
  Yi, Y. Q., Bonnet, N., Yamanaka, K., Lei, K., Magni, A., Salleo, A., Osaka, I., Luscombe, C. K.
  2026; 8 (3): 2077-2085
- **Cation-polymer interactions drive water expulsion and deswelling in n-type ladder organic mixed conductors.** *Nature materials*
  van der Pol, T. P., Lyu, D., Truyens, Z., Lemaur, V., Tsokkou, D., Magni, A., Musumeci, C., Wu, H. Y., Ji, J., Cornil, D., Yang, C. Y., Keene, S. T., D'Avino, et al
  2026
- **Evidence for Photoinduced Polaron Generation in a High Persistence Length Low Bandgap Conjugated Polymer in Solution.** *The journal of physical chemistry. B*
  Azzouzi, M., Rezasoltani, E., Bird, M. J., Coker, J. F., Frost, J. M., LeCroy, G. S., Parker, A. W., Sazanovich, I. V., Greetham, G. M., Towrie, M., Virbule, A., Vezie, M. S., Heracleous, et al
  2026
- **Additive-Induced Morphology Change of Polymer Film Enables Enhanced Charge Mobility and Faster Organic Electrochemical Transistor Switching** *ACS APPLIED POLYMER MATERIALS*
  Yi, Y., Bonnet, N., Yamanaka, K., Lei, K., Magni, A., Salleo, A., Osaka, I., Luscombe, C. K.
  2026
- **Soft photonic skins with dynamic texture and colour control.** *Nature*
  Doshi, S., Güsken, N. A., Dijk, G., Carlström, J., Ortiz-Cárdenas, J. E., Suzuki, P., Li, B., Fordyce, P. M., Salleo, A., Melosh, N. A., Brongersma, M. L.
  2026; 649 (8096): 345-352
- **Electrodiffusion through Pores in Supported Lipid Bilayers on PEDOT:PSS Electrodes: Bridging Equivalent Circuits and FEM Simulations.** *The journal of physical chemistry. B*
  Mele, L. J., Treiber, J., Salleo, A.
  2025
- **An unbalanced load resistor for ideal logic levels and maximum gain in organic electrochemical transistor-based unipolar inverters** *JOURNAL OF MATERIALS CHEMISTRY C*
  Luginieski, M., Torres, B., Feitosa, B., Dijk, G., Salleo, A., Faria, G.
  2025
- **Electron-ion coupling breaks energy symmetry in bistable organic electrochemical transistors** *COMMUNICATIONS MATERIALS*
  Bongartz, L. M., Lecroy, G., Quill, T. J., Siemons, N., Dijk, G., Marks, A., Cheng, C., Kleemann, H., Leo, K., Salleo, A.
  2025; 6 (1)
- **The Importance of Organic Mixed Ionic-Electronic Conductor (OMIEC)-Water Interactions: A Perspective.** *Journal of the American Chemical Society*
  Siemons, N., De La Fuente Durán, A., Shad, A. C., Iyer, M., Chen, F. Y., Marks, A., Chueh, W., Salleo, A.
  2025
- **Mechanotransducing Organic Electrochemical Diode for Crosstalk-Inhibited Artificial Skin** *ADVANCED FUNCTIONAL MATERIALS*
  Kim, T., Baek, S., Lecroy, G., Choi, H., Suh, W., Cho, W., Salleo, A., Jeong, U.
  2025
- **Design, synthesis, and photovoltaic performance of regioisomeric D18-Impact of cross-conjugation on electronic structure and solar cell efficiency** *ORGANIC ELECTRONICS*
  Valkeneers, K., Leten, L., Gielen, S., Cardeynaels, T., Mertens, S., Vanderspikken, J., Arwani, R., Marks, A., Salleo, A., Kumar, R., Lutsen, L., Vandewal, K., Maes, et al
  2025; 145
- **Automated Label-Free Assay for Viral Detection and Inhibitor Screening via Biomembrane-Functionalized Microelectrode Arrays.** *Advanced materials (Deerfield Beach, Fla.)*

Lu, Z., Treiber, J., Kallitsis, K., Selivanovitch, E., Wheeler, A., Lopez-Cavestany, M., Chao, Z., Barron, S. L., Park, J. A., Hoven, D., Scheeder, A., Withers, A., Hess, et al

2025: e01985

- **Suppressing Phase Transitions and High-Pressure Amorphization through Tethered Organic Cations in Organochalcogenide-Halide Perovskites.** *Journal of the American Chemical Society*

  Li, J., Hofmann, J., Stolz, R. M., Wen, J., Deschene, C. R., Bartels, H., Liu, Z., Salleo, A., Lin, Y., Chapman, K. W., Karunadasa, H. I.

  2025

- **Electrical Monitoring of Vibrio vulnificus-Host Cell Membrane Interactions in Simple and Complex Matrices** *ADVANCED MATERIALS INTERFACES*

  Wheeler, A., Lu, Z., Treiber, J., Salleo, A., Owens, R. M.

  2025

- **Intrachain Electron Transport in a Naphthalene Diimide-Bithiophene Copolymer: A Mixed-Valence Approach** *ACS MATERIALS LETTERS*

  Mohapatra, A., Karunasena, C., Li, S., Magni, A., Brosius, V., Tang, K., Pratik, S., Greenaway, A. L., Bredas, J., Salleo, A., Marder, S. R., Barlow, S., Coropceanu, et al

  2025

- **Thermal Processing Creates Water-Stable PEDOT:PSS Films for Bioelectronics.** *Advanced materials (Deerfield Beach, Fla.)*

  Doshi, S., Forner, M. O., Wang, P., Hadwe, S. E., Jin, A. T., Dijk, G., Brinson, K., Lim, J., Dominguez-Alfaro, A., Lim, C. Y., Salleo, A., Barone, D. G., Hong, et al

  2025: e2415827

- **A Conformationally Driven Mechanism in n-Type Doping of Naphthalene Diimide-Bithiophene Copolymer by 1H-Benzimidazoles.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*

  Cimò, S., Denti, I., Rossi, L., Cassinelli, M., Rossi, M., Castagna, R., LeCroy, G., Salleo, A., Caironi, M., Famulari, A., Castiglioni, C., Bertarelli, C.

  2025: e2402482

- **Polarized Intestinal Cell Membrane-on-Chip for Bacterial Toxin Interaction Studies** *ADVANCED NANOBIOMED RESEARCH*

  Mccoy, R., Treiber, J., Malliaras, G. G., Salleo, A., Owens, R. M.

  2025

- **Copper-Based Two-Dimensional Conductive Metal-Organic Framework Thin Films for Ultrasensitive Detection of Perfluoroalkyls in Drinking Water.** *ACS nano*

  Roh, H., Quill, T. J., Chen, G., Gong, H., Cho, Y., Kulik, H. J., Bao, Z., Salleo, A., Gumyusenge, A.

  2025

- **Soft and Stretchable Thienopyrroledione-Based Polymers via Direct Arylation** *ADVANCED ELECTRONIC MATERIALS*

  Lin, A., Guio, L., Lecroy, G., Lo, S., Sharif, A., Wang, Y., Salleo, A., Gu, X., Luscombe, C. K., Tran, H.

  2025

- **An Amorphous Donor-Acceptor Conjugated Polymer with Both High Charge Carrier Mobility and Luminescence Quantum Efficiency.** *Angewandte Chemie (International ed. in English)*

  Chen, H., Wang, M., Xia, G., Yang, C., Zhang, L., Nikolka, M., Zhang, W., Cendra, C., Liu, W., Zhao, S., Zeng, J., Zou, C., Gorenflot, et al

  2025: e202421199

- **The Influence of Alkyl Spacers and Molecular Weight on the Charge Transport and Storage Properties of Oxy-Bithiophene-Based Conjugated Polymers.** *Angewandte Chemie (International ed. in English)*

  Yu, H., Marks, A., Tuladhar, S. M., Siemons, N., Anderson, I., Bidinger, S., Keene, S. T., Quill, T. J., Wu, R., Gough, O., Wu, G., Eisner, F., Salleo, et al

  2024: e202417897

- **Evaluation of the Biocompatibility of Poly(benzimidazobenzophenanthroline)(BBL) Polymer Films with Living Cells.** *Small (Weinheim an der Bergstrasse, Germany)*

  Latte Bovio, C., Campione, P., Wu, H. Y., Li, Q., De La Fuente Durán, A., Salleo, A., Fabiano, S., Messina, G. M., Santoro, F.

  2024: e2404451

- **Mucus-on-a-chip: investigating the barrier properties of mucus with organic bioelectronics.** *Journal of materials chemistry. B*

  McCoy, R., Wang, K., Treiber, J., Fu, Y., Malliaras, G. G., Salleo, A., Owens, R. M.

  2024

- **Impact of Dilute DIO Additive on Local Microstructure of Fluorinated, pNDI-Based Polymer Solar Cells.** *Advanced materials (Deerfield Beach, Fla.)*
  Cheng, C., Wu, Y., Cendra, C., Schneider, S., Treiber, J., Agarwala, P., Gomez, E. D., Bao, Z., Takacs, C., Toney, M. F., Salleo, A.
  2024: e2409502
- **The hierarchical structure of organic mixed ionic-electronic conductors and its evolution in water.** *Nature materials*
  Tsarfati, Y., Bustillo, K. C., Savitzky, B. H., Balhorn, L., Quill, T. J., Marks, A., Donohue, J., Zeltmann, S. E., Takacs, C. J., Giovannitti, A., McCulloch, I., Ophus, C., Minor, et al
  2024
- **Using Molecular Structure to Tune Intrachain and Interchain Charge Transport in Indacenodithiophene-Based Copolymers.** *Journal of the American Chemical Society*
  LeCroy, G., Ghosh, R., Sommerville, P., Burke, C., Makki, H., Rozylowicz, K., Cheng, C., Weber, M., Khelifi, W., Stingelin, N., Troisi, A., Luscombe, C., Spano, et al
  2024
- **Organic and perovskite materials and devices** *MRS COMMUNICATIONS*
  Zakhidov, D., Zakhidov, A., Malliaras, G., Salleo, A., Geerts, W., Slinker, J.
  2024
- **Tuning polymer-backbone coplanarity and conformational order to achieve high-performance printed all-polymer solar cells.** *Nature communications*
  Wu, Y., Yuan, Y., Sorbelli, D., Cheng, C., Michalek, L., Cheng, H. W., Jindal, V., Zhang, S., LeCroy, G., Gomez, E. D., Milner, S. T., Salleo, A., Galli, et al
  2024; 15 (1): 2170
- **Charge Carrier Induced Structural Ordering And Disordering in Organic Mixed Ionic Electronic Conductors.** *Advanced materials (Deerfield Beach, Fla.)*
  Quill, T. J., LeCroy, G., Marks, A., Hesse, S. A., Thiburce, Q., McCulloch, I., Tassone, C. J., Takacs, C. J., Giovannitti, A., Salleo, A.
  2024: e2310157
- **Tuning the Mobility of Indacenodithiophene-Based Conjugated Polymers via Coplanar Backbone Engineering** *CHEMISTRY OF MATERIALS*
  Ji, X., Cheng, H., Schuster, N. J., LeCroy, G. S., Zhang, S., Wu, Y., Michalek, L., Nguyen, B. T., Chiong, J. A., Schrock, M., Tomo, Y., Rech, J., Salleo, et al
  2023; 36 (1): 256-265
- **The impact of hydrogen peroxide production in OECTs for in vitro applications** *JOURNAL OF MATERIALS CHEMISTRY C*
  Lubrano, C., Bettucci, O., Dijk, G., Salleo, A., Giovannitti, A., Santoro, F.
  2023
- **On the Potential of Optical Nanoantennas for Visibly Transparent Solar Cells** *ACS PHOTONICS*
  Qarony, W., Hossain, M., Tamang, A., Jovanov, V., Shahiduzzaman, M., Ahamed, M., Pala, R. A., Salleo, A., Tsang, Y., Knipp, D.
  2023; 10 (12): 4205-4214
- **Polaron absorption in aligned conjugated polymer films: breakdown of adiabatic treatments and going beyond the conventional mid-gap state model.** *Materials horizons*
  LeCroy, G., Ghosh, R., Untilova, V., Guio, L., Stone, K. H., Brinkmann, M., Luscombe, C., Spano, F. C., Salleo, A.
  2023
- **Origins of hydrogen peroxide selectivity during oxygen reduction on organic mixed ionic-electronic conducting polymers** *ENERGY & ENVIRONMENTAL SCIENCE*
  Duran, A., Liang, A., Denti, I., Yu, H., Pearce, D., Marks, A., Penn, E., Treiber, J., Weaver, K., Turaski, L., Maria, I. P., Griggs, S., Chen, et al
  2023
- **On the Importance of Chemical Precision in Organic Electronics: Fullerene Intercalation in Perfectly Alternating Conjugated Polymers** *ADVANCED FUNCTIONAL MATERIALS*
  Vanderspikken, J., Liu, Z., Wu, X., Beckers, O., Moro, S., Quill, T., Liu, Q., Goossens, A., Marks, A., Weaver, K., Hamid, M., Goderis, B., Nies, et al
  2023
- **Controlling swelling in mixed transport polymers through alkyl side-chain physical cross-linking.** *Proceedings of the National Academy of Sciences of the United States of America*

Siemons, N., Pearce, D., Yu, H., Tuladhar, S. M., LeCroy, G. S., Sheelamanthula, R., Hallani, R. K., Salleo, A., McCulloch, I., Giovannitti, A., Frost, J. M., Nelson, J.
2023; 120 (35): e2306272120

- **Structural Study of Hydrated Organic Mixed Ionic Electronic Conductors Using Cryogenic 4D-STEM.** *Microscopy and microanalysis : the official journal of Microscopy Society of America, Microbeam Analysis Society, Microscopical Society of Canada*
  Tsarfati, Y., Bustillo, K. C., Savitzky, B. H., Ophus, C., McCulloch, I., Salleo, A., Minor, A. M.
  2023; 29 (Supplement_1): 264-265

- **Volumetric Electron Transfer from Metabolites to Chemically Doped Polymer Electrodes** *ADVANCED FUNCTIONAL MATERIALS*
  Tan, S., Lee, G., Rozylowicz, K., Marks, A., Salleo, A.
  2023

- **Multiparametric Sensing of Outer Membrane Vesicle-Derived Supported Lipid Bilayers Demonstrates the Specificity of Bacteriophage Interactions.** *ACS biomaterials science & engineering*
  Bali, K., McCoy, R., Lu, Z., Treiber, J., Savva, A., Kaminski, C. F., Salmond, G., Salleo, A., Mela, I., Monson, R., Owens, R. M.
  2023

- **Role of aggregates and microstructure of mixed-ionic-electronic-conductors on charge transport in electrochemical transistors.** *Materials horizons*
  LeCroy, G., Cendra, C., Quill, T. J., Moser, M., Hallani, R., Ponder, J. F., Stone, K., Kang, S. D., Liang, A. Y., Thiburce, Q., McCulloch, I., Spano, F. C., Giovannitti, et al
  2023

- **Tailoring the Surface Chemistry of PEDOT:PSS to Promote Supported Lipid Bilayer Formation** *MACROMOLECULAR MATERIALS AND ENGINEERING*
  Kallitsis, K., Pappa, A., Lu, Z., Alvarez-Fernandez, A., Charalambous, I., Schack, S., Traberg, W. C., Thiburce, Q., Bali, K., Christie, G., Guldin, S., Daniel, S., Salleo, et al
  2023

- **Linking Phase Behavior to Performance Parameters in Non-Fullerene Acceptor Solar Cells** *ADVANCED ENERGY MATERIALS*
  Cheng, C., Wong, S., LeCroy, G., Schneider, S., Gomez, E., Toney, M. F., Salleo, A.
  2023

- **An ordered, self-assembled nanocomposite with efficient electronic and ionic transport.** *Nature materials*
  Quill, T. J., LeCroy, G., Halat, D. M., Sheelamanthula, R., Marks, A., Grundy, L. S., McCulloch, I., Reimer, J. A., Balsara, N. P., Giovannitti, A., Salleo, A., Takacs, C. J.
  2023

- **Influence of Side Chain Interdigitation on Strain and Charge Mobility of Planar Indacenodithiophene Copolymers.** *ACS polymers Au*
  Sommerville, P. J., Balzer, A. H., Lecroy, G., Guio, L., Wang, Y., Onorato, J. W., Kukhta, N. A., Gu, X., Salleo, A., Stingelin, N., Luscombe, C. K.
  2023; 3 (1): 59-69

- **Closing the loop between microstructure and charge transport in conjugated polymers by combining microscopy and simulation.** *Proceedings of the National Academy of Sciences of the United States of America*
  Balhorn, L., MacPherson, Q., Bustillo, K. C., Takacs, C. J., Spakowitz, A. J., Salleo, A.
  2022; 119 (46): e2204346119

- **Influence of Side Chain Interdigitation on Strain and Charge Mobility of Planar Indacenodithiophene Copolymers** *ACS POLYMERS AU*
  Sommerville, P. J. W., Balzer, A. H., Lecroy, G., Guio, L., Wang, Y., Onorato, J. W., Kukhta, N. A., Gu, X., Salleo, A., Stingelin, N., Luscombe, C. K.
  2022

- **Wafer-scale microfabrication of flexible organic electrochemical transistors** *FLEXIBLE AND PRINTED ELECTRONICS*
  Thiburce, Q., Melosh, N., Salleo, A.
  2022; 7 (3)

- **Impact of Side Chain Hydrophilicity on Packing, Swelling and Ion Interactions in Oxy-bithiophene Semiconductors.** *Advanced materials (Deerfield Beach, Fla.)*
  Siemons, N., Pearce, D., Cendra, C., Yu, H., Tuladhar, S. M., Hallani, R. K., Sheelamanthula, R., LeCroy, G. S., Siemons, L., White, A. J., Mcculloch, I., Salleo, A., Frost, et al
  2022: e2204258

- **Simultaneous Performance and Stability Improvement of a p-Type Organic Electrochemical Transistor through Additives** *CHEMISTRY OF MATERIALS*
  Castillo, T., Moser, M., Cendra, C., Nayak, P., Salleo, A., McCulloch, I., Inal, S.
  2022
- **Conjugated polymers for microwave applications: untethered sensing platforms and multifunctional devices.** *Advanced materials (Deerfield Beach, Fla.)*
  Tan, S. T., Giovannitti, A., Marks, A., Moser, M., Quill, T. J., McCulloch, I., Salleo, A., Bonacchini, G. E.
  2022: e2202994
- **Tuning Organic Electrochemical Transistor Threshold Voltage using Chemically Doped Polymer Gates.** *Advanced materials (Deerfield Beach, Fla.)*
  Tan, S. T., Lee, G., Denti, I., LeCroy, G., Rozylowicz, K., Marks, A., Griggs, S., McCulloch, I., Giovannitti, A., Salleo, A.
  2022: e2202359
- **Enhancing and Extinguishing the Different Emission Features of 2D (EA(1-)(x)FA(x))(4)Pb3Br10 Perovskite Films** *ADVANCED OPTICAL MATERIALS*
  Kennard, R. M., Dahlman, C. J., Morgan, E. E., Chung, J., Cotts, B. L., Kincaid, J. R. A., DeCrescent, R. A., Stone, K. H., Panuganti, S., Mohtashami, Y., Mao, L., Schaller, R. D., Salleo, et al
  2022
- **Efficient Electronic Tunneling Governs Transport in Conducting Polymer-Insulator Blends.** *Journal of the American Chemical Society*
  Keene, S. T., Michaels, W., Melianas, A., Quill, T. J., Fuller, E. J., Giovannitti, A., McCulloch, I., Talin, A. A., Tassone, C. J., Qin, J., Troisi, A., Salleo, A.
  2022
- **Critical analysis of self-doping and water-soluble n-type organic semiconductors: structures and mechanisms** *JOURNAL OF MATERIALS CHEMISTRY C*
  Cowen, L. M., Gilhooly-Finn, P. A., Giovannitti, A., LeCroy, G., Demetriou, H., Neal, W., Dong, Y., Westwood, M., Luong, S., Fenwick, O., Salleo, A., Heutz, S., Nielsen, et al
  2022
- **Understanding electrochemical properties of supported lipid bilayers interfaced with organic electronic devices** *JOURNAL OF MATERIALS CHEMISTRY C*
  Lu, Z., van Niekerk, D., Savva, A., Kallitsis, K., Thiburce, Q., Salleo, A., Pappa, A., Owens, R. M.
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- **Mixed Ionic-Electronic Conduction, a Multifunctional Property in Organic Conductors.** *Advanced materials (Deerfield Beach, Fla.)*
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