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, Kelly Liu, Max Schrock, Xintong Xu

Postdoctoral Faculty Sponsor

Changbai Li, Lucrezia Maini, Si En Ng, Jeremy Treiber, Yael Tsarfati, Qilun Zhang

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.
  2022
- **Mixed Ionic-Electronic Conduction, a Multifunctional Property in Organic Conductors.** *Advanced materials (Deerfield Beach, Fla.)*
  Tan, S. T., Gumyusenge, A., Quill, T. J., LeCroy, G. S., Bonacchini, G. E., Denti, I., Salleo, A.
  2022: e2110406
- **Beyond Tristimulus Color Vision with Perovskite-Based Multispectral Sensors.** *ACS applied materials & interfaces*
  Qarony, W., Khan, H. A., Hossain, M. I., Kozawa, M., Salleo, A., Hardeberg, J. Y., Fujiwara, H., Tsang, Y. H., Knipp, D.
  2022
- **High-Performance Humidity Sensing in pi-Conjugated Molecular Assemblies through the Engineering of Electron/Proton Transport and Device Interfaces.** *Journal of the American Chemical Society*
  Turetta, N., Stoeckel, M., Furlan de Oliveira, R., Devaux, F., Greco, A., Cendra, C., Gullace, S., Gicevicius, M., Chattopadhyay, B., Liu, J., Schweicher, G., Sirringhaus, H., Salleo, et al
  2022
- **Impedance sensing of antibiotic interactions with a pathogenic E. coli outer membrane supported bilayer.** *Biosensors & bioelectronics*
  Ghosh, S., Mohamed, Z., Shin, J., Bint E Naser, S. F., Bali, K., Dorr, T., Owens, R. M., Salleo, A., Daniel, S.
  2022; 204: 114045
- **Nanoscopic Electrolyte-Gated Vertical Organic Transistors with Low Operation Voltage and Five Orders of Magnitude Switching Range for Neuromorphic Systems.** *Nano letters*
  Eckel, C., Lenz, J., Melianas, A., Salleo, A., Weitz, R. T.
  1800
- **Quantifying Polaron Mole Fractions and Interpreting Spectral Changes in Molecularly Doped Conjugated Polymers** *ADVANCED ELECTRONIC MATERIALS*

Moule, A. J., Gonel, G., Murrey, T. L., Ghosh, R., Saska, J., Shevchenko, N. E., Denti, I., Fergerson, A. S., Talbot, R. M., Yacoub, N. L., Mascal, M., Salleo, A., Spano, et al
2021

- **Conjugated polymers with controllable interfacial order and energetics enable tunable heterojunctions in organic and colloidal quantum dot photovoltaics** *JOURNAL OF MATERIALS CHEMISTRY A*
  Zhong, Y., Kirmani, A. R., Lan, X., Carpenter, J., Chew, A., Awartani, O., Yu, L., Niazi, M. R., Voznyy, O., Hu, H., Ndjawa, G., Tietze, M. L., Salleo, et al
  2021
- **Organic neuromorphic electronics for sensorimotor integration and learning in robotics.** *Science advances*
  Krauhausen, I., Koutsouras, D. A., Melianas, A., Keene, S. T., Lieberth, K., Ledanseur, H., Sheelamanthula, R., Giovannitti, A., Torricelli, F., Mcculloch, I., Blom, P. W., Salleo, A., van de Burgt, et al
  2021; 7 (50): eabl5068
- **High-Speed Ionic Synaptic Memory Based on 2D Titanium Carbide MXene** *ADVANCED FUNCTIONAL MATERIALS*
  Melianas, A., Kang, M., VahidMohammadi, A., Quill, T., Tian, W., Gogotsi, Y., Salleo, A., Hamedi, M.
  2021
- **Detection of Ganglioside-Specific Toxin Binding with Biomembrane-Based Bioelectronic Sensors.** *ACS applied bio materials*
  Bint E Naser, S. F., Su, H., Liu, H. Y., Manzer, Z. A., Chao, Z., Roy, A., Pappa, A. M., Salleo, A., Owens, R. M., Daniel, S.
  2021; 4 (11): 7942-7950
- **Detection of Ganglioside-Specific Toxin Binding with Biomembrane-Based Bioelectronic Sensors** *ACS APPLIED BIO MATERIALS*
  Naser, S. E., Su, H., Liu, H., Manzer, Z. A., Chao, Z., Roy, A., Pappa, A., Salleo, A., Owens, R. M., Daniel, S.
  2021; 4 (11): 7942-7950
- **Reversible photochromic and photoluminescence in iodide perovskites** *THIN SOLID FILMS*
  Qarony, W., Hossain, M., Hossain, M., Zeng, L., Ma, S., Yu, K., Salleo, A., Knipp, D., Yip, C., Tsang, Y.
  2021; 737
- **Functional Infectious Nanoparticle Detector: Finding Viruses by Detecting Their Host Entry Functions Using Organic Bioelectronic Devices.** *ACS nano*
  Tang, T., Savva, A., Traberg, W. C., Xu, C., Thiburce, Q., Liu, H., Pappa, A., Martinelli, E., Withers, A., Cornelius, M., Salleo, A., Owens, R. M., Daniel, et al
  2021
- **Improving molecular alignment and charge percolation in semiconducting polymer films with highly localized electronic states through tailored thermal annealing** *JOURNAL OF MATERIALS CHEMISTRY C*
  Luzio, A., Martin, J., Cheng, C. H., Stingelin, N., Toney, M. F., Salleo, A., Caironi, M.
  2021
- **Unraveling the Unconventional Order of a High-Mobility Indacenodithiophene-Benzothiadiazole Copolymer.** *ACS macro letters*
  Cendra, C., Balhorn, L., Zhang, W., O'Hara, K., Bruening, K., Tassone, C. J., Steinrück, H. G., Liang, M., Toney, M. F., McCulloch, I., Chabinyc, M. L., Salleo, A., Takacs, et al
  2021; 10 (10): 1306-1314
- **Unraveling the Unconventional Order of a High-Mobility Indacenodithiophene-Benzothiadiazole Copolymer** *ACS MACRO LETTERS*
  Cendra, C., Balhorn, L., Zhang, W., O'Hara, K., Bruening, K., Tassone, C. J., Steinrueck, H., Liang, M., Toney, M. F., McCulloch, I., Chabinyc, M. L., Salleo, A., Takacs, et al
  2021; 10 (10): 1306-1314
- **Redox-Active Polymers Designed for the Circular Economy of Energy Storage Devices** *ACS ENERGY LETTERS*
  Tan, S., Quill, T. J., Moser, M., LeCroy, G., Chen, X., Wu, Y., Takacs, C. J., Salleo, A., Giovannitti, A.
  2021; 6 (10): 3450-3457
- **Growth-Controlled Broad Emission in Phase-Pure Two-Dimensional Hybrid Perovskite Films** *CHEMISTRY OF MATERIALS*
  Kennard, R. M., Dahlman, C. J., Chung, J., Cotts, B. L., Mikhailovsky, A. A., Mao, L., DeCrescent, R. A., Stone, K. H., Venkatesan, N. R., Mohtashami, Y., Assadi, S., Salleo, A., Schuller, et al
  2021; 33 (18): 7290-7300

- **Ion Pair Uptake in Ion Gel Devices Based on Organic Mixed Ionic-Electronic Conductors** *ADVANCED FUNCTIONAL MATERIALS*
  Quill, T. J., LeCroy, G., Melianas, A., Rawlings, D., Thiburce, Q., Sheelamanthula, R., Cheng, C., Tuchman, Y., Keene, S. T., McCulloch, I., Segalman, R. A., Chabinyc, M. L., Salleo, et al
  2021

- **Band-Gap-Engineered Transparent Perovskite Solar Modules to Combine Photovoltaics with Photosynthesis.** *ACS applied materials & interfaces*
  Weng, S., Tamang, A., Salleo, A., Fujiwara, H., Nakamura, M., Zhang, Y., Knipp, D.
  2021

- **Operation mechanism of organic electrochemical transistors as redox chemical transducers** *JOURNAL OF MATERIALS CHEMISTRY C*
  Tan, S., Keene, S., Giovannitti, A., Melianas, A., Moser, M., McCulloch, I., Salleo, A.
  2021

- **Electronic Doping and Enhancement of n-Channel Polycrystalline OFET Performance through Gate Oxide Modifications with Aminosilanes** *ADVANCED MATERIALS INTERFACES*
  Shin, N., Schellhammer, K., Lee, M., Zessin, J., Hambsch, M., Salleo, A., Ortmann, F., Mannsfeld, S. C. B.
  2021

- **A Stacked Hybrid Organic/Inorganic Electrochemical Random-Access Memory for Scalable Implementation** *ADVANCED ELECTRONIC MATERIALS*
  Tuchman, Y., Quill, T. J., LeCroy, G., Salleo, A.
  2021

- **Controlling Electrochemically Induced Volume Changes in Conjugated Polymers by Chemical Design: from Theory to Devices** *ADVANCED FUNCTIONAL MATERIALS*
  Moser, M., Gladisch, J., Ghosh, S., Hidalgo, T., Ponder, J. F., Sheelamanthula, R., Thiburce, Q., Gasparini, N., Wadsworth, A., Salleo, A., Inal, S., Berggren, M., Zozoulenko, et al
  2021

- **Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals.** *Nature communications*
  Guzelturk, B., Cotts, B. L., Jasrasaria, D., Philbin, J. P., Hanifi, D. A., Koscher, B. A., Balan, A. D., Curling, E., Zajac, M., Park, S., Yazdani, N., Nyby, C., Kamysbayev, et al
  2021; 12 (1): 1860

- **High-Gain Chemically Gated Organic Electrochemical Transistor** *ADVANCED FUNCTIONAL MATERIALS*
  Tan, S., Giovannitti, A., Melianas, A., Moser, M., Cotts, B. L., Singh, D., McCulloch, I., Salleo, A.
  2021

- **In situ Parallel Training of Analog Neural Network Using Electrochemical Random-Access Memory.** *Frontiers in neuroscience*
  Li, Y., Xiao, T. P., Bennett, C. H., Isele, E., Melianas, A., Tao, H., Marinella, M. J., Salleo, A., Fuller, E. J., Talin, A. A.
  2021; 15: 636127

- **Materials Strategies for Organic Neuromorphic Devices** *ANNUAL REVIEW OF MATERIALS RESEARCH, VOL 51, 2021*
  Gumyusenge, A., Melianas, A., Keene, S. T., Salleo, A.
  edited by Clarke, D. R.
  2021; 51: 47-71

- **Altered heparan sulfate metabolism during development triggers dopamine-dependent autistic-behaviours in models of lysosomal storage disorders.** *Nature communications*
  De Risi, M., Tufano, M., Alvino, F. G., Ferraro, M. G., Torromino, G., Gigante, Y., Monfregola, J., Marrocco, E., Pulcrano, S., Tunisi, L., Lubrano, C., Papy-Garcia, D., Tuchman, et al
  2021; 12 (1): 3495

- **Electrolyte-gated transistors for enhanced performance bioelectronics.** *Nature reviews. Methods primers*
  Torricelli, F., Adrahtas, D. Z., Bao, Z., Berggren, M., Biscarini, F., Bonfiglio, A., Bortolotti, C. A., Frisbie, C. D., Macchia, E., Malliaras, G. G., McCulloch, I., Moser, M., Nguyen, et al
  2021; 1

- **How is flexible electronics advancing neuroscience research?** *Biomaterials*
  Chen, Y., Rommelfanger, N. J., Mahdi, A. I., Wu, X., Keene, S. T., Obaid, A., Salleo, A., Wang, H., Hong, G.

2020; 268: 120559

- **Brush-Painted Solar Cells from Pre-Crystallized Components in a Nonhalogenated Solvent System Prepared by a Simple Stirring Technique** *MACROMOLECULES*
  Nguyen, N. A., Himmelberger, S., Salleo, A., Mackay, M. E.
  2020; 53 (19): 8276–85

- **Perovskite Color Detectors: Approaching the Efficiency Limit.** *ACS applied materials & interfaces*
  Hossain, M. I., Khan, H. A., Kozawa, M., Qarony, W., Salleo, A., Hardeberg, J. Y., Fujiwara, H., Tsang, Y. H., Knipp, D.
  2020

- **Reversible Doping and Photo Patterning of Polymer Nanowires** *ADVANCED ELECTRONIC MATERIALS*
  Bedolla-Valdez, Z. I., Xiao, R., Cendra, C., Fergerson, A. S., Chen, Z., Gonel, G., Salleo, A., Yu, D., Moule, A. J.
  2020

- **Towards biomimetic electronics that emulate cells** *MRS COMMUNICATIONS*
  Lubrano, C., Matrone, G., Forro, C., Jahed, Z., Offenhaeusser, A., Salleo, A., Cui, B., Santoro, F.
  2020; 10 (3): 398–412

- **Combining Photosynthesis and Photovoltaics: A Hybrid Energy-Harvesting System Using Optical Antennas.** *ACS applied materials & interfaces*
  Tamang, A., Parsons, R., Lertchaiwarakul, C., Palanchoke, U., Kojima, H., Salleo, A., Nakamura, M., Knipp, D.
  2020

- **Side Chain Redistribution as a Strategy to Boost Organic Electrochemical Transistor Performance and Stability.** *Advanced materials (Deerfield Beach, Fla.)*
  Moser, M., Hidalgo, T. C., Surgailis, J., Gladisch, J., Ghosh, S., Sheelamanthula, R., Thiburce, Q., Giovannitti, A., Salleo, A., Gasparini, N., Wadsworth, A., Zozoulenko, I., Berggren, et al
  2020: e2002748

- **Organic neuromorphic devices: Past, present, and future challenges** *MRS BULLETIN*
  Tuchman, Y., Mangoma, T. N., Gkoupidenis, P., van de Burgt, Y., John, R., Mathews, N., Shaheen, S. E., Daly, R., Malliaras, G. G., Salleo, A.
  2020; 45 (8): 619–30

- **Roadmap on emerging hardware and technology for machine learning.** *Nanotechnology*
  Xia, Q., Berggren, K. K., Likharev, K., Strukov, D. B., Jiang, H., Mikolajick, T., Querlioz, D., Salinga, M., Erickson, J., Pi, S., Xiong, F., Lin, P., Li, et al
  2020

- **On the growth, structure and dynamics of P3EHT crystals** *JOURNAL OF MATERIALS CHEMISTRY C*
  Faria, G. C., Duong, D. T., da Cunha, G., Selter, P., Strasso, L., Davidson, E. C., Segalman, R. A., Hansen, M., deAzevedo, E., Salleo, A.
  2020; 8 (24): 8155–70

- **Vertically Stacked Perovskite Detectors for Color Sensing and Color Vision** *ADVANCED MATERIALS INTERFACES*
  Qarony, W., Kozawa, M., Khan, H., Hossain, M., Salleo, A., Tsang, Y., Hardeberg, J., Fujiwara, H., Knipp, D.
  2020

- **Optical and Electronic Ion Channel Monitoring from Native Human Membranes.** *ACS nano*
  Pappa, A., Liu, H., Traberg-Christensen, W., Thiburce, Q., Savva, A., Pavia, A., Salleo, A., Daniel, S., Owens, R. M.
  2020

- **Surfactant-Mediated Growth and Patterning of Atomically Thin Transition Metal Dichalcogenides.** *ACS nano*
  Li, X., Kahn, E., Chen, G., Sang, X., Lei, J., Passarello, D., Oyedele, A. D., Zakhidov, D., Chen, K., Chen, Y., Hsieh, S., Fujisawa, K., Unocic, et al
  2020

- **Enhancement-Mode PEDOT:PSS Organic Electrochemical Transistors Using Molecular De-Doping.** *Advanced materials (Deerfield Beach, Fla.)*
  Keene, S. T., van der Pol, T. P., Zakhidov, D., Weijtens, C. H., Janssen, R. A., Salleo, A., van de Burgt, Y.
  2020: e2000270

- **Influence of Perovskite Interface Morphology on the Photon Management in Perovskite/Silicon Tandem Solar Cells.** *ACS applied materials & interfaces*

Qarony, W., Hossain, M. I., Jovanov, V., Salleo, A., Knipp, D., Tsang, Y. H.
2020

- **Energetic Control of Redox-Active Polymers toward Safe Organic Bioelectronic Materials.** *Advanced materials (Deerfield Beach, Fla.)*
  Giovannitti, A., Rashid, R. B., Thiburce, Q., Paulsen, B. D., Cendra, C., Thorley, K., Moia, D., Mefford, J. T., Hanifi, D., Weiyuan, D., Moser, M., Salleo, A., Nelson, et al
  2020: e1908047

- **Non-resonant metal-oxide metasurfaces for efficient perovskite solar cells** *SOLAR ENERGY*
  Hossain, M. I., Yumnam, N., Qarony, W., Salleo, A., Wagner, V., Knipp, D., Tsang, Y. H.
  2020; 198: 570–77

- **Reversible Electrochemical Phase Change in Monolayer to Bulk-like MoTe2 by Ionic Liquid Gating.** *ACS nano*
  Zakhidov, D., Rehn, D. A., Reed, E. J., Salleo, A.
  2020

- **Balancing Ionic and Electronic Conduction for High-Performance Organic Electrochemical Transistors** *ADVANCED FUNCTIONAL MATERIALS*
  Savva, A., Hallani, R., Cendra, C., Surgailis, J., Hidalgo, T. C., Wustoni, S., Sheelamanthula, R., Chen, X., Kirkus, M., Giovannitti, A., Salleo, A., McCulloch, I., Inal, et al
  2020

- **Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors.** *Journal of the American Chemical Society*
  Wadsworth, A., Chen, H., Thorley, K. J., Cendra, C., Nikolka, M., Bristow, H., Moser, M., Salleo, A., Anthopoulos, T. D., Sirringhaus, H., McCulloch, I.
  2020

- **Uncovering the Effects of Metal Contacts on Monolayer MoS2.** *ACS nano*
  Schauble, K. n., Zakhidov, D. n., Yalon, E. n., Deshmukh, S. n., Grady, R. W., Cooley, K. A., McClellan, C. J., Vaziri, S. n., Passarello, D. n., Mohney, S. E., Toney, M. F., Sood, A. K., Salleo, et al
  2020

- **A biohybrid synapse with neurotransmitter-mediated plasticity.** *Nature materials*
  Keene, S. T., Lubrano, C. n., Kazemzadeh, S. n., Melianas, A. n., Tuchman, Y. n., Polino, G. n., Scognamiglio, P. n., Cinà, L. n., Salleo, A. n., van de Burgt, Y. n., Santoro, F. n.
  2020

- **Self-Assembly of Mammalian-Cell Membranes on Bioelectronic Devices with Functional Transmembrane Proteins.** *Langmuir : the ACS journal of surfaces and colloids*
  Liu, H. Y., Pappa, A. M., Pavia, A. n., Pitsalidis, C. n., Thiburce, Q. n., Salleo, A. n., Owens, R. M., Daniel, S. n.
  2020

- **Engineering Optically Switchable Transistors with Improved Performance by Controlling Interactions of Diarylethenes in Polymer Matrices.** *Journal of the American Chemical Society*
  Hou, L. n., Leydecker, T. n., Zhang, X. n., Rekab, W. n., Herder, M. n., Cendra, C. n., Hecht, S. n., McCulloch, I. n., Salleo, A. n., Orgiu, E. n., Samorì, P. n.
  2020; 142 (25): 11050–59

- **Nonequilibrium Thermodynamics of Colloidal Gold Nanocrystals Monitored by Ultrafast Electron Diffraction and Optical Scattering Microscopy.** *ACS nano*
  Guzelturk, B. n., Utterback, J. K., Coropceanu, I. n., Kamysbayev, V. n., Janke, E. M., Zajac, M. n., Yazdani, N. n., Cotts, B. L., Park, S. n., Sood, A. n., Lin, M. F., Reid, A. H., Kozina, et al
  2020

- **Charge transport in high-mobility conjugated polymers and molecular semiconductors.** *Nature materials*
  Fratini, S. n., Nikolka, M. n., Salleo, A. n., Schweicher, G. n., Sirringhaus, H. n.
  2020

- **Mid-infrared emission and absorption from GeSn/Ge core-shell nanowires with nanophotonic light extraction**
  Peng, S., Braun, M., Meng, A., Shang, Z., Salleo, A., McIntyre, P. C., IEEE
  IEEE.2020

- **Tuning the bandgap of Cs2AgBiBr6 through dilute tin alloying.** *Chemical science*
  Lindquist, K. P., Mack, S. A., Slavney, A. H., Leppert, L., Gold-Parker, A., Stebbins, J. F., Salleo, A., Toney, M. F., Neaton, J. B., Karunadasa, H. I.
  2019; 10 (45): 10620-10628
- **Tuning the bandgap of Cs2AgBiBr6 through dilute tin alloying** *CHEMICAL SCIENCE*
  Lindquist, K. P., Mack, S. A., Slavney, A. H., Leppert, L., Gold-Parker, A., Stebbins, J. F., Salleo, A., Toney, M. F., Neaton, J. B., Karunadasa, H. I.
  2019; 10 (45): 10620–28
- **Phototuning Selectively Hole and Electron Transport in Optically Switchable Ambipolar Transistors** *ADVANCED FUNCTIONAL MATERIALS*
  Rekab, W., Leydecker, T., Hou, L., Chen, H., Kirkus, M., Cendra, C., Herder, M., Hecht, S., Salleo, A., McCulloch, I., Orgiu, E., Samori, P.
  2019
- **Impact of Liquid-Crystalline Chain Alignment on Charge Transport in Conducting Polymers** *MACROMOLECULES*
  Rudnicki, P. E., MacPherson, Q., Balhorn, L., Feng, B., Qin, J., Salleo, A., Spakowitz, A. J.
  2019; 52 (22): 8932–39
- **The Role of Morphology in Optically Switchable Transistors Based on a Photochromic Molecule/p-Type Polymer Semiconductor Blend** *ADVANCED FUNCTIONAL MATERIALS*
  Carroli, M., Duong, D. T., Buchaca-Domingo, E., Liscio, A., Borjesson, K., Herder, M., Palermo, V., Hecht, S., Stingelin, N., Salleo, A., Orgiu, E., Samori, P.
  2019
- **Organic Transistors Incorporating Lipid Monolayers for Drug Interaction Studies** *ADVANCED MATERIALS TECHNOLOGIES*
  Cavassin, P., Pappa, A., Pitsalidis, C., Barbosa, H. F. P., Colucci, R., Saez, J., Tuchman, Y., Salleo, A., Faria, G. C., Owens, R. M.
  2019
- **Anisotropic Polaron Delocalization in Conjugated Homopolymers and Donor-Acceptor Copolymers** *CHEMISTRY OF MATERIALS*
  Ghosh, R., Luscombe, C. K., Hambsch, M., Mannsfeld, S. C. B., Salleo, A., Spano, F. C.
  2019; 31 (17): 7033–45
- **Enhancing the energy conversion efficiency of low mobility solar cells by a 3D device architecture** *JOURNAL OF MATERIALS CHEMISTRY C*
  Qarony, W., Hossain, M., Tamang, A., Jovanov, V., Salleo, A., Knipp, D., Tsang, Y.
  2019; 7 (33): 10289–96
- **Color Sensing by Optical Antennas: Approaching the Quantum Efficiency Limit** *ACS PHOTONICS*
  Tamang, A., Parsons, R., Palanchoke, U., Stiebig, H., Wagner, V., Salleo, A., Knipp, D.
  2019; 6 (8): 2041–48
- **Parallel programming of an ionic floating-gate memory array for scalable neuromorphic computing** *SCIENCE*
  Fuller, E. J., Keene, S. T., Melianas, A., Wang, Z., Agarwal, S., Li, Y., Tuchman, Y., James, C. D., Marinella, M. J., Yang, J., Salleo, A., Talin, A.
  2019; 364 (6440): 570-+
- **High-mobility, trap-free charge transport in conjugated polymer diodes** *NATURE COMMUNICATIONS*
  Nikolka, M., Broch, K., Armitage, J., Hanifi, D., Nowack, P. J., Venkateshvaran, D., Sadhanala, A., Saska, J., Mascal, M., Jung, S., Lee, J., McCulloch, I., Salleo, et al
  2019; 10
- **The role of the third component in ternary organic solar cells** *NATURE REVIEWS MATERIALS*
  Gasparini, N., Salleo, A., McCulloch, I., Baran, D.
  2019; 4 (4): 229–42
- **Increased charge carrier mobility and molecular packing of a solution sheared diketopyrrolopyrrole-based donor-acceptor copolymer by alkyl side chain modification** *JOURNAL OF MATERIALS CHEMISTRY C*
  Hambsch, M., Erdmann, T., Chew, A. R., Bernstorff, S., Salleo, A., Kiriy, A., Voit, B., Mannsfeld, S. C. B.
  2019; 7 (12): 3665–74
- **Rough versus planar interfaces: How to maximize the short circuit current of perovskite single and tandem solar cells** *MATERIALS TODAY ENERGY*
  Qarony, W., Hossain, M., Salleo, A., Knipp, D., Tsang, Y.

2019; 11: 106–13

- **Influence of Water on the Performance of Organic Electrochemical Transistors** *CHEMISTRY OF MATERIALS*
  Savva, A., Cendra, C., Giugni, A., Torre, B., Surgailis, J., Ohayon, D., Giovannitti, A., McCulloch, I., Di Fabrizio, E., Salleo, A., Rivnay, J., Inal, S.
  2019; 31 (3): 927–37

- **Role of the Anion on the Transport and Structure of Organic Mixed Conductors** *ADVANCED FUNCTIONAL MATERIALS*
  Cendra, C., Giovannitti, A., Savva, A., Venkatraman, V., McCulloch, I., Salleo, A., Inal, S., Rivnay, J.
  2019; 29 (5)

- **Mechanisms for Enhanced State Retention and Stability in Redox-Gated Organic Neuromorphic Devices** *ADVANCED ELECTRONIC MATERIALS*
  Keene, S., Melianas, A., van de Burgt, Y., Salleo, A.
  2019; 5 (2)

- **Additive solution deposition of multi-layered semiconducting polymer films for design of sophisticated device architectures** *JOURNAL OF MATERIALS CHEMISTRY C*
  Murrey, T. L., Guo, K., Mulvey, J. T., Lee, O. A., Cendra, C., Bedolla-Valdez, Z. I., Salleo, A., Moulin, J., Hong, K., Moule, A. J.
  2019; 7 (4): 953–60

- **Multifunctional, Room-Temperature Processable, Heterogeneous Organic Passivation Layer for Oxide Semiconductor Thin-Film Transistors.** *ACS applied materials & interfaces*
  Tak, Y. J., Keene, S. T., Kang, B. H., Kim, W. G., Kim, S. J., Salleo, A. n., Kim, H. J.
  2019

- **Wearable Organic Electrochemical Transistor Patch for Multiplexed Sensing of Calcium and Ammonium Ions from Human Perspiration.** *Advanced healthcare materials*
  Keene, S. T., Fogarty, D. n., Cooke, R. n., Casadevall, C. D., Salleo, A. n., Parlak, O. n.
  2019: e1901321

- **The Effect of Ring Expansion in Thienobenzo[b]indacenodithiophene Polymers for Organic Field-Effect Transistors.** *Journal of the American Chemical Society*
  Chen, H. n., Wadsworth, A. n., Ma, C. n., Nanni, A. n., Zhang, W. n., Nikolka, M. n., Luci, A. M., Perdigão, L. M., Thorley, K. J., Cendra, C. n., Larson, B. n., Rumbles, G. n., Anthopoulos, et al
  2019

- **Parallel programming of an ionic floating-gate memory array for scalable neuromorphic computing.** *Science (New York, N.Y.)*
  Fuller, E. J., Keene, S. T., Melianas, A. n., Wang, Z. n., Agarwal, S. n., Li, Y. n., Tuchman, Y. n., James, C. D., Marinella, M. J., Yang, J. J., Salleo, A. n., Talin, A. A.
  2019

- **Redefining near-unity luminescence in quantum dots with photothermal threshold quantum yield.** *Science (New York, N.Y.)*
  Hanifi, D. A., Bronstein, N. D., Koscher, B. A., Nett, Z., Swabeck, J. K., Takano, K., Schwartzberg, A. M., Maserati, L., Vandewal, K., van de Burgt, Y., Salleo, A., Alivisatos, A. P.
  2019; 363 (6432): 1199–1202

- **Diffraction imaging of nanocrystalline structures in organic semiconductor molecular thin films.** *Nature materials*
  Panova, O. n., Ophus, C. n., Takacs, C. J., Bustillo, K. C., Balhorn, L. n., Salleo, A. n., Balsara, N. n., Minor, A. M.
  2019

- **High-mobility, trap-free charge transport in conjugated polymer diodes.** *Nature communications*
  Nikolka, M. n., Broch, K. n., Armitage, J. n., Hanifi, D. n., Nowack, P. J., Venkateshvaran, D. n., Sadhanala, A. n., Saska, J. n., Mascal, M. n., Jung, S. H., Lee, J. K., McCulloch, I. n., Salleo, et al
  2019; 10 (1): 2122

- **Optics of Perovskite Solar Cell Front Contacts.** *ACS applied materials & interfaces*
  Hossain, M. I., Hongsingthong, A. n., Qarony, W. n., Sichanugrist, P. n., Konagai, M. n., Salleo, A. n., Knipp, D. n., Tsang, Y. H.
  2019; 11 (16): 14693–701

- **The Mechanism of Dedoping PEDOT:PSS by Aliphatic Polyamines.** *The journal of physical chemistry. C, Nanomaterials and interfaces*
  van der Pol, T. P., Keene, S. T., Saes, B. W., Meskers, S. C., Salleo, A. n., van de Burgt, Y. n., Janssen, R. A.

2019; 123 (39): 24328–37

- **High-Throughput Open-Air Plasma Activation of Metal-Oxide Thin Films with Low Thermal Budget** *ACS APPLIED MATERIALS & INTERFACES*
  Tak, Y., Hilt, F., Keene, S., Kim, W., Dauskardt, R. H., Salleo, A., Kim, H.
  2018; 10 (43): 37223–32
- **Unraveling the Effect of Conformational and Electronic Disorder in the Charge Transport Processes of Semiconducting Polymers** *ADVANCED FUNCTIONAL MATERIALS*
  Chew, A. R., Ghosh, R., Pakhnyuk, V., Onorato, J., Davidson, E. C., Segalman, R. A., Luscombe, C. K., Spano, F. C., Salleo, A.
  2018; 28 (41)
- **Progress in Poly (3-Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance** *ADVANCED ENERGY MATERIALS*
  Wadsworth, A., Hamid, Z., Bidwell, M., Ashraf, R. S., Khan, J. I., Anjum, D. H., Cendra, C., Yan, J., Rezasoltani, E., Guilbert, A. A. Y., Azzouzi, M., Gasparini, N., Bannock, et al
  2018; 8 (28)
- **Biomimetic Electronic Devices for Measuring Bacterial Membrane Disruption** *ADVANCED MATERIALS*
  Pitsalidis, C., Pappa, A., Porel, M., Artim, C. M., Faria, G. C., Duong, D. D., Alabi, C. A., Daniel, S., Salleo, A., Owens, R. M.
  2018; 30 (39): e1803130
- **Spectral Signatures and Spatial Coherence of Bound and Unbound Polarons in P3HT Films: Theory Versus Experiment** *JOURNAL OF PHYSICAL CHEMISTRY C*
  Ghosh, R., Chew, A. R., Onorato, J., Pakhnyuk, V., Luscombe, C. K., Salleo, A., Spano, F. C.
  2018; 122 (31): 18048–60
- **Approaching Perfect Light Incoupling in Perovskite and Silicon Thin Film Solar Cells by Moth Eye Surface Textures** *ADVANCED THEORY AND SIMULATIONS*
  Qarony, W., Hossain, M., Dewan, R., Fischer, S., Meyer-Rochow, V., Salleo, A., Knipp, D., Tsang, Y.
  2018; 1 (8)
- **Polymorphism controls the degree of charge transfer in a molecularly doped semiconducting polymer** *MATERIALS HORIZONS*
  Jacobs, I. E., Cendra, C., Harrelson, T. F., Valdez, Z., Faller, R., Salleo, A., Moule, A. J.
  2018; 5 (4): 655–60
- **A Universal Platform for Fabricating Organic Electrochemical Devices** *ADVANCED ELECTRONIC MATERIALS*
  Duong, D. T., Tuchman, Y., Chakthranont, P., Cavassin, P., Colucci, R., Jaramillo, T. F., Salleo, A., Faria, G. C.
  2018; 4 (7)
- **Molecularly selective nanoporous membrane-based wearable organic electrochemical device for noninvasive cortisol sensing.** *Science advances*
  Parlak, O., Keene, S. T., Marais, A., Curto, V. F., Salleo, A.
  2018; 4 (7): eaar2904
- **Optimized pulsed write schemes improve linearity and write speed for low-power organic neuromorphic devices** *JOURNAL OF PHYSICS D-APPLIED PHYSICS*
  Keene, S. T., Melianas, A., Fuller, E. J., van de Burgt, Y., Talin, A., Salleo, A.
  2018; 51 (22)
- **Copper interstitial recombination centers in Cu3N** *PHYSICAL REVIEW B*
  Yee, Y., Inoue, H., Hultqvist, A., Hanifi, D., Salleo, A., Magyari-Kope, B., Nishi, Y., Bent, S. F., Clemens, B. M.
  2018; 97 (24)
- **Improving Quantum Yield of Upconverting Nanoparticles in Aqueous Media via Emission Sensitization** *NANO LETTERS*
  Wisser, M. D., Fischer, S., Siefe, C., Alivisatos, A., Salleo, A., Dionne, J. A.
  2018; 18 (4): 2689–95
- **Chemically Responsive Elastomers Exhibiting Unity-Order Refractive Index Modulation.** *Advanced materials (Deerfield Beach, Fla.)*
  Wu, D. M., Solomon, M. L., Naik, G. V., Garcia-Etxarri, A., Lawrence, M., Salleo, A., Dionne, J. A.
  2018; 30 (7)

- **Organic electrochemical transistors** *NATURE REVIEWS MATERIALS*
  Rivnay, J., Inal, S., Salleo, A., Owens, R. M., Berggren, M., Malliaras, G. G.
  2018; 3 (2)
- **Fused electron deficient semiconducting polymers for air stable electron transport** *NATURE COMMUNICATIONS*
  Onwubiko, A., Yue, W., Jellett, C., Xiao, M., Chen, H., Ravva, M., Hanifi, D. A., Knall, A., Purushothaman, B., Nikolka, M., Flores, J., Salleo, A., Bredas, et al
  2018; 9: 416
- **Organic Electronics for Point-of-Care Metabolite Monitoring** *TRENDS IN BIOTECHNOLOGY*
  Pappa, A., Parlak, O., Scheiblin, G., Mailley, P., Salleo, A., Owens, R. M.
  2018; 36 (1): 45–59
- **Organic Electronics for Neuromorphic Computing** *NATURE ELECTRONICS*
  Burgt, Y. v., Melianas, A., Keene, S. T., Malliaras, G., Salleo, A.
  2018; 1 (7): 386-397
- **Organic Electronics for Point-of-Care Metabolite Monitoring.** *Trends in biotechnology*
  Pappa, A. M., Parlak, O., Scheiblin, G., Mailley, P., Salleo, A., Owens, R. M.
  2018; 36 (1): 45-59
- **Sequential Doping Reveals the Importance of Amorphous Chain Rigidity in Charge Transport of Semi-Crystalline Polymers.** *The journal of physical chemistry letters*
  Chew, A. R., Ghosh, R., Shang, Z., Spano, F. C., Salleo, A.
  2017; 8 (20): 4974-4980
- **Structural Effects of Gating Poly(3-hexylthiophene) through an Ionic Liquid** *ADVANCED FUNCTIONAL MATERIALS*
  Guardado, J. O., Salleo, A.
  2017; 27 (32)
- **Improving the electrical performance of solution processed oligothiophene thin-film transistors via structural similarity blending** *JOURNAL OF MATERIALS CHEMISTRY C*
  Leydecker, T., Favaretto, L., Duc Trong Duong, Zappala, G., Borjesson, K., Licciardello, A., Salleo, A., Melucci, M., Orgiu, E., Samori, P.
  2017; 5 (21): 5048–54
- **On the transient response of organic electrochemical transistors** *ORGANIC ELECTRONICS*
  Faria, G. C., Duong, D. T., Salleo, A.
  2017; 45: 215-221
- **Long-Term Structural Evolution of an Intercalated Layered Semiconductor** *ADVANCED FUNCTIONAL MATERIALS*
  Chew, A. R., Fonseca, J. J., Dubon, O. D., Salleo, A.
  2017; 27 (14)
- **Negative Isotope Effect on Field-Effect Hole Transport in Fully Substituted C-13-Rubrene** *ADVANCED ELECTRONIC MATERIALS*
  Ren, X., Bruzek, M. J., Hanifi, D. A., Schulzetenberg, A., Wu, Y., Kim, C., Zhang, Z., Johns, J. E., Salleo, A., Fratini, S., Troisi, A., Douglas, C. J., Frisbie, et al
  2017; 3 (4)
- **Hierarchical Aerographite nano-microtubular tetrapodal networks based electrodes as lightweight supercapacitor** *NANO ENERGY*
  Parlak, O., Mishra, Y. K., Grigoriev, A., Mecklenburg, M., Luo, W., Keene, S., Salleo, A., Schulte, K., Ahuja, R., Adelung, R., Turner, A. P., Tiwari, A.
  2017; 34: 570-577
- **Reducing the efficiency-stability-cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells.** *Nature materials*
  Baran, D., Ashraf, R. S., Hanifi, D. A., Abdelsamie, M., Gasparini, N., Röhr, J. A., Holliday, S., Wadsworth, A., Lockett, S., Neophytou, M., Emmott, C. J., Nelson, J., Brabec, et al
  2017; 16 (3): 363-369
- **A non-volatile organic electrochemical device as a low-voltage artificial synapse for neuromorphic computing.** *Nature materials*
  van de Burgt, Y., Lubberman, E., Fuller, E. J., Keene, S. T., Faria, G. C., Agarwal, S., Marinella, M. J., Alec Talin, A., Salleo, A.

2017

- **Towards 3D organic solar cells** *NANO ENERGY*
  Knipp, D., Jovanov, V., Tamang, A., Wagner, V., Salleo, A.
  2017; 31: 582-589

- **Anomalous Charge Transport in Conjugated Polymers Reveals Underlying Mechanisms of Trapping and Percolation** *ACS CENTRAL SCIENCE*
  Mollinger, S. A., Salleo, A., Spakowitz, A. J.
  2016; 2 (12): 910-915

- **Trade-Off between Trap Filling, Trap Creation, and Charge Recombination Results in Performance Increase at Ultralow Doping Levels in Bulk Heterojunction Solar Cells** *ADVANCED ENERGY MATERIALS*
  Shang, Z., Heumueller, T., Prasanna, R., Burkhard, G. F., Naab, B. D., Bao, Z., McGehee, M. D., Salleo, A.
  2016; 6 (24)

- **The Roles of Structural Order and Intermolecular Interactions in Determining Ionization Energies and Charge-Transfer State Energies in Organic Semiconductors** *ADVANCED ENERGY MATERIALS*
  Graham, K. R., Ndjawa, G. O., Conron, S. M., Munir, R., Vandewal, K., Chen, J. J., Sweetnam, S., Thompson, M. E., Salleo, A., McGehee, M. D., Amassian, A.
  2016; 6 (22)

- **Naphthalenediimide Polymers with Finely Tuned In-Chain p-Conjugation: Electronic Structure, Film Microstructure, and Charge Transport Properties.** *Advanced materials*
  Erdmann, T., Fabiano, S., Milián-Medina, B., Hanifi, D., Chen, Z., Berggren, M., Gierschner, J., Salleo, A., Kiriy, A., Voit, B., Facchetti, A.
  2016; 28 (41): 9169-9174

- **Signatures of Intracrystallite and Intercrystallite Limitations of Charge Transport in Polythiophenes** *MACROMOLECULES*
  Vakhshouri, K., Smith, B. H., Chan, E. P., Wang, C., Salleo, A., Wang, C., Hexemer, A., Gomez, E. D.
  2016; 49 (19): 7359-7369

- **Dual-Characteristic Transistors Based on Semiconducting Polymer Blends** *ADVANCED ELECTRONIC MATERIALS*
  Lu, G., Di Pietro, R., Koelln, L. S., Nasrallah, I., Zhou, L., Mollinger, S., Himmelberger, S., Koch, N., Salleo, A., Neher, D.
  2016; 2 (10)

- **Bandgap Restructuring of the Layered Semiconductor Gallium Telluride in Air.** *Advanced materials*
  Fonseca, J. J., Tongay, S., Topsakal, M., Chew, A. R., Lin, A. J., Ko, C., Luce, A. V., Salleo, A., Wu, J., Dubon, O. D.
  2016; 28 (30): 6465-6470

- **Enhancing Quantum Yield via Local Symmetry Distortion in Lanthanide-Based Upconverting Nanoparticles** *ACS PHOTONICS*
  Wisser, M. D., Fischer, S., Maurer, P. C., Bronstein, N. D., Chu, S., Alivisatos, A. P., Salleo, A., Dionne, J. A.
  2016; 3 (8): 1523-1530

- **Roadmap on optical energy conversion** *JOURNAL OF OPTICS*
  Boriskina, S. V., Green, M. A., Catchpole, K., Yablonovitch, E., Beard, M. C., Okada, Y., Lany, S., Gershon, T., Zakutayev, A., Tahersima, M. H., Sorger, V. J., Naughton, M. J., Kempa, et al
  2016; 18 (7)

- **ORGANIC DEVICES. Avoid the kinks when measuring mobility.** *Science*
  McCulloch, I., Salleo, A., Chabinyc, M.
  2016; 352 (6293): 1521-1522

- **High-efficiency and air-stable P3HT-based polymer solar cells with a new non-fullerene acceptor** *NATURE COMMUNICATIONS*
  Holliday, S., Ashraf, R. S., Wadsworth, A., Baran, D., Yousaf, S. A., Nielsen, C. B., Tan, C., Dimitrov, S. D., Shang, Z., Gasparini, N., Alamoudi, M., Laquai, F., Brabec, et al
  2016; 7

- **Core/Shell Approach to Dopant Incorporation and Shape Control in Colloidal Zinc Oxide Nanorods** *CHEMISTRY OF MATERIALS*
  Mehra, S., Bergerud, A., Milliron, D. J., Chan, E. M., Salleo, A.
  2016; 28 (10): 3454-3461

- **Role of Polymer Structure on the Conductivity of N-Doped Polymers** *ADVANCED ELECTRONIC MATERIALS*
  Naab, B. D., Gu, X., Kurosawa, T., To, J. W., Salleo, A., Bao, Z.
  2016; 2 (5)
- **Near infrared laser annealing of CdTe and in-situ measurement of the evolution of structural and optical properties** *JOURNAL OF APPLIED PHYSICS*
  Simonds, B. J., Misra, S., Paudel, N., Vandewal, K., Salleo, A., Ferekides, C., Scarpulla, M. A.
  2016; 119 (16)
- **Characterizing the Polymer:Fullerene Intermolecular Interactions** *CHEMISTRY OF MATERIALS*
  Sweetnam, S., Vandewal, K., Cho, E., Risko, C., Coropceanu, V., Salleo, A., Bredas, J., McGehee, M. D.
  2016; 28 (5): 1446-1452
- **Time- and Temperature-Independent Local Carrier Mobility and Effects of Regioregularity in Polymer-Fullerene Organic Semiconductors** *ADVANCED ELECTRONIC MATERIALS*
  Sher, M., Bartelt, J. A., Burke, T. M., Salleo, A., McGehee, M. D., Lindenberg, A. M.
  2016; 2 (3)
- **Strain effects on the work function of an organic semiconductor.** *Nature communications*
  Wu, Y., Chew, A. R., Rojas, G. A., Sini, G., Haugstad, G., Belianinov, A., Kalinin, S. V., Li, H., Risko, C., Brédas, J., Salleo, A., Frisbie, C. D.
  2016; 7: 10270-?
- **Significance of the double-layer capacitor effect in polar rubbery dielectrics and exceptionally stable low-voltage high transconductance organic transistors** *SCIENTIFIC REPORTS*
  Wang, C., Lee, W., Kong, D., Pfattner, R., Schweicher, G., Nakajima, R., Lu, C., Mei, J., Lee, T. H., Wu, H., Lopez, J., Diao, Y., Gu, et al
  2015; 5
- **Microstructural and Electronic Origins of Open-Circuit Voltage Tuning in Organic Solar Cells Based on Ternary Blends** *ADVANCED ENERGY MATERIALS*
  Mollinger, S. A., Vandewal, K., Salleo, A.
  2015; 5 (23)
- **Toward Conductive Mesocrystalline Assemblies: PbS Nanocrystals Cross-Linked with Tetrathiafulvalene Dicarboxylate** *CHEMISTRY OF MATERIALS*
  Andre, A., Zherebetskyy, D., Hanifi, D., He, B., Khoshkhoo, M. S., Jankowski, M., Chasse, T., Wang, L., Schreiber, F., Salleo, A., Liu, Y., Scheele, M.
  2015; 27 (23): 8105-8115
- **Solid Solutions of Rare Earth Cations in Mesoporous Anatase Beads and Their Performances in Dye-Sensitized Solar Cells** *SCIENTIFIC REPORTS*
  Cavallo, C., Salleo, A., Gozzi, D., Di Pascasio, F., Quaranta, S., Panetta, R., Latini, A.
  2015; 5
- **Solid Solutions of Rare Earth Cations in Mesoporous Anatase Beads and Their Performances in Dye-Sensitized Solar Cells.** *Scientific reports*
  Cavallo, C., Salleo, A., Gozzi, D., Di Pascasio, F., Quaranta, S., Panetta, R., Latini, A.
  2015; 5: 16785
- **Organic electronics: Something out of nothing.** *Nature materials*
  Salleo, A.
  2015; 14 (11): 1077-8
- **Engineering semiconducting polymers for efficient charge transport** *MRS COMMUNICATIONS*
  Himmelberger, S., Salleo, A.
  2015; 5 (3): 383-395
- **Experimental evidence that short-range intermolecular aggregation is sufficient for efficient charge transport in conjugated polymers.** *Proceedings of the National Academy of Sciences of the United States of America*
  Wang, S., Fabiano, S., Himmelberger, S., Puzinas, S., Crispin, X., Salleo, A., Berggren, M.
  2015; 112 (34): 10599-10604

- **Experimental evidence that short-range intermolecular aggregation is sufficient for efficient charge transport in conjugated polymers** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Wang, S., Fabiano, S., Himmelberger, S., Puzinas, S., Crispin, X., Salleo, A., Berggren, M.
  2015; 112 (34): 10599-10604

- **Miscibility and Acid Strength Govern Contact Doping of Organic Photovoltaics with Strong Polyelectrolytes** *MACROMOLECULES*
  Le, T. P., Shang, Z., Wang, L., Li, N., Kesava, S. V., O'Connor, J. W., Chang, Y., Bae, C., Zhu, C., Hexemer, A., Gomez, E. W., Salleo, A., Hickner, et al
  2015; 48 (15): 5162-5171

- **The Effect of Processing Additives on Energetic Disorder in Highly Efficient Organic Photovoltaics: A Case Study on PBDTTT-C-T:PC71 BM.** *Advanced materials*
  Gao, F., Himmelberger, S., Andersson, M., Hanifi, D., Xia, Y., Zhang, S., Wang, J., Hou, J., Salleo, A., Inganäs, O.
  2015; 27 (26): 3868-3873

- **Percolation, Tie-Molecules, and the Microstructural Determinants of Charge Transport in Semicrystalline Conjugated Polymers** *ACS MACRO LETTERS*
  Mollinger, S. A., Krajina, B. A., Noriega, R., Salleo, A., Spakowitz, A. J.
  2015; 4 (7): 708-712

- **The Effect of Processing Additives on Energetic Disorder in Highly Efficient Organic Photovoltaics: A Case Study on PBDTTT-C-T:PC71 BM.** *Advanced materials*
  Gao, F., Himmelberger, S., Andersson, M., Hanifi, D., Xia, Y., Zhang, S., Wang, J., Hou, J., Salleo, A., Inganäs, O.
  2015; 27 (26): 3868-3873

- **Control of Rubrene Polymorphs via Polymer Binders: Applications in Organic Field-Effect Transistors** *CHEMISTRY OF MATERIALS*
  Jo, P. S., Duong, D. T., Park, J., Sinclair, R., Salleo, A.
  2015; 27 (11): 3979-3987

- **Structural and Electrical Investigation of C-60-Graphene Vertical Heterostructures** *ACS NANO*
  Kim, K., Lee, T. H., Santos, E. J., Jo, P. S., Salleo, A., Nishi, Y., Bao, Z.
  2015; 9 (6): 5922-5928

- **Molar Mass versus Polymer Solar Cell Performance: Highlighting the Role of Homocouplings** *CHEMISTRY OF MATERIALS*
  Vangerven, T., Verstappen, P., Drijkoningen, J., Dierckx, W., Himmelberger, S., Salleo, A., Vanderzande, D., Maes, W., Manca, J. V.
  2015; 27 (10): 3726-3732

- **Role of Side-Chain Branching on Thin-Film Structure and Electronic Properties of Polythiophenes** *ADVANCED FUNCTIONAL MATERIALS*
  Himmelberger, S., Duong, D. T., Northrup, J. E., Rivnay, J., Koch, F. P., Beckingham, B. S., Stingelin, N., Segalman, R. A., Mannsfeld, S. C., Salleo, A.
  2015; 25 (17): 2616-2624

- **Direct Correlation of Charge Transfer Absorption with Molecular Donor:Acceptor Interfacial Area via Photothermal Deflection Spectroscopy** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Buchaca-Domingo, E., Vandewal, K., Fei, Z., Watkins, S. E., Scholes, F. H., Bannock, J. H., de Mello, J. C., Richter, L. J., Delongchamp, D. M., Amassian, A., Heeney, M., Salleo, A., Stingelin, et al
  2015; 137 (16): 5256-5259

- **Symmetry-Breaking Charge Transfer in a Zinc Chlorodipyrrin Acceptor for High Open Circuit Voltage Organic Photovoltaics** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Bartynski, A. N., Gruber, M., Das, S., Rangan, S., Mollinger, S., Trinh, C., Bradforth, S. E., Vandewal, K., Salleo, A., Bartynski, R. A., Bruetting, W., Thompson, M. E.
  2015; 137 (16): 5397-5405

- **Strain-induced modification of optical selection rules in lanthanide-based upconverting nanoparticles.** *Nano letters*
  Wisser, M. D., Chea, M., Lin, Y., Wu, D. M., Mao, W. L., Salleo, A., Dionne, J. A.
  2015; 15 (3): 1891-1897

- **Optically switchable transistors by simple incorporation of photochromic systems into small-molecule semiconducting matrices** *NATURE COMMUNICATIONS*

El Gemayel, M., Borjesson, K., Herder, M., Duong, D. T., Hutchison, J. A., Ruzie, C., Schweicher, G., Salleo, A., Geerts, Y., Hecht, S., Orgiu, E., Samori, P.
2015; 6

- **Optical measurement of doping efficiency in poly(3-hexylthiophene) solutions and thin films** *PHYSICAL REVIEW B*
  Wang, C., Duong, D. T., Vandewal, K., Rivnay, J., Salleo, A.
  2015; 91 (8)

- **Optically switchable transistors comprising a hybrid photochromic molecule/n-type organic active layer** *JOURNAL OF MATERIALS CHEMISTRY C*
  Boerjesson, K., HERDER, M., Grubert, L., Duong, D. T., Salleo, A., Hecht, S., Orgiu, E., Samori, P.
  2015; 3 (16): 4156-4161

- **Strain-induced modification of optical selection rules in lanthanide-based upconverting nanoparticles** *Nano Letters*
  Wisser, M., Chea, M., Lin, Y., Wu, D., Mao, W. L., Salleo, A., Dionne, J.
  2015: 1891–97

- **Modulating molecular aggregation by facile heteroatom substitution of diketopyrrolopyrrole based small molecules for efficient organic solar cells** *JOURNAL OF MATERIALS CHEMISTRY A*
  Qian, D., Liu, B., Wang, S., Himmelberger, S., Linares, M., Vagin, M., Muller, C., Ma, Z., Fabiano, S., Berggren, M., Salleo, A., Inganas, O., Zou, et al
  2015; 3 (48): 24349-24357

- **Efficiency Enhancement of Gallium Arsenide Photovoltaics Using Solution-Processed Zinc Oxide Nanoparticle Light Scattering Layers** *JOURNAL OF NANOMATERIALS*
  Kang, Y., Liang, D., Mehra, S., Huo, Y., Chen, Y., Christoforo, M. G., Salleo, A., Harris, J. S.
  2015

- **Branched and linear A(2)-D-A(1)-D-A(2) isoindigo-based solution-processable small molecules for organic field-effect transistors and solar cells** *RSC ADVANCES*
  Tomassetti, M., Ouhib, F., Cardinaletti, I., Verstappen, P., Salleo, A., Jerome, C., Manca, J., Maes, W., Detrembleur, C.
  2015; 5 (104): 85460-85469

- **Multi-phase microstructures drive exciton dissociation in neat semicrystalline polymeric semiconductors** *JOURNAL OF MATERIALS CHEMISTRY C*
  Paquin, F., Rivnay, J., Salleo, A., Stingelin, N., Silva-Acuna, C.
  2015; 3 (41): 10715-10722

- **Modular synthetic design enables precise control of shape and doping in colloidal zinc oxide nanorods** *JOURNAL OF MATERIALS CHEMISTRY C*
  Mehra, S., Chan, E. M., Salleo, A.
  2015; 3 (27): 7172-7179

- **Semi-transparent perovskite solar cells for tandems with silicon and CIGS** *ENERGY & ENVIRONMENTAL SCIENCE*
  Bailie, C. D., Christoforo, M. G., Mailoa, J. P., Bowring, A. R., Unger, E. L., Nguyen, W. H., Burschka, J., Pellet, N., Lee, J. Z., Graetzel, M., Noufi, R., Buonassisi, T., Salleo, et al
  2015; 8 (3): 956-963

- **Solution-Processed Field-Effect Transistors Based on Dihexylquaterthiophene Films with Performances Exceeding Those of Vacuum-Sublimed Films** *ACS APPLIED MATERIALS & INTERFACES*
  Leydecker, T., Duc Trong Duong, D. T., Salleo, A., Orgiu, E., Samori, P.
  2014; 6 (23): 21248-21255

- **The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells** *ADVANCED ENERGY MATERIALS*
  Zusan, A., Vandewal, K., Allendorf, B., Hansen, N. H., Pflaum, J., Salleo, A., Dyakonov, V., Deibel, C.
  2014; 4 (17)

- **Organic electrochemical transistors as impedance biosensors** *MRS COMMUNICATIONS*
  Faria, G. C., Duong, D. T., Salleo, A., Polyzoidis, C. A., Logothetidis, S., Rivnay, J., Owens, R., Malliaras, G. G.
  2014; 4 (4): 189-194

- **Plasmon-Enhanced Upconversion** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*
  Wu, D. M., Garcia-Etxarri, A., Salleo, A., Dionne, J. A.
  2014; 5 (22): 4020-4031

- **Plasmon-Enhanced Upconversion.** *journal of physical chemistry letters*
  Wu, D. M., García-Etxarri, A., Salleo, A., Dionne, J. A.
  2014; 5 (22): 4020-4031

- **Enhancing Fullerene-Based Solar Cell Lifetimes by Addition of a Fullerene Dumbbell** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*
  Schroeder, B. C., Li, Z., Brady, M. A., Faria, G. C., Ashraf, R. S., Takacs, C. J., Cowart, J. S., Duong, D. T., Chiu, K. H., Tan, C., Cabral, J. T., Salleo, A., Chabinyc, et al
  2014; 53 (47): 12870-12875

- **Role of Molecular Weight Distribution on Charge Transport in Semiconducting Polymers** *MACROMOLECULES*
  Himmelberger, S., Vandewal, K., Fei, Z., Heeney, M., Salleo, A.
  2014; 47 (20): 7151-7157

- **Enhanced Photovoltaic Performance of Indacenodithiophene-Quinoxaline Copolymers by Side-Chain Modulation** *ADVANCED ENERGY MATERIALS*
  Dang, D., Chen, W., Himmelberger, S., Tao, Q., Lundin, A., Yang, R., Zhu, W., Salleo, A., Mueller, C., Wang, E.
  2014; 4 (15)

- **Direct Observation of Doping Sites in Temperature-Controlled, p-Doped P3HT Thin Films by Conducting Atomic Force Microscopy** *ADVANCED MATERIALS*
  Duong, D. T., Hung Phan, H., Hanifi, D., Jo, P. S., Thuc-Quyen Nguyen, T. Q., Salleo, A.
  2014; 26 (35): 6069-?

- **Direct observation of doping sites in temperature-controlled, p-doped P3HT thin films by conducting atomic force microscopy.** *Advanced materials*
  Duong, D. T., Phan, H., Hanifi, D., Jo, P. S., Nguyen, T., Salleo, A.
  2014; 26 (35): 6069-6073

- **Contact Doping with Sub-Monolayers of Strong Polyelectrolytes for Organic Photovoltaics** *ADVANCED ENERGY MATERIALS*
  Mor, G. K., Jones, D., Le, T. P., Shang, Z., Weathers, P. J., Woltermann, M. K., Vakhshouri, K., Williams, B. P., Tohran, S. A., Saito, T., Verduzco, R., Salleo, A., Hickner, et al
  2014; 4 (13)

- **A New Tetracyclic Lactam Building Block for Thick, Broad-Bandgap Photovoltaics** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Kroon, R., Mendaza, A. D., Himmelberger, S., Bergqvist, J., Backe, O., Faria, G. C., Gao, F., Obaid, A., Zhuang, W., Gedefaw, D., Olsson, E., Inganas, O., Salleo, et al
  2014; 136 (33): 11578-11581

- **Mechanism of Crystallization and Implications for Charge Transport in Poly(3-ethylhexylthiophene) Thin Films** *ADVANCED FUNCTIONAL MATERIALS*
  Duong, D. T., Ho, V., Shang, Z., Mollinger, S., Mannsfeld, S. C., Dacuna, J., Toney, M. F., Segalman, R., Salleo, A.
  2014; 24 (28): 4515-4521

- **Importance of the donor:fullerene intermolecular arrangement for high-efficiency organic photovoltaics.** *Journal of the American Chemical Society*
  Graham, K. R., Cabanetos, C., Jahnke, J. P., Idso, M. N., El Labban, A., Ngongang Ndjawa, G. O., Heumueller, T., Vandewal, K., Salleo, A., Chmelka, B. F., Amassian, A., Beaujuge, P. M., McGehee, et al
  2014; 136 (27): 9608-9618

- **Effective Solution- and Vacuum-Processed n-Doping by Dimers of Benzimidazoline Radicals.** *Advanced materials*
  Naab, B. D., Zhang, S., Vandewal, K., Salleo, A., Barlow, S., Marder, S. R., Bao, Z.
  2014; 26 (25): 4268-4272

- **Correlated Donor/Acceptor Crystal Orientation Controls Photocurrent Generation in All-Polymer Solar Cells** *ADVANCED FUNCTIONAL MATERIALS*
  Schubert, M., Collins, B. A., Mangold, H., Howard, I. A., Schindler, W., Vandewal, K., Roland, S., Behrends, J., Kraffert, F., Steyrleuthner, R., Chen, Z., Fostiropoulos, K., Bittl, et al

2014; 24 (26): 4068-4081

- **Toward bulk heterojunction polymer solar cells with thermally stable active layer morphology** *JOURNAL OF PHOTONICS FOR ENERGY*
  Cardinaletti, I., Kesters, J., Bertho, S., Conings, B., Piersimoni, F., d'Haen, J., Lutsen, L., Nesladek, M., Van Mele, B., Van Assche, G., Vandewal, K., Salleo, A., Vanderzande, et al
  2014; 4

- **Modeling of the effect of intentionally introduced traps on hole transport in single-crystal rubrene** *PHYSICAL REVIEW B*
  Dacuna, J., Desai, A., Xie, W., Salleo, A.
  2014; 89 (24)

- **Increased open-circuit voltage of organic solar cells by reduced donor-acceptor interface area.** *Advanced materials*
  Vandewal, K., Widmer, J., Heumueller, T., Brabec, C. J., McGehee, M. D., Leo, K., Riede, M., Salleo, A.
  2014; 26 (23): 3839-3843

- **High Performance All-Polymer Solar Cell via Polymer Side-Chain Engineering.** *Advanced materials*
  Zhou, Y., Kurosawa, T., Ma, W., Guo, Y., Fang, L., Vandewal, K., Diao, Y., Wang, C., Yan, Q., Reinspach, J., Mei, J., Appleton, A. L., Koleilat, et al
  2014; 26 (22): 3767-3772

- **Tuning the plasmonic absorption of metal reflectors by zinc oxide nano particles: Application in thin film solar cells** *NANO ENERGY*
  Palanchoke, U., Kurz, H., Noriega, R., Arabi, S., Jovanov, V., Magnus, P., Aftab, H., Salleo, A., Stiebig, H., Knipp, D.
  2014; 6: 167-172

- **Charge Transport Orthogonality in All-Polymer Blend Transistors, Diodes, and Solar Cells** *ADVANCED ENERGY MATERIALS*
  Fabiano, S., Himmelberger, S., Drees, M., Chen, Z., Altamimi, R. M., Salleo, A., Loi, M. A., Facchetti, A.
  2014; 4 (6)

- **On the Efficiency of Charge Transfer State Splitting in Polymer: Fullerene Solar Cells** *ADVANCED MATERIALS*
  Albrecht, S., Vandewal, K., Tumbleston, J. R., Fischer, F. S., Douglas, J. D., Frechet, J. M., Ludwigs, S., Ade, H., Salleo, A., Neher, D.
  2014; 26 (16): 2533-2539

- **The Role of Regioregularity, Crystallinity, and Chain Orientation on Electron Transport in a High-Mobility n-Type Copolymer** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Steyrleuthner, R., Di Pietro, R., Collins, B. A., Polzer, F., Himmelberger, S., Schubert, M., Chen, Z., Zhang, S., Salleo, A., Ade, H., Facchetti, A., Neher, D.
  2014; 136 (11): 4245-4256

- **A direct measurement of the electronic structure of Si nanocrystals and its effect on optoelectronic properties** *JOURNAL OF APPLIED PHYSICS*
  Mustafeez, W., Majumdar, A., Vuckovic, J., Salleo, A.
  2014; 115 (10)

- **High-resolution x-ray analysis of graphene grown on 4H-SiC (000(1)over-bar) at low pressures** *JOURNAL OF MATERIALS RESEARCH*
  Capanoa, M. A., Capano, B. M., Morisette, D. T., Salleo, A., Lee, S., Toney, M. F.
  2014; 29 (3): 439-446

- **Very Low Band Gap Thiadiazoloquinoxaline Donor-Acceptor Polymers as Multi-tool Conjugated Polymers** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Steckler, T. T., Henriksson, P., Mollinger, S., Lundin, A., Salleo, A., Andersson, M. R.
  2014; 136 (4): 1190-1193

- **Structure-property relationships of oligothiophene-isoindigo polymers for efficient bulk-heterojunction solar cells** *ENERGY & ENVIRONMENTAL SCIENCE*
  Ma, Z., Sun, W., Himmelberger, S., Vandewal, K., Tang, Z., Bergqvist, J., Salleo, A., Andreasen, J. W., Inganas, O., Andersson, M. R., Muller, C., Zhang, F., Wang, et al
  2014; 7 (1): 361-369

- **Sub-bandgap laser annealing of room temperature deposited polycrystalline CdTe** *Conference on Laser Processing and Fabrication for Solar, Displays, and Optoelectronic Devices III*
  Simonds, B. J., Misra, S., Paudel, N., Vandewal, K., Salleo, A., Ferekides, C., Scarpulla, M. A.
  SPIE-INT SOC OPTICAL ENGINEERING.2014

- **Efficient charge generation by relaxed charge-transfer states at organic interfaces.** *Nature materials*
  Vandewal, K., Albrecht, S., Hoke, E. T., Graham, K. R., Widmer, J., Douglas, J. D., Schubert, M., Mateker, W. R., Bloking, J. T., Burkhard, G. F., Sellinger, A., Fréchet, J. M., Amassian, et al
  2014; 13 (1): 63-68

- **Semi-Transparent Polymer Solar Cells with Excellent Sub-Bandgap Transmission for Third Generation Photovoltaics** *ADVANCED MATERIALS*
  Beiley, Z. M., Christoforo, M. G., Gratia, P., Bowring, A. R., Eberspacher, P., Margulis, G. Y., Cabanetos, C., Beaujuge, P. M., Salleo, A., McGehee, M. D.
  2013; 25 (48): 7020-7026

- **Spray Deposition of Silver Nanowire Electrodes for Semitransparent Solid-State Dye-Sensitized Solar Cells** *ADVANCED ENERGY MATERIALS*
  Margulis, G. Y., Christoforo, M. G., Lam, D., Beiley, Z. M., Bowring, A. R., Bailie, C. D., Salleo, A., McGehee, M. D.
  2013; 3 (12): 1657-1663

- **The impact of molecular weight on microstructure and charge transport in semicrystalline polymer Semiconductors poly(3-hexylthiophene), a model study** *PROGRESS IN POLYMER SCIENCE*
  Koch, F. P., Rivnay, J., Foster, S., Mueller, C., Downing, J. M., Buchaca-Domingo, E., Westacott, P., Yu, L., Yuan, M., Baklar, M., Fei, Z., Luscombe, C., McLachlan, et al
  2013; 38 (12): 1978-1989

- **Solar Cells: Re-evaluating the Role of Sterics and Electronic Coupling in Determining the Open-Circuit Voltage of Organic Solar Cells (Adv. Mater. 42/2013).** *Advanced materials*
  Graham, K. R., Erwin, P., Nordlund, D., Vandewal, K., Li, R., Ngongang Ndjawa, G. O., Hoke, E. T., Salleo, A., Thompson, M. E., McGehee, M. D., Amassian, A.
  2013; 25 (42): 5990-?

- **Re-evaluating the role of sterics and electronic coupling in determining the open-circuit voltage of organic solar cells.** *Advanced materials*
  Graham, K. R., Erwin, P., Nordlund, D., Vandewal, K., Li, R., Ngongang Ndjawa, G. O., Hoke, E. T., Salleo, A., Thompson, M. E., McGehee, M. D., Amassian, A.
  2013; 25 (42): 6076-6082

- **A general relationship between disorder, aggregation and charge transport in conjugated polymers** *NATURE MATERIALS*
  Noriega, R., Rivnay, J., Vandewal, K., Koch, F. P., Stingelin, N., Smith, P., Toney, M. F., Salleo, A.
  2013; 12 (11): 1037-1043

- **Re-evaluating the Role of Sterics and Electronic Coupling in Determining the Open-Circuit Voltage of Organic Solar Cells** *ADVANCED MATERIALS*
  Graham, K. R., Erwin, P., Nordlund, D., Vandewal, K., Li, R., Ndjawa, G. O., Hoke, E. T., Salleo, A., Thompson, M. E., McGehee, M. D., Amassian, A.
  2013; 25 (42): 6076-6082

- **A general relationship between disorder, aggregation and charge transport in conjugated polymers.** *Nature materials*
  Noriega, R., Rivnay, J., Vandewal, K., Koch, F. P., Stingelin, N., Smith, P., Toney, M. F., Salleo, A.
  2013; 12 (11): 1038-1044

- **Chain conformations dictate multiscale charge transport phenomena in disordered semiconducting polymers** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Noriega, R., Salleo, A., Spakowitz, A. J.
  2013; 110 (41): 16315-16320

- **High Mobility N-Type Transistors Based on Solution-Sheared Doped 6,13-Bis(triisopropylsilylethynyl)pentacene Thin Films.** *Advanced materials*
  Naab, B. D., Himmelberger, S., Diao, Y., Vandewal, K., Wei, P., Lussem, B., Salleo, A., Bao, Z.
  2013; 25 (33): 4663-4667

- **Structural Factors That Affect the Performance of Organic Bulk Heterojunction Solar Cells** *MACROMOLECULES*
  Vandewal, K., Himmelberger, S., Salleo, A.
  2013; 46 (16): 6379-6387

- **Photocurrent Enhancement from Diketopyrrolopyrrole Polymer Solar Cells through Alkyl-Chain Branching Point Manipulation** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*

Meager, L., Ashraf, R. S., Mollinger, S., Schroeder, B. C., Bronstein, H., Beatrup, D., Vezie, M. S., Kirchartz, T., Salleo, A., Nelson, J., McCulloch, L.
2013; 135 (31): 11537-11540

- **Color in the Corners: ITO-Free White OLEDs with Angular Color Stability.** *Advanced materials*
  Gaynor, W., Hofmann, S., Christoforo, M. G., Sachse, C., Mehra, S., Salleo, A., McGehee, M. D., Gather, M. C., Lüssem, B., Müller-Meskamp, L., Peumans, P., Leo, K.
  2013; 25 (29): 4006-4013
- **Solution-Processable Zirconium Oxide Gate Dielectrics for Flexible Organic Field Effect Transistors Operated at Low Voltages** *CHEMISTRY OF MATERIALS*
  Park, Y. M., Desai, A., Salleo, A., Jimison, L.
  2013; 25 (13): 2571-2579
- **Conformational Disorder Enhances Solubility and Photovoltaic Performance of a Thiophene-Quinoxaline Copolymer** *ADVANCED ENERGY MATERIALS*
  Wang, E., Bergqvist, J., Vandewal, K., Ma, Z., Hou, L., Lundin, A., Himmelberger, S., Salleo, A., Muller, C., Inganas, O., Zhang, F., Andersson, M. R.
  2013; 3 (6): 806-814
- **One-Step Macroscopic Alignment of Conjugated Polymer Systems by Epitaxial Crystallization during Spin-Coating** *ADVANCED FUNCTIONAL MATERIALS*
  Muller, C., Aghamohammadi, M., Himmelberger, S., Sonar, P., Garriga, M., Salleo, A., Campoy-Quiles, M.
  2013; 23 (19): 2368-2377
- **Solution processed zinc oxide nanopyramid/silver nanowire transparent network films with highly tunable light scattering properties.** *Nanoscale*
  Mehra, S., Christoforo, M. G., Peumans, P., Salleo, A.
  2013; 5 (10): 4400-4403
- **The chemical and structural origin of efficient p-type doping in P3HT** *ORGANIC ELECTRONICS*
  Duong, D. T., Wang, C., Antono, E., Toney, M. F., Salleo, A.
  2013; 14 (5): 1330-1336
- **Effects of Confinement on Microstructure and Charge Transport in High Performance Semicrystalline Polymer Semiconductors** *ADVANCED FUNCTIONAL MATERIALS*
  Himmelberger, S., Dacuna, J., Rivnay, J., Jimison, L. H., McCarthy-Ward, T., Heeney, M., McCulloch, I., Toney, M. F., Salleo, A.
  2013; 23 (16): 2091-2098
- **Ultrathin Body Poly(3-hexylthiophene) Transistors with Improved Short-Channel Performance** *ACS APPLIED MATERIALS & INTERFACES*
  Wang, C., Rivnay, J., Himmelberger, S., Vakhshouri, K., Toney, M. F., Gomez, E. D., Salleo, A.
  2013; 5 (7): 2342-2346
- **Vertical Confinement and Interface Effects on the Microstructure and Charge Transport of P3HT Thin Films** *JOURNAL OF POLYMER SCIENCE PART B-POLYMER PHYSICS*
  Jimison, L. H., Himmelberger, S., Duong, D. T., Rivnay, J., Toney, M. F., Salleo, A.
  2013; 51 (7): 611-620
- **Low-Temperature Processed Ga-Doped ZnO Coatings from Colloidal Inks** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Della Gaspera, E., Bersani, M., Cittadini, M., Guglielmi, M., Pagani, D., Noriega, R., Mehra, S., Salleo, A., Martucci, A.
  2013; 135 (9): 3439-3448
- **Moderate doping leads to high performance of semiconductor/insulator polymer blend transistors** *NATURE COMMUNICATIONS*
  Lu, G., Blakesley, J., Himmelberger, S., Pingel, P., Frisch, J., Lieberwirth, I., Salzmann, I., Oehzelt, M., Di Pietro, R., Salleo, A., Koch, N., Neher, D.
  2013; 4
- **Recombination in Polymer:Fullerene Solar Cells with Open-Circuit Voltages Approaching and Exceeding 1.0 V** *ADVANCED ENERGY MATERIALS*
  Hoke, E. T., Vandewal, K., Bartelt, J. A., Mateker, W. R., Douglas, J. D., Noriega, R., Graham, K. R., Frechet, J. M., Salleo, A., McGehee, M. D.
  2013; 3 (2): 220-230
- **PEDOT:gelatin composites mediate brain endothelial cell adhesion** *JOURNAL OF MATERIALS CHEMISTRY B*

Bongo, M., Winther-Jensen, O., Himmelberger, S., Strakosas, X., Ramuz, M., Hama, A., Stavrinidou, E., Malliaras, G. G., Salleo, A., Winther-Jensen, B., Owens, R. M.
2013; 1 (31): 3860-3867

- **Solution processed zinc oxide nanopyramid/silver nanowire transparent network films with highly tunable light scattering properties** *Nanoscale*
  Mehra, S., Christoforo, M., G., Peumans, P., Salleo, A.
  2013; 5: 4400
- **Efficient charge generation by relaxed charge-transfer states at organic interfaces** *Nature Materials, Advance Online*
  Vandewal, K., Albrecht, S., Hoke, E., T., Graham, K., R., Widmer, J., Douglas, J., D., Salleo, A.
  2013
- **High Mobility N-Type Transistors Based on Solution-Sheared Doped 6,13-Bis(triisopropylsilylethynyl)pentacene Thin Films** *Advanced Materials*
  Naab, B., D., Himmelberger, S., Diao, Y., Vandewal, K., Wei, P., Lussem, B., Salleo, A.
  2013; 25: 4663
- **Color in the corners: ITO-free white OLEDs with angular color stability** *Advanced Materials*
  Gaynor, W., Hofmann, S., Christoforo, G., M., Sachse, C., Mehra, S., Salleo, A.
  2013; 25: 4006
- **Confined organization of fullerene units along high polymer chains** *JOURNAL OF MATERIALS CHEMISTRY C*
  Fang, L., Liu, P., Sveinbjornsson, B. R., Atahan-Evrenk, S., Vandewal, K., Osuna, S., Jimenez-Oses, G., Shrestha, S., Giri, G., Wei, P., Salleo, A., Aspuru-Guzik, A., Grubbs, et al
  2013; 1 (36): 5747-5755
- **Role of confinement and aggregation in charge transport in semicrystalline polythiophene thin films** *PHYSICAL REVIEW B*
  Duong, D. T., Toney, M. F., Salleo, A.
  2012; 86 (20)
- **Quantitative Determination of Organic Semiconductor Microstructure from the Molecular to Device Scale** *CHEMICAL REVIEWS*
  Rivnay, J., Mannsfeld, S. C., Miller, C. E., Salleo, A., Toney, M. F.
  2012; 112 (10): 5488-5519
- **Estimation of the spatial distribution of traps using space-charge-limited current measurements in an organic single crystal** *PHYSICAL REVIEW B*
  Dacuna, J., Xie, W., Salleo, A.
  2012; 86 (11)
- **Optically switchable transistor via energy-level phototuning in a bicomponent organic semiconductor** *NATURE CHEMISTRY*
  Orgiu, E., Crivillers, N., Herder, M., Grubert, L., Paetzel, M., Frisch, J., Pavlica, E., Duong, D. T., Bratina, G., Salleo, A., Koch, N., Hecht, S., Samori, et al
  2012; 4 (8): 675-679
- **Scalable Fabrication of Strongly Textured Organic Semiconductor Micropatterns by Capillary Force Lithography** *ADVANCED MATERIALS*
  Jo, P. S., Vailionis, A., Park, Y. M., Salleo, A.
  2012; 24 (24): 3269-3274
- **Electrothermal phenomena in zinc oxide nanowires and contacts** *APPLIED PHYSICS LETTERS*
  LeBlanc, S., Phadke, S., Kodama, T., Salleo, A., Goodson, K. E.
  2012; 100 (16)
- **A Selenophene-Based Low-Bandgap Donor-Acceptor Polymer Leading to Fast Ambipolar Logic** *ADVANCED MATERIALS*
  Kronemeijer, A. J., Gili, E., Shahid, M., Rivnay, J., Salleo, A., Heeney, M., Sirringhaus, H.
  2012; 24 (12): 1558-1565
- **Controlled Conjugated Backbone Twisting for an Increased Open-Circuit Voltage while Having a High Short-Circuit Current in Poly(hexylthiophene) Derivatives** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Ko, S., Hoke, E. T., Pandey, L., Hong, S., Mondal, R., Risko, C., Yi, Y., Noriega, R., McGehee, M. D., Bredas, J., Salleo, A., Bao, Z.
  2012; 134 (11): 5222-5232

- **The Mechanism of Burn-in Loss in a High Efficiency Polymer Solar Cell** *ADVANCED MATERIALS*
  Peters, C. H., Sachs-Quintana, I. T., Mateker, W. R., Heumueller, T., Rivnay, J., Noriega, R., Beiley, Z. M., Hoke, E. T., Salleo, A., McGehee, M. D.
  2012; 24 (5): 663-?

- **Effect of Miscibility and Percolation on Electron Transport in Amorphous Poly(3-Hexylthiophene)/Phenyl-C-61-Butyric Acid Methyl Ester Blends** *PHYSICAL REVIEW LETTERS*
  Vakhshouri, K., Kozub, D. R., Wang, C., Salleo, A., Gomez, E. D.
  2012; 108 (2)

- **Laser-Based Synthesis of Nanomaterials in the Solid State** *Conference on Lasers and Electro-Optics (CLEO)*
  Salleo, A.
  IEEE.2012

- **Solution-grown n-type ZnO nanostructures: synthesis, microstructure and doping** *Handbook of ZnO and Related Materials*
  Noriega, R., Mehra, S., Salleo, A.
  edited by Feng, Z., C.
  Taylor and Francis/CRC Press.2012: 1

- **Controlled conjugated backbone twisting for an increased open-circuit voltage while having a high short-circuit current in poly(hexyl)thiophene derivatives** *J. Am. Chem. Soc.*
  Ko, S., Hoke, E., Pandey, L., Hong, S., Mondal, R., Rajib, R., Salleo, A.
  2012; 134: 5222

- **Effect of Miscibility and Percolation on Electron Transport in Amorphous Poly(3-Hexylthiophene)/Phenyl-C61-Butyric Acid Methyl Ester Blends** *Phys. Rev. Lett.*
  Vakhshouri, K., Kozub, D., R., Wang, C., Salleo, A., Gomez, E., D.
  2012; 108: 26601

- **Electrothermal phenomena in zinc oxide nanowires and contacts** *Appl. Phys. Lett.*
  LeBlanc, S., Phadke, S., Kodama, T., Salleo, A., Goodson, K., E.
  2012; 100: 163105

- **Electrothermal phenomena in zinc oxide nanowires and contacts** *Appl. Phys. Lett.*
  LeBlanc, S., Phadke, S., Kodama, T., Salleo, A., Goodson, K., E.
  2012; 100: 163105

- **Title: Using Alignment and 2D Network Simulations to Study Charge Transport Through Doped ZnO Nanowire Thin Film Electrodes** *ADVANCED FUNCTIONAL MATERIALS*
  Phadke, S., Lee, J., West, J., Peumans, P., Salleo, A.
  2011; 21 (24): 4691-4697

- **Modeling space-charge-limited currents in organic semiconductors: Extracting trap density and mobility** *PHYSICAL REVIEW B*
  Dacuna, J., Salleo, A.
  2011; 84 (19)

- **Relation between Microstructure and Charge Transport in Polymers of Different Regioregularity** *JOURNAL OF PHYSICAL CHEMISTRY C*
  McMahon, D. P., Cheung, D. L., Goris, L., Dacuna, J., Salleo, A., Troisi, A.
  2011; 115 (39): 19386-19393

- **Morphology-Dependent Trap Formation in High Performance Polymer Bulk Heterojunction Solar Cells** *ADVANCED ENERGY MATERIALS*
  Beiley, Z. M., Hoke, E. T., Noriega, R., Dacuna, J., Burkhard, G. F., Bartelt, J. A., Salleo, A., Toney, M. F., McGehee, M. D.
  2011; 1 (5): 954-962

- **Real-Time Observation of Poly(3-alkylthiophene) Crystallization and Correlation with Transient Optoelectronic Properties** *MACROMOLECULES*
  Boudouris, B. W., Ho, V., Jimison, L. H., Toney, M. F., Salleo, A., Segalman, R. A.
  2011; 44 (17): 6653-6658

- **Effect of Acene Length on Electronic Properties in 5-, 6-, and 7-Ringed Heteroacenes** *ADVANCED MATERIALS*
  Goetz, K. P., Li, Z., Ward, J. W., Bougher, C., Rivnay, J., Smith, J., Conrad, B. R., Parkin, S. R., Anthopoulos, T. D., Salleo, A., Anthony, J. E., Jurchescu, O. D.

2011; 23 (32): 3698-?

- **Steric Control of the Donor/Acceptor Interface: Implications in Organic Photovoltaic Charge Generation** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Holcombe, T. W., Norton, J. E., Rivnay, J., Woo, C. H., Goris, L., Piliego, C., Griffini, G., Sellinger, A., Bredas, J., Salleo, A., Frechet, J. M.
  2011; 133 (31): 12106-12114
- **Precipitation of silicon nanoclusters by laser direct-write** *OPTICS EXPRESS*
  Mustafeez, W., Lee, D., Grigoropoulos, C., Salleo, A.
  2011; 19 (16): 15452-15458
- **Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport** *MACROMOLECULES*
  Rivnay, J., Steyrleuthner, R., Jimison, L. H., Casadei, A., Chen, Z., Toney, M. F., Facchetti, A., Neher, D., Salleo, A.
  2011; 44 (13): 5246-5255
- **Quantitative analysis of lattice disorder and crystallite size in organic semiconductor thin films** *PHYSICAL REVIEW B*
  Rivnay, J., Noriega, R., Kline, R. J., Salleo, A., Toney, M. F.
  2011; 84 (4)
- **A Boltzmann-weighted hopping model of charge transport in organic semicrystalline films** *JOURNAL OF APPLIED PHYSICS*
  Kwiatkowski, J. J., Jimison, L. H., Salleo, A., Spakowitz, A. J.
  2011; 109 (11)
- **Structural origin of gap states in semicrystalline polymers and the implications for charge transport** *PHYSICAL REVIEW B*
  Rivnay, J., Noriega, R., Northrup, J. E., Kline, R. J., Toney, M. F., Salleo, A.
  2011; 83 (12)
- **Room-Temperature Fabrication of Ultrathin Oxide Gate Dielectrics for Low-Voltage Operation of Organic Field-Effect Transistors** *ADVANCED MATERIALS*
  Park, Y. M., Daniel, J., Heeney, M., Salleo, A.
  2011; 23 (8): 971-974
- **Using Alignment and 2D Network Simulations to Study Charge Transport Through Doped ZnO Nanowire Thin Film Electrodes** *Advanced Functional Materials*
  Phadke, S., Lee, J., Y., West, J., Peumans, P., Salleo, A.
  2011; 21: 4691
- **Room-Temerature Fabrication of Ultra-Thin Oxide Gate Dielectrics for Low-Voltage Operation of Organic Field Effect Transistors** *Advanced Materials*
  Park, Y., M., Daniel, J., Heeney, M., Salleo, A.
  2011; 23: 971
- **Organic Semiconductors in Transistor Applications** *Organic Electronics Vol.II: More Materials and Applications*
  James, D., Smith, D., Heeney, M., Anthopoulos, T., Salleo, A., McCulloch, I.
  edited by Klauk, H.
  Wiley-VCH Verlag.2011: 1
- **Charge Transport Theories in Organic Semiconductors** *Organic Electronics Vol.II: More Materials and Applications*
  Noriega, R., Salleo, A.
  edited by Klauk, H.
  Wiley-VCH Verlag.2011: 1
- **Laser-Synthesized Epitaxial Graphene** *ACS NANO*
  Lee, S., Toney, M. F., Ko, W., Randel, J. C., Jung, H. J., Munakata, K., Lu, J., Geballe, T. H., Beasley, M. R., Sinclair, R., Manoharan, H. C., Salleo, A.
  2010; 4 (12): 7524-7530
- **Unconventional Face-On Texture and Exceptional In-Plane Order of a High Mobility n-Type Polymer** *ADVANCED MATERIALS*
  Rivnay, J., Toney, M. F., Zheng, Y., Kauvar, I. V., Chen, Z., Wagner, V., Facchetti, A., Salleo, A.
  2010; 22 (39): 4359-?

- **Microstructural Characterization and Charge Transport in Thin Films of Conjugated Polymers** *ADVANCED MATERIALS*
  Salleo, A., Kline, R. J., Delongchamp, D. M., Chabinyc, M. L.
  2010; 22 (34): 3812-3838
- **Indacenodithiophene Semiconducting Polymers for High-Performance, Air-Stable Transistors** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Zhang, W., Smith, J., Watkins, S. E., Gysel, R., McGehee, M., Salleo, A., Kirkpatrick, J., Ashraf, S., Anthopoulos, T., Heeney, M., McCulloch, I.
  2010; 132 (33): 11437-11439
- **Quantification of Thin Film Crystallographic Orientation Using X-ray Diffraction with an Area Detector** *LANGMUIR*
  Baker, J. L., Jimison, L. H., Mannsfeld, S., Volkman, S., Yin, S., Subramanian, V., Salleo, A., Alivisatos, A. P., Toney, M. F.
  2010; 26 (11): 9146-9151
- **Probing the electrical properties of highly-doped Al:ZnO nanowire ensembles** *JOURNAL OF APPLIED PHYSICS*
  Noriega, R., Rivnay, J., Goris, L., Kaelblein, D., Klauk, H., Kern, K., Thompson, L. M., Palke, A. C., Stebbins, J. F., Jokisaari, J. R., Kusinski, G., Salleo, A.
  2010; 107 (7)
- **Transmission electron microscopy of solution-processed, intrinsic and Al-doped ZnO nanowires for transparent electrode fabrication** *13th International Conference on Electron Microscopy*
  Kusinski, G. J., Jokisaari, J. R., Noriega, R., Goris, L., Donovan, M., Salleo, A.
  WILEY-BLACKWELL.2010: 443–49
- **Microstructural Origin of High Mobility in High-Performance Poly(thieno-thiophene) Thin-Film Transistors** *ADVANCED MATERIALS*
  Wang, C., Jimison, L. H., Goris, L., McCulloch, I., Heeney, M., Ziegler, A., Salleo, A.
  2010; 22 (6): 697-?
- **Materials and Applications for Large Area Electronics: Solution-Based Approaches** *CHEMICAL REVIEWS*
  Arias, A. C., MacKenzie, J. D., McCulloch, I., Rivnay, J., Salleo, A.
  2010; 110 (1): 3-24
- **Materials and Applications for Large-Area Electronics: Solution-Based Approaches** *Chemical Reviews*
  Arias, A., C., MacKenzie, D., McCulloch, I., Rivnay, J., Salleo, A.
  2010; 110: 3
- **Microstructural Origin of High-Mobility in High-Performance Poly(thieno-thiophene) Thin Film Transistors** *Advanced Materials*
  Wang, C., Jimison, L., H., Goris, L., McCulloch, I., Heeney, M., Ziegler, A., Salleo, A.
  2010; 22: 697
- **Unconvention Face-On Texture and Exceptional In-Plane Order of a High Mobility n-Type Polymer** *Advanced Materials*
  Rivnay, J., Toney, M., F., Zheng, Y., Kauvar, I., V., Chen, Z., Wagner, V., Salleo, A.
  2010; 22: 4359
- **Light trapping in thin-film silicon solar cells with submicron surface texture** *OPTICS EXPRESS*
  Dewan, R., Marinkovic, M., Noriega, R., Phadke, S., Salleo, A., Knipp, D.
  2009; 17 (25): 23058-23065
- **Large modulation of carrier transport by grain-boundary molecular packing and microstructure in organic thin films** *NATURE MATERIALS*
  Rivnay, J., Jimison, L. H., Northrup, J. E., Toney, M. F., Noriega, R., Lu, S., Marks, T. J., Facchetti, A., Salleo, A.
  2009; 8 (12): 952-958
- **Ordering of Poly(3-hexylthiophene) Nanocrystallites on the Basis of Substrate Surface Energy** *ACS NANO*
  Meredig, B., Salleo, A., Gee, R.
  2009; 3 (10): 2881-2886
- **Dual-gate organic thin film transistors as chemical sensors** *APPLIED PHYSICS LETTERS*
  Park, Y. M., Salleo, A.
  2009; 95 (13)
- **Charge-Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regioregular Poly(3-hexylthiophene)** *ADVANCED MATERIALS*

Jimison, L. H., Toney, M. F., McCulloch, I., Heeney, M., Salleo, A.
2009; 21 (16): 1568-?

- **Intrinsic and Doped Zinc Oxide Nanowires for Transparent Electrode Fabrication via Low-Temperature Solution Synthesis** *50th Electronic Materials Conference*
  Goris, L., Noriega, R., Donovan, M., Jokisaari, J., Kusinski, G., Salleo, A.
  SPRINGER.2009: 586–95

- **Semiconducting Thienothiophene Copolymers: Design, Synthesis, Morphology, and Performance in Thin-Film Organic Transistors** *ADVANCED MATERIALS*
  McCulloch, I., Heeney, M., Chabinyc, M. L., DeLongchamp, D., Kline, R. J., Coelle, M., Duffy, W., Fischer, D., Gundlach, D., Hamadani, B., Hamilton, R., Richter, L., Salleo, et al
  2009; 21 (10-11): 1091-1109

- **Large modulation of carrier transport by grain-boundary molecular packing and microsctructure in organic thin films** *Nature Materials*
  Rivnay, J., Jimison, L., H., Northrup, J., E., Toney, M., F., Noriega, R., Lu, S., Salleo, A.
  2009; 8: 952

- **Flexible Electronics: Materials and Applications**
  edited by Salleo, A., Wong, W., S.
  Springer Verlag.2009

- **Light Trapping in Thin Film Silicon Solar Cells with Periodic Pyramid Texture** *Optics Express*
  Devan, R., Marinkovic, M., Noriega, R., Phadke, S., Salleo, A., Knipp, D.
  2009; 17: 23058

- **Dual gate organic thin film transistors as chemical sensors** *Applied Physics Letters*
  Park, Y., M., Salleo, A.
  2009; 95: 133307

- **Materials and Novel Patterning methods for Flexible Electronics** *Flexible Electronics: Materials and Applications*
  Wong, W., S., Chabinyc, M., L., Ng, T., N., Salleo, A.
  edited by Wong, W., W., Salleo, A.
  Springer Verlag.2009: 1

- **Charge Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regio-Regular Poly(3-hexylthiophene)** *Advanced Materials*
  Jimison, L., H., Toney, M., F., McCulloch, I., Heeney, M., Salleo, A.
  2009; 21: 1568

- **Correlating the microstructure of thin films of poly[5,5-bis(3-dodecyl-2-thienyl)-2,2-bithiophene] with charge transport: Effect of dielectric surface energy and thermal annealing** *PHYSICAL REVIEW B*
  Jimison, L. H., Salleo, A., Chabinyc, M. L., Bernstein, D. P., Toney, M. F.
  2008; 78 (12)

- **Interfacial effects in thin films of polymeric semiconductors** *JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B*
  Rivnay, J., Jimison, L. H., Toney, M. F., Preiner, M., Melosh, N. A., Salleo, A.
  2008; 26 (4): 1454-1460

- **Connecting electrical and molecular properties of semiconducting polymers for thin-film transistors** *MRS BULLETIN*
  Chabinyc, M. L., Jimison, L. H., Rivnay, J., Salleo, A.
  2008; 33 (7): 683-689

- **Connecting Electrical and Molecular Properties of Semiconducting Polymers for Thin Film Transistors** *MRS Bulletin*
  Chabinyc, M., Jimison, L., H., Rivnay, J., Salleo, A.
  2008; 33: 683-689

- **Correlating the microstructure of thin films of Poly[5,5'-bis(3-dodecyl-2-thienyl)-2,2'-bithiophene] with charge transport: effect of dielectric surface energy and thermal annealing.** *Physical Review B*
  Jimison, L., H., Salleo, A., Chabinyc, M., L., Toney, M., F.

2008; 78: 19

- **Solution based self-assembly of an be array of polymeric thin-film transistors** *ADVANCED MATERIALS*
  Salleo, A., Arias, A. C.
  2007; 19 (21): 3540-?
- **Charge transport in polymeric transistors** *MATERIALS TODAY*
  Salleo, A.
  2007; 10 (3): 38-45
- **Microstructure, charge transport and trapping in anisotropic polymeric thin film transistors** *IEEE LEOS Summer Topical Meeting 2007*
  Jimison, L. H., Rivnay, J., Toney, M. F., Salleo, A.
  IEEE.2007: 206–207
- **Bias stress effects in organic thin film transistors** *2007 IEEE INTERNATIONAL RELIABILITY PHYSICS SYMPOSIUM PROCEEDINGS - 45TH ANNUAL*
  Ng, T. N., Chabinyc, M. L., Street, R. A., Salleo, A.
  2007: 243-?
- **Solution Based Self-Assembly of an Array of Polymeric Thin-Film Transistors** *Advanced Materials*
  Salleo, A., Arias, A., C.
  2007; 19: 3540
- **Jet printing flexible displays** *MATERIALS TODAY*
  Street, R. A., Wong, W. S., Ready, S. E., Chabinyc, I. L., Arias, A. C., Limb, S., Salleo, A., Lujan, R.
  2006; 9 (4): 32-37
- **Micro-structural effects on the performance of poly(thiophene) field-effect transistors** *Conference on Organic Field-Effect Transistors V*
  Salleo, A., Jimison, L. H., Donovan, M. M., Chabinyc, M. L., Toney, M. F.
  SPIE-INT SOC OPTICAL ENGINEERING.2006
- **Toolset for printed electronics** *DIGITAL FABRICATION 2006, FINAL PROGRAM AND PROCEEDINGS*
  Ready, S. E., Wong, W. S., Arias, A., Salleo, A., Apte, R. B., Chabinyc, M. L., Street, R. A.
  2006: 17-20
- **Stability of organic transistors** *Organic Electronics*
  Salleo, A., Chabinyc, M., L.
  edited by Klauk, H.
  Wiley-VCH Verlag.2006: 1
- **Jet printing flexible displays** *Materials Today*
  Street, R., A., Wong, W., S., Ready, S., E., Chabinyc, M., L., Arias, A., C., Limb, S., Salleo, A.
  2006; 9: 32
- **Microstructural effects on the performance of poly(thiophene) thin-film-transistors**
  Salleo, A., Jimison, L., H., Donovan, M., M., Chabinyc, M., L., Toney, M., F.
  2006
- **Printing methods and materials for large-area electronic devices** *PROCEEDINGS OF THE IEEE*
  Chabinyc, M. L., Wong, W. S., Arias, A. C., Ready, S., Lujan, R. A., Daniel, J. H., Krusor, B., Apte, R. B., Salleo, A., Street, R. A.
  2005; 93 (8): 1491-1499
- **Polymer thin-film transistor arrays patterned by stamping** *ADVANCED FUNCTIONAL MATERIALS*
  Salleo, A., Wong, W. S., Chabinyc, M. L., Paul, K. E., Street, R. A.
  2005; 15 (7): 1105-1110
- **Transport in polycrystalline polymer thin-film transistors** *PHYSICAL REVIEW B*
  Street, R. A., Northrup, J. E., Salleo, A.
  2005; 71 (16)

- **Reversible and irreversible trapping in poly(thiophene) thin-film-transistors** *Applied Physics Letters*
  Salleo, A., Endicott, F., Street, R., A.
  2005; 86: 263505
- **Printed active-matrix TFT arrays for x-ray imaging** *MEDICAL IMAGING 2005: PHYSICS OF MEDICAL IMAGING, PTS 1 AND 2*
  Street, R. A., Wong, W. S., Ready, S., Lujan, R., Arias, A. C., Chabinyc, M. L., Salleo, A., Apte, R., Antonuk, L. E.
  2005; 5745: 7-17
- **Polymer thin-film-transistor arrays patterned by stamping** *Advanced Functional Materials*
  Salleo, A., Wong, W., S., Chabinyc, M., L., Paul, K., E., Street, R., A.
  2005; 15: 1105
- **Printing Methods and Materials for Large-Area Electronic Devices**
  Chabinyc, M., L., Wong, W., S., Arias, A., C., Ready, S., E., Lujan, R., Daniel, J., H., Salleo, A.
  2005
- **Transport in polycrystalline polymer TFTs** *Physical Review B*
  Street, R., A., Northrup, J., E., Salleo, A.
  2005; 71: 165202
- **Materials requirements and fabrication of active matrix arrays of organic thin-film transistors for displays** *CHEMISTRY OF MATERIALS*
  Chabinyc, M. L., Salleo, A.
  2004; 16 (23): 4509-4521
- **Lamination method for the study of interfaces in polymeric thin film transistors** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Chabinyc, M. L., Salleo, A., Wu, Y. L., Liu, P., Ong, B. S., Heeney, M., McCulloch, I.
  2004; 126 (43): 13928-13929
- **All jet-printed polymer thin-film transistor active-matrix backplanes** *APPLIED PHYSICS LETTERS*
  Arias, A. C., Ready, S. E., Lujan, R., Wong, W. S., Paul, K. E., Salleo, A., Chabinyc, M. L., Apte, R., Street, R. A., Wu, Y., Liu, P., ONG, B.
  2004; 85 (15): 3304-3306
- **Localized state effects in polymer thin film transistors** *JOURNAL OF NON-CRYSTALLINE SOLIDS*
  Street, R. A., Salleo, A., Chabinyc, M., Paul, K.
  2004; 338: 607-611
- **Kinetics of Bias-stress and Bipolaron formation in regio-regular poly(thiophene)** *Physical Review B*
  Salleo, A., Street, R., A.
  2004; 23 (70): 235324
- **Printed polymer transistors and display backplanes**
  Arias, A., C., Ready, S., E., Lujan, R., A., Wong, W., S., Paul, K., E., Chabinyc, M., L., Salleo, A.
  2004
- **Short-channel effects in regio-regular poly(thiophene) thin-film transistors**
  Chabinyc, M., L., Lu, J., P., Salleo, A., Street, R., A.
  2004
- **Materials requirements and fabrication of active matrix arrays of organic thin-film-transistors for displays** *special issue of Chemistry of Materials on Organic Electronics*
  Chabinyc, M., L., Salleo, A.
  2004; 23 (16): 4509
- **Intrinsic hole mobility and trapping in regio-regular poly(thiophene)** *Physical Review B*
  Salleo, A., Chen, T., W., Volkel, A., Wu, Y., Liu, P., Ong, B., S.
  2004; 7 (70): 115311
- **Organic Electronics** *Flexible Flat Panel Displays*
  Apte, R., B., Ong, B., S., Street, R., A., Salleo, A., Chabinyc, M., L., Arias, A., C.
  edited by Crawford, G., P.

2004: 1

- **Localized state effects in polymer thin-film transistors** *Journal of Non-Crystalline Solids*
  Street, R., A., Salleo, A., Chabinyc, M., L.
  2004; 338-340: 607
- **Lamination Method for the Study of Interfaces in Polymeric Thin Film Transistors** *Journal of the American Chemical Society-Communication*
  Chabinyc, M., L., Salleo, A., Wu, Y., Liu, P., Ong, B., S., Heeney, M.
  2004; 43 (126): 13928
- **All jet-printed polymer thin film transistor active-matrix backplanes** *Applied Physics Letters*
  Arias, A., C., Ready, S., E., Lujan, R., Wong, W., S., Paul, K., E., Salleo, A.
  2004; 15 (85): 3304
- **Bipolaron mechanism for bias-stress effects in polymer transistors** *PHYSICAL REVIEW B*
  Street, R. A., Salleo, A., Chabinyc, M. L.
  2003; 68 (8)
- **Light-induced bias stress reversal in polyfluorene thin film transistors** *Journal of Applied Physics*
  Salleo, A., Street, R., A.
  2003; 1 (94): 471
- **Printed polymer transistor arrays for displays and imaging**
  Paul, E., Wong, W., S., Chabinyc, M., L., Salleo, A., Ready, S., E., Apte, R., B.
  2003
- **Bipolaron mechanism for bias-stress effects in organic transistors** *Physical Review B*
  Street, R., A., Salleo, A., Chabinyc, M., L.
  2003; 8 (68): 85316
- **Laser driven phase transformations in amorphous silica** *Nature Materials*
  Salleo, A., Taylor, S., T., Martin, M., C.
  2003; 12 (2): 796
- **Polymer thin-film transistors with chemically modified dielectric interfaces** *APPLIED PHYSICS LETTERS*
  Salleo, A., Chabinyc, M. L., Yang, M. S., Street, R. A.
  2002; 81 (23): 4383-4385
- **Organic polymeric thin-film transistors fabricated by selective dewetting** *APPLIED PHYSICS LETTERS*
  Chabinyc, M. L., Wong, W. S., Salleo, A., Paul, K. E., Street, R. A.
  2002; 81 (22): 4260-4262
- **Contact effects in polymer transistors** *Applied Physics Letters*
  Street, R., A., Salleo, A.
  2002; 15 (81): 2887
- **Fabrication processes for polymeric organic transistors**
  Salleo, A., Chabinyc, M., L., Paul, K., E., Apte, R., B., Street, R., A., Ong, B., S.
  2002
- **Continuous-wave InGaN laser diodes on copper and diamond substrates** *Journal of Materials Research*
  Wong, W., S., Kneissl, M., Treat, D., W., Panero, M., Miyashita, N., Salleo, A.
  2002; 4 (17): 1
- **Organic Polymeric Thin Film Transistors Fabricated by Selective Dewetting** *Applied Physics Letters*
  Chabinyc, M., L., Wong, W., S., Salleo, A., Paul, K., E., Street, R., A.
  2002; 22 (81): 4260
- **High-resolution jet printing for fabrication of a Si:H thin film transistors and arrays**
  Wong, W., S., Ready, S., E., Matusiak, R., White, S., D., Lu, J., P., Ho, J., H., Salleo, A.

2002

- **Polymer thin-film transistors with chemically modified dielectric interfaces** *Applied Physics Letters*
  Salleo, A., Chabinyc, M., L., Street, R., A., Yang, M., S.
  2002; 23 (81): 4383
- **Energy deposition at front and rear surfaces during picosecond laser interaction with fused silica** *Applied Physics Letters*
  Salleo, A., Génin, F., Y., Feit, M., D., Teepe, A., M., Sands, T., Russo, R., E.
  2001; 19 (78): 2840
- **Role of light intensification by cracks in optical breakdown on surfaces** *Journal of the Optical Society of America A*
  Génin, F., Y., Salleo, A., Pistor, T., V., Chase, L., L.
  2001; 10 (18): 2607
- **Rear surface laser damage on 355 nm silica optics due to Fresnel diffraction at front surface contamination particles** *Applied Optics*
  Génin, F., Y., Feit, M., D., Kozlowski, M., R., Rubenchik, A., M., Salleo, A., Yoshiyama, J.
  2000; 21 (39): 3654-3663
- **Machining of transparent materials using an IR and UV nanosecond pulsed laser** *Applied Physics A*
  Salleo, A., Sands, T., Génin, F., Y.
  2000; 6 (71): 601-608
- **Integration of GaN Thin Films with Dissimilar Substrate Materials by Pd-In Metal Bonding and Laser Liftoff** *Journal of Electronic Materials*
  Wong, W., S., Wengrow, A., B., Cho, Y., Salleo, A., Quitoriano, N., J., Cheung, N., W.
  1999; 12 (28): 1409-13
- **Crack propagation in fused silica during UV and IR ns-laser illumination.**
  Salleo, A., Chinsio, R., Génin, F., Y.
  edited by Exarhos et al., G., J.
  1999
- **Modeling of laser-induced surface cracks in silica at 355 nm**
  Feit, M., D., Campbell, J., Faux, D., Génin, F., Y., Kozlowski, M., R., Rubenchik, A., M., Salleo, A.
  edited by Exarhos et al., G., J.
  1998
- **Characterization of nodular and thermal defects in hafnia/silica multilayer coatings using optical, photothermal, and atomic force microscopy**
  Stolz, C., J., Yoshiyama, J., M., Salleo, A., Wu, Z., L., Green, J., Krupka, R.
  edited by Exarhos et al., G., J.
  1998
- **Laser-induced damage of fused silica at 355 nm initiated at scratches**
  Salleo, A., Génin, F., Y., Yoshiyama, J., Stolz, C., J., Kozlowski, M., R.
  edited by Exarhos et al., G., J.
  1998
- **Pulse-shape and pulse-length scaling of ns pulse laser damage threshold due to rate limiting by thermal conduction.**
  Feit, M., D., Rubenchik, A., M., Salleo, A., Eimerl, D.
  edited by Exarhos et al., G., J.
  1998
- **Effects of polishing, etching, cleaving, and water leaching on the UV laser damage of fused silica**
  Yoshiyama, J., Génin, F., Y., Salleo, A., Thomas, I., Kozlowski, M., R., Sheehan, L., M.
  edited by Exarhos et al., G., J.
  1998
- **Influence of external mechanical loadings (creep, fatigue) on oxygen diffusion during nickel oxidation.** *Oxidation of Metals*
  Moulin, G., Arevalo, P., Salleo, A.
  1996; 1-2 (45): 153-181

- **High temperature reactivity of different forms of carbon at low oxygen fugacity** *Solid State Ionics, Diffusions & Reactions*
  Gozzi, D., Guzzardi, G., Salleo, A.
  1996; 3-4 (83): 177-189