

Stanford

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- Postdoctoral Scholar, Materials Science and Engineering
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Bio

STANFORD ADVISORS

- Alberto Salleo, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **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
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- **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
- **Polaron absorption in aligned conjugated polymer films: breakdown of adiabatic treatments and going beyond the conventional mid-gap state model.** *Materials horizons*
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- **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*
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- **Role of aggregates and microstructure of mixed-ionic-electronic-conductors on charge transport in electrochemical transistors.** *Materials horizons*
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2023
- **Linking Phase Behavior to Performance Parameters in Non-Fullerene Acceptor Solar Cells** *ADVANCED ENERGY MATERIALS*
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- **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.

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- **Impact of Side Chain Hydrophilicity on Packing, Swelling and Ion Interactions in Oxy-bithiophene Semiconductors.** *Advanced materials (Deerfield Beach, Fla.)*
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- **Critical analysis of self-doping and water-soluble n-type organic semiconductors: structures and mechanisms** *JOURNAL OF MATERIALS CHEMISTRY C*
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- **Mixed Ionic-Electronic Conduction, a Multifunctional Property in Organic Conductors.** *Advanced materials (Deerfield Beach, Fla.)*
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- **Redox-Active Polymers Designed for the Circular Economy of Energy Storage Devices** *ACS ENERGY LETTERS*
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- **Ion Pair Uptake in Ion Gel Devices Based on Organic Mixed Ionic-Electronic Conductors** *ADVANCED FUNCTIONAL MATERIALS*
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- **A Stacked Hybrid Organic/Inorganic Electrochemical Random-Access Memory for Scalable Implementation** *ADVANCED ELECTRONIC MATERIALS*
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