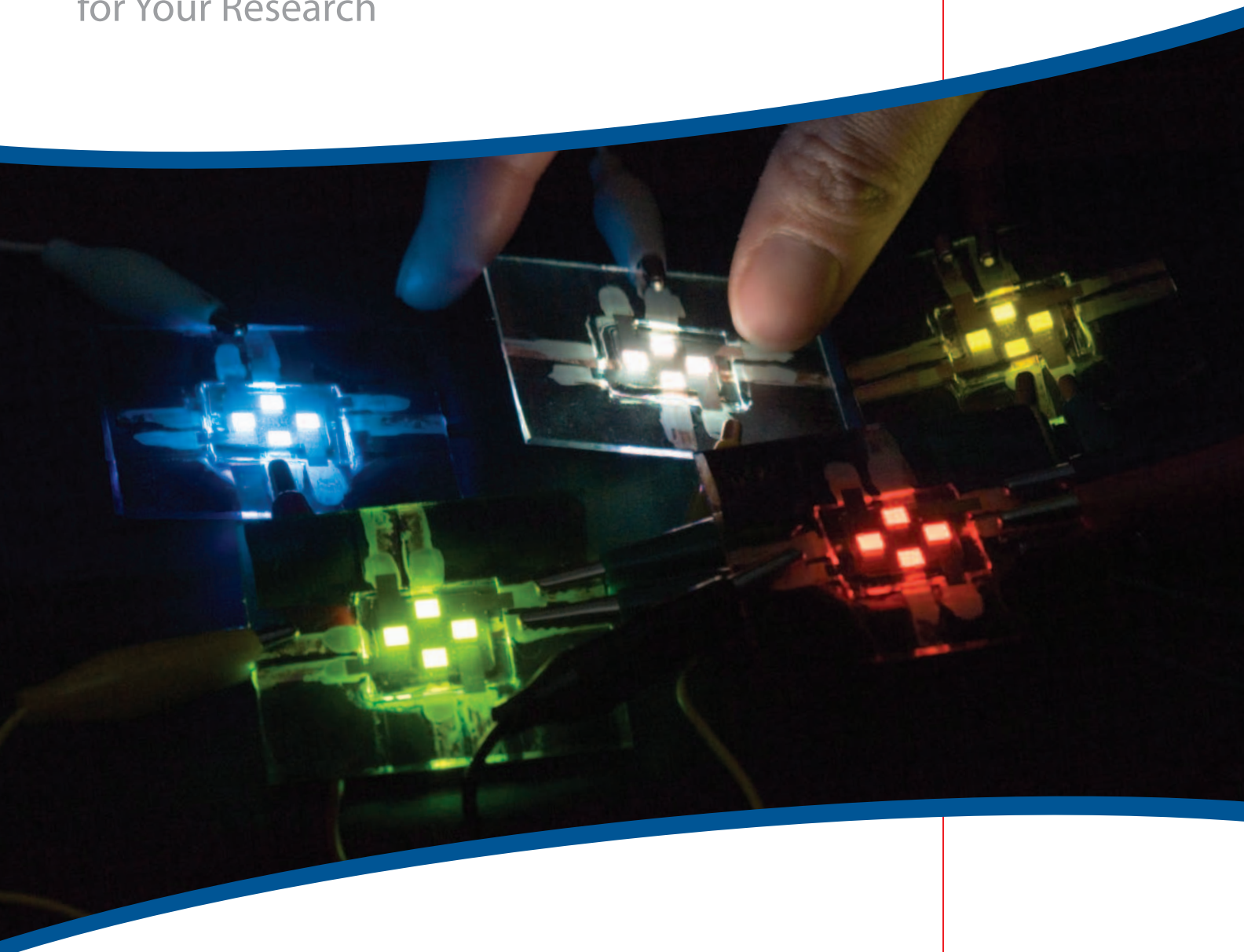


Organic & Printed Electronics

Innovative Materials and Resources
for Your Research



Technical Periodical and Online Resources



Free Access Technical Periodical

Material Matters® Vol. 7, No. 1

Innovative Materials for High-Performance Optoelectronic Devices (OPVs, OFETs, and OLEDs)

- Materials Design Concepts for Efficient Blue OLEDs: A Joint Theoretical & Experimental Study
- Development of Organic Semiconductors from Highly-Ordered Oligo and Polythiophenes.
- Diketopyrrolopyrrole (DPP)-containing Conjugated Small Molecules for Optoelectronic Devices
- Functionalized Nanomaterials for Optoelectronic Applications

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Webcast and Technology Spotlights

Molecular Self-Assembly

Professor Paul Weiss

Director – California NanoSystems Institute

Professor – Chemistry and Biochemistry, University of California, Los Angeles

"Self and Directed Assembly of Single Molecule Environments"

Professor Milan Mrksich

Investigator – Howard Hughes Medical Institute, Chicago, IL

Professor – Chemistry, University of Chicago, IL

"Using Self-Assembled Monolayers and Mass Spectrometry for BioChip Applications"

Aldrich.com/selfassembly

Materials and Technical Resources

Aldrich Materials Science is committed to providing a wide range of organic semiconducting products for use in high performance devices (OPVs, OLEDs and OTFTs) to support academic research through to industrial manufacturing.

Organic Photovoltaic (OPV)

Materials

- Donor-Acceptor Materials
- Buffer Layer Materials
- Dye Sensitized Solar Cell Materials (DSSCs)
- FTO Substrates
- Synthetic Precursors

Technical Resources

- Ruthenium-based Dyes for DSSCs
- Efficient DSSC for Direct Conversion of Sunlight to Electricity
- Preparation of Photoactive Layers for OPV Applications
- Synthesis of ZnO Aggregates and their Application in DSSCs
- Plexcore® Photovoltaic Ink System

Organic Field Effect Transistors (OFET)

Materials

- n-Type Semiconductors
- p-Type Semiconductors
- Dielectric Materials
- Synthetic Precursors

Technical Resources

- Plexcore® P3HT as a p-Type Organic Semiconductor
- Thin Film Transistor Device Preparation and Performance
- Fabrication of an OFET Device using a Soluble Pentacene Precursor
- TIPS Pentacene: Dip Coating Procedure
- Solution Processable Polytriarylamine Semiconductors

Organic Light Emitting Devices (OLED & PLED)

Materials

- Hole Transport & Hole Injection Layer Materials
- Electron Injection/Electron Blocking Layer
- Electron Transport & Hole Blocking Materials
- Host Materials
- Light Emitters & Dopants
- Light-Emitting Polymers
- Synthetic Precursors

Technical Resources

- Plexcore Conductive Inks for HILs
- Polymer-based Materials for Printed Electronics: Enabling High Efficiency Solar Power and Lighting
- Achieving High Efficiency in Organic Light-Emitting Devices
- Light Emitting Polymers in PLED Devices

For a complete overview, please visit [Aldrich.com/spie](https://www.aldrich.com/spie)

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