Stanford

Alberto Salleo

Associate Professor of 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. Ultra-fast laser processing for electronics, photonics and biotechnology. Defects and structure/property studies of polymeric semiconductors, nano-structured and amorphous materials in thin films.

ACADEMIC APPOINTMENTS

- Associate Professor, Materials Science and Engineering
- Affiliate, Precourt Institute for Energy
- Member, Stanford Neurosciences Institute

HONORS AND AWARDS

- Tau Beta Pi Award for Excellence in Undergraduate Teaching, Stanford University (2013)
- Early Career Award, SPIE (2010)
- Untenured Faculty Award, 3M (2007-2009)
- CAREER Award, NSF (2007-2011)
- Outstanding Performance Award, PARC (2003, 2004)
- John Tyssowski Memorial Fellow, UC Berkeley (1997)
- Award for Outstanding Students Abroad, Italian University Council (1997)
- Fellow, Fulbright (1995-2000)

PROFESSIONAL EDUCATION

- PhD, UC Berkeley , Materials Science (2001)

Teaching

COURSES

2017-18

- Electronic and Photonic Materials and Devices Laboratory: MATSCI 164, MATSCI 174 (Aut)
- Organic Semiconductors for Electronics and Photonics: MATSCI 343 (Spr)
- Thermodynamics and Phase Equilibria: MATSCI 194, MATSCI 204 (Win)
- Thermodynamics and Phase Equilibria: MATSCI 204 (Sum)

2016-17

- Organic Semiconductors for Electronics and Photonics: MATSCI 343 (Spr)
- Thermodynamics and Phase Equilibria: MATSCI 194, MATSCI 204 (Win)

2015-16

- Electronic and Photonic Materials and Devices Laboratory: MATSCI 164, MATSCI 174 (Aut)
- Organic Semiconductors for Electronics and Photonics: MATSCI 343 (Spr)
- Thermodynamics and Phase Equilibria: MATSCI 194, MATSCI 204 (Win)

2014-15

- Electronic and Photonic Materials and Devices Laboratory: MATSCI 164, MATSCI 174 (Aut)
- Lasers in Materials Processing: MATSCI 311 (Spr)
- Thermodynamics and Phase Equilibria: MATSCI 194, MATSCI 204 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Aryeh Gold-Parker, Aditi Krishnapriyan

Postdoctoral Faculty Sponsor

Armantas Melianas, Onur Parlak

Doctoral Dissertation Advisor (AC)

David Hanifi, Scott Keene, Rohit Prasanna, Mark Tuchman

Doctoral (Program)

Mark Tuchman

Publications

PUBLICATIONS

- **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
- **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

- **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

- **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

- **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

- **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-?

- **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

- **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.
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