

Stanford

Alberto Salleo

Associate Professor of Materials Science and Engineering

CONTACT INFORMATION

- **Administrator**

Naomi Tudor - Administrative Associate

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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, Wu Tsai 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

2018-19

- 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 (Win, Sum)
- Thermodynamics and Phase Equilibria: MATSCI 204 (Win, Sum)

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)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Aditi Krishnapriyan, Daniel Rehn

Postdoctoral Faculty Sponsor

Benjamin Cotts, Armantas Melianas, Quentin Thiburce

Doctoral Dissertation Advisor (AC)

David Hanifi, Scott Keene, Rohit Prasanna, Mark Tuchman

Master's Program Advisor

Alan Murphy, Marco Scaglia

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., Chabinc, 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., Zherebetsky, 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., Steyrlleuthner, 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 (0001)over-bar at low pressures** *JOURNAL OF MATERIALS RESEARCH*
Capano, M. A., Capano, B. M., Morissette, 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., Inganäs, O., Andersson, M. R., Müller, 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.
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.
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