

Publikationsliste von Dr. Jens Andreas Hauch

h-index 24, Zitationen insgesamt: >4000

1. Hauch, J. A.; Marder, M.P.; **Energy balance in dynamic fracture, investigated by a potential drop technique**; International Journal of Fracture; Vol. 90; no. 1; pp. 133-151: 1998
2. Hauch, J. A.; Marder, M. P.; **How cracks misbehave in silicon**; APS March Meeting Abstracts:1998
3. Hauch, J. A.; **Dynamic fracture in brittle materials**; PhD Thesis:1998
4. Hauch, J. A.; Holland, D. ; Marder, M. P.; Swinney, H. L.; **Dynamic fracture in single crystal silicon**; Physical Review Letters; Vol. 82; no. 19; pp. 3823: 1999
5. Rieger, G; Ludwig, K; Hauch, J. A.; Clemens, W; **GMR sensors for contactless position detection**; Sensors and Actuators A: Physical; Vol. 91; no. 1; pp. 43046: 2001
6. Hauch, J. A. ; Rieger, G.; Ganzer, S. ; Bayreuther, G.; **High speed signal transmission with GMR based magnetocouplers**; INTERMAG Europe 2002 AV7: 2002
7. Waldauf, C.; Schilinsky, P.; Perisutti, M.; Hauch, J. A.; Brabec, C. J.; **Solution-Processed Organic n-Type Thin-Film Transistors**; Advanced Materials; Vol. 15; no. 24; pp. 2084-2088: 2003
8. Ganzer, S.; Bayreuther, G.; Hauch, J. A.; Rieger, G.; **High speed signal transmission with magneto-couplers**; Journal of applied physics; Vol. 93; no. 10; pp. 6867-6869: 2003
9. Ludwig, K.; Hauch, J. A.; Mattheis, R.; Barholz, K.-U.; Rieger, G.; **Adapting GMR sensors for integrated devices**; Sensors and Actuators A: Physical; Vol. 106; no. 1; pp. 15-18: 2003
10. Schilinsky, P.; Waldauf, C.; Hauch, J. A.; Brabec, C. J.; **Simulation of light intensity dependent current characteristics of polymer solar cells**; Journal of Applied Physics; Vol. 95; no. 5; pp. 2816-2819: 2004
11. Schuller, S.; Schilinsky, P.; Hauch, J. A.; Brabec, C. J.; **Determination of the degradation constant of bulk heterojunction solar cells by accelerated lifetime measurements**; Applied Physics A: Materials Science & Processing; Vol. 79; no. 1; pp. 37-40: 2004
12. Waldauf, C.; Schilinsky, P.; Hauch, J.; Brabec, C. J.; **Material and device concepts for organic photovoltaics: towards competitive efficiencies**; Thin Solid Films; Vol. 451; pp. 503-507: 2004
13. Schilinsky, P.; Waldauf, C.; Hauch, J. A.; Brabec, C. J.; **Polymer photovoltaic detectors: progress and recent developments**; Thin solid films; Vol. 451; pp. 105-108: 2004
14. Rauch, T.; Henseler, D.; Schilinsky, P.; Waldauf, C.; Hauch, J. A.; Brabec, C. J.; **Performance of bulk-heterojunction organic photodetectors**; Nanotechnology; pp. 632-634: 2004
15. Brabec, C. J.; Hauch, J. A.; Schilinsky, P.; Waldauf, C.; **Production aspects of organic photovoltaics and their impact on the commercialization of devices**; MRS bulletin; Vol. 30; no. 1; pp. 50-52: 2005
16. Moro, L.; Rutherford, N.M.; Visser, R. J.; Hauch, J. A. ; Klepek, C.; Denk, P.; Schilinsky, P.; Brabec, C. J.; **Barix multilayer barrier technology for organic solar cells**; Proc. SPIE; Vol. 6334; pp. 63340M: 2005
17. Waldauf, C.; Scharber, M. C.; Schilinsky, P.; Hauch, J. A.; Brabec, C. J.; **Physics of organic bulk heterojunction devices for photovoltaic applications**; Journal of applied physics; Vol. 99; no. 10; pp. 104503: 2006
18. Hauch, J. A.; Schilinsky, P.; Choulis, S. A.; Childers, R.; Biele, M.; Brabec, C. J.; **Flexible organic P3HT: PCBM bulk-heterojunction modules with more than 1 year outdoor lifetime**; Solar Energy Materials and Solar Cells; Vol. 92; no. 7; pp. 727-731: 2008
19. Hauch, J. A.; Schilinsky, P.; Choulis, S. A.; Rajoelson, S.; Brabec, C. J.; **The impact of water vapor transmission rate on the lifetime of flexible polymer solar cells**; Applied Physics Letters; Vol. 93; no. 10; pp. 331: 2008
20. Nisato, G.; Hauch, J. A.; Book Chapter: **Current and Future Directions in Organic Photovoltaics**; Organic photovoltaics: materials, device physics, and manufacturing technologies: 2008
21. Seemann, A.; Egelhaaf, H.-J.; Brabec, C. J.; Hauch, J. A.; **Influence of oxygen on semi-transparent organic solar cells with gas permeable electrodes**; Organic Electronics; Vol. 10; no. 8; pp. 1424-1428: 2009
22. Kreger, M.; Zeira, E.; Eckert, B.; Lee, S.; Pusateri, B.; Wicks, S.; Rodman, S.; Hauch, J. A.; Brabec, C. J.; **Reliability and lifetime of flexible organic electronics**; Reliability Physics Symposium, 2009 IEEE International; pp. 104-104: 2009
23. Morana, M.; Azimi, H.; Dennler, G.; Egelhaaf, H.-J.; Scharber, M.; Forberich, K.; Hauch, J. A.; Gaudiana, R.; Waller, D.; Zhu, Z.; **Nanomorphology and Charge Generation in Bulk Heterojunctions Based on**

- Low-Bandgap Dithiophene Polymers with Different Bridging Atoms**; Advanced Functional Materials; Vol. 20; no. 7; pp. 1180-1188: 2010
24. Hintz, H.; Egelhaaf, H.-J.; L  er, L.; Hauch, J. A.; Peisert, H.; Chass  , T.; **Photodegradation of P3HT– a systematic study of environmental factors**; Chemistry of Materials; Vol. 23; no. 2; pp. 145-154: 2010
 25. Ameri, T.; Dennler, G.; Waldauf, C.; Azimi, H.; Seemann, A.; Forberich, K.; Hauch, J. A.; Scharber, M.; Hingerl, K.; Brabec, C. J.; **Fabrication, optical modeling, and color characterization of semitransparent bulk-heterojunction organic solar cells in an inverted structure**; Advanced Functional Materials; Vol. 20; no. 10; pp. 1592-1598: 2010
 26. Reese, M. O.; Gevorgyan, S. A.; Kurtz, S. R.; Ginley, D. S.; Hauch, J. A.; Krebs, F. C. et al.; **Consensus stability testing protocols for organic photovoltaic materials and devices**; Solar Energy Materials and Solar Cells; Vol. 95; no. 5; pp. 1253-1267: 2011
 27. Gevorgyan, S. A.; Medford, A. J.; Bundgaard, E.; Sapkota, S. B.; Schleiermacher, H.-F.; Zimmermann, B.; W  rfel, U.; Chafiq, A.; Lira-Cantu, M.; Swonke, T.; **An inter-laboratory stability study of roll-to-roll coated flexible polymer solar modules**; Solar Energy Materials and Solar Cells; Vol. 95; no. 5; pp. 1398-1416: 2011
 28. Seemann, A.; Sauermann, T.; Lungenschmied, C.; Armbruster, O.; Bauer, S.; Egelhaaf, H.-J.; Hauch, J. A.; **Reversible and irreversible degradation of organic solar cell performance by oxygen**; Solar Energy; Vol. 85; no. 6; pp. 1238-1249: 2011
 29. Deschler, F.; De Sio, A.; Von Hauff, E.; Kutka, P.; Sauermann, T.; Egelhaaf, H.-J.; Hauch, J. A.; Da Como, E.; **The effect of ageing on exciton dynamics, charge separation, and recombination in P3HT/PCBM photovoltaic blends**; Advanced Functional Materials; Vol. 22; no. 7; pp. 1461-1469: 2012
 30. Bachmann, J.; Buerhop-Lutz, C.; Steim, R.; Schilinsky, P.; Hauch, J. A.; Zeira, E.; **Highly sensitive non-contact shunt detection of organic photovoltaic modules**; Solar Energy Materials and Solar Cells; Vol. 101; pp. 176-179: 2012
 31. Nisato, G.; Hauch, J. A.; Book Chapter: **Current and Future Directions in Organic Photovoltaics**; Organic Photovoltaics: Materials, Device Physics, and Manufacturing Technologies; pp. 587-598: 2014
 32. Buerhop, C.; Pickel, T.; Blumberg, T.; Adams, J.; Wrana, S.; Dalsass, M.; Zetzmann, C.; Camus, C.; Hauch, J. A.; Brabec, C. J.; **IR-images of PV-modules with potential induced degradation (PID) correlated to monitored string power output**; SPIE Optics+ Photonics for Sustainable Energy; 99380J-99380J-10: 2016
 33. Buerhop, C.; Pickel, T.; Scheuerpflug, H.; Camus, C.; Hauch, J. A.; Brabec, C. J.; **Statistical overview of findings by IR-inspections of PV-plants**; SPIE Optics+ Photonics for Sustainable Energy 99380L-99380L-9: 2016
 34. Buerhop, C.; Winkler, T.; Wirsching, S.; Pickel, T.; Bemm, A.; Camus, C.; Hauch, J. A.; Brabec, C. J.; **Analyzing the degradation of pre-damaged PV-modules**; Reliability of Photovoltaic Cells, Modules, Components, and Systems X; Vol. 10370; pp. 103700H: 2017
 35. Buerhop, C.; Pickel, T.; Patel, T.; Fecher, F. W.; Zetzmann, C.; Camus, C.; Hauch, J. A.; Brabec, C. J.; **Analysis of inhomogeneous local distribution of potential induced degradation at a rooftop photovoltaic installation**; IET Renewable Power Generation; Vol. 11; no. 10; pp. 1253-1260: 2017
 36. Buerhop, C.; Fecher, F. W.; Pickel, T.; Patel, T.; Zetzmann, C.; Camus, C.; Hauch, J. A.; Brabec, C. J.; **Impact of PID on industrial rooftop PV-installations**; Reliability of Photovoltaic Cells, Modules, Components, and Systems X; Vol. 10370; pp. 103700B: 2017
 37. Teubner, J.; Kruse, I.; Scheuerpflug, H.; Buerhop-Lutz, C.; Hauch, J. A.; Camus, C.; Brabec, C. J.; **Comparison of Drone-based IR-imaging with Module Resolved Monitoring Power Data**; Energy Procedia; Vol. 124; pp. 560-566: 2017
 38. Choulis, S.; Hoth, C.; Schilinsky, P.; Hauch, J. A.; Waldauf, C.; Dennler, G.; Brabec, C.; Scharber, M.; Waller, Dave; Zeira, E.; **Printing highly efficient organic solar cells**; Solar & Alternative Energy: 2007
 39. Bogenrieder, J.; H  ttner, M.; Luchscheider, P.; Hauch, J. A.; Camus, C.; Brabec, C. J.; **Technology-specific yield analysis of various photovoltaic module technologies under specific real weather conditions**; Progress in Photovoltaics: Research and Applications