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**List of publications:  
(as of October 27, 2019)**

**Basic bibliometric data:**

> 400 journal publications  
> 11000 citations (Web-of-Science), > 15000 (Google Scholar)  
17 patents or patent applications  
9 books and book articles  
h-index: 63 (Google Scholar), 53 (Web-of-Science)

**Journal articles:**

**2019**

412.) Tobias Abzieher , Jonas A. Schwenger , Somayeh Moghadamzadeh, Florian Sutterlueti, Ihteaz M. Hossain, Michael Pfau, Erwin Lotter , Michael Hetterich , Bryce S. Richards, Uli Lemmer, Michael Powalla, and Ulrich W. Paetzold, *Efficient All-Evaporated pin-Perovskite Solar Cells: A Promising Approach Toward Industrial Large-Scale Fabrication*, IEEE J. Photovolt. **9**, 1249 (2019).

<https://doi.org/10.1109/JPHOTOV.2019.2920727>

411.) Simon Ternes, Tobias Börnhorst, Jonas A. Schwenger, Ihteaz M. Hossain, Tobias Abzieher, Waldemar Mehlmann, Uli Lemmer, Philip Scharfer, Wilhelm Schabel, Bryce S. Richards, and Ulrich W. Paetzold, *Drying Dynamics of Solution-Processed Perovskite Thin-Film Photovoltaics: In Situ Characterization, Modeling, and Process Control*, Adv. Energy Mater. **9**, 1901581 (2019).

<https://doi.org/10.1002/aenm.201901581>

410.) Braulio Cardenas-Benitez, Carsten Eschenbaum, Dario Mager, Jan G. Korvink, Marc J. Madou, Uli Lemmer, Israel De Leon and Sergio O. Martinez-Chapa, *Pyrolysis-induced shrinking of three-dimensional structures fabricated by two photon polymerization: experiment and theoretical model*, Microsystems & Nanoengineering **5**, 38 (2019).

<https://doi.org/10.1038/s41378-019-0079-9>

409.) Shudong Yu, Benjamin Fritz, Siegbert Johnsen, Dmitry Busko, Bryce S. Richards,

Marc Hippler, Gabriele Wiegand, Yong Tang, Zongtao Li, Uli Lemmer, Hendrik Hölscher, and Guillaume Gomard, *Enhanced Photoluminescence in Quantum Dots–Porous Polymer Hybrid Films Fabricated by Microcellular Foaming*, *Adv. Optical Mater.* **7**, 1900223 (2019).

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408.) Anne Habermehl, Philipp Brenner, Robert Huber, Adrian Mertens, Frank Winkler, Lothar Hahn, Markus Guttmann, Carsten Eschenbaum, and Uli Lemmer\*, *Roll-to-Roll Hot Embossing of 1D and 2D Photonic Nanostructures*, *Adv. Eng. Mater.*, 1900110 (2019)

<https://doi.org/10.1002/adem.201900110>

407.) Malte Langenhorst, Benjamin Sautter, Raphael Schmager, Jonathan Lehr, Erik Ahlswede, Michael Powalla, Uli Lemmer, Bryce S. Richards, Ulrich W. Paetzold, *Energy yield of all thin-film perovskite/CIGS tandem solar modules*, *Prog Photovolt Res Appl.* **27**, 290 (2019).

<https://doi.org/10.1002/pip.3091>

406.) S. Gharibzadeh, B. A. Nejad, M. Jakoby, T. Abzieher, D. Hauschild, S. Moghadamzadeh, J. A. Schwenzler, P. Brenner, R. Schmager, A. A. Haghighirad, L. Weinhardt, U. Lemmer, B. S. Richards, I. A. Howard, and U. W. Paetzold, *Record Open-Circuit Voltage Wide-Bandgap Perovskite Solar Cells Utilizing 2D/3D Perovskite Heterostructure*, *Adv. Energy Mater.* **9**, 1803699 (2019).

<https://doi.org/10.1002/aenm.201803699>

405.) Marius Jakoby, Bryce S. Richards, Uli Lemmer, and Ian A. Howard, *Investigations of singlet and triplet diffusion in thermally activated delayed-fluorescence emitters: Implications for hyperfluorescence*, *Phys. Rev. B* **100**, 045303 (2019).

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404.) Raphael Schmager, Malte Langenhorst, Jonathan Lehr, Uli Lemmer, Bryce S Richards, Ulrich W Paetzold, *Methodology of energy yield modelling of perovskite-based multi-junction photovoltaics*, *Opt. Expr.* **27**, A507 (2019).

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403.) Ian A. Howard, Tobias Abzieher, Ihtez M. Hossain, Helge Eggers, Fabian Schackmar, Simon Ternes, Bryce S. Richards, Uli Lemmer, and Ulrich W. Paetzold, *Coated and Printed Perovskites for Photovoltaic Applications*, *Adv. Mater. Adv. Mater.* **31**, 1806702 (2019).

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402.) Henning Mescher, Elias Hamann, Uli Lemmer, *Simulation and design of folded perovskite x-ray detectors*, *Sci. Rep.* **9**, 5231 (2019).

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401.) Lisa Merklein, Dominik Daume, Felix Braig, Stefan Schliske, Tobias Rödlmeier, Marvin Mink, Dimitrios Kourkoulos, Benjamin Ulber, Manuela Di Biase, Klaus Meerholz, Gerardo Hernandez-Sosa, Uli Lemmer, Hans Martin Sauer, Edgar Dörsam, Philip Scharfer and Wilhelm Schabel, *Comparative Study of Printed Multilayer OLED Fabrication through Slot Die Coating, Gravure and Inkjet Printing, and Their Combination*, *Colloids Interfaces* **3**, 32 (2019).

<https://doi.org/10.3390/colloids3010032>

400.) Henning Mescher, Uli Lemmer, *Novel hybrid organic-inorganic perovskite detector designs based on multilayered device architectures: simulation and design*, Proc. SPIE 10948, 109480W (2019).  
<https://10.1117/12.2511739>

399.) Tobias Abzieher,\* Somayeh Moghadamzadeh, Fabian Schackmar, Helge Eggers, Florian Sutterlütli, Amjad Farooq, Danny Kojda, Klaus Habicht, Raphael Schmager, Adrian Mertens, Raheleh Azmi, Lukas Klohr, Jonas A. Schwenzer, Michael Hetterich, Uli Lemmer, Bryce S. Richards, Michael Powalla, and Ulrich W. Paetzold\*, *Electron-Beam-Evaporated Nickel Oxide Hole Transport Layers for Perovskite-Based Photovoltaics*, Adv. Energy Mater. **9**, 1802995 (2019).  
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398.) Philipp Brenner, Ofer Bar-On, Marius Jakoby, Isabel Allegro, Bryce S. Richards, Ulrich W. Paetzold, Ian A. Howard, Jacob Scheuer, Uli Lemmer, *Continuous wave amplified spontaneous emission in phase-stable lead halide perovskites*, Nature Commun. **10**, 988 (2019).  
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397.) S. Delbeck, B. Schmitz, A. Nabers, K. Gerwert, A. Habermehl, U. Lemmer, H. M. Heise, *Applications of tapered flat silver halide fibers chemically modified by 12-mercaptododecanoic acid NHS ester for infrared biospectroscopy with prospects for medical diagnostics*, Proc. SPIE 10872, 108720T (2019).  
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396.) J. Chen, B. Fritz, G. Liang, X. Ding, U. Lemmer, G. Gomard, *Micro lens arrays with adjustable aspect ratio fabricated by electrowetting and their application to correlated color temperature tunable light-emitting diodes*, Opt. Expr. **27**, A25 (2019).  
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## 2018

395.) Stefan Schlisske, Florian Mathies, Dmitry Busko, Noah Strobel, Tobias Rödlmeier, Bryce S. Richards, Uli Lemmer, Ulrich W. Paetzold, Gerardo Hernandez-Sosa and Efthymios Klampafitis, *Design and Color Flexibility for Inkjet-Printed Perovskite Photovoltaics*, ACS Appl. Energy Mater. **2**, 764 (2019).  
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393.) Noah Strobel, Mervin Seiberlich, Tobias Roedlmeier, Uli Lemmer, and Gerardo Hernandez-Sosa, *Non-Fullerene-Based Printed Organic Photodiodes with High*

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392.) R. V. Schneider, K. A. Waibel, A. P. Arndt, M. Lang, R. Seim, D. Busko, S. Braese, U. Lemmer, M. A. R. Meier, *Sequence-definition in stiff conjugated oligomers*, Sci. Rep. **8**, 17483 (2018).

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391.) Anne Habermehl, Jan-Hendric Rakebrandt, Philipp Brenner, Robert Huber, Adrian Mertens, Markus Guttman, Frank Winkler, Wilhelm Pfleging, Carsten Eschenbaum, Uli Lemmer, *Comparing roll-to-roll and laser-assisted hot embossing for micro- and nanofabrication*, Proc. SPIE **10730**, 107300F (2018).

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386.) Muluneh G. Abebe, Aimi Abass, Guillaume Gomard, Lin Zschiedrich, Uli Lemmer, Bryce S. Richards, Carsten Rockstuhl, and Ulrich W. Paetzold, *Rigorous wave-optical treatment of photon recycling in thermodynamics of photovoltaics: Perovskite thin-film solar cells*, Phys. Rev. B **98**, 075141 (2018).

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- 382.) J. A. Schwenzler; L. Rakocevic, R. Gehlhaar, T. Abzieher, S. Gharibzadeh, S. Moghadamzadeh, A. Quintilla, B. S. Richards, U. Lemmer, U.W. Paetzold, *Temperature Variation-Induced Performance Decline of Perovskite Solar Cells*, ACS Appl Mater. Interfaces **10**, 16390 (2018).  
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- 379.) Lukas Ahrens, Stefan Schliske, Karl-Philipp Strunk, Felix Hinkel, Christian Melzer, Uwe HF Bunz, Uli Lemmer, Gerardo Hernandez-Sosa, Daniel Jänsch, Jan Freudenberg, Klaus Müllen, *Solubility Modulation of Polyfluorene Emitters by Thermally Induced (Retro)-Diels-Alder-Crosslinking of Cyclopentadienyl Substituents*, Chem. Mater. **30**, 4157 (2018).  
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- 377.) D. Jahn, R. Eckstein, L. M. Schneider, N. Born, G. Hernandez-Sosa, J. C. Balzer, I. Al-Naib, U. Lemmer, and M. Koch, *Digital Aerosol Jet Printing for the Fabrication of Terahertz Metamaterials*, Adv. Mater. Technol., 1700236 (2018).  
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- 376.) T. Eiselt, J. B. Preinfalk, K. Bittkau, G. Gomard, T. Hanemann and U. Lemmer, Inkjet-printed internal light extraction layers for organic light emitting diodes, Flex. Print. Electron. **3**, 015007 (2018).  
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- 375.) S. Stolz, U. Lemmer, G. Hernandez-Sosa, and E. Mankel, *Correlation of Device Performance and Fermi Level Shift in the Emitting Layer of Organic Light-Emitting Diodes with Amine-Based Electron Injection Layers*, ACS Appl. Mater. Interfaces **10**, 8877 (2018).  
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- 374.) M. Langenhorst, M.F. Schumann, S. Paeteld, R. Schmager, U. Lemmer, B.S.

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