

**Publications**

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Fraunhofer Institute for Solar Energy Systems ISE

Division Photovoltaics

Heidenhofstrasse 2  
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Germany

***Abdel Latif\_3DO.18.1***

N. Abdel Latif, J. Markert, D. von Kutzleben, S. Birnkammer, T. Rößler, J. Weber, A. Kraft, H. Neuhaus  
**Design, Manufacturing and Reliability of Shingle Matrix Modules**

***Bienkowski\_3AV.1.10***

L. Bienkowski, M. Zimmer, J. Willmann, B. U. Sander, M. Schneider, B. Bläsi, A. Brand, C. Schmitt,  
J. Nekarda, M. Hofmann

**Combining Laser Texturing and Wet Chemical Etching for Anti-Glare Properties of Photovoltaic Module Glass**

***Brailovsky\_5DV.2.44***

P. Brailovsky, J. Reich, D. Subasi, M. Fischer, T. Dannenberg, M. Held, A.-K. Briem, J. Rentsch, R. Preu,  
S.-U. Geißen, S. Nold

**Circular Water Strategies in Solar Cells Manufacturing**

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P. Brailovsky, L. Sanchez, D. Subasi, J. Rentsch, R. Preu, S. Nold

**PV Manufacturing Factories and Industrial Site Environmental Impact Assessment**

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A. Callies, M. Hanser, J. C. Goldschmidt, B. Bläsi, O. Höhn

**Structuring of Perovskite-Silicon Tandem Solar Cells for Reduced Reflectance and Thermalization Losses**

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C. Diestel, S. Senthil Kumar, N. Schüler, M. Leonhardt, J. Haunschild, S. Rein

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L. Emmer (née Mohr), G. Isele, K. Krieg, M. Zimmer

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***Er-Raji\_2CO.1.3***

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A. Fischer, I. Voicu, S. Pingel, A. Steinmetz

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***Fischer\_2AO.3.5***

O. Fischer, A. Bui, F. Schindler, D. Macdonald, S. W. Glunz, H. Nguyen, M. C. Schubert

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J. Forster, G. Tszutkiridze, C. Herr, J. Huyeng, F. Basler, R. Kohlhauer

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B. Goraya, V. Georgiou-Sarlikiotis, M. Meßmer, A. Wolf, M. Zimmer, M. Klawitter, A. Lorenz, D. Ourinson, J. Schneider, G. Emanuel, J. Greulich, F. Clement, S. Nold

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D. Güldali, A. De Rose, S. Oeser, A. Kraft, U. Tetzlaff

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U. Heitmann, C. Vannaldeshi, O. Er-Raji, O. Schultz-Wittmann, B. Grübel, J. Bartsch, J. Borchert

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R. Keding, J. Schube, O. Höhn, P. Schygulla, R. Müller, M. Jahn, G. Mikolasch, F. Predan, J. Bartsch, F. Clement, F. Dimroth

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C. Leon, P. Saint-cast, A. Fell, A. Krieg, J. Freilich, S. Rein

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F. Maischner, J. Greulich, W. Kwapil, D. Ourinson, S. W. Glunz, S. Rein

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C. Messmer, D. Chojniak, A. J. Bett, S.K. Reichmuth, J. Hohl-Ebinger, M. Bivour, M. Hermle, J. Schön, M. C. Schubert, S. W. Glunz

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H. Nagel, T. Dietsch, W. Wolke, V. Linß, S. Mack, M. Bivour, E. Schneiderlöchner

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J. Nekarda, G. Emanuel, O. John, J. Paschen, M. Menegassi, A. Nägele, A. Brand, D. Ourinson, J. Huyeng, A. DeRose, R. Preu

**A Roadmap for Silver-, Copper-, Lead-, Solder- and Adhesive-free PV Modules based on TOPCon IBC Technology & more than 15 Years of Successful Laser Process Development in the Field of "Aluminum Joining"**

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A. K. Öz, J. Vasani, C. Reichel, C. Wellens, H. Neuhaus

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D. Ourinson, D. Erath, M. Lion, M. Drews, S. Tepner, L. Folcarelli, A. Lorenz, F. Clement

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D. Ourinson, A. Brand, M. Dhamrin, K. Tsuji, R. Haberstroh, A. Lorenz, J. D. Huyeng, F. Clement  
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A. J. Beinert, A. Mahfoudi, F. Ensslen, P. Romer, C. Erban, P. Romer  
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O. Schultz-Wittmann, P. S. C. Schulze, O. Er-Raji, B. Kore, R. Efinger, U. Heitmann, O. Fischer, M. Kohlstädt, S. Pingel, H. Nagel, M. Bivour, J. Borchert, M. Hermle, S. W. Glunz  
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T. Schweigstill, O. Höhn, L. Stevens, A. Lebowsky, M. Steiner, F. D. Heinz, R. Müller, P. Schygulla, F. Dimroth  
**Reducing Shading Effects in CPV Solar Cells with Advanced Contact Finger Design**

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P. Schygulla, R. Müller, O. Höhn, M. Schachtner, D. Chojniak, A. Cordaro, S. Tabernig, B. Bläsi, A. Polman, G. Siefer, D. Lackner, F. Dimroth<sup>1</sup>  
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L. Stevens, B. Bläsi, C. Horch, S. Ihlow, M. Mittag  
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***Tummalieh\_3DO.17.4***

A. Tummalieh, M. Mittag, J. Weber, D. Yucebas, L. Schäfer, R. Quay, C. Reichel, H. Neuhaus

**Impact of String Connection and Contact Degradation on Electrical Current Distribution on Solar Cell and Photovoltaic Module Level: A Magnetic Field Imaging Validated Model**

***Vadadkar\_5DV.2.50***

S. Vadadkar, S. Agrawal, R. Preu

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I. Voicu Vulcanean, J. Seif, S. Pingel, I. Koc, M. Bivour, A. Steinmetz

**Microdoping of Layers for High Efficiency Silicon Heterojunction Solar Cells**

Schreibt Conference Paper, Poster könnte auch hochgeladen werden

***Wessels\_4BO.16.5***

A. Wessels, L. Christen, T. Kroyer, B. Bläsi, O. Höhn

**Structured Interference Layer Systems for the Color Design of Integrated PV Systems**

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W. Wöhler, J. Greulich, A. Fell

**Rapid Quantification of Light Trapping in Bifacial Silicon Solar Cells Based on Inline Reflection Measurements**

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A. Wörnhör, A. Fell, S. Rein, M. Demant

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