

Publications

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Fraunhofer Institute for Solar Energy Systems ISE

Division Materials – Solar Cells and Technology
Division Photovoltaic Modules, Systems and Reliability
Division PV Production Technology and Quality Assurance
Division Solar Cells – Development and Characterization

Heidenhofstrasse 2
79110 Freiburg
Germany

Baliozian_7EO.2.2

P. Baliozian, S. Mourad, D. Morse, S. Kim, L. Friedrich, R. Preu

Photovoltaic Development Standardizing Based on Roadmaps and Technology Readiness Levels

Bartsch_2BV.7.48

J. Bartsch, S. Kluska, A. Büchler, A.A. Brand, G. Cimiotti, J. Nekarda, M. Glatthaar, S.W. Glunz

The "Easy Plate" Process – Analysis of Process Route Options in Direct Plating of Nickel and Copper for c-Si Solar Cell Metalization

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A.J. Beinert, M. Ebert, U. Eitner, J. Aktaa

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The Benefit of Ultra-High Minority Carrier Lifetime Silicon Wafers for High-Efficiency and Innovative Solar Cells

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F. Mosel, A.V. Denisov, B. Klipp, B. Spill, R. Sharma, P. Dold

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D. Philipp, I. Dürr, S. Stecklum, C. Völker

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T. Geipel, M. Moeller, A. Kraft, U. Eitner

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H. Helmers, D. Lackner, G. Siefer, E. Oliva, F. Dimroth, A.W. Bett

Integrated Power and Data Transceiver Devices for Power-by-Light Systems - A Concept Study

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M. Hofmann, M. Jäcklein, P. Saint-Cast, D. Wagenmann, B. Cord, T. Dippell, M. Dörr, T. Schütte, M. Siemers

Plasma Process Analysis of ICP-PECVD of AlO_x Layers for c-Si Surface Passivation

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I. Kröger, J. Hohl-Ebinger, S. Brachmann, S. Winter

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J.D. Huyeng, R. Efinger, A. Spribille, R. Keding, A. Wolf, O. Doll, F. Clement, D. Biro

Co-Diffused Back-Contact Back-Junction Silicon Solar Cells with a Novel Screen-Printed Boron-Doping Paste

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P. Krenckel, S. Riepe, F. Schindler, T. Strauch

Optimized Grain Size of Seed Plates for High Performance Multicrystalline Silicon

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A. Lorenz, C. Gredy, M. Lehner, H. Brocker, J. Rohde, A. Senne, T. Strauch, H. Reinecke, F. Clement

Progress with Rotational Printing for the Front Side Metallization of Silicon Solar Cells

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S. Meier, S. Wiesnet, S. Mack, S. Werner, S. Maier, S. Unmüßig, C. Demberger, H. Knauss, D. Biro, A. Wolf
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D.N. Micha, A.W. Walker, G. Siefert, F. Dimroth, A.W. Bett

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M. Mittag, A.J. Beinert, L.C. Rendler, M. Ebert, U. Eitner

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L. Mohr, T. Dannenberg, M. Zimmer, J. Rentsch

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H. Nagel, M. Kamp, D. Eberlein, A. Kraft, J. Bartsch, M. Glatthaar, S.W. Glunz

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E. Oliva, T. Salvat, C. Jany, R. Thibon, H. Helmers, M. Steiner, M. Schachtner, P. Beutel, V. Klinger
J.S. Moulet, F. Dimroth

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S. Philipps, M. Baudrit, K. Hillerich, V. Moreau, R. Parmesani, E. Román, G. Sala, B. Schineller, G. Timò,
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M. Pospischil, M. Klawitter, M. Kuchler, M. Linse, S. Gutscher, A. Brand, M. König, L. Wende, F. Clement,
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M. Rauer, K. Bothe, C. Comparotto, P. Danzl, M. Debucquoy, N. Enjalbert, J. Hohl-Ebinger, P. Manshanden,
Y. Veschetti, J. Wong

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S.K. Reichmuth, H. Helmers, C.E. Garza, D. Vahle, M. de Boer, L. Stevens, M. Mundus, A.W. Bett, G. Siefert

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L.C. Rendler, A. Kraft, C. Ebert, S. Wiese, U. Eitner

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P. Saint-Cast, I. Reis, J. Greulich, S. Werner, E. Lohmüller, H. Höffler, J. Haunschild, R. Preu

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P. Saint-Cast, J. Greulich, S. Werner, U. Jäger, E. Lohmüller, A. Brand, H. Höffler, R. Preu

Loss Analysis of 21.4% Industrial PERC Solar Cell

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F. Schindler, J. Giesecke, B. Michl, J. Schön, P. Krenckel, S. Riepe, W. Warta, M.C. Schubert

***Material Limits of Silicon from State-of-the-Art Photoluminescence Imaging Techniques
To be published in Progress in Photovoltaics***

Schmid_5BV.4.7

A. Schmid, D. Philipp

Characterization and Testing of Bifacial Modules

Spribille_2BO.4.3

A. Spribille, T. Savisalo, A. Kraft, D. Eberlein, M. Ebert, T. Fellmeth, S. Nold, H. Pantzar, F. Clement

Towards a 300W_p-type HIP-MWT-Module – Simulation, Experimental Results and Costs

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S. Werner, A. Wolf, S. Mack, E. Lohmüller, R.C.G. Naber

Impact of High-Temperature Processes on Carrier Lifetime of n-Type Cz Silicon

Wöhrle_2DO.4.3

N. Wöhrle, A. Alapont Sabater, J. Greulich

Genuine Bifacial Simulation and Optimization of an mc-Silicon PERC Solar Cell