CONFERENCE PROGRAMME

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(i) = invited

THURSDAY, 24 September 2009

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Mono- and Multicrystalline Silicon Materials and Cells

2DV.1.1 I. Martín & R. Alcubilla
UPC, Barcelona, Spain
R. Lövblom
ETH Zurich, Switzerland
High-efficiency Solar Cells Based on Inversion Layer Emitters

2DV.1.2 J. Robbelein, E. Van Kerschaver, N.E. Posthuma, G. Beaucarne & J. Poortmans
IMEC, Leuven, Belgium
Industrial Type Passivation on Interdigitated Back Junction Solar Cells

2DV.1.3 P. Voisin, M. Peters, H. Hauser, B. Bläsi, M. Hermle & S.W. Glunz
Fraunhofer ISE, Freiburg, Germany
C. Helgert, E.-B. Kley & T. Pertsch
Friedrich-Schiller-University, Jena, Germany
Nanostructured Back Side Silicon Solar Cells

2DV.1.4 K. Mangersnes & S. E. Foss
Institute for Energy Technology, Kjeller, Norway
Laser Ablation of PECVD SiO2 for Structuring of Back-Junction Interdigitated Silicon Solar Cells

2DV.1.5 T. Roth, P. Rosenits, F. Kopp, W. Warta & S.W. Glunz
Fraunhofer ISE, Freiburg, Germany
Photoconductance-Based Excess Carrier Lifetime Measurements of Unpassivated Silicon Samples

2DV.1.6 F. Kopp, P. Rosenits, T. Roth, S. Reber & W. Warta
Fraunhofer ISE, Freiburg, Germany
Lifetime Studies on Crystalline Silicon Thin-Films by Photoluminescense Imaging

2DV.1.7 A. Herguth & G. Hahn
University of Konstanz, Germany
Temperature Induced Degradation of the Contact Resistance of Ag-screen Printed p-type Silicon Solar Cells

2DV.1.8 B.J. Hallam, T. Trupke, Y. Augarten, B.S. Tjahjono & S. R. Wenham
University of NSW, Sydney, Australia
Photoluminescence Imaging for Fast Determination of the Implied Open Circuit Voltage of Silicon Wafers

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2DV.1.9 J. Hofstetter, C. del Cañizo & A. Luque
UPM, Madrid, Spain
Simulating the Evolution of the Impurity Content and Distribution in a mc-Si Wafer during Solar Cell Processing

2DV.1.10 P. Karzel, J. Junge, A. Zuschlag & G. Hahn
University of Konstanz, Germany
Mapping of Hydrogen Bond Energies in EFG Wafers by Analysis of Spatially Resolved Carrier Lifetimes after Annealing Steps

2DV.1.11 M. Wagner & B. Gründig-Wendrock
SolarWorld Innovations, Freiberg, Germany
P. Palinginis & C. Knopf
Deutsche Solar, Freiberg, Germany
Shunts, Diode Breakdown and High Reverse Currents in Multicrystalline Silicon Solar Cells

2DV.1.12 M. Blazek, W. Kwapil, J. Schön & W. Warta
Fraunhofer ISE, Freiburg, Germany
G. Coletti
ECN, Petten, The Netherlands
Gettering Variation and Lifetime Characterization on Intentionally Iron, Nickel and Chromium Contaminated Multicrystalline Silicon Wafers

2DV.1.13 M.C. Colom Talló & K.R. McIntosh
The Australian National University, Canberra, Australia
Permeability of TiO2 Antireflection Coatings to Damp Heat

2DV.1.14 A. Krieg, J. Wallach & S. Rein
Fraunhofer ISE, Freiburg, Germany
Impact of Surface Structures on the Inline Vision Inspection of Antireflection Coatings

2DV.1.15 M. Dhamrin, A. Uzum, P. Supajariyawichai, N. Ban, L.W. Goh & K. Kamisako
TUAT, Tokyo, Japan
T. Megumi, H. Tabuchi & K. Saegusa
Sumitomo Chemical, Ehime, Japan
Fabrication and Characterization of Al-Doped Multicrystalline Silicon Wafers and Solar Cells

2DV.1.16 A. Oltersdorf, M. Zimmer, K. Birmann & J. Rentsch
Fraunhofer ISE, Freiburg, Germany
Analysis of Metal Impurities in Wet Chemical Processes by ICP OES and AAS

2DV.1.17 D. Lausch, K. Petter & R. Bakowskie
Q-Cells, Bitterfeld-Wolfen, Germany
H. von Wenckstern & M. Grundmann
University of Leipzig, Germany
Correlation of Pre-breakdown Sites and Bulk Defects in Multicrystalline Silicon Solar Cells

2DV.1.18 M. Becker, U. Gösele & S. Christiansen
Max-Planck-Institut, Halle, Germany
Highly p-doped Regions in Silicon Solar Cells Quantitatively Analyzed by Small Angle Beveling and Micro-Raman Spectroscopy

2DV.1.19 B. Thaidigsmann, A. Wolf & D. Biro
Fraunhofer ISE, Freiburg, Germany
Accurate Determination of the IQE of Screen Printed Silicon Solar Cells by Accounting for the Finite Reflectance of Metal Contacts

2DV.1.20 K. Lauer, M. Blech, A. Laades & A. Lawerenz
CiS, Erfurt, Germany
Investigation of Minority Carrier Trapping in Silicon by MWPCD Measurements

2DV.1.21 J. Greulich, M. Glatthaar, A. Krieg, G. Emanuel & S. Rein
Fraunhofer ISE, Freiburg, Germany
Current-Voltage-Characteristics of Industrial Silicon Solar Cells: Influence of Distributed Series Resistance and Shockley-Read-Hall Recombination

2DV.1.22 S. Daliento & M. Costagliola
University of Naples, Italy
Direct Measurement of the Surface Recombination Velocity by Means of a Special Test Device

2DV.1.23 E. Sugimura, A. Kitiyanan, A. Ogane, A. Tani, K. Hirata, T. Saitoh, T. Hatayama, H. Yano & T. Fuyuki
NAIST, Ikoma, Japan
The Investigation of Multicrystalline Si Solar Cells by the Electroluminescence Imaging Technique with Different Wavelength Bandpass Filters

2DV.1.24 J. Moyer & W. Zhang
Heraeus, West Conshohocken, USA
Comparison of Loss Mechanisms from Print Quality and Electrical Parameters in the Move Towards Higher Sheet Resistance Emitters

2DV.1.25 T.M. Pletzer, E.F. Stegemann, H. Windgassen, D.L. Bätzner & H. Kurz
RWTH Aachen, Germany
Extensive Investigation and Characterisation of Solar Cells with Screen-Printed Emitters Using Phosphorus Dopant Pastes

2DV.1.26 P. Saint-Cast, M. Alemán, C. Reichel, J. Bartsch, M. Hofmann, J. Rentsch & R. Preu
Fraunhofer ISE, Freiburg, Germany
Relevant Pinhole Characterisation Methods for Silicon Solar Cell Dielectric Layers

2DV.1.27 D. Kiliani, A. Herguth, G. Hahn & M. Junk
University of Konstanz, Germany
Fitting of Lateral Resistances in Silicon Solar Cells to Electroluminescence Images

2DV.1.28 L. Lancellotti & R. Fucci
ENEA, Portici, Italy
Numerical Analysis of the Series Resistance in Silicon Concentration Solar Cells

2DV.1.29 A.M. Petersson, H. Larsson & T. Bostrom
Norut Narvik, Norway
A. Roos
Uppsala University, Sweden
Optical Characterization of Crystalline Silicon Surfaces for Solar Cell Applications

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2DV.1.30 R. Bakowskie, D. Lausch & K. Petter
Q-Cells, Bitterfeld-Wolfen, Germany
H. von Wenckstern & M. Grundmann
University of Leipzig, Germany
Thermal Admittance Spectroscopy of Multicrystalline Silicon Wafers and Solar Cells

2DV.1.31 P. Rosenits, F. Kopp, T. Roth, W. Warta, S. Reber & S.W. Glunz
Fraunhofer ISE, Freiburg, Germany
Quasi-Steady-State Photoconductance Measurements on Crystalline Silicon Thin-Film Material

2DV.1.32 Y. Sayad, D. Blanc, A. Kaminski, B. Rézgui, G. Brémond & M. Lemiti
INL, Lyon, France
Evaluation of Minority Carrier Lifetime in Mono- and Multicrystalline Silicon from Room Temperature Photoluminescence Measurements

2DV.1.33 A. Fülle, A. Krause, M. Kutzer & M. Wagner
Solar World Innovations, Freiberg, Germany
Characterization of Emitter in mc-Si Solar Cells by Scanning Electron Microscopy

2DV.1.34 T. Sueto, N. Saito & K. Nishioka
University of Miyazaki, Japan
Antireflection Nano Structure of Silicon Surface Formed by Catalysis of Single Nano-Sized Silver Particle

2DV.1.35 J. Barredo, L. Hermanns, A. Fraile & E. Alarcón
UPM, Madrid, Spain
J.C. Jimeno
UPV, Bilbao, Spain
Study of the Edge and Surface Cracks Influence in the Mechanical Strengh of Silicon Wafers

2DV.1.36 M. Amado, E. Diez & Y. Meziani
University of Salamanca, Spain
V. Bellani, J.M. Caridad & F. Rossella
University of Pavia, Spain
J. Gutiérrez, T. del Caño & V. Parra
Instalaciones Pevafersa, Boecillo, Spain
Optical and Magnetotransport Characterization of Solar-Grade mc-Silicon Wafers

2DV.1.37 P. Vitanov, A. Harizanova & T. Ivanova
Bulgarian Academy of Sciences, Sofia, Bulgaria
X. Loozen & G. Beaucarne
IMEC, Leuven, Belgium
Observation of the Long Time Behavior of the Effective Lifetime after Passivation with Al2O3 Dielectric Layers

2DV.1.38 B. Moralejo, M.A. González & J. Jimenez
University of Valladolid, Spain
R. Descalzo, J. Gutiérrez & V. Parra
Instalaciones Pevafersa, Boecillo, Spain
Light Reflectivity-Coupled LBIC Mapping for mc-Si Wafers and PV Cells

2DV.1.39 K. Nishioka, M. Uchida & N. Saito
University of Miyazaki, Japan
Temperature Characteristics Analysis of Multicrystalline Si Solar Cell by SPICE

2DV.1.40 S. Würzner, T. Kaden & H. J. Möller
TU Bergakademie Freiberg, Germany
A New View on the Origin of Dislocations and Their Density Distribution in Multicrystalline Silicon

2DV.1.41 M. Bertoni, C. Colin & T. Buonassisi
MIT, Cambridge, USA
High Temperature Annealing of Dislocations in mc-Si

2DV.1.43 U. Hess, S. Joos, S. Seren & G. Hahn
University of Konstanz, Germany
P.Y. Pichon & A. Schönecker
RGS Development, Oudkarspel, The Netherlands
T. Weber
SolarWorld Innovations, Freiberg, Germany
Infrared Microscopy Investigation of the Crystal Structure of Ribbon Growth on Substrate (RGS) Solar Cells

2DV.1.44 I.E. Reis & S. Riepe
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W. Koch
KoSolCo, Dinkelsbühl, Germany
Effect of Impurities on Solar Cell Parameters in Intentionally Contaminated Multicrystalline Silicon

2DV.1.45 H. Nagel, S. Zimmermann, B. Lenkeit & W. Schmidt
SCHOTT Solar, Alzenau, Germany
Experimental Verification of a Fast Method for Measuring the Interstitial Iron Concentration In p-Type Crystalline SI Solar Cells

2DV.1.46 A. Zuschlag, J. Junge, S. Seren & G. Hahn
University of Konstanz, Germany
Evaluation of Processing Steps Regarding Lifetime of Iron/Copper Contaminated mc Si Wafers

2DV.1.47 A. Laades, K. Lauer, M. Blech, C. Maier, M. Bähr & A. Lawerenz
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J. Nutsch & J. Lossen
ersol Solar Energy, Erfurt, Germany
D. Alber
Helmholtz Centre Berlin for Materials and Energy, Germany
Iron Gettering in CZ Silicon Solar Cells

2DV.1.48 J. Mayandi, M. Syre, E. S. Marstein & A. Holt
Institute for Energy Technology, Kjeller, Norway
Determination of Impurity Species and the Limitation of Various P Gettering Profiles on Multicrystalline Silicon Wafers

2DV.1.49 A. Knorz, R. Rössler, A. Grohe & R. Preu
Fraunhofer ISE, Freiburg, Germany
Laserablation of Etch Resists for Structuring and Lift-Off Processes

Visual Presentations

2DV.1.50 A. Pauchard, N. Vago & M. Meizoso
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Industrialization of LCP Doping

2DV.1.51 D. Lahmer, J. Lossen & H.-J. Krokoszinski
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F. Clement, M. Menkö, R. Hönig, D. Biro & R. Preu
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Pilot-Line Processing of Cz-Si MWT Solar Cells with an Efficiency Gain of 0,3%

2DV.1.52 F. Clement, M. Menkö, D. Erath, M. Hörteis, J. Bartsch, R. Hönig, U. Belledin, D. Biro & R. Preu
Fraunhofer ISE, Freiburg, Germany
Industrially Feasible mc-Si Solar Cells with Fine Line Printed Front Contacts on High Emitter Sheet Resistance Towards 17% Efficiency

2DV.1.53 R.C.G. Naber, N. Guillevin, L.J. Geerligs & A.W. Weeber
ECN, Petten, The Netherlands
A 10 mV Voc Enhancement for Industrial Screen Printed N-Type Silicon Solar Cells

2DV.1.54 A. Bettinelli, L. Vivet & M. Pirot
CEA, Le Bourget du Lac, France
O. Nichiporuk, G. Goaer & N. Le Quang
PHOTOWATT International, Bourgoin Jallieu, France
D.H. Hyun
Jusung Engineering, Kyunggi-Do, Republic of Korea
D. Blin
Jusung Engineering Europe, Crolles, France
Cells Realized on Multi-crystalline MG-Si Wafers Using an Industrial Dry Texturing

2DV.1.55 V. Naumann, C. Hagendorf, M. Werner, C. Schmidt & J. Bagdahn
Fraunhofer CSP, Halle, Germany
Local Electronic Properties and Microstructure of Individual Laser-Fired Contacts

2DV.1.56 R. Pavlovic, A. Dastgheib-Shirazi, F. Book, B. Raabe & G. Hahn
University of Konstanz, Germany
Large Area Solar Cells with Screen Printed Front Side Metallization and Dielectric Rear Side Passivation

2DV.1.57 R. Dahl & M. Stroisch
centrotherm photovoltaics technology, Konstanz, Germany
M. Heintze, H. Wanka & P. Fath
centrotherm photovoltaics, Blaubeuren, Germany
J.-D. Kähler
centrotherm thermal solutions, Blaubeuren, Germany
High Volume (100MW) Industrial PECVD System for In-Line Deposition of SiN:H on Solar Wafers

2DV.1.58 R. Harney, J. Theobald & K. Peter
ISC Konstanz, Germany
P. Winter, M. Geiger, F. Binaie, S. Keller & P. Fath
centrotherm photovoltaics technology, Konstanz, Germany
Establishing an Industrial Solar Cell Process in a Laboratory Environment

2DV.1.60 A. Uzum, M. Dhamrin, P. Supajariyawichai, N. Ban, L.G. Wei, T. Saitoh & K. Kamisako
TUAT, Tokyo, Japan
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Dai-ichi Kiden, Tokyo, Japan
Effect of Boron Diffusion Profile on the Emitter Quality Formed on N-Type Multicrystalline Silicon Wafers

2DV.1.61 D. Suwito, S. Janz, M. Hermle & S.W. Glunz
Fraunhofer ISE, Freiburg, Germany
High-Efficiency Silicon Solar Cells with Intrinsic and Doped a-SixC1-x Rear Side Passivation

2DV.1.62 D. Muñoz, A.S. Ozanne, A. Vandeneynde, F. Souche, C. Denis, T. Desrues & P.J. Ribeyron
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M.S. Kang & K.M. Kim
Jusung Engineering, Kyunggi-Do, Republic of Korea
R. Janin & D. Blin
Jusung Engineering Europe, Crolles, France
Preliminary Steps towards an Industrialization Process in Silicon Heterojunction Solar Cells: 16% Efficiency Obtained on 125 PS Monocrystalline Silicon

2DV.1.63 T. Desrues, P.-J. Ribeyron, A. Vandeneynde, A.-S. Ozanne, F. Souche, D. Muñoz & C. Denis
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D. Diouf & J. P. Kleider
CNRS, Gif-sur-Yvette, France
Progress in Contacting a-Si:H/c-Si Heterojunction Solar Cells and its Application to Interdigitaded Back Contact Structure

2DV.1.64 V. Gazuz, M. Mühlbauer & R. Auer
ZAE Bayern, Erlangen, Germany
Novel n-Type Silicon Solar Sell Device by Aluminium Bonding to a Glass Substrate

2DV.1.65 Y. Veschetti, V. Sanzone & T. Schutz-Kuchly
CEA, Le Bourget du Lac, France
Studies of Electrical Properties of N-Type Solar Grade Silicon – Fabrication of Solar Cells and Investigation of Light Induced Degradation Effect

2DV.1.66 L. Korte, T.F. Schulze, F. Lange, M. Schmidt & B. Rech
Helmholtz Centre Berlin for Materials and Energy, Germany
K. von Maydell & C. Agert
EWE Research Center, Oldenburg, Germany
Insight into Electronic Transport in Amorphous/Crystalline Heterojunction Solar Cells by Temperature-Dependent I-V Characterization

2DV.1.68 C.S. Liu, J.C. Wu, S.H. Shu, Y. Tai & L.-S. Hong
National Taiwan University of Science and Technology, Taipei, Taiwan
Interface Control by Self-Assembled Monolayers in Si Heterojunction Solar Cells

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2DV.1.69 J. Summhammer
University of Technology Vienna, Austria
H. Rothen
Powerquant Photovoltaik, Bisamberg, Austria
Rectangular Silicon Solar Cell with More Power and Higher Voltage

2DV.1.70 M. Tucci, L. Serenelli, E. Salza & L. Pirozzi
ENEA, S. Maria di Galeria, Italy
G. de Cesare & D. Caputo
University of Rome "La Sapienza", Italy
S. De Iuliis & L.J. Geerligs
ECN, Petten, The Netherlands
BEHIND 2.0 : the Back Enhanced Heterostructure with Interdigitated Contact Solar Cell Evolution

2DV.1.71 N. S. Zin, A. Blakers & V. Everett
The Australian National University, Canberra, Australia
Progress in the Development of Silicon Solar Cells for Six-Junction Tandem Stack Cells

2DV.1.72 D. Sherban, A. Simashkevich, M. Rusu, L. Bruk & I. Usatii
Institute of Applied Physics, Chisinau, Moldova
ITO-nSi Solar Cells: Charge Transport Mechanisms through the Interface

2DV.1.73 M. Canino, C. Summonte & E. Centurioni
CNR-IMM Bologna, Italy
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DICASM University of Bologna, Italy
Optimizing the Rear Side of Heterojunction Solar Cells on N-Type CZ Substrates

2DV.1.74 G. Kulushich, R. Zapf-Gottwick & J.H. Werner
University of Stuttgart, Germany
Optimized Solar Cell Front Grid Design

2DV.1.75 T. Lu, L. Carnel, P. Hjemas, J. Nyhus, K. Helland & O. Gjerstad
REC Wafer Norway, Porsgrunn, Norway
Investigation of Pre-Breakdown Defects In Wafers and Cells by Photoluminescence, Thermography and LBIC

2DV.1.76 A. Ebong & A. Rohatgi
Georgia Institute of Technology, Atlanta, USA
R. Prunchak, X. Gao & S. Hermes
BASF Catalysts LLC, East Newark, USA
F. Kleine Jäger
BASF, Ludwigshafen, Germany
Lead Free Front Silver Paste for High Quality Contacts to Silicon Solar Cells: Glass Frit and Firing Optimization

2DV.1.77 A.J. Lennon & S.R. Wenham
University of NSW, Sydney, Australia
M. Renn
Optomec, St. Paul, USA
Aerosol Jet Etching for Silicon Solar Cells

2DV.1.78 K. Ogawa, F. Kadono, M. Dhamrin & K. Kamisako
TUAT, Tokyo, Japan
Texturing of Crystalline Silicon by Hydrogen Radicals Generated Using Remote Plasma Technique

2DV.1.79 L.W. Goh, A. Uzum, N. Ban, M. Dhamrin & K. Kamisako
TUAT, Tokyo, Japan
K. Saegusa, H. Tabuchi & T. Megumi
Sumitomo Chemical, Ehime, Japan
Growth and Characterization of n-Type Multicrystalline Silicon Ingot Intentionally Compensated with Aluminum

2DV.1.80 N. Ban, L.W. Goh, A. Uzum, M. Dhamrin & K. Kamisako
TUAT, Tokyo, Japan
K. Saegusa, H. Tabuchi & T. Megumi
Sumitomo Chemical, Ehime, Japan
Quality Investigation of Compensted Aluminium-Doped Multicrystalline Silicon Ingot

2DV.1.81 K. Furuichi, S. Maeda, M. Dhamrin, M. Suda & K. Kamisako
TUAT, Tokyo, Japan
Effect of SiNx:H Passivation Films Deposited by RPECVD Technique on N-Type Monocrystalline Silicon

2DV.1.82 H. Habenicht, M.C. Schubert & W. Warta
Fraunhofer ISE, Freiburg, Germany
Impact of SiNx:H and Al2O3 Surface Passivation on Iron Concentration and Carrier Lifetime in mc-Silicon Wafers

2DV.1.83 S. Köstner, J. Bauer, J.-M. Wagner & O. Breitenstein
Max-Planck-Institut, Halle, Germany
3D Imaging of Precipitates Inside Block-Cast Silicon

2DV.1.84 D. Kania, P. Saint-Cast, D. Wagenmann, M. Hofmann, J. Rentsch & R. Preu
Fraunhofer ISE, Freiburg, Germany
Industrial Negatively Charged c-Si Surface Passivation by Inline PECVD AlOx

VISUAL PRESENTATIONS 6DV.2

Markets for PV Systems

6DV.2.1 F. Tilli
Gestore dei Servizi Elettrici (GSE), Rome, Italy
M. Pellegrino
ENEA, Portici, Italy
A. Grassi & A. Berni
ETA-Renewable Energies, Florence, Italy
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Politecnico of Milan, Italy
An Interview to Italian PV Market for Detecting Barriers and their Overcoming to a Full Deployment

6DV.2.2 A. De Lillo, S. Li Causi, S. Castello, F. De Lia & M. Tucci
ENEA, Rome, Italy
S. Guastella & F. Paletta
CESI RICERCA, Milan, Italy
PV Market, Industry and Research in Italy

6DV.2.3 C. Protogeropoulos, A. Constantis & N. Chrysochoidis
Phoenix Solar EPE, Athens, Greece
The Future of the Photovoltaic Market and Applications in Greece and Suggested Measures for a Sustainable Development

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6DV.2.4 S. Tselepis
CRES, Pikermi, Greece
The Current State of the PV Market and Industrial Activities in Greece

6DV.2.5 M.C. Brito, J.M. Serra, J.M. Alves, K. Lobato & A.M. Vallera
University of Lisbon, Portugal
Evaluation of the Implementation of PV Feed-In Law in Portugal

6DV.2.6 J.C. Jol & E.C. Molenbroek
Ecofys Netherlands, Utrecht, The Netherlands
B. Janson
SenterNovem, Utrecht, The Netherlands
PV Market Development in the Netherlands

6DV.2.7 V. Fröding
Gide Loyrette Nouel, Paris, France
Photovoltaic in France - an Emerging Market

6DV.2.8 M.A.W. Hoehner, J. Winkler, D. Schreiber & F. Schmidt
EuPD Research, Bonn, Germany
The German PV Market 2009 - Solid Rock in Turbulent Waters?

6DV.2.11 S. Plater & G. Boyle
The Open University, Milton Keynes, United Kingdom
Germany: Is the PV Capacity Following the Money?

6DV.2.12 S.M. Pietruszko
Warsaw University of Technology, Poland
D. Malinovska
BAS, Sofia, Bulgaria
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ICPE, Bucharest, Romania
M. Semanova
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F. Nemac
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Status of Photovoltaics (2008) in the European Union New Member States

6DV.2.13 M.M.A. Nogara
Assosolare, Milan, Italy
J. Anta
ASIF, Madrid, Spain
P. Sonvilla & R. Brückmann
Eclareon, Berlin, Germany
T. Chrometzka
BSW, Berlin, Germany
M. Latour
EPIA, Brussels, Belgium
Reduction of Bureaucratic Barriers for Successful PV Deployment in the EU

6DV.2.14 D. Saprykin & V. Yagudkin
R&D Institute ESTO, Moscow, Russian Federation
Eurasian Market of Solar Energy Installation and Equipment. A Chance for Europe-Russia Cooperation

6DV.2.15 J.M. Olchowik, K. Cieslak & M. Sordyl
Lublin University of Technology, Poland
Analysis of the Photovoltaic Development under South-East Poland Conditions

6DV.2.16 G. Notton & C. Cristofari
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Technical University of Civil Engineering, Bucharest, Romania
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N. Mihailov
University of Rousse, Bulgaria
Research Network between France and Countries of Central and Eastern Europe on Renewable Energy Systems

6DV.2.17 A.V. Yurchenko, A.V. Kosloff & V.I. Yurchenko
Tomsk Politechnical University, Russian Federation
Innovation Processes in Industrial Engineering of Solar-Type Silicon in Siberia

6DV.2.21 S. Hiranvarodom, B. Plangklang & P. Apiratikul
Rajamangala University of Technology Thanyaburi, Pathum Thani, Thailand
An Information Process of Dissemination for PV Power Systems Development: Case Study in a Thai University of Technology

6DV.2.22 M.R. Regmi & B. Pokharel
Kathmandu, Nepal
Promotion of Solar Energy in Nepal: the Reality of Energy Sustainability for the 21st Century

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6DV.2.25 C. Hu
EACEE, Yueqing, China
Solutions for Development of China's Rural Solar PV Marketing

6DV.2.27 K. Komoto
Mizuho Information & Research Institute, Tokyo, Japan
K. Kurokawa
Tokyo Institute of Technology, Japan
Future PV Direction: VLS-PV Roadmap Toward 2100

6DV.2.28 K. Kurokawa
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Realistic, Sustainable Energy Solutions from the Desert for World Energy throughout the Century

6DV.2.29 D. Lecoufle, R. Lawless & M. Hampel
Lahmeyer International, Bad Vilbel, Germany
Large Scale PV Plants in North Africa and the Middle East - Are Large Scale PV Plants in the Sun-Belt Countries Overshadowed by CSP's Recent Boom? A Technical and Economical Comparison

6DV.2.30 P. Haurant & M. Muselli
University of Corsica, Ajaccio, France
P. Oberti
University of Corsica, Corte, France
Solar Atlas Implementation and Multicriteria Context of PV Plant Planning in Corsica Island (France)

6DV.2.31 C. Württemberger
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Economics of Different Solar Power Generation Systems

6DV.2.32 B. Gaiddon
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pvXchange, Berlin, Germany
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6DV.2.37 M. García Carromero
GRENERGY Renovables, Madrid, Spain
J.C. González López
UPM, Madrid, Spain
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Centrosolar, Paderborn, Germany
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6DV.2.41 I. Kaizuka
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G. Watt
Energy Futures Australia, Wauchope, Australia
P. Hüsser
Nova Energie, Aarau, Switzerland
P. Cowley
SEI, Bristol, United Kingdom
R. Bründlinger
Arsenal Research, Vienna, Austria
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CarbonFree Technology, Toronto, Canada
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NEDO, Kawasaki, Japan
K. Kurokawa
Tokyo Institute of Technology, Japan
F. Aratani
RTS Corporation, Tokyo, Japan
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6DV.3.1 L. Zanchi, V. Bellicini, I. Ferretti & L. Zavanella
University of Brescia, Italy
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6DV.3.2 A. Skumanich
SolarVision Consulting, Los Gatos, USA
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6DV.3.6 R. Frischknecht & M. Stucki
ESU-Services, Uster, Switzerland
W. Krewitt
German Aerospace Center (DLR), Stuttgart, Germany
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6DV.3.7 D. Beloin-Saint-Pierre, D. Mayer & I. Blanc
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N. Adra & E. Plocoste
Transénergie, Ecully, France
P. Jacquin
PHK Consultants, Ecully, France
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SETEMIP, Bonnefamille, France
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6DV.3.8 K. Sussman, N.H. Reich, R. Van der Meulen, E.A. Alsema, W.G.J.H.M. van Sark & E. Nieuwlaar
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6DV.3.9 E.A. Alsema
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6DV.3.10 B. Ghosh
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University of Lisbon, Portugal
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6DV.3.13 B. Huberlant, K. van Rattinghe, V. Van Thong & A. Woyte
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D.V. Suvorov, G.V. Gordienko & N.V. Kazakova
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S. Laucher, S. Kohle, A. Zechelius & P. Adelmann
Ulm University of Applied Sciences, Germany
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6DV.3.18 P. Pistochini
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S. Castello & A. Moreno
ENEA, Rome, Italy
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6DV.3.21 V. Gomez & J. Clyncke
PV Cycle, Brussels, Belgium
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CIEMAT, Madrid, Spain
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1DV.4.2 J. Halme, K. Miettunen & P. Lund
Helsinki University of Technology, Espoo, Finland
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1DV.4.3 Y.T. Wang & I. Hsieh
National Chung Hsing University, Taichung, Taiwan
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1DV.4.4 M. Berginc, U. Opara-Krasovec, M. Hocevar & M. Topic
University of Ljubljana, Slovenia
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1DV.4.6 M. Drabik, J. Touskova & H. Biederman
Charles University, Prague, Czech Republic
H. Kobayashi
National Institute for Materials Science, Tsukuba, Japan
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1DV.4.7 S. Rani, P. Suri, P.K. Shishodia & R.M. Mehra
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1DV.4.10 Y.C. Huang, M.C Wu & W.F. Su
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1DV.4.14 M. Rusu, S. Wiesner, S. Lehmann, K. Fostiropoulos, C. H. Fischer, I. Lauermann & M. C. Lux-Steiner
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The Chemical and Electronic Structure of the Organic Bulk Heterojunction Absorber / Inorganic Contact Interface in High-Efficient Organic Solar Cells

1DV.4.15 C.W. Bumby, S. Ravi & A.B. Kaiser
Victoria University of Wellington, New Zealand
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1DV.4.16 S.-J. Moon, W.S. Shin, J.C. Lee, W.-W. So & S.C. Yoon
Korea Research Institute of Chemical Technology, Daejeon, Republic of Korea
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1DV.4.17 E. Bobeico, S. Esposito & P. Morvillo
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1DV.4.18 W.S. Shin, S.-J. Moon & W.-W. So
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1DV.4.19 S.-K. Chaiyuth, P. Vijitjunya, K. Inpor, S. Keawket, A. Heawchin & S. Kobsak
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Influence of Bile-Acid as Co-Absorbent for Reducing Charge Recombination to Improve Dye Sensitized Solar Cell Performance

1DV.4.20 N. Kronenberg, H.W. Lademann & K. Meerholz
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H. Bürckstümmer, E.V. Tulvakova, M. Deppisch & F. Würthner
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Bulk-Heterojunction Organic Solar Cells Based on Merocyanine Colorants

1DV.4.21 H.W.A. Lademann, Y. Yuan, K. Deing & K. Meerholz
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Morphology Control of Bulk-Heterojunction Solar Cells

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1DV.4.26 E. von Hauff, F. Johnen & J. Parisi
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1DV.4.29 A. Bernardi, C. Carbonera, R. Po & G. Giannotta
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1DV.4.31 W. Tress, J. Widmer, A. Merten, M.K. Riede & K. Leo
Dresden University of Technology, Germany
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1DV.4.32 B. Minnaert & P. Veelaert
University College Ghent, Belgium
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1DV.4.41 A.E. Kashyout & M. Fathy
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1DV.4.42 S.H. Seo, B.K. Koo, W.J. Lee & D.Y. Lee
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1DV.4.43 A. Chebotareva, G. Untila & T. Kost
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1DV.4.45 C. Olson, M. Balci, F. Cadot, N.J. Bakker, M. J. Goris & F.O. Lenzmann
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1DV.4.46 C. Lévy-Clément, J. Elias & R. Tena-Zaera
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1DV.4.48 M. Liu, C.H. Chang, C.H. Chang, J.S. Huang, C.Y. Chou, Y.H. Lin, W.H. Lin & C.F. Lin
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Air-Stable Inverted Polymer Solar Cell Employing a Sol-Gel Derived ZnO Electron Selective Layer

1DV.4.49 K. Miettunen, J. Halme & P. Lund
Helsinki University of Technology, Espoo, Finland
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1DV.4.50 P.M. Sommeling & J. Kroon
ECN, Petten, The Netherlands
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Dai Nippon Printing, Kashiwa-city, Japan
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1DV.4.53 M. Niggemann, B. Zimmermann & H.F. Schleiermacher
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1DV.4.54 C. Filagrossi Ambrosino
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EKO Instruments, Tokyo, Japan
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1DV.4.57 H. Seifert, J. Hohl-Ebinger & W. Warta
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1DV.4.58 M. Toerker, T. Schmitt & O. R. Hild
Fraunhofer IPMS, Dresden, Germany
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Technical University of Ilmenau, Germany
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University of Karlsruhe, Germany
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1DV.4.62 J.W. Kang, S.Y. Park, K.H. Choi, D.G. Kim, J.K. Kim & Y.S. Jeong
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SPD Laboratory, Hamamatsu, Japan
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1DV.4.68 A. Elazari
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Veeco Instruments, Somerset, USA
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1DV.5.2 E. Garralaga Rojas, B. Terheiden, J. Hensen, H. Plagwitz & R. Brendel
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G.F. X. Strobl, W. Köstler & W. Zimmermann
AZUR SPACE Solar Power, Heilbronn, Germany
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1DV.5.3 R. Jakomin, G. Beaudoin, N. Gogneau & I. Sagnes
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1DV.5.4 E. Fernandez Lisbona & B. Lehmann
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1DV.5.5 M. Alurralde, M. Barrera, C.G. Bolzi, C.J. Bruno, P. Cabot, E. Carella, J. C. Duran, J. Fernández Vázquez, E. M. Godfrin, V. Goldbeck, A. Iglesias, M. Martinez Bogado, A. Moglioni, S.L. Nigro, J. Plá, M.C. Raffo Calderón, S.E. Rodriguez & M.J.L. Tamasi
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J. Di Santo, A. Filevich, L. Gonzalez, E. Mezzabolta, S. Muñoz, D. Raggio, C. Rinaldi & H. Socolovsky
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Flight Models for the Aquarius/SAC-D Satellite Mission

1DV.5.6 M.G. Martinez Bogado, M.J.L. Tamasi, C.G. Bolzi, I. Prario & M. Alurralde
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1DV.5.7 H.C. Neitzert
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The German Joint Project 'Flexible CIGSe Thin Film Solar Cells for Space Applications'

1DV.5.9 T. Fellmeth, F. Clement, M. Menkö, N. Mingirulli, M. Glatthaar, D. Biro & R. Preu
Fraunhofer ISE, Freiburg, Germany
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1DV.5.10 A. Pauchard & M. Meizoso
Synova, Ecublens, Switzerland
Cutting Solar Cells for CPV Applications

1DV.5.11 M.K. Munji, E.E. Van Dyk & F.J. Vorster
Nelson Mandela Metropolitan University, Port Elisabeth, South Africa
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1DV.5.12 M. Steiner, S.P. Philips, M. Hermle, F. Dimroth & A.W. Bett
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1DV.5.13 D. Vincenzi, S. Baricordi, C. Malagù, M. Pasquini, F. Gualdi & G. Martinelli
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1DV.5.14 F.D. Newman, D.R. Chumney, P.M. Patel, R.W. Hoffman, T. Varghese, D.J. Aiken, M.A. Stan & P.R. Sharps
EMCORE, Albuquerque, USA
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1DV.5.15 V.S. Kalinovsky, V.V. Evstropov, V.M. Lantratov, M.A. Mintairov & V.M. Andreev
Ioffe Physico Technical Institute, St. Petersburg, Russian Federation
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1DV.5.16 V. Kalinovsky, R.V. Levin, B.V. Pushniy, V.D. Rumyantsev & V.M. Andreev
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1DV.5.17 A. Vossier & A. Dollet
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B. Hirsch, A. Braun, E.A. Katz & J.M. Gordon
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A. Antonini, M. A. Butturi, P. Di Benedetto, D. Uderzo, P. Zurru & E. Milan
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Indoor Optical Characterization of the Nonimaging "Rondine" PV Solar Concentrator

1DV.5.19 S. Moriwaki
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1DV.5.20 F. Languy & S. Habraken
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1DV.5.21 M. Victoria, C. Domínguez, I. Antón & G. Sala
UPM, Madrid, Spain
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1DV.5.23 K.K. Chong, C.W. Wong, F.L. Siaw, T.K. Yew, S.S. Ng, S.L. Lau, M.S. Liang & Y.S. Lim
University Tunku Abdul Rahman, Kuala Lumpur, Malaysia
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1DV.5.24 S. Gale
Elektrika Pty, Melbourne, Australia
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Royal Melbourne Institute of Technology, Australia
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1DV.5.25 M. Davis
Green Mountain Engineering, San Francisco, USA
M. Martínez & D. Sánchez
ISFOC, Puertollano, Spain
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Performances Comparison between Photovoltaic Concentrator Modules Equipped with SJ and MJ Concentrator Cells Using Different Assembling Techniques

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1DV.5.45 F. Aleo, M.L. Lo Trovato, G. Gigliucci & S. Scalia
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