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3DV.1.7	Optical Characteristics of Thin CIGS Cells on TCO Back Contact <i>J. van Deelen, B. Kniknie, Z. Vroon, R. Würz, F. Kessler</i>	1701
3DV.1.10	Comparison Study of CZTS Thin Films Grown Using Vacuum and Solution Based Methods <i>G. Gordillo, M.F. Hurtado-Morales, R.A. Becerra, S.D. Cruz, E. Ramirez, J.S. Oyola Villegas, I. Lauermann</i>	1704
3DV.1.15	Improvement in Processing CdTe/CdS Thin Film Solar Cells <i>N. Romeo, A. Bosio, D. Menossi, G. Rosa, A. Salavei, A. Romeo</i>	1709
3DV.1.16	Preparation and Characterization of CZTS Single Crystal by Molten Salt Method <i>J. Zhang, S. Wang, L. Shao</i>	1713
3DV.1.19	Characteristics of Sodium Distribution in Bridgman CuInSe _{2+x} by XPS <i>S. Park, C.H. Champness, I. Shih</i>	1716
3DV.1.21	Device Structures for High-Efficiency Chalcopyrite Tandem Solar Cells <i>S. Shibasaki, H. Hiraga, H. Saito, N. Nakagawa, M. Yamazaki, K. Yamamoto</i>	1722

3DV.1.26	On the Importance of the Back Contact for Cu (In, Ga) Se ₂ Thin Film Solar Cells <i>T. Ott, T. Lavrenko, T. Walter, R. Schöffler, H.-J. Fecht</i>	1725
3DV.1.30	Studies of the Zn ₂ SnO ₄ and In _x Sy as Alternative Buffer Layers Deposited via R.F. Sputtering for Chalcogenide Photovoltaics <i>R.A. Mereu, A. Le Donne, S. Binetti, M. Acciarri</i>	1730
3DV.1.36	In ₂ S ₃ Buffer Layer Prepared by Chemical Bath Deposition <i>L. Atourki, K. Bouabid, A. Ihlal, E. Ihalane, Y. Amira, A. Elfanaoui, H. Kirou, A. Outzourhit, X. Portier</i>	1733
3DV.1.40	Comparison of Different CIGS-laser Structuring Methods <i>N. Schilling, K. Schlemper, U. Klotzbach</i>	1736
3DV.1.41	Improved Activation Treatment for CdTe Solar Cells <i>B. Späth, C. Drost, V. Velappan, C. Kraft, B. Siepchen, T. Modes, O. Zywitzki, S. Peng</i>	1741
3DV.1.44	Preparation of CZTS Thin Films by Wet Techniques: SILAR and Electrodeposition <i>H. Kirou, L. Atourki, A. Elfanaoui, K. Bouabid, A. Ihlal</i>	1746
3DV.1.45	Preparation and Characterization of ZnO and ZnO:Al Thin Films <i>L. Atourki, E. El Hamri, H. Kirou, E.H. Ihalane, A. Elfanaoui, K. Bouabid, A. Ihlal</i>	1749
3DV.1.47	Cu ₂ ZnSn _x Ge _{1-x} S ₄ Thin Film Solar Cell by Sulfurizing Sputtered Metallic Precursors <i>J. Chen, W. Li, F. Liu, N. Song, S. Huang, X. Hao, M. Green</i>	1752
3DV.1.52	Flexible Antireflection Layer of ZnO Nanorod Embedded in PDMS Film for Enhancing Omnidirectional Photovoltaic Performance of CIGS Solar Cell <i>M.-Y. Hsieh, S.-Y. Kuo, F.-I. Lai, H.-V. Han</i>	1756
3DV.1.54	Sheet Resistance Measurements of Highly Resistive Interfacial Layers in Photovoltaic TCO Thin Films <i>T. Tänzer, V. Naumann, S. Großer, C. Hagendorf</i>	1759
3DV.1.55	Investigation of Thin-Film CIGS Degradation under P2 Scribe Laser Illumination <i>K. Stelmaszczyk, C. Schultz, M. Schuele, M. Weizman, C.A. Kaufmann, R. Schlatmann, B. Rau, V. Quaschnig, B. Stegemann, F. Fink</i>	1763
3DV.1.57	Cu ₂ SnS ₃ Based Solar Cell <i>R. Chierchia, P. Mangiapane, E. Salza, M. Valentini, A. De Girolamo, A. Mittiga, M. Tucci</i>	1770
3DV.1.60	Al-Doped ZnO by Inline MOCVD <i>W.S.M. Brooks, V. Barrioz, P. Siderfin, D.A. Lamb, G. Kartopu, S. Monir, A.J. Clayton, S.J.C. Irvine</i>	1773
3DV.1.63	Spray Pyrolyzed CIS Thin Film Solar Cells Using Sandwich Structured TCO Layer <i>E. Aydin, E. Ugur, M. Sankir, N.D. Sankir</i>	1778
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3DV.2.7	Influence of HCl-Activation on the Performance of Low and High Temperature Grown CdTe Solar Cells <i>E. Schwuchow, O. Zywitzki, T. Modes, H. Morgner, CHR. Metzner</i>	1786
3DV.2.9	Fabricating of Cu ₂ SnS ₃ -Based Photovoltaic Cells Using Dry Deposition Processes <i>H. Araki, A. Kanai, K. Toyonaga, N. Aihara, H. Katagiri</i>	1791
3DV.2.11	Optical Properties of i-ZnO Prepared by Pulsed DC Magnetron Sputtering Using Rotary Ceramic Targets <i>P. Prunici, C. David, A. Panckow, T. Springborn, B. Tinkham</i>	1794
3DV.2.13	Effect of Electric Field on Spray Deposited Kesterite (Cu ₂ ZnSnS ₄) Film <i>S.K. Swami, N. Chaturvedi, A. Kumar, V.K. Komarala, V. Dutta</i>	1798

3DV.2.15	Influence of the Annealing Process on Transport and Photoelectrical Properties of Cu ₂ ZnSnS ₄ Kesterite Thin Films Obtained by Spray Pyrolysis <i>L. Dermenji, M. Guc, L.I. Bruc, Th. Dittrich, M. Rusu, K.G. Lisunov, N. Curmei, D.A. Sherban, A.V. Simashkevich, M.Ch. Lux-Steiner, E. Arushanov</i>	1801
3DV.2.17	Improving the Cu ₂ SnS ₃ PV Cell Efficiency via Post Treatment of Co-Evaporated Thin Films <i>A. Kanai, N. Aihara, K. Toyonaga, H. Araki, A. Takeuchi, H. Katagiri</i>	1805
3DV.2.21	Modelling and Simulation of Curved CIGS Modules <i>N. Bednar, N. Severino, N. Adamovic</i>	1809
3DV.2.23	Chemical and Electrochemical Processing of High Quality CIS/CIGS Absorber, Buffer, Window, and Anti-Reflective Coating for Low Cost Photovoltaic Technology <i>D. Papadimitriou, G. Roupakas, C. Chatzitheodoridis, G. Halambalakis, S. Tselepis, R. Sáez-Araoz, M.C. Lux-Steiner, N.H. Nickel, S. Alamé, P. Vogt, M. Kneissl</i>	1812
3DV.2.27	Analysis of the Stability of Ultra-Thin CdTe Absorbers <i>I. Rimmaudo, A. Salavei, B.L. Xu, S. Di Mare, A. Romeo</i>	1816
3DV.2.28	Effect of Magnesium Content on the Properties of Transparent Conductive RF-Sputtered Gallium-Doped Magnesium Zinc Oxide Thin Films and CIGS Solar Cells <i>H.-C. Lu, Y.-P. Hsiao, J.-C. Jou, C.-S. Chang</i>	1819
3DV.2.29	Annealing of Kesterite Thin Films of Cu ₂ ZnSnS ₄ Obtained by Spray Pyrolysis in Selenium Atmosphere <i>L.I. Bruc, M. Guc, M. Rusu, A. Siminel, L. Dermenji, N. Curmei, D.A. Sherban, A.V. Simashkevich, E. Arushanov</i>	1823
3DV.2.32	Multiple Effects of the CdCl ₂ Activation Treatment on the Device Properties of CdTe/CdS Solar Cells by Monitoring the Annealing Temperature <i>B.L. Xu, I. Rimmaudo, A. Salavei, F. Piccinelli, M. Barbato, M. Meneghini, G. Meneghesso, S. Di Mare, D. Menossi, A. Bosio, N. Romeo, A. Romeo</i>	1826
3DV.2.35	Cu ₂ ZnSnS ₄ Thin Film Solar Cells Produced by Thiourea Complexes Suspension <i>S. Tombolato, A. Colombo, M. Acciarri, M. Boshta, S. Binetti</i>	1829
3DV.2.36	Thickness and Ga-Content Variations in Co-Evaporated CIGS Solar Solar Cells with Flat Ga Profile - an Electrical Characterization <i>D. Ledinek, B. Vermang, M. Edoff</i>	1832
3DV.2.37	Cu(In,Ga)Se ₂ Solar Cells on Flexible Substrate Fabricated by an Innovative Roll to Roll Hybrid Sputtering and Evaporation Process <i>M. Acciarri, A. Le Donne, R. Mereu, P. Garattini, M. Falcone, S. Marchionna, M. Meschia, R. Moneta, A. Gasparotto, S. Binetti</i>	1837
3DV.2.41	Performance of EVA Encapsulated CdTe Devices and Micro-Modules Grown by MOCVD under Heat/Humidity Testing <i>S.D. Hodgson, G. Kartopu, M. Crozier, P. Adamson, V. Barrioz, S. Rugen-Hankey, E. Tejedor, D. Dupin, A.J. Clayton, W.S.M. Brooks, D.A. Lamb, A. Brunton, S.J.C. Irvine</i>	1840
3DV.2.42	Synthesis of CZTS Nanocrystals and Transformation into CZTSE by Hot Injection of Selenium <i>S. Engberg, Z. Li, J.Y. Lek, Y.M. Lam, J. Schou</i>	1844
3DV.2.48	Development of In _x Se _y Buffer Layers for Application in CdTe Based Thin Film Solar Cells <i>M.L. Madugu, P.A. Bingham, H.I. Salim, O.I. Olusola, I.M. Dharmadasa</i>	1847
3DV.2.49	Optimisation of pH for Electrodeposition of n-CdSe Thin Films for Applications in Photovoltaic Devices <i>O.I. Olusola, V. Patel, I.M. Dharmadasa</i>	1852
3DV.2.51	Fabrication and Characterization of Molybdenum/Copper Zinc Tin Sulfide (CZTS)/Aluminum Thin Film Structures <i>A. El Kissani, L. Nkhaili, K. Ellassali, A. Outzourhit</i>	1857
3DV.2.53	Modulation Spectroscopy as a Probe of Surface Electric Field in CdTe Solar Cells <i>A.E. Delahoy, Z. Cheng, K.K. Chin, S. Peng</i>	1860

3DV.2.55	Epitaxial Growth of Cu ₂ ZnSnS ₄ by Radio Frequency Magnetron Sputtering <i>N. Song, X. Hao, M.A. Green</i>	1865
3DV.2.56	The Impact of Metal Precursor on ZnS Formation in Zn-Rich Cu ₂ ZnSnS ₄ Thin Film Solar Cells <i>J. Chen, W. Li, C. Yan, F. Liu, N. Song, S. Huang, X. Hao, M. Green</i>	1869
3DV.2.58	Accelerated Relaxation of Efficiency of Thermally Aged Zn(O,S) Buffered CIGS Devices <i>R.H. Chua, L.K. Teh, G.M. Ng, S. Zweigart, P. Vemulamada, L.H. Wong, S. Mhaisalkar</i>	1872
3DV.2.64	Inkjet Printing of Kesterite and Chalcopyrite Thin Film Absorbers for Low Cost Photovoltaic Application <i>X. Lin, J. Kavalakkatt, N. Brusten, M.C. Lux-Steiner, A. Ennaoui</i>	1876
3DV.2.65	Cu(In,Ga)(S,Se) ₂ Thin-film Solar Cells with Zn-based Double Layered Buffers Deposited by CBD and ALD <i>T. Kato, R. Kamada, S. Adachi, H. Sugimoto</i>	1880
Visual PRESENTATIONS 3DV.4 Silicon-based Thin Film Solar Cells		
3DV.4.6	Effects of Large-Area PECVD Process on the Property of a-SiGe Thin Films <i>S. Liu, D. Zhu, W. Li, J. Zheng, S. Wang, H. Huang, C. Lu, X. Niu</i>	1883
3DV.4.7	A-SiO:H Thin Films with Increased Light Induced Degradation Stability for Thin Film Silicon Solar Cells <i>S. Holinski, D. Borchert, S. Hohage, B.-M. Meiners, P. Schäfer, T. Westrich</i>	1886
3DV.4.8	Mechanical Loading Effects on the Resistivity of Thin Film Semiconductors <i>D. Lange, P. Roca i Cabarrocas, N. Triantafyllidis, D. Daineka</i>	1890
3DV.4.11	One Step Process as a Route for Effective Light Trapping in Thin Film Solar Cells <i>G. Li, H. Li, J. Ho, M. Wong, H.S. Kwok</i>	1894
3DV.4.12	Interface Engineering by Using Germanium Carbon Layer at the TCO/p Interface in Silicon Thin Film Solar Cells <i>G. Li, H. Li, J. Ho, M. Wong, H.S. Kwok</i>	1897
3DV.4.13	High-Rate Deposition of Si Absorber Layers by Electron Beam Evaporation and First Electron Beam Crystallization Tests <i>S. Saager, M.B. Yaala, J.-P. HeiB, C. Metzner, B. Pfefferling, D. Temmler</i>	1900
3DV.4.14	Threshold RF Power in Producing Hydrogenated Nano-Crystalline Silicon (nc-Si:H) Thin Films with Constant H ₂ Flow <i>T. Eren, A. Bacioglu, M.M. Can</i>	1904
3DV.4.16	Solution Growth of Crystalline Si on Glass <i>R. Bansen, R. Heimbürger, J. Schmidtbauer, T. Teubner, T. Boeck</i>	1908
3DV.4.17	Growth Differences of AZO on Different Glass Textures and Their Application in Thin Film Silicon Solar Cells <i>M. Llusà, L. Morrone, A. Caballero, A. Antony, J.M. Asensi, J. Andreu, J. Bertomeu</i>	1912
3DV.4.18	Static and Dynamic VHF-Deposition of Microcrystalline Silicon at 140 MHz with Rates Up to 2.5 Nm/s <i>C. Strobel, B. Leszczynska, S. Leszczynski, U. Merkel, J. Kuske, D.D. Fischer, M. Albert, J. Holovsky, J.W. Bartha</i>	1917
3DV.4.19	Pulsed-Lamp Crystallization of Nanocrystalline Silicon Thin Films for Solar Cell Application <i>B. Yan, M. Dubey, M. Shrestha, Q. Fan, D. Stevenson</i>	1921
3DV.4.20	High Haze Textured Surface B-Doped ZnO-TCO Films on Chemically Etched Glass Substrates for Si-Based Thin Film Solar Cells <i>X.-L. Chen, X.-D. Zhang, J.-M. Liu, Z. Chen, J. Fang, J. Ni, D.-K. Zhang, C.-C. Wei, H.-Z. Ren, Y. Zhao</i>	1926
3DV.4.24	Development and Investigation of Thin Film Solar Cells on Flexible Substrates Using Very High Frequency Plasma Enhanced Chemical Vapor Deposition (VHF-PECVD) Technique <i>D.D. Fischer, B. Leszczynska, M. Albert, J.W. Bartha, U. Stephan, J. Kuske, N. Prager, M. Fahland</i>	1929

3DV.4.29	Electrochemically Grown ZnO Nanorods as Antireflective Layer for Silicon Thin-Film Solar Cells in n-i-p Configuration <i>R.-E. Nowak, M. Juilfs, S. Geißendörfer, M. Vehse, K. von Maydell, C. Agert</i>	1933
3DV.4.30	Integrated Solar Cell Based on Monocrystalline Si Thin Film Transferred to Low Cost Sintered Si Wafers <i>F. Chancerel, Y. Boye, G. Sun, A Sow, J.-B. Brette, B. Sionneau, A. Malinge, A. Straboni</i>	1937
3DV.4.32	Graded Index at the TCO/p Interface for Silicon Thin Film Solar Cells Using Nb Doped TiO ₂ <i>A. Antony, M. Llusà, F. Rojas Tarazona, L. Morrone, A. Caballero, J.M. Asensi, J. Andreu, J. Bertomeu</i>	1941
3DV.4.33	2D Photonic Crystals with Random Surface Roughness for Light Trapping in Thin Film Crystalline Silicon Photovoltaic Cells <i>X. Meng, E. Drouard, G. Gomard, D. Frisina, R. Kleiman, C. Seassal</i>	1944
3DV.4.35	Applying Design of Experiment to the Modeling and Optimization of a-Si:H/ μ c-Si:H Tandem Solar Cells <i>J. Xin, Y. Lee, L. Zhao, C. Liu, J. Peng, P. Ho, A.Y.-S. Lee, B. Leung</i>	1948
3DV.4.37	2D Periodic Photonic Nanostructures Integrated in 40 μ m Thin Crystalline Silicon Solar Cells <i>C. Trompoukis, O. El Daif, V. Depauw, T. Bearda, K. Van Nieuwenhuysen, J. Govaerts, H. Sivaramakrishnan Radhakrishnan, R. Martini, S. Granata, I. Gordon, R. Mertens, J. Poortmans</i>	1952
3DV.4.39	Synergy Effect of XRD, Raman, FTIR, UVVIS and Tem Analyses in μ c-Si:H and nc-Si Microstructure Determination <i>P. Sutta, J. Müllerová, P. Calta, S.N. Agbo, R. Medlin, M. Netrvalová, V. Vavrunková, L. Prušáková</i>	1955
3DV.4.41	Epitaxial Growth of Silicon Thin Films by Low Temperature RF-PECVD from SiF ₄ /H ₂ /Ar <i>R. Leal, J.-C. Dornstetter, F. Haddad, B. Bruneau, R. Cariou, W. Chen, I. Cosme Bolanos, G. Poulain, J.-L. Maurice, P. Roca i Cabarrocas</i>	1959
3DV.4.42	Control of Glass Texture by NaOH and HF Etching in Aluminium Induced Texturing Process for Enhanced Light Scattering in Silicon Thin Film Solar Cells <i>A. Soman, A. Antony</i>	1963
3DV.4.45	Towards Integration of High Quality Epitaxial Si Foils into Low-Temperature Back-Contacted Solar Devices <i>K. Van Nieuwenhuysen, V. Depauw, T. Bearda, E. Carnemolla, H. Sivaramakrishnan Radhakrishnan, J. Govaerts, S.N. Granata, R. Martini, C. Trompoukis, Y. Abdulraheem, I. Gordon, J. Poortmans</i>	1967
3DV.4.46	FTIR Analysis of Post-Oxidation in Microcrystalline Silicon Thin Films <i>E. Farsari, A. Kalampounias, E. Amanatides, D. Mataras</i>	1971

Solar Cells / Assemblies / Modules for Terrestrial Concentrator Systems and for Space Solar Generators

Plenary SESSION 4CP.2 THIN FILM SOLAR CELLS // SOLAR CELLS / ASSEMBLIES / MODULES FOR TERRESTRIAL CONCENTRATOR SYSTEMS AND FOR SPACE SOLAR GENERATORS

4CP.2.1	New Efficiency Frontiers with Wafer-Bonded Multi-Junction Solar Cells. <i>T.N.D. Tibbitts, P. Beutel, M. Grave, C. Karcher, E. Oliva, G. Siefer, A. Wekkeli, M. Schachtner, F. Dimroth, A.W. Bett, R. Krause, M. Piccin, N. Blanc, M. Muñoz-Rico, C. Arena, E. Guiot, C. Charles-Alfred, C. Drazek, F. Janin, L. Farrugia, B. Hoarau, J. Wasselin, A. Tauzin, T. Signamarcheix, T. Hannappel, K. Schwarzbürg, A. Dobrich</i>	1975
4CP.2.2	Solar Generators for ESA Missions: in Orbit Performance and Future Challenges <i>A. Caon, C. Baur, G. D'Accolti, L. Icardi, O. Mourra, C. Signorini, S. Taylor</i>	1979

Oral PRESENTATIONS 4BO.10 III-IV MultiJunction Cells and CPV Modules

- 4BO.10.1** InGaAs/GaAsP Superlattice Solar Cells on Vicinal Substrates for Current-Matched Triple Junction Cells on Ge 1986
H. Fujii, K. Toprasertpong, H. Sodabanlu, Y. Wang, K. Watanabe, M. Sugiyama, Y. Nakano
- 4BO.10.2** Next Generation of Wafer-Bonded Multi-Junction Solar Cells 1991
M. Niemeyer, V. Klinger, F. Dimroth, F. Predan, P. Fuss-Kailuweit, D. Reinwand, D. Lackner, A. Wekkeli, E. Oliva, M. Schachtner, G. Siefer, A.W. Bett
- 4BO.10.3** Lattice Matched III-V/SiGe on Silicon Tandem Solar Cells 1996
M. Diaz, L. Wang, D. Li, B. Conrad, X. Zhao, A. Soeriyadi, A. Gerger, A. Lochtefeld, C. Ebert, R. Opila, I. Perez-Wurfl, A. Barnett
- 4BO.10.4** 4-Junction Solar Cells with Dilute Nitrides: Optimization with Luminescent Coupling 1999
M.M. Wilkins, A. Gabr, P. Sharma, H. Schriemer, S. Fafard, K. Hinzer
- 4BO.10.5** High Quality Measurements of the Solar Spectrum for Simulation of Multi-Junction Photovoltaic Cell Yields 2002
M. Norton, V. Paraskeva, R. Galleano, G. Makrides, R.P. Kenny, G.E. Georghiou
- 4BO.10.6** In-Field Temperature Evaluation of Solar Modules by Time Dependent Open Circuit Voltage Measurements 2008
V.D. Rumyantsev, A.V. Chekalin, N.Yu. Davidiyuk, N.A. Sadchikov, A. Luque

Oral PRESENTATIONS 4CO.13 Terrestrial Concentrator Modules and Systems

- 4CO.13.2** SOPHIA CPV Module Round Robin: Power Rating at CSOC 2012
M. Steiner, M. Baudrit, C. Domínguez, I. Anton, F. Roca, R. Fucci, P.M. Pugliatti, A. Di Stefano, R. Kenny, P. Morabito, M. Muller, G. Siefer
- 4CO.13.3** Return of Experience from 5 Years of Field Data: Long Term Performance Reliability of Soitec's CPV Technology 2017
T. Zech, T. Gerstmaier, M. Röttger, R. Moretta, C. Braun, A. Gombert, M. Steiner, G. Siefer, D. Sánchez, O. de la Rubia, M. Martínez
- 4CO.13.4** Comparative Analysis of Nonuniform Illumination and Chromatic Aberration in Triple and Quadruple Junction Solar Cells under Concentration Using SPICE 2020
P. Sharma, A.H. Trojnar, M. Wilkins, A.W. Walker, H. Schriemer, K. Hinzer

Oral PRESENTATIONS 4DO.13 Solar Generators for Space Missions

- 4DO.13.2** Design of a Flexible Solar Generator for on-Orbit Verification on a Small Satellite Mission 2025
K. Zajac, S. Brunner, S. Langendorf
- 4DO.13.3** High Efficiency Four Junction Lattice Matched Solar Cells for Space Applications: Analysis of Radiation Hardness Against 1 MeV Electrons 2031
R. Campesato, G. Gori, M. Casale, G. Gabetta

Visual PRESENTATIONS 4CV.3 III-V-based Multi-junction Solar Cells, Concentrator Solar Cells and Space Solar Cells / Electrical Characterisation and Modeling of Cells and Modules / Terrestrial Concentrator Modules and Systems / Solar Generators for Space Missions

- 4CV.3.1** Design, Fabrication and Analysis of SiGe Solar Cell in a Gallium Arsenide Phosphide - Silicon Germanium Dual Junction Solar Cell on Si Substrate 2036
X. Zhao, D. Li, B. Conrad, L. Wang, A.H. Soeriyadi, M. Diaz, A. Lochtefeld, A. Gerger, I. Perez-Wurfl, A. Barnett
- 4CV.3.3** Study of GaPN(As)/Si Multijunction Solar Cells Grown by MBE 2040
A.S. Gudovskikh, A.I. Baranov, A.Y. Egorov, K.S. Zelentsov, D.A. Kudryashov, I.A. Morozov, E.V. Nikitina, E.V. Pirogov, M.S. Sobolev
- 4CV.3.4** GaAsP Top Solar Cell of Three-Terminal GaAsP/SiGe on Si Tandem Solar Cells 2043
L. Wang, M. Diaz, B. Conrad, A. Lochtefeld, A. Gerger, C. Ebert, X. Zhao, D. Li, A. Soeriyadi, I. Perez-Wurfl, A. Barnett

4CV.3.6	Optical and Electrical Characterization of High-Efficiency InGaP/InGaAs/Ge Triple-Junction Solar Cell Incorporated with InGaAs/GaAs QDs Layers in Middle Cell <i>W.-J. Ho, G.-C. Yang, C.-M. Chan, J.-J. Liu, Y.-Y. Lee, H.-P. Shiao</i>	2046
4CV.3.7	Overview of Loss Mechanisms for Super High-Efficiency Multijunction Solar Cells <i>M. Yamaguchi, K. Ikeda, N. Kojima, Y. Ohshita, T. Takamoto</i>	2050
4CV.3.8	Influence of Surfactants on the Recombination and Diffusion Processes in GaAs Solar Cells <i>A.S. Vlasov, L.B. Karlina, M.Z. Shvarts, N.K. Timoshina, B.Y. Ber, D.Y. Kazantsev</i>	2054
4CV.3.9	Simulation and Optimization of InP Nanowire Solar Cell <i>A. Alimardani, A. Afzali-Kusha, E. Asl-Soleimani</i>	2058
4CV.3.10	Growth of (InXGa1-X)2Se3 Buffer Material for Spalling a III-V Overlayer via Van Der Waals Interface <i>N. Kojima, H. Nakamura, Y. Ohshita, M. Yamaguchi</i>	2063
4CV.3.11	Cadmium Telluride Thin Film Photovoltaics for Space Application <i>R. Kimber, D.A. Lamb, S.J.C. Irvine, M.A. Baker, R. Grilli, C.I. Underwood, J. Hall</i>	2066
4CV.3.14	Further Development of a Pulsed Solar Simulator for CPV Modules and Acceptance Angle Measurement <i>G. Mathiak, A. Bork, C. Schaefer, F. Bous, L. Rimmelspacher, W. Herrmann, W. Shisler</i>	2072
4CV.3.16	Modeling Realistically Attainable Efficiency of Multijunction Solar Cells <i>A.V. Sachenko, V.P. Kostilyov, M.R. Kulish, I.O. Sokolovskiy, A.I. Shkrebtii, F. Gaspari, S. Quaranta</i>	2076
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