

Analysis of fill factor losses in thin film CdS/CdTe photovoltaic devices

Potlog, Tamara; Spalatu, Nicolae; Ciobanu, V.; **Hiie, Jaan; Mere, Arvo; Mikli, Valdek; Valdna, Vello** Moldavian journal of the physical sciences 2010 / 3/4, p. 363-367
https://ibn.idsi.md/sites/default/files/imag_file/Analysis%20of%20fill%20factor%20losses%20in%20thin%20film%20CdSCdTe%20photovoltaic%20devices.pdf

Annealing of bulk crystalline CdTe under CdCl₂ controlled vapor pressure

Hiie, Jaan; Valdna, Vello E-MRS Spring Meeting : Strasbourg, 1999 : abstracts 1999 / p. O-32

CdTe monograin powders technology

Altosaar, Mare; Kukk, Peeter-Enn 17th Nordic Semiconductor Meeting, Trondheim, Norway, June 17-20, 1996 : abstracts 1996

CdTe:CdCl₂:O₂ annealing process

Hiie, Jaan Thin solid films 2003 / p. 90-93 : ill <https://www.sciencedirect.com/science/article/pii/S0040609003002050>

Chemistry of CdCl₂:O₂ flux for CdTe solar cell technology

Hiie, Jaan; Valdna, Vello; Kois, Julia; Danilson, Mati; Mikli, Valdek Proceedings of the 19th EPVSECE conference 2004 / p. 927

Comparative study of isothermal grain growth of CdS and CdTe in the presence of halide fluxes

Hiie, Jaan; Altosaar, Mare; Mellikov, Enn Solid state phenomena 1999 / Polycrystalline Semiconductors V : Bulk Materials, Thin Films and Devices : Proceedings of the Fifth International Conference, held in Schwäbisch Gmünd, Germany, September 13-18, 1998, p. 303-308

Comparative study of isothermal grain growth of CdS and CdTe in the presence of halide fluxes at low temperatures

Hiie, Jaan; Altosaar, Mare; Mellikov, Enn Abstracts of the International Conference POLYSe'98 : Polycrystalline Semiconductors - Bulk Materials, Thin Films and Devices, 13-18 Sept. 1998, Schwäbisch Gmünd, Germany 1998 / p. O24

Complex defects in Cl doped ZnTe and CdTe

Valdna, Vello MRS Fall Meeting, Boston, 1996 : abstracts. 1 1996

Complex defects in Cl doped ZnTe and CdTe

Valdna, Vello Materials Research Society symposia proceedings series 1997 / p. 585-591: ill

Conductive polymer back contact in CdTe based solar cell

Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Öpik, Andres EMRS-2009 Spring Meeting, Strasbourg, France, 8-12 of June 2009, Symposium A 2009 / p. 25

Conductive polymer PEDOT:PSS back contact for CdTe solar cell

Jarkov, Aleksandr; Bereznev, Sergei; Laes, Kristjan; Volobujeva, Olga; Traksmäa, Rainer; Öpik, Andres; Mellikov, Enn Thin solid films 2011 / p. 7449-7452 : ill

Conductivity conversion in CdTe layers

Valdna, Vello; Buschmann, Felix; Mellikov, Enn Journal of crystal growth 1996 / p. 164-167: ill

Conductivity of evaporated CdTe films

Nirk, Tiit Tallinna Tehnikaülikooli Toimetised 1994 / lk. 13-19: ill

Configuration-coordinate model and the defect states of semiconductors, CdTe in particular

Hjelt, Kari; Collan, Heikki; **Krustok, Jüri; Mädasson, Jaan** Annual report 1994 / Optoelectronics Laboratory, Helsinki University of Technology 1995 / p. 50-51

Deep center luminescence in p-type CdTe

Krustok, Jüri; Valdna, Vello; Hjelt, Kari; Collan, Heikki Journal of applied physics 1996 / 3, p. 1757-1762: ill

Deep-level photoluminescence of doped CdTe in 0,8 eV region

Krustok, Jüri; Lõo, A.; Piibe, Toomas Journal of physics and chemistry of solids 1991 / 8, p. 1037-1038

Defect structure of silver-doped cadmium telluride

Nirk, Tiit Tallinna Tehnikaülikooli Toimetised 1994 / lk. 3-12: ill

Defects in chlorine doped CdTe thin films

Valdna, Vello; Hiie, Jaan; Gavrilov, Aleksei Abstracts POLYSE 2000 / p. 36

Defects in chlorine-doped CdTe thin films

Valdna, Vello; Hiie, Jaan; Gavrilov, Aleksei Solid state phenomena 2001 / p. 155-160 : ill

Defects in Cl and Na doped CdTe monograin powders

Altosaar, Mare; Kuk, Peeter-Enn; Raudoja, Jaan; Mellikov, Enn E-MRS Spring Meeting : Strasbourg, 1999 : abstracts 1999 / p. O-32 <https://www.sciencedirect.com/science/article/abs/pii/S0040609099008135>

Development organic back contact for thin-film CdS/CdTe solar cell

Khrypunov, G.; **Bereznev, Sergei**; Meriuts, A.; Kopach, G.; Kovtun, N.; Deyneko, N. Physics and chemistry of solid state 2010 / 1, p. 248-251 : ill

Does the low-temperature Arrhenius plot of the photoluminescence intensity in CdTe point towards an erroneous activation energy?

Krustok, Jüri; Collan, Heikki; Hjelt, Kari Journal of applied physics 1997 / 3, p. 1442-1445: ill

Effect of CdCl₂ annealing treatment on structural and optoelectronic properties of close spaced sublimation CdTe/CdS thin film solar cells vs deposition conditions

Spalatu, Nicolae; Hiie, Jaan; Mikli, Valdek; Krunks, Malle; Valdna, Vello; Maticiuc, Natalia; Raadik, Taavi; Caraman, Mihail Thin solid films 2015 / p. 128-133 : ill <http://dx.doi.org/10.1016/j.tsf.2014.11.066> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of the vacuum annealing on p-type CdTe

Valdna, Vello Physica scripta 1997 / p. 315-318: ill

Efficiency limits of CdTe thin film solar cells

Valdna, Vello; Hiie, Jaan Seventeenth European Photovoltaic Solar Energy Conference : proceedings of the International Conference held in Munich, Germany, 22-26 October, 2001. Volume II 2002 / p. 1233-1235 : ill

Electrical characterization of annealed chemical-bath-deposited CdS films and their application in superstrate configuration CdTe/CdS solar cells

Graf, Aleksandr; Maticiuc, Natalia; Spalatu, Nicolae; Mikli, Valdek; Mere, Arvo; Gavrilov, Aleksei; Hiie, Jaan Thin solid films 2015 / p. 351-355 : ill <https://doi.org/10.1016/j.tsf.2014.11.003> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Formation of photosensitivity in CdSexTe1-x monograin powders

Altosaar, Mare; Krustok, Jüri; Mädasson, Jaan; Mellikov, Enn; Kuk, Peeter-Enn Ternary and Multinary Compounds : proceedings of the 11th International Conference on Ternary and Multinary Compounds, ICTMC-11, University of Salford, 8-12 September 1997 1998 / p. 553-556: ill

Formation of structure of the CdTe film, recrystallized on Mo/glass substrate under high temperature and mechanical pressure

Mikli, Valdek; Hiie, Jaan; Valdna, Vello; Viljus, Mart; Traksmäa, Rainer; Kallavus, Urve Thin solid films 2009 / 7, p. 2252-2255 : ill

Growth of CdTe monograin powders

Hiie, Jaan; Altosaar, Mare; Mellikov, Enn; Kuk, Peeter-Enn; Sapogova, J.; Meissner, Dieter Physica scripta 1997 / p. 155-158: ill

High temperature electrical conductivity in ZnS:Cu ceramics and in CdSe-CdTe polycrystalline solid solutions

Lott, Kalju; Nirk, Tiit; Gorokhova, Elena; Ryzhikov, Engels Polyse'98 : Polycrystalline Semiconductors, September 13-18, 1998, Stadtgarten, Schwäbisch Gmünd, Germany : final program and abstracts 1998 / p. P31

High temperature properties of CdTe crystals, doped by Sb

Fochuk, P.; Grill, R.; Nykonyuk, Y.; **Krustok, Jüri**; Armani, N.; Zakharuk, Z.; **Grossberg, Maarja**; Panchuk, O. IEEE transactions on nuclear science 2007 / 4, p. 763-768

Highly conductive PEDOT-PSS back contact layer for CdTe photoabsorber layer in the solar cell

Bereznev, Sergei; Volobujeva, Olga; Laes, Kristjan; Kois, Julia; Öpik, Andres ICSM-2008 : International Conference of Science and Technology of Synthetic Metals : Porto de Galinhas, Brazil, July 6-11, 2008 : book of abstracts 2008 / p. 160 <https://www.sciencedirect.com/science/article/pii/S0040609011000940>

Impact of CdS annealing atmosphere on the performance of CdS-CdTe solar cell

Maticiuc, Natalia; Spalatu, Nicolae; Mikli, Valdek; Hiie, Jaan Applied surface science 2015 / p. 14-18 : ill <https://doi.org/10.1016/j.apsusc.2015.01.172> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Implications of the negative capacitance observed at forward bias in nanocomposite and polycrystalline solar cells

Mora-Sero, Ivan; Bisquert, Juan; **Oja Acik, Ilona** Nano letters 2006 / 4, p. 640-650 <https://pubs.acs.org/doi/10.1021/nl052295q>

Influence of copper and oxygen on the optoelectronic properties of chlorine doped CdTe thin films

Valdna, Vello Thin solid films 2001 / p. 192-194 : ill

Influence of Na doping on opto-electrical properties of CdTe:Cl

Altosaar, Mare; Kukk, Peeter-Enn; Raudoja, Jaan; Krustok, Jüri; Krunks, Malle; Mellikov, Enn; Raudoja, Jaan vt.ka Mädasson, Jaan 11th International Photovoltaic Science and Engineering Conference : Sept. 20-24/1999, Hokkaido, Japan : technical digest 1999 / p. 457-458: ill

Influence of the secondary thermal annealing on the properties of CdTe/CdS:CdCl₂:O₂ structure

Yang, Wangjun; Spalatu, Nicolae; Maticiu, Natalia; Krunks, Malle; Hiie, Jaan Proceedings of 13th International Conference of Young Scientists on Energy Issues : CYSENI 2016 : May 26-27 2016, Kaunas, Lithuania 2016 / p. VII-220 - VII-225 : ill

Investigation of P-type conductivity in CdTe and ZnTe

Valdna, Vello; Hiie, Jaan; Krustok, Jüri; Mellikov, Enn International Conference Advanced Optical Materials and Devices, Riga, 1996 1996 / p. 204

Isothermal grain growth of CdTe in CdCl₂ and Te fluxes

Hiie, Jaan; Altosaar, Mare; Mellikov, Enn; Mädasson, Jaan; Sapogova, J.; Mikli, Valdek Conference record of the Twenty Sixth IEEE Photovoltaic Specialists Conference - 1997, Anaheim, CA, 29 September - 03 October 1997 1997 / p. 455-458: ill

Isothermal grain growth of CdTe in liquid Te flux

Hiie, Jaan; Altosaar, Mare; Mellikov, Enn; Mädasson, Jaan; Sapogova, J.; Mikli, Valdek 26th IEEE Photovoltaic Specialists Conference, Anaheim, 1997 : abstracts 1997 / p. 111

1.4 eV photoluminescence in chlorine-doped polycrystalline CdTe

Hjelt, Kari; Collan, Heikki; Krustok, Jüri; Mädasson, Jaan Annual report 1994 / Optoelectronics Laboratory, Helsinki University of Technology 1995 / p. 47-48

1.4 eV photoluminescence in chlorine-doped polycrystalline CdTe with a high density of defects

Krustok, Jüri; Mädasson, Jaan; Collan, Heikki; Hjelt, Kari Journal of materials science 1997 / p. 1545-1550: ill
<https://link.springer.com/article/10.1023/A:1018526622440>

1.4-eV photoluminescence in chlorine doped polycrystalline CdTe

Krustok, Jüri; Mädasson, Jaan; Hjelt, Kari; Collan, Heikki Journal of physics and chemistry of solids 1994

Optoelectronic properties of CdSe - CdTe solid solutions

Valdna, Vello; Mere, Arvo; Voronin, A. MatTech '91 : The Second European East-West Symposium on Materials and Processes, May 26-30, 1991 : abstracts 1991 / p. 256

Optoelectronic properties of CdTe thin films

Valdna, Vello EUROMAT 99. Volume 9, Interface controlled materials 2000 / p. 90-95 : ill
<https://onlinelibrary.wiley.com/doi/abs/10.1002/352760622X.ch15>

Optoelectronic properties of chlorine and oxygen doped CdTe thin films

Valdna, Vello Solar energy materials and solar cells 2005 / p. 369-373 : ill

Oxygen codopant in Cl doped CdTe thin films

Valdna, Vello E-MRS Spring Meeting 2002 : June 18-21, 2002. Symposium B, Thin Film Chalcogenide Photovoltaic Materials 2002 / p. B-26

Photoconductivity formation in CdTe in the annealing process

Hiie, Jaan; Valdna, Vello; Mellikov, Enn; Altosaar, Mare Optical organic and semiconductor inorganic materials 1997 / p. 123-129

Photoconductivity formation in CdTe in the annealing process

Hiie, Jaan; Valdna, Vello; Altosaar, Mare; Mellikov, Enn International Conference Advanced Optical Materials and Devices, Riga, 1996 1996 / p. 197

Photoluminescence from deep acceptor - deep donor complexes in CdTe

Krustok, Jüri; Collan, Heikki; Hjelt, Kari; Mädasson, Jaan; Valdna, Vello ICL'96, Prague : International Conference on Luminescence and Optical Spectroscopy of Condensed Matter, Prague, Czech Republic, 18-23 August 1996 1996 / p. 1-17

Photoluminescence from deep acceptor - deep donor complexes in CdTe

Krustok, Jüri; Collan, Heikki; Hjelt, Kari; Mädasson, Jaan; Valdna, Vello Journal of luminescence 1997 / p. 103-105: ill

Photoluminescence properties of Z-bands in CdTe

Krustok, Jüri; Mädasson, Jaan; Hiie, Jaan Physica status solidi (a) 1998 / p. 517-525: ill

Photoluminescence study of the 1.1 eV deep emission band in p-type CdTe

Hjelt, Kari; Collan, Heikki; **Krustok, Jüri; Valdna, Vello** Proceedings of the XXX Annual Conference of the Finnish Physical Society : March 21-23, 1996, Espoo, Finland 1996 / 8.29

Point defects in Cl and Na doped CdTe

Altosaar, Mare; Kuk, Peeter-Enn; Mellikov, Enn Thin solid films 2000 / p. 443-445

Preparation and properties of CdTe films on Mo/glass substrates

Valdna, Vello; Grossberg, Maarja; Hiie, Jaan; Kallavus, Urve; Mikli, Valdek; Traksmaa, Rainer; Viljus, Mart Thin-film compound semiconductor photovoltaics - 2009 2009 / p. M08-24

https://www.researchgate.net/publication/231763435_Preparation_and_Properties_of_CdTe_Films_on_MoGlass_Substrates

Properties of the CdCl₂ air-annealed CSS CdTe thin films

Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Caraman, Mihail; Maticiuc, Natalia; Mikli, Valdek; Potlog, Tamara; Krunks, Malle; Lugh, Vanni Energy procedia 2014 / p. 85-95 : ill <https://doi.org/10.1016/j.egypro.2013.12.013> [Conference proceedings at Scopus](#)

[Article at Scopus](#) [Article at WOS](#)

Properties of the CdCl₂ air-annealed CSS CdTe thin films

Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Maticiuc, Natalia; Krunks, Malle; Mikli, Valdek TÜ ja TTÜ doktorikool

"Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

p-type doping of CdTe

Valdna, Vello Abstracts of the International Conference POLYSe'98 : Polycrystalline Semiconductors - Bulk Materials, Thin Films and Devices, 13-18 Sept. 1998, Schwäbisch Gmünd, Germany 1998 / p. P27

p-type doping of CdTe

Valdna, Vello Solid state phenomena 1999 / Polycrystalline Semiconductors V : Bulk Materials, Thin Films and Devices : Proceedings of the Fifth International Conference, held in Schwäbisch Gmünd, Germany, September 13-18, 1998, p. 309-314

Radiative and nonradiative recombination centers in Cl and Na doped CdTe

Altosaar, Mare; Kuk, Peeter-Enn Journal of materials science 2000 / p. 1135-1138

<https://link.springer.com/article/10.1023/A:1004715931935>

Recrystallization of CdTe film under conditions of high temperature and mechanical pressure

Mikli, Valdek; Hiie, Jaan; Viljus, Mart; Nisumaa, Reet; Traksmaa, Rainer; Kallavus, Urve Thin solid films 2008 / 20, p. 7041-7045 : ill

Recrystallization of CdTe under conditions of high temperature and pressure

Mikli, Valdek; Hiie, Jaan Nanostructured and advanced materials 2005 / p. 351-354

Selection of processing conditions for solution growth of CdTe and CuInSe₂ monograin powders on the base of phase diagrams

Altosaar, Mare; Hiie, Jaan; Mellikov, Enn 24th Estonian Chemistry Days : abstracts of scientific conference 1998 / p. 11

Stability of p-type CdTe thin films

Valdna, Vello Proceedings of EMRS 1999 Spring Meeting, Strasbourg, France, June 1-4 1999 / p. O-PS 3/P19

Structural and optoelectronic properties of CdCl₂ activated CdTe thin films modified by multiple thermal annealing

Spalatu, Nicolae; Krunks, Malle; Hiie, Jaan Thin solid films 2017 / p. 106-111 : ill <https://doi.org/10.1016/j.tsf.2016.09.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of activating treatment for glass/ITO/CdS/CdTe structures prepared by high vacuum evaporation

Jarkov, Aleksandr; Bereznev, Sergei; Laes, Kristjan; Volobujeva, Olga; Öpik, Andres EMRS-2010 Spring Meeting : Strasbourg, France, June 7-11 : program and book of abstracts. Symposium M 2010 / p. 8-9

Study of the edge and exciton emission in CdTe:Cu:Cl powder samples

Krustok, Jüri; Mädasson, Jaan; Hjelt, Kari; Collan, Heikki Journal of materials science letters 1995 / p. 1490-1492: ill

Study of the edge and exciton emission in the CdTe:Cu:Cl powder samples

Hjelt, Kari; Collan, Heikki; **Krustok, Jüri; Mädasson, Jaan** Annual report 1994 / Optoelectronics Laboratory, Helsinki University of Technology 1995 / p. 49

Synthesis and optical properties of Ga₂O₃ nanowires grown on GaS substrate

Leontie, Liviu; Sprincean, Veaceslav; Untila, Dumitru; **Spalatu, Nicolae** Thin solid films 2019 / art. 137502, 6 p. : ill

<https://doi.org/10.1016/j.tsf.2019.137502> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Technology of CdTe monograin powders

Altosaar, Mare; Hiie, Jaan; Mellikov, Enn; Varema, Tiit; Kukk, Peeter-Enn; Meissner, Dieter Proceedings of the Estonian Academy of Sciences. Engineering 1996 / 1, p. 89-97: ill

Temperature dependent electroreflectance study of CdTe solar cells

Raadik, Taavi; Krustok, Jüri; Josepson, Raavo; Hiie, Jaan; Potlog, Tamara; **Spalatu, Nicolae** Thin solid films 2013 / p. 279-282

: ill <https://doi.org/10.1016/j.tsf.2012.12.083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The impedance spectroscopy of hybrid CdTe / PEDOT-PSS interface

Bereznev, Sergei; Laes, Kristjan; Jarkov, Aleksandr; Volobujeva, Olga; Öpik, Andres Hybrid and Organic Photovoltaics 2010 Conference : Assisi, Italy, May 23-27, 2010 : book of abstracts 2010 / p. 118

Thermal analysis of CdTe : CdCl₂ : O₂ annealing process

Hiie, Jaan; Valdna, Vello Seventeenth European Photovoltaic Solar Energy Conference : proceedings of the International Conference held in Munich, Germany, 22-26 October, 2001. Volume II 2002 / p. 1240-1242 : ill

Модель точечных дефектов кристаллической решетки теллурида кадмия

Nirk, Tiit; Nei, Toomas Математическое моделирование физических процессов в полупроводниках и полупроводниковых приборах : Тезисы докладов III всесоюзного совещания (Паланга, 5-9 сент. 1989 г.). 1989 / с. 75-76

Особенности температурного поведения полосы 0,81 эВ фотолюминесценции теллурида кадмия

Krustok, Jüri; Piibe, Toomas; Лью А.Э. Физика и техника полупроводников 1991 / 7, с. 1257-1259: ил

Фотоэлектрические свойства твердых растворов селенотеллуридов кадмия

Valdna, Vello; Voronin, A.I.; **Mere, Arvo** Tallinna Tehnikaülikooli Toimetised 1990 / lk. 30-39: ill