

Annealing effect on CdS films : transition from glass to ITO

Maticiu, Natalia; Hiie, Jaan IOP conference series : materials science and engineering 2013 / p. 1-4 : ill <https://doi.org/10.1088/1757-899X/49/1/012061> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Combinative solution processing and Li doping approach to develop p-type NiO thin films with enhanced electrical properties

Oluwabi, Abayomi Titilope; Spalatu, Nicolae; Maticiu, Natalia; Katerski, Atanas; Mere, Arvo; Krunks, Malle; Oja Acik, Ilona Frontiers in materials 2023 / 12 p. : ill <https://doi.org/10.3389/fmats.2023.1060420> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative study of CdS films annealed in neutral, oxidizing and reducing atmospheres

Maticiu, Natalia; Kuk, Mart; Spalatu, Nicolae; Potlog, Tamara; Krunks, Malle; Valdna, Vello; Hiie, Jaan Energy procedia 2014 / p. 77-84 : ill <https://doi.org/10.1016/j.egypro.2013.12.012> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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; Maticiu, 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 CdCl₂ vapor phase pretreatment annealing on the properties of CSS CdS and CdTe/CdS thin film solar cells

Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Krunks, Malle; Caraman, Mihail; Mikli, Valdek; Maticiu, Natalia 2014 Spring Meeting Lille, France : May 26-30. Symposium A, Thin film chalcogenide photovoltaic materials 2014 / p. 17

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

Graf, Aleksandr; Maticiu, 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](#)

Electrical characterization of CdS films, annealed in reducing, neutral and oxidizing ambients of H₂, N₂, and air

Graf, Aleksandr; Maticiu, Natalia; Gavrilov, Aleksei; Hiie, Jaan EMRS 2014 Spring Meeting : Lille, France, May 26-30. Symposium A, Thin film chalcogenide photovoltaic materials 2014 / p. 22

Electrodeposited nanostructured CdSe/CdS matrix for hybrid solar cells [Online resource]

Maricheva, Jelena; Bereznev, Sergei; Maticiu, Natalia; Volobujeva, Olga; Kois, Julia Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p. : ill <http://fmtdk.ut.ee/teesid/>

Electrodeposition of cadmium chalcogenide films for hybrid solar cells = Kaadmiumkalkogeniidkilede elektrokeemiline sadestamine kasutamiseks hübriid-päikesepatareides

Maricheva, Jelena 2017 http://www.ester.ee/record=b4747305*est <https://digi.lib.ttu.ee/i/?9117>

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

Maticiu, 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](#)

Impact of vacuum and nitrogen annealing on HVE SnS photoabsorber films

Revathi, Naidu; Loooris, Mihkel; Kärber, Erki; Volobujeva, Olga; Raudoja, Jaan; Maticiu, Natalia; Bereznev, Sergei; Mellikov, Enn Materials science in semiconductor processing 2017 / p. 252-257 : ill <https://doi.org/10.1016/j.mssp.2017.08.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improved electrodeposition of CdS layers in presence of activating H₂SeO₃ microadditive

Maricheva, Jelena; Bereznev, Sergei; Naidu, Revathi; Maticiu, Natalia; Mikli, Valdek; Kois, Julia Materials science in semiconductor processing 2016 / p. 14-19 : ill <https://doi.org/10.1016/j.mssp.2016.06.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Incorporation of plasmonic Au nanoparticles inside the CdTe thin film absorber

Maticiu, Natalia; Spalatu, Nicolae; Katerski, Atanas; Repan, T.; Hiie, Jaan NANOSMAT Conference, 22-25 September 2013, Granada, Spain : abstracts book 2013 / p. 341-342

Influence of annealing in H₂ atmosphere on the electrical properties of thin film CdS

Maticiu, Natalia; Hiie, Jaan; Potlog, Tamara; Valdna, Vello; Gavrilov, Aleksei MRS proceedings 2011 / p. d14-05

Influence of PH on the hydroxide impurities in chemically deposited CDS thin film

Üürke, Marvin; Maticiu, Natalia; Volobujeva, Olga; Spalatu, Nicolae; Hiie, Jaan The 14th International Conference of Young

Scientists on Energy Issues : Kaunas, Lithuania, May 25-26, 2017 2017 / p. X-316 - X-323 : ill
http://cyseni.com/archives/proceedings/Proceedings_of_CYSENI_2017.pdf

Influence of selenous acid microadditive on electrochemical formation of CdS thin films

Maricheva, Jelena; Bereznev, Sergei; Maticiuc, Natalia; Volobujeva, Olga; Kois, Julia Electrochimica acta 2017 / p. 280-286 : ill
<https://doi.org/10.1016/j.electacta.2017.05.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of technological conditions on the properties of CBD CdS layers

Maticiuc, Natalia; Hiie, Jaan; Potlog, Tamara CAS 2012 proceedings. Volume 1 : 2012 International Semiconductor Conference : October 15-17, Sinaia, Romania 2012 / p. 187-190 : ill https://ibn.idsi.md/vizualizare_articol/192476

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

Yang, Wangjun; Spalatu, Nicolae; Maticiuc, 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

Issues with application of CBD CdS in CdS/i-ZnO/ZnO:Al window layer

Maticiuc, Natalia; Potlog, Tamara; **Hiie, Jaan** 17th International Conference on II-VI Compounds and Related Materials : Paris, 13-18 September 2015 : conference book 2015 / p. 372 : ill http://ii-vi-2015.sciencesconf.org/conference/ii-vi-2015/pages/ConferenceBook_II-VI2015_web_1.pdf

Keemiliselt sadestatud kaadmiumsulfiidi kilede lõõmutamisel toimuvad struktuursed muutused

Põldme, Nils; Hiie, Jaan; Mikli, Valdek; Raadik, Taavi; Valdna, Vello; Mere, Arvo; Gavrilov, Aleksei; Maticiuc, Natalia; Potlog, Tamara; Quinci, Frederico; Lughì, Vanni; Sergo, Valter XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 65

Mechanism of changes in the properties of chemically deposited CdS thin films induced by thermal annealing =

Keemiliselt sadestatud CdS õhukeste kilede omaduste muutumise mehhanism termilisel lõõmutamisel

Maticiuc, Natalia 2015 https://www.eester.ee/record=b4518170*est

One-stage pulsed laser deposition of conductive zinc oxysulfide layers

Bereznev, Sergei; Kocharyan, Hrachya; **Maticiuc, Natalia; Naidu, Revathi; Volobujeva, Olga;** Tverjanovich, Andrey; **Kois, Julia** Applied surface science 2017 / p. 722-727 : ill <https://doi.org/10.1016/j.apsusc.2017.07.078> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Plasmonic effect of Au NPs on CSS CdS/CdTe solar cell characteristics

Spalatu, Nicolae; Maticiuc, Natalia; Katerski, Atanas; Krunks, Malle; Mikli, Valdek; Hiie, Jaan Science and Applications of Thin Films, SATF 2014 : Cesme, Izmir, Turkey, September 15-19 : abstract book 2014 / p. 371

Plasmonic effect of spray-deposited Au nanoparticles on the performance of CSS CdS/CdTe solar cells

Spalatu, Nicolae; Hiie, Jaan; Maticiuc, Natalia; Krunks, Malle; Katerski, Atanas; Mikli, Valdek; Sildos, Ilmo Applied surface science 2015 / p. 69-73 : ill <https://doi.org/10.1016/j.apsusc.2015.04.065> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Plasmonic modification of CdTe thin films by gold nanoparticles : methods, difficulties and solutions

Maticiuc, Natalia; Spalatu, Nicolae; Katerski, Atanas; Hiie, Jaan; Mikli, Valdek; Krunks, Malle; Dolgov, Leonid; Sildos, Ilmo Microelectronic engineering 2014 / p. 173-178 : ill <https://doi.org/10.1016/j.mee.2014.07.016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A post-deposition annealing approach for organic residues control in TiO₂ and its impact on Sb₂Se₃/TiO₂ device performance

Koltsov, Mykhailo; Krautmann, Robert; Katerski, Atanas; Maticiuc, Natalia; **Krunks, Malle; Oja Acik, Ilona; Spalatu, Nicolae** Faraday Discussions 2022 / p. 273-286 <https://doi.org/10.1039/D2FD00064D> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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;** Lughì, 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

Properties of the CdCl₂:O₂ treated CSS CdTe thin films

Spalatu, Nicolae; Caraman, Mihail; **Maticiuc, Natalia; Hiie, Jaan; Valdna, Vello; Mikli, Valdek;** Lughì, Vanni E-MRS 2013 Spring Meeting. Symposium D, Advanced inorganic materials and structures for photovoltaics : poster session II 2013 / p. 19

Reversibility of CdS film properties depending on the nature of annealing gas

Maticiu, Natalia; Hiie, Jaan; Spalatu, Nicolae; Valdna, Vello E-MRS 2013 Spring Meeting. Symposium D, Advanced inorganic materials and structures for photovoltaics : poster session II 2013 / p. 15-16

The role of Cl in the chemical bath on the properties of CdS thin films

Maticiu, Natalia; Hiie, Jaan; Raadik, Taavi; Graf, Aleksandr; Gavrilov, Aleksei Thin solid films 2013 / p. 184-187 : ill <https://doi.org/10.1016/j.tsf.2012.11.107> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural and optical properties of cadmium sulfide thin films modified by hydrogen annealing

Maticiu, Natalia; Hiie, Jaan; Mikli, Valdek; Potlog, Tamara; Valdna, Vello Materials science in semiconductor processing 2014 / p. 169-174 : ill <https://doi.org/10.1016/j.mssp.2014.04.031> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural and optical properties of ZnTe thin films

Potlog, Tamara; **Maticiu, Natalia**; Mirzac, A.; Dumitriu, P.; Scortescu, D. CAS 2012 proceedings. Volume 2 : 2012 International Semiconductor Conference : October 15-17, Sinaia, Romania 2012 / p. 321-324 : ill <https://ieeexplore.ieee.org/abstract/document/6400772/keywords#keywords>

Structural changes in CBD CdS: effect of rapid thermal annealing

Hiie, Jaan; Quinci, Frederico; Lughi, Vanni; Maticiu, Natalia; Potlog, Tamara; **Mere, Arvo; Valdna, Vello; Gavrilov, Aleksei** "Thin film chalcogenide photovoltaic materials" (Symposium M, EMRS 2010 Spring Meeting) : 7-11 June 2010, Strasbourg, France 2010

Structural changes in chemically deposited CdS : effect of thermal annealing

Maticiu, Natalia; Potlog, Tamara; **Hiie, Jaan; Mikli, Valdek; Pöldme, Meeme; Raadik, Taavi; Valdna, Vello; Mere, Arvo; Gavrilov, Aleksei**; Sergo, V.; Quinci, Frederico; Lughi, Vanni Moldavian journal of the physical sciences 2010 / 3/4, p. 275-279 https://www.researchgate.net/publication/281997353_Structural_changes_in_chemically_deposited_CdS_Effect_of_thermal_annealing

Structural reproducibility of CdTe thin films deposited on different substrates by close space sublimation method

Potlog, Tamara; Spalatu, Nicolae; Maticiu, Natalia; **Hiie, Jaan; Valdna, Vello; Mikli, Valdek; Mere, Arvo** Physica status solidi (a) : applications and materials science 2012 / p. 272-276 : ill https://ibn.idsi.md/ro/vizualizare_articol/188177

ZnO/NiO heterostructures with enhanced photocatalytic activity obtained by ultrasonic spraying of a NiO shell onto ZnO nanorods

Chen, Zengjun; Dedova, Tatjana; Spalatu, Nicolae; Maticiu, Natalia; Rusu, Marin; **Katerski, Atanas; Oja Acik, Ilona**; Unold, Thomas; **Krunks, Malle** Colloids and surfaces A : physicochemical and engineering aspects 2022 / art. 129366 <https://doi.org/10.1016/j.colsurfa.2022.129366> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Vesinikus lõõmutamise mõju CdS kilede omadustele

Maticiu, Natalia; Potlog, Tamara; **Hiie, Jaan** XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 61

XPS study of OH impurity in solution processed CdS thin films

Maticiu, Natalia; Katerski, Atanas; Danilson, Mati; Krunks, Malle; Hiie, Jaan Solar energy materials and solar cells 2017 / p. 211-216 : ill <https://doi.org/10.1016/j.solmat.2016.10.040> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)