

## Annealing effect on CdS films : transition from glass to ITO

Maticiuc, Natalia; Hiiie, Jaan IOP conference series : materials science and engineering 2013 / p. 1-4 : ill

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

Maticiuc, Natalia; Kukk, Mart; Spalatu, Nicolae; Potlog, Tamara; Krunks, Malle; Valdna, Vello; Hiiie, Jaan Energy procedia 2014 / p. 77-84 : ill

## Effect of CdCl<sub>2</sub> annealing treatment on structural and optoelectronic properties of close spaced sublimation CdTe/CdS thin film solar cells vs deposition conditions

Spalatu, Nicolae; Hiiie, 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>

## Effect of CdCl<sub>2</sub> vapor phase pretreatment annealing on the properties of CSS CdS and CdTe/CdS thin film solar cells

Spalatu, Nicolae; Hiiie, Jaan; Valdna, Vello; Krunks, Malle; Caraman, Mihail; Mikli, Valdek; Maticiuc, 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; Maticiuc, Natalia; Spalatu, Nicolae; Mikli, Valdek; Mere, Arvo; Gavrilov, Aleksei; Hiiie, Jaan Thin solid films 2015 / p. 351-355 : ill <http://dx.doi.org/10.1016/j.tsf.2014.11.003>

## Electrical characterization of CdS films, annealed in reducing, neutral and oxidizing ambients of H<sub>2</sub>, N<sub>2</sub>, and air

Graf, Aleksandr; Maticiuc, Natalia; Gavrilov, Aleksei; Hiiie, 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; Maticiuc, 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 hübrid-päikesepatareides

Maricheva, Jelena 2017 [http://www.estet.ee/record=b4747305\\*est https://digi.lib.ttu.ee/i/?9117](http://www.estet.ee/record=b4747305*est https://digi.lib.ttu.ee/i/?9117)

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

Maticiuc, Natalia; Spalatu, Nicolae; Mikli, Valdek; Hiiie, Jaan Applied surface science 2015 / p. 14-18 : ill <http://dx.doi.org/10.1016/j.apsusc.2015.01.172>

## Impact of vacuum and nitrogen annealing on HVE SnS photoabsorber films

Revathi, Naidu; Loorits, Mihkel; Kärber, Erki; Volobujeva, Olga; Raudoja, Jaan; Maticiuc, 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>

## Improved electrodeposition of CdS layers in presence of activating H<sub>2</sub>SeO<sub>3</sub> microadditive

Maricheva, Jelena; Bereznev, Sergei; Naidu, Revathi; Maticiuc, Natalia; Mikli, Valdek; Kois, Julia Materials science in semiconductor processing 2016 / p. 14-19 : ill <http://dx.doi.org/10.1016/j.mssp.2016.06.013>

## Incorporation of plasmonic Au nanoparticles inside the CdTe thin film absorber

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

## Influence of annealing in H<sub>2</sub> atmosphere on the electrical properties of thin film CdS

Maticiuc, Natalia; Hiiie, 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

Ürike, Marvin; Maticiuc, Natalia; Volobujeva, Olga; Spalatu, Nicolae; Hiiie, 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](http://cyseni.com/archives/proceedings/Proceedings_of_CYSENI_2017.pdf)

## Influence of technological conditions on the properties of CBD CdS layers

Maticiuc, Natalia; Hiiie, Jaan; Potlog, Tamara CAS 2012 proceedings. Volume 1 : 2012 International Semiconductor Conference : October 15-17, Sinaia, Romania 2012 / p. 187-190 : ill

## Influence of the secondary thermal annealing on the properties of CdTe/CdS:CdCl<sub>2</sub>:O<sub>2</sub> structure

Yang, Wangjun; Spalatu, Nicolae; Maticiuc, Natalia; Krunks, Malle; Hiiie, 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\\_IIVI2015\\_web\\_1.pdf](http://ii-vi-2015.sciencesconf.org/conference/ii-vi-2015/pages/ConferenceBook_IIVI2015_web_1.pdf)

## **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.estet.ee/record=b4518170\\*est](https://www.estet.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>

## **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 <http://dx.doi.org/10.1016/j.apsusc.2015.04.065>

## **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

## **Properties of the CdCl<sub>2</sub> air-annealed CSS CdTe thin films**

**Spalatu, Nicolae; Hiie, Jaan; Valdma, Vello; Caraman, Mihail; Maticiuc, Natalia; Mikli, Valdek; Potlog, Tamara; Krunks, Malle; Lugi, Vanni** Energy procedia 2014 / p. 85-95 : ill

## **Properties of the CdCl<sub>2</sub> air-annealed CSS CdTe thin films**

**Spalatu, Nicolae; Hiie, Jaan; Valdma, Vello; Maticiuc, Natalia; Krunks, Malle; Mikli, Valdek** TÜ ja TTÜ doktorikool "Funktsoonalaed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

## **Properties of the CdCl<sub>2</sub>:O<sub>2</sub> treated CSS CdTe thin films**

**Spalatu, Nicolae; Caraman, Mihail; Maticiuc, Natalia; Hiie, Jaan; Valdma, Vello; Mikli, Valdek; Lugi, 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**

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

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

**Maticiuc, Natalia; Hiie, Jaan; Mikli, Valdek; Potlog, Tamara; Valdma, Vello** Materials science in semiconductor processing 2014 / p. 169-174 : ill

## **Structural and optical properties of ZnTe thin films**

Potlog, Tamara; **Maticiuc, 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>

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

**Maticiuc, Natalia; Hiie, Jaan; Raadik, Taavi; Graf, Aleksandr; Gavrilov, Aleksei** Thin solid films 2013 / p. 184-187 : ill

## **Vesinikus lõõmutamise möju CdS kilede omadustele**

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

## **XPS study of OH impurity in solution processed CdS thin films**

**Maticiuc, Natalia; Katerski, Atanas; Danilson, Mati; Krunks, Malle; Hiie, Jaan** Solar energy materials and solar cells 2017 / p. 211-216 : ill <http://dx.doi.org/10.1016/j.solmat.2016.10.040>