

#### **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](#)

#### **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 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; 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 CdCl<sub>2</sub> 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 H<sub>2</sub>, N<sub>2</sub>, 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://fntdk.ut.ee/teesid/>

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

**Maricheva, Jelena** 2017 [http://www.eester.ee/record=b4747305\\*est](http://www.eester.ee/record=b4747305*est) <https://digi.lib.ttu.ee/79117>

#### **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 H<sub>2</sub>SeO<sub>3</sub> 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 H<sub>2</sub> 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](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; Maticiu, 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**

**Maticiu, 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](https://ibn.idsi.md/vizualizare_articol/192476)

### **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; 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

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

**Maticiu, 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](http://ii-vi-2015.sciencesconf.org/conference/ii-vi-2015/pages/ConferenceBook_II-VI2015_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**

**Maticiu, Natalia** 2015 [https://www.ester.ee/record=b4518170\\*est](https://www.ester.ee/record=b4518170*est)

### **One-stage pulsed laser deposition of conductive zinc oxysulfide layers**

**Bereznev, Sergei;** Kocharyan, Hrachya; **Maticiu, 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; Maticiu, 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; Maticiu, 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**

**Maticiu, 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](#)

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

**Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello;** Caraman, Mihail; **Maticiu, 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 CdCl<sub>2</sub> air-annealed CSS CdTe thin films**

**Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Maticiu, Natalia; Krunks, Malle; Mikli, Valdek** TÜ ja TTÜ doktorikool "Funktsionaalsed 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; **Maticiu, Natalia; Hiie, Jaan; Valdna, Vello; Mikli, Valdek;** Lugh, 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>

**Vesinikus lõõmutamise mõju CdS kilede omadustele**

**Maticiuc, Natalia**; Potlog, Tamara; **Hiie, Jaan** XXXII Eesti Keemiapäevad : 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 <https://doi.org/10.1016/j.solmat.2016.10.040> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)