

### **Characterisation of samarium and nitrogen co-doped TiO<sub>2</sub> films prepared by chemical spray pyrolysis**

**Oja Acik, Ilona;** Kiisk, Valter; **Krunks, Malle;** Sildos, Ilmo; **Junolainen, Agne;** **Danilson, Mati;** **Mere, Arvo;** **Mikli, Valdek** Applied surface science 2012 / p. 735-741 : ill

### **Characterization of samarium and nitrogen doped TiO<sub>2</sub> films prepared by spray pyrolysis**

**Oja Acik, Ilona;** Junolainen, Agne; Kiisk, Valter; Sildos, Ilmo; **Danilson, Mati;** **Krunks, Malle** EMRS-2010 Spring Meeting : Strasbourg, France, June 7-11 : program and book of abstracts. Symposium K 2010 / p. 4

### **CuInS<sub>2</sub> solar cell absorber plasmonically modified by gold nanoparticles**

Repän, Taavi; Dolgov, Leonid; **Katerski, Atanas;** **Oja Acik, Ilona;** **Kärber, Erki;** **Mere, Arvo;** **Mikli, Valdek;** **Krunks, Malle;** Sildos, Ilmo Applied physics. A, Materials science & processing 2014 / p. 455-458 : ill <https://doi.org/10.1007/s00339-014-8681-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Effect of Zn:S molar ratio in solution on the properties of ZnS thin films and the formation of ZnS nanorods by spray pyrolysis**

**Dedova, Tatjana;** **Krunks, Malle;** **Gromõko, Inga;** **Mikli, Valdek;** Sildos, Ilmo; Utt, Kathriin; Unt, Tarmo Physica status solidi (a) : applications and materials science 2014 / p. 514-521 : ill <https://doi.org/10.1002/pssa.201300215> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Electrodeposited ZnO morphology transformations under the influence of SeO<sub>2</sub> additive: Rods, disks, nanosheets network**

**Gromõko, Inga;** **Dedova, Tatjana;** **Polivtseva, Svetlana;** **Kois, Julia;** Puust, Laurits; Sildos, Ilmo; **Mere, Arvo;** **Krunks, Malle** Thin solid films 2018 / p. 10-15 : ill <https://doi.org/10.1016/j.tsf.2017.12.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Growth dynamics of nanocrystalline diamond films produced by microwave plasma enhanced chemical vapor deposition in methane/hydrogen/air mixture : scaling analysis of surface morphology**

**Podgurski, Vitali;** **Bogatov, Andrei;** Sedov, V.; Sildos, Ilmo; **Mere, Arvo;** **Viljus, Mart;** Buijnsters, J. G.; Ralchenko, V. Diamond and related materials 2015 / p. 172-179 : ill <https://doi.org/10.1016/j.diamond.2015.07.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Increased efficiency inside the CdTe solar cell absorber caused by plasmonic metal nanoparticles**

Repän, Taavi; Pikker, Siim; Dolgov, Leonid; Loot, Ardi; **Hiie, Jaan;** **Krunks, Malle;** Sildos, Ilmo Energy procedia 2014 / p. 229-233 : ill <https://doi.org/10.1016/j.egypro.2013.12.032> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Local strain-induced band gap fluctuations and exciton localization in aged WS<sub>2</sub> monolayers**

**Krustok, Jüri;** **Kaupmees, Reelika;** Jaaniso, Raivo; Kiisk, Valter; Sildos, Ilmo; Li, B.; Gong, Y. AIP advances 2017 / art. 065005, 12 p. <https://doi.org/10.1063/1.4985299> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Low-cost plasmonic solar cells prepared by chemical spray pyrolysis**

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### **Luminescent materials based on thin metal oxide films doped with rare Earth ions**

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### **Modification of light absorption in thin CuInS<sub>2</sub> films by sprayed Au nanoparticles**

**Katerski, Atanas;** **Kärber, Erki;** **Oja Acik, Ilona;** Dolgov, Leonid; **Mere, Arvo;** Sildos, Ilmo; **Mikli, Valdek;** **Krunks, Malle** Nanoscale research letters 2014 / p. 1-6 : ill <https://doi.org/10.1186/1556-276X-9-494> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Modification of light absorption in thin CuInS<sub>2</sub> films by sprayed gold nanoparticles**

**Mere, Arvo;** **Katerski, Atanas;** **Oja Acik, Ilona;** Dolgov, Leonid; Sildos, Ilmo; **Krunks, Malle** NANOSMAT Conference, 22-25 September 2013, Granada, Spain : abstracts book 2013

### **Nanostructured layers of ZnS obtained by spray pyrolysis**

**Dedova, Tatjana;** **Gromõko, Inga;** **Mikli, Valdek;** **Volobujeva, Olga;** Utt, Kathriin; Sildos, Ilmo; **Mere, Arvo;** **Krunks, Malle** E-MRS 2013 Spring Meeting. Symposium P, Functional nanowires : synthesis, characterization and applications : poster session II 2013 / p. 15

### **Plasmonic control of light in thin film solar cell absorbers**

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**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 enhancement of light absorption in CuInS<sub>2</sub> layer doped by gold nanoparticles**

**Rep  n, Taavi; Katerski, Atanas; Oja Acik, Ilona; K  rber, Erki; Mere, Arvo; Mikli, Valdek; Krunks, Malle;** Dolgov, Leonid; Sildos, Ilmo META'14 - Singapore : The 5th International Conference on Metamaterials, Photonic Crystals and Plasmonics : book of abstracts 2014

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

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**Plasmonic TiO<sub>2</sub>:Au composite layers deposited in situ by chemical spray pyrolysis**

**Oja Acik, Ilona; Oyekoya, Gboyega Nathaniel; Mere, Arvo;** Loot, Ardi; Dolgov, Leonid; **Mikli, Valdek; Krunks, Malle;** Sildos, Ilmo Surface and coatings technology 2015 / p. 27-31 : ill <https://doi.org/10.1016/j.surfcoat.2015.01.036> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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**Dedova, Tatjana; Grom  ko, Inga; Krunks, Malle; Mikli, Valdek; Grossberg, Maarja;** Sildos, Ilmo; Utt, Kathriin; **Vessart, Risto; Unt, Tarmo** Crystal research and technology 2015 / p. 85-92 : ill <https://doi.org/10.1002/crat.201400172> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

**Study on photocatalytic activity of ZnO nanoneedles, nanorods, pyramids and hierarchical structures obtained by spray pyrolysis method**

**Klauson, Deniss; Grom  ko, Inga; Dedova, Tatjana; Pronina, Natalja; Krit  ševskaja, Marina; Budarnaja, Olga; Oja Acik, Ilona; Volobujeva, Olga;** Sildos, Ilmo; Utt, Kathriin Materials science in semiconductor processing 2015 / p. 315-324 : ill <https://doi.org/10.1016/j.mssp.2014.12.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Surface plasmon resonance caused by gold nanoparticles formed on sprayed TiO<sub>2</sub> films**

**Oja Acik, Ilona;** Dolgov, Leonid; **Krunks, Malle; Mere, Arvo; Mikli, Valdek;** Pikker, Siim; Loot, Ardi; Sildos, Ilmo Thin solid films 2014 / p. 144-147 : ill <https://doi.org/10.1016/j.tsf.2013.11.125> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**ZnS thin films and nanostructured layers by chemical spray pyrolysis**

**Dedova, Tatjana; Krunks, Malle; Grom  ko, Inga; Mikli, Valdek;** Sildos, Ilmo; Utt, Kathriin; **Unt, Tarmo** XXXIII Eesti Keemiap  evad : teaduskonverentsi teesid 2013 / p. 13

**Tribological behavior of carbon nanofibers deposited on hard nanocomposite (nc-Ti<sub>1-x</sub>Al<sub>x</sub>N)/(a-Si<sub>3</sub>N<sub>4</sub>) coating**

**Kimmari, Eduard; Podgurski, Vitali;** Simunin, M.; **Adoberg, Eron; Sur  ženkov, Andrei; Viljus, Mart;** Hartelt, M.; W  sche, R.; **Sildos, Ilmo; Kulu, Priit** Surface & coatings technology 2013 / p. 21-25 : ill <https://doi.org/10.1016/j.surfcoat.2013.03.011> <https://www.sciencedirect.com/science/article/pii/S0257897213002636?via%3Dihub> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Ultra thin TiO<sub>2</sub> films with gold nanoparticles by the chemical spray pyrolysis method**

**Oja Acik, Ilona; Oyekoya, G.; Dedova, Tatjana; Mikli, Valdek; Mere, Arvo; Krunks, Malle;** Dolgov, Leonid; Sildos, Ilmo Joint 12th Russia/CIS/Baltic/Japan Symposium on Ferroelectricity and 9th International Conference Functional Materials and Nanotechnologies : Institute of Solid State Physics, University of Latvia, September 29-October 2, Riga, Latvia : book of abstracts 2014 / p. 296