

**Poster session 1, Monday 10 October**

1	The influence of temperature on the CIGS films deposited by picosecond laser ablation for solar cells applications <b><u>C. Sima, Ov. Toma</u></b>
2	Revealing the physical properties of semiconductor super-lattices $\text{Al}_x\text{Ga}_{1-x}\text{N}$ and $\text{In}_x\text{Ga}_{1-x}\text{N}$ within the full-potential linearized augmented plane-wave approach <b><u>M. Hadjab, M. Ibrir, I. Bouchama, S. Berrah, H. Abid, S. Boudour</u></b>
3	Investigation of glyme additives to organometallic ink systems <b><u>B. Fleming, S. Rushworth</u></b>
4	Novel synthetic pathways towards well-defined double-layered nanographene derivatives <b><u>S. Bartoccini, A. Marrocchi, H. Hopf</u></b>
5	Pulsed laser deposition of ZnO thin films decorated with Au and Pd nanoparticles with enhanced acetone sensing performance <b><u>M. Alexiadou, M. Kandyla, G. Mousdis, M. Kompitsas</u></b>
6	Optimization of CdTe solar cell performances using Ga-doped $\text{Mg}_x\text{Zn}_{1-x}\text{O}$ buffer layers <b><u>S. Boudour, I. Bouchama, M. Hadjab</u></b>
7	A three-terminal ultraviolet photodetector constructed on a barrier-modulated triple-layer architecture <b><u>Z. Mei, D. Ye, H. Liang, L. liu, Y. Zhang, J. Li, Y. Liu, C. Gu, X. Du</u></b>
8	Sn doped $\alpha\text{-Ga}_2\text{O}_3$ : deep UV transparent conductor <b><u>E. Chikoidze, K. Akaiwa, K. Kaneko, S. Fujita, H. J. von Bardeleben, Y. Dumont</u></b>
9	Study on surface-textured LPCVD ZnO:B thin films for enhanced light-trapping effect <b><u>J. Yoo, K. Kim, Y-J Eo, J. H. Park, J. Gwak, S-K Ahn, A. Cho, S. Ahn, J-H Yun , J-S Cho</u></b>
10	The semiconductor-metal transition in $\text{V}_2\text{O}_5$ thin films deposited by rf magnetron sputtering: the influence of oxygen content in physical properties <b><u>D. Acosta, A. Pérez, C. Magaña, F. Hernández</u></b>
11	Electronic processes in doped ZnO nanopowders and transparent ceramics <b><u>L. Grigorjeva, K. Smits, A. Zolotarjovs, E. Gorokhova, S. B. Eron'ko, P. Rodnyi, K. Chernenko</u></b>
12	Atomic layer deposition of electroactive $\text{V}_2\text{O}_5$ layers for potential energy storage and electrochromic applications <b><u>D. Vernardou, M. Apostolopoulou, N. Katsarakis, E. Koudoumas, I. I. Kazadojev, I. M. Povey, S. O'Brien, M. E. Pemble</u></b>
13	p-type Mg doped $\text{CuCrO}_2$ transparent conducting thin layers <b><u>E. Chikoidze, M. Boshta, H. Mohamed, T. Tchelidze, D. Daraselia, D. Japaridze, A. Shengelaya, Y. Dumont, C. Mathai, M. Neumann-Spallart</u></b>
14	Nanoscale ZnO-enhanced/Si heterojunction pure/stable blue light emitting diode <b><u>S. Fiat Varol, M. Kompitsas, D. Unal, Z. Merdan, D. E. Manolakos, P. Koralli</u></b>
15	Enhanced efficiency of Cu (In, Ga) Se <sub>2</sub> solar cells by adding $\text{Cu}_2\text{ZnSn}(\text{S}, \text{Se})_4$ absorber layer <b><u>H. Heriche, Z. Rouabah, I. Bouchama, S. Benabbas, N. Bouarissa L. Selmani</u></b>

16	ALD of various transparent electron transport layers (ETLs) for use in planar perovskite solar cells <b>M. McCarthy, A. Walsh, S. O'Brien, M. E. Pemble, I. M. Povey</b>
17	Transparent conductive oxide as a protective layer in the development of an effective photoanode for solar water splitting applications <b>J. Halpin, J. Kegel, I. Povey, M. Pemble</b>
18	Sprayed ZnO: Al thin film as abundant TCO layer for nc-Si:H/C-Si solar cell application <b>F. A. Mahmoud, W. Magdy</b>
19	AZO/n-type nc-Si:H/ p-type C-Si wafer/Ag heterojunction solar cells; studying the properties of nc-Si:H layer and the effect of AZO preparation technique <b>F. A. Mahmoud, W. Magdy</b>
20	Photocatalytic degradation of textile wastewater using Ag/ZnO thin film <b>A. AbdelSamad, T. A. Gad-Allah, F. A. Mahmoud, M. I. Badawy</b>
21	Hydrogen influence on the electrical, optical and chemical properties of aluminum gallium-doped zinc oxide film deposited by facing target sputtering <b>S. H. Cho, H. Y. Jang, S. H. Kim</b>
22	Hybrid van der Waals p-n heterojunctions based on p-type oxide and 2D MoS <sub>2</sub> <b>Z. Wang, X. He, X-X Zhang, H. N. Alshareef</b>
23	Thermodynamic analyses of point and impurity defect concentrational equilibrium in Cu(I)M(III)O <sub>2</sub> materials <b>T. Tchelidze, E. Chikoidze, M. Boshta, D. Daraselia, D. Japaridze, A. Shengelaya, Y. Dumont, M. Neumann-Spallart</b>
24	Innovative five guns EB-PVD technique for perovskite nanostructured thin films deposition <b>C. F. Rusti, A. A. Sobetkii, R. M. Piticescu, C. Bogdanescu, A.I. Tudor, A.M. Motoc, R. R. Piticescu, C. Pantilimon, C. Dragan</b>
25	Crystallization of sputtered In <sub>2</sub> O <sub>3</sub> and In <sub>2</sub> O <sub>3</sub> :H <b>A. Steigert, I. Lauermann, S. Körner, R. Muydinov, B. Szyszka, R. Schlatmann, R. Klenk</b>
26	Biodegradable polymer blends for applications in field-effect transistors <b>M.P. Bracciale, A. Broggi, M. L. Santarelli, A. Facchetti, A. Marocchi</b>
27	CZTS Solar Cell performance enhancement using Al-doped ZnO nanorods <b>A. S. Salim, B. Idris, S. Boudour, N. Amin</b>
28	Tuning the refractive index of transparent conducting oxides via oxide/oxide periodic heterostructures <b>D. Caffrey, E. Norton, C. O'Coileain, L. Farrell, B. Bulfin, C. M. Smith, I. V. Shvets, K. Fleischer</b>
29	Squaraine-based polymers: towards optimized structures for efficient field-effect transistors <b>A. Broggi, M. P. Bracciale, M. L. Santarelli, C. Kim, A. Marocchi</b>
30	Does the dopant influence the texture of magnetron sputtered In <sub>2</sub> O <sub>3</sub> thin films? <b>A. H. Hubmann, M. V. Frischbier, H. F. Wardenga, K. L. Hoyer, A. Klein</b>
31	Effects of fabrication conditions and post-annealing on the characteristics of thin film transistors with Zr-Al-Zn-O channel layers <b>H-S Jun, S-H Lee, J-H Park, W. Kim, J-S Park</b>

32	Effect of plasma treatment on the characteristics of thin film transistors with zirconium-aluminum-zinx oxide active channels <b><u>J. Park, S-H Lee, H-S Jun, W Kim, J-S Park</u></b>
33	p-type SnO bilayers based nano crossbar memristors <b><u>M. K. Hota, and H. N. Alshareef</u></b>
34	Study of the effect of thin ALD oxide coatings on the stability of silver nanowire based transparent electrodes <b><u>S. AghazadehChors, V. Nguyen, M. Lagrange, A. Khan, T. Sannicolo, N.D. Nguyen, D. Muñoz-Rojas, D. Bellet</u></b>
35	Cadmium zinc sulfide $\text{Cd}_{1-x}\text{Zn}_x\text{S}$ for improving the performance of chalcogenides CdTe, CZTS and CZTSe solar cells <b><u>S. Benabbas, Z. Rouabah, H. Heriche, N-E Chelali, N. Bouarissa</u></b>