

Wednesday, 12 October			
Room: Imperial Main			
08:30-09:10	P7-1801. <u>Humam N. Alshareef</u> , H. Kim, S. R. Sarath Kumar, A. Abutaha Thermoelectric performance of transparent oxide semiconductor films and superlattices		
	Session 9A (Imperial Main)	Session 9B (Imperial 1)	Session 9C (Imperial 2)
09:15-09:35	O-1927. <u>J. Purans</u> , M. Zubkin, J. Gabrusenoks, G. Cikvaizde, R. Kalendarev, A. Azens, A. Zitolo, K. Pudzs, A. Anspoks The structure and properties of amorphous p-type ZnO-IrO ₂ thin films	O-1954. M. Guc, P. Fuchs, F. Tsin, J. Rousset, Y. E. Romanyuk, V. Izquierdo-Roca, <u>A. Pérez-Rodríguez</u> Non-destructive assessment of solution on based ZnO doped layers for photovoltaic applications: Raman scattering methodologies	O-1909. <u>M. Campion</u> , H. Tuller Oxidation and reduction behavior in donor-doped BaSnO ₃ thin films
09:35-09:55	O-1836. <u>S. Heusing</u> , T. Martins Amaral, P. William de Oliveira Investigation of UV curing behaviour of TCO coatings	O-1881. <u>H. Viet-Nguyen</u> , D. Bellet, P. Carroy, D. Muñoz, D. Muñoz-Rojas Low temperature deposition of In-free TCO using spatial ALD for application to morphous/crystalline silicon heterojunction solar cells	O-1825. <u>G. K. Deyu</u> , H. F. Wardenga, A. Klein Effect of Aluminium Oxide (Al ₂ O ₃) surface layers on tin doped Indium oxide (ITO) thin films
09:55-10:15	O-2020. <u>I. Isakov</u> , H. Faber, M. Grell, S. Das, T. D. Anthopoulos Nucleation control of the In ₂ O ₃ deposition by ultrasonic spray pyrolysis for high performance thin film transistors	O-1785. <u>P. Novák</u> , J. Briscoe, M. Netrvalová, T. Kozák Optimization of thin transparent conductive ZnO:Al film for nanostructured piezoelectric energy harvesters	O-1811. <u>G. Bonneux</u> , K. Elen, N. Sarmadian, C. Detavernier, D. Lamoen, B. Partoens, A. Hardy, M. Van Bael Design and synthesis of novel p-type TCOs: From computational screening towards film deposition
10:15-10:45	I-2030. <u>D. C. Paine</u> , Y. Song, A. Zaslavsky, A. Katsman Sharp-switching top-gated IZO thin film transistors using a novel <i>in-situ</i> dielectric formation process	I-1665. <u>A. Vomiero</u> Engineering TCMs for high-efficiency Photo-electrochemical Cells	I- 2061. <u>J. Medvedeva</u> Defects in amorphous oxide semiconductors
10:45-11:15	Coffee break		
Room: Imperial Main			
11:15-11:55	PO11-1681. <u>Sang Y. Lee</u> Thin film device applications with transparent amorphous SiInZnO semiconductors		
	Session 10A (Imperial Main)	Session 10B (Imperial 1)	Session 10C (Imperial 2)
12:00-12:20	O-1694. <u>M. Theelen</u> , C. Foster, S. Dasgupta, Z. Vroon, N. Barreau, M. Zeman The influence of water and atmospheric gases on the degradation of aluminum doped zinc oxide layers for CIGS solar cells	O-1761. <u>W. Marchal</u> , C. De Dobbelaere, J. Kesters, B. Moeremans, I. Verboven, G. Bonneux, K. Elen, W. Maes, W. Deferme, H-G Boyen, M. K. Van Bael, A. Hardy Steering the performance of MoO ₃ hole transporting layers for OLEDs and OPVs: morphology vs. electronic structure	O-1838. <u>D. Erfurt</u> , M. D. Heinemann, S. Körner, B. Szyszka, C. A. Kaufmann, R. Schlatmann Integration of IOH as a front contact layer for CIGS cells and modules
12:20-12:40	O-1742. <u>S. Sanzaro</u> , E. Smecca, G. Pellegrino, C. Bongiorno, F. Neri, G. Malandrino, M. R. Catalano, L. De Marco, R. Iacobellis, G. Mannino, A. La Magna, A. Alberti Dye sensitized mesoporous thick TiO ₂ layers deposited by grazing incidence reactive sputtering methods assisted by local oxidation	O-1790. L. Liu, <u>Z. Mei</u> , Y. Hou, H. Liang, A. Azarov, V. Venkatachalapathy, A. Kuznetsov, X. Du Feasible solution to n-type doping of high-resistance solar-blind 4.43 eV bandgap Mg _{0.51} Zn _{0.49} O by fluorine	O-1828. G. Christmann, <u>D. Sacchetto</u> , L. Sansonnens, G. Wahli, L. Barraud, A. Descoedres, B. Paviet-Salomon, N. Badel, B. Strahm, M. Despeisse, S. Nicolay, C. Ballif Zinc oxide as indium free transparent conducting oxide for silicon heterojunction solar cells
12:40-13:00	O-2007. <u>M. Moschogiannaki</u> , S. Murcia-Lopez, V. Binas, T. Andreu, J. R. Morante, G. Kiriakidis Binary (Ni _x Co _{1-x}) titanates nanorods as photocatalysts for solar water oxidation	O-1806. <u>P. Fuchs</u> , J. Steinhauser, D. Hariskos, W. Wischmann, Y. E. Romanyuk, A. N. Tiwari Electrical conductivity transients in chemical bath deposited ZnO thin films as a function of UV illumination wavelength	O-1693. Y. Furmansky, S. Serganid, N. Ashkenasy, <u>I. Visoly-Fisher</u> Photoconductance of ITO/conductive polymer junctions in the UV and visible ranges
13:00-13:30	I-1706 L. Österlund Functional photocatalytic films for green buildings: From fundamental science to engineering	I-2042. M. Esro, D. Afouxenidis, W. I. Milne, <u>G. Adamopoulos</u> Solution Processed SiO ₂ and high-k dielectrics for MO-based CMOS TFTs	I-1716. P. Mazzolini, C. S. Casari, V. Russo, G. Gregori, D. Chrastina, R. Ferragut, S. Nakao, T. Hitosugi, <u>A. Li Bassi</u> Nanoengineering TiO ₂ and Ta-doped TiO ₂ for high TC electrodes and photoanodes
13:30-15:00	Light lunch and poster session 2		
Room: Imperial Main			
15:00-15:40	P9-2038. <u>Xuesong Li</u> Graphene transparent conductive film - progress, challenges and prospects		

	Session 11A (Imperial Main)	Session 11B (Imperial 1)	Session 11C (Imperial 2)
15:45-16:05	O-1888. <u>S. Dellis</u> , S. Elhamali, P. Downs, N. Kalfagiannis, C. Ramsdale, R. Price, D. Koutsogeorgis Laser annealing of transparent semi-conductive oxides: A platform towards flexible and large area processing for transparent TFT devices	O-1882. <u>M. K. Hota</u> , H. N. Alshareef Ternary HfZnO _x for multistate memory applications	O-1967. G. Socol, G. Dorcioman, D. Craciun, P. Garoi, O. Fufa, L. Truica, A. C. Galca, H. Swart, C. Martin, V. Craciun Investigations of gamma and X-ray radiation effects in transparent and conductive oxides
16:05-16:25	O-1859. <u>S. Murcia-López</u> , T. Andreu, C. Fàbrega, M. D. Hernández-Alonso, G. Penelas, J. R. Morante Pulsed laser deposition of high performance metal oxide photoanodes for water splitting	O-1834. <u>T. Martins Amaral</u> , M. G. Prada Rivero, S. Heusing, P. König, P. William de Oliveira Investigation of the coffee ring effect in inkjet printed ITO patterns	O-1970. <u>D. Papadaki</u> , V. Binas, B. Gupta, J. Lipton-Duffin, N. Motta, G. Kiriakidis Metal doped TiO ₂ : the effect of NH ₃ exposure on structural and photocatalytic properties
16:25-16:45	O-1827. <u>A. Medvid</u> , P. Onufrijevs, E. Dauksta, K. Murakami, M. Shimomura Phase transitions in TiO ₂ induced by laser radiation	O-1848. L. Farrell, E. Norton, C. M. Smith, D. Caffrey, I. V. Shvets, <u>K. Fleischer</u> Synthesis of nanocrystalline Cu deficient Cu _x CrO ₂ - a high figure of merit p-type transparent semiconductor	O-1772. <u>D. Acosta</u> , E. Mejía, C. Sanchez Alkali halide nano and micro films produced by pulsed laser deposition : An electron microscopy study
16:45-17:15	I-2063. <u>P. Trikalitis</u> Reticular chemistry and the development of novel metal organic frameworks	I-2053. <u>D. G. Georgiadou</u> , T. D. Anthopoulos Novel patterning techniques and materials concepts for large area electronics	I-1851. F. Xu, W. Shen, W. Xu, J. li, Q. Huang, Q. Xu, <u>W. Song</u> Preparation and application of silver nanowire-based TC thin films
17:15-17:45	Coffee break		
	Room: Imperial Main		
17:45-18:25	P10-1965. <u>Kenneth Poeppelmeier</u> Impact of local structure on transparent conductors		
	Session 12A (Imperial Main)	Session 12B (Imperial 1)	Session 12C (Imperial 2)
18:30-18:50	O-2002. <u>S. S. Nkosi</u> , V. Binas, T. Kroon, O. M. Ndwandwe, G. Kiriakidis The effect of ZnO vacancies on the photo-catalytic activities and magnetic properties	O-1963. <u>K. Král</u> , M. Menšík Charge transfer or energy transfer between Quasi-zero-dimensional nanostructures	O-1915. <u>P. Baroch</u> , J. Rezek, T. Kozak, J. Houska Comparison of HiPIMS and conventional sputtering methods used for preparation of transparent IGZO thin films
18:50-19:10	O-2019. <u>R. Poulain</u> , A. Delvaux, A. Klein, J. Proost Tailoring reactively sputtered nickel oxide thin films for photo-catalytic applications	O-1905. <u>D. Gaspar</u> , L. Pereira, E. Fortunato, R. Martins Hydrogenated ZnO thin films with improved electro-optical properties	O-1889. S. Elhamali, N. Pliatsikas, W. Cranton, R. Ranson, P. Patsalas, <u>D. Koutsogeorgis</u> Electrical, structural, and compositional properties evolution of Al-doped zinc oxide upon excimer laser annealing, rapid thermal annealing, and damp heat exposure
19:10-19:40	I-2066. <u>D. Venieri</u> Disinfection of Waters/Wastewaters by Solar Photocatalysis	I-1788. L. Liu, <u>Z. Mei</u> , A. Tang, A. Azarov, A. Kuznetsov, Q-K Xue, X. Du +2 Charged oxygen vacancy: a shallow donor native point defect in ZnO revealed by ¹⁸ O self-diffusion in isotopic heterostructures	I-2047. <u>V. Sittinger</u> , F. C. Carreri, S. Jung, A. Kaiser, G. Bräuer Reactive mid-frequency sputtering process of Al-doped zinc oxide films from rotatable targets
19:30-21:00	Dinner		