

Wednesday 17 October				
Imperial Main Chairs: J. Morante / R. J. Nemanish				
08:30-09:10	P16 - E. Comini , V. Galstyan, N. Kaur, A. Moumen, H.M. Munashinge, O. Sisman, G. Sberveglieri, D. Zappa Metal oxide nanostructures: Growth and application to chemical sensing			
09:10-09:50	P17 - G. Sberveglieri , E. Núñez-Carmona, V. Sberveglieri, M. Abbatangelo, E. Comini Metal oxide nanowires gas sensors array for food quality control and safety			
09:50-10:30	P18 - G. Gelinck Flexible, printed organic photodetectors and their use in medical X-ray detectors, pulse oximetry and retina implants			
10:30-11:00	Coffee break			
	TCM Session 5A (Imperial Main) Chairs: B. Clark / C. Panagopoulos	TCM Session 5B (Imperial 1) Chairs: N. Stingelin / G. Westin	BS Session 5A (Imperial 2) Chairs: H. Nishikawa / Q. Guo	BS Session 5B (Imperial 3) Chairs: P. Zalar / T. Yanagida
11:00-11:30	TCM-I13.ID-181 C. Baratto , N. Bontempi, M. Donarelli, M. Ferroni, D. Rocco, C. De Angelis, G. Faglia Whispering gallery modes in ZnO nano-microwires in controlled environment	TCM-I16.ID-158 P. N. Trikalitis Rational design of metal-organic frameworks using reticular chemistry rules for advanced gas storage/separation applications	BS2-I8.ID-172 M. M. De Souza , P. Pillai, A. Kumar, X. Song Solid electrolyte transistors: Mechanisms and applications	BS3-I7.ID-91 H. Tanaka Transistors based on 2D semiconductors/dielectrics contacted with the phase- change oxides
11:30-12:00	TCM-I14.ID-214 A. J. Flewitt , S. Han High target utilisation sputtering of P-type cuprous oxide thin films and their performance in thin film transistors	TCM-I17.ID-173 G. E. Froudakis , E. Klontzas, I. Tsamardinos Chemically-intuited, large-scale screening of MOFs by machine learning techniques	BS2-I9.ID-101 M. Furuta Low-temperature activation of Ar+O ₂ +H ₂ sputtered In-Ga-Zn-O film followed by thermal annealing	BS3-I8.ID-85 M. Higashiwaki , M. H. Wong, A. Takeyama, T. Makino, T. Ohshima, K. Goto, K. Sasaki, A. Kuramata, S. Yamakoshi, H. Murakami, Y. Kumagai Ga ₂ O ₃ field-effect transistor technologies: Recent advances and future perspectives
12:00-12:10	TCM-O21.ID-197 A. Loufardaki , S. Aslanoglou, E. Orfanoudakis, C. Fotakis, E. Stratakis Visible light - induced reversible hydrophilicity of doped metal oxide micro/nano structured surfaces	TCM-O26.ID-159 A. Barnabé , J. Schorne-Pinto, L. Cassayre, I. Sinnarasa, Y. Thimont, L. Presmanes, P. Tailhades Copper based delafossite Cu(M)O ₂ with M = {Fe, Cr} materials revisited : from thermodynamic calculation to p- type TCO thin films optimization	BS2-I10.ID-56 N. Fujimura Origin of the photo-induced current of strongly correlated YMnO ₃ ferroelectric epitaxial films	BS3-I9.ID-51 T. Kubo , W. Haibin, H. Segawa Highly infrared-transparent oxides for PbS colloidal quantum dot-based solar cells
12:10-12:20				
12:20-12:30				
12:30-12:40	TCM-O22.ID-242 M. Moschogiannaki , J. Sukunta, C. Liewhiran, E. Gagaoudakis, G. Kiriakidis, V. Binas p-type CoV ₂ O ₆ nanoparticles as H ₂ gas sensing material	TCM-O27.ID-108 A. H. Hubmann , J. Hunka, A. Klein Assessing the conductivity limits and scattering processes of doped In ₂ O ₃ thin films by electrically tuning the carrier concentration		
12:40-14:00	Lunch			

	Imperial Main Chairs: M. G. Kanatzidis / T. Anthopoulos			
14:00-14:40	The "Bruno Meyer" Lecture P19 - <u>A. Zunger</u> The fundamentals of transparent oxides revisited: Band gap formation in classic Mott insulators and spontaneous non-stoichiometry in degenerate oxides			
14:40-15:20	P20 - <u>J. Morante</u> Insight into ALD-TiO ₂ protective transparent layers of electrodes for solar fuels production and photobatteries			
15:20-16:00	P21 - <u>K. Ellmer</u> , R. Mientus, S. Seeger The transparent conductive oxides In ₂ O ₃ :Sn, SnO ₂ :X, TiO ₂ :X and ZnO:X: Similarities and differences of their electronic properties			
16:00-16:30	Coffee break			
	TCM Session 6A (Imperial Main) Chairs: B. Szyszka / H. H. Radamson	TCM Session 6B (Imperial 1) Chairs: A. Li Bassi / P. Patsalas	BS Session 6A (Imperial 2) Chairs: N. Fujimura / G. E. Froudakis	BS Session 6B (Imperial 3) Chairs: P. N. Trikalitis / H. Tanaka
16:30-17:00	TCM-I15.ID-261 <u>G. Adamopoulos</u> Solution-processed metal oxide-based CMOS	TCM-I18.ID-223 <u>N. Stingelin</u> Designing solution-processable transparent hybrid oxide materials for photonic light- and heat-management structures	BS2-I11.ID-148 <u>Q. Guo</u> Characteristics of gallium oxide based wide bandgap semiconductors	BS3-I10.ID-120 <u>T. Tsuchiya</u> , T. Nakajima, I. Yamaguchi, M. Suzuki, J. Monoto Development of advanced oxide thin films prepared by excimer laser-assisted metal organic deposition (ELAMOD) for electrical and optical applications
17:00-17:10	TCM-O23.ID-140 <u>J. Hillier</u> , D. Koutsogeorgis, S. Camelio, N. Kalfagiannis Controlled environment excimer laser annealing (CEELA): A novel strategy for low-loss materials engineering for IR plasmonics	TCM-O28.ID-131 <u>G. Torrisi</u> , A. Terrasi, E. Cavaliere, F. Banfi, G. Benetti, R. Raciti, L. Gavioli Transparent conductors made with Ag nanoclusters in TCO/Ag/TCO multilayers	BS2-I12.ID-124 <u>T. Hitosugi</u> Transparent superconductor LiTi ₂ O ₄	BS3-O1.ID-113 <u>Y. Magari</u> , H. Makino, M. Furuta XPS analysis of silver-oxide films deposited by reactive sputtering
17:10-17:20				TCM-O24.ID-194 <u>E. Serpetzoglou</u> , I. Konidakis, A. Panagiotopoulos, T. Maksudov, G. Kakavelakis, E. Kymakis, E. Stratakis Charge carrier transport dynamics in perovskite solar cells probed by transient absorption spectroscopy
17:20-17:30	TCM-O25.ID-132 <u>S. Körner</u> , M. Hartig, R. Muydinov, D. Erfurt, B. Szyszka Investigation of structural, electrical and optical properties of aluminum doped zinc oxide fabricated by direct current in-line magnetron co-sputtering	TCM-O30.ID-153 <u>V. H. Nguyen</u> , D. Muñoz-Rojas, U. Gottlieb, A. Valla, D. Muñoz, D. Bellet Electron tunneling through grain boundaries in transparent conductive oxides and implications for electrical conductivity: The case of ZnO:Al thin films		BS2-I13.ID-33 <u>H. Nishikawa</u> Electronic properties of hetero-interface between LaTiO ₃ and LaMO ₃ (M = Cr, Mn, Fe)
17:30-17:40				
17:40-17:50				
17:50-18:00				
19:00-23:00	Gala dinner			