

Sunday, October 19

16:00-17:30	Registration
Room	Megas Alexandros
17:30-18:00	Welcome Addresses
Chairs	George Kiriakidis & Vassilios Binas
18:00-18:40	Plenary 1 Hideo Hosono Progress in science and application of transparent oxide semiconductors
18:40-19:20	Plenary 2 Lars Österlund ZnO interfaces: Defects, heterostructures and surface chemistry
19:30-20:30	Welcome Reception

Monday, October 20

Room	Megas Alexandros	
Chair	Hideo Hosono	
09:00-09:40	Plenary 3 Andreas Klein Analyzing defect properties in oxides by x-ray photoelectron spectroscopy	
09:40-10:20	Plenary 4 Gunnar Westin Complex structure and composition metal-oxides through solution processing	
10:20-10:50	COFFEE BREAK	
Room	Megas Alexandros	Achilles
Chairs	Emmanouil Gagaoudakis	Andreas Klein
	Invited Presentations	
10:50-11:20	Daniel Bellet Brief overview of metallic nanowire based transparent conductive materials	Juris Purans Adaptive chromogenic material for smart windows
11:20-11:50	Dimitrios A. Koutsouras Organic materials for bioelectronic devices	Jiri Rezek High-power impulse magnetron sputtering as a knob for tailoring transparent conductive oxides
	Oral Presentations	
11:50-12:10	Markus R. Wagner From crystal symmetry to heat flow: resolving anisotropic transport in gallium oxide phases	Jörgen Sweelssen Tailored liquid-phase chemistry to achieve low-temperature synthesis of BiVO ₄ for photoelectrochemical water splitting
12:10-12:30	Marlene Härtel Industry-scaled DC sputtering of SnZnOx: toward indium-free transparent electrodes for solar cells	Joon-Ho Oh Triode plasma approach to low-damage TCO deposition for silicon heterojunction solar cells
12:30-12:50	Mustafa Göktürk Yazlak Revealing the incorporation sites and local structure of nickel and selenium in doped copper iodide thin films	Jan Koloros Low-resistivity of highly nitrogen-doped p-type Cu ₂ O thin films prepared by reactive HiPIMS
12:50-14:50	LUNCH BREAK / POSTER SESSION I	

Room	Megas Alexandros	
Chair	Lars Österlund	
14:50-15:30	Plenary 5 Sanjay Mathur Magnetically Tailored Metal Oxide Thin Films as Efficient Catalysts for Green H ₂ and NH ₃ Synthesis	
15:30-16:10	Plenary 6 Bernd Szyszka Activation of thin film growth versus plasma damage – the challenge in sputtering of transparent conductors and active semiconductive coatings	
16:10-16:40	COFFEE BREAK	
Room	Megas Alexandros	
Chair	Sanjay Mathur	
16:40-17:20	Plenary 7 Darrell Schlom Reaching beyond Diamond to Sapphire, a 7 eV Semiconductor	
17:20-18:00	Plenary 8 Panos Patsalas Laser growth and processing of materials in the nanotechnology era	
Room	Megas Alexandros	Achilles
Chairs	Bernd Szyszka	Panos Patsalas
	Invited Presentations	
18:00-18:30	József S. Pap Benchmarking membrane electrode assembly inks with transparent conductive oxides for proton-exchange membrane water electrolysis	Nikolaos Pliatsikas Laser processes for colloidal conductive metal nitrides
	Oral Presentations	
18:30-18:50	Varun Ranade Real time optical observation of multi-filament formation and electrode remodeling in Ag/SiO ₂ /Au memristors	Eleanor Teather Development of a synthesis route for YScS ₃ , a potential sulfide p-type TCM
18:50-19:10	Dwight Acosta A rejuvenation study of WO ₃ and Re:WO ₃ : thin films deposited on fto substrate using ultrasonic spray pyrolysis	François Balty Insight into the morphological instability of metallic nanowires under thermal stress
19:10-19:30	Nirmal Kumar Sputter deposited CuO-WO ₃ nanosized heterojunctions for gas detection	Ainur Zhussupbekova Cation engineering and quantum effects in zinc tin oxide films

Tuesday, October 21

Room	Megas Alexandros	
Chair	Vasillios Binas	
09:00-09:40	Plenary 9 Clark Bright Metallic thin films: Back to the future	
09:40-10:20	Plenary 10 George Adamopoulos Solution-Processed YIZO-based synaptic transistors for neuromorphic applications	
10:20-10:50	COFFEE BREAK	
Room	Megas Alexandros	Achilles
Chairs	Clark Bright	George Adamopoulos
	Invited Presentations	
10:50-11:20	Ulrike Kraft Stretchable conducting polymers and devices for biosensing applications	Berit Goodge Advances in electron microscopy for atomic-scale insights to engineer functional oxide thin films
11:20-11:50	Fabio Cicoira Repairable, recyclable, and stretchable electronic materials	Tomas Kubart Reactive high power impulse magnetron sputtering of oxide thin films
	Oral Presentations	
11:50-12:10	Doga Selin Memikoglu Two-Layer ITO metallization in transparent electronics	Atsushi Shimizu High sensitivity H ₂ gas sensor gas sensor utilizing large on/off ratio of amorphous In-Ga-Zn-O thin film transistor
12:10-12:30	Brian Walls Optical anisotropy of pristine and reduced V ₂ O ₅ (010)	Ekaterine Chikoidze Two-dimensional electron (2DEG) and hole (2DHG) gases onto β -Ga ₂ O ₃
12:30-12:50	Ling Lu Hyper-gap transparent conductor & superconductor	Maria de la Luz Olvera Transparent and conductive codoped-ZnO thin films (IGZO, IAZO, AGZO) deposited by ultrasonic chemical spray technique
12:50-14:50	LUNCH BREAK	

Room	Megas Alexandros	
Chair	Elisabetta Comini	
14:50-15:30	Plenary 11 Chris Van de Walle Hydrogen in indium oxide and gallium oxide	
15:30-16:10	Plenary 12 Ruitao Wen Electrochromic materials for visible and near infrared light modulation	
16:10-16:40	COFFEE BREAK	
Room	Megas Alexandros	
Chair	Tetsuya Yamamoto	
16:40-17:20	Plenary 13 Norifumi Fujimura Novel chemical vapor deposition process of ZnO and Ga ₂ O ₃ films by nonequilibrium atmospheric pressure N ₂ /O ₂ Plasma	
17:20-18:00	Plenary 14 Holger von Wenckstern Creation of material libraries of wide and ultra-wide bandgap conductive oxides by combinatorial pulsed laser deposition	
Room	Megas Alexandros	Achilles
Chair	Chris Van de Walle	Ruitao Wen
	Invited Presentations	
18:00-18:30	Dalibor M. Stanković Transparent electrodes and semiconductor materials for electrocatalysis applications	Maria Kandyla Micro/nano-structures of transparent oxides by laser processing for optoelectronics and smart surfaces
	Oral Presentations	
18:30-18:50	Jonas Elz The plasma plume deflection and target surface roughness during pulsed laser deposition of functional oxides	Amaury Baret Heuristic approach to the fundamental optical constants of silver nanowire networks: experiments and theory
18:50-19:10	Emmanouil Gagaoudakis Flexible, printed absorbers for shielding against microwave radiation	Liam Morgan QM/MM Investigations of defects in MgO and their use as a model system for high-T _c Superconductivity

19:10-19:30	Ke Li Extrinsic doping mechanism in Sb₂O₅ as a promising n-type transparent conducting oxide	Måns Mattsson Full subgap defect density of states in p- and n-type metal oxide transistors
19:30-19:50	Mona Tréguer-Delapierre Oxidation-resistant Cu-based nanowires transparent electrodes activated by an exothermic reaction	Alla Chebotareva Electrical properties of heterostructure metal - polyarylene ether ketone copolymer - TCO

Wednesday, October 22

Room	Megas Alexandros	
Chair	Norifumi Fujimura	
09:00-09:40	Plenary 15 Elisabetta Comini From Sensing to Energy: Metal Oxide Nanostructures for Green Technologies	
09:40-10:20	Plenary 16 Tetsuya Yamamoto Materials Design of High Carrier Transport Oxide Films for Various Applications	
10:20-10:50	COFFEE BREAK	
Room	Megas Alexandros	Achilles
Chair	Emmanouil Gagaoudakis	Holger von Wenckstern
	Invited Presentations	
10:50-11:20	Junjun Jia Switching the Transparency of Semiconductor Thin Films	Ilya Sytjugov Nanomaterials for Semi-Transparent Photovoltaics and Transparent Wood
11:20-11:50	Spyros Kassavetis Colloidal Metal Oxides for Printed Electronics	P. Mazzolini Challenges and perspectives in r-GeO ₂ heteroepitaxy
	Oral Presentations	
11:50-12:10	Maria del Mar Rodriguez Protection of Transparent Electrodes based on metallic nanowires by nitrides deposited by Plasma-Enhanced ALD	Ryotaro Nakazawa Direct observation of the density of in-gap states of In ₂ O ₃ :H thin films and the origin of instability of thin film transistors
12:10-12:30	Minseok Kim New evaluation method on various gas barrier performances using functional oxide films (1); O ₂ or H ₂ O barrier properties	Sabine Heusing Electrospun fiber coatings as new transparent conductive coatings
12:30-12:50	Anthony Sanderse Surface activation of BiVO ₄ for improved performance in alkaline photoelectrochemical water splitting	Sandra Montag Uncovering the element-specific interatomic distances throughout the Cu(Br,I) alloy system
12:50-14:50	LUNCH BREAK / POSTER SESSION II	

	Megas Alexandros	
Chair:	George Adamopoulos	
14:50-15:30	Plenary 17 Julia Medvedeva Maximizing electrical conductivity in amorphous oxide semiconductors	
15:30-16:10	Plenary 18 Pedro Barquinha Beyond the pixel: oxide TFTs shaping smart, sustainable systems	
16:10-16:40	COFFEE BREAK	
	Megas Alexandros	
Chair	Nektarios Lathiotakis	
16:40-17:20	Plenary 19 Yiannis Deligiannakis Precision engineering of functional NanoOxides at industrial scale: from lab scale research to the TRL ladder	
17:20-18:00	Plenary 20 Volker Sittering Sputtering technologies for the deposition of transparent conductive oxides on large areas	
Room	Megas Alexandros	Achilles
Chair	Yiannis Deligiannakis	Volker Sittering
	Oral Presentations	
18:00-18:20	Peter Russell Computational prediction of $\text{Cd}_2\text{Sb}_2\text{O}_7$ as a candidate TCO	Keisuke Ide Fast solution of inverse problems on IGZO transistor characterization via tandem neural network
18:20-18:40	Petr Novák Structural properties of Ga_2O_3 thin films grown via dc-pulsed magnetron sputtering using a liquid gallium target	Stefanie Frick Transparent conductive Cu diffusion barriers: A 2-dimensional combinatorial screening study on the In-Zn-O system
18:40-19:00	Romain Claes Exploring the Sb (V) oxides: transport and defect properties of Asb_2O_6 (A = Mg, Ca, Sr, Ba, Cd)	Taiga Kurihara New evaluation methods on various gas barrier performances using functional oxide films (2); Hydrogen gas barrier properties
19:00	Gala Dinner	

Thursday, October 23

Room	Megas Alexandros
Chair	Pedro Barquinha
09:00-09:40	Plenary 21 John Robertson Deep acceptor polarons in α -TeO ₂ and hydrogen-induced Instabilities in IGZO
	Invited Presentations
09:40-10:10	Nektarios Lathiotakis First-principles study of carbon-doped Cu ₂ O and lead-free A ₂ ZrX ₆ defect perovskites for optoelectronic applications
	Oral Presentations
10:10-10:30	Karsten Fleischer Spray pyrolysis of ternary oxides – the case of Cu _x CrO ₂ and α -ZnSnO ₃
10:30-10:50	Dimitra Katerinopoulou Photocatalytic materials for a greener tomorrow
10:50-11:20	COFFEE BREAK
Room	Megas Alexandros
Chair	Vassilios Binas
11:20-11:40	Tomoya Suzuki Mechanism of epitaxial growth of rutile-type GeO ₂ by PLD
11:40-12:00	Yang Chen Ambient-Stable p-Type transparent CuI thin-film transistors via room-temperature pulsed laser deposition
	Invited Presentations
12:00-12:30	Seohan Kim Advanced applications of wide bandgap semiconductors with hybrid structures
12:30	Awards / Closing Remarks