## EM-NANO 2025 Timetable

			LIVI-IVAIVO 2025 TIITIETABLE								
Time	June 11. Wednesday	June 12, Thursday		June 13, Friday				June 14, Saturday Time			
9	0 5 5 10 10 15 5 20 22 5 25 35 35 40 45 50 50 50 50 50 50 50 50 50 50 50 50 50	Opening Remarks	9:30-1	9:00-9:30 (30 mins) on Nitride and Oxide based Wide bandgap Semiconductor Devices, Invited Lecture 1 To be announced  9:30-10:00 (30 mins) Nitride and Oxide based Wide bandgap Semiconductor Devices, Invited Lecture 2 "High-Frequency Performance of AlGaN/GaN HEMTs with High Al Content: A Theoretical Study" Prof. Massaki Kuzuhara, Kwansei Gakuin University				Plenary Lecture 3 "Novel approaches for responsible electronics" Prof. Karl Leo Technische Universität Dresden			
	55 0									5	
	5 10	Plenary Lecture 1 "A New Era of SiC Power Devices and their Impacts on Carbon Neutrality"		10:00-10:30 (30 mins) Nitride and Oxide based Wide bandgap Semiconductor Devices, Invited Lecture 3 "Heteroepitaxy of Ga <sub>2</sub> O <sub>2</sub> films using liquid-injection MOCVD: Impact of Hydrogen annealing on transport properties of				10:00-10:15 (15	mins) Break		
	15 20	Prof. Tsunenobu Kimoto JSAP President, Kyoto University		MOSFETs" Prof. Milan Tapajna, Slovak Academy of Science				[Invited, 11-01] [Invited, 12-01] "Oxide-TFT-based circut and device applications of the control			
10	25 30 35				10:30-10:45 (15 mins) Break				"Oxide-TFT-based circut and device application for sustainable electronics" Prof. Kenji Nomura	ns 10 2 3	
	40 45			10.30-10.43 (13 111113)	s) Diear	`		Prof. Satoshi Hiura	10:15-11:45	4	
	50 55	10:45-11:00 (15 mins) Break		[Invited, 5-01] "Development of ferroelectric field effect		[Invited, 6-01] " Spin states of organic and inorganic electronic materials and devices by operando	10:15-12:00	[Invited, 11-02] "Superconductive coupling and diode effect in topological insulator-based multi-terminal	(105 mins) Session 12 (D4. Advanced "New progress in thermo/electrochromis	m: 5	
11	0 5 5 10 15 25 25 26 30 35 40 45 5 5	Plenary Lecture 2 "A Renewed Challenge at Leading-Edge Semiconductors" Chairman Tetsuro Higashi Chairman of the Board of Directors at Rapidus Corporation	10:45-12:30 (105 mins) Session 5 (D8. Silicon LS Emerging Tech	transistor designed by nanomaterial engineering" Prof. Tadashi Yamaguchi  [Invited, 5-02]  [Invited, 5-02]  [Interface dipole engineering for multi-Vt technology of Gate-All-Around Nanosheet/CPET devices: Prof. Hiroald Arimura  Harves  [Invited, 5-02]	10:45-12:30 (105 mins) Session 6 (D2. Energy Harvesting/Batt ery-related	microscopic investigation* Prof. Kazuhiro Marumoto  [6-02] "Potential-induced degustation of crystalline sistom photovoltas modules with polyuchronate cover, Ngyen Tran Trung Ducet at.  [6-03] "Performance of encapsulant-less vertical photovoltas' modules", Adrian Augusto Mendoca Sumalade et al.  [6-04] "AN-embedded electrospus separations for	investigation of himitine Marumoto Session 11 (D7. segradation of crystalline sition Ducer al. Ducer al. Addis Augusto Mendical deter da. deteriorapen separators for an end adely in lithium metal come Kang et al.	Josephson junctions* Prof. Thomas Schapers  Prof. Thomas Schapers  [11-03] "Electrical ON-OFF switching of spin-orbit torque in ionic-gated PVCoPF trilayer", Soobeom Lee et al.  [11-04] "Epitadia growth and characterization of MoSuhsbh ship of the profession on GAA(H19) suity MBE for Spin-FET applications", show the Fyeal et al.  [11-05] "Ent-principles study of spin-splitting and	materials and devices"  Oxide materials and their applications   Perf. Yanfeng Gao    12-01  "synchromo spectracopic insights into engre vacancy engineering for each aligned strutture processed or TFTS*. Kristin Averattampen (Kristin Averattampen)    12-04  "Optical anisotropy of \$p\$-Ga202: first-princip study on refractive index", Messio Ishikana et al.	11 33 34 44	
	50 55 5 0 5 10	Lunch	gg 100.ij	Devited 5.021	nology and aterials)	efficient thermal dispersion and safety in lithium metal batteries", Yoona Kang et al.  [6-65] "Understanding the impact of Si, Ti, and Ge doping on the voltage profile of LING-SMn1.504 Cathodes for lithium-ion batteries", Tien Quana Nguyen et al.		dynamical effective charges in Janus WSSe*, Salsabila Amanda Putri et al.	11:45-12:00 (15 mins) Break	5	
	15 20			[5-04] "Reduction of back bias effect in cryogenic SOI- MOSFET", Ryosuke Kobayashi et al.		[6-06] "Triboelectric nanogenerator (TENGs) energy harvester using polypropylene-based recycled food packaging materials" Jose Manuel Esmeria Jr et al.				1	
12	25 30			moon Er y nyouwe nousyssell et al.		materials*Jose Manuel Esmeria Jr et al.				12 2	
	35 40 45 50 55 0			Lunch	nch					3 4 4 5 5	
	5 10 15	12:00-14:00 (2 hrs) Poster Session 1						12:00-14:00 (2 hrs)	Poster Session 3	1	
	20									2	
13	25 30 35			12:30-14:30 (2 hrs) Pos	notor Cons	ion 2				13 3	
	40 45 50			12.55 14:50 (21115)	ocss					4	
<u> </u>	50 55 0						44.00.00			5	
1		[201] "Pattern recognition enhancement of MEDO2 ferroelectric transel junctions with MSH-Pattern scale ALD TN become transel junctions with MSH-Pattern scale and transel and tr					14:00-14:30 (30 mins) Session 13	[13-01] "Preparation of Mg and Ni nanoparticles by pulsed wire discharge", Ziyan Chen et al.		1	
	15 20	"Mesoporous MU-s for Biosensing"  Prof. Jinlou Gu  [2-02] *Piezoelectric properties of polymorphic phase region in (Ba,Ca)(Ti,Sn)(33 ceramics', Hideki Hashimoto					(C. Nanotechnologies for Electronics)	[13-02] "Synthesis of intermetallic Mg-Ni compound nanoparticles by pulsed wire discharge of twisted Mg and Ni wires". Yiyue Mou et al.		1 2	
14	25 30 35	14:00-15:45 tas(4-cyanotipheny4-4yl-22-bithiophene 14:00-15:45 tas(4-cyanotiphene 1		floring 7 cm		[Invited, 8-01]	.or Liectronics)	and Ni wires", Yiyue Mou et al.  [14-01] "Quantitative elemental analysis of clay for identifying the production area of earthenware using CO2-Laser induced		14 <sup>2</sup> 3	
	40 45	(105 mins) Session 1    Total Timprovement of photoconduction in pentacene   (105 mins)   Xiaopeng Liu et al.		[Invited, 7-01] "Design of photoactive materials for intrinsically-stretchable polymer solar cells"		"Optical manipulation of nuclear spin polarization: Single-to-Double hysteresis transition in semiconductor nanostructures"	14:30-15:30 (60 mins)	the production area of earthenware using CO2-Laser induced breakdown spectroscopy", Kazuyoshi Kurihara et al. [14-02] "Densification of polysilazane under 172 nm VUV light at		4	
	50 55	(A. Organic Materials and Layheng Chee et al.  (B. Inorganic dioxide nanofilms and their potential for chaos-based Materials and Secure communication", Selichi Sato et al.		Prof. Bumjoon J Kim		Prof. Reina Kaji	Session 14 (B. Inorganic	varying light intensity and their application to high-performance moisture barriers", Luyang Song et al.		5	
	Opening Remarks Remarks from the JSAP President Prof. Tsunenobu Kimoto	Devices for Electronic)    Tevice of the upconversion donor layer*, You Maekawa et al.   Device of the upconversion donor layer*, You Maekawa et al.   Devices for Electronics		[7-02] "Tuning the open-circuit voltage and fill factor of ternary blend organic solar cells based on material miscibility", Hiroaki Benten et al.		[Invited, 8-02] "Unconventional epitaxy for high-density vertical	Materials and Devices for	[14-03] "Sensitivity enhancement of surface plasmon resonance sensor employing 2D black phosphorus: an analytical insight", Arnab Saha et al.		1	
	Introduction of Guests of Honor	[1-05] "Highly transparent and flexible thin-film heater [2-06] "Photoluminescence dynamics in a GaAs multiple	14:30-16:15 (105 mins) Session 7	[7-03] "Improvement of non-fullerene organic solar cells by using the localized surface plasmon resonance effect of metal (105)	30-16:15 05 mins)	stack R/G/B micro-LED pixel arrays"  Prof. Young Joon Hong	Electronics)	[14-04] "Comparison between Cu2ZnSnS4 crystals with		1 2	
15	25 30	using conductive N-type polymer via electrostatic spraying method, Riopie kim et al. (Xioki Haysahi et al. (Xioki Haysahi et al. (1-66) "Investigation of orientation distribution in P. (2-77) "Investigation of the hardelineage in common control orientation of the hardelineage in common control orientation of the hardelineage in common control or	/D1	[7-04] "Development of organic thin film electrodes for	ession 8 (C.	[8-03] "Local luminescence characterization of gallium nitride		different Zn ratios*, Kolchiro Olshi et al.	g Remarks	15 2	
	Remarks from our honored guests, Profs. Futao Kaneko and Kiyoshi Yatsui	[1-60] "Investigation of orientation distribution in nematic liquid cystal on linear till-patterned surface", Yuji Tsukamoto et al. [2-07] Tsukamoto e		Konishi et al.	es for	semiconductors with pit structures by wavelength angle- resolved cathodoluminescence method*, Shota Usami et al.		Ciosin	g svennal NØ	3	
50	45 50 55	15:45-16:00 (15 mins) Break		[7-05] "Role of HOMO energy level alignment in charge transport and fill factor in ternary blend all-polymer solar cells", Zhiyuan Liang et al.		[8-04] "Deep learning-based automated SEM image analysis pipeline for GaN trench structures", Seiyo Nojima et al.				5	
0 5	0	[Invited, 3-01] [Invited, 4-01]	Phonistral 4 043	[7-06] "Enhancing dye-sensitized solar cell performance by photoanode with carbon and titanium dioxide nanostructures from Sri Lankan limenite", A.C.W.W.M. Nilakshi Peshala	es [	.  18-051 "Deciphering a graphene/2D TiS2-based electrochemical	nical ciffic				
	Memorial Lecture for Prof. Keizo Kato by Prof. Akira Baba 15	"The trivalent metal (Bi, Sb, In) approach for Pb and Pb-free perovskites based on optoelectronic studies."  Pb Part Part Part Part Part Part Part Part	ar	from Sri Lankan ilmenite", A.C.W.W.M. Nilakshi Peshala Koswatta et al.		Immunosensor:a novel label-free platform for prostate-specific antigen detection using ferrocene carboxylic acid signal amplification", Patrawadee Yalwong et al.				1 1	
16 2 3 3	20 25 16:20-16:30 (10 mins) Break	Nishikubo Prof. Morinobu Endo	16	:15-16:40 (25 mins) Break		[8-06] "ZnS/ZF8 inorganic/organic nanowire hybrids for humidity-resistant H2S gas sensing", Wenjea Tseng et al.				16	
	30 35 40 Special Lecture 1 by Prof. Akio Yamamoto, "MOVPE growth and	[Invited, 3-02] [Invited, 4-02] "Enhanced channel mobility of hydrogen-			16:	:30-16:40 (10 mins) Break				3	
	40 Special Lecture 1 by Prof. Akio Yamamoto, "MOVPE growth and 45 applications of InN,In-rich InGaN and In-rich InAIN"	16:00-18:00 16:00-18:00 Prof. Feng Wang 16:00-18:00 (120 mins) terminated diamond field-effect transistors utilizing a hexagonal boron nitride gate insulator*	19	[Invited, 9-01] "AIN for ultra wide bandgap based power		[Invited, 10-01] "Disordered lasers using molecular glasses or				4 4	
	0	Session 3 Session 4 (D6. Carbon &		electronics" Prof. Ramon Collazo		paper" Prof. Thomas Fuhrmann-Lieker					
	Special Lecture 2 by Prof. Masahiro Horibe, "Formation of a Quantum	crystalline mica substrate*, Yemu Yang et al. Materials)		(90	40-18:10 0 mins)	[10-02] "Study on carrier behavior in OLED with					
	15 Global Business Ecosystem" 20 25	D-04 "Effect of mixed ZD-cation passivation revards improved durability of perovarkies sour cells and quantica of ZD-perovarkies under light irrediation and at high temperature", Hiropuk Ixanda et al. Hiropuk Ixanda et al. applications "Massaki Tanemura et al.	16:30-18:30	[Invited, 9-02]  "Critical issues and limitations in p-GaN HEMTs  technology"  (A. C	ssion 10 Organic	rubrene/acceptor by displacement current measurement", Hikaru Nagahama et al.				17	
17	30 Closing Remarks 35	[3-05] "Efficient and stable perovskite solar cells and self- owered photodetectors enabled by molecular and interface PTEF-CNT composite to control contact electrification	(120 mins) Session 9	Prof. Giuseppe Greco Mater Devi	erials and vices for	[10-03] "Development of red circularly polarized luminescence via chiral induction and dye doping", Haoran Sun et al.				''	
	40 45	[3-66] "Fabrication of high-efficiency perovskite/silicon tandem [4-961 "Recovery of spin properties in focused ion beam-	(D3. Wide bandgap	[9-03] "Wavelength dependence of photoluminescence lifetime in InGaN quantum wells with different alloy composition", Ririka	ctronics)	[10-04] "Surface plasmon resonance-enhanced photoelectrochemical flexible sensor using PEDOT:PSS thin					
	50 55	photovoltaic modules using silicone encapsulants", Hanae tabricated nitrogen-vacancy scanning probes using ultravioletizoner", Dwi Pramanto et al.	materials and devices)	Yamagata et al.  [9-04] "Importance of Mg diffusion process in realizing p-		film with nanostructured gold", Charin Seesomdee et al.  [10-05] "p+-i-p+ type thin-film transistors based on poly(3-					
	0 5 5 10 10 10 10 10 10 10 10 10 10 10 10 10			channel GaN FinFETs on low-doped p-GaN films*, Simranjit Singh et al.		hexylthiophene) fabricated by polymer stampling", Kazuki Takayama et al.					
	10 15 20			[9-05] "Enhancing beta-Ga2O3-diamond integration for high- power electronics: thermal and mechanical performance of SiC and SiO2 interlayers", Javad Keshtkar et al.						1 1	
18	25 18:00 ~ 30 Welcome Reception			[9-06] "Understanding the reduced current collapse in Schottky- gate AlGaN/GaN HEMT's with Vanadium-based metal stack	40.4	0-10-00 (50 mins) Perst				18 2	
	35 40			ohmic contact*, Naeemul Islam et al.	18:1	0-19:00 (50 mins) Break				3	
	45 50									4	
	55									5	
			19:00 ~								
				Banquet							
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