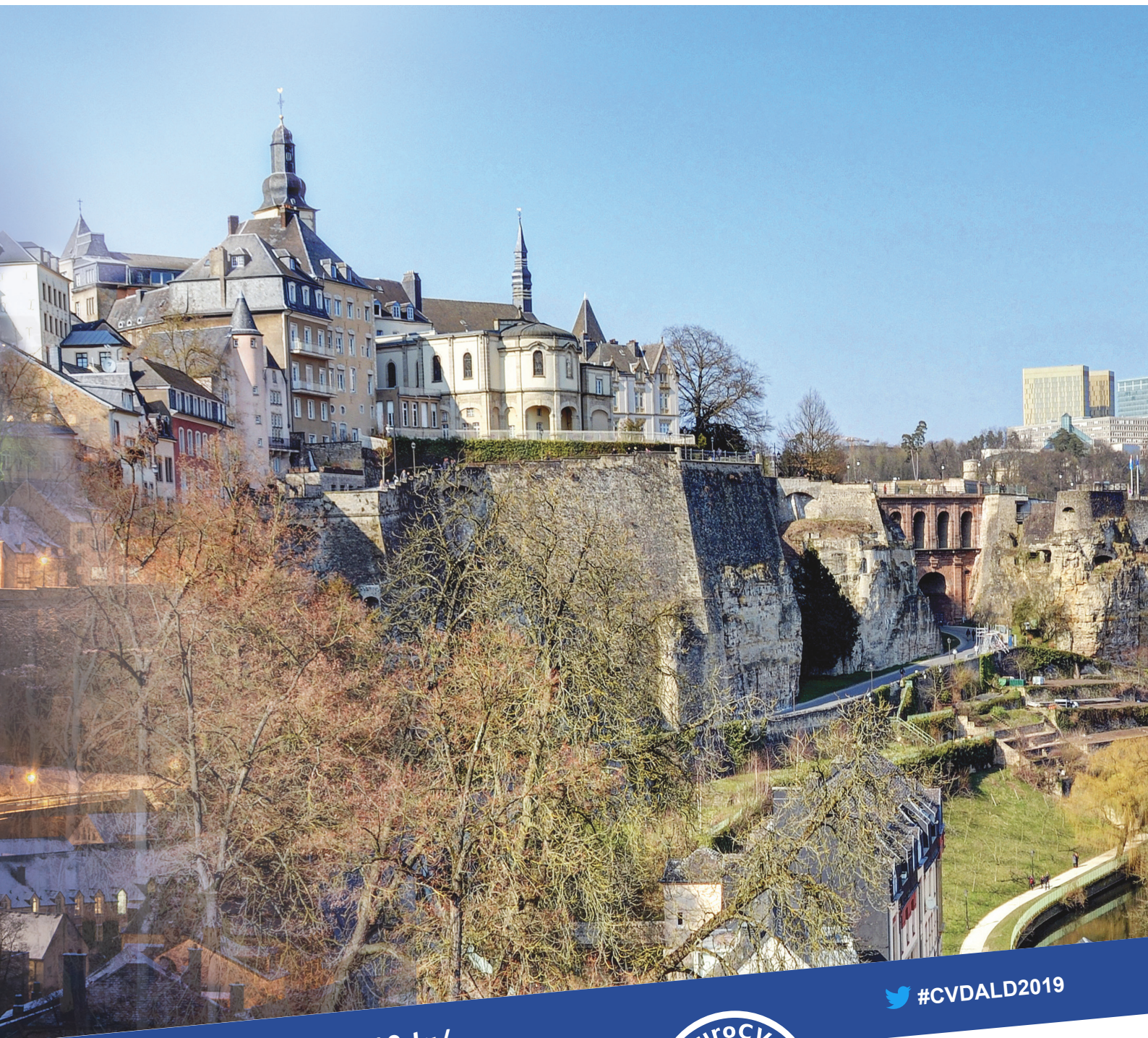


EuroCVD 22 Baltic ALD 16 | 2019

24-28.06.2019 | Luxembourg

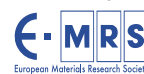


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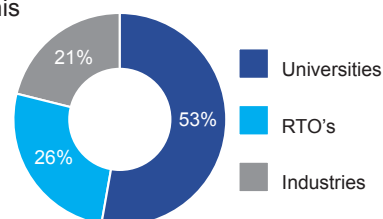


Welcome Message

Dear colleagues and friends,

On behalf of the local Organizing Committee, the Scientific Committee and the International Board of EuroCVD, it is our great pleasure to welcome you to the joint 22nd EuroCVD and 16th Baltic-ALD conferences. Chemical Vapour Deposition (CVD) and Atomic Layer Deposition (ALD) are key enabling technologies essential to the development of the innovative materials and architectures that are at the heart of modern nanotechnology. The conference is part of the biennial series of European CVD conferences, which started in Paris (1977), and the Baltic ALD series, which was launched as an Atomic Layer Epitaxy Symposium in Helsinki (1991). After the first successful experience in Linköping, 2017, we are happy to bridge these two events by emphasizing their common interests. As an organizing institution, the Luxembourg Institute of Science and Technology is proud to host these central events for the CVD and ALD communities in Luxembourg for the first time.

As one of the leading events for process and material development, this conference will be a showcase, thanks to your contributions and interactions, of the forefront of research addressing up-to-date challenges and state-of-the-art chemical processing from the gas phase (CVD, ALD, energy-assisted CVD/ALD, MOVPE, RIE, ALE). Your efforts will fuel the success of this long-standing conference. The conference counts 77 talks and nearly 110 posters from 26 countries. Despite the title, the event is not restricted to contributions from Europe or even the Baltic region. Nearly 16% of the attendees are from outside Europe and we are proud of that.



The charm of this conference is essentially linked to its small size. The established members have become something of a close family, and newcomers are warmly welcomed. The future of the field is in good hands with the PhD students forming 40% of the attendees. The satellite “Early Carrier Investigator” workshop, supported by the HERALD action, welcomes your participation.

Just like the contributing institutions, the conference will address fundamental, applied and industrialized developments. To express the relevance of the transition of ideas from Lab to Fab, we hope you will particularly appreciate the series of planned stimulating tutorials:

- From Lab to Fab: Innovation Management
- From Lab to Fab: Challenges for industrial application of ALD and CVD
- From Fab to Lab: Entrepreneurium (R2IE2)

The generous support from the Luxembourg Institute of Science and Technology and our Gold (Ceratzit), Silver (Air Liquide) and Bronze (SemiLab) sponsors is acknowledged with great thanks. We are committed to providing optimal conditions to strengthen collaboration and promote innovation. We are happy to host the conference exhibitors and encourage your interactions to shape tomorrow’s research and developments. We are delighted to offer the Relax lounge in partnership with hhp sarl; please do not hesitate to enjoy it.

We look forward a stimulating and fruitful Conference in Luxembourg.

Yours sincerely


Naoufal Bahlawane

→ PROGRAMME OVERVIEW

Monday - June 24, 2019

| | | |
|------------|---|--|
| 8.00 | Registration & welcome coffee | |
| 9.00-19.00 | Room 1 | Room 2 |
| 9.00 | Welcome Speech | |
| 9.20 | Session A Structural coatings and surface engineering | |
| 10.40 | Coffee break (Lobby) | |
| 11.10 | Session A Structural coatings and surface engineering | |
| 12.30 | Lunch (Restaurant) | |
| 13.30 | Session B Deposition of / on single and multilayered materials | Session C Epitaxial and textured growth of structural and functional coatings |
| 15.10 | Coffee break (Lobby) | |
| 15.40 | Session B Deposition of / on single and multilayered materials | Session C Epitaxial and textured growth of structural and functional coatings |
| 17.00 | Welcome Drink (Lobby) | |
| 18.00 | Tutorial I From Lab to Fab: Innovation Management | |
| 19.00 | End of day 1 | |

Tuesday - June 25, 2019

| | | |
|-------------|---|---|
| 8.00 | Registration & welcome coffee | |
| 9.00-19.00 | Room 1 | Room 2 |
| 9.00 | Session D Simulation and in situ monitoring to generate theoretical models, as a basis for fundamental understanding towards optimization and scale-up Ceratizit Award  | |
| 10.40 | Coffee break (Lobby) | |
| 11.10 | Session D Simulation and in situ monitoring to generate theoretical models, as a basis for fundamental understanding towards optimization and scale-up Ceratizit Award | |
| 12.30 | Lunch (Restaurant) | |
| 13.30 | Session E High-throughput and atmospheric pressure gas-phase processes | Session F Gas-phase synthesis of organic and hybrid coatings |
| 15.10 | Coffee break (Lobby) | |
| 15.40 | Session G Structural coatings and surface engineering | Session F Gas-phase synthesis of organic and hybrid coatings |
| 17.00-19.00 | Poster Session I (Lobby) | |
| 18.00 | Tutorial II From Lab to Fab: Challenges for industrial application of ALD and CVD | |
| 19.00 | End of day 2 | |

→ PROGRAMME OVERVIEW

Wednesday - June 26, 2019

8.00 Registration & welcome coffee

9.00-12.30 Room 1

9.00 **Session H** Advanced surface chemistries for etch and deposition with special focus on area selective treatments

10.40 Coffee break (Lobby)

11.10 **Session H** Advanced surface chemistries for etch and deposition with special focus on area selective treatments

12.30 Lunch (Restaurant)

14.00 Excursion

14.00 Departure from LUXEXPO THE BOX

16.30 End: and back to LUXEXPO THE BOX

17.00 Conference Dinner

17.00 Departure from LUXEXPO THE BOX

17.45 Free time in Remich (Luxembourg)

18.30 On boarding on the River Diva

22.30-23.30 Bus shuttles to the hotels in Luxembourg and LUXEXPO THE BOX

23.30 End of day 3

Thursday - June 27, 2019

8.15 Registration & welcome coffee

9.00-19.00 Room 1 Room 2

9.00 **Session I** Functional coatings and surface functionalization for energy and for biology

10.40 Coffee break (Lobby)

11.10 **Session I** Functional coatings and surface functionalization for energy and for biology

12.30 Lunch (Restaurant)

13.30 **Session J** Gas-phase synthesis of nanostructured coatings **Session K** Gas-phase chemical synthesis of materials for filling structures with 3D topographies

15.30 Coffee break (Lobby)

16.00 **Session L** Functional coatings and surface functionalization for energy and for biology **Session M** Functional coatings and surface functionalization for energy and for biology

17.00-19.00 Poster Session 2 (Lobby)

18.00 **Tutorial III** From Fab to Lab: Entrepreneurium (R2IE2) – a newly discovered composite state found hidden sub surface in talented researchers

19.00 End of day 4

Friday - June 28, 2019

8.15 Registration & welcome coffee

9.00-12.30 Room 1

9.00 **Session N** Gas-phase synthesis of functional and smart complex oxides

10.40 Coffee break (Lobby)

11.10 **Session N** Gas-phase synthesis of functional and smart complex oxides

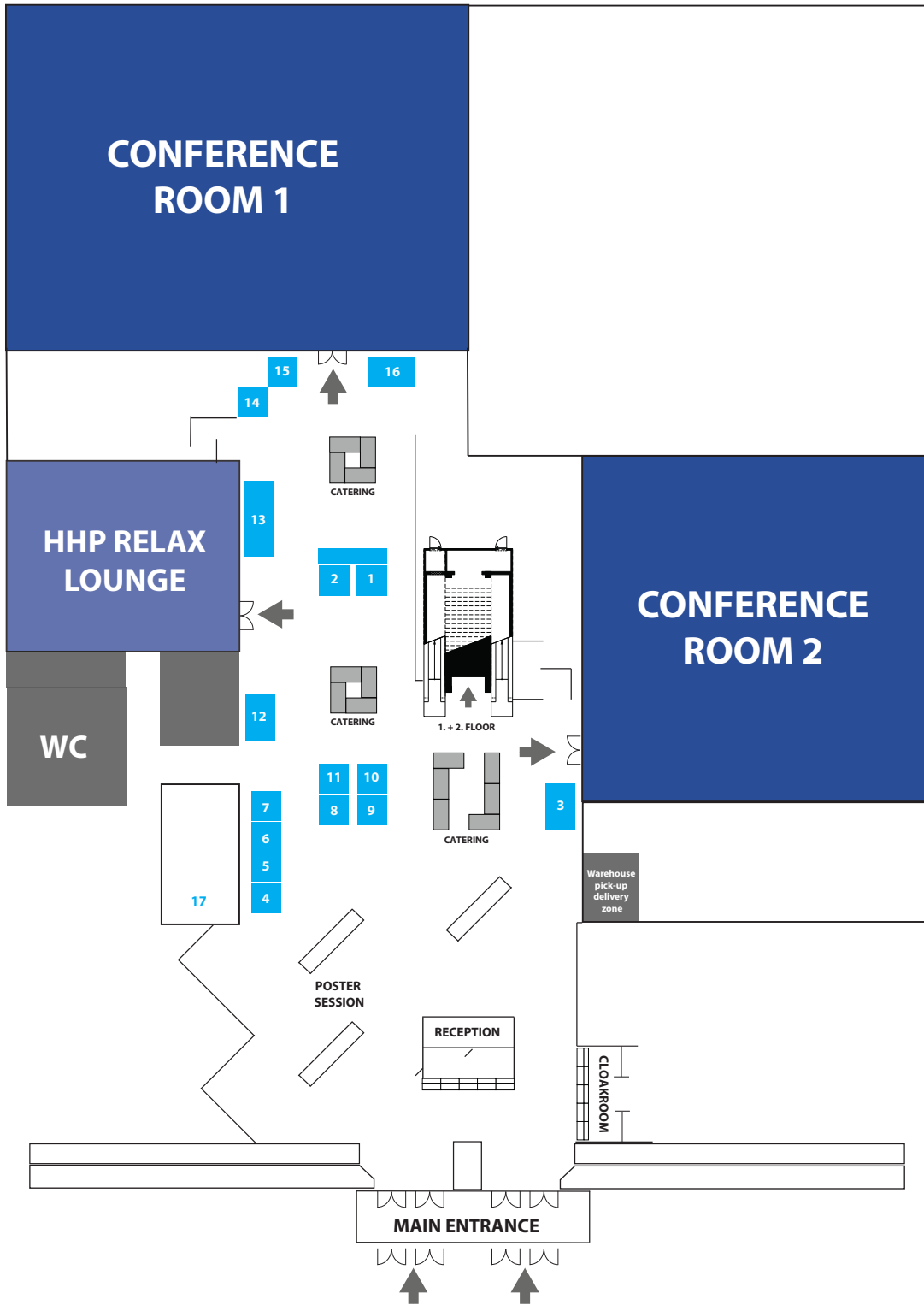
12.10 Closing session

12.30 Light Lunch (Restaurant)

13.30-19.00 **4th Early Career Investigator workshop on “Boosting your Creativity and Efficiency as a Group”**

19.00 End of day 5

➔ EXHIBITOR'S MAP



Exhibitors

- | | | | | | | | |
|---|---|---|---|----|--|----|---|
| 1 |  EpiValence Building Chemical Bonds | 5 |  HIDEN ANALYTICAL | 9 |  picosun AGILE ALD | 13 |  LIST |
| 2 |  STREM CHEMICALS, INC. | 6 |  Veeco | 10 |  CS CLEAN SOLUTIONS | 14 |  DOCK/ CHEMICALS SEMICONDUCTORS DECISION |
| 3 |  KEMSTREAM ADVANCED VAPORIZERS | 7 |  Swagelok Belgian Fluid System Technologies | 11 |  ROTAREX VALVES • FITTINGS • REGULATORS | 15 |  SEMPA |
| 4 |  ANNEALSYS | 8 |  Pegasus | 12 |  LOT Quantum Design | 16 |  SEMILAB |
| |  RASIRC | | | | | 17 |  BENEQ |

→ DETAILED PROGRAMME

Day 1 - June 24, 2019

| | | |
|-------------|--|--|
| 8.00 | Registration and welcome coffee | |
| 9.00 | Welcome speech <i>Thomas Kallstenius, Chief Executive Officer, Luxembourg Institute of Science and Technology (LIST) (LU)</i> | Room 1 |
| 9.20-12.30 | Session A Structural coatings and surface engineering <i>Chaired by Naoufal Bahlawane, Luxembourg Institute of Science and Technology (LU)</i> | |
| 9.20 | Scalable Manufacturing of Nanostructured Particles using Atomic Layer Deposition <i>Ruud van Ommen (Technical University Delft, NL)</i> | |
| 10.00 | Atomic layer deposition for spacecraft applications <i>Adomaitis Raymond (USA)</i> | |
| 10.20 | Amorphous chromium carbide coatings: low temperature DLI-MOCVD growth and characterization <i>Michau Alexandre (FR)</i> | |
| 10.40 | Coffee break | |
| 11.10 | Tantalum based hard coatings by CVD <i>Mandy Hoehn (DE)</i> | |
| 11.30 | High rate lithium ion batteries via ALD infiltration of LiCoO₂ <i>Povey Ian (IRL)</i> | |
| 11.50 | Rational design of new NHC-stabilized copper (I) amide complexes for the deposition of copper containing nanostructures <i>Nils Boysen (DE)</i> | |
| 12.10 | Cavity filling and superconformally selective nanocoatings by capillary condensation <i>Ville A. Lovikka (FI)</i> | |
| 12.30 | Lunch | |
| 13.30-17.00 | Session B Deposition of / on single and multilayered materials <i>Chaired by Bianca Rita Pistillo, Luxembourg Institute of Science and Technology (LU)</i> | Room 1 |
| 13.30-17.00 | Session C Epitaxial and textured growth of structural and functional coatings <i>Chaired by Susan Krumdieck, University of Canterbury (UK)</i> | Room 2 |
| 13.30 | Wafer-scale epitaxial growth of single crystal transition metal dichalcogenide monolayers by metalorganic chemical vapor deposition <i>Joan Redwing (Penn State University, USA)</i> | Concepts for local epitaxial growth <i>André Strittmatter (Institut für Experimentelle Physik – FNW, DE)</i> |
| 14.10 | Thermal-CVD of carbon nanotubes with controlled morphology <i>Jagalur Basheer (LU)</i> | From process modelling to the evaluation of superconducting properties of ultrathin films of epitaxial niobium nitride <i>Jacquemin Manoel (FR)</i> |
| 14.30 | The nucleation and radial growth of thin film coatings on inert surfaces <i>Utke Ivo (CH)</i> | Atomic layer deposition of InN using trimethylindium and ammonia plasma <i>Deminskyi Petro (SE)</i> |
| 14.50 | A comparative study of low-temperature BN ALD in thermal and plasma-enhanced modes <i>Apaydin R. Oguzhan (NL)</i> | Van der Waals epitaxy of 2D materials using atomic layer deposition <i>Mattinen Miika (FI)</i> |
| 15.10 | Coffee break | |
| 15.40 | Orientation-controlled, low-temperature plasma growth and applications of C doped h-BN nanosheets <i>Merenkov Ivan (RU)</i> | Relationship Processing–Composition–Structure–Resistivity of LaNiO₃ Thin Films Grown by Chemical Vapor Deposition Methods <i>Astié Vincent (FR)</i> |
| 16.00 | MOCVD of transition metal dichalcogenides: Sensing and hydrogen evolution reaction studies on MoS₂ and WS₂ <i>Wree Jan-Lucas (DE)</i> | Intrinsic and Extrinsic Factors Behind the Large Remanent Polarization of La:HfO₂ <i>Schenk Tony (LU)</i> |
| 16.20 | Highly uniform Al₂O₃ ultra-thin layers by seed-layer-free Atomic Layer Deposition onto monolayer epitaxial Graphene on 4H-SiC <i>Emanuela Schiliro (IT)</i> | Growth mechanism of uniform silver nanoparticles by plasma-enhanced atomic layer deposition <i>Wack Sabrina (LU)</i> |
| 16.40 | ALD growth of ultra-thin Co layers on the topological insulator Sb₂Te₃ <i>Longo Emanuele (IT)</i> | Insight into the formation of 3D structures during atomic layer deposition of WS₂ <i>Bloodgood Matthew (NL)</i> |
| 17.00 | Welcome Drink | |
| 18.00-19.00 | Tutorial I From Lab to Fab: Innovation Management <i>Tutor/Speaker: Bruno Wozniak, SES (LU)</i> | |
| | | Room 1 |

Day 2 - June 25, 2019

| | | |
|-------------|---|---|
| 8.00 | Registration and welcome coffee | |
| 9.00-12.30 | Session D Simulation and in situ monitoring to generate theoretical models, as a basis for fundamental understanding towards optimization and scale-up <i>Chaired by Mikko Ritala, University of Helsinki (FI)</i> | |
| 9.00 | How spectator adsorbates affect surface reactivity: computing the cooperative effect by automated enumeration of reaction pathways <i>Simon Elliott (Schrodinger, IRL)</i> | |
| 9.40 | In-situ study of ammonium bromide formation for optimizing boron nitride ALD from BBr₃ and NH₃ <i>Onnink Arnaud J. (NL)</i> | |
| 10.00 | Kinetic analysis on TiAlN-CVD to construct reaction model <i>Yamaguchi Jun (JP)</i> | |
| 10.20 | Time-resolved in-situ mass spectrometry for monitoring and identifying reaction products in ALD processes <i>Werbrouck Andreas (BE)</i> | |
| 10.40 | Coffee break | |
| 11.10 | From precursor design to growth mechanisms - ab initio modelling of CVD processes for III/V materials <i>Tonner Ralf (DE)</i> | |
| 11.30 | Surface chemical modelling of a possible thermal ALD mechanism for group 13 nitrides from trimethyl metals and ammonia <i>Karl Ronnby (SE)</i> | |
| 11.50 | A Reduced order modelling framework for CVD processes based on low-fidelity data <i>Koronaki Eleni (GR)</i> | |
| 12.10 | In situ X-ray studies of the early stage of ZnO Atomic Layer Deposition on InGaAs <i>Skopin Evgeniy (RU)</i> | |
| 12.30 | Lunch | |
| 13.30-15.40 | Session E High-throughput and atmospheric pressure gas-phase processes <i>Chaired by Nicolas Boscher, LIST (LU)</i> | Room 1 |
| 13.30-15.40 | Session F Gas-phase synthesis of organic and hybrid coatings <i>Chaired by Christian DUSSARRAT, Air Liquide Laboratories (JPN)</i> | Room 2 |
| 13.30 | High-throughput synthesis of graphene by plasma CVD <i>Masataka Hasegawa (National Institute of Advanced Industrial Science and technology, JP)</i> | Chemical vapor deposition of nanoporous metal-organic frameworks (MOF-CVD) and their integration as low-k dielectrics <i>Rob Ameloot (KU Leuven, BE)</i> |
| 14.10 | Atmospheric pressure plasma initiated chemical vapor deposition (AP-PiCVD) - temporally isolated discharges for the growth of functional polymers <i>Francois Loyer (LU)</i> | Molecular layer deposition of 'Magnesicone', a magnesium-based hybrid material <i>Kint Jeroen (BE)</i> |
| 14.30 | Near room temperature plasma enhanced atomic layer deposition of gold metal <i>Van Daele Michiel (BE)</i> | Polymeric Conductive Fused MetalloPorphyrin Thin Films on Sensitive Substrate for Optoelectronic Devices: An oCVD approach <i>Bengasi Giuseppe (LU)</i> |
| 14.50 | Stability of mechanical properties of molecular layer-deposited alucone <i>Utke Ivo (CH)</i> | Azobenzene-containing metal-organic framework thin films by ALD/MLD <i>Khayyami Aida (FI)</i> |
| 15.10 | Coffee break | |
| 15.40-17.00 | Session G Structural coatings and surface engineering <i>Chaired by Nicolas Boscher, LIST (LU)</i> | Room 1 |
| 15.40-17.00 | Session F Gas-phase synthesis of organic and hybrid coatings <i>Chaired by Christian DUSSARRAT, Air Liquide Laboratories (JPN)</i> | Room 2 |
| 15.40 | Atomic layer deposition onto reinforcement fiber fabrics <i>Dill Pauline (DE)</i> | Experimental and numerical study of an oCVD process for the deposition of PEDOT thin films <i>Mirabedin Milad (FR)</i> |
| 16.00 | Nitrogen doping of Al- and Ti-phosphate through plasma-enhanced ALD <i>Henderick Lowie (BE)</i> | Atmospheric-Pressure Synthesis of Atomically Smooth, Conformal, and Ultrathin Low-k Polymer Insulating Layers by Plasma-Initiated CVD <i>Abessolo Ondo Dominique (LU)</i> |
| 16.20 | Rare-earth-containing zirconia as thermal barrier coating materials for plastic processing tools and device development for heat transfer measurement <i>Fornalczyk Gregor (DE)</i> | Lithium-based metal-organic carboxylate network thin films by ALD/MLD <i>Penttinen Jenna (FI)</i> |
| 16.40 | Low temperature Zinc-doped Alumina and Alucone by ALD for flexible and transparent gas permeation barriers <i>Bhudia Shiv (LU)</i> | Indium-tris-guanidinate, indium-tris-amidinate and indium-tris-formamidinate as indium precursors for plasma ALD of InN films. <i>Rouf Polla (SE)</i> |
| 17.00 | Poster Session 1 | |
| 18.00-19.00 | Tutorial II From Lab to Fab: Challenges for industrial application of ALD and CVD <i>Moderator: Michael Hitchman (UK)</i> <i>Chemical provider: Christian Dussarrat, Air Liquide Laboratories (JP)</i> <i>Equipement supplier: Tero Pilvi, Picosun (FI)</i> <i>Metrology: Christophe Defranoux, Semilab (HU)</i> | |
| 18.00-19.00 | Room 1 | |

Day 3 - June 26, 2019

| | | |
|-------------|--|--------|
| 8.00 | Registration and welcome coffee | |
| 9.00-12.30 | Session H Advanced surface chemistries for etch and deposition with special focus on area selective treatments <i>Chaired by Raymond Adomaitis, University of Maryland (USA)</i> | Room 1 |
| 9.00 | Precursors for focused electron beam induced deposition (FEBID) of nanostructures <i>Lisa McElwee-White (University of Florida, USA)</i> | |
| 9.40 | Local structure and point-defect dependant selective atomic layer deposition of copper (I) oxide and metallic copper thin films <i>Claudia De Melo (FR)</i> | |
| 10.00 | Inherent substrate-selective atomic layer deposition of polycrystalline gallium nitride <i>Banerjee Sourish (NL)</i> | |
| 10.20 | Area-selective deposition on nanoscale metal/dielectric patterns by surface-dependent dimethylamino-trimethylsilane reaction <i>Soethoudt Job (BE)</i> | |
| 10.40 | Coffee break | |
| 11.10 | Selective materials deposition and etching from the gas phase - selectivity and limitations <i>Hoffmann Patrik (CH)</i> | |
| 11.30 | Synthesis of novel Lithium Adducts as Precursors for Lithium containing phases <i>Peddagopu Nishant (IT)</i> | |
| 11.50 | Plasma CVD of first-row transition metals using plasma electrons as reducing agents <i>Nadhom Hama (SE)</i> | |
| 12.10 | MOCVD process design for luminescent rare-earth sulfides circumventing H₂S as co-reactant <i>Beer Sebastian Markus Josef (DE)</i> | |
| 12.30 | Lunch | |
| 14.00 | Excursion | |
| 14.00 | Departure: from LUXEXPO THE BOX | |
| 16.30 | End and back to LUXEXPO THE BOX | |
| 17.00 | Conference Dinner | |
| 17.00 | Departure from LUXEXPO THE BOX to Remich (Luxembourg) | |
| 17.45 | Free time in Remich | |
| 18.30 | On boarding on the River Diva for the aperitive and dinner | |
| 22.30-23.30 | Bus shuttles to Luxembourg | |



Day 4 - June 27, 2019

| | | |
|-------------|---|--|
| 8.15 | Registration and welcome coffee | |
| 9.00-12.30 | Session I Functional coatings and surface functionalization for energy and for biology Room 1 <i>Chaired by Cheol Seong Hwang, Seoul National University (KR)</i> | |
| 9.00 | Electrode design through chemical vapor deposition for rechargeable batteries <i>Yinzhu Jiang (Zhejiang University, CHN)</i> | |
| 9.40 | Synthesis of self-assembled 3D nanostructures for UV-NIR broadband absorber <i>Ziegler Mario (DE)</i> | |
| 10.00 | Atomic Layer Deposition at the heart of an innovating strategy to fabricate stable and efficient photoanode for water photooxidation <i>Dufond Maxime (FR)</i> | |
| 10.20 | A thorough characterization of ALD Pt catalysts for fuel cells by X-ray absorption spectroscopy <i>Dadlani Anup (NO)</i> | |
| 10.40 | Coffee break | |
| 11.10 | Stability Enhancement of Silver Nanowire Networks with Conformal ZnO Coatings Deposited by Atmospheric Pressure Spatial Atomic Layer Deposition <i>David Munoz-Rojas (FR)</i> | |
| 11.30 | Approaching 10% power conversion efficiency in solar cells using CuSCN hole transport material deposited via aerosol assisted chemical vapour deposition <i>Mohan Lokeshwari (UK)</i> | |
| 11.50 | Atomic layer deposition of localised boron- and hydrogen-doped aluminium oxide using trimethyl borate as a dopant precursor <i>Jolien Dendooven (BE)</i> | |
| 12.10 | MnO₂-based nanosystems by Plasma Assisted-CVD as sensors for safety and food industry applications <i>Barreca Davide (IT)</i> | |
| 12.30 | Lunch | |
| 13.30-15.30 | Session J Gas-phase synthesis of nanostructured coatings Room 1 <i>Chaired by Renaud Leturcq, Luxembourg Institute of Science and Technology (LU)</i> | Session K Gas-phase chemical synthesis of materials for filling structures with 3D topographies Room 2 <i>Chaired by Francis Maury, CIRIMAT-CNRS (FR)</i> |
| 13.30 | <i>Yukihiro Shimogaki (University of Tokyo, JPN)</i> | Chemical Vapor Infiltration for Carbon/Carbon Composites – from industry to research and back <i>Gerard Vignoles (University of Bordeaux - FR)</i> |
| 14.10 | High temperature XRD and XRR studies on atomic layer deposited niobium oxide - silicon oxide nanolaminates <i>Mikko Heikkila (FI)</i> | A surface inhibiting effect in chemical vapor deposition of boron-carbon thin films from trimethylboron <i>Souqui Laurent (SE)</i> |
| 14.30 | ALD of ZnO-SnO₂ composite thin-film for lithium ion battery applications <i>Zhao Bo (BE)</i> | AlN coatings on 3D titanium alloy structures elaborated by Electron Beam Melting <i>Moll Adrien (FR)</i> |
| 14.50 | Al₂O₃/ZnO nanolaminate thin films deposited on polyethylene terephthalate substrates by ALD: Fracture mechanics and oxygen gas barrier properties <i>Janne-Petteri Niemelae (CH)</i> | Low temperature atomic layer deposition of silicon nitride in trench structure: Comparing hollow cathode plasma-enhanced ALD and thermal ALD with hydrazine <i>Kim Jiyoung (USA)</i> |
| 15.10 | Zinc oxide material elaboration by atomic layer deposition, role of molecular oxygen incorporation and Schottky consecutive behaviour <i>Raoul Joly (LU)</i> | Pulsed CVD/ALD of amorphous GeSe for application as OTS selector <i>Haider Ali (BE)</i> |
| 15.30 | Coffee break | |
| 16.00-17.00 | Session L Functional coatings and surface functionalization for energy and for biology Room 1 <i>Chaired by Renaud Leturcq, LIST (LU)</i> | Session M Functional coatings and surface functionalization for energy and for biology Room 2 <i>Chaired by Francis Maury, CIRIMAT-CNRS (FR)</i> |
| 16.00 | Atomic layer deposition of metal oxide nanolaminates exhibiting nonlinear electrical and magnetic polarization with tunable resistivity <i>Kukli Kaupo (EE)</i> | Drug elution system based on a sandwich layer structure grown onto commercially-available stents using atomic layer deposition <i>Pemble Martyn (IRL)</i> |
| 16.20 | New synergic deposition route for the osteointegrative functionalisation of titanium substrates for dental implant applications <i>Visentin Francesca (IT)</i> | In situ thermal annealing of ALD fabricated Pt nanoparticles and their stabilization via Al₂O₃ overcoating <i>Solano Eduardo (SP)</i> |
| 16.40 | A new MOCVD process for SnO₂ using an amino functionalised tin alkyl precursor: Tuning of surface morphology for sensor related applications <i>Zanders David (DE)</i> | Developing upscalable routes to water splitting devices using chemical vapour deposition <i>Kafizas Andreas (UK)</i> |
| 17.00 | Poster Session 2 | |
| 18.00-19.00 | Tutorial III From Fab to Lab: Entrepreneurium (R2IE2) – a newly discovered composite state found hidden sub surface in talented researchers Room 1 <i>Dr. Pranjul Shah, Head of the Incubator, University of Luxembourg, researcher and a serial entrepreneur (LU)</i> | |

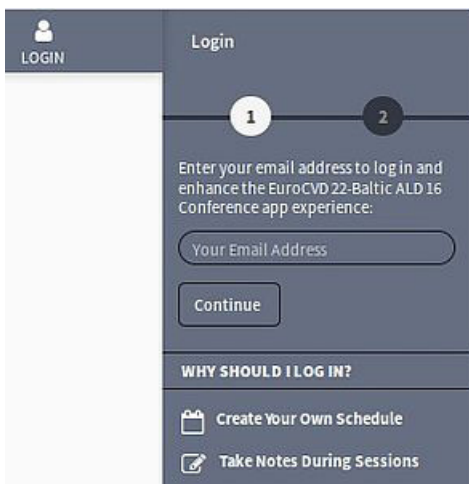
Day 5 - June 28, 2019

| | | |
|-------------|--|----------------------------------|
| 8.15 | Registration and welcome coffee | |
| 9.00-12.30 | Session N Gas-phase synthesis of functional and smart complex oxides <i>Chaired by Sven Van Elschocht, IMEC (BE)</i> | Room 1 |
| 9.00 | Atomic layer deposited Ta2O5 thin film for the resistive switching memory <i>Cheol Seong Hwang (Seoul National University, KR)</i> | |
| 9.40 | Defect engineering of atomic layer deposited TiO2 for photocatalytic applications <i>Saari Jesse (FI)</i> | |
| 10.00 | CuCrO2 deposited by AA-MOCVD as p-type transparent semiconducting oxide: deposition optimization and application in CuCrO2/ZnO junctions <i>Lorenzo Bottiglieri (FR)</i> | |
| 10.20 | Support effect of Fe-Cu-Co thin film catalyst on CO oxidation <i>Waqas Muhammad (CHI)</i> | |
| 10.40 | Coffee break | |
| 11.10 | Fabrication of WO3 thin films from a new tungsten precursor: Film growth and investigation of surface and sensing properties <i>Wilken Martin (DE)</i> | |
| 11.30 | Towards high crystalline quality europium doped yttrium oxide thin films grown by ALD with optimized properties for quantum technologies <i>Scarafagio Marion (FR)</i> | |
| 11.50 | ZnO thin films grown by plasma-enhanced atomic layer deposition: material properties in and outside the ALD window <i>Pilz Julian (AUT)</i> | |
| 12.10 | Closing Session | Room 1 |
| 12.30 | Light Lunch | |
| 13.30-19.00 | 4th Early Career Investigator workshop on “Boosting your Creativity and Efficiency as a Group” <i>Chaired by Tony Schenk, Luxembourg Institute of Science and Technology (LU)</i> | Meeting Rooms 2.1 / 2.2 / 2.3 |

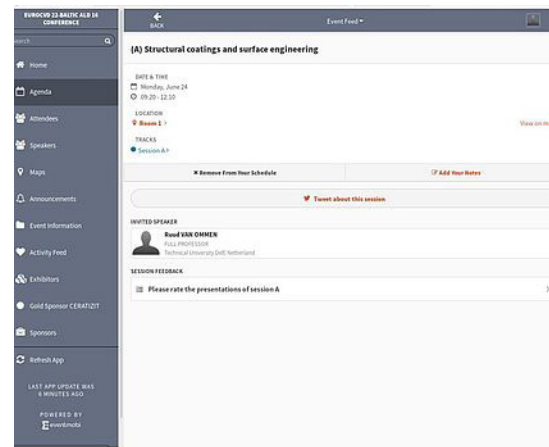
➔ VOTING PROCEDURE FOR THE ORAL PRESENTATIONS

<https://www.eventmobi.com/eurocvd-balticald2019>

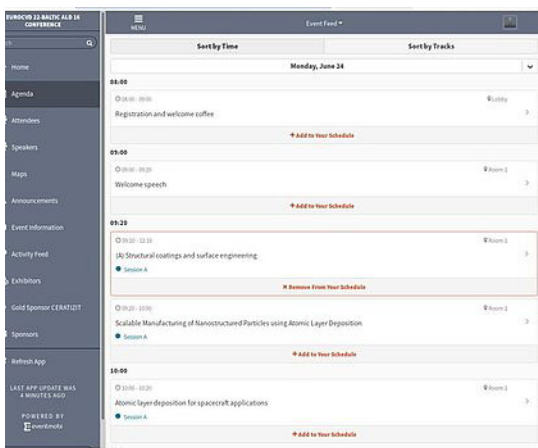
1. Log in to the app: This feature is only available when logged in to the app.



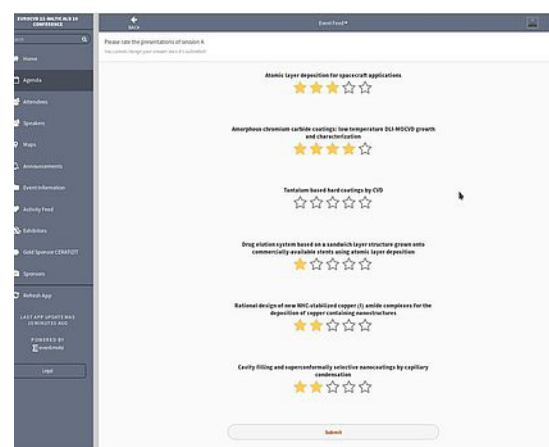
3. Go to the rating form.



2. Go to the agenda and select the entry for the FULL agenda.



4. Rate each presentation using 1 to 5 stars ...and submit so that your vote is taken into account.



→ POSTER SESSION 1

June 25, 2019

| | | |
|----|--|---|
| 1 | Growth mechanism of III-V nanowires depending on the temperature and pressure: ab-initio thermodynamic study | Choi Jung-Hae, Yeu In Won, Gyuseung Han, Hwang Cheol Seong |
| 2 | UV-Spectroscopic investigation of Al (acac)₃ precursor delivery and stability | Grimm Sebastian, Kasper Tina, Atakan Burak |
| 3 | In situ and in vacuo studies on plasma enhanced atomic layer deposition of cobalt | Knaut Martin, Reif Johanna, Killge Sebastian, Albert Matthias, Bartha Johann W. |
| 4 | Computational screening of cobalt precursors for CVD and ALD applications | Hu Xiao, Schuster Jörg, Schulz Stefan |
| 5 | Surface reactions during thermal and plasma-enhanced atomic layer deposition of titanium dioxide films using tetrakis (dimethylamino) titanium | Vandenbroucke Sofie S. T., Levrau Elisabeth, Minjauw Matthias, Solano Minuesa Eduardo, Van De Kerckhove Kevin, Devloo-Casier Kilian, Pulinthanathu Sree Sreeprasanth, Martens Johan A., Vos Rita, Jans Karolien, Dendooven Jolien, Vereecken Philippe, Stakenborg Tim, Detavernier Christophe |
| 6 | Chlorosilane gas transport real-time monitoring using quartz crystal microbalance set at an exhaust of slim vertical cold wall chemical vapour deposition reactor | Takahashi Toshinori, Muroi Mitsuko, Irikura Kenta, Matsuo Miya, Yamada Ayami, Habuka Hitoshi, Ishida Yuuki, Hara Shiro, Ikeda Shin-Ichi |
| 7 | Sticking coefficient estimation for TaN ALD using a combined simulative and experimental approach | Jäckel Linda, Knaut Martin, Schuster Jörg |
| 8 | Influence of the Geometric Parameters on the Deposition Mode in Spatial Atomic Layer Deposition: A Novel Approach to Area-Selective Deposition | Muñoz-Rojas David |
| 9 | What limits the conductivity of ZnO: Al thin films deposited by atmospheric pressure Spatial Atomic Layer Deposition? A new model to link electrical properties and deposition conditions | Muñoz-Rojas David |
| 10 | Enabling Nucleation Phenomena studies of ALD Deposited Films by In-situ High-Resolution TEM | Burgmann Stephanie, Bin Afif Abdulla, Provine J, Van Helvoort Antonius T. J., Torgersen Jan |
| 11 | Derivation of the analytical solutions of deposition profiles in chemical vapor deposition reactors and their application to high-throughput modeling of reactions | Takahashi Takahiro, Nakazawa Eisuke, Masuoka Daiki, Suzuki Kenta |
| 12 | The automatic experimental design for modelling the reaction mechanism of chemical vapor deposition using multi-objective optimization algorithms | Takahashi Takahiro, Tsuchiya Ryosuke, Arakawa Masamoto |
| 13 | Overview of doctoral theses on Atomic Layer Deposition collected in the Virtual Project on the History of ALD | Aarik Jaan, Aav Jussi, Ahvenniemi Esko, Akbashev Andrew R., Ali Saima, Bechelany Mikhael, Berdova Maria, Bodalyov Ivan, Boyadjiev Stefan, Cameron David, Chekurov Nikolai, Chen Rong, Chubarov Mikhail, Cremers Véronique, Devi Anjana, Drozd Victor E., Elnikova Liliya, Gottardi Gloria, Goulas Aristeidis, Grigoras Kestutis, Hausmann Dennis, Hwang Cheol Seong, Jen Shih-Hui, Junige Marcel, Kallio Tanja, Kanervo Jaana, Khmel'nitskiy Ivan, Kim Do Han, Klibanov Lev, Koshtyal Yury, Krause Outi, Kuhs Jakob, Kärkkäinen Irina, Kääriäinen Marja-Leena, Kääriäinen Tommi, Lamagna Luca, Lapicki Adam, Leskelä Markku, Lipsanen Harri, Malkov Anatolii, Malygin Anatoly, Mattelaer Felix, Mennad Abdelkader, Miltzer Christian, Molarius Jyrki, Norek Ma?gorzata, Ozgit-Akgun Cagla, Panov Mikhail, Pedersen Hendrik, Peña Luis Fabián, Piallat Fabien, Popov Georgi, Puurunen Riikka L., Perros Alexander Pymäki, Rampelberg Geert, Ras Robin H. A., Rauwel Erwan, Roozeboom Fred, Sajavaara Timo, Salami Hossein, Savin Hele, Schneider Nathanaelle, Seidel Thomas E., Sundberg Pia, Sundqvist Jonas, Suyatin Dmitry, Tallarida Massimo, Törndahl Tobias, Utrianen Mikko, Van Ommen Ruud J., Waechter Thomas, Weckman Timo, Claudia Wiemer, Yim Jihong, Ylivaara Oili, Yurkevich Oksana |
| 14 | Growth of MoS₂ in a 300mm Atomic Layer Deposition Reactor: Structural and Electronic Properties | Povey Ian, Hurley Paul, Monaghan Scott, Lin Jun, James Connolly, Gity Farzan, O'Neill Katie, Duesberg Georg, Mcevoy Niall |
| 15 | Array of single-walled carbon nanotubes with controlled parameters for gas detection devices | Klimin Victor, Rezvan Alexey, Ageev Oleg |
| 16 | Atomic layer deposition of highly stoichiometric Cu₂SnS₃ films as absorber materials for photovoltaic cells | Agbenyeke Raphael Edem, Park Bo Keun, Chung Taek-Mo, Lee Young Kuk, Kim Chang Gyoung |
| 17 | Alkylsilyl - and alkylstanylselenides: A comparative study | Charvot Jaroslav, Bures Filip, Macák Jan |
| 18 | Low-Temperature Plasma ALD of Niobium Nitride Films with RF Substrate Biasing for Superconducting Applications | Shu Yi, O'mahony Aileen, Knoops Harm, Kurek Agnieszka, Miller Thomas, Thomas Owain, Hodson Chris |
| 19 | Structural and morphological properties of hot-wire deposited MoS₂ thin films | Papadimitropoulos Giorgos, Gasparotto Alberto, Barreca Davide, Kontos Athanasios, Davazoglou Dimitris, Kouvatso Dimitris |
| 20 | Arrays of ZnO nanopramids grown on their tips by chemical vapor deposition | Maccato Chiara, Barreca Davide, Altantzis Thomas, Kaunisto Kimmo, Gasparotto Alberto |

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| 21 | Towards stoichiometric LiNbO₃ epitaxial thin films grown by Direct Liquid Injection MOCVD | Astié Vincent, Oliveri Stefania, Millon Cyril, Margueron Samuel, Raschetti Marina, Decams Jean-Manuel, Pascal Boulet, Bartasyte Ausrine |
| 22 | Structural and electrical properties AlN thin films grown by plasma enhanced atomic layer deposition on GaN substrates | Lo Nigro Raffaella, Giannazzo Filippo, Schilirò Emanuela, Greco Giuseppe, Roccaforte Fabrizio, Prystawko Pawel, Piotr Kruszewski, Mike Leszczynski, Adrien Michon, Cordier Yvon, Cora Ildico, Pecz Bela, Gargouri Hassan |
| 23 | Tuning the Texture and Electrical Properties of Cu₂O Thin Films Deposited via Aerosol-Assisted CVD | Muñoz-Rojas David |
| 24 | Controlling properties of zinc oxide thin films grown by thermal atomic layer deposition with oxygen gas | Nguyen Tai, Adjeroud Noureddine, Fleming Yves, Valle Nathalie, Menguelti Kevin, Guillot Jérôme, Polesel Jérôme |
| 25 | Atomic layer etching method for removal of disturbed layers obtained by plasma-chemical etching, followed by the growth of quantum dots GaAs by dropping epitaxy | Klimin Victor, Rezvan Alexey, Solodovnik Maksim, Ageev Oleg |
| 26 | Au nanoparticles supported by titania: a vapor deposition approach via ALD | M. Hashemi Fatemeh S., Grillo Fabio, Ravikumar Vikram R., Benz Dominik, Shekhar Ankit, Griffiths Matthew B. E., Barry Seán T., Van Ommen J. Ruud |
| 27 | Al₂O₃ thin films prepared by a modified H₂O-based PEALD for encapsulation applications | Zhu Zhen, Merdes Saoussen, Mizohata Kenichiro, Ylivaara Oili, Heikkilä Mikko, Salmi Emma |
| 28 | Low-temperature Atomic Layer Deposition of alumina and titania for encapsulation | Diouf Maïmouna W., Dufond Maxime E., Kools Jacques, Santinacci Lionel |
| 29 | Homo-IPNs thin films with tuneable nanoscale viscoelastic domains from telechelic poly(ethylene glycol) oligomers | Niemczyk Edyta Monika, Quintana Robert, Verge Pierre |
| 30 | Nanostructure generation and surface area enhancement in bi-phase TiO₂ based photocatalytic coatings by pp-MOCVD | Gorthy Rukmini, Mecartney Martha, Yang Yingjie, Xu Mingjie, Aoki Toshihiro, Zheng Jian-Guo, Land Johann, Bishop Catherine, Krumdieck Susan |
| 31 | Surface carbonization of Si (100) substrate by heat treatment in CH₄/H₂ atmosphere | Sugawara Ryouya, Katamune Yuki, Izumi Akira |
| 32 | Large-area and roll-to-roll Atmospheric Spatial Atomic Layer Deposition for thin-film photovoltaics | Van Den Bruele Fieke, Frijters Corné, Bolt Pieter-Jan, Illiberi Andrea, Zardetto Valerio, Poodt Paul |
| 33 | Magnetic and electrical properties of atomic layer deposited iron and bismuth oxide layered structures | Seemen Helina, Dueñas Salvador, Castán Helena, Link Joosep, Stern Raivo, Jõgiaas Taivo, Kukli Kaupo, Tamm Aile |
| 34 | A liquid alkoxide precursor for the atomic layer deposition of aluminum oxide films | Cao Liao, Mattelaer Felix, Dendooven Jolien, Detavernier Christophe |
| 35 | New atmospheric pressure plasma torch CVD process for micro-printing of organic functional layer | Acharya Kishor, Bulou Simon, Gaulain Thomas, Gérard Mathieu, Bour Jérôme, Choquet Patrick |
| 36 | Towards faster growth of hybrid films by spatial molecular layer deposition | Jain Hardik, Van Den Bruele Fieke, Poodt Paul |
| 37 | Chemical vapor deposition of Tin and of Erbium oxide and Er doped SnO₂ films | Davazoglou Dimitris, Peloriadou Konstantina, Papadimitropoulos George, Vourdas Nikolaos, Soutati Anastasia, Maria Vasilopoulou, Aviziotis Ioannis, Boudouvis Andreas |
| 38 | Development of Low Temperature Atmospheric Spatial Atomic Layer Deposition System for Al₂O₃ Thin Film based on Roll to Roll Process | Lee Jae-Wook, Kim Hyeon-Beom, Manzoor Soomro Afaque, Mun Seong-Woo, Choi Kyung-Hyun |
| 39 | STM analysis made easy | Engelund Mads, Kharitonov Stanislav |
| 40 | Recent advances in rare-earth precursor chemistry for CVD/ALD: An overview | Boysen Nils, Beer Sebastian M. J., Mai Lukas, Kaur Parmish, Krusenbaum Annika, Baier Daniel, Huster Jan-Niklas, Devi Anjana |
| 41 | Hybrid CVD-ALD for the synthesis of immobilised CNT/Metal oxide smart black nanocomposite coatings | Vasu Prasadam, Naoufal Bahlawane |
| 42 | Extraordinary synergetic effect in laser CVD deposition of SiBCN films | Merenkov Ivan, Hirokazu Katsui, Takashi Goto, Kosinova Marina |
| 43 | Ferromagnetic SiC_xN_y: Fe films with tailored conductivity for spintronics | Pushkarev Roman, Fainer Nadezhda, Stepina Natalya, Kirienko Victor, Trubina Svetlana, Ehrenburg Simon |
| 44 | Bioactive silver nanoparticles produced by CVD technique on titanium customized implants surface | Piszczek Piotr, Radtke Aleksandra, Grodzicka Marlena, Ehlert Michalina, Bartmański Michał, Jędrzejewski Tomasz |
| 45 | Atomic layer deposition as a tool for nanoscale inorganic-organic hybrid photovoltaics | Kainth Jaspreet, Heeney Martin, Mclachlan Martyn |
| 46 | ZrO₂ polymorphs in atomic layer deposited Al₂O₃-ZrO₂ thin films and related properties | Taivo Jõgiaas, Kukli Kaupo, Tamm Aile |
| 47 | Automated exploration of reaction networks in the chemical vapor deposition by density functional theory | Pieck Fabian, Tonner Ralf |
| 48 | Easy polymeric nanofillings by capillary condensation | Ville A. Lovikka, Marianna Kemell, Marko Vehkamäki, Markku Leskelä |
| 49 | The use of the Fluidized-Bed Chemical Vapor Deposition Process for Additive Manufacturing applications | Pierre Lassegue, Sébastien Donet, Guilhem Roux |

→ POSTER SESSION 2

June 27, 2019

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| 1 | MOCVD approach for the synthesis of Ln³⁺ doped NaYF₄ fluoride thin films: pros and cons of mono- and heterobimetallic b-diketonate precursors | Pellegrino Anna Lucia, Malandrino Graziella, Battiato Sergio, Rossi Patrizia, Paoli Paola |
| 2 | Influencing the gas barrier performance of plasma enhanced atomic layer deposited metal oxide thin films | Mai Lukas, Gebhard Maximilian, Mitschker Felix, Awakowicz Peter, Devi Anjana |
| 3 | On the role of the co-reactant during plasma enhanced atomic layer deposition of Pd | Feng Ji-Yu, Ramachandran Ranjith, Minjauw Matthias, Van Daele Michiel, Solano Eduardo, Sajavaara Timo, Detavernier Christophe, Dendooven Jolien |
| 4 | Alkyl-substituted cyclopentadienyl complexes of iridium (I) with cyclooctadiene: synthesis, thermal behavior and application in MOCVD | Bonegardt Dmitry, Ilyin Igor, Turgambaeva Asiya, Morozova Natal'ya |
| 5 | Comparison of Zr ALD-precursors for semiconductor applications | Materano Monica, Richter Claudia, Mittmann Terence, Zhou Chuazhen, Jones Jacob L., Mikolajick Thomas, Schroeder Uwe |
| 6 | Cost-reducing PE-ALD processes for pure and doped SiO₂ thin films | Rampelberg Geert, Cremers Véronique, Werbrouck Andreas, Dendooven Jolien, Detavernier Christophe |
| 7 | A new nickel oxide CVD process utilizing the nickel ¹²-ketoiminato precursor class | Zywitzki Dennis, Rogalla Detlef, Devi Anjana |
| 8 | Volatile Heteroleptic Tin (IV) Aminoalkoxides as MOCVD Precursors for SnO₂ Thin Films: A Comparative Study of Fluorinated and Non-fluorinated Ligands | Verchère Alexandre, Mishra Shashank, Danièle Stéphane, Jeanneau Erwann, Guillon Hervé, Decams Jean-Manuel |
| 9 | Implementation of Vinyltrimethoxysilane for the Atomic Layer Deposition of Silicon Oxide | Fomekia Serge, Prasadam Vasu, Bahlawane Naoufal |
| 10 | Low temperature CVD pure boron layers for Si micromachining | Liu Xingyu, Navner Lis |
| 11 | Self-Limited Area Selective Thermal Atomic Layer Deposition of Copper Films for Advanced Interconnects | Franz Mathias, Melzer Marcel, Georgi Colin, Schulz Stefan |
| 12 | Chemical vapor deposition of MgO-based thin films with enhanced secondary electron emission | Evgeniia Vikulova, Ksenia Zherikova, Sergey Zabuslaev, Alena Pochtar', Natalia Morozova, Inga Vasilieva |
| 13 | A layer by layer approach towards SrTiO₃ growth on silicon by ALD | Dumont Yves, Berini Bruno, Sarteel Corinne, Frégnaux Mathieu, Aureau Damien, Amiri Gaëlle, Yedra L., Hassani Said, Popova Olena, Dkhil Brahim, Sallet Vincent |
| 14 | Atomic layer deposition of metal oxides using La (NO₃)₃·6H₂O catalytic oxidant | In -Sung Park |
| 15 | Rational Development of ALD Precursors for p-Type SnO Thin Films | Sullivan Hannah, Parish James, Johnson Andrew |
| 16 | The preparation of NiO thin films by PEALD | Innocent Jerome, Napari Mari, Driscoll Judith, Johnson Andrew |
| 17 | Cupric oxide thin films grown by atomic layer deposition | Tamm Aile, Tarre Aivar, Seemen Helina, Vargunin Artjom, Kukli Kaupo, Link Joosep, Verchenko Valeriy, Stern Raivo |
| 18 | Atomic layer deposition of ZnO films doped with transition metal oxides | Blagoev Blagoy, Terziyska P., Avramova I., Tzvetkov P., Mehandzhiev V., Kovacheva D., Paskaleva A. |
| 19 | Deposition of tungsten oxide and silver decorated tungsten oxide for use in oxygen gas sensing | Sari Wangi P., Blackman Chris, Zhu Yiyun, Covington James |
| 20 | New organosilicon route to silicon oxycarbonitride thin films | Kosinova Marina, Pushkarev Roman, Maslova Olga, Shayapov Vladimir, Mareev Alexander, Rakhlin Vladimir, Tsyrendorzhieva Irina, Lijuan Jiang, Yu Yude |
| 21 | Structural and optoelectronic parameters of gradient Al-doped ZnO thin films | Wlazlo Mateusz, Bartmański Marcin, Starowicz Zbigniew, Putynkowski Grzegorz, Panek Piotr |
| 22 | Vapor-liquid-solid growth of SnO₂ nanowires by atmospheric-pressure CVD and their structural, optical and gas-sensing properties | Terasako Tomoaki, Kurashige Toshiki, Marui Hideyuki, Manabe Gou, Yagi Masakazu, Mori Masami, Sadaoka Yoshihiko |
| 23 | ALD infilling of Quantum Dot thin films for increased stability and carrier mobility | M. Hashemi Fatemeh S., W. Crisp Ryan, Alkemade Jordi, J. Houtepen Arjan, Van Ommen J. Ruud |
| 24 | MOCVD of metal iridium coatings for medical electrodes: from volatile Ir (I) precursors to pacemaker testing | Karakovskaya Ksenya, Vikulova Evgeniya, Dorovskikh Svetlana, Kal'nyi Danila, Turgambaeva Asiya, Morozova Natal'ya |
| 25 | Growth and phase formation of Pd-based thin films by metal-organic chemical vapor co-deposition | Nikolaeva Nataliya, Turgambaeva Asiya, Vasil'eva Inga, Morozova Natal'ya |
| 26 | Superconducting properties of NbN thin films deposited by plasma enhanced atomic layer deposition using a metalorganic precursor | Jimenez Carmen, Tian Liang, Jacquemin Manoel, Crisci Alexandre, Mantoux Arnaud, Berthomé Grégory, Mercier Frédéric, Sulpice André, Rapenne Laetitia, Weiss François, Blanquet Elisabeth |
| 27 | Controlled Cu-promoted reactive 2D catalyst for efficient VOCs emissions abatement | El Kasmi Achraf, Waqas Muhammad, Mountapmbeme Kouotou Patrick, Tian Zhen-Yu |
| 28 | Co₃O₄ films deposited by MOCVD: A study connecting the microstructure to the electric and electronic properties | Miquelot Adeline, Despotopoulou Myrto, Debieu Olivier, Villeneuve Christina, Prud'homme Nathalie, Vahlas Constantin |
| 29 | Perovskite Bi(1-x)DyxFeO₃ thin films on Si based substrates: MOCVD growth and characterization | Micard Quentin, Condorelli Guglielmo G., Malandrino Graziella |

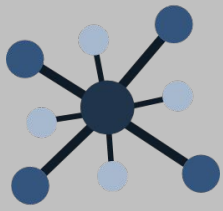
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| 30 | p-type thin film transistors with ALD Cu₂O channel layer | Napari Mari, Heikkilä Mikko, Iivonen Tomi, Niang Kham, Meeth Jake, Ritala Mikko, Leskelä Markku, Flewitt Andrew J., Macmanus-Driscoll Judith L. |
| 31 | Stabilizing Red Fluoride Phosphors for White LEDs using Atomic Layer Deposition | Verstraete Reinert, Rijckaert Hannes, Rampelberg Geert, Coetsee-Hugo Elizabeth, Duvenhage Mart-Mari, Detavernier Christophe, Swart Hendrik, Smet Philippe, Poelman Dirk |
| 32 | Single-source precursors for the temperature-controlled deposition of iron oxide thin-films | Surman Matthew, Hill Michael, Johnson Andrew, Eslava Salvador |
| 33 | PE-CVD and PE-ALD for food packaging | Cremers Veronique, Hähnel Daniel |
| 34 | Molybdenum Disulfides and Diselenides by Atomic Layer Deposition | Zazpe Raul, Prikryl Jan, Krbal Milos, Charvot Jaroslav, Dvorak Filip, Bures Filip, Macák Jan |
| 35 | Multi-functional AlZr-TiO₂ bilayer coatings for corrosion and antibiofouling prevention by photocatalytic reactions | Villardi De Oliveira Caroline, Jimenez Carmen, Alhussein Akram, Zhili Dong, Schuster Frédéric, Schlegel Michel, Fay Fabienne, Sanchette Frédéric |
| 36 | Perovskite Solar Cells using Atomic Layer Deposited Ti-doped ZnO as a Transparent Contact | Pemble Martyn, Ryan Louise, McCarthy Melissa, Monaghan Scott, Modreanu Mircea, O'Brien Shane, Povey Ian |
| 37 | Development of selenium containing single source precursors for the AACVD of SnSe and ZnSe thin films | Taylor Emily, Ahmet Ibrahim, Johnson Andrew |
| 38 | Oxidative control over SnO and SnS deposition. | Johnson Andrew |
| 39 | Low temperature anatase TiO₂ thin films synthesised by Plasma Enhanced Chemical Vapour Deposition for photocatalytic properties | Dey Benjamin, Bulou Simon, Gaulain Thomas, Ravisy William, Richard-Plouet Mireille, Goulet Antoine, Granier Agnès, Choquet Patrick |
| 40 | Monitoring structural, morphological and functional characteristics of DLI-MOCVD TiO₂ films through different types of precursors | Samelot Diane, Turgambaeva Asiya, Krisyuk Vladislav, Miquelot Adeline, Sysoev Sergey, Trubin Sergey, Stabnikov Pavel, Vahlas Constantin |
| 41 | Cross-over study of electric and electronic properties versus microstructure of MOCVD processed TiO₂ anatase films for solar water splitting | Miquelot Adeline, Debieu Olivier, Rouessac Vincent, Villeneuve Christina, Prud'homme Nathalie, Cure Jérémy, Constantoudis Vassilios, Papavieros George, Roualdes Stéphanie, Vahlas Constantin |
| 42 | Highly-efficient and stable organic photovoltaics using sodium metatungstate-mixed ZnO as electron extraction layer | Soultati Anastasia, Argitis Panagiotis, Davazoglou Dimitris, Vasilopoulou Maria |
| 43 | Development of nanostructured FTO films as transparent and diffuse electrodes for enhanced photovoltaic performances | Lakhdar Chaouche Soraya |
| 44 | Al₂O₃ coated Au@WO₃ and its potential application in photoelectrochemistry | Xia Xueming, Blackman Chris |
| 45 | Metamaterial Design and Elaborative Approach for Efficient Selective Solar Absorber | Nikhar Khanna, Mohamed El Hachemi |
| 46 | Mn₃O₄-based nanosystems: from fabrication to hydrogen photogeneration | Barreca Davide, Bigiani Lorenzo, Maccato Chiara, Gasparotto Alberto, Sada Cinzia, Monai Matteo, Marti-Sanchez Sara, Arbiol Jordi, Fornasiero Paolo |
| 47 | Magnetic and electrical properties of atomic layer deposited iron and bismuth oxide layered structures | Helina Seemen, Salvador Duenas, Helena Castan, Josep Link, Raivo Stern, Taivo Jõgiaas, Kaupo Kukli, Aile Tamm |
| 48 | Chemical vapor deposition of silicon carbide from vinyltrichlorosilane and other precursors | Desenfant Anthony, Laduye Guillaume, Goujard Stéphane, Vignoles Gérard, Chollon Georges |
| 49 | The scalability of low-temperature thermal ALD of SiO₂- from single wafer to batch | Kalliomäki Jesse, Mäntymäki Miia, Lehto Tero, Shukla Shashank, Kääriä Markku, Sarnet Tiina |
| 50 | The effect of impurities on properties of atomic layer deposited Y₂O₃ thin films | Kalliomäki Jesse, Lehto Tero, Kääriä Markku, Sarnet Tiina |
| 51 | Conformality analysis of the archetype aluminium oxide ALD process in 3rd-generation silicon-based lateral high-aspect-ratio test structures | Ylivaara Oili, Yim Jihong, Ylilampi Markku, Utraiainen Mikko, Puurunen Riikka |
| 52 | Evaluation of Dielectric ALD with Hydrogen Peroxide: Comparison of Growth and Film Characteristics for Anhydrous H₂O₂, H₂O₂/H₂O Mixtures and H₂O | Spiegelman Jeffrey, Alvarez Daniel, Andachi Keisuke |
| 53 | Improvement of demolding properties in injection molding processes by application of metal oxide thin films | Vanessa frettlöh, Matthias Korres, Frank Mumme |
| 54 | Continuous dosage of solid state precursor material for MOCVD processes and the laser structuring of so-obtained zirconia thin films | Michaela Sommer, Christopher Beck, Frank Mumme |

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| 14 Si Silicon 28.086 | 21 Sc Scandium 44.956 | 39 Y Yttrium 88.906 | 22 Ti Titanium 47.88 | 40 Zr Zirconium 91.224 | 72 Hf Hafnium 178.49 | 41 Nb Niobium 92.906 | 73 Ta Tantalum 180.948 | 74 W Tungsten 183.85 | 44 Ru Ruthenium 101.07 | 27 Co Cobalt 58.933 | 28 Ni Nickel 58.693 |
| | 57 La Lanthanum 138.906 | 58 Ce Cerium 140.115 | 59 Pr Praseodymium 140.908 | 63 Eu Europium 151.966 | 64 Gd Gadolinium 157.25 | 66 Dy Dysprosium 162.50 | 68 Er Erbium 167.26 | 70 Yb Ytterbium 173.04 | 71 Lu Lutetium 174.967 | 78 Pt Platinum 195.08 | 29 Cu Copper 63.546 |

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