

## Poster Program

1. Formaldehyde preparation from methanol on nanostructured powder and membrane catalysts synthesized by molecular layering method, Prof Malygin Anatolii, *St. Petersburg State Technological University, Russia*
2. Ab-initio Study of the Trimethylaluminum Atomic Layer Deposition Process on Carbon Nanotubes, Ms Anja Förster, *Chemnitz University of Technology, Germany*
3. Nanopinta - an affordable and open ALD platform, Dr Tapani Alasaarela, *Nanobakers Ltd, Finland*
4. Plasma enhanced atomic layer deposition of  $\text{Fe}_2\text{O}_3$  thin films, Mr Ranjith Karuparambil Ramachandran, *Ghent University, Belgium*
5. Nanotechnology of Low-Dimensional Oxide and Nitride Systems, Mr Yuri Ezhovski, *St. Petersburg State Technological University, Russia*
6. Evaluation of the reaction of the surface of solids processes ALD, Mr Yuri Ezhovski, *St. Petersburg State Technological University, Russia*
7. Core-shell-structured Nanothermites Synthesized by Atomic Layer Deposition, Dr Hao Feng, *Xi'an Modern Chemistry Research Institute, China*
8. Overview of early publications on Atomic Layer Deposition, Dr Riikka Puurunen, *VTT Technical Research Centre of Finland, Finland*
9. Using ALD to Enable High Performance Detectors and Optics for Astronomy and Planetary Exploration, Dr April Jewell, *Jet Propulsion Laboratory, USA*
10. In situ synchrotron based XRF and GISAXS study of ALD encapsulation of supported nanocrystals, Mr Kilian Devloo-Casier, *Ghent University, Belgium*
11. Scaling up  $\text{MnCo}_2\text{O}_4$  ALD Process for Coating SOFC Interconnect Plates, Mr Jyrki Mikkola, *VTT Technical Research Centre of Finland, Finland*
12. Organic X-ray detectors with improved resolution enabled by atomic layer deposition, Ms Barbara Wegler, *Siemens AG, Corporate Technology / Friedrich-Alexander University of Erlangen-Nuremberg, Germany*
13. Quantum chemical analysis of the chemical assembling of low-dimensional metal-oxide species on the silica surface, Dr Stanislaw Dubrovensky, *St. Petersburg State Technological University, Russia*
14. Sequential treatment of magnesium hydrosilicate  $\text{Mg}_3\text{Si}_2\text{O}_5(\text{OH})_4$  synthetic nanotubes with titanium tetrachloride and water vapours, Mr Ivan Bodalyov, *St. Petersburg State Technological University, Russia*
15. Blistering effect of ALD  $\text{Al}_2\text{O}_3$  grown with trimethylaluminum and water, Mrs Maria Berdova and Mr Ville Rontu, *Aalto University, Finland*
16. Photocatalytic  $\text{TiO}_2$  nanoparticle chains by ALD on carbonaceous template, Mr Shaoren Deng and Dr Christophe Detavernier, *Ghent University, Belgium*
17. Adjusting hydrophobic and hydrophilic properties by ALD and MLD, Mr Erkki Salo and Mr Matti Putkonen, *VTT Technical Research Centre of Finland, Finland*
18. Ferroelectric properties of ALD grown  $\text{BiFeO}_3$  films, Mr Pasi Jalkanen, *University of Helsinki, Finland*

19. Mechanical properties of ALD TiN made from  $\text{TiCl}_4$  and  $\text{NH}_3$ , Dr Riikka Puurunen, *VTT Technical Research Centre of Finland, Finland*
20. Atomic Layer Deposition for Hard Nanocomposites, Mr Taivo Jõgiaas, *University of Tartu, Estonia*
21.  $(\text{La}_{1-x}\text{Sr}_x) \text{CoO}_{3-\delta}$  thin films for solid oxide fuel cells made with atomic layer deposition, Mr Esko Ahvenniemi and Mr Mikko Matvejeff, *Aalto University, Finland*
22. Engineering of photoelectrochemically active i-p / i-n interfaces fabricated by Atomic Layer Deposition, Dr. Loic Assaud, *Friedrich-Alexander University Erlangen-Nürnberg, Germany*
23. Atomic layer deposition for the growth of doped  $\text{TiO}_2$  thin films for utilization in photovoltaic applications, Mr Harry Manley, *Tyndall National Institute, Ireland*
24. Desorption of light elements during heavy ion elastic recoil detection analysis of ALD samples, Mr Kenichiro Mizohata, *University of Helsinki, Finland*
25. Atomic layer deposition of Pd nanoparticles on  $\text{TiO}_2$  nanotubes for electrocatalytic oxidation of ethanol, Dr Lionel Santinacci, *CINaM-CNRS, Aix-Marseille University, France*
26. Tribological Performance of ALD  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$  and ATO Nanolaminate Coatings, Mr Lauri Kilpi, *VTT Technical Research Centre of Finland, Finland*
27. The origin of high n-type conductivity of  $\text{ZnO}$  films grown by Atomic Layer Deposition - electrical and optical studies, Dr Tomasz Krajewski, *Polish Academy of Sciences, Poland*
28. Testing thin alumina and titania laminates as chemically resistive coatings, Mr Ivan Netsipailo, *University of Tartu, Estonia*
29. Synthesis of  $\text{SnO}_2$  thin film electrodes and  $\text{Al}_2\text{O}_3$  passivation coatings for Li-ion batteries application using atomic layer deposition, Mr Maxim Maximov, *Saint Petersburg Polytechnical University, Russia*
30. Growth and characterization of  $\text{ZrO}_2:\text{RE}$  phosphor films obtained by the Spin-coating and Atomic Layer Deposition method, Mr Lukasz Wachnicki, *Polish Academy of Sciences, Poland*
31. Residual stresses in atomic layer-deposited tantalum oxide thin films, Ms Emma Härkönen, *University of Helsinki, Finland*
32. Role of oxide dielectric layers in electronic devices obtained by the ALD method, Ms Sylwia Gieraltowska, *Polish Academy of Sciences, Poland*
33. Atomic Layer Deposition and Characterization of Dysprosium-Doped Zirconium Oxide Thin Films, Dr Aile Tamm, *University of Tartu, Estonia*
34. Aluminum and titanium doped zinc oxide based transparent conductive oxides with ALD, Mr Sanjeev Kumar Gurram, *Fraunhofer Institute for Surface Engineering and Thin Films, Germany*
35. Particle nanostructuring using atmospheric-pressure ALD: assessing the process efficiency, Mr Aristeidis Goulas, *Delft University of Technology, Netherlands*
36. Characterization of ALD materials for optical applications in the ultraviolet range, Dr Andreas Langner, *VTT Technical Research Centre of Finland, Finland*
37. Reactions of DEZ and  $\text{TiCl}_4$  with homo and hetero para-substituted aromatic organic molecules in ALD/MLD, Ms Anne Tanskanen, *Aalto University, Finland*

38. Atomic layer deposition from the solution, Prof Julien Bachmann, *Friedrich-Alexander University Erlangen-Nürnberg, Germany*
39. Thermal and Plasma enhanced ALD of TiO<sub>2</sub>: comparison of spectroscopic and electric properties, Dr Massimo Tallarida, *Brandenburg Technical University Cottbus, Germany*
40. Third-Order Nonlinearity Measurements of Polyimide/Ta<sub>2</sub>O<sub>5</sub> Nanolaminates Deposited by Atomic Layer Deposition, Dr Elina Färm, *University of Helsinki, Finland*
41. ALD Based Nanostructured Corrosion Resistant Coatings for Al 1000 series, Mr Maito Merisalu, *University of Tartu, Estonia*
42. Atomic Layer Deposition of Gd<sub>2</sub>O<sub>3</sub> and Sc<sub>2</sub>O<sub>3</sub> on In<sub>0.53</sub>Ga<sub>0.47</sub>As: Interfacial Layer Engineering, Mr Mahmoud Ameen, IMEC, Belgium
43. Alumina-, titania- and silicon dioxide-nanotubes with high aspect ratios (1500) synthesized by ion-track technology and ALD, Ms Anne Spende, *GSI Helmholtz Centre for Heavy Ion research, Germany*
44. Coating of solution grown ZnO nanorods with aluminium doped ZnO by ALD for transparent conducting electrode applications, Ms Claire Burgess , *Imperial College London, United Kingdom*
45. High lithium content Li<sub>x</sub>Al<sub>y</sub>O<sub>z</sub> thin films deposited by LiTMSO, Mr Amund Ruud, *University of Oslo, Norway*
46. Electrical properties of thin ZnO films co-doped with nitrogen and aluminum, Mr. Dmytro Snigurenko and Prof. Elzbieta Guziewicz, *Polish Academy of Sciences, Poland*
47. XPS study of In<sub>2</sub>(S,O)<sub>3</sub> films grown by Plasma Enhanced Atomic Layer Deposition, Ms Cathy Bugot, *Institute of Research and Development on Photovoltaic Energy, France*
48. X-ray spectroscopic study of ALD transition-metal oxides films, Prof Elena Filatova, *St. Petersburg State University, Russia*
49. Novel heteroleptic ALD precursor for Gd<sub>2</sub>O<sub>3</sub>, Mrs Sanni Seppälä, *University of Helsinki, Finland*
50. RBS/Channeling Analysis of TiO<sub>2</sub> Films Grown by Atomic Layer Deposition, Prof Elzbieta Guziewicz, *Polish Academy of Sciences, Poland*
51. Ta doped ZnO for Transparent MESFETs, Dr Jacqueline Wrench, *University of Liverpool, United Kingdom*
52. Fragmentation test of oxide thin films deposited by Atomic Layer Deposition, Dr Vipin Chawla and Dr Ivo Utke, *EMPA - Materials Science & Technology, Switzerland*
53. Zinc oxide films grown by ALD as SERS platforms, Prof Elzbieta Guziewicz, *Polish Academy of Sciences, Poland*
54. Atomic layer deposition of TiO<sub>2</sub> thin films using heteroleptic titanium precursors and ozone, Mr Mikko Kaipio, *University of Helsinki, Finland*
55. Heteroleptic guanidinate precursors for ALD of TiO<sub>2</sub> and ZrO<sub>2</sub>, Mr Mikko Kaipio, *University of Helsinki, Finland*
56. Growth studies and characterization of Cu<sub>x</sub>Al<sub>y</sub>S<sub>z</sub> thin films, Ms Loraine Duclaux, *Institute of Research and Development on Photovoltaic Energy, France*

57. Remote Plasma ALD Silver Nanoparticles on Graphene, Ms Sanna Arpiainen, VTT Technical Research Centre of Finland, Finland
58. Graphene on ZrO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> Gate Dielectrics, Ms Sanna Arpiainen, VTT Technical Research Centre of Finland, Finland
59. Patterning of ALD oxide films by focused ion beam direct-writing, Ms Zhongmei Han, University of Helsinki, Finland
60. Deposition of functional MgO films on ZrO<sub>2</sub> microtubes, Mr Marko Part, University of Tartu, Estonia
61. Effect of substrate temperature on the growth of ZnO/Al<sub>2</sub>O<sub>3</sub> nanolaminate thin films on glass and silicon, Prof Viktor Drozd, St. Petersburg State University, Russia
62. Studies of possible germanium precursors for ALD of GST and related materials, Mr. Timo Hatanpää, University of Helsinki, Finland
63. Properties of nanocrystalline n-ZnO films deposited by ALD onto p-Si(100), Prof Viktor Drozd, St. Petersburg State University, Russia
64. Comparison of precursors for ALD of antimony oxide, Dr Raija Matero, ASM Microchemistry Ltd, Finland
65. Hybrid gas diffusion barrier films prepared by plasma enhanced atomic layer and chemical vapour deposition in the same reactor, Mr Tim Buelow and Mr Sebastian Montzka, University of Brunswick – Institute of Technology, Germany
66. Nucleation and Growth of Low-temperature Atomic Layer Deposited ZnO on PMMA, Ms Mari Napari, University of Jyväskylä, Finland
67. Cyclopentadienyl Precursors for ALD of Erbium Oxide Thin Films, Dr Jaakko Niinistö, University of Helsinki, Finland
68. Atomic Layer Deposition of Copper(II) Oxide Thin Films Using bis-(dimethylamino-2-propoxide)copper(II) and Ozone, Mr Tomi Iivonen, University of Helsinki, Finland
69. Plasma chemistry's influence on impurity incorporation in AlN prepared by plasma assisted atomic layer deposition, Mr Alexander Pyymäki Perros and Ms Hanna Hakola, Aalto University and Tampere University of Technology, Finland
70. HTXRD study of CeSnO<sub>x</sub> grown by ALD using a single metal source, Mr Mikko Heikkilä, University of Helsinki, Finland
71. Atomic layer deposition of epitaxial Cr<sub>2</sub>O<sub>3</sub> using bis(1,5-di-tert-butyl-1,2,5-triazapentadienyl)chromium(II) as chromium source, Mr Kaspar Roosalu, University of Tartu, Estonia
72. Spatial Atomic Layer Deposition: ozone as alternative oxidizing precursor for Al<sub>2</sub>O<sub>3</sub> diffusion barrier layers, Mr Philipp Maydannik, Lappeenranta University of Technology, Finland
73. Atomic Layer Deposition of Cerium Oxide for Potential Use in Diesel Soot Combustion, Mrs Tatiana Ivanova, Lappeenranta University of Technology, Finland
74. Investigation of the physical and electrical properties of atomic layer deposited Nb<sub>2</sub>O<sub>5</sub> films for MIM capacitors, Mr Stefan Riedel, Fraunhofer IPMS-CNT, Germany
75. Thermogravimetric methods for assessing atomic layer deposition precursors and the effect of ligand design, Prof Sean Barry, Carleton University, Canada

76. Atomic layer deposition of TiO<sub>2</sub> on sapphire: effect of substrate orientation on structure and growth rate of thin films, Ms Kristel Möldre, *University of Tartu, Estonia*
77. Amino acids in organic-inorganic hybrid thin films for biocompatible materials, Dr Karina Barnholt Klepper, *University of Oslo, Norway*
78. ALD sulfide semiconductor films as potential photosensor active materials, Dr Marko Vehkamäki, *University of Helsinki, Finland*
79. Growth of AlTiO films by atomic layer deposition in A+B+C processes, Mr Tõnis Arroval, *University of Tartu, Estonia*
80. Encapsulation of Metallic Nanoparticles in Transparent Conductive Oxides for Nanophotonic Photovoltaic Devices, Ms Manuela Goebelt, *Max Planck Institute for the Science of Light, Germany*