

PRELIMINARY ONLINE TECHNICAL PROGRAM*

F3 - EuroCVD 17 and CVD 17 High Temperature Materials/Dielectric Science and Technology/Electronics and Photonics

Monday, October 5, 2009

Hall F1, Level OE - Yellow

Fundamentals I

Time	Abs#	Title and Authors
10:00	F3-0439O [2466]	Hot Wire Chemical Vapor Deposition: Recent Progress, Present State of the Art and Competitive Opportunities R. E. Schropp (Utrecht University)
10:40	F3-0443O [2467]	Investigation of Triethylgallium Thermal Decomposition Using In Situ Raman Spectroscopy and DFT Calculations J. Lee, Y. Kim and T. J. Anderson (University of Florida)
11:00	F3-0193O [2468]	Gas Phase Deposition and Characterization of (Si)-B-C Ceramics G. Chollon (LCTS), J. Berjonneau and F. Langlais (LCTS (CNRS, Safran, CEA, UB1))
11:20	F3-0387O [2469]	A Density Functional Theory Study of Chlorosilanes Polymerization in Silicon Epitaxy D. Moscatelli, M. Dossi, A. Fiorucci and M. Masi (Politecnico di Milano)
11:40	F3-0351O [2470]	Electrical Properties of Plasma-Deposited Silicon Oxide Clarified by Chemical Modeling A. Kovalgin, A. Boogaard, I. Brunets, T. Aarnink and R. Wolters (University of Twente)

Lunch (12:00-14:00), included in EuroCVD Registration Package

Fundamentals II

Time	Abs#	Title and Authors
14:00	F3-0474O [2471]	Cat-CVD (Catalytic-CVD): Its Fundamentals and Application H. Matsumura and K. Ohdaira (Japan Advanced Inst. Sci. & Tech.)
14:40	F3-0181O [2472]	N- and S-doped Titania Thin Films, Prepared by Atmospheric Pressure Chemical Vapour Deposition: Enhanced Visible Light Photocatalytic Activity and Anti-microbial Effects C. W. Dunnill and I. Parkin (University College London)
15:00	F3-0164O [2473]	A Comparative Study of the Photoinduced Properties of TiO₂/SiO₂ and TiO₂/ZnO/SiO₂ Layers Prepared by Chemical Routes D. Vernardou, E. Spanakis (Technological Educational Institute of Crete), K. Vlachou, G. Kalogerakis (University of Crete), J. Costello (Tyndall National Institute), E. Koudoumas, N. Katsarakis (Technological Educational Institute of Crete) and M. Pemble (Tyndall National Institute)

15:20 [F3-0330O](#) [2474] [Selective Growth of B- and C-doped SiGe Layers in Unprocessed and Recessed Si Openings for pMOSFET Application](#) M. Kolahdouz, E. Trybom and H. Radamson (Royal Institute of Technology KTH)

Fundamentals III

Time	Abs#	Title and Authors
16:00	F3-0277O [2475]	Surface Chemistry Controlling Technology: Multiscale Spatial Behavior in Atomic Layer Deposition G. W. Rubloff, L. Henn-Lecordier, E. Cleveland, P. Banerjee and I. Perez (University of Maryland)
16:40	F3-0432O [2476]	Multiscale Simulation and Optimization of an Atomic Layer Deposition Process in a Nanoporous Material V. Dwivedi and R. A. Adomaitis (University of Maryland)
17:00	F3-0385O [2477]	A Detailed Investigation of the Gas Phase and Surface Chemistry Active during the PECVD of nc-Silicon: A Detailed Model of the Gas Phase and Surface Chemistry C. Cavallotti, M. Rondanini, T. Moiseev, D. Chrastina and G. Isella (Politecnico di Milano)
17:20	F3-0381O [2478]	A Comprehensive Insight in the MOCVD of Aluminum Through Interaction Between Reactive Transport Modeling and Targeted Growth Experiments T. C. Xenidou (National Technical University of Athens), N. Prud'homme (CIRIMAT/ENSIACET), C. Vahlas (CIRIMAT), N. C. Markatos and A. G. Boudouvis (National Technical University of Athens)
17:40	F3-0331O [2479]	Kinetic Modeling of Pyrocarbon Deposition Obtained by Propane Pyrolysis R. Lacroix, R. Fournet, I. Ziegler-Devin and P. Marquaire (CNRS-INPL)

Hall F2, Level OE - Yellow EuroCVD Posters I

Time	Abs#	Title and Authors
o	F3-0135O [2489]	Atmospheric Pressure SiC Film Deposition at Low Temperatures Using SiH₃CH₃ AND HCl Gases H. Habuka and H. Omori (Yokohama National University)
o	F3-0183P [2490]	Innovative M(Hfa)₂•TMEDA (M = Co, Cu) Precursors for the CVD Of Copper-Cobalt Oxides: An Integrated Theoretical and Experimental Approach A. Gasparotto (Padova University and INSTM), D. Barreca (Padova University), A. Devi, R. Fischer (Ruhr-University Bochum), E. Fois, A. Gamba (Insubria University and INSTM), C. Maccato (Padova University and INSTM), R. Seraglia (ISTM-CNR and INSTM), G. Tabacchi (Insubria University and INSTM) and E. Tondello (Padova University and INSTM)

- o [F3-0189P](#) [2491] [Influence of N₂ and H₂ Gas Flow Rates on Properties of n-Type Nanocrystalline 3C-SiC:H Thin Films Prepared by Hot-wire Chemical Vapor Deposition](#) A. Tabata, Y. Hoshide (Nagoya University) and A. Kondo (Gifu University)
- o [F3-0191P](#) [2492] [New Group of TiO₂ CVD Precursors \[Ti₄O₄\(O^tBu\)₄\(OOCR'\)₄\], R' = ^tBu, C\(Me\)₂Et, CH₂^tBu](#) A. A. Radtke, P. Piszczeck, T. Muzioł, A. Wojtczak and W. Bartkowski (Nicolaus Copernicus University)
- o [F3-0194P](#) [2493] [PECVD Deposition of nc-Si, \$\mu\$ c-Si, and a-Si of Different Isotopic Composition in Form of Films and Bulk Material from SiF₄ Precursor](#) P. Sennikov, S. Golubev (Institute of Applied Physics), V. Shashkin, D. Pryakhin, B. Andreev, M. Drozdov (Institute for Physics of Microstructures) and H. Pohl (VITCON GmbH)
- o [F3-0207P](#) [2494] [AFM Study of PECVD DLC Films for Solar Selective Absorber](#) S. Tinchev (IE BAS), A. Gusterov (2- FB18 Technische Physik, Universitet Kassel, Germany), P. Sharlandzhiev (3- CLOSPi, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria), P. Nikolova and Y. Dyulgarska (IE BAS)
- o [F3-0220P](#) [2495] [Correlation Between Plasma OES and Properties of B-doped Diamond Films Grown by MW PE CVD](#) M. Belousov, V. Krivchenko, P. Minakov, A. Pal, A. Rakhimov, N. Suetin and V. Sen' (Moscow State University)
- o [F3-0237O](#) [2496] [Functional Complex Oxides: Interplay between the Structure, Electrical Properties and Surface Reactivity](#) N. Bahllawane, P. Tchoua Ngamou and K. Kohse-Höinghaus (Bielefeld University)
- o [F3-0159O](#) [2497] [Deposition of WN_xC_y from the Tungsten Piperidylhydrazido Complex Cl₄\(CH₃CN\)W\(N-pip\) as a Single-Source Precursor](#) D. Kim, O. Kim, H. Ajmera, T. J. Anderson, J. Koller and L. McElwee-White (University of Florida)
- o [F3-0250P](#) [2498] [Variation in Properties CVD-ZnS_xSe_{1-x} with Composition](#) D. V. Savin, E. Gavrilchuk and V. Ikonnikov (Institute of Chemistry of High-Purity Substances of RAS)
- o [F3-0255P](#) [2499] [In Situ Doped Si Selective Epitaxial Growth at Low Temperatures by Atmospheric Pressure Plasma CVD](#) T. Ohnishi, Y. Kirihata, H. Ohmi, H. Kakiuchi and K. Yasutake (Osaka University)
- o [F3-0266P](#) [2500] [Comparison of Diamond Deposition with Boron or Sulfur Addition](#) R. Haubner (University of Technology Vienna)
- o [F3-0275P](#) [2501] [Barium Titanate Thin Film Growth by Low-pressure Metalorganic Chemical Vapor Deposition](#) T. Sekine, Y. Okumura, A. Satou and Y. Akiyama (Tokai University)
- o [F3-0281P](#) [2502] [Formation of Silicon Nitride Layer on Microcrystalline Silicon](#)

- [Thin Films by Hot-wire Chemical Vapor Method Using Nitrogen and Hydrogen Gases](#) A. Tabata, K. Mazaki (Nagoya University) and A. Kondo (Gifu University)
- o [F3-0285P](#) [2503] [CVD of Pure Copper Films from Amidinate Precursor](#) L. Aloui (CIRIMAT/ENSIACET), V. Krisyuk (Nikolaev Institute of Inorganic Chemistry), N. Prud'homme, B. Sarapata, F. Senocq (CIRIMAT/ENSIACET), D. Samelot and C. Vahlas (CIRIMAT)
- o [F3-0292P](#) [2504] [Reactor Scale Simulations of Boron and Boron Carbide Deposition](#) G. Reinisch, D. Alotta, N. Bertrand, G. Chollon, C. Descamps and G. Vignoles (LCTS)
- o [F3-0295P](#) [2505] [Theoretical Study of the Gas-phase System B/C/Cl/H for Boron Carbide Deposition](#) G. Reinisch (LCTS), G. L. Vignoles (University Bordeaux) and J. Leyssale (LCTS)
- o [F3-0298P](#) [2506] [\$\text{La}_{1-x}\text{Sr}_x\text{MnO}_3\$ Films on Perovskite and Technological Substrates: In Situ Growth by MOCVD from a Liquid Multi-metal Source](#) R. G. Toro (INSTM), D. Fiorito, G. Malandrino and I. Fragalà (Università di Catania)
- o [F3-0302O](#) [2507] [Deposition of Metastable Nickel Nitride by CVD](#) E. Lindahl, M. Ottosson and J. Carlsson (Uppsala University)
- o [F3-0308P](#) [2508] [Effect of Ozone on Deposition of Titanium Oxide Films from Tetraisopropoxide](#) S. Alexandrov, M. Barishnikova, L. A. Filatov and V. Protopopova (Saint Petersburg State Polytechnical University)
- o [F3-0319O](#) [2509] [In Situ Investigation of the Processes of Precursor Adsorption by Means of Ellipsometry and Mass Spectrometry](#) I. Igumenov, P. Prozorov, P. P. Semyannikov and I. N. Zhukova (Nikolaev Institute of Inorganic Chemistry)
- o [F3-0322P](#) [2510] [Characterization of High-Rate Deposited Microcrystalline Si Films Prepared Using Atmospheric-Pressure Very High Frequency Plasma](#) K. Tabuchi, K. Ouchi, H. Ohmi, H. Kakiuchi and K. Yasutake (Osaka University)
- o [F3-0337P](#) [2511] [Texture and Residual Stress Analysis by XRD on Metastable Tetragonal Zirconia Films Obtained by MOCVD](#) M. Jouili, M. Andrieux and I. Gallet (LEMHE-ICMMO-UPS)
- o [F3-0348P](#) [2512] [Novel Precursors for the MOCVD of Molybdenum Nitride](#) T. Thiede, V. Gwildies, L. Alsamann, D. Rische and R. Fischer (Ruhr-University Bochum)
- o [F3-0350P](#) [2513] [Alkylsilyl Compounds of Selenium and Tellurium: New Precursors for ALD](#) T. Hatanpää, V. Pore, M. Ritala and M. Leskelä (University of Helsinki)
- o [F3-0364O](#) [2514] [ALD TaN from PDMAT and \$\text{NH}_3/\text{H}_2\$ for Cu Diffusion Barriers](#) V. Virginie BRIZE, P. Violet, F. Volpi, I. Nuta, A. Mantoux, R. Boichot and E. Blanquet (SIMaP)
- o [F3-0371P](#) [2515] [Tuning the Thermal Properties of Hafnium Precursors by](#)

- Tailoring the Ligands K. Xu, A. P. Milanov and A. Devi
(Ruhr-University Bochum)
- o [F3-0180P](#) [2516] Photoluminescence Properties of Polar and Non-polar ZnO Films Grown by Atmospheric-Pressure CVD Using Zn and H₂O as Source Materials T. Terasako (Ehime University), K. Taniguchi (Takuma National College of Technology), K. Taira (Ehime University), M. Yagi (Takuma National College of Technology) and S. Shirakata (Ehime University)
 - o [F3-0388P](#) [2517] An Ab Initio RRKM/Master Equation Investigation of SiH₄ and GeH₄ Decomposition Kinetics Using a Kinetic Monte Carlo Approach C. Cavallotti, D. Polino and A. Barbato (Politecnico di Milano)
 - o [F3-0390Q](#) [2518] Rapid Thermal (RT) MOCVD of Undoped and Al Doped ZnO Thin Films A. E. Nebatti, C. Pflitsch, C. Eckert and B. Atakan (University of Duisburg-Essen)
 - o [F3-0394P](#) [2519] Synthesis of Transparent ZrO₂ Thin Films by MOCVD P. Cárcamo-León (Instituto Politecnico Nacional), A. Torres-Huerta (Instituto Politécnico Nacional), M. Domínguez-Crespo and E. Ramírez-Meneses (Instituto Politecnico Nacional)
 - o [F3-0398P](#) [2520] Atomic Layer Deposition of Magnesium Oxide on GaAs A. O'Mahony, R. Chiodo, M. Nolan, J. Hamilton, I. M. Povey and M. Pemble (Tyndall National Institute)
 - o [F3-0416P](#) [2522] The Application of Advanced Spectroscopic Diagnostics with Chemometric Modelling to Optimise Thin Film Properties Grown by Atmospheric Pressure PE-CVD D. Sawtell (University of Manchester), D. Sheel (University of Salford) and P. A. Martin (University of Manchester)
 - o [F3-0426O](#) [2523] Reaction Kinetics of GaN Metal-Organic Vapor-Phase Epitaxy Analyzed by Multi-scale Profiles of Growth Rate M. Sugiyama, S. Yasukochi, T. Shioda, Y. Shimogaki and Y. Nakano (University of Tokyo)
 - o [F3-0429O](#) [2524] In Situ Monitoring of the Initial Nucleation for the Formation of Uniform InGaAs Micro-discs on Si M. Deura, Y. Kondo, T. Hoshii, M. Takenaka, S. Takagi, Y. Nakano and M. Sugiyama (University of Tokyo)
 - o [F3-0450P](#) [2525] A New Low-Melting Barium and Strontium Precursors for MOCVD Growth of BST Thin Films N. P. Kuzmina (Lomonosov Moscow State University), I. Malkerova, A. Alikhanyan (Kurnakov Institute of General and Inorganic Chemistry), D. Tsymbarenko (Moscow State University), O. Kreinin, G. Schuster and E. Zolotoyabko (Materials Engineering Department of Technion)
 - o [F3-0190P](#) [2527] Atmospheric Pressure Chemical Vapour Deposition of Electrochromic Mo-W Oxide Films: Structure and Optoelectronic Properties T. Ivanova (Central Laboratory of

- Solar Energy and New Energy Sources), K. Gesheva (Bulgarian Academy of Sciences), S. Bojadjiev (Technical University of Sofia), M. Kalitzova (Institute of Solid State Physics) and O. Lebedev (Antwerp University)
- o F3-0198O [2528] [Effect of the Substrate Nature on the ALD ZrO₂ Films Crystalline Structure](#) D. Monnier, M. Gros-Jean, E. Deloffre (STMicroelectronics), B. Doisneau, S. Coindeau, A. Crisci (SIMaP), J. Roy (E.S.R.F.), Y. Mi, B. Detlefs, J. Zegenhagen (ESRF), C. Wyon (CEA-LETI), C. Martinet (LPCML), F. Volpi and E. Blanquet (SIMaP)
 - o F3-0219P [2529] [Effect of H₂ on the Microstructure and Properties of TiO₂ Films Grown by Atmospheric Pressure MOCVD on Stainless Steel Substrates](#) D. Duminica (CIRIMAT), F. Maury (CNRS-CIRIMAT) and R. Hausbrand (ArcelorMittal)
 - o F3-0192P [2530] [Morphological and Structural Study of CVD MoO₃-Cr₂O₃ Films](#) T. Ivanova (Central Laboratory of Solar Energy and New Energy Sources), K. Gesheva (Bulgarian Academy of Sciences), S. Bojadjiev (Technical University of Sofia) and M. Kalitzova (Institute of Solid State Physics)
 - o F3-0265O [2531] [On Gaseous Phase of ALD Precursors by Means of Thermodynamics](#) P. Violet, I. Nuta, C. Chatillon and E. Blanquet (SIMaP)
 - o F3-0236P [2532] [Thermal Properties of Some Volatile Titanium\(IV\) Precursors](#) E. S. Filatov (Nikolaev Institute of Inorganic Chemistry), H. Nizard (EADS Deutschland GmbH), P. P. Semyannikov, S. V. Sysoev, S. V. Trubin, N. B. Morozova, K. Zherikova and N. V. Gelfond (Nikolaev Institute of Inorganic Chemistry)
 - o F3-0238P [2533] [MOCVD of Zirconium Oxide from the Zirconium Guanidinate Complex \[ZrCp'{η²-\(^{Pr}N\)₂CNMe₂}₂Cl\]](#) C. Blackman, C. Carmalt (University College London), H. Davies (SAFC Hitech Limited), S. Moniz (University College London), S. E. Potts (Eindhoven University of Technology) and D. Pugh (University College London)
 - o F3-0240P [2534] [Online Control by IR Pyrometry of Nanostructured Multilayer CrC_x/CrN Coatings Grown by MOCVD](#) A. Douard, D. Samelor, S. Delcelos, C. Tendero (CIRIMAT) and F. Maury (CNRS-CIRIMAT)
 - o F3-0243O [2535] [Preparation and Physical Characterization of SnO₂:Sb](#) S. Haireche, A. Boumeddiene (Université Saâd Dahlab de Blida), A. Guittoum (Centre de Recherche Nucléaire d'Alger), A. El Hdiy (Université de Reims Champagne ardenne) and A. Boufelfel (Université de Guelma)
 - o F3-0244O [2536] [Microstructural Control of Zirconium Carbide Coating Prepared by Chemical Vapor Deposition](#) W. Sun, X. Xiong, B. Huang, G. Li, H. Zhang, P. Xiao, Z. Chen and X. Zheng

- (Central South University)
- o [F3-0267O](#) [2537] [High-speed Growth and Characterization of AlN Polycrystalline Layers by High Temperature Chemical Vapor Deposition \(HTCVD\)](#) A. CLAUDEL (ACERDE), E. Blanquet (SIMaP), D. Chaussende (LMGP), B. Doisneau (SIMaP), H. Mank (NOVASIC), D. Pique (ACERDE) and M. Pons (SIMAP)
 - o [F3-0278P](#) [2538] [Preparation of Strontium Titanate Film by Low Pressure Chemical Vapor Deposition](#) D. Kon, K. Hashiba, T. Kawashima and Y. Akiyama (Tokai University)
 - o [F3-0282P](#) [2539] [Novel N-containing Precursors of Nickel\(II\) for Film Deposition by MOCVD](#) K. Zherikova, N. B. Morozova (Nikolaev Institute of Inorganic Chemistry), A. S. Kil'metiev, L. N. Zelenina (Nikolaev Institute of Inorganic Chemistry, SB RAS 630090, Novosibirsk, Lavrentiev ave., 3, Russia), P. P. Semyannikov, N. V. Gelfond, T. P. Chusova and I. K. Igumenov (Nikolaev Institute of Inorganic Chemistry)
 - o [F3-0291P](#) [2540] [PECVD BC_xN_y Films from Mixtures of N-trimethylborazine with Hydrogen and Ammonia: Modelling, Synthesis and Characterization](#) V. Sulyaeva (Nikolaev Institute of Inorganic Chemistry SB RAS), M. Kosinova (Nikolaev Institute of Inorganic Chemistry), A. Golubenko (Novosibirsk State University), Y. Rumyantsev (Nikolaev Institute of Inorganic Chemistry SB RAS), N. I. Fainer (Nikolaev Institute of Inorganic Chemistry) and F. A. Kuznetsov (Nikolaev Institute of Inorganic Chemistry SB RAS)
 - o [F3-0293O](#) [2541] [In-Situ Infrared Spectroscopy of Hydrocarbons in a Pyrocarbon CVD Reactor](#) M. Kawase, T. Ito and K. Miura (Kyoto University)
 - o [F3-0296P](#) [2542] [Modeling of the Gas Dynamic Processes During the Deposition of Nanolayers on the Surface of Submicrometer Channels of Porous Solids](#) I. F. Golovnev, V. Fomin (Khristianovich Institute of Theoretical and Applied Mechanics), I. K. Igumenov and B. M. Kuchumov (Nikolaev Institute of Inorganic Chemistry)
 - o [F3-0300O](#) [2543] [Highly Conformal Film Growth by Chemical Vapor Deposition: A Zone Diagram Based on Kinetics](#) A. Yanguas-Gil, N. Kumar (University of Illinois at Urbana-Champaign), Y. Yang (Cypress Semiconductor) and J. R. Abelson (University of Illinois at Urbana-Champaign)
 - o [F3-0307P](#) [2544] [Effect of Ozone on Deposition of Silicon Oxide Films from Decamethylcyclopentasiloxane](#) S. Alexandrov, L. A. Filatov and A. Speshilova (Saint Petersburg State Polytechnical University)
 - o [F3-0318O](#) [2545] [CVD Flow Field Modeling Using the Quiet Direct Simulation](#)

- (QDS) Method H. Cave, C. Lim, M. Jermy (University of Canterbury), J. Wu (National Chiao-Tung University, Taiwan), M. Smith (National Centre for High Performance Computing, Taiwan) and S. Krumdieck (University of Canterbury)
- o F3-0321O [2546] Dimethylgallium Isopropoxide as a New Volatile Source for ALD and MOCVD of Ga₂O₃ H. Lee, K. Kim, J. Woo, D. Jun, Y. Park, Y. Kim (Korea University), H. Lee, Y. Cho and H. Cho (Korea Research Institute of Standards and Science)
 - o F3-0324O [2547] Investigation of Precursor Adsorption on Silicon Surface by Means of Molecular Dynamics I. N. Zhukova (Nikolaev Institute of Inorganic Chemistry), I. F. Golovnev (Khristianovich Institute of Theoretical and Applied Mechanics), I. K. Igumenov, P. P. Semyannikov and E. S. Filatov (Nikolaev Institute of Inorganic Chemistry)
 - o F3-0339P [2548] Predictable Simple Reaction Model for Poly-Silicon LPCVD Process K. Kaneko (Fuji Electric Advanced Technology Co., Ltd.), M. Ogino (Fuji Electric Device Technology Co., Ltd.), R. Shimizu (Fuji Electric Advanced Technology Co., Ltd.), Y. Shimogaki (University of Tokyo) and M. Koshi (The University of Tokyo)
 - o F3-0368P [2549] Impact of Small Deviations in EEDF on Silane-based Plasma Chemistry A. Kovalgin, A. Boogaard and R. Wolters (University of Twente)
 - o F3-0349P [2550] Zinc Malonate Based Precursors for MOCVD of ZnO D. Bekermann, R. Fischer and A. Devi (Ruhr-University Bochum)
 - o F3-0356P [2551] MOCVD of Gallium Oxide Thin Films Using Homoleptic Gallium Complexes: Precursor Evaluation and Thin Film Characterisation M. Hellwig, K. Xu (Ruhr-University Bochum), D. Barreca (ISTM-CNF), A. Gasparotto (Padova University and INSTM), B. Niermann, J. Winter, R. Fischer and A. Devi (Ruhr-University Bochum)
 - o F3-0380O [2552] Growth of ZnO Nanowires by MOCVD: Fundamental Role of the Substrates C. Ternon (LTM - Grenoble-INP), G. Rey, M. Labeau, N. Thiré, C. Jimenez and D. Bellet (LMGP - Grenoble-INP)
 - o F3-0389O [2553] MOCVD of Epitaxial Alkali-Earth Fluorides Thin Films A. V. Blednov, O. Gorbenko (Moscow State University), S. Samoilenkova (Lomonosov Moscow State University), R. Muydinov (IOT, TU Braunschweig) and A. Kaul (Moscow State University)
 - o F3-0376P [2554] Atmospheric Pressure CVD of Tin Oxide and Fluorine-Doped Tin Oxide T. Abendroth, H. Althues and S. Kaskel (Fraunhofer IWS)
 - o F3-0382P [2555] In-Line Monitoring of Atmospheric Pressure Plasma Processes

- by Fourier Transform Infrared Spectroscopy M. Leistner, D. Linaschke, W. Graehlert and S. Kaskel (Fraunhofer IWS)
- o [F3-0397P](#) [2556] New Thin-Film $\text{BiFe}_{1-x}\text{Co}_x\text{O}_3$ and $\text{BiFe}_{1-x}\text{Ni}_x\text{O}_3$ Multiferroics: Preparation and Analysis of Structure A. Akbashev, E. Ganshina, T. Murzina and A. Kaul (Moscow State University)
 - o [F3-0393P](#) [2557] Synthesis of $\text{ZnO-Ce}_2\text{O}_3$ Thin Films by APCVD A. Torres-Huerta, M. A. Domínguez-Crespo, S. Brachetti-Sibaja (Instituto Politécnico Nacional) and M. Hernández-Pérez (Instituto Politécnico Nacional)
 - o [F3-0402P](#) [2558] Development of an Automatic Modeling System of the Reaction Mechanisms for CVD Processes T. Takahashi and Y. Ema (Shizuoka University)
 - o [F3-0410O](#) [2559] New Complexes of Alkali-Metals as Precursors for MOCVD of Ferroelectric $(\text{K},\text{Na})\text{NbO}_3$ Thin Films D. Tsymbarenko, I. Korsakov, A. Mankevich and A. Kaul (Moscow State University)
 - o [F3-0417P](#) [2560] 2D Species Concentration Mapping of Thermal AP-CVD Reactors for Monitoring, Control and Design D. Sawtell, V. Kasiutsich (University of Manchester), R. Holdsworth (TDL Sensors ltd.), D. Sheel (University of Salford) and P. A. Martin (University of Manchester)
 - o [F3-0427O](#) [2561] Epitaxial Heterostructures of $\text{KNbO}_3/\text{LaNiO}_3/\text{SrTiO}_3$ and $\text{KNbO}_3/\text{La}_{1-x}\text{K}_x\text{MnO}_3/\text{SrTiO}_3$: MOCVD Preparation and Properties I. Korsakov, A. Mankevich, D. Tsymbarenko (Moscow State University), A. M. Makarevich (Lomonosov Moscow State University) and A. Kaul (Moscow State University)
 - o [F3-0437P](#) [2562] Low-Temperature MOCVD of Epitaxial CaF_2 and SrF_2 Films A. M. Makarevich, A. Shchukin, A. Markelov (Lomonosov Moscow State University), S. Samoilenkova (Institute of High Temperature RAS), P. P. Semyannikov (Nikolaev Institute of Inorganic Chemistry) and N. P. Kuzmina (Lomonosov Moscow State University)
 - o [F3-0458P](#) [2563] Real Time Monitoring of the Transmittance/Reflectance during the Thermal Annealing of Amorphous Silicon N. Ota, T. Imamura (Saitama University), H. Shimizu (Saitama Industrial Technology Center), T. Kobayashi (The Institute of Physics and Chemical Research) and H. Shirai (Saitama University)

Tuesday, October 6, 2009**Hall F1, Level OE - Yellow****Precursors I**

Time	Abs#	Title and Authors
08:00	F3-0297O [2480]	<u>MOCVD of Complex Oxide Systems: from Precursor Chemistry to Applications</u> G. Malandrino (Università di Catania), R. G. Toro (INSTM), R. Lo Nigro (IMM-CNR) and I. L. Fragala' (Università di Catania)
08:40	F3-0403O [2481]	<u>Remarkable Influence of Molecular structure of N,N'-Unsymmetrically Substituted 1,3-amidinate and -guanidinate on the Volatility and the Thermal Stability of Precursors for HfO₂ Films via Liquid Injection-MOCVD</u> M. Eleter, S. Daniele (University Lyon 1), V. Brize (SIMaP), C. Dubourdieu (INP-Minatec), C. Lachaud, N. Blasco and A. Pinchart (Air Liquide)
09:00	F3-0365O [2482]	<u>Rare-Earth Based Oxide and Nitride Thin Films Employing Volatile Homoleptic Guanidinate Precursors</u> A. P. Milanov, T. Thiede, H. Parala, C. Bock, H. Becker (Ruhr-University Bochum), D. Ngwashi, R. Cross, S. Paul (De Montfort University), U. Kunze, R. Fischer and A. Devi (Ruhr-University Bochum)
09:20	F3-0284O [2483]	<u>CaCu₃Ti₄O₁₂ Thin Films for Capacitive Applications: MOCVD Synthesis and Nanoscopic/Microscopic Characterization</u> R. Lo Nigro (IMM-CNR), R. Toro, M. Catalano, G. Malandrino, I. Fragalà (Università di Catania), P. Fiorenza and V. Raineri (IMM-CNR)

Precursors II

Time	Abs#	Title and Authors
10:00	F3-0469O [2484]	<u>Mechanism-Based Design of Precursors for MOCVD</u> L. McElwee-White, J. Koller, D. Kim and T. J. Anderson (University of Florida)
10:40	F3-0453O [2485]	<u>Iron Amidinates as Precursors for the MOCVD of Iron-Containing Thin Films</u> A. N. Gleizes (CIRIMAT, ENSIACET), V. Krisyuk (Nikolaev Institute of Inorganic Chemistry), L. Aloui (CIRIMAT/ENSIACET), A. E. Turgambaeva (Nikolaev Institute of Inorganic Chemistry), B. Sarapata, N. Prud'homme, F. Senocq (CIRIMAT/ENSIACET), D. Samelor (CIRIMAT), A. Zielinska-Lipiec (AGH University of Science and Technology), F. Dumestre (NanoMePS) and C. Vahlas (CIRIMAT)
11:00	F3-0422O [2486]	<u>Optimization of Ca Precursor Transport for High Vacuum Chemical Vapor Deposition (HV-CVD)</u> L. Luo, Y.

Kuzminykh (Ecole Polytechnique Fédéral de Lausanne), M. Catalano, G. Malandrino (Università di Catania) and P. Hoffmann (Ecole Polytechnique Fédérale de Lausanne)

11:20 [F3-0473O](#) [2487] [Conformal Chemical Vapor Deposition of Metal Oxide Thin Films from N-N, Dimethyldiboranamide Precursors](#) A. Yanguas-Gil, N. Kumar (University of Illinois at Urbana-Champaign), S. Daly (University of Illinois at Urbana-Champaign), G. Girolami (University of Illinois at Urbana-Champaign) and J. R. Abelson (University of Illinois at Urbana-Champaign)

11:40 [F3-0343O](#) [2488] [Analytical Characterization of BC_xN_y Films Grown with Trimethylamine Borane, Triethylamine Borane or Trimethylborazine Precursor](#) O. Baake, P. S. Hoffmann, A. Klein (Technical University), B. Pollakowski, B. Beckhoff (Physikalisch-Technische Bundesanstalt), W. Ensinger (Technische Hochschule Darmstadt), M. Kosinova, N. I. Fainer, V. Sulyaeva and V. Trunova (Nikolaev Institute of Inorganic Chemistry)

Lunch (12:00-14:00), included in EuroCVD Registration Package

Excursion: Historical Vienna Tour, included in EuroCVD Registration Package

**Buses depart from the Austria Center Vienna at 14:00,
and are expected to return to Austria Center Vienna at about 18:30**

Wednesday, October 7, 2009

Hall F1, Level OE - Yellow

Industrial and New Applications, Devices I

Time	Abs#	Title and Authors
08:00	F3-0187O [2564]	Industrial Applications of ALD: Current Status and Future Perspectives M. Ritala (University of Helsinki)
08:40	F3-0425O [2565]	Novel CVD Strategies and Novel Chemical Precursors Enabling Low Temperature Epitaxy of Si and Si:C Alloys M. Bauer and S. Thomas (ASM America)
09:00	F3-0341O [2566]	A Conformal Oxide Liner for Through Silicon Vias by Pulsed SA-CVD Deposition E. Sleenckx, M. Schaekers and E. Dürr (IMEC)
09:20	F3-0205O [2567]	Low Pressure Chemical Vapour Deposition as a Tool for Deposition of Thin Film Battery Materials J. Oudenhoven (Eindhoven University of Technology), T. Van Dongen, R. Niessen (Philips Research Laboratories Eindhoven), M. De Croon and P. Notten (Eindhoven University of Technology)

Industrial and New Applications, Devices II

Time	Abs#	Title and Authors
10:00	F3-0150O [2568]	Growth of Triple-Junction Solar Cells (TJ-SC) in an Optimized MOCVD Reactor M. Daelsberg, J. Hofeldt, B. Schineller and M. Heukens (AIXTRON AG)
10:40	F3-0361O [2569]	Atmospheric Pressure CVD: An Easy and Sustainable Method for Technical Surface Functionalisation A. Schimanski, A. Heft, A. Pfuch and K. Horn (Innovent e.V.)
11:00	F3-0177P [2570]	Optimization of Solar Cell Performance Using Atmospheric Pressure Chemical Vapour Deposition Deposited TCOs H. M. Yates, P. Evans, D. Sheel (University of Salford), U. Dagkaldiran, A. Gordijn, F. Finger (Forschungszentrum Julich GmbH), Z. Remes and M. Vanecek (Academy of Sciences of the Czech Republic)
11:20	F3-0377O [2571]	Tungsten Coatings as a Protective Layer on Surfaces in Contact with Molten Metals P. Cosemans, W. Lauwerens and F. Mampaey (SIRRIS)
11:40	F3-0440O [2572]	Amorphous Carbon Film Deposition for Hydrogen Barrier in FeRAM Integration by Radio Frequency Plasma Chemical Vapor Deposition Method T. Saito, K. Izumi, Y. Hirota, N. Okamoro, K. Kondo, T. Yoshimura and N. Fujimura (Osaka Prefecture University)

Lunch (12:00-14:00), included in EuroCVD Registration Package

Industrial and New Applications III

Time	Abs#	Title and Authors
14:00	F3-0418O [2573]	Large Area PECVD Technology S. Choi and J. M. White (AKT/Applied Materials)
14:40	F3-0374O [2574]	Phosphorous and Boron Doping in Plasma Enhanced Chemical Vapor Deposition of Silicon Oxynitride Based Optical Waveguides F. Sun, G. Sengo, A. Driessen and K. Wörhoff (University of Twente)
15:00	F3-0415O [2575]	Multi-scale Simulations for Plasma Processing of Thin Films A. Bhoj, K. Shah (ESI), M. Megahed (ESI Group), P. Kothnur and R. Kinder (Novellus Systems, Inc.)
15:20	F3-0481O [2576]	Investigation of Optical Properties and Photoluminescence of Amorphous Silicon Carbide in a-SiC/Si₃N₄ Quantum Well Structures Fabricated by PECVD Technique L. Kamyab, Rusli (Nanyang Technological University), M. Yu (Institute of Microelectronics), L. He and M. Dua (Nanyang Technological University)

Nanostructured Systems I

Time	Abs#	Title and Authors
16:00	F3-0242O [2577]	Controlled Synthesis of Carbon Nanotubes by Various CVD and PECVD Methods J. Kpetsu, P. Jedrzejowsk, C. Côté, A. Sarkissian (Plasmionique Inc.), P. Merel, P. Laou, S. Désilets, S. Paradis (Defense Research & Development Canada - Valcartier), H. Liu, M. I. Ionescu, Y. Zhong, Y. Zhang, R. Li and X. Sun (University of Western Ontario)
16:40	F3-0420O [2578]	Long and Aligned Multi-walled Carbon Nanotubes Grown on Carbon and Metallic Substrates by Injection-CVD Process M. Delmas, M. Pinault, D. Porterat, C. Reynaud and M. Mayne-L'hermite (CEA - Saclay)
17:00	F3-0386O [2579]	Influencing Factors towards a Scalable Synthesis of Aligned Carbon Nanotubes by Chemical Vapour Deposition T. K. Karachalios and S. F. Nitidas (Nanothinx S.A.)
17:20	F3-0395O [2580]	CVD Growth of Carbon Nanotubes over Metal Free Catalyst Nanoparticles R. Smajda, M. Mionic, K. Gloystein, M. Duchamp (EPFL), J. Seo (Katholieke Universiteit Leuven), L. Forró and A. Magrez (EPFL)
17:40	F3-0438O [2581]	Gas-Phase Synthesis of Hierarchical Carbon Structures and the Deposition of Pt Catalysts in a Fluidized-Bed Reactor W. Xia, C. Jin, B. Mei, S. Kundu and M. Muhler (Ruhr University Bochum)

Hall F2, Level OE - Yellow
EuroCVD Posters II

Time	Abs#	Title and Authors
o	F3-0131P [2582]	Photo-Catalytic Surfaces via Low Temperature Atmospheric Pressure Plasma J. L. Hodgkinson, H. M. Yates and D. Sheel (University of Salford)
o	F3-0153O [2583]	Hybrid Aerosol Assisted Atmospheric Pressure Chemical Vapour Deposition: A Facile Route Toward Nano-Composite Thin Films? R. Binions (University College London), M. Saeli (Università degli Studi di Palermo), C. Piccirillo and I. Parkin (University College London)
o	F3-0175P [2584]	Effects of APCVD Growth Conditions on the Photocatalytic Behavior of Titania Films H. M. Yates, P. Evans and D. Sheel (University of Salford)
o	F3-0196P [2586]	Silicon Oxynitride Layers Fabricated by Plasma Enhanced Chemical Vapor Deposition (PECVD) for CMOS Devices R. Mroczynski and R. Beck (Institute of Microelectronics and Optoelectronics)
o	F3-0212P [2587]	Stabilized Zirconia -Based Materials for Solid Oxide Fuel Cells (SOFC) Obtained by MOCVD and Aerosol-CVD N. El Habra, M. Bolzan, C. De Zorzi, M. Favaro (ICIS-CNR), M. Casarin, C. Sada (Università degli Studi di Padova) and G. Rossetto (ICIS-CNR)
o	F3-0213P [2588]	Deposition of TiO₂ Thin Films by Liquid Injection ALD Using New 2,5-Dimethylpyrrolyl Titanium-alkylamide and -alkoxide Precursors H. Davies (SAFC Hitech Limited), K. Black, A. Jones, J. Bacsa, P. Chalker, P. Marshall (Liverpool University), P. Heys (SAFC Hitech Limited), P. O'Brien and M. Afzaal (Manchester University)
o	F3-0216P [2589]	TiO₂ Strelitzia-like Hybrid Nanocomposites Obtained by a Synergic Combination of Vapor Techniques S. Battiston (IENI-CNR), M. Bolzan (ICIS-CNR), M. Fabrizio (IENI-CNR), R. Gerbasi, P. Guerriero (ICIS-CNR), E. Miorin, C. Mortalò, C. Pagura (IENI-CNR) and F. Visentin (ICIS-CNR)
o	F3-0221P [2590]	Surface Modification of PMMA with DLC Using RF-PECVD P. K. Barhai, R. Sharma, A. Yadav, A. Singh (Birla Institute of Technology), H. Gaur and V. Buck (University of Duisburg-Essen)
o	F3-0223O [2591]	AlGaN Multiple Quantum Wells and AlN Grown in a Hot-wall MOCVD for Deep UV Applications A. Henry, A. Lundskog, J. Palisaitis, I. Ivanov, A. Kakanakova-Georgieva, U. Forsberg, P. Persson and E. Janzén (Linköping University)

- o [F3-0224O](#) [2592] [Carbon Nanostructures Produced by High Pressure CVD](#) V. Khavrus, E. Ibrahim, A. Leonhardt, A. Elgendi, S. Hampel, R. Klingeler and B. Büchner (IFW Dresden)
- o [F3-0225P](#) [2593] [Comparative Study of SiN_x and BN_x Nanolayers Prepared by Different Chemical Vapour Deposition Methods](#) G. Beshkov (Bulgarian Academy of Science), N. Nedev (Universidad Autónoma de Baja California), D. Spassov (Bulgarian Academy of Science), J. Terrazas, B. Salas (Universidad Autónoma de Baja California) and V. Krastev (Bulgarian Academy of Science)
- o [F3-0233P](#) [2594] [Photocatalytic Activity Dependence on the Structural Orientation of MOCVD TiO₂ Anatase Films](#) R. Gerbasi, M. Bolzan, N. El Habra, G. Rossetto (ICIS-CNR), L. Schiavi and A. Strini (ITC-CNR)
- o [F3-0235P](#) [2595] [Growth of Carbon Nanotube Layers in a Thermal CVD Reactor on Substrates Prepared by Catalyst Spray Deposition](#) M. Traxler and R. Haubner (University of Technology Vienna)
- o [F3-0239P](#) [2596] [Resistive Switching in Metal Oxide Films Deposited by Metalorganic Chemical Vapor Deposition](#) T. Nakamura, K. Onogi, K. Homma and K. Tachibana (Kyoto University)
- o [F3-0247P](#) [2597] [Deposition of Ir Nanostructured Thin Films by Pulse CVD](#) N. V. Gelfond, P. P. Semyannikov, S. V. Trubin, N. B. Morozova (Nikolaev Institute of Inorganic Chemistry) and I. Igumenov (Nikolaev Institute of Inorganic Chemistry, SB RAS 630090, Novosibirsk, Lavrentiev ave., 3, Russia)
- o [F3-0249P](#) [2598] [HfO₂-high-k Dielectric for Nanoelectronics](#) T. P. Smirnova, F. A. Kuznetsov, L. Yakovkina (Nikolaev Institute of Inorganic Chemistry SB RAS), V. Kaichev (Boreskov Institute of Catalysis), V. Kosyakov, M. Lebedev and V. Kichai (Nikolaev Institute of Inorganic Chemistry SB RAS)
- o [F3-0260P](#) [2599] [Pulse CVD Deposition of Ru Films from Ru\(II\) \$\eta^3\$ -Allylic Complex](#) S. V. Trubin, N. B. Morozova, P. P. Semyannikov, A. Bessonov, N. V. Gelfond and I. K. Igumenov (Nikolaev Institute of Inorganic Chemistry)
- o [F3-0261P](#) [2600] [Preparation of Iridium Thin Film by Pulse CVD from Ir\(acac\)\(CO\)₂](#) P. P. Semyannikov, N. B. Morozova, K. Zherikova, S. V. Trubin, I. K. Igumenov and N. V. Gelfond (Nikolaev Institute of Inorganic Chemistry)
- o [F3-0263O](#) [2601] [Initial Stages of Thermally and Hot-wire Assisted CVD Copper on SiLK® and LTO Substrates Activated with Mercaptopropyl Triethoxysilane Self-assembled Monolayers](#) G. Papadimitropoulos (Institute of Microelectronics), T. Speliotis (Institute of Materials Science), A. Arapoyianni (University of Athens) and D. Davazoglou (Institute of Microelectronics)

- o [F3-0273P](#) [2602] [Capacitance-Voltage Analysis of ZrO₂ Thin Films Deposited by MOCVD Technique](#) T. A. Mih, S. Paul (De Montfort University), A. Milanov and A. Devi (Ruhr-University Bochum)
- o [F3-0274P](#) [2603] [MOCVD of the \(Al₂O₃\)_x\(HfO₂\)_{1-x} Films as Alternative Gate Dielectric for MIS Nanostructures](#) T. P. Smirnova, M. Lebedev (Nikolaev Institute of Inorganic Chemistry SB RAS), V. Kaichev (Boreskov Institute of Catalysis), L. Yakovkina (Nikolaev Institute of Inorganic Chemistry SB RAS), N. B. Morozova, K. Zherikova, P. P. Semyannikov and S. V. Trubin (Nikolaev Institute of Inorganic Chemistry)
- o [F3-0279O](#) [2604] [Low-temperature VUV-stimulated MO CVD Process of Palladium Layer Deposition](#) B. M. Kuchumov, T. Koretskaya, Y. Shevtsov, S. V. Trubin, G. Zharkova, V. Danilovich, I. K. Igumenov (Nikolaev Institute of Inorganic Chemistry) and V. Kruchinin (Rzhanov Institute of Semiconductor Physics)
- o [F3-0283P](#) [2605] [Selective Growth of Carbon Nanotubes on Printed Fe₃O₄ Nanoparticles](#) R. Haubner (University of Technology Vienna), W. Schwinger, B. Dittert and R. Schöftner (Profactor GmbH)
- o [F3-0286O](#) [2606] [Synthesis of Carbon Nanotubes by Catalytic Chemical Vapour Deposition in a Fluidized Bed Reactor](#) K. Danova, I. Jipa, U. Zenneck and N. Popovska (University Erlangen-Nuremberg)
- o [F3-0287O](#) [2607] [Synthesis and Thermal Stability of Nanocomposite SiC_xN_yH Films from Cycle Siliconorganic Precursor](#) N. I. Fainer (Nikolaev Institute of Inorganic Chemistry), Y. Rumyantsev (Nikolaev Institute of Inorganic Chemistry SB RAS), V. Kesler (Institute of Semiconductor Physics SB RAS), E. Maximovski and F. A. Kuznetsov (Nikolaev Institute of Inorganic Chemistry SB RAS)
- o [F3-0290P](#) [2608] [Pulsed MO CVD Processes of MgO Layer Deposition from Mg\(thd\)₂](#) B. M. Kuchumov, Y. Shevtsov, P. P. Semyannikov, E. S. Filatov and I. K. Igumenov (Nikolaev Institute of Inorganic Chemistry)
- o [F3-0299P](#) [2609] [Investigation of Tantalum Oxide Films Prepared by Atmospheric Pressure Chemical Vapour Deposition for Use as Water Splitting Photocatalysts](#) G. Hyett, J. Darr (University College London), A. Mills (University of Strathclyde) and I. Parkin (University College London)
- o [F3-0301P](#) [2610] [Controlled Protein Adsorption on Nanostructured Zinc Oxide Thin Films Deposited by Colloidal Assisted-Low Temperature MOCVD](#) M. Fragala (Università di Catania and INSTM UdR Catania), C. Satriano (Dipartimento di Scienze Chimiche and CSGI Università di Catania) and G. Malandrino (Università di Catania)
- o [F3-0303P](#) [2611] [Atmospheric Pressure Plasma Enhanced CVD of Fe](#)

- [Nanoparticles](#) S. Alexandrov, I. Kretusheva and M. V. Mishin
(Saint Petersburg State Polytechnical University)
- o [F3-0306P](#) [2612] [Dynamics of Pulsed DC Discharges Used for PACVD of a-C:H:Si](#) M. Traxler (University of Technology Vienna), A. Puchhammer, H. Störi (TU Wien), T. Müller (Ruebig GmbH & Co KG) and J. Laimer (TU Wien)
 - o [F3-0310P](#) [2613] [Synthesis of ZnS Nanoparticles by Spray Pyrolysis: Morphology Control Using the Same Precursors in Different Reactor Systems](#) S. Liu and M. T. Swihart (University at Buffalo (SUNY))
 - o [F3-0313P](#) [2614] [Fabrication of ZnO Thin Film Transistor by MO-CVD Using Bis\(acetylacetonato\)zinc\(II\) Fiber and Ozone](#) M. Sakuma, S. Seki and K. Haga (Sendai National College of Technology)
 - o [F3-0315O](#) [2615] [Exploring Multiple Calcium Phosphate Precursors for Pulsed Pressure-MOCVD](#) D. Clearwater, R. M. Hartshorn and S. Krumdieck (University of Canterbury)
 - o [F3-0316O](#) [2616] [VUV-Stimulated MO CVD Processes of Copper Layer Deposition](#) I. K. Igumenov, B. M. Kuchumov, S. Kozlova, T. Koretskaya, S. V. Trubin, R. Sokuev (Nikolaev Institute of Inorganic Chemistry), V. Lyakh (Budker Institute of Nuclear Physics) and V. Kruchinin (Rzhanov Institute of Semiconductor Physics)
 - o [F3-0327P](#) [2617] [Pulsed-Pressure MOCVD Processing Investigation for TiO₂ Films on Si₃N₄ Substrate from TTIP](#) V. Siriwongrungson, S. Krumdieck and M. Alkaisi (University of Canterbury)
 - o [F3-0332P](#) [2618] [Hierarchical Nanostructure Produced by Growing Carbon Nanotubes on Silicon Oxide Nanowires](#) H. Woo, J. Kim, D. Choi and C. S. Yoon (Hanyang University)
 - o [F3-0347O](#) [2619] [Dynamic Study of Gas-Phase Species during Single-Walled Carbon Nanotubes Production by Chemical Vapor Deposition of Ethanol](#) K. Kouravelou and X. Verykios (University of Patras)
 - o [F3-0353P](#) [2620] [A Single-Step APCVD Route to Novel Dual Functionality: Self-Cleaning Biocidal Titania-Copper Films](#) P. Evans, H. Foster, D. Sheel, A. Steele and H. M. Yates (University of Salford)
 - o [F3-0354P](#) [2621] [Deposition of Germanium Nanowires from Digermane Precursor: Influence of the Substrate Pretreatment](#) V. Dřínek, R. Fajgar (Institute of Chemical Process Fundamentals), J. Šubrt and M. Klementová (Institute of Inorganic Chemistry)
 - o [F3-0360P](#) [2622] [ArF Laser-Induced Deposition of Carbon Encapsulated CoFe Nanoparticles](#) R. Fajgar (Institute of Chemical Process Fundamentals), Z. Bastl (J. Heyrovsky Institute of Physical Chemistry), J. Šubrt, N. Murafa (Institute of Inorganic Chemistry) and M. Maryško (Institute of Physics)

- o [F3-0367O](#) [2623] [Strain Evaluation in SiC MEMS Test Structures](#) M. Bosi, G. Attolini, B. E. Watts, C. Frigeri, F. Rossi (Consiglio Nazionale delle Ricerche), A. Poggi, A. Roncaglia, F. Mancarella (IMM-CNR), O. Martinez and V. Hortelano (Universidad de Valladolid)
- o [F3-0375P](#) [2624] [Silver Films Deposited by Liquid-Delivery MOCVD Using \(Tertbutylcarboxylate\)\(Triethylphosphine\)Silver with Toluene as the Solvent](#) M. Lisca, B. Kalkofen, M. Lisker, E. Burte (University Otto von Guericke Magdeburg), I. Szymańska and E. Szłyk (Nicolaus Copernicus University)
- o [F3-0379P](#) [2625] [Vertical Aligned Carbon Nanotube Deposition on Metallic Substrates by CVD](#) S. Doerfler (Fraunhofer IWS), A. Meyer (TU Dresden), H. Althues, I. Dani and S. Kaskel (Fraunhofer IWS)
- o [F3-0383P](#) [2626] [Low Temperature Atmospheric Pressure CVD of Photoactive Titanium Dioxide](#) T. Abendroth, H. Althues, B. Leupolt and S. Kaskel (Fraunhofer IWS)
- o [F3-0384P](#) [2627] [Shape Optimization of a Showerhead System for the Control of Growth Uniformity in a MOCVD Reactor Using CFD-based Evolutionary Algorithms](#) T. C. Xenidou (National Technical University of Athens), N. Prud'homme, L. Aloui (CIRIMAT/ENSIACET), C. Vahlas (CIRIMAT), N. C. Markatos and A. G. Boudouvis (National Technical University of Athens)
- o [F3-0392P](#) [2628] [Preparation of High Permittivity \$\text{GdScO}_3\$ Films by Liquid Injection MOCVD](#) K. Huseková, M. Jurkovič, K. Cico, D. Machajdík, E. Dobročka, R. Lupták, K. Fröhlich (Institute of Electrical Engineering, SAS) and A. Macková (Nuclear Physics Institute, ASCR,)
- o [F3-0396O](#) [2629] [Plasma Composition and Kinetic Reaction Rates in a LEPECVD \$\text{Ar-SiH}_4\text{-H}_2\$ Plasma during Deposition of nc-Si Films for Photovoltaic Applications](#) T. Moiseev, D. Chrastina, G. Isella and C. Cavallotti (Politecnico di Milano)
- o [F3-0405P](#) [2630] [Memory Structures Based on the Self-Organization of Cu Nanoparticles Deposited by Hot-Wire CVD on Polythiophene Layers](#) D. Davazoglou (Institute of Microelectronics), P. Dimitrakis, M. Vasilopoulou (Institute of Microelectronics-NCSR) and D. Davazoglou (Institute of Microelectronics)
- o [F3-0407P](#) [2631] [CVD Elaboration of Nanometric Barium Silicate Films](#) T. Geneves, L. Imhoff, B. Domenichini and S. Bourgeois (Université de Bourgogne - CNRS)
- o [F3-0408P](#) [2632] [MOCVD Growth of MgZnO Nanotips Used for Hybrid Polymer Solar Cells](#) Z. Duan, A. Pasquier, J. Zhong and Y. Lu (Rutgers University)
- o [F3-0414P](#) [2633] [Doped Iron Oxide Thin Films for Photoelectrochemical](#)

- o [F3-0419O](#) [2634] [Generation of Hydrogen from Water](#) D. Sheel, J. Lewis, A. Robinson and H. M. Yates (University of Salford)
 - o [F3-0421O](#) [2635] [Combination of Electron or Laser Beam Irradiation with High Vacuum Chemical Vapor Deposition \(HV-CVD\) of Al₂O₃ for In Situ Local Structuring on Wafer Scale Substrate](#) Y. Kuzminykh, X. Multon (Ecole Polytechnique Fédéral de Lausanne) and P. Hoffmann (Ecole Polytechnique Fédérale de Lausanne)
 - o [F3-0421O](#) [2635] [Tailoring of Optical Properties of Alumina Films Deposited by High Vacuum CVD \(HV-CVD\)](#) X. Multon, B. Afra, Y. Kuzminykh (Ecole Polytechnique Fédéral de Lausanne) and P. Hoffmann (Ecole Polytechnique Fédérale de Lausanne)
 - o [F3-0431P](#) [2636] [Combustion-Driven Synthesis of Non-Oxide Nanoparticles in a High Temperature Reducing Jet](#) W. J. Scharmach (SUNY at Buffalo), V. Papavassiliou, P. Pacouloute (Praxair Inc.), R. Buchner and M. Swihart (SUNY at Buffalo)
 - o [F3-0442O](#) [2637] [Thin Films of Some Aromatic Terbium Carboxylates: Reactive CVD and Optical Properties](#) O. Kotova, V. Utochnikova, S. Samoilenkova and N. P. Kuzmina (Lomonosov Moscow State University)
 - o [F3-0451P](#) [2638] [Gas Jet Synthesis of Nano-sized Polymer-Silver Bactericid Compounds](#) A. K. Rebrov, A. Safonov and N. Timoshenko (Kutateladse Institute of Thermophysics)
 - o [F3-0459O](#) [2639] [Microplasma Synthesis of Blue-White Luminescent Amorphous SiOC Films at Atmospheric Pressure](#) Y. Ding, H. Shirai (Saitama University), F. Yuan (Chinese Academy of Sciences) and T. Kobayashi (The Institute of Physics and Chemical Reaserach)
 - o [F3-0467P](#) [2640] [ZrO₂ Thin Films Grown on 2D and 3D Silicon Surfaces by DLI-MOCVD for Electronic Devices](#) K. Galicka-Fau (Univ. Paris Sud 11), M. Andrieux (LEMHE-ICMMO-UPS), C. Legros, M. Herbst-Ghysel, I. Gallet (Univ. Paris Sud 11), M. Brunet, E. Scheid (LAAS-CNRS Univ. Toulouse) and S. Schamm (CEMES-CNRS Univ. Toulouse)
 - o [F3-0477P](#) [2641] [Continuous Wide Area Coating of Scratch and Corrosion Resistant Silica Films](#) S. Tschoecke, H. Alhues, I. Dani and S. Kaskel (Fraunhofer IWS)
 - o [F3-0492O](#) [2642] [Phase Change Memory Using InSbTe Chalcogenide Materials Deposited by Metal-Organic Chemical Vapor Deposition](#) J. Ahn, K. Park, H. Jung, S. Pammi, S. Hur and S. Yoon (Chungnam National University)
 - o [F3-0498O](#) [2643] [Processing and Deposition Mechanism of Nanocomposite Coatings Using Aerosol-assisted Chemical Vapor Deposition \(AACVD\) Method](#) K. Choy, X. Hou (Univ. of Nottingham), V. Serín (CEMES) and N. Fleischer (NanoMaterials Ltd.)

Thursday, October 8, 2009

Hall F1, Level OE - Yellow

Nanostructured Systems II

Time	Abs#	Title and Authors
08:00	F3-0434O [2644]	Growth Mechanisms and Size-Dependent Characteristics of Si and SiGe Nanowires J. M. Redwing, P. Nimmatoori, K. Lew, X. Zhang, Q. Zhang, T. Clark, L. Pan and E. Dickey (Penn State University)
08:40	F3-0211O [2645]	Preparation and Functional Characterizations of Ta₂O₅ Deposits Organized at the Micro- and Nano-scale M. Terranova, V. Guglielmotti, S. Orlanducci, V. Sessa, E. Tamburri and M. Rossi (Università di Roma)
09:00	F3-0358O [2646]	Study of Si Nanowires Growth by CVD-VLS and Physical Properties T. Baron, F. Dhalluin, S. Bassem, B. Salhi, H. Abed, A. Potie, M. Panabièvre, S. Decossas, M. Kogelschatz (CNRS), L. Montès (INPG), F. Oehler, P. Gentile, N. Pauc, M. Den Hertog, J. Rouvière, P. Noe and P. Ferret (CEA)
09:20	F3-0252O [2647]	Chemical Vapor Deposition of Silica Nanowires Using Heteroleptic Bis(ethylmethylamino)silane Precursor H. Kim, S. Park and J. Heo (Seoul National University)

Nanostructured Systems III

Time	Abs#	Title and Authors
10:00	F3-0435O [2648]	CVD of Metal Oxide Nanowires: Growth, Applications and Devices S. Mathur (University of Cologne)
10:40	F3-0176O [2649]	Multifunctional Copper Oxide Nanosystems for H₂ Sustainable Production and Sensing A. Gasparotto (Padova University and INSTM), D. Barreca (Padova University), P. Fornasiero, V. Gombac (Trieste University), O. Lebedev (Antwerp University), C. Maccato (Padova University and INSTM), T. Montini (Trieste University), E. Tondello (Padova University and INSTM), G. Van Tendeloo (Antwerp University), E. Comini and G. Sberveglieri (Brescia University)
11:00	F3-0411O [2650]	Growth and Characterisation of Zinc Oxide Thin Films Containing Directly Incorporated Silicon Nanoparticles by Aerosol Assisted Chemical Vapour Deposition J. Hamilton, D. Iacopino, M. Nolan, S. O'Brien, I. M. Povey, M. Pemble (Tyndall National Institute), C. Licita, N. Rochat, B. Florin, D. Lafond and P. Mur (CEA-LETI, MINATEC)
11:20	F3-0264O [2651]	CVD Synthesis of Shape and Size Controlled ZnO Nanoparticles for Application as UV Filters R. R. Bacsa, P. Serp (CNRS), K. Pierzchala and A. Sienkiewicz (Ecole Polytechnique Fédérale de Lausanne)

11:40 [F3-0340O](#) [2652] [MOCVD Grown Thin Film Nanocomposites Based on YBCO with Columnar Defects Comprised of Self-Assembled Inclusions](#) O. V. Boytsova (Moscow State University), S. Samilenkov (Institute of High Temperature RAS), A. Vasiliev, A. Kaul (Moscow State University) and I. Voloshin (All-Russian Electrical Engineering Institute)

Lunch (12:00-14:00), included in EuroCVD Registration Package

Novel Processes, Reactor Design I

Time	Abs#	Title and Authors
14:00	F3-0186O [2653]	<u>Plasma Nanoarchitectronics: Thermokinetic Pathways from Higher-complexity and Strongly Non-equilibrium CVD to Exotic Self-organized Nanoassemblies</u> K. Ostrikov (CSIRO Materials Science and Engineering), S. Xu (NTU Singapore) and I. Levchenko (University of Sydney)
14:40	F3-0423O [2654]	<u>Locally Beam Assisted Deposition: An Overview</u> P. Hoffmann (Ecole Polytechnique Fédérale de Lausanne)
15:00	F3-0391O [2655]	<u>Supercritical Chemical Fluid Deposition of High Quality Compound Semiconductors</u> M. Afzaal (University of Manchester), P. O'Brien (Manchester University), F. Cheng (University of Southampton), M. George (University of Nottingham), A. Hector (University of Southampton), S. Howdle (University of Nottingham), J. Hyde, W. Levason (University of Southampton), M. Malik (University of Manchester), K. Mallik (University of Southampton), C. Nguyen (University of Manchester), G. Reid, P. Sazio, D. Smith, M. Webster, J. Wilson, J. Yang and W. Zhang (University of Southampton)
15:20	F3-0430O [2656]	<u>Comparative Study on the Step Coverage Quality of Cu Film by SCFD and CVD</u> Y. Shimogaki, T. Momose and M. Sugiyama (University of Tokyo)

Novel Processes, Reactor Design II

Time	Abs#	Title and Authors
16:00	F3-0323O [2657]	<u>Pulsed-Pressure MOCVD Science, Materials and Technology</u> S. Krumdieck (University of Canterbury)
16:40	F3-0399O [2658]	<u>Combinatorial Chemical Vapor Deposition of Lithium Niobate Thin Films</u> A. Dabirian (Ecole Polytechnique Fédérale de Lausanne), Y. Kuzminykh (Ecole Polytechnique Fédéral de Lausanne), P. Hoffmann (Ecole Polytechnique Fédérale de Lausanne), S. Sandu, E. Wagner, G. Benvenuti (ABCD Technology), C. Parsons and S. Rushworth (SAFC Hitech Limited)

- 17:00 [F3-0142O](#) [2659] [Initiated and Oxidative Chemical Vapor Deposition \(CVD\) of Conformal and Functional Polymer Films](#) S. Baxamusa, S. Im, M. Karaman, W. Tenhaeff, S. Vaddiraju and K. Gleason (MIT)
- 17:20 [F3-0269O](#) [2660] [Initiated Chemical Vapor Deposition \(iCVD\) of Hydrogel Polymers](#) R. Bose, S. Nejati and K. K. Lau (Drexel University)
- 17:40 [F3-0259O](#) [2661] [Processing of Biomorphic Porous Ceramics by Chemical Vapor Infiltration and Reaction \(CVI-R\) Technique](#) N. Popovska (University Erlangen-Nuremberg)

EuroCVD Banquet, included in EuroCVD Registration Package

Cocktail hour begins at 18:00

Dinner begins at 19:00

Friday, October 9, 2009
Hall F1, Level OE - Yellow

Novel Processes, Reactor Design III

Time	Abs#	Title and Authors
08:00	F3-0253O [2662]	Combinatorial CVD: New Oxy-nitride Photocatalysts I. Parkin, G. Hyett and A. Kafizas (University College London)
08:40	F3-0447O [2663]	Study of TiC Coatings on Nicalon Fibre Prepared by Pressure-Pulsed Reactive Chemical Vapour Deposition at Low Pressure I. Jouanny, S. Jacques, P. Weisbecker, B. Rufino, L. Maillé and R. Pailler (LCTS)
09:00	F3-0280O [2664]	Liquid Droplet Evaporation in Simulations of the Flow in Pulsed-Pressure MOCVD C. Lim, H. Cave, M. Jermy and S. Krumdieck (University of Canterbury)
09:20	F3-0400O [2665]	Influence of the Heating Mode and the Spray Introduction on Chemically Vapour Deposited Aluminium Doped Zinc Oxide Thin Films J. Garnier (Arts et Metiers Paris Tech d'Angers), R. Sreekumar (Arts et Metiers ParisTech d'Angers) and A. Bouteville (Arts & Metiers ParisTech)

Closing Session

Time	Abs#	Title and Authors
10:00	F3-0409O [2666]	Residual Stress Mechanisms in Aluminum Oxide Films Grown by MOCVD S. Soni (Brown University), D. Samelot (CIRIMAT), B. W. Sheldon (Brown University), C. Vahlas (CIRIMAT) and A. N. Gleizes (CIRIMAT, ENSIACET)
10:20	F3-0372O [2667]	Mass Spectrometry as a Tool to Study CVD Process A. E. Turgambaeva, V. Krisyuk (Nikolaev Institute of Inorganic Chemistry), N. Prud'homme (CIRIMAT/ENSIACET) and C. Vahlas (CIRIMAT)
10:40	F3-0188O [2668]	Fibre-scale Modelling of C/C Processing by Chemical Vapour Infiltration Using X-Ray CMT Images and Random Walkers G. L. Vignoles (University Bordeaux), C. Germain (ENITAB), O. Coindreau, C. Mulat and W. Ros (University Bordeaux)
11:00	F3-0262O [2669]	Fabrication of Micro- and Nano-electrodes by Selective Chemical Vapor Deposition of Cu on Si Substrates Patterned with AZ5214™ and PMMA G. Papadimitropoulos (Institute of Microelectronics), S. Cibella, R. Leoni (Instintuto di Fotonica e Nanotecnologie, CNR), A. Arapogianni (University of Athens) and D. Davazoglou (Institute of Microelectronics)
11:20	F3-0294O [2670]	Dy³⁺:Al₂O₃ and (Dy³⁺+Cr³⁺):Al₂O₃ Films for Temperature Sensor Applications Derived by Thermal CVD and Sol-Gel

11:40

Techniques C. Eckert, C. Pflitsch and B. Atakan (University of
Duisburg-Essen)
Concluding Remarks (20 Minutes)