

POSTER SESSION

Wednesday 16 & Thursday 17, June

TOPIC 2: Modelling

- P-2.1** The simulation of temperature fields into a moving substrate during of a PVD - coatings deposition process
I.A. Ivanou
Belorussian National Technical University, Minsk, Republic of Belarus
- P-2.2** Schauder's fixed point periodic solution existence investigation of a Piezo/FGM composite plate
H.A. Sepiani¹, A. Shadpour²
¹ *University of Tehran, Tehran, Iran*
² *McMaster University, Ontario, Canada*
- P-2.3** Arc fault generation and modelling
J. Andrea¹, P. Schweitzer¹, R. Hugon², L. de Poucques²
¹ *LIEN, Vandoeuvre-lès-Nancy, France*
² *Institut jean Lamour, UMR 7198 CNRS, Département CP2S, Nancy, France*

TOPIC 3: Diagnostics

- P-3.1** Titanium oxide thin film growth by HiPIMS: Mass spectrometry study
M. Palmucci¹, A. Balhamri¹, S. Konstantinidis¹, R. Snyders^{1,2}
¹ *Laboratoire de Chimie Analytique et Inorganique, CIRMAP, Université de Mons, Belgium*
² *Materia Nova Research Center, Mons, Belgium*
- P-3.2** Analysis of NiO thin films deposited by HiPIMS
L. Le Brizoual¹, T. Begou¹, P.Y. Jouan¹, M. Ganciu², M.A. Djouadi¹
¹ *Université de Nantes, Institut des Matériaux Jean Rouxel, Nantes, France*
² *National Institute for Laser, Plasma and Radiation Physics, Magurele, Bucharest, Romania*
- P-3.3** Measurements of the energy influxes at the substrate in magnetron sputtering processes
P.A. Cormier, A.L. Thomann, N. Semmar, R. Dussart, J. Mathias
GREMI, Université d'Orléans, France

Metz (F) – June 16-18, 2010

Updated on June 11

- P-3.4** Time resolved tunable diode laser diagnostic of Argon metastable in HiPIMS
**C. Vitelaru^{1,2}, D. Lundin³, G.D. Stancu¹, N. Brenning⁴, J. Bretagne¹,
U. Helmersson³, T.M. Minea¹**
¹ LPGP, Université Paris Sud-XI, Orsay, France
² Faculty of Physics AI I Cuza University, Iasi, Romania
³ Plasma and Coatings Physics Division, IFM-Materials Physics, Linköping University, Sweden
⁴ Division of Space and Plasma Physics, School of Electrical Engineering, Royal Institute of Technology, Stockholm, Sweden

TOPIC 4: Related Technologies

- P-4.1** Recent progress in reactive magnetron sputtering
V. Šatava¹, J. Musil^{1,2}, P. Baroch¹
¹ Department of Physics, Faculty of Applied Sciences, University of West Bohemia, Plzeň, Czech Republic
² Institute of Physics, Academy of Sciences of the Czech Republic, Praha, Czech Republic
- P-4.2** Elimination of arcing in reactive DC pulse magnetron sputtering of Al₂O₃ thin films
M. Meissner¹, P. Baroch¹, J. Musil^{1,2}
¹ Department of Physics, Faculty of Applied Sciences, University of West Bohemia, Plzeň, Czech Republic
² Institute of Physics, Academy of Sciences of the Czech Republic, Praha, Czech Republic
- P-4.3** Properties of TaN_x thin films deposited by highly ionised pulsed magnetron sputtering
C. Jin¹, B. Agius¹, R. Sireilles², M. Ganciu³, B. Bouchet-Fabre⁴, N. Marsot¹, M.C. Hugon¹
¹ Laboratoire de Physique des Gaz et des Plasmas, Université Paris Sud-XI, Orsay, France
² Alliance Concept, Cran-Gevrier, France
³ National Institute of Laser, Plasma and Radiation Physics, Magurele, Bucharest, Romania
⁴ CEA/IRAMIS/SPA, CEA Saclay, Gif sur Yvette, France

TOPIC 5: Applications

- P-5.1** All-metal molded field emitter arrays by sputtering, evaporation and electrochemical deposition
E. Kirk^{1,2}, J. Krbanjevic³, T. Vogel^{1,2}, J. Gobrecht¹, S. Tsujino^{1,2}
¹ *Laboratory for Micro- and Nanotechnology, Paul Scherrer Institut, Villigen PSI, Switzerland*
² *SwissFEL, Paul Scherrer Institut, Villigen PSI, Switzerland*
³ *Centre for research in Plasma Physics, Ecole Polytechnique Federale de Lausanne, Switzerland*
- P-5.2** Golden thin films by magnetron sputtering: from material decorating to hardening
M. Vogt, A. Ennajdaoui, M. Cavarroc
Made In Dreux Innovation, Vernouillet, France
- P-5.3** Complex structure, composition and contact angle relationship in thin films of AlCoCrCuFeNi high entropy alloy and ZrCuAl metallic glass
V. Dolique¹, L. Bedra¹, A. Caillard¹, A.L. Thomann¹, P. Brault¹, A. Pineau²
¹ *Groupe de Recherche sur l'Energétique des Milieux Ionisés, Université d'Orléans, France*
² *Centre de Recherche sur la Matière Divisée, Orléans, France*
- P-5.4** Textured transparent conductive oxide thin films with uniform properties on large scale
E. Miorin, S. Battiston, M. Fabrizio, F. Montagner, C. Pagura
CNR-Institute for Energetics and Interphases, Padova, Italy
- P-5.5** Synthesis of yttria stabilized zirconia thin film by high-power impulse magnetron sputtering
E. Reguzina¹, D. Magnfält², M. Aiempanakit², U. Helmersson², A. Caillard¹, V. Dolique¹, A.L. Thomann¹, P. Brault¹
¹ *GREMI, Université d'Orléans, France*
² *Plasma & Coatings Physics Division, IFM Material Physics, Linköping University, Sweden*
- P-5.6** Density profile of ultra hard carbon by cathodic arc
C. Meunier¹, A. Roman¹, S. Vives¹, G. Berthout², S. Mikhailov³, E. Shelev⁴
¹ *FEMTO-ST, Université de Franche-Comté, Montbéliard, France*
² *CSM-Instruments SA, Galileo Center, Suisse*
³ *He-Arc, Chauds de fonds, Suisse*
⁴ *Creepservice SARL, NEODE, Chauds de fonds, Suisse*
- P-5.7** Numerical simulation on the effect of defects created by electron irradiation on GaAs solar cell
H. Mazouz
Université de Béchar, Algérie

Metz (F) – June 16-18, 2010

Updated on June 11

- P-5.8** Copper thin film deposition on polymer substrate by RF-IPVD
I. Guesmi¹, C. Boisse-Laporte¹, L. de Poucques², J. Bretagne¹, L. Teule-Gay³
¹ *Laboratoire de Physique des Gaz et des Plasmas, Orsay, France*
² *Institut Jean Lamour, UMR 7198 CNRS, Département CP2S, Nancy, France*
³ *Institut de Chimie de la Matière Condensée de Bordeaux, France*
- P-5.9** ~~Ion beam process control by direct chamber partial pressure monitoring and control~~
Ion Beam Milling using SIMS monitoring/control and directional Reactive Ion Beam Etching profile control for optoelectronic devices
D.I.C. Pearson, S. Pochon
Oxford Instruments Plasma Technology, UK
- P-5.10** W films by DC magnetron sputtering
S.M. Deambrosis, E. Miorin, F. Montagner, S. Battiston, M. Fabrizio, S. Daolio
Italian National Research Council (CNR), Institute for Energetics and Interphases (IENI), Padova, Italy
- P-5.11** Study of mechanical, physical and chemical properties of a-C:H thin films deposited by reactive magnetron sputtering in dc pulsed mode
J. Colaux¹, T. Delvigne², E. Brauer³, F. Van Dievoet⁴, D. Strivay⁵, J. Dille⁶, S. Lucas¹
¹ *University of Namur (FUNDP), Namur, Belgium*
² *Delta Services Industriels (DSI), Froyennes, Belgium*
³ *Breuer Technical Development (BTD), Malmedy, Belgium*
⁴ *BFB Oil Research, Gembloux, Belgium*
⁵ *University of Liège, Belgium*
⁶ *Université Libre de Bruxelles, Belgium*
- P-5.12** Co-based magnetic thin films obtained by glancing angle deposition
V. Edon, M. Jaegle, S. Dubourg
CEA, DAM Le Ripault, Monts, France