

CIP 09

International Colloquium on Plasma Processes
Marseille, France

POSTERS SESSIONS WEDNESDAY 24 JUNE & THURSDAY 25 JUNE 2.00 PM

TOPIC1: ADVANCED PLASMA SOURCES

- P-1.1** Low pressure micro plasma generation by ECR related magnetized plasmas
H. Fujiyama¹, M. Shinohara²
¹ Graduate School of Science and Technology, Nagasaki University (J)
² Faculty of Engineering, Nagasaki University (J)
- P-1.2** High Power Impulse Magnetron Sputtering of Zirconium
J. Lazar, J. Rezek, J. Vıcek
Department of Physics, University of West Bohemia, Plzen, (CZ)
- P-1.3** Plasma-surface interaction during High Power Impulse Magnetron Sputtering
M. Palmucci¹, S. Konstantinidis¹, A. Balhamri¹, J.P. Dauchot^{1,2}, M. Hecq^{1,2}, R. Snyders^{1,2}
¹ Laboratoire de Chimie Analytique et Inorganique, Université de Mons, (B)
² Materia Nova Research Center, Mons (B)
- P-1.4** Study of HIPIMS discharge in Ar/O₂ mixture for RuO₂ conductive thin film deposition
D. Benzeggouta, M.C. Hugon, J. Bretagne
LPGP, Université Paris-Sud, Orsay (F)
- P-1.5** 2M long line plasma production by microwave in an arrowed rectangular waveguide
H. Shindo, Y. Kimura
Department of Electronics, Tokai University, Hiratsuka (J)
- P-1.6** Discharge produced plasma sources for extreme ultraviolet lithography applications
V. Borisov, G. Borisova, A. Ivanov, Y. Kiryukhin, O. Khristoforov, V. Mischenko, A. Prokofiev, A. Vinokhodov
The State Research Centre of the Russian Federation, Troitsk Institute for Innovation and Fusion research, Troitsk, Moscow reg.(RUS)
- P-1.7** Flow transition in a small scale remote plasma jet at atmospheric pressure
G. Arnoult, T. Belmonte, G. Henrion
Institut Jean Lamour, Nancy Université, UPV Metz, École des Mines de Nancy, Parc de Saurupt, Nancy (F)
- P-1.8** Production of protons in a multicusp source: enhancement with water vapour
A. Lejeune¹, L. Chérigier-Kovacic¹, F. Doveil¹, G. Cartry²
¹ Equipe Turbulence Plasma,
² Equipe Plasma Surface,
Université de Provence, Centre Universitaire de Saint-Jérôme, Marseille (F)
- P-1.9** Atmospheric pressure RF plasma jets generated by dielectric barrier discharges of various configurations
M. Teodorescu¹, C. Stancu¹, E.R. Ionita¹, M.D. Ionita¹, M. Bazavan², G. Dinescu¹
¹ National Institute for Laser, Plasma and Radiation Physics, Magurele Bucharest (RO)
² University of Bucharest, Faculty of Physics, Magurele (RO)

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-1.10** Growth of carbonaceous nanoparticles in a glow discharge
A. Moberi, C. Arnas
Laboratoire de Physique des Interactions Ioniques et Moléculaires (PIIM), Université de Provence, Marseille (F)

TOPIC 2: PLASMA DIAGNOSTICS AND MODELLING

- P-2.1** An analysis of gaseous and solid products formed in CH₄-N₂ corona discharge – Simulation of Titan's atmosphere
G. Horvath^{1,2}, N.J. Mason², M. Zahoran¹, S. Matejcek¹
¹ *Comenius University, Bratislava (SK)*
² *Open University, Department of Physics and Astronomy, Milton Keynes (UK)*
- P-2.2** Laser diode absorption investigation of a high pressure argon microwave discharge
C. Noël^{1,2}, T. Belmonte¹, G. Henrion¹, Z. Harrache³, R.P. Cardoso¹, N. Sadeghi⁴
¹ *Institut Jean Lamour, Nancy Université, UPV Metz, Ecole des Mines de Nancy, Parc de Saurupt, Nancy (F)*
² *Centre de Recherche Public Gabriel Lippmann, Belvaux (L)*
³ *Département de Physique, El-M'naouer, Université des Sciences et de la Technologie d'Oran Algérie (DZ)*
⁴ *Laboratoire de Spectrométrie Physique, Université Joseph Fourier, Saint Martin d'Hères (F)*
- P-2.3** Instrumentation for double electric probe characterization of DC and RF plasmas
I.A. Rojas-Olmedo¹, R. López-Callejas^{1,2}, R. Peña Eguiluz², A. de la Piedad Beneitez¹, A. Mercado-Cabrera², R. Valencia-Alvarado², S. R. Barocio², A.E. Muñoz-Castro²
¹ *Instituto Tecnológico de Toluca, Estado de México (MEX)*
² *Instituto Nacional de Investigaciones Nucleares, Plasma Physics Laboratory, México (MEX)*
- P-2.4** Spatially-resolved optical emission spectroscopy of Ar/N₂ plasma in RF magnetron sputtering reactor for SiC_xN_y deposition
A. Bousquet, J. Cellier, E. Tomasella
Laboratoire des Matériaux Inorganiques, Université Blaise Pascal, Aubière (F)
- P-2.5** Electrical diagnostics of positive corona discharge in air at atmospheric pressure for pollution control
N. Merbahi, A. Abahazem, M. Yousfi, O. Eichwald
LAPLACE, Université Paul Sabatier, Toulouse (F)
- P-2.6** Surface discharge sound analysis by optical wave microphone
F. Mitsugi¹, S. Suyama¹, T. Ikegami¹, T. Nakamiya², Y. Sonoda², Y. Iwasaki², R. Tsuda²
¹ *Kumamoto University (J)*
² *Tokai University, Kumamoto (J)*
- P-2.7** Excitation of species in an expanded argon microwave plasma at atmospheric pressure
M. Varo¹, M.C. García^{1,2}, M.D. Pérez¹, D. Muñoz¹
¹ *Departamento de Física Aplicada, Universidad de Córdoba (E)*
² *Grupo de Espectroscopía de Plasmas, Universidad de Córdoba (E)*
- P-2.8** Study of afterglows at atmospheric pressure in nitrogen with chemical species injection
B. Rouffet, E. Lecoq, F. Clément
Laboratoire d'Electronique des Gaz et des Plasmas LEGP, Université de Pau et des Pays de l'Adour, Pau (F)

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-2.9** Laser-induced fluorescence diagnostic for ions or atoms in plasmas
N. Claire, C. Rebont, F. Doveil
PIIM laboratory, Université de Provence, Marseille (F)
- P-2.10** Density and flux measurements of metallic species in magnetron discharge using diode laser spectroscopy
C. Vitelaru^{1,2}, L. dePouques³, T.M. Minea¹, C. Boisse-Laporte¹, J. Bretagne¹, G. Popa²
¹ *LPGP, Université Paris-Sud, Orsay (F)*
² *Physics Department, Faculty of Physics AI I Cuza University (RO)*
³ *Institut Jean Lamour, Nancy Université - UPV Metz, Vandoeuvre-lès-Nancy (F)*
- P-2.11** Virtual instrument based Langmuir probes for diagnosis of unstable plasmas
W.Q. Lu¹, P.G. Wen², F.Y. Yuan¹, S. Yang¹, F. Gao¹, Y.N. Wang¹, G.Q. Lin¹, J. Xu¹, C. Dong¹, Y. Yan², Y.L. Wang²
¹ *School of physics and optoelectronic technology, Dalian University of Technology (PRC)*
² *Beijing Institute of Aeronautical Materials, Beijing (PRC)*
- P-2.12** Enhanced control of plasma etching parameters by optical emission spectroscopy
F. Henrio, A. Maalouf, D. Bosc
CNRS FOTON-CCLLO, Lannion (F)
- P-2.13** Study of SF₆ plasmas in a hollow cathode reactive ion etching reactor using optical emission spectroscopy and Langmuir probe techniques
R.S. Pessoa, L. Tezani, H.S. Maciel, G. Petraconi, M. Massi
Instituto Tecnológico de Aeronáutica, São José dos Campos (BR)
- P-2.14** A global model applied for investigate the flow rate effect in inductively coupled CF₄ plasmas
R.S. Pessoa, H.S. Maciel, G. Petraconi, M. Massi, L. Tezani
Instituto Tecnológico de Aeronáutica, São José dos Campos (BR)
- P-2.15** Metastable-atom density measurements in rare gas discharges at atmospheric pressure through optical absorption spectroscopy using a spectral lamp
E. Castañós-Martínez, M. Moisan
Groupe de physique des plasmas, Université de Montréal, Québec (CND)
- P-2.16** Plasma diagnostic of multi-dipolar plasmas by optical emission spectroscopy and Langmuir probe
Y. Guo, G. Marcos, T. Belmonte, T. Czerwiec
Institut Jean Lamour, INPL, Nancy Université, École des Mines de Nancy (F)
- P-2.17** Wall re-association probability of atomic oxygen in DC glow discharge in silica and pyrex discharge tubes for middle pressures
L. Schmiedt, O. Kylián, V. Hrachová, A. Kaňka
Charles University, Faculty of Mathematics and Physics, Prague (CZ)
- P-2.18** Measurements of surface recombination coefficients of hydrogen and chlorine atoms in H₂ and Cl₂ inductively coupled plasmas by time-resolved optical emission spectroscopy
G.A. Curley¹, L. Gatilova¹, S. Bouchoule¹, S. Guilet¹, P. Chabert²
¹ *LPN, Marcoussis (F)*
² *LPP, Ecole Polytechnique, Palaiseau (F)*

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-2.19** Computational analysis of plasma interaction with uneven substrates
R. Hrach, V. Hruby
Department of Surface and Plasma Science, Faculty of Mathematics and Physics, Charles University, Prague (CZ)
- P-2.20** Computational study of plasma-surface interactions in chemically active plasmas at high pressures
S. Novak¹, P. Cerny¹, R. Hrach^{2,1}, L. Schmiedt², V. Hrachova², A. Kanka²
¹ *J.E. Purkinje University, Faculty of Science, Department of Physics, Usti nad Labem (CZ)*
² *Charles University, Faculty of Mathematics and Physics, Department of Surface and Plasma Science, Praha (CZ)*
- P-2.21** Dynamics of laser induced plasma plume at early stage of its expansion
M. Cirisan¹, J.M. Jouvard¹, L. Lavisse¹, R. Oltra²
¹ *Institut Carnot de Bourgogne, Université de Bourgogne, Le Creusot (F)*
² *Institut Carnot de Bourgogne, Université de Bourgogne, Dijon (F)*
- P-2.22** Modelling of laser induced plasma expansion in the presence of non-maxwellian electrons
D. Bennaceur-Doumaz¹, M. Djebli^{1,2}
1. *Centre de Développement des Technologies Avancées, Algiers (DZ)*
2. *Theoretical Phys. Lab., Faculty of Physics, Algiers (DZ)*
- P-2.23** Investigation of plasmas produced by laser ablation of carbon-containing materials
E. Mothe^{1,2}, L. Mercadier^{1,3}, D. Borivent¹, J. Hermann¹
¹ *LP3, Université d'Aix Marseille II, Marseille (F)*
² *Bertin-Technologies, Aix-en-Provence (F)*
³ *CEA Cadarache, St Paul-lez-Durance (F)*
- P-2.24** Optical emission spectroscopy of the plasma plume during laser ablation of Si/Ge targets
L. Marques, L. Costa, M.M. D. Ramos, M.J.M. Gomes
Departamento de Física, Universidade do Minho, Braga (P)
- P-2.25** Local thermodynamic equilibrium plasma modeling applied to pulsed laser deposition of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$, $\text{Ba}_{0.6}\text{Sr}_{0.4}\text{TiO}_3$ AND $\text{La}_{0.9}\text{Sr}_{1.1}\text{NiO}_4$ films
J.F. Lagrange¹, J. Hermann², O. Motret¹
¹ *LEMA, Université François Rabelais de Tours (F)*
² *LP3, Université de la Méditerranée, Marseille (F)*
- P-2.26** Non-local model of the source of ionization in glow discharge and hollow cathode discharge
V.V. Gorin
Kyiv National Taras Shevchenko University, Radiophysical Faculty, Kiev (UA)
- P-2.27** Effect of electronic-density gradient in PECVD reactor on electric field distribution
N. Ikhlef^{1,2}, O. Leroy², M.R Mékidèche¹
¹ *Laboratoire d'études et modélisation en électrotechnique LAMEL, Université de Jijel, Ouled Aissa, Jijel (DZ)*
² *LPGP, Université Paris-Sud, Orsay (F)*

CIP 09

International Colloquium on Plasma Processes Marseille, France

- P-2.28** Modelling of microwave micro-plasmas at atmospheric pressure
J. Gregório^{1,2}, C. Boisse-Laporte², L.L. Alves¹
¹ Instituto de Plasmas e Fusão Nuclear, Instituto Superior Técnico, Lisboa (P)
² LPGP, Université Paris-Sud, Orsay (F)
- P-2.29** Modelling of capacitively coupled radio-frequency discharges in nitrogen
L. Marques^{1,2}, C.D. Pintassilgo^{1,3}, G. Alcouffe⁴, G. Cernogora⁴, L.L. Alves¹
¹ Instituto de Plasmas e Fusão Nuclear, Instituto Superior Técnico, Lisboa (P)
² Centro de Física da Universidade do Minho, Universidade do Minho, Braga (P)
³ Depart. Eng. Física, Fac. Engenharia, Univ. Porto, Porto (P)
⁴ Université de Versailles St-Quentin LATMOS, Verrières le Buisson (F)
- P-2.30** Observation and modeling of hydrogen negative ions in sheet plasma
A. Tonegawa, T. Shibata, T. Torada, H. Ishioka, K. Kawamura
Tokai University, Hiratsuka, Kanagawa (J)
- P-2.31** Modelling of an axial injection torch
L.L. Alves¹, R. Álvarez², L. Marques^{1,3}
¹ Instituto de Plasmas e Fusão Nuclear, Instituto Superior Técnico, Lisboa (P)
² Instituto de Ciencias de Materiales de Sevilla, Consejo Superior de Investigaciones Científicas, Sevilla (E)
³ Centro de Física da Universidade do Minho, Universidade do Minho, Braga (P)
- P-2.32** Chlorine discharges diluted with argon: the dissociation and the electronegativity
E.G. Thorsteinsson¹, A.T. Hjartarson², J.T. Gudmundsson^{1,2}
¹ Science Institute, University of Iceland, Reykjavik (IS)
² Department of Electrical and Computer Engineering, University of Iceland, Reykjavik (IS)
- P-2.33** Pulsed power modulation of the chlorine discharge: a global (volume averaged) model study
E.G. Thorsteinsson¹, J.T. Gudmundsson^{1,2}
¹ Science Institute, University of Iceland, Reykjavik (IS)
² Department of Electrical and Computer Engineering, University of Iceland, Reykjavik (IS)
- P-2.34** Study of the sputtered atoms by Monte Carlo approach in magnetron discharge
O. Msieh^{1,2}, T. Minea¹, D. Saifaoui²
¹ LPGP, Université Paris-Sud, Orsay (F)
² Laboratoire de Physique Théorique & Appliquée, Université Hassan II, Maarif Casablanca (MA)
- P-2.35** Numerical model of electric properties in magnetron sputtering process
Z. Ballah, F. Khelfaoui, M.T. Meftah
LENREZA Laboratory, Physics Department, Faculty of Sciences, University of Ouargla (DZ)
- P-2.36** Modeling of pulsed and continuous microwave discharges used for diamond film deposition
N. Derkaoui, D. Monéger, F. Bénédic, A. Michau, G. Lombardi, A. Gicquel
LIMHP, Université Paris 13, Villetaneuse (F)
- P-2.37** Two dimensional modeling of an electrical discharge in Nitrogen at atmospheric pressure with a dielectric material on the cathode
L. Papageorghiou, J.F. Loiseau¹, N. Spyrou²
¹ Université de Pau et des Pays de l'Adour, LEGP, Pau (F)
² University of Patras, Electrotechnic Material Laboratory, Rion (GR)

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-2.38** Radiative properties of neutral helium under non-equilibrium conditions
T. Lefevre¹, A. Escarguel^{1*}, F.B. Rosmej², L. Godbert-Mouret¹, R. Stamm¹
¹ *Université de Provence, PIIM, Marseille (F)*
² *Université Pierre et Marie Curie, Paris (F)*
- P-2.39** Study of a discharge for excilamp in the mixture Ne-Xe-HCl
S.Bendella, A. Belasri
Laboratoire de Physique des Plasmas, Matériaux Conducteurs et Leur Applications, Université des Sciences et de la Technologie d'Oran EL M'Naoeur, Oran (DZ)
- P-2.40** Determination of the magnetic field magnitude in a high-temperature hydrogen plasma on the basis of nonlinear optics
G.G. Adonts¹, E.G. Kanetsyan²
¹ *Lazerayin Tekhnika CJC, Yerevan (ARM)*
² *Yerevan State University of Architecture and Construction, Departement of Physics and Mathematics, Yerevan (ARM)*
- P-2.41** Approximation of form and position of anode plasma boundary in the technological high voltage glow discharge electron sources
S.V. Denbnovetskiy, V.I. Melnyk, I.V. Melnyk, B.A. Tugay
National Technical University of Ukraine, Kiev Polytechnic Institute, Electronic Faculty, Kiev (UA)

TOPIC 4: PLASMA DEPOSITION PROCESSES

- P-4.1** UHV hollow cathode plasma-jet deposition system
P. Řepa¹, L. Peksa¹, F. Fendrych², T. Gronych¹
¹ *Charles University, Praha (CZ)*
² *Institute of Physics, Czech Academy of Science, Praha (CZ)*
- P-4.2** Studies of electron cyclotron resonance plasmas for materials engineering
P. Kumar¹, D. Mishra², D. Kanjilal¹
¹ *Inter University Accelerator Centre, New Delhi (IND)*
² *Institute of Minerals and Materials Technology, Orissa (IND)*
- P-4.3** Influence of transverse magnetic field on expansion and spectral emission of laser produced plasma
C. Pagano, S. Hafeez, J.G. Lunney
School of Physics, Trinity College Dublin (IRL)
- P-4.4** Pulse laser deposition of ZnS thin films
S.P. Patel¹, L. kumar¹, A. Chawla², A. Tripathi³, I. Sulania³, P. Kulariya³, J. Prakash⁴, R. Chandra², D. Kanjilal⁴
¹ *Department of Physics, University of Allahabad, Allahabad (IND)*
² *Institute of Instrumentation Centre, Indian Institute of Technology, Roorkee (IND)*
³ *Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi (IND)*
⁴ *Department of Chemistry, MMH College, Ghaziabad (IND)*
- P-4.5** Plasma-assisted MOMBE growth and characterization of wurtzite Indium Nitride on Si
F.I. Lai¹, W.C. Chen², W.T. Lin¹, S.Y. Kuo³, C.N. Hsiao²
¹ *Department of Electrical Engineering, Yuan-Ze University (RC)*
² *Instrument Technology Research Center, National Applied Research Laboratories (RC)*
³ *Department of Electronic Engineering, Chang Gung University (RC)*

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-4.6** Experimental study of the structure of titanium oxide films deposited by filtered cathodic vacuum arc technique
Yu. Chekh^{1,3}, I.S. Zhirkov^{2,3}, M.P. Delplancke-Ogletree³
¹ *Institute of Physics of NAS of Ukraine, Kyiv (UA)*
² *Institute of High Current Electronics SB RAS, Tomsk (RUS)*
³ *Université libre de Bruxelles, Chemicals and Materials Department, Brussels (B)*
- P-4.7** Deposition of TiO₂ thin films by hollow cathode magnetron sputtering
D.A. Duarte¹, M. Massi¹, A.S. da Silva Sobrinho¹, H.S. Maciel¹, K. Grigorov^{1,2}, L.C. Fontana³
¹ *Techological Institute of Aeronautics, São José dos Campos (BR)*
² *Institute of Electronics, Bulgarian Academy of Science, Sofia (BG)*
³ *Santa Catarina State University, Campus Universitário Avelino Marcante, Joinville (BR)*
- P-4.8** Deposition of zirconium dioxide (ZrO₂) by reactive radiofrequency magnetron sputtering
O. Antonin, C. Boisse-Laporte, L. de Poucques, M.C. Hugon
LPGP, Université Paris-Sud, Orsay (F)
- P-4.9** Effect of sputtering power and deposition pressure on the surface morphology and structural properties of Cu thin film
A. Hojabri^{1,*}, F. Amini¹, F. Hajakbari¹, M. Ghoranneviss²
¹ *Physics Department, Islamic Azad University (IR)*
² *Plasma Physics Research Center, Science and Research Campus of Islamic Azad University, Tehran (IR)*
- P-4.10** Optimization of the discharge conditions in carbon coatings deposition on polymer substrates
A. Stoica, V. Buršíková, L. Kelar, T. Novotný
Masaryk University, Brno (CZ)
- P-4.11** Comparative study of films deposited from HMDSO/O₂ in inductively and capacitively coupled RF discharges
T. Begou¹, A. Granier¹, A. Goulet¹, V. Bursikova², D. Franta², L. Zajickova²
¹ *Institut des Matériaux Jean Rouxel, Université de Nantes (F)*
² *Department of Physical Electronics, Masaryk University, Brno (CZ)*
- P-4.12** Fast and low temperature SiO_x thin film deposition with a new plasma discharge at atmospheric pressure
J. Dutroncy, F. Benhalima, E. Jouvét, T. Sindzingre
AcXys Technologies, Saint Martin le Vinoux (F)
- P-4.13** Investigation on the growth of high quality SiO₂ films in large area Atmospheric Pressure Plasma Enhanced Chemical Vapour Deposition (AP-PECVD)
P. Antony Premkumar^{1,2*}, S.A. Starostin^{1,2}, H. de Vries³, R. Paffen³, M. Creatore², M.C.M. van de Sanden²
¹ *Materials Innovation Institute (M2i), Delft (NL)*
² *Plasma and Materials Processing Group, Department of Applied Physics, Eindhoven University of Technology (NL)*
³ *FUJIFILM Manufacturing Europe, Tilburg (NL)*
- P-4.14** Plasma-polymerization of HMCTSO using an atmospheric pressure dielectric barrier discharge
G.T. Kim, Y.K. Kim
Department of Welding and Production Engineering, Hanbat National University, Daejeon (ROK)

TOPIC 5: PLASMA FOR FUNCTIONAL AND MULTIFUNCTIONAL COATINGS

- ~~P-5.1~~ ~~TiO_{2-x}N_x dielectric films prepared by pulsed bias arc ion plating~~
~~**G. Lin, H. Li, M. Zhang, C. Dong**~~
~~*Key Laboratory for Materials by Laser, Dalian University of Technology, Dalian (PRC)*~~
- P-5.2** Influence of PVD/IPVD parameters on titanium oxide thin film color
M. Vogt, M. Cavarroc, A. Ennajdaoui
Made In Dreux, Vernouillet (F)
- P-5.3** Properties of metal doped TiO_x films prepared by reactive magnetron cosputtering
M. Horakova¹, N. Martin², E. Aubry^{1,2}, P. Spatenka^{1,3}
¹ *Technical University of Liberec, Department of Material Science, Liberec (CZ)*
² *Département MN2S, Institut FEMTO-ST, Besançon (F)*
³ *University of South Bohemia, Department of Physics, České Budějovice (CZ)*
- P-5.4** Photocatalytic activity of metal modified TiO₂ surface
P. Hajkova¹, P. Spatenka^{1,2}
¹ *Technical University of Liberec, Department of Material Science, Liberec (CZ)*
² *University of South Bohemia, Department of Physics, Ceske Budejovice (CZ)*
- P-5.5** Comparison of plasma enhanced chemical vapour deposition processes for producing photocatalytically active Titania layers at ambient temperature
S. Chappuis¹, A. Reller², E.M. Moser¹
¹ *hepia Geneva, University of Applied Sciences Western Switzerland, Geneva (CH)*
² *Solid State Chemistry, Institute of Physics, Augsburg (D)*
- P-5.6** Effect of ion energy flux on optical properties of TiO_x films deposited in RF inductively coupled plasma
K. Makaoui¹, T. Begou¹, D. Necas², D. Franta², M.P. Besland¹, A. Granier¹, A. Gouillet¹, L. Zajickova²
¹ *Institut des Matériaux Jean Rouxel, Université de Nantes (F)*
² *Department of Physical Electronics, Masaryk University, Brno (CZ)*
- P-5.7** The investigation of Fe doped SnO₂ coatings deposited by on-axis and off-axes single target magnetron co-sputtering
M. Kormunda¹, J. Pavlik¹, P. Hedbavny²
¹ *Department of Physics, J.E. Purkinje University, Usti nad Labem (CZ)*
² *VAKUUM PRAHA s.r.o., Praha (CZ)*
- P-5.8** Morphological, structural and optical properties of reactive magnetron sputtered SnO₂: Fe thin films for gas sensors
A. Benyoucef, A. Billard, A. Benyoucef, F. Lapostolle, D. Klein
LERMPS, UTBM, Belfort (F)
- P-5.9** Deposition of metalorganic layer using Zirconium Tert-Butoxide/oxygen mixture in MMP-DECR low pressure plasma
R. Cozzolino^{1,2}, D. Escaich^{1,2}, Y. Segui^{1,2}, P. Raynaud^{1,2}
¹ *Université de Toulouse; UPS, INPT; LAPLACE, Toulouse (F)*
² *LAPLACE; Toulouse (F)*

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-5.10** Pre-irradiation and post irradiation study of pld prepared PrFeO₃ thin film
F. Ahmad Mir¹, M. Ikram¹, R.J. Choudary³, R. Kumar²
¹ Department of Physics, National Institute of Technology, Srinager (IND)
² Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi (IND)
³ UGC-DAE Consortium for Scientific Research, Indore (IND)
- P-5.11** Compositional and structural studies of HfO₂ thin films deposited by reactive sputtering
L. Adnani¹, E. Tomasella¹, A. Bousquet¹, J. Cellier¹, T. Sauvage².
¹ Laboratoire des Matériaux Inorganiques, Université Clermont 2, Aubière (F)
² CNRS/CEMHTI Site Cyclotron, Orléans (F)
- P-5.12** Determination of AlN thin film optical characteristics from experimental transmission data
F. Hajakbari¹, M.M. Larijani², M. Ghoranneviss¹, M. Aslaninejad¹
¹ Plasma Physics Research Center, Islamic Azad University, Tehran (IR)
² Agricultural Medical & Industrial Research School, Karaj (IR)
- P-5.13** Ta and TaN thin films deposited by magnetron sputtering with a high degree of ionization of the sputtered vapor
C. Jin^a, M.C. Hugo^a, R. Sireilles^b, B. Agius^a
^a LPGP, Université Paris-Sud, Orsay (F)
^b Alliance Concept, Cran Gevrier (F)
- P-5.14** Heteroepitaxial growth of InN layers by PA-MOMBE
W.C. Chen¹, F.I. Lai², W.T. Lin², S.Y. Kuo³, C.N. Hsiao¹
¹ Instrument Technology Research Center, National Applied Research Laboratories (RC)
² Department of Electrical Engineering, Yuan-Ze University, Taiwan (RC)
³ Department of Electronic Engineering, Chang Gung University (RC)
- P-5.15** Effects of Buffer Layers on Structural and Optoelectronic Properties of InN Films Grown by RF-MOMBE
W.C. Chen^{1*}, S.Y. Kuo², W.T. Lin³, H.Y. Chen⁴, S. Gwo^{1,4}, C.N. Hsiao¹, F.I. Lai³
¹ Instrument Technology Research Center, National Applied Research Laboratories (RC)
² Department of Electronic Engineering, Chang Gung University (RC)
³ Department of Electrical Engineering, Yuan-Ze University, Taiwan (RC)
⁴ Department of Physics, National Tsing-Hua University, Taiwan (RC)
- P-5.16** The electrical and thermal response of DLC thin film piezoresistor deposited at low temperature
L.A. Rasia, R.D. Mansano, C.E. Viana, A.P. Mousinho, M. Massi
Universidade de São Paulo (BR)
Instituto Tecnológico da Aeronáutica, São Paulo (BR)
- P-5.17** Influence of cerium nanoparticles on corrosion behaviour of plasma polymerized organosilicon coatings
D. Del Frari, J. Bour, J. Bardou, D. Ruch
Laboratoire de Technologies Industrielles, CRPHT, Esch sur Alzette (L)
- P-5.18** Silicon oxide permeation barrier coating of PET bottles and foils deposited by BIASED hexamethyldisiloxan-oxygen plasmas
S. Steves, M. Deilmann, N. Bibinov, P. Awakowicz
Institute for Electrical Engineering and Plasma Technology, Ruhr-Universität Bochum (D)

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-5.19** Tailoring the structural complexity by PVD to enhance the adherence of quasicrystalline coatings
T. Duguet, J.M. Dubois, V. Fournée, T. Belmonte
Institut Jean Lamour, Ecole des Mines de Nancy (F)
- P-5.20** Nano-structured plasma film deposition for the adhesion improvement of metallic sheet or ceramic powders with polymer materials
P. Choquet, J. Borgès, H. Hody, M. Moreno-Couranjou, D. Duday, N. Boshier
Centre de Recherche Public Gabriel Lippmann, Belvaux, (L)
- P-5.21** Study of the deposition of Ti/TiN multilayers by magnetron sputtering
N. Saoula¹, K. Henda¹, R. Kesri², R.M. Erasmus³, J. Darrell Comins³
¹ DMIL, CDTA, Alger (DZ)
² Laboratoire d'Electrochimie-Corrosion, USTHB, Algiers (DZ)
³ Departement of physics, University of the Witwatersrand, Johannesburg (ZA)
- P-5.22** Effect of temperature on physical and mechanical properties of titanium carbide using indirect method
L. Mohammedi¹, R. Gheriani¹, R. Halimi², A. Billard³
¹ Université de Ouargla (DZ)
² Laboratoire Couches Minces et Interfaces, Université Mentouri de Constantine (DZ)
³ Université de Technologie de Belfort-Montbéliard (F)
- P-5.23** Microwave/Low frequency PACVD of a-SiC:H nano-periodic layers: plasma and films characterisations
T. Gaudy¹, F. Rebib², C. Picard¹, F. Cournut³, L. Thomas¹
¹ PROMES/CNRS, Perpignan (F)
² CASIMIR, Pôle Technologique d'Auvergne, Aubière (F)
³ EADS France - Innovation Works, Suresnes (F)
- P-5.24** Effect of the thickness on some properties of hard thin films (Cr, CrN AND TiAl)
L. Chekour¹, Y. Benlatreche¹, H. Berkane¹, M.A Djouadi²
¹ Laboratoire Microstructure et Défauts dans les Matériaux, Université Mentouri Constantine (DZ)
² Institut des Matériaux Jean Rouxel, Université de Nantes (F)
- P-5.25** Nanoindentation investigation of Cr /CrN multilayers films
D. Benzeggouta¹, P. Aubert¹, S. Labdi¹, M.H. Berger², C. Duhamel², A. Douard³
¹ LMN, Université d'Evry Val d'Essonne, Evry (F)
² MINES ParisTech Centre des Matériaux, Evry (F)
³ ArcelorMittal, Isbergues (F)
- P-5.26** Corrosion protection of AZ31 magnesium alloy by SiO_xC_y(-H) film deposited by atmospheric pressure dielectric barrier discharge
G.T. Kim¹, K.I. Moon², Y.K. Kim¹
¹ Department of Welding and Production Engineering, Daejeon (ROK)
² Korea Institute of Industrial Technology, Incheon (ROK)
- P-5.27** Corrosion resistance properties of radiofrequency cold plasma nitrided carbon steel: effect of hydrogen addition
F. Zahra Bouanis¹, F. Bentiss², M. Traisnel¹; C. Jama¹
¹ PERF, LSPES, ENSCL, Villeneuve d'Ascq (F)
² Laboratoire de Chimie de Coordination et d'Analytique, Jadida (MA)

TOPIC 6: PLASMA FOR LIFE SCIENCE

- P-6.1** Instrumentation for a plasma-needle applied to elimination of *E. COLI* bacteria
R. Peña Eguiluz¹, J.A. Pérez-Martínez², J. Solís-Pacheco³, B. Aguilar-Uscanga³, R. López-Callejas^{1,2}, A. Mercado-Cabrera², R. Valencia-Alvarado², A.E. Muñoz-Castro², S. R. Barocio², A. de la Piedad Beneitez¹
¹ Instituto Nacional de Investigaciones Nucleares, México (MEX)
² Instituto Tecnológico de Toluca, México (MEX)
³ Universidad de Guadalajara, CUCEI, México (MEX)
- P-6.2** Observation of antibacterial effects obtained at atmospheric and reduced pressures in afterglow conditions
J.P. Sarrette¹, S. Cousty², N. Merbahi¹, A. Nègre-Salvayre³, F. Clément⁴, J. Santos Sousa^{5,6}, V. Puech⁵
¹ LAPLACE, Toulouse (F)
² Laboratoire Parodontites et Maladies Générales, Toulouse (F)
³ INSERM, Toulouse (F)
⁴ LEGP, Université de Pau et des Pays de l'Adour, Pau (F)
⁵ LPGP, Université Paris-Sud, Orsay (F)
⁶ IPFN, Instituto Superior Técnico, Lisboa (P)
- P-6.3** Investigation on the radiation based sterilization mechanisms of a double inductively coupled plasma discharge
B. Denis¹, H. Halfmann², N. Bibinov¹, J. Wunderlich³, P. Awakowicz¹
¹ Universität Bochum (D)
² OSRAM GmbH, Berlin (D)
³ Fraunhofer Institute for Process Engineering and Packaging, Freising (D)
- P-6.4** Development and characterization of a novel VHF-CCP-reactor for biomedical applications
K. Stapelmann, N. Bibinov, E. Semmler, P. Awakowicz
Institute for Electrical Engineering and Plasma Technology, Ruhr-Universität Bochum (D)
- P-6.5** Deposition of metalorganic thin films via PECVD for antibacterial applications
L. Duque^{1,2}, X. Muñoz², T. Jenkins², R. Förch¹
¹ Max Planck Institute for Polymer Research, Mainz (D)
² Chemistry Department, University of Bath (UK)
- P-6.6** Theoretical and experimental characterization of the pulsed plasma polymerization of primary amine
L. Denis^a, P. Marsal^b, T. Godfroid^c, J. Cornil^b, R. Snyders^{a,c}, R. Lazzaroni^{b,c}, M. Hecq^{a,c}
^a Laboratoire de Chimie Inorganique et Analytique, Université de Mons (B)
^b Service de Chimie des Matériaux Nouveaux, Université de Mons (B)
^c Materia Nova Research Center, Mons (B)
- P-6.7** Spectroscopic analysis of laser-produced plasmas for quality-control of aliments
D. Borivent¹, S. Beldjilali^{1,2}, L. Mercadier^{1,3}, E. Mothe^{1,4}, J. Hermann¹
¹ LP3, CNRS - Université d'Aix Marseille II, Marseille (F)
² Laboratoire de Physique des Plasmas, Oran (DZ)
³ Bertin-Technologies, Aix-en-Provence (F)
⁴ CEA Cadarache IRFM/SIPP, St Paul-lez-Durance (F)

TOPIC 7: PLASMA FOR SURFACE ENGINEERING

- P-7.1** Relations between surface energy and surface potentials for a nitrogen plasma modified polypropylene
Y.I. Chang
Dept. of Chemical Engineering, Tunghai University, Taichung, Taiwan (RC)
- P-7.2** The probe-tack test as a tool for the diagnostic of plasma surface
Y. Magga^{1,2}, C. Derail², N. Soulem³
¹ *LEGP, Pau (F)*
² *IPREM, Pau (F)*
³ *LGE, Université de Pau et des Pays de l'Adour, Pau (F)*
- P-7.3** Diagnostic of an Allylamine low pressure plasma discharge using mass spectrometry and optical emission spectroscopy
E. Gallino^{1,2}, F. Arefi-Khonsari¹, D. Mantovani², M. Tatoulian¹
¹ *Plasma Chemical Engineering Laboratory, UPMC-ENSCP, Paris (F)*
² *Laboratory for Biomaterials and Bioengineering, Laval University, Québec (CND)*
- P-7.4** Novel plasma processes provide durable anti-fogging effect and adhesion improvement on polypropylene surfaces
D. Gilliéron¹, U. Pieles², E.M. Moser¹
¹ *Hepia Geneva, University of Applied Sciences Western Switzerland, Geneva (CH)*
² *University of Applied Sciences North West Switzerland, Muttenz (CH)*
- P-7.5** Plasma pretreatment for the improvement of the adhesion of copper layers on polymer surfaces
I. Guesmi¹, L. de Poucques², L. Teule-Gay³, J. Bretagne¹, C. Boisse-Laporte¹
¹ *LPGP, Université Paris Sud, Orsay (F)*
² *Institut Jean Lamour Dpt. CP2S, Eq. ESPRITS, Vandoeuvre-lès-Nancy (F)*
³ *ICMCB, Pessac (F)*
- P-7.6** Improvement of the adhesion of electrochromic devices to polymeric substrates by low pressure plasma treatment in the toy sector
A. Ibáñez, A. Martínez-García, A. Sánchez Reche
AIJU (Toy Research Institute), Alicante (E)
- P-7.7** Surface-plasma interactions in textiles subjected to metal plasmas
C.C. Surdu-Bob¹, M. Badulescu¹, I. Sandu¹, I. Morjan¹, I. Gruia²
¹ *National Institute for Lasers, Plasma and Radiation Physics, Bucharest (RO)*
² *Faculty of Physics, Bucharest University (RO)*
- P-7.8** Plasma treatment of composite materials surfaces for aeronautics
J.F. Coulon
Ecole Louis de Broglie, Groupe ECAM, Bruz (F)
- P-7.9** Modification of Pyrite-surfaces by RF- and MW-plasmas under different conditions
F. May¹, N. Savastenko¹, V. Brüser¹, E. Gock², V. Vogt²
¹ *Leibniz-Institut für Plasmaforschung und Technologie, Greifswald (D)*
² *Institut für Aufbereitung, Clausthal-Zellerfeld (D)*

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-7.10** Plasma electrolyte polishing of Titanium medicine implants
S.I. Bahayeu¹, I.S. Kulikov², N.M. Chekan¹
¹ *Physical Technical Institute of the NAS of Belarus, Minsk (BY)*
² *Joint Institute for Power and Nuclear Research-SOSNY of the NAS of Belarus, Minsk (BY)*
- P-7.11** Laser shock peening of a stainless steel
M. Rozmus, J. Kusiński, M. Blicharski
AGH University of Science and Technology, Kraków (PL)
- P-7.12** Deeper nitriding on H13 steel by hybrid surface treatment
K. Taek Cho^{[1],[2]}, G. Hwang Kim^{[1],[2]}, K. Ill Moon, W. Beom Lee^[1]
¹ *Heat Treatment & Plating Technology Service Center, Korea Institute of Industrial Technology (ROK)*
² *School of Materials Science and Engineering, INHA University (ROK)*
- P-7.13** Modification of aluminium surface using atmospheric pressure non-equilibrium plasma
T. Homola¹, A. Zahoranová¹, L. Bónová¹, D. Kováčik¹, M. Zahoran¹, M. Černák^{1,2}
¹ *Department of Experimental Physics, Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava (SK)*
² *Department of Physical Electronics, Faculty of Science, Masaryk University, Brno (CZ)*
- P-7.14** Selective surface purification via crater eruption induced by pulsed electron beam treatment
C. Dong¹, S. Hao¹, J. Zou^{1,2}, Y. Qin¹, T. Grosdidier^{1,2}
¹ *Key Lab of Materials Modification, Dalian Univ. of Technology, Dalian (PRC)*
² *LETAM, Université de Metz (F)*
- P-7.15** Surface structures and high-temperature oxidation resistance of NiCoCrAlY coatings irradiated by high-current pulsed electron beam
X. Mei, C. Wang, Z. Wang, W. Sun, S. Hao, Y. Qin, C. Dong, H. Wu
Key Laboratory for Material Modification by Laser, Ion and Electron Beams, Dalian University of Technology (PRC)

TOPIC 8: PLASMA FOR MICROELECTRONICS, MICRO AND NANOTECHNOLOGY

- P-8.1** Anode plasma jet behavior in CNTs deposit growth
Z. Kolacinski¹, L. Szymański², G. Raniszewski¹
¹ *Technical University of Lodz, Electrical Apparatus Department, Lodz (PL)*
² *Academy of Humanities and Economics in Lodz (PL)*
- P-8.2** High-aligned carbon nanotubes forest obtained by high density plasma chemical vapor deposition
A.P. Mousinho, R.D. Mansano
Universidade de São Paulo (BR)
- P-8.3** Micropatterning of single-walled carbon nanotubes films by high density plasma chemical vapor deposition
A.P. Mousinho, R.D. Mansano
Universidade de São Paulo (BR)
- P-8.4** Aerosol production by nucleation in dielectric barrier discharges at atmospheric pressure
J.P. Borra¹, E. Bourgeois², N. Jidenko¹
¹ *LPGP, Univ. Paris-Sud, Orsay (F)*
² *Supélec, Gif-sur-Yvette (F)*

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CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-8.5** Nanoparticle formation in plasmas generated by the interaction of two time-delayed femtosecond laser pulses with metals
E. Axente^{1,2}, S. Noël¹, A. Popescu^{1,2}, J. Hermann¹, I.N. Mihailescu²
¹ LP3, CNRS - Université d'Aix Marseille II, Marseille (F)
² Lasers Department, National Institute for Lasers, Plasma and Radiation Physics, Bucharest-Magurele (RO)
- P-8.6** Diamond schottky diod based on Boron doped HPHT substrate with epitaxial CVD film
V.D. Blank, S.G. Buga, V.S. Bormashov, Y.L. Al'shevskiy, S.A. Terentiev, N.V. Kornilov, A.P. Volkov
Technological Institute for Superhard and Novel Carbon Materials, Troitsk (RUS)
- P-8.7** Soft X-Ray point source based on a gas pinch special gas density distribution
V.I. Zaitsev¹, G.S Volkov¹, I.A.Barykov¹, S.V.Zakharov², A.S. Boldarev³
¹ Troitsk Institute for Innovation and Fusion Research, Troitsk (RUS)
² RRC Kurchatov Institute, Moscow (RUS)
³ Keldysh Institute of Applied Mathematics RAS, Moscow (RUS)
- P-8.8** Patterning of plasma polymer thin films using an excimer laser by DUV interferometry
A. Dirani¹, O. Soppera¹, A. Ponche², V. Roucoules²
¹ Photochemistry department (DPG), Haute-Alsace University, Mulhouse (F)
² Materials Science Institute of Mulhouse (IS2M), Haute-Alsace University, Mulhouse (F)
- P-8.9** Austenitic stainless steel patterning by plasma assisted diffusion treatments
T. Thiriet, G. Marcos, Y. Guo, T. Belmonte, T. Czerwiec
Institut Jean Lamour, Département CP2S, CNRS, INPL, Nancy Université, École des Mines de Nancy (F)
- P-8.10** Plasma-chemical synthesis of nanoporous lithium fluoride
L.A. Bityutskaya¹, Y.A. Dikarev¹, A.P. Lazarev¹, A.S. Sigov²
¹ Voronezh State University (RUS)
² MIREA, Moscow (RUS)
- P-8.11** Real down stream and high density radical flux processing for new surface activation or photoresist stripping applications
M. Segers¹, R. Morgan¹, L. Boufendi², F. Hamouda³
¹ NANOPLAS, Orsay (F)
² GREMI, Université d'Orléans (F)
³ IEF, Orsay (F)
- P-8.12** Formation of Columnar MicroStructures of silicon (CMS) in SF₆/O₂ plasma in cryogenic conditions
J. Pereira¹, R. Dussart¹, L.E. Pichon^{1,2}, V.L. Girault¹, C.Y. Duluard¹, P. Lefauchaux¹, M. Boufnichel², P. Ranson¹
¹ GREMI, Université d'Orléans (F)
² STMicroelectronics, Tours (F)
- P-8.13** STiGer cryoetching process on silicon results on performance for 0.8 μm trenches
V.L. Girault¹, R. Dussart¹, L.E. Pichon^{1,2}, J. Pereira¹, C.Y. Duluard¹, P. Lefauchaux¹, M. Boufnichel², P. Ranson¹
¹ GREMI, Université d'Orléans (F)
² STMicroelectronics, Tours (F)

CIP 09

International Colloquium on Plasma Processes Marseille, France

- P-8.14** Low pressure SF₆ plasma jet applied to silicon etching
R.S. Pessoa, L. Tezani, M. Massi, H.S. Maciel, G. Petraconi
Instituto Tecnológico de Aeronáutica, São José dos Campos (BR)
- P-8.15** Etching of silica glass using SF₆/Ar inductively coupled plasma
L. Lallement, A. Rhallabi, C. Cardinaud, M.C. Peignon-Fernandez
Institut des Matériaux Jean Rouxel, Université de Nantes (F)
- P-8.16** Plasma chemical etching of high-*k* dielectric HfO₂ films for technological applications
H.H. Richter, M. Fraschke, M. Lukosius, C. Wenger, D. Wolansky, J. Berthold, S. Marschmeyer, I. Costina
IHP Frankfurt (D)
- ~~**P-8.17** (C,W)-doped Cu films for barrierless interconnection
X. Li, L. Nie, X. Jiang, C. Dong
Key Laboratory for Material Modification by Laser, Dalian University of Technology (PRC)~~
- P-8.18** Electrodeposited Ni Masks for etching applications
F. Leroy, L. Ferlazzo
Laboratoire de Photonique et de Nanostructures, Marcoussis (F)

TOPIC 9: PLASMA FOR ENERGY AND ENVIRONMENTAL APPLICATIONS

- P-9.1** Plasma-assisted catalysis at atmospheric pressure
D.T. Lundie, J.A. Rees, P.J. Hatton
Hidden Analytical Ltd., Warrington (UK)
- P-9.2** Electrical discharge in foam for removal of organic contaminants
J. Pawłat
Waseda University, Hibikino (J)
- P-9.3** Influence of dust particles on coronas discharges
S. Gaychet¹, N. Soulem¹, D. Bessières¹, J. Paillol¹, A. Bourdon², F. Lemont³
¹ LGE, Université de Pau et des Pays de l'Adour, PAU (F)
² Laboratoire EM2C, Ecole Centrale Paris, Châtenay-Malabry (F)
³ CEA Marcoule, Bagnol-sur-Ceze (F)
- P-9.4** Aerosol charging by electrical discharges at atmospheric pressure and applications of charged aerosols
N. Jidenko, J.P. Borra
LPGP, Université Paris Sud, Orsay (F)
- P-9.5** Magnetron reactive sputtering deposition of oxide films for SOFC application
E. Rezugina, A.L. Thomann, P. Brault, V. Dolique, Y. Tessier
GREMI, Université d'Orléans (F)
- P-9.6** Atmospheric plasma sprayed M-YSZ (M= Ni, Cu, Co, Cu-Co, Ni-Cu-Co) SOFC anode cermet and their thermal stability under 800°C and 1000°C annealing treatment
A. Benyoucef, D. Klein, F. Lapostolle, C. Coddet
LERMPS, UTBM, Belfort (F)

CIP 09

International Colloquium on Plasma Processes
Marseille, France

- P-9.7** Plasma-polymerized membranes: Development and integration in fuel cells
A. Ennajdaoui^{1,2}, S. Roualdès¹, J. Durand¹, P. Brault³, M. Cavarroc²
¹ *Institut Européen des Membranes, ENSCM, Montpellier (F)*
² *MID Dreux Innovation, Vernouillet (F)*
³ *GREMI, Université d'Orléans (F)*
- P-9.8** Liquid precursors for silicon solar cells: from plasma to antireflective and passivating properties
A. Cojaccaru, J. Larrieu, S. Quoizola, F. Massines, L. Thomas
PROMES-CNRS, Perpignan (F)
- P-9.9** Deposition of nickel oxide thin films for photovoltaic applications by reactive sputtering
A. Karpinski, K. Makaoui, M. Richard-Plouet, A. Djouadi, P.Y. Jouan, L. Brohan
Institut des Matériaux Jean Rouxel, Université de Nantes (F)
- P-9.10** Studies on the properties of Al-doped ZnO films sputtered from aerogel nanopowder target for solar cells applications
Z. Ben Ayadi^{1,*}, K. Djessas², L. El Mir¹, A. Alaya¹
¹ *LPMNE, Gabès (T)*
² *LPMES, PROMES-CNRS, Perpignan (F)*
- P-9.11** Comparison of TiO_x thin films deposited by ICP-PECVD TTIP/O₂ plasma and reactive DC magnetron sputtering
K. Makaoui^{1,2}, T. Begou¹, M.P. Besland¹, P.Y. Jouan¹, J.L. Kindler², A. Granier¹, A. Goulet¹
¹ *Institut des Matériaux Jean Rouxel, Université de Nantes (F)*
² *MHS Equipment, Houilles (F)*

TOPIC 10: LOW TEMPERATURE PLASMAS FOR ITER

- P-10.1** Bulk changes in tubes and sheets Zr-based alloys under surface treatment with the impulse plasma
Y. Perlovich, M. Isaenkova, M. Grekhov, O. Krymskaya
Moscow Engineering Physics Institute (State University), Moscow (RUS)
- P-10.2** Effects of the electron-beam treatment on structure and texture of Ti-based alloys
Y. Perlovich, M. Isaenkova, V. Fesenko, V. Engelko, D. Keryaev, O. Bytchenko
Moscow Engineering Physics Institute (State University), Moscow (RUS)
- P-10.3** Dust particles collected in the MAST tokamak
C. Arnas¹, C. Martin¹, C. Pardanaux¹, P. Roubin¹, G. De Temmerman², G. Counsell², E. Delchambre², S. Booth², the MAST team²
¹ *PIIM, Université de Provence, Marseille (F)*
² *EURATOM/UKAEA Fusion Association Culham Science Center, Abingdon (UK)*
- P-10.4** Design of a low-temperature plasma reactor for plasma-wall interactions studies with mixed materials targets
M. Redolfi¹, L. Colina Delacqua¹, G. Lombardi¹, X. Bonnin¹, A. Michau¹, K. Hassouni¹, J.L. Delastre²
¹ *LIMHP, Université Paris Nord, Villetaneuse (F)*
² *Boréal Plasma : groupe HEF, Varcès (F)*

CIP 09

International Colloquium on Plasma Processes Marseille, France

- P-10.5** Radiofrequency plasma jet cleaning inside tokamak deep gaps at atmospheric pressure
E.R. Ionita¹, C. Stancu¹, G. Dinescu¹, C. Grisolia²
¹ National Institute for Laser, Plasma and Radiation Physics, Magurele Bucharest (RO)
² Association Euratom/CEA, Saint Paul Lez Durance (F)
- P-10.6** Measurements of argon ions by tunable diode-laser induced fluorescence in a helicon discharge
T. Bieber, S. Bardin, L. de Pouques, F. Brochard, R. Hugon, J. Bougdira
Institut Jean Lamour, Vandoeuvre-lès-Nancy (F)
- P-10.7** Structural and spectroscopic analyses of plasma facing components extracted from the Tore Supra Tokamak
C. Martin¹, C. Pardanaud¹, R. Ruffe¹, C. Brosset², B. Pégourié², E. Tsitrone², P. Roubin¹
¹ PIIM, Université de Provence, Marseille (F)
² Association Euratom/CEA, Saint Paul Lez Durance (F)
- P-10.8** Study of elementary processes of plasma-wall interaction in fusion devices: Activation barrier for H/D adsorption on graphite surface
C. Thomas, E. Aréou, G. Cartry, J.M. Layet T. Angot
PIIM, Université de Provence, Marseille (F)
- P-10.9** Developing an improved plasma-wall interaction model for ITER safety safety code
J.C. Rivas¹, L.F. Errea²
¹ Universitat Politècnica de Catalunya (E)
² Universidad Autónoma de Madrid (E)
- P-10.10** Secondary plasma characteristics of the ITER Neutralizer. Comparison between hydrogen and lithium
F. Duré, A. Lifschitz, J. Bretagne, T. Minea, G. Maynard
LPGP, Université Paris-Sud, Orsay (F)
- P-10.11** Negative ion extraction using radiofrequency or “the RF filter”
B.M. Annaratone
PIIM, Université de Provence, Marseille (F)
- P-10.12** Cs and Cs⁺ transport in negative ion sources for NBI
S. Longo^{1,2}, P. Diomede¹, M. Capitelli^{1,2}
¹ Dipartimento di Chimica dell'Università di Bari (I)
² CNR-IMIP Bari, Bari (I)