

POSTER SESSIONS

Poster Session #1 - Tuesday 12 September (17:30 – 19:30)

DEPO / Plasma - deposited coatings for optical, electronical and other functionalities

- #015** Properties of a new TiTaZrHfW(-N) refractory high entropy film deposited by reactive DC pulsed magnetron sputtering
A. Bouissil¹, S. Achache¹, D.E. Touaibia¹, B. Panicaud², M. Arab Pour Yazdi³, F. Sanchette¹, M. El Garah¹
¹ LASMIS, Antenne de Nogent – Nogent (FR)
² LASMIS, Univ. Technologie de Troyes (UTT) - Troyes (FR)
³ FEMTO-ST, MN2S Department, Univ. Bourgogne Franche-Comté, UTBM, - Montbéliard (FR)
- #018** Effect of interfacial SiN_x ultra-thin film on optical and electrical properties of PVD antireflective coating
B. Hiba¹, G. Monier², L. Bideux², P. Hoggan², A.Z. Dagou³, R. Ergun³, A. Bousquet⁴, E. Tomasella⁴
¹ Institut Pascal (IP), Institut de Chimie de Clermont-Ferrand ICCF – Clermont-Ferrand (FR)
² Institut Pascal (IP) - Clermont-Ferrand (FR)
³ School of Engineering and Computing Sciences, Durham Univ. - Durham (UK)
⁴ Institut de Chimie de Clermont-Ferrand ICCF - Clermont-Ferrand (FR)
- #039** Development and characterization of chromium-based PVD coatings for the protection of stainless steel bipolar plates for PEM fuel cells
J. Orrit-Prat, R. Bonet, S. Molas, A. Concustell, M. Bahillo, J. Caro
Eurecat, Centre Tecnològic de Catalunya, Unit of Metallic and Ceramic Materials - Manresa (ES)
- #067** Tailoring surface properties of Zr-V thin films by competitive self-separation of crystalline and amorphous phases during sputtering
Q. Liebgott^{1,2}, A. Borroto³, S. Bruyère¹, A. Ahmed², D. Müller², S. Migot¹, F. Mücklich², D. Horwat¹
¹ Institut Jean Lamour - Nancy (FR)
² Univ. Saarlandes - Saarbrücken (DE)
³ Univ. Rennes - Saint-Brieuc (FR)
- #106** Design of transition metal carbonitride superlattice thin film systems and its influence on material properties
B. Schmid¹, N. Koutná¹, T. Schöngruber¹, T. Wojcik¹, S. Bühler-Paschen², S. Kolozsvari³, P.H. Mayrhofer¹
¹ TU Wien, Institute of Materials Science and Technology - Vienna (AT)
² TU Wien, Institute of Solid State Physics - Vienna (AT)
³ Plansee Composite Materials GmbH - Lechbruck am See (DE)
- #115** Engineering multifunctional thin films by plasma copolymerization
A. Riahi, J. Carneiro de Oliveira, A. Airoudj, V. Roucoules, F. Bally-Le-Gall
CNRS, IS2M UMR 7361, Univ. Haute-Alsace, Univ. Strasbourg - Mulhouse (FR)

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- #164** Very thin carbon films prepared by electron beam-plasma vacuum deposition on sapphire substrates: photoelectron emission properties
J. Huran¹, A.V. Skrypnik¹, V. Dujnič³, A.S. Doroshkevich¹, B. Zaťko², M.A. Nozdrin¹, E. Kováčová², G.D. Shirkov¹
¹ Joint Institute for Nuclear Research, Dubna (RU)
² Institute of Electrical Engineering, Slovak Academy of Sciences, Bratislava (SK)
³ Institute of Chemistry, Slovak Academy of Sciences, Bratislava (SK)

- #170** Advanced protective thin films for improving electrochemical and biomedical properties of stainless steels
A. Alhussein¹, E. Kaady¹, R. Habchi², S. Rtimi³
¹ Univ. Technology of Troyes - Nogent (FR)
² Lebanese Univ. - Beyrouth (LB)
³ École Polytechnique Fédérale de Lausanne - Lausanne (CH)

GROM / Thin films growth and modelling

- #003** Modeling of nanoscale AlGaIn/GaN heterostructure with field plated gate technology
M. Kaddeche¹, A. Telia², M. Soltani³
¹ Faculté des Sciences et de la Technologie, Univ. Djilali Bounaâma - Skikda (DZ)
² Lab. Microsystème et Instrumentation (LMI), Univ. Mentouri - Constantine (DZ)
³ IEMN-CNRS 8520, Univ. Lille, Villeneuve d'Ascq - Lille (FR)
- #063** Depth resolved XRD measurements using *in-situ* XRD during ion beam sputtering
D. Manova, S. Mändl
Leibniz Institute of Surface Engineering - Leipzig (DE)
- #123** "MISSTIC": a multi-tool experimental setup for magnetron sputtering deposition combined with *in situ* and real-time characterization
R. Zapata¹, H. Montigaud¹, M. Balestrieri¹, I. Gozhyk¹, R. Lazzari²
¹ Laboratoire Surface du Verre et Interfaces UMR 125 - Aubervilliers (FR)
² Institut des Nanosciences de Paris UMR 7588 - Paris (FR)
- #126** Augmented reality representation for the investigation of simulated inclined chromium thin films
N. Watiez, D. Cotton, A. Besnard, R. Lou, H. Birembaux, J. Outeiro
LaBoMaP - Cluny (FR)
- #149** Chromium carbide coatings by DC sputtering of a sintered target
A. Besnard¹, Y. Pinot¹, M.R. Ardigo-Besnard², S. Lucas³, E. Haye⁴, L. Chavée⁴
¹ Arts et Métiers Science and Technology - LaBoMaP - Cluny (FR)
² Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB) - Dijon (FR)
³ Innovative Coating Solutions (ICS) - Namur (BE)
⁴ Université de Namur, LARN laboratory, NISM - Namur (BE)

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HELIAG / Plasmas for health, agriculture and life science

- #044** Polysaccharide coatings for urinary catheters
A. Vesel¹, N. Recek¹, R. Zaplotnik¹, K. Kuzmic², L. Fras Zemljič²
¹ Jozef Stefan Institute - Ljubljana (SL)
² Univ. Maribor, Faculty of Mechanical Engineering - Maribor (SL)
- #099** Plasma polymer coatings of non-planar materials for bioapplications
L. Janu¹, D. Nečas¹, E. Dvořáková¹, M. Buchtelová¹, L. Zajíčková^{1, 2, 3}
¹ Plasma Technologies for Materials, CEITEC, Brno Univ. - Brno (CZ)
² Dpt. Condensed Matter Physics, Masaryk Univ. - Brno (CZ)
³ Dpt. Theoretical and Experimental Electrical Engineering, Brno Univ. - Brno (CZ)
- #101** Towards a development of integrated micro-electro-apta-sensors into a diabetes organoid-on-a-chip device
A. Aubert¹, G. Nonglaton¹, Y. Thomas¹, Y. Roupioz²
¹ Univ. Grenoble Alpes, CEA, LETI, DTBS - Grenoble (FR)
² Univ. Grenoble Alpes, CNRS, CEA, IRIG, SyMMES - Grenoble (FR)

ITEC / Innovations & Technologies

- #107** Industrial technology for ta-C coatings deposition
J. Kluson¹, M. Ucik¹, M. Jilek¹, A. Luemkemann², H. Bolvardi², B. Paul²
¹ Platit a.s. - Sumpark (CZ)
² Platit AG - Selzach (CH)
- #110** Innovative conformal deposition solution into TSV integration for oxide, nitride, and metal layers by pulsed liquid precursor injection
M. Segers, P.D. Szkutnik, A. Pageau
Plasma-Therm Europe - Bernin (FR)

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NANO / Nanomaterials and nanostructured thin films

- #017** Localized laser texturing of passivating nano-layer deposited by PVD for industrial olfactory sensors applications
S. Fabert¹, L. Dubost¹, S. Ponton¹, N. Morel², C. Herrier²
¹ IREIS, Groupe HEF - Andrézieux-Bouthéon (FR)
² ARYBALLE - Grenoble (FR)
- #076** Dielectric Barrier Discharge in nitrogen for the realization of nanocomposite layers using multifrequency excitation and gold salt precursors
E. Bizeray¹, A. Belinger¹, S. Dap¹, F. Fanelli², N. Naudé¹
¹ LAPLACE, Univ. Toulouse, CNRS, INPT, UPS - Toulouse (FR)
² National Research Council (CNR), NANOTEC, Univ. Bari 'Aldo Moro' - Bari (IT)
- #096** Zirconium-based nanocatalysts by sputtering onto glycerol and solid carbon
A. Caillard¹, S. Atmane¹, S. Fazeli¹, E. Millon¹, A.L. Thomann¹, P. Brault¹, N. Neha², T. Rafaideen², C. Coutanceau²
¹ GREMI, Univ. Orléans / CNRS - Orléans (FR)
² IC2MP, Univ. Poitiers / CNRS - Poitiers (FR)
- #132** Direct liquid reactor-injector of nanoparticles: a safer-by-design aerosol injection for nanocomposite thin-film deposition adapted to various plasma-assisted processes
L. Stafford¹, G. Carnide², L. Cacot¹, N. Naudé², M. Kahn³, R. Clergereaux³
¹ Univ. Montréal - Montréal (CA)
² CNRS-LAPLACE - Toulouse (FR)
³ CNRS-LCC - Toulouse (FR)
- #144** Optical and structural analysis of silicon nitride co-doped with erbium and ytterbium
A. Brik, S. Naama, K. Benfadel
CRTSE (DZ)

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PROC / Process control (including plasma diagnostics, plasma modelling)

- #023** Time-resolved plasma diagnostics by means of modified RF probe in different reactive deposition systems: HiPIMS, hollow cathode and E-CVD
A. Kapran¹, M. Čada¹, P. Niiranen², R. Hippler¹, H. Nadhom², H. Pedersen², D. Lundin², Z. Hubička¹
¹Dpt. Low-Temperature Plasma, Institute of Physics v.v.i. - Prague (CZ)
²Dpt. Physics, Chemistry and Biology (IFM), Linköping Univ. - Linköping (SE)
- #071** Study of the ion energy distribution in the ALE process of GaN
A. Crespi¹, L. Hamraoui¹, T. Zhang¹, P. Lefauchaux¹, T. Tillocher¹, M. Boufnichel², R. Dussart¹
¹GREMI - Orléans (FR)
²ST-Microelectronics - Tours (FR)
- #098** Optical diagnostics of a N₂/Ar microplasma for the deposition of hexagonal boron nitride
B. Menacer, A. Remigy, C. Lazzaroni, K. Gazeli, G. Lombardi, S. Prasanna, X. Aubert
Univ. Sorbonne Paris Nord, LSPM, CNRS - Villetaneuse (FR)
- #129** Tuning plasma-droplet interactions in Dielectric Barrier Discharge at atmospheric pressure for thin-film deposition
L. Stafford¹, L. Cacot¹, R. Clergereaux², N. Naudé³
¹Univ. Montréal - Montréal (CA)
²CNRS-LAPLACE - Toulouse (FR)
³UPS-LAPLACE - Toulouse (FR)
- #131** Time-resolved optical emission spectroscopy analysis of a low-pressure RF plasma with pulsed injection of argon, pentane and ZnO nanoparticles
M. Dion^{1,2}, R. Clergereaux², L. Stafford¹
¹Univ. Montréal - Montréal (CA)
²LAPLACE - Toulouse (FR)
- #137** Developing a method with optical emission spectroscopy to control thin layer in R-HiPIMS deposition process
D. Boivin¹, A. Najah¹, R. Jean-Marie-Désirée², S. Cuyenet², L. De Poucques²
¹GREMI, UMR7344 Univ. Orléans/CNRS - Orléans (FR)
²Univ. Lorraine, CNRS, IJL, Campus ARTEM - Nancy (FR)
- #142** Study of N₂/H₂ plasmas produced by an active screen source: contamination due to NO production and role of hydrogen in the gas mixture
R. Hugon¹, G. Marcos¹, O. Carrivain², C. Noël¹, T. Czerwec¹
¹Institut Jean Lamour (IJL), Département CP2S, UMR 7198 CNRS, Univ. Lorraine - Nancy (FR)
²HEPIA/HES-SO, Univ. Applied Sciences of Western Switzerland - Geneva (CH)
- #163** A comparison between simulation & experimental results of a low-pressure argon plasma generated by ECR
Y. Fermi, T. Maho, P. Guillot
Laboratoire Diagnostics des Plasmas Hors Equilibre, Univ. Toulouse, INU Champollion - Albi (FR)
- #174** Impact of electronegativity and monoenergetic electrons on the properties of electrostatic sheaths in magnetized discharge plasmas
S. Chekour¹, A. Tahraoui¹, Z. Kechidi², N. Rebiai¹, N. Fouial¹, F. Abdedou¹
¹Quantum Electronics Laboratory, Faculty of Physics, USTHB (DZ)
²Laboratory of Electrical Engineering and Automatics - Media (DZ)

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SOUR / Plasma sources and electrical discharges

- #004** Few-body approximation in atomic and molecular physics
S. Pozdneev
FIAN - Moskow (RU)
- #005** Application of multiple scattering approximation to the calculation ion-atom and ion-molecular collision
S. Pozdneev
Pozdneev - Moskow (RU)
- #152** O₂ shielding modulates the spatiotemporal density of Ar(1s₅) in argon atmospheric-pressure micro-plasma jets
J. Santos Sousa¹, D. Goncalves^{1,2}, G. Bauville¹, P. Jeanney¹, L. Lemos Alves², M. Lino da Silva², S. Pasquiers²
¹ *Univ. Paris-Saclay, CNRS, Laboratoire de Physique des Gaz et des Plasmas - Orsay (FR)*
² *Instituto de Plasmas e Fusão Nuclear, Instituto Superior Técnico, Univ. Lisboa - Lisboa (PT)*
- #158** New micro-plasma reactors for the synthesis of heterostructures of 2D films of hexagonal boron nitride and graphene
A-A. Halfaoui, G. Bauville, S. Pasquiers, J. Santos Sousa
Univ. Paris-Saclay, CNRS, Laboratoire de Physique des Gaz et des Plasmas - Orsay (FR)

POSTER SESSIONS

Poster Session #2 – Wednesday 13 September (16:35 – 18:30)

DEPO / Plasma - deposited coatings for optical, electronical and other functionalities

- #021** Plasma magnetron sputtering using combinatorial approach to deposit complex alloys thin films
D. Boivin¹, A. Jagodar¹, A. Caillard¹, M. Cavarroc², P. Brault¹, A.L. Thomann¹
¹ GREMI, UMR 7344 Université d'Orléans/CNRS - Orléans (FR)
² SAFRAN Tech - Magny-Les-Hameaux (FR)
- #026** Effect of tantalum addition on properties of Cu–Zr–based thin film metallic glasses (TFMGS)
S. Achache
LASMIS (FR)
- #032** Solar-blind photodetectors based on β -Ga₂O₃ fabricated by oxygen plasma assisted-pulsed laser deposition
E. Kim, T. Kim, Y. Kim, W.C. Jeong
Department of Physics, Hanyang Univ. - Seoul (KR)
- #069** Control of the oxidation state of copper and nickel atoms in reactively sputtered oxide thin films
R. El Beainou¹, D. Pilloud¹, S. Xing², B. Kierren¹, J.F. Pierson¹, F. Capon¹
¹ Université de Lorraine, CNRS, IJL - Nancy (FR)
² CRYOSCAN, Campus Artem - Nancy (FR)
- #090** Plasma decontamination of surfaces using a microwave torch – assessment of the additional role of a TiO₂ photocatalytic layer
C. Dublanche-Tixier¹, L. Renoux¹, L. Youssef¹, P. Tristant¹, C. Chazelas¹, C. Maftah², P. Leprat²
¹ Univ. Limoges, CNRS, IRCER, UMR 7315 - Limoges (FR)
² Univ. Limoges, E2Lim - Limoges (FR)
- #094** Elaboration and characterization of WO₃/TiO₂ nanostructured photoanodes for solar water splitting
J. Pulpytel, T. Lang, F. Arefi-Khonsari, A. Pailleret
LISE (UMR8235) - Sorbonne Univ. - CNRS - Paris (FR)
- #130** Superelastic TiZrNb and TiZrNbSn coatings for biomedical applications
G. Abadias¹, T. Choquet^{1,2}, H. Chigama³, A. Fillon⁴, A. Michel¹, D. Laille⁴, Y. Robin¹, P. Vigneron³, M. Vayssade³, T. Gloriant⁴
¹ Institut Pprime - Poitiers (FR)
² INSA Rennes - Rennes (FR)
³ Univ. Technologie de Compiègne - Compiègne (FR)
⁴ INSA Rennes - Rennes (FR)

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GROM / Thin films growth and modelling

- #007** The influence of structural design on the properties of TiN coatings
D. Munteanu¹, I. Borsan¹, C. Gabor¹, M.A. Pop¹, C. Lopes², F. Macedo², M. Rodrigues², F. Vaz²
¹ Transilvania Univ. - Brasov (RO)
² Minho Univ. - Braga (PT)
- #070** Modelling of thin film deposition into nanofibrous mats
D. Nečas
CEITEC, Brno Univ. of Technology - Brno (CZ)
- #103** Non-reactive magnetron sputtering of Al-N coatings
B. Hajas¹, R. Janknecht¹, A. Foki¹, T. Wojcik¹, P. Daniel², K. Szilard³, P.H. Mayrhofer¹
¹ TU Wien, Institute of Material Science and Technology - Vienna (AT)
² Department of Physics and Astronomy, Applied Nuclear Physics, Uppsala Univ. - Uppsala (SE)
³ Plansee Composite Materials GmbH - Lechbruck am See (DE)
- #127** Analyse of the angular distribution of the columns of chromium tilted thin films through a comprehensive simulation
N. Watiez¹, A. Besnard¹, P. Moskovkin², R. Lou¹, H. Birembaux¹, J. Outeiro¹, S. Lucas²
¹ LaBoMaP - Cluny (FR)
² LARN - Namur (BE)
- #134** Biased reactive high power impulse sputtering of silica
M. Serényi, G. Safran
MFA Center of Energy Research - Budapest (HU)

PLACC / Plasmas for conversion and catalysis

- #014** Synthesis of nanoparticles by reactive magnetron sputtering on ionic liquid for photocatalytic applications, from metallic to Bi-based compound nanoparticles
A. Bousquet¹, S. Ibrahim¹, V. Ntomprougkidis¹, M. Traikia¹, G. Monier², J.M. Andanson¹, P. Bonnet¹
¹ ICCF - Clermont-Ferrand (FR)
² IP - Clermont-Ferrand (FR)
- #047** Dissociation of ammonia by microwave discharges in medium pressure range: an experimental study
M. Awaji, T. Belmonte, C. Noel, M. Belmahi, T. Gries
Univ. Lorraine, CNRS, IJL - Nancy (FR)
- #086** Spark ablation synthesis of nanoparticles for fuel cell catalyst applications
D. Shapko, M.S. Garapati, T. Němec
Dpt. Electrical Engineering and Electrophysics, Institute of Thermomechanics - Prague (CZ)

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NANO / Nanomaterials and nanostructured thin films

- #029** Creation of pure and homogeneous carbon nanoparticles from laser-induced carbon vapors
A. Kaczmarek, J. Hoffman
Institute of Fundamental Technological Research Polish Academy of Sciences - Warsaw (PL)
- #054** GLAD sputtering of nanostructured Ta thin films: influence of deposition angle on electrical resistivity at cryogenic temperature
H. Gerami, J.M. Cote, R. Salut, N. Martin
Institut FEMTO-ST, UMR 6174, CNRS Univ. Bourgogne Franche-Comté - Besançon (FR)
- #072** Galvanic corrosion-based antibacterial bimetallic nanoparticles produced by cylindrical gas aggregation source
N. Khomiakova¹, D. Nikitin¹, H. Biederman¹, M. Cieslar¹, Y. Al-Muhkhrabi², D. Kahoun², J. Lieskovská², J. Kratochvíl², O. Kylián¹
¹ Charles Univ., Faculty of Mathematics and Physics, Prague (CZ)
² Univ. South Bohemia, Faculty of Science, České Budějovice (CZ)
- #085** Pulsed laser deposition of nanostructured Mo thin films on AlN substrate for heat sink applications: growth characterization and thermal diffusivity measurements
M. Tabbal¹, Z. Harajli¹, M. Kazan¹, M. Soueidan², Z. Herro³, D. Fabregue⁴
¹ American Univ. Beirut - Beirut (LB)
² Lebanese CNRS - Beirut (LB)
³ Lebanese Univ. - Fanar (LB)
⁴ INSA-Lyon - Lyon (FR)
- #118** Laser beam nanostructuring of Gadolinium-Doped Cerium oxide (GDC) oxide thin films deposited by plasma magnetron sputtering
A-L. Thomann¹, W. Karim¹, A. Petit¹, E. Millon¹, J. Vuillet², M. Tabbal³, N. Semmar¹
¹ GREMI CNRS/Univ. Orléans - Orléans (FR)
² CEA Le Ripault - Mons (FR)
³ American Univ. Beirut - Beirut (LB)

Poster Session #2 – Wednesday 13 September (16:35 – 18:30)

SURF / Plasma - surface interactions

- #059** *In-situ* FTIR spectroscopic analysis of plasma activation and plasma polymer film deposition on polylactid acid
H. Müller, S. Golebiowska, G. Grundmeier
Technical and Macromolecular Chemistry, Paderborn Univ. - Paderborn (DE)
- #109** Plasma electrolytic oxidation of aluminium with incorporation of carbon black nanoparticles
L. Magniez¹, S. Fontana¹, J. Martin^{1, 2}, C. Hérold¹, G. Henrion^{1, 2}
¹ *Univ. Lorraine, CNRS, Institut Jean Lamour - Nancy (FR)*
² *Univ. Lorraine, LabEx DAMAS - Metz (FR)*
- #136** How to functionalize PVD ZrCu-based thin film metallic glasses? Effect of an ultrashort laser surface treatment
**P. Steyer¹, N. Lebrun¹, Z. Fernandez Gutierrez², H. Bruhier³, M. Prudent³,
C. Der Loughian¹, S. Dassonneville¹, A. Borroto², F. Bourquard³, M. Rousseau⁴,
J.F. Pierson², J.P. Colombier³, F. Garrelie³**
¹ *INSA-Lyon, MATEIS Lab. - Villeurbanne (FR)*
² *Univ. Lorraine, IJL - Nancy (FR)*
³ *Univ. St Etienne, LabHC - St-Etienne (FR)*
⁴ *Univ. St Etienne, Sainbiose Lab. - St-Etienne (FR)*
- #138** Functionalization of MIL-53(Al) by means of ECR plasma treatment: a feasibility study
R. Jean-Marie-Desiree¹, A. Najah², G. Marcos¹, S. Cuynet¹, L. De Poucques¹
¹ *IJL - CNRS - Nancy (FR)*
² *GREMI - CNRS - Orléans (FR)*
- #155** Increasing the hydrogen storage capacities of MIL-53 Al by amino-grafting functionalization using an impulse Dielectric Barrier Discharge plasma
**A. Najah¹, D. Boivin², R. Jean-Marie Desirée³, R. Luan Sehn Canevesi⁴, V. Fierro⁴,
L. De Poucques³, G. Henrion³, S. Cuynet³**
¹ *GREMI, UMR7344 Univ. Orléans/CNRS - Bourges (FR)*
² *GREMI, UMR7344 Univ. Orléans/CNRS - Orléans (FR)*
³ *Univ. Lorraine, CNRS, IJL - Nancy (FR)*
⁴ *Univ. Lorraine, CNRS, IJL - Epinal (FR)*
- #157** Plasma surface modification of glass and stainless steel by an atmospheric-pressure air DBD treatment
A. Najah, F. Faubert, I. Géraud-Grenier, M. Wartel, S. Pellerin
GREMI, UMR7344 Univ. Orléans/CNRS - Bourges (FR)
- 159** Study by Optical Emission Spectroscopy (OES) of the characteristics of the plasma jet produced by an Axial Injection Torch (TIA): influence of a substrate placed on the jet axis
C. Chazelas, L. Renoux, P. Tristant, C. Dublanche Tixier
Univ. Limoges, CNRS, IRCER, UMR 7315 - Limoges (FR)

Poster Session #2 – Wednesday 13 September (16:35 – 18:30)

TRIB / Plasma - deposited protective and tribological coatings

- #013** Mechanical properties and tribological performances of AlTiZrTaHf(-N) high entropy nitrides deposited by reactive magnetron sputtering
M. El Garah¹, D.E. Touaibia¹, S. Achache¹, A. Michau², E. Sviridova³, P.S. Postnikov³, M.M. Chehimi⁴, F. Schuster², F. Sanchette¹
¹ LASMIS, Antenne de Nogent - Nogent (FR)
² Commissariat à l'Energie Atomique et aux énergies alternatives (CEA) Saclay, Gif-Sur Yvette (FR)
³ Research School of Chemistry & Applied Biomedical Sciences, Tomsk Univ. - Tomsk (RU)
⁴ Univ. Paris, ITODYS, UMR CNRS 7086 - Paris (FR)
- #038** Development and characterization of ultra-hard DLC coatings for high quality machining of high strength aluminium alloys
J. Caro¹, G. Ramirez¹, J.M. Gonzalez Castro², J. Orrit-Prat¹, R. Bonet¹, N. Cuadrado¹, M. Visaleca¹, L. Carreras³
¹ Eurecat, Unit of Metallic and Ceramic Materials - Manresa (ES)
² Eurecat, Unit of Applied Artificial Intelligence - Cerdanyola del Vallès (ES)
³ Tratamientos Térmicos Carreras S.A. - Sabadell (ES)
- #056** Properties of tungsten-tantalum diboride coatings deposited by HiPIMS
R. Psiuk, T. Moscicki
Institute of Fundamental Technological Research PAS - Warsaw (PL)
- #057** Study on tribological properties of niobium-titanium thin films doped with different contents of Al, N and C
J-L. Lin¹, H.J. Tsai², J.H. Horng¹, W.H. Kao³, B.Y. Chen⁴
¹ Dpt. Power Mechanical Engineering, National Formosa Univ. - Yunlin (TW)
² Dpt. Mechanical Engineering, Wu Feng Univ. - Chiayi (TW)
³ Dpt. Automation Engineering & Institute of Mechatronoptics Systems, Chienkuo Univ. – Changhua (TW)
⁴ Dpt. Mechanical Engineering, National Cheng Kung University - Tainan (TW)
- #066** Comparison of high-temperature tribological properties in different high-entropy sublattice ceramic coatings
A. Kretschmer¹, H. Rojacz², E. Badisch², P. Polcik³, P.H. Mayrhofer¹
¹ Institute of Materials Science and Technology, TU Wien - Vienna (AT)
² AC2T Research GmbH - Wiener Neustadt (AT)
³ Plansee Composite Materials GmbH - Lechbruck am See (DE)
- #083** Effect of annealing temperature on morphological and microstructural properties of CrN-MoN multilayers deposited by reactive magnetron sputtering
R. Mareus¹, A. Caillard¹, A.L. Thomann¹, G. Rosiere^{1,2}, C. Richard³, M. Amigou²
¹ GREMI UMR7344, Univ. Orléans / CNRS - Orléans (FR)
² BorgWarner France, Injection systems automotive supplier - Blois (FR)
³ GREMAN UMR 7347 Univ. Tours / CNRS - Tours (FR)
- #114** Zirconium-based thin film metallic glasses prepared by magnetron sputtering
P. Souček¹, J. Ženíšek¹, T. Schmidtová¹, V. Buršíková¹, P. Vašina¹, A. Kubíček², V. Sochora²
¹ Masaryk Univ. - Brno (CZ)
² SHM s.r.o. - Šumperk (CZ)
- #156** Increasing the thickness of sputtered Cr films by HiPIMS-DOMS
S. Adebayo, R. Serra, J. Oliveira
CEMMPRE, Univ. Coimbra - Coimbra (PT)

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- #176** Influence of temperature on the properties of W-Ti-B coatings deposited with the HIPIMS method
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