

## Confirmed posters (at June 6<sup>th</sup> 2017)

### **Session 1: Formation of anodic films on Al, Ti, Mg alloys** (Reaction mechanisms, formation and organization of the porosity (self-assembly, nanoindentation), modeling)

- 1-10 **The morphological transition of anodic TiO<sub>2</sub> nanostructures in HF-based mixture electrolytes**, Jihyeon Park, Korea
- 1-48 **Tuning the pore ordering in anodic alumina films via symmetry of the Al substrate**, Ilya Roslyakov, Russia
- 1-51 **Anodizing of aluminum alloy 1050 in phosphoric and sulfophosphoric medium**, Vincent Cartigny, France
- 1-75 **3D nanoporous titania formed by anodization as promising photoelectrode materials**, Grzegorz D. Sulka, Poland
- 1-80 **Estimating the quality of thin aluminum layers through their anodizing behavior**, Jakub Kolar, Czech Republic
- 1-84 **Nanoporous anodic aluminium oxide : effect of aluminium purity and the barrier layer thinning**, Naima Mansouri, Algeria
- 1-86 **Influence of anodization voltage on the surface morphology and photoelectrochemical activity of TiO<sub>2</sub> nanotube layers**, Leyla Rebek, Algeria
- 1-89 **In situ diagnostics of coating thickness for industrial scale hard anodization of aluminium**, Evgeny Parfenov, Russia
- 1-103 **Preparation and characterizations of AAO porous templates obtained by self-assembly for next-generation nanointerconnects**, Laurent Arurault, France

### **Session 2: Specific anodizations** (Local or horizontal anodizations, other electrical modes (pulsed or AC), other media (organic or molten salts), other substrates (Nb, W ...))

- 2-15 **Investigation of pulse anodization parameters on the production of anodic alumina oxide (AAO)**, Francisco Trivinho-Strixino, Brazil
- 2-64 **The effect of anodizing parameters on the formation of ZnO nanowires during anodic oxidation of zinc in bicarbonates electrolytes**, Leszek Zaraska, Poland
- 2-100 **Effect of the substrate composition on the anodic titanium oxide formation**, Marta Michalska-Domanska, Poland

### **Session 3: Formation of MAO films** (Reaction mechanisms, micro-arc formation, modeling)

- 3-7 **Influences of negative duty cycle on the characteristics of micro-arc oxidation coated magnesium-lithium alloy**, Le-Hung-Toan Do, Taiwan, R.O.C.
- 3-24 **Current and frequency role in energy efficiency of PEO treatment of aluminium with precursor films**, Raul Arrabal, Spain
- 3-29 **Electrolyte ageing: does it matter in the plasma electrolytic oxidation process ?**, Gérard Henrion, France
- 3-59 **Effect of sodium silicate on the electrochemical behavior of 1050 alloy during MAO**, Emmanuel Rocca, France
- 3-82 **Studies on the surface conditions of titanium alloy processed by the method of plasma electrolytic polishing with different electrolyte recipe**, Wang, Lishi, China
- 3-96 **Effect of multi-step plasma electric oxidation on structure and corrosion resistance of anodic films formed on AZ31 magnesium alloy**, Sachiko Ono, Japan
- 3-104 **Micro-arc anodizing of zinc in alkaline media**, Emmanuel Rocca, France
- 3-105 **Initial stages of micro-arc anodizing of 2214 aluminum alloys**, Emmanuel Rocca, France

### **Session 4: Anodic / MAO films for protection against corrosion** (Green sealings, sealing mechanism, anticorrosion)

- 4-42 **Fabrication of environmentally friendly anti-corrosive multi-layer structure composite coatings on AZ31B Mg alloys**, Zhaohua Jiang, China
- 4-52 **Comparative evaluation of anodized AA2024-T3 aircraft alloy samples with and without subsequent Cerium conversion coating**, Stephan Kozhukharov, Bulgaria
- 4-56 **Corrosion behavior of anodic alumina support used for photocatalytic application**, Lamia Bouchama, Algeria
- 4-58 **Growth behaviour and corrosion properties of low-voltage plasma electrolytic oxidation coatings on a die-cast AM50 magnesium alloy**, Vahid Dehnavi, Canada

### **Session 5: Colored anodic / MAO films** (Pigments and dyes and their modes of action, thermo-optical properties, coloring)

- 5-20 **Photoluminescence in anodic alumina oxide (AAO) membranes prepared by galvanostatic anodization of Al**, S. Janaina Santos, Brazil
- 5-36 **Development of environment friendly plasma anodizing method for Magnesium press and casting alloys**, Sung Hyung Lee, Japan
- 5-38 **Colour control of metal-anodic aluminium oxide-Al nanostructures by morphological parameters of self-ordered anodic aluminium oxide films**, Vicente Manzano Cristina, Switzerland
- 5-50 **Influence of AC-polarization parameters on incorporated nickel in alumina films**, Christian Girginov, Bulgaria
- 5-69 **Vanadium oxide in Plasma Electrolytic Oxidation coatings**, Gérard Henrion, France
- 5-102 **Electro-chemical colorings of anodic films prepared on 7175 aluminium alloy for space applications**, Jerome Roche, France

### **Session 6: Anodic / MAO films for mechanical properties (Tribology, fatigue...)**

- 6-1 **Anodic plasma electrolytic polishing of medium carbon steel after nitriding**, Sergei Kusmanov, Russia
- 6-2 **Anodic plasma electrolytic nitrocarburising of Ti-6Al-4V alloy**, Irina Kusmanova, Russia
- 6-3 **Anode saturation of steel with boron and carbon in aqueous electrolyte**, Pavel Belkin, Russia
- 6-5 **Plasma Electrolytic Oxidation of TA6V for the improvement of its surface hardness**, Marie Laveissière, France
- 6-65 **New development of multifunctional coating for rain erosion, corrosion resistance and aesthetical aerospace requirements of aluminum large parts by plasma electrolytic oxidation**, Julien Escobar, France
- 6-81 **Mechanisms involved in the decrease in fatigue life of anodized Aluminium alloys**, Catherine Mabru, France

### **Session 7: Other functionalizations of anodic / MAO films (Biocompatible coatings, electrical properties...)**

- 7-8 **TiO<sub>2</sub> nanotubes with a doping of Mo by single step anodization and potential shock**, DOUNGHEUN HA, Korea
- 7-9 **A simple spray coating of bismuth oxide on TiO<sub>2</sub> nanotube arrays for lithium ion battery anode material**, Kim Namyoul, Korea
- 7-39 **The oxide coating modified with transition metals (Ni, Co, Cu) prepared by plasma electrolytic oxidation and its Fenton-like activity by degradation of phenol**, Jiankang Wang, China
- 7-40 **Preparation of TiO<sub>2</sub> nanotube/C/Mn<sub>x</sub>O<sub>y</sub> nanostructured composite for high performance electrochemical capacitive energy storage**, Qixing Xia, China
- 7-57 **Insulating properties of hot dip aluminized microarc oxidation coatings on stainless steel**, Jung-Chou Hung, Taiwan
- 7-62 **Some peculiarities of MAO treatment of Ti-15Mo alloy**, Snizhko Lyubov, Ukraine
- 7-72 **Interaction of surface modified nanoporous anodic titanium oxide layers with osteoblast-like cells line SAOS-2**, Grzegorz D. Sulka, Poland
- 7-73 **Effect of the anodization potential on the apatite-forming ability of anodic titanium oxide layers**, Grzegorz D. Sulka, Poland
- 7-74 **Influence of different morphology of anodic titanium oxide on a photodegradation of dye**, Grzegorz D. Sulka, Poland
- 7-78 **VOC degradation and wastewater purification using TiO<sub>2</sub> nanostructures obtained by anodic oxidation**, Davide Prando, Italy
- 7-85 **Functionalization of PEO coatings with RGD-modified phosphonic acid derivatives for improved biocompatibility of nanostructured titanium implants**, Evgeny Parfenov, Russia
- 7-94 **Investigation of PEO coatings on nanostructured titanium for biomedical applications**, Evgeny Parfenov, Russia
- 7-95 **Investigation of PEO coatings on nanostructured Mg1Ca alloy for biodegradable implants**, Veta Mukaeva, Russia

### **Session 8: Membranes, templates and composites (Preparation and functionalization (by MOFs, CNTs ...) of membranes or templates)**

- 8-23 **Electrochemical barrier layer thinning of anodic alumina templates for nanofabrication of nanowires**, Wojciech J. Stepniowski, Poland
- 8-53 **Silver nanowire array electrodes for electrocatalytic reduction of trichloromethane in aqueous solutions**, Anna Brudzisz, Poland
- 8-54 **Fast and efficient method for preparation of anodic Al<sub>2</sub>O<sub>3</sub> membranes formed by anodization in sulfuric acid**, Anna Brudzisz, Poland
- 8-76 **Synthesis of semiconducting InSb nanowires with different diameters using anodic aluminium oxide (AAO) templates**, Grzegorz D. Sulka, Poland