

Session Program

17-22 Jun 2018



15th European Vacuum Conference (EVC-15)
Thin Films & Surface Engineering

Monday 18 June

09:55

Thin Films & Surface Engineering: 1

Session | **Location:** CICG, Room 2 | **Convener:** Matjaz Panjan

09:55–10:15

Semiconductor Thin Films by Hybrid Pulsed Laser Deposition Methods

Speaker

Prof. Reinhard Schwarz

10:15–10:36

Structure, thermal stability and oxidation resistance of TiBN PVD hard coatings

Speaker

Paulina Zackova

10:55

11:15

Thin Films & Surface Engineering: 1

Session | **Location:** CICG, Room 2 | **Convener:** Matjaz Panjan

11:15–11:35

Microstructure, Stress Gradients, and Mechanical Properties in Diamond Films Revealed by Cross-sectional X-ray Nanodiffraction and Microcantilever Testing

Speaker

Mr David Gruber

11:35–11:55

In-Situ²: In-Situ High-Temperature High-Energy X-Ray Diffraction and In-Situ Micromechanical Testing of nanostructured AlCrSiN-AlCrN multilayer coating prepared by reactive arc evaporation

Speaker

Mr Michael Meindlhumer

11:55–12:15

Controlling the Boron-to-Titanium Ratio in Magnetron-Sputter-Deposited TiB_x Thin Films via Preferential Ionization of Sputter-Ejected Ti

Speaker

Ivan Petrov

12:15

Tuesday 19 June

09:30

Thin Films & Surface Engineering: 2

Session | **Location:** CICG, Room 2 | **Convener:** Ming Show Wong

09:30–09:50

The influence of post-deposition annealing on the microstructure of TiZrV non-evaporable getter coatings, their activation behaviour, and pumping speed.

Speaker

Mr Theo Sinkovits

09:50–10:10

The role of oxygen in sputtering of ZnO films for ZnO nanorod-based devices

Speaker

Petr Novák

10:10–10:30

Effect of Growth Temperature on the Structure of CoCrFeNiCu High Entropy Alloy Films

Speaker

György Radnóczy

10:30

10:50

Thin Films & Surface Engineering: 2

Session | **Location:** CICG, Room 2 | **Convener:** Ming Show Wong

10:50–11:30

Functional Metal-Oxide and Diamond-like Carbon Thin Films using Standard and High Power Impulse Magnetron Sputtering

Speaker

Dr Asim Aijaz

11:30–11:50

Magnetron Sputter Deposition of Ti-Nb Coatings on AISI 316L Stainless Steel

Speaker

Prof. Pedro Nascente

11:50

13:20

Thin Films & Surface Engineering: 3

Session | **Location:** CICG, Room 2 | **Convener:** Daniel Lundin

13:20–13:40

Surface modification of a TiN coated steel by ion beam dynamic mixing

Speaker

Prof. Toshiro Kobayashi

13:40–14:00

Temperature stability of decorative electro-magnetic transparent metal-semiconductor thin-films

Speaker

Dr Bastian Stoeher

14:00–14:20

Investigation of the influence of molecular and atomic nitrogen ion species during epitaxial nitride thin film growth**Speaker**

Mr Michael Mensing

14:20–14:40

Remote Anode Assisted Magnetron Sputtering (RAAMS) of Cr-based Hard Coatings for Tribological Applications**Speaker**

Dr Ganesh Kamath

15:00

15:20

Thin Films & Surface Engineering: 3**Session** | **Location:** CIG, Room 2 | **Convener:** Daniel Lundin

15:20–15:40

In-situ electrical characterization on dipole formation on MoS₂ by atomic layer deposition**Speaker**

Jiyoung Kim

15:40–16:00

Plasma-based substrate modification for highly c-axis oriented growth of AlN and Al_{1-x}Ga_xN thin films by reactive magnetron sputtering**Speaker**

Dr Agnė Žukauskaitė

16:00–16:21

Deep oscillation versus direct current magnetron sputtering of AlN thin films for acoustic biosensors**Speaker**

Olimpia Salas

16:40

Wednesday 20 June

09:30

Thin Films & Surface Engineering: 4

Session | **Location:** CICG, Room 2 | **Convener:** Pedro Nascente

09:30–10:10

Specific features of thin film metallic glasses and their elastic properties relationship

Speaker

Philippe Djemia

10:10–10:30

Comprehensive Thin Film Analysis by Cross-sectional X-ray Nanodiffraction

Speaker

Dr Juraj Todt

10:30

10:50

Thin Films & Surface Engineering: 4

Session | **Location:** CICG, Room 2 | **Convener:** Pedro Nascente

10:50–11:10

Generation of an energy and mass selective hyperthermal ion beam for investigation of ion-assisted thin film growth processes

Speaker

Jürgen W. Gerlach

11:10–11:30

Brittle film-induced cracking of ductile substrates

Speaker

Prof. Xiaolu Pang

11:30–11:50

Catalytic Performance of Coated Hollow Glass Microspheres

Speaker

Dr Eisenmenger-Sittner Christoph

11:50–12:10

LHC Beam Vacuum Evolution during Run 2 Machine Operation

Speaker

Christina Yin Vallgren

12:10

13:20

Thin Films & Surface Engineering: 5

Session | **Location:** CICG, Room 2 | **Convener:** Jörg Patscheider

13:20–13:40

Structure and properties of ion-assisted and co-sputtered Ti-Zr-B hard and superhard coatings

Speaker

Prof. Ming Show Wong

13:40–14:00

Trapped aqueous films lubricate a highly-hydrophobic surface.

Speaker

Dr Irit Rosenhek-Goldian

14:00–14:20

Novel Superhydrophobic Cellulose Coating and Its Multifunctional Applications

Speaker

Prof. Sunanda Roy

14:20–14:40

Thin Films of Trimeric Surfactant as Boundary Lubricants

Speaker

Dr Nir Kampf

14:40–15:00

Tribological and electrical characterization of Ag/Rh coating pair for sliding RF contact application for ITER

Speaker

Mr Zhaoxi CHEN

15:00