



European Materials Research Society



# Spring Meeting 2018

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## SYMPOSIUM K

### Defect-induced effects in nanomaterials

Symposium Organizers :

**Nikolai A. SOBOLEV**, University of Aveiro, Portugal

**Flyura DJURABEKOVA**, University of Helsinki, Finland

**Eugene KOTOMIN**, University of Latvia, Riga / MPI, Stuttgart, Germany

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- 16:30 **Nano-sculpturing thin films of Ag-O based in the Glancing Angle Deposition (GLAD). Comparative study of the zigzag and helical n** K PII.2  
F. Chaffar Akkari,1,\* A. Khoualdia 2, D. Demaille,3 B. Gallas 3 and M. Kanzari 1  
1 Laboratoire de Photovoltaïque et Matériaux Semiconducteur-ENITunis - Université Tunis ElManar, Tunis, Tunisie, 2 Faculté des sciences de Annaba, université Badji Mokhtar, Annaba-Algérie, 3 CNRS, UMR 7588, INSP, F-75005, Paris, France Sorbonne Universités, UPMC Unis Paris 06, UMR 7588, INSP, F-75005, Paris France
- 16:30 **HRTEM study of size-controlled Bi quantum dots in annealed GaAsBi/AlAs MQW structure** K PII.46  
Martynas Skapas, Renata Butkutė, Sandra Stanionytė, Evelina Posingytė  
Center for Physical Science and Technology, Vilnius, Lithuania
- 16:30 **Fe:STO thin film preparation by PLD: Dependence of the chemical composition and structure on the preparation conditions** K PII.28  
Stefanie Taibl, Maximilian Morgenbesser, Andreas Limbeck, Jürgen Fleig  
Vienna University of Technology, Institute of Chemical Technologies and Analytics, 1060 Vienna, Austria
- 16:30 **The effect of surface defect on photoluminescence of PbS quantum dots** K PII.51  
D.V. Gulyaev, I.A. Aleksandrov, S.A. Bacanov, A.K. Gutakovskii and K.S. Zhuraviev  
Rzhanov Institute of Semiconductor Physics, 630090, Novosibirsk, Russia, pr. Lavrentieva 13
- 16:30 **Manganese implantation into Ti2AlC: towards magnetic MAX phases** K PII.18  
F. Mignerot, M.-L. David, V. Mauchamp, T. Cabioch  
Institut Pprime - CNRS-Université de Poitiers-ENSMA SP2MI-Bd Marie et Pierre Curie - BP 30179 86962 Futuroscope Chasseneuil cedex France
- 16:30 **WO3 nanostructures for the photocatalytic reduction of CO2 into fuels** K PII.17  
Anna Andreassen Wilson  
Dr Andreas Kafizas, Dr Camille Petit, Dr Laia Francas
- 16:30 **Influence of defects on the photocatalytic properties of ZnO grown by laser-assisted flow deposition** K PII.7  
J. Rodrigues1, A. Pimentel2, E. Fortunato2, A. J. Neves1, T. Monteiro1, F. M. Costa1  
1Departamento de Física & I3N, Universidade de Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal, 2CENIMAT/I3N, Departamento de Ciência dos Materiais, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516 Caparica, Portugal.
- 16:30 **Temperature and Water Effect on synthesis ZnO by microwave-assisted** K PII.35  
Karla Moreno Laguna, Erik Ramirez Morales, Lizeth Rojas Blanco, Juan Gabriel Alvarez Ramirez, Germán Pérez Hernández, Alberto Gabriel Vega Poot\*  
Universidad Juárez Autónoma de Tabasco, Avenida Universidad S/N, Zona de la Cultura, Col. Magisterial, Villahermosa, Centro, Tabasco 86040, México. \*  
Department of Applied Physics, CINVESTAV-IPN, Mérida, Yuc. 97310, México.
- 16:30 **Role of oxygen vacancies in nanocrystalline tin dioxide films for humidity sensing** K PII.49  
V.K. Ksenevich (1), D.V. Adamchuk (1), N.A. Poklonski (1), A.I. Kovalev (1), A. Lyubchik (2)  
(1) Department of Physics of Semiconductors and Nanoelectronics, Belarusian State University, 220030, Minsk, Republic of Belarus, (2) I3N/CENIMAT, Department of Materials Science, Faculty of Science and Technology Universidade NOVA de Lisboa and CEMOP/UNINOVA Campus de Caparica, 2829-516 Caparica, Portugal
- 16:30 **Porous activated graphene as an anode material for high-rate sodium-ion batteries** K PII.26  
Ha-Kyung Roh< sup>1< /sup>, Young-Hwan Kim< sup>1< /sup> and Kwang-Bum Kim< sup>1< /sup>  
< sup>1< /sup>Department of Material Science and Engineering, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, Seoul, 03722, Republic of Korea
- 16:30 **Materials based on AgGaS2 for X-ray Detection** K PII.42  
S.N. Mustafaeva1, S.M. Asadov2, D.B. Tagiyev2  
1Institute of Physics, Azerbaijan National Academy of Sciences, AZ-1143, Baku, H. Javid ave. 131, 2Institute of Catalysis and Inorganic Chemistry, Azerbaijan National Academy of Sciences, AZ-1143, Baku, H. Javid ave. 113
- 16:30 **Chemically activated graphene for high-performance sodium-ion batteries** K PII.25  
Ha-Kyung Roh< sup>1< /sup>, Young-Hwan Kim< sup>1< /sup> and Kwang-Bum Kim< sup>1< /sup>  
< sup>1< /sup>Department of Material Science and Engineering, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, Seoul, 03722, Republic of Korea