

CONFERENCE PROGRAM: PHYSICS OF SEMICONDUCTOR DEVICES

الملتقى الدولي لفيزياء مركبات أشباه الناقل و الطاقات المتجددة و البيئة

The first International Conference on Physics of Semiconductor Devices, Renewable Energies and Environment

Bechar, Algeria 14th – 16th November 2022

First day

Monday November 14, 2022

Session A: Physics of Semiconductor Devices

Session chair : Prof. Abderrahmane BELGHACHI

Plenary presentation

Zoom Link		
Prof.Chennupati JAGADISH	Semiconductor Nanostructures for Optoelectronics Applications	08:30 to 09:10
Prof. Rabia SalihuSA'ID	A Review of Research in Atmospheric Physics at an Academic Institution in Nigeria	09:10 to 09:50

N° ID	Attendees	Presentation title	Time
Zoom Link			
04	PhD. Asmaa BAHLOULI	Effect of pressure on the electronic properties of rare earth-based Heusler compounds X ₂ RuPb (X= Sc, Y and La)	09:50 to 10:05
Tea/Coffee break : 10:05 to 10:35			
Session Chair : Prof. Abdelkader NOURI Prof. Syham KADRI			
14	PhD. Ilyas DAOUALI	GEANT4 simulation of Ni63 beta particles behavior and energy—loss process in Gallium Nitride†	10:35 to 10:55
Zoom Link			

05	PhD. Halima HABIEB	Morphological Characterization of Sb-Doped SnO ₂ Thin Films Developed by Spray Pyrolysis	10:55 to 11:10
09	Dr. Zehira BELAMRI	Study of structural, morphological and hydrophobic property of nanostructured cobalt-doped ZnO thin film Gallium Nitride	11:10 to 11:25
16	PhD. Soumia ZEFFANE	Investigation of the structural, Electronic and magnetic properties of Mn ₂ PdSn Heusler alloy under hydrostatic pressure	11:25 to 11:40
Attendee presentations			
06	Dr. Yacine MAROUF	Performance assessment of InGaN-based single, dual, and triple junction solar cells	11:40 to 12:00
Zoom Link			
17	Dr. Amiri BENAMEUR	First Principles Study of Europium doped Gallium Nitride in Wurzite Structure	12:00 to 12:15
19	PhD. Fatima SOFRANI	Contribution to the study of the CoFeTiAs quaternary Heusler material's structural, electronic, and magnetic properties	12:15 to 12:30
21	Dr. Fatima ELHAMRA	Theoretical study of structural, electronic, optical and elastic properties of the perovskite CsPbCl ₃ in the cubic phase	12:30 to 12:45
25	PhD. Naima TALEM	Study of structural and electronic properties of binary AgCl and AgBr	12:45 to 13:00
Taking a group photo of the participants in the forum			
Lunch break : 13:00 to 14:30			

Attendee presentations			
Session Chair: Prof. Abdelkrim MERAD Dr. Ahmed BOUIDA			
10	Dr. Rahima ZELLAGUI	Effect of zinc doped CdS thin films deposited by CBD method	14:30 to 14:50
Zoom Link			
26	PhD. Oussama ZAOUI	Numerical simulation of the correlation between the Al molar fraction of Al _x Ga _{1-x} As window layer and induced degradation of proton irradiation	14:50 to 15:05

27	PhD. Saida HOGGAS	Influence of (F) doping on the structural and optical properties of SnO ₂ thin films	15:05 to 15:20
31	PhD. Ouafaa SADOUKI	Determination of half metallicity behavior of quaternary heusleralloy CrCoScGa	15:20 to 15:35
Tea/Coffee break: 15:35 to 16:00			
Plenary Session			
Session Chair: Dr. Houaria BOURBABA Dr. Ahmed BOUIDA			
Prof. Abdelkrim MERAD		Promising alternative new class of A ₂ BX ₆ double lead-free perovskites for solar cells applications	16:00 to 16:40
Zoom Link			
Prof. Tse Nga NG		Polymeric Devices for Infrared Up conversion Imagers and Energy Storage	16:40 to 17:20

N° ID	Attendees	Presentation title	Time
Zoom Link			
33	Dr. Mama Hamlat	Enhancement of the magneto-electronic properties by GGA and TB-mBJ approaches for KMgO ₃ perovskite oxide	17:20 to 17:35
36	PhD. Ishak MEBARKIA	Theoretical insights into the structural and optoelectronic properties of the ternary cesium tetrafluoridobromate semiconductor CsBrF ₄	17:35 to 17:50
38	Dr. Mourad HEBALI	Effect of Electronic Properties of Si _{1-x} Gex and SiC Semiconductors on the Electrical Behavior of MOS Transistors	17:50 to 18:05
40	Dr. Halima BENATTOU	Study of thin films (ZnO) _(0.4) (CdO) _(0.6) composite properties	18:05 to 18:20
35	Dr. Fatima NEMLA	On the structural, optical and thermodynamic properties of TlBiTe ₂ compound: basic DFT study	18:20 to 18:35
13	Loubna DEBACHE	Study of fundamental physical properties of the BaMg ₂ X ₂ N ₄ (X=Ga and Al) materials	18:35 to 18:50
Session closing 18:35			

CONFERENCE PROGRAM : ENVIRONMENT

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Session B: Environment

Session chair : Prof. Emeritus Ahmed KETTAB | Dr. Khelifa HAMI

Plenary presentation

Prof. Leila ALOUANE		Geothermal energy in Algeria and the contribution of geophysics	08:30 to 09:10
Prof. Mostafia BOUGHALEM-KASMI		Land productivity enhancement: a vegetal cover to improve soil fertility	09:10 to 09:50
Zoom Link			
01	PhD. Mohamed AIT OUMERACI	The influence of Extraction method on structural and photocatalytic activity of zinc oxide nanoparticles synthesized by Green method	09:50 to 10:05
Tea/Coffee break: 10:05 to 10:35			
Session Chair: Dr. Abdelkrim TALHI Dr. Wafa DIFALLAH			
Dr. Wahiba MOKRANE		Temperature variability effect on polyethylene high density water supply pipes	10:35 to 11:15
N° ID	Attendees	Presentation title	Time
12	PhD. Mohammed BOUAOUINA	Safety analysis of two design basis accidents using PARET and SUSA computer codes	11:15 to 11:35
Zoom Link			

02	PhD. Souad HASSENE DAOUADJI	Valorization of silt from Gargar dam in manufacturing ceramic to protect the environment	11:35 to 11:50
04	PhD. Sabiha HAKKAR	Treatment and Study of the Adsorption of Phenol Surfactant Added to Natural Montmorillonite	11:50 to 12:05
06	Dr. Karima BARBARI	Synthesis of semiconductor TiO ₂ supported on titanium: Application as photocatalyst for water treatment	12:05 to 12:20
Attendee presentations			
13	Prof. Samira KACI	Fabrication of Cu-Sensitized Lead Sulfide/PSi-based Photocathode for Light-Driven CO ₂ Reduction	12:20 to 12:40
19	PhD. Haissoune DEIH	Contribution to the hydrological study of groundwater in the Tindouf region	12:40 to 13:00
Taking a group photo of the participants in the forum			
Lunch break : 13:00 to 14:30			
Attendee presentations			
Session Chair: Dr. Wafa DIFALLAH Dr. Abdelkrim TALHI			
18	PhD. Omar MOUZTI	Use of remote sensing in the mapping of the Tafegount-Zemoul axis North of Tindouf (South-West Algeria)	14:30 to 14:50
Zoom Link			
07	PhD. Khaled BEKKI	Evaluation of Zn -Pb and Ba levels in urban and semi-urban and tourist soils in the vicinity of mining activities in the Bou-Caïd region (Tissemsilt - Algeria)	14:50 to 15:05
08	Dr. Imene FEDDAL	Experimental study of the elimination of a pesticide by an algerian clay	15:05 to 15:20
09	PhD. Ahmed BENNIA	Structural mapping for hydrogeological study using microwave and optical remote sensing data in Tabelbala region, Algeria	15:20 to 15:35
Tea/Coffee break: 15:35 to 16:00			
Session Chair: Dr. Khelifa HAMI Dr. Abdelkrim TALHI			
21	PhD. Moustafa DIDA	Considerations For A Possible Water Supply For The Region Fort Lotfi -Hassi Khebbi (South Western Algeria)	16:00 to 16:20

Zoom Link			
14	PhD. Mehdi BOUKHARI	Development of a mathematical model based on an Artificial Neural Network (ANN) to predict nickel uptake data by a natural zeolite	16:20 to 16:35
15	Dr. Djamila DJEDOUANI	Shrinking core model to the adsorption of oxyteracycline onto commercial and peanut hull-derived activated carbons	16:35 to 16:50
16	PhD. Narimene AOUN	Photocatalytic performance of CeO ₂ nanoparticles through the elimination of Naproxen from aqueous solution	16:50 to 17:05
Attendee presentations			
22	PhD. Abdelfettah BOUREKIZA	Effective Diffusion in Porous Media: Modeling Approaches and Concepts	17:05 to 17:25
Zoom Link			
17	Dr. Brahim ABDELKEBIR	Analysis and mapping of spatio-temporal variability of rainfall in the Soummam watershed	17:25 to 17:40
03	PhD. Maha KHARROUBI	Estimation of fluoride concentrations in groundwater in the city of Ouargla, Algeria using FPI and GIS	17:40 to 17:55
Session closing 18:00			