

People's Democratic Republic of Algeria

Ministry of Higher Education and  
Scientific Research

Ferhat Abbas University Setif 1

Institute of Optics and Precision  
Mechanics



الجمهورية الجزائرية الديمقراطية الشعبية

وزارة التعليم العالي والبحث العلمي جامعة

فرحات عباس سطيف 1

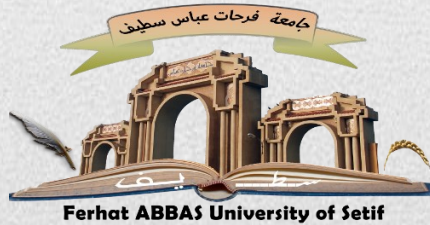
معهد البصريات و ميكانيك الدقة

The 5<sup>th</sup> International Conference of Optics

ICO 2022

December 4<sup>th</sup> & 5<sup>th</sup> 2022, Setif, Algeria

## CONFERENCE SCHEDULE



Ferhat ABBAS University of Setif



*Organized by*

- Institute of Optics and Precision Mechanics

Ferhat Abbas, Setif 1 University, Setif, Algeria

# PROGRAM

<b>Sunday 04/12/2022 – Morning</b>	
08h00-08h30	<b>Welcome - Registration</b>
08h30-09h30	<b>Opening Ceremony</b>
09h30-10h15	<p><b>Plenary Session 1</b></p> <p>“Femtosecond time resolved pump-probe spectroscopic ellipsometry – principles and applications”</p> <p><b>Dr. RÜDIGER SCHMIDT-GRUND</b></p> <p>Introduced by: <b>Pr. AÏSSA MANALLAH &amp; Pr. BOUZID BELLOUI</b></p>
10h15-10h45	<b>Poster Session 1 &amp; Coffee break</b>
<p><b>Oral Session 1</b></p> <p>(Chairs : <b>Pr. Rüdiger SCHMIDT-GRUND &amp; Pr. Bouzid BELLOUI</b>)</p>	
10h45-11h05	<b>A. KHELEFHOUM</b> , Numerical study investigating the electro-optical properties of quaternary alloy InAlGaAs for laser diode
11h05-11h25	<b>S. HARIECH</b> , Étude des propriétés structurales et optiques des couches minces de CuxS : Effet de la source de Cu
11h25-11h45	<b>A. GUESSOUM</b> , Technique de réalisation et d'intégration de microlentilles paraboliques en bout de fibre optique SMF
11h45-12h05	<b>Y. GHANEMI</b> , Collimation of seven incoherent beams of green laser pointers using a waveguide combiner
12h05-12h25	<b>A. RAMDANI</b> , Sound detection system based on light, simulation, and experimental results
12h25-12h45	<b>S. A. HAMADOUCHE</b> , Direction estimation of oblique stripe noise in remote sensing images
12h45-14h00	<b>Lunch</b>
14h00-14h45	<p><del><b>Plenary Session 2</b></del></p> <p><del>“Acoustic phonons propagation in thin film and bulk materials”</del></p> <p><del><b>DR. SHIRLY JOSEFINA ESPINOZA-HERRERA</b></del></p> <p>Introduced by: <b>Pr. BOUZID BELLOUI</b> <b>CANCELED</b></p>
<p><b>Oral Session 2</b></p> <p>(Chairs : <b>Pr. Bouzid BELLOUI &amp; Pr. Aïssa MANALLAH</b>)</p>	
14h45-15h05	<b>S. MEGUELLATI</b> , Performance enhancement of phase-OTDR distributed fiber optic sensor using multi-strand optical fiber cable
15h05-15h25	<b>Y. GHANEMI</b> , A parametric study of an optical detection system for the reflective targets at 532 nm
15h25-15h45	<b>O. BELMAHI</b> , Optical Parametric Generator Based on PPLN Crystals: Setup and Automatic Tuning
15h45-16h05	<b>H. BENDADA</b> , Polarimetric study of geometric phase optical lenses

16h05-16h35	<b>Poster Session 2 &amp; Coffee break</b>
<b>Oral Session 3</b> (Chairs : <b>Dr. Abdelhak BELKHIR &amp; Pr. Stefan KRISCHOK</b> )	
16h35-16h55	<b>A. ABCHI</b> , Effect of storage and roughness of BK7 and PMMA on the ZnS adhesion behavior
16h55-17h15	<b>M. KHERIF</b> , Les Faisceaux vectoriels Plats d'Ordre Supérieur
17h15-17h35	<b>Assia YOUSFI</b> , Dynamics superposition of laser vortex beams

<b>Monday 05/12/2022 – Morning</b>	
08h30-09h15	<p><b>Plenary Session 3</b></p> <p>“Nonlinear Polarization Spectroscopy in the Frequency Domain”</p> <p><b>Pr. WICHARD J. D. BEENKEN</b></p> <p>Introduced by: <b>Pr. ABDELWAHAB HAMADOU</b> <b>CANCELED</b></p>
<p><b>Oral Session 4</b></p> <p>(Chairs : <b>Pr. Abdelwahab HAMADOU &amp; Pr. Nabil BELKHIR</b>)</p>	
09h15-09h35	<b>Z. AKHRIB</b> , Optical spectroscopy of Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> (LuAG): Pr <sup>3+</sup> garnet nanomaterial: Effect of Li <sup>+</sup> ions co-doping
09h35-09h55	<b>M. I. HABIA</b> , Performance of SPR sensor for analysis of hemoglobin concentration based on Au or Ag in the near infrared
09h55-10h25	<b>Poster Session 3 &amp; Coffee break</b>
10h25-11h05	<p><b>Plenary Session 4</b></p> <p>“Heterostructured scintillators, a cooperative approach to radiation detection Application to Time-of-Flight Positron Emission Tomography”</p> <p><b>Pr. G. BIZARRI</b></p> <p>Introduced by: <b>&amp; Pr. HOCINE GUESSAS</b></p>
<p><b>Oral Session 5</b></p> <p>(Chairs : <b>Pr. NABIL BELKHIR &amp; Pr. HOCINE GUESSAS</b>)</p>	
11h05-11h25	<b>C. BENSAID</b> , Effets de nanotubes d’argent sur la polarisation et sur la directivité de l’émission d’un OLED
11h25-11h45	<b>T. TAOUCHE</b> , Multiple stages Interband Cascade Infrared Photodetectors with equal-absorbers
11h45-12h15	<b>Poster Session 4</b>
12h15 -13h15	<b>Closing Ceremony</b>
13h15- 14h00	<b>Lunch</b>

# POSTER PRESENTATIONS

## Session 1

Sunday 04/12/2022

10h15-10h45

Author	Title	Topic
S. ACHOU	Effects of Nickel doping on structural and optical properties of ZnAl <sub>2</sub> O <sub>4</sub> based spinel	T1
A. BAKHOUCHE	Croissance et caractérisation de nanostructures de GaN élaborées par (EJM)	T1
S. MANAA	Estimation et mesure de l'épaisseur et de l'indice de réfraction des couches minces semi-conductrices	T1
A. BRIK	Etude sur les applications optiques du dioxyde de titane TiO <sub>2</sub>	T1
Y. CHEROURA	Luminescence dynamics and Judd-Ofelt analysis of Pr <sup>3+</sup> doped $\beta$ -NaGdF <sub>4</sub> nanorods obtained by rapid coprecipitation method	T1
DJ. DEKHIL	Investigation of a graded band gap PN junction based on SnS thin films	T1
K. MADOU	Etude des propriétés photophysiques de TiO <sub>2</sub> -SiO <sub>2</sub> en présence d'un colorant pour obtenir un filtre coloré	T1
O. MOUSSAOUI	The slow beam electrons and positrons transport in solids: The best analytical approximation of the differential elastic scattering cross-section determination	T1
I. MEBARKIA	CsBrF <sub>4</sub> semiconducting material for optoelectronic applications: Ab initio calculations	T1
A. NOURI	Nucleation and growth of ZnO nanosheets on an ITO substrate in a sulfate medium	T1
A. GUECHI	Optical properties of Zintl phase KSbSn compound: first principles study	T1
S. ZAIDI	Détermination de la taille des particules par analyse d'hologrammes digitaux	T3

## Session 2

Sunday 04/12/2022

16h05-16h35

Author	Title	Topic
D. LAADJEL	Amélioration des composants optiques en matériaux durs	T1
F. LATRECHE	The effect of the number of multilayers on optical properties in the distributed Bragg reflector obtained by the sol-gel method	T1
S. HARIECH	Synthèse et caractérisations des couches minces de chlorure de plomb méthylammonium en vue d'applications photovoltaïques	T1
N. MENACEUR	Elaboration et caractérisation des semi-conducteurs [Cu In <sub>x</sub> Te <sub>2</sub> ] et [Cu In <sub>x</sub> Ga <sub>(x-1)</sub> Te <sub>2</sub> ] destinées pour des applications photovoltaïques	T1
A. KHELEFHOUM	A theoretical study of the optical properties of AGaS <sub>2</sub> (A=Rb, Cs) monoclinic compounds	T1
Y. SLIMI	Investigation of Sc <sub>x</sub> Al <sub>1-x</sub> N Thin Films Dielectric Function by Means of Spectroscopic Ellipsometry	T1
Z. SMARA	Judd-Ofelt analysis and optical characterization of Eu <sup>3+</sup> or Eu <sup>3+</sup> /Yb <sup>3+</sup> doped α-NaYF <sub>4</sub> nanorods obtained by rapid coprecipitation method	T1
C. SOUID	The changes of optical properties in life time of optical lens	T1
Asma YOUSFI	The structural and optical properties of ZnO thin film deposited by Dip coating on glasses	T1
H. ZANANE	Thermal, Physical and Structural Properties of Calcium Fluoro-Oxy-germanotellurite Glass-ceramics	T1
R. BELMERABET	SPR based fiber optic sensor with gold coated copper nanocolumn array for a high refractive index detection	T5
DJ. DEKHIL	Photocurrent response study of SnS thin films: photovoltaic application	T1

## Session 3

**Monday 05/12/2022**

**10h35-11h05**

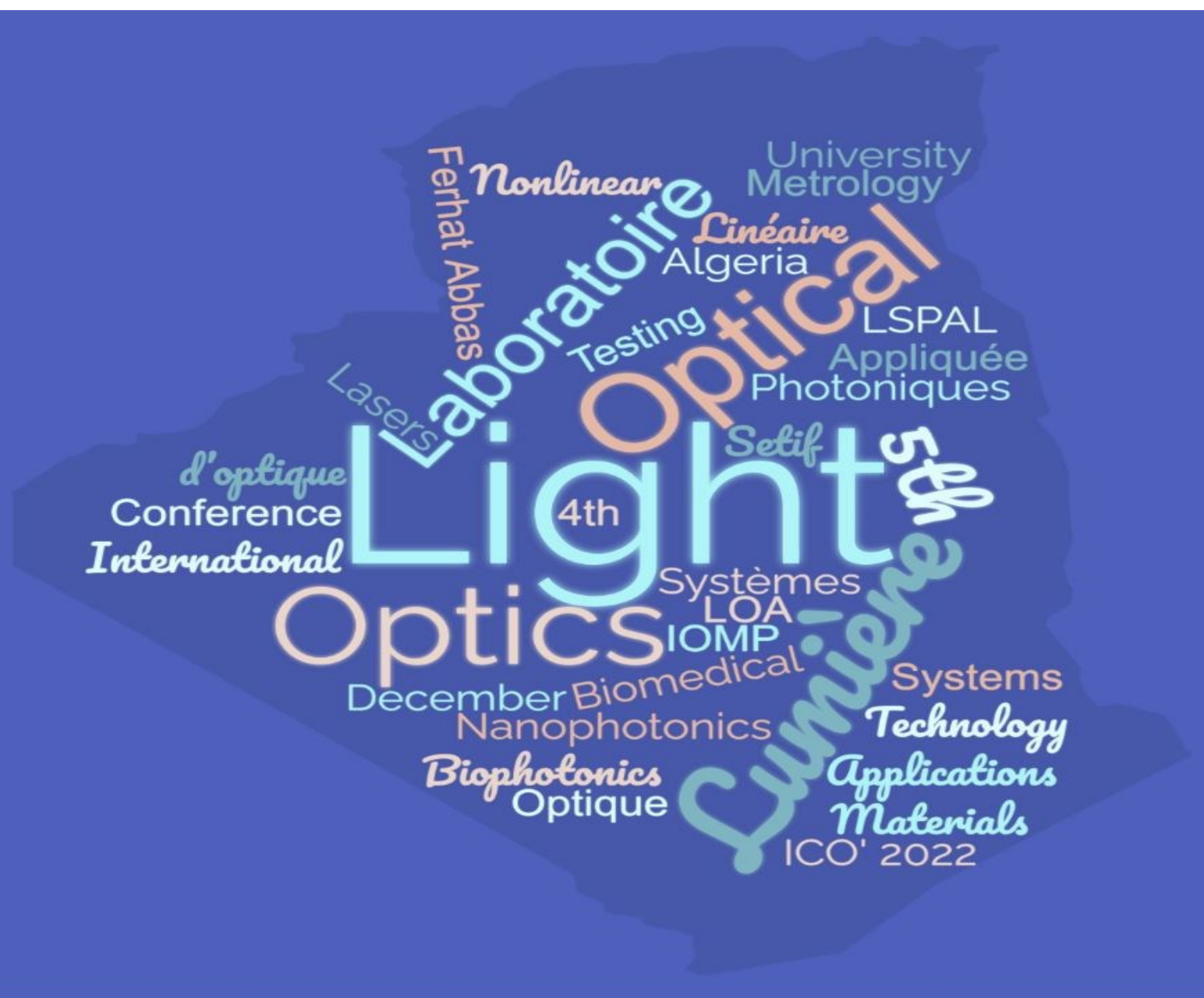
Author	Title	Topic
F. BOUGHEZIOU	Synthèse d'Ouverture en Holographie Digitale à Deux Vues	T2
A. GUESSOUM	Apport des microlentilles paraboliques aux fibres optiques microlentillées	T2
A. MESSAOUDI	L'optique du front d'onde, un outil prometteur pour l'évaluation de la qualité de vision	T2
A. OUBOUZID	Damage control of sandwich composite structures subjected to cyclic impact by microscopic system technology	T2
D. ZAIDI	Recent advances in fiber-optic sensors for monitoring pollutants in water	T2
B. BEZZIOU	Implementation of a Real-Time Terahertz Body Scanner	T3
Y. FACI	Damage analysis in open hole composite specimens by digital image correlation: experimental investigation	T3
H. LAOUAMRI	Laser induced damage performance of TiO <sub>2</sub> thin films	T3
M. MESSAGIER	Topographie Sans Contact d'Etat de Surface Optique en Temps Réel par Interférométrie	T3
A. BENSTITI	Laser beam interaction with an acousto-optic cell: accelerated airy beam	T4
H. BOUFAS	Numerical Modeling of Femtosecond Optical Pulses Propagation in silica fiber	T4
O. BOUZID	Intra-cavity generation of an invariant flat-top laser beam	T4

# Session 4

Monday 05/12/2022 11h50-12h20

Author	Title	Topic
S. CHERIF	Etude de l'effet du diamètre du trou de phase dans un interféromètre (PS/PDI) pour créer un faisceau parfait à partir d'un faisceau incident aberré	T4
D. DJELLOUT	Comparaison entre le modèle ponctuel et le modèle à onde progressive dans la simulation d'un laser passivement Q-déclenché et à commutation de gain dopé Er-Tm	T4
A. KEMMACHE	Double pass L-Band EDFA design with an improved gain and low noise figure	T4
M. ZAIDI	Nonlinear optical properties of Bivalent Transition-Metal Complexes of the Hexadentate Pyridine/Pyrazine Amide Ligands	T4
H. BOUANDAS	Study of human Colorectal Mucosa by SPR Biosensor using admittance Loci Method	T5
A. SAOULI	Simulation of multi-resonance SPR response in Nano-metallic multilayers structures intended for biomedical application	T5
B. SI TAYEB	Diffusion élastique des électrons par une molécule constituant l'ADN et/ou ARN	T5
B. BAKHOUCHE	Wavelength domain spectrally modulated polarimetry for the measurement of optical rotation	T1
S. FEDALA	Utilisation des codeurs optiques pour la caractérisation des sources d'excitation dans les machines tournantes	T3
H. SELMANI	Particle Tracking Velocimetry Measurements of Aeolian mass flux	T3
S. MAROUF	Microstructure development of aged RE doped ZnO nanostructures	T1
Said MEGUELLATI	Topographie des surfaces réfléchissantes par autocollimation interférentielle	T3





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