

2nd Algerian - German
International Conference
 on **New Technologies** and their
Applications



AGICNT '2019, September 22-23, Ferhat Abbas University Setif 1

Conference Program

Sunday, September 22, 2019

8h00 – 9h00	Conference Registration
9h00 – 9h30	Official opening of the conference
9h30 – 10h00	COFFEE BREAK

Session 1	
Chairmen	Dr. S. Meguellati , Dr. D. Schulze
10h00 – 10h45	Keynote: Femtosecond spectroscopy and diffraction in applied science at the ELI Beamlines facility Dr. Jakob Andreasson ELI Beamlines, Institute of Physics, Czech Academy of Sciences, Czech Republic
10h45 – 11h05	Synthesis and study of a new optical material O. Ben Mya, University of El-Oued, Algeria

11h05 – 11h25	Chemical changes of float glass surfaces induced by different sands and mineralogical phases S. Reiss, TU Ilmenau, Germany
11h25 – 11h45	Anisochronous SMPPM a modified modulation scheme for Free Space Optical Systems M. Rouissat, El-Bayadh, Algeria
11h45 – 12h05	Development and experimental characterization of the thermomechanical behavior of new insulating materials based on Juncusmaritimus fibers Z.Saghrouni, ENIM Monastir, Tunisia
12h05 – 12h25	Reconstruction of metastable induced electron spectra of molecules on solid surfaces W.J.D. Beenken, TU Ilmenau, Germany
12h25 – 12h45	Performance improvement of multi access OCDMA System based on 3D-single weight zero crosscorrelation code M.Alayedi, University of Sétif 1
12h45 – 13h05	Prediction based resource allocation algorithm for cloud computing R. Djelid, Technologie, Constantine, Algeria
13h05- 14h00	LUNCH BREAK
Session 2	
Chairmen	Prof. Sylvain Lecler, Dr. As. Guessoum
14h00 – 14h20	Effects of precursors on structural and morphological properties of ZnO nanostructures elaborated by hydrothermal method A.Tadji, University of Oran, Algeria
14h20 – 14h40	Spectroscopic characterization of sputtered ScAlN thin films S.Krischok, TU Ilmenau, Germany
14h40 – 15h00	Effet de l'oxyde tungstène sur les propriétés thermiques et structurales des verres de Sb_2O_3 . F.Z. Agti, University of Biskra
15h00 – 15h20	Structural and optical properties of N and Mn co-doped ZnO thin films grown by ultrasonic spray pyrolysis method K. Chebbah, University of Mascara – Tiaret, Algeria
15h20 - 15h50	COFFEE BREAK – POSTER SESSION
Session 3	
Chairmen	Dr. S. Elalimi, Dr. S. Reiss
15h50– 16h35	Keynote: New exotic glasses based on antimony oxide as promising glass amplifier and white light generation Prof. Mohamed Toufik Soltani, University of Biskra
16h35 –16h55	Focused Ion Beam technique as a powerful method in material science H. Romanus, TU Ilmenau, Germany

16h55– 17h15	Investigation of magnetic and structural properties of $\text{Co}_x\text{Fe}_{100-x}$ thin films A.Melloul, University of Sétif 1
17h15– 17h35	O9-Multi-face recognition systems using EmguCV and deep learning B.Alane, University of Sétif 1
17h35- 17h55	Automatic diffracted order detection in spectral domain of digital multiplexed Off-axis holograms Application to spatial filtering O. Chaab, University of Mostaganem
20h00	CONFERENCE DINNER

Monday, September 23, 2019

Session 4

Chairmen	Dr. J. Andreasson, Dr. H. Romanus
8h30– 9h15	Keynote: Photonic nanojet: from laser submicron processing to super-resolution microscopy Prof. Sylvain Lecler Université de Strasbourg, Télécom Physique Strasbourg, Laboratoire Icube UMR CNRS, France
9h15 – 9h35	Strongly green light emission: Novel hybrid compound O.Zeghouan, University of Constantine, Algeria
9h35 – 9h55	Opto-digital double image encryption scheme based on discrete fractional Fourier transform and chaotic map T.Bekkouche, University of Bordj Bouarrerdj (BBA), Algeria
9h55 – 10h15	M^2 factor of radial Laguerre Gaussian beam passing through an opaque disk S.Chabou, A. Bencheikh University of Sétif 1, Algeria
10h15 – 10h45	COFFEE BREAK- POSTER SESSION

Session 5

Chairmen	Prof. M.T. Soltani, Dr. W. Beenken
10h45- 11h30	Keynote : Solar Photovoltaic Research Overview Dr.Souheil ElAlimi, ENIM Monastir, Tunisia
11h30- 11h50	About the background of light induced degradation of czochralski-grown silicon solar cells and it's reversibility D. Schulze, TU Ilmenau, Germany
11h50 – 12h10	PSO-based PV array topology reconfiguration tackling partial shading conditions A.Harrag, University of Sétif 1, Algeria

12h10 – 12h30	Investigation of Optical fiber sensor control during Congo red photo-catalysis mechanism K. Azil, University of Sétif 1, Algeria
12h30 – 12h50	Synthesis and characterization of SiO ₂ from aluminosilica material coated by iron oxides nanoparticles: Photocatalytic activity evaluation W. Rezig, University of Oran, Algeria
12h50- 13h10	Application of ion imprinted 2-polypyrrole-COOH films for the detection of lead in water–A highly selective approach N.Maouche, University of Sétif 1, Algeria
13h10 – 13h30	PhotoGrad - A doctoral program "From the solar cell to the complete electrical system" G. Gobsch, TU Ilmenau, Germany
CONFERENCE CLOSURE - LUNCH	

POSTERS SESSIONS	
Id.	Titles and Authors
P01	The role of seed layer thickness on ZnO nanowires deposited by electrochemical method S.Bouzerara, L.Mentar
P02	Synthesis and characterization of cuprous oxide (Cu ₂ O) thin films for photovoltaic application S. Derbal, M. Benaicha
P03	Electrosynthesis and characterization of polyaniline/Cd ²⁺ composite material L. Mekhiche, N. Maouche, B. Nessark
P04	Electrolyte effects in copper electrodeposition for one-chip interconnection R.K. Bouriche, Y. Messaoudi, A. Messai, A. Azizi
P05	Contribution à la synthèse de nouveaux matériaux composites (PANI /MnO ₂) et leur performance électrochimique A. Tounsi, F. Habelhames, A. Bahloul, A. Sayah
P06	Synthesis, spectral and optical properties of bidentate Schiff base ligand A. Alouache
P07	Annealing temperature effects on the structural, optical and photocatalytic properties of TiO ₂ thin films prepared by the sol-gel method A.Doula, R.Bensaha
P08	Sol-gel synthesis and characterization of MgO nanoparticles and their photocatalytic activity I. Ameur, M. Khennoucha, B.Boudine, V.Brien, D.Horwat, M. Sebais
P09	Effect of dipping number on the structural and optical properties of tin oxide thin films obtained by sol-gel method M. Khechba, F.Hanini, A.Bouabellou, A.Soualhia
P10	Elaboration and characterization of new Eu ⁺³ doped Sb ₂ O ₃ based glasses for light generation in LED applications H. Youcef, M.T. Soltani, M. Baazouzi, D. De ligny

P11	Physical and optical properties of new Sb_2O_3 - K_2O - B_2O_3 glasses L. Beghdadi, M. Hamzaoui, N. Guesmia, M.T. Soltani, D. De Ligny
P12	Optical and magnetic properties of Sb_2O_3 - Li_2O - MoO_3 glasses containing molybdenum ions M. Hamzaoui, N. Guesmia, L. Beghdadi, M.T. Soltani, D. De Ligny Dominique, R. Lebullenger, M. Poulain
P13	Application of ScAlN alloy in LEDs Y. Slimi, M. Bouafia, S. Krischok, A. Arres
P14	ScAlN alloy: effect of the ratio of scandium over aluminum nitride on the band gap A. Arres, M. Bouafia, S. Krischok, K. Tonisch, A. Knauer, Y. Slimi
P15	Study of the physical properties of different materials I. Mebarkia, Ai. Manallah, W. Beenken
P16	Application of Michelson and Mach-Zehnder interferometers for optical communication I. Mebarkia, A. Guechi
P17	Study of the degradation of structural and optical properties of glasses D. Senouci, Ai. Manallah, S. Reiß, S. Krischok, E. Rädlein, H. Romanus
P18	Transparent gypsum analysis T.E. Djemai, M. Bouafia, S. Krischok, A. Medjahed
P19	Needle-like structure of black silicon characterized by SE N. Hadjilat, H. Romanus, M. Bouafia, S. Krischok
P20	Simultaneous optical scanners obtained by the acoustic wave propagation in water Am. Guessoum
P21	Influence des critères de refocalisation sur un hologramme en holographie digital hors axe à deux vues A. Helal, B. Rayenne, S. Hassad, L. Bouamama
P22	Synthesis and characterization of AZO thin films for solar cells application S. Khelfi, H. Laouamri
P23	Simulation and experimental comparison of P&O and IC PV MPPTs using stateflow Matlab models C. E. Rahmoune, I. Bouhabila, A. Harrag
P24	Probing the mechanical properties of single crystal iron (Fe) at nano-scale with nano-indentation by molecular dynamic simulation S. Hamdani, S. Abdeslam
P25	The contribution of optics to metrology S. Meguellati, M. Messagier
P26	Sensitivity improvement of a temperature and pressure fiber optic sensor based on a deformable micro-mirror As. Guessoum, A. Guermat, N.E. Demagh
P27	Excitation of a microcollimator with PDMS microlens by powerful laser N. Boulaiche, N. Lahlouhi, A. Nezzar, As. Guessoum, N.E. Demagh University of Sétif 1
P28	Detection of surface defects and imperfections in transparent ceramics by interferometry R. Meziane, K. Hoggas, A. Cherouana, S. Bouhroum, S. Benaissa

P29	Study and design of $M_xAl_{1-x}N$ ($M=Y, Sc$) low loss SAW delay line for acoustic sensors application S. Amara, F. Kanouni, A. Assali, F. Arab, F. Laidoudi
P30	Synthesis and characterization of CZTS absorber films solar cells M. Khammar, S. Guitouni
P31	Etude de nouvelles stratégies de synthèse en vue de concevoir des matériaux hybrides: Application au renforcement des polymères A.Bouibed, R.Doufnoune
P32	First-principles calculations and numerical modeling on the structural and optoelectronic properties of chalcopyrite materials for solar cells application M. Hadjab, J.-M.Wagner, F.Bouzid, M.Ibrir, A. HadjLarbi, S.Boudour, H.Bennacer, M.I.Ziane
P33	Preparation and characterization of new nanocomposite based on the polyvinylalcohol/poly (4 styrenesulfonic) complex and sulfonated graphene oxide L.Otmani, R.Doufnoune
P34	Application of confocal microscopy with white light illumination for surface topography Ai. Manallah, M. Bouafia
P35	Investigation of magnetic and structural properties of Co_xFe_{100-x} thin films A.Melloul, A. Kharmouche
P36	Extraction des paramètres optoélectroniques des photopiles solaires à composition graduelle à base de $Cu_2Zn(S_ySe_{1-y})_4$ S. Kerour, A. Bouloufa
P37	Opto-Electrical and Thermal dynamic model (OET model) for photovoltaic cells F. Zaoui
P38	Enhancement in the electrical and optical properties of sprayed ZnO films by simultaneous doping of Cobalt and Nickel N.Guermat, W.Daranfed, K.Mirouh
P39	Numerical and experimental analysis of welding parameters in X70-304L dissimilar weld T.Saadi, M.F.Benlamnouar, N.Bensaid, A.Boutaghane, M.Iddir, R.Badji, Y.Laib
P40	Comparative study on the optical properties of the PV cells on silicon to produce high yields using photonic crystals B.Sadoun, S.Mouetsi
P41	Suitability of ITIC as Electron Acceptor in OPV Reassessed* W.J.D. Beenken, S. Alam, R. Meitzner, U. Ritter, A. Konkin, D.A.M. Egbe, M. Anton, U.S. Schubert, H. Hoppe
P42	Optical properties of synthesized metal transition (Fe)-doped ZnO transparent thin films prepared by sol-gel spin coating Solar cells applications A. Mohammedi, M. Irir, O. Meglali, A. Saoudi, M. Hadjab
P43	Ab initio study of structural and optical properties of a novel material ($AgBr_{1-x}I_x$) alloys in Zinc-Blend(B3), and Rock-Salt(B1), structures H. RekadJabri, S. LouhibiFasla

P44	Morphological and optical properties study of nanocomposites of ZnO on porous silicon substrate prepared by electrochemical anodization technique N.Selmane, A.Cheknane, M.Aillerie, H.S. Hilal
P45	Performance analysis of RoF-WDM system using optical DSB-SC A.Fares, K. Saouchi, F. Brik, M.O.Saouchi
P46	Structural, optical and electrical properties of SnO ₂ , In ₂ O ₃ and ZnO films deposited via sol-gel spin-coating technique M. Ghemid, H. Gueddaoui
P47	Optical properties of co doped ZnSe thin films prepared by chemical bath deposition (CBD) method R.Khalfi, D.Talantikite-Touati, A.Tounsi
P48	Synthesis and study of electrochemic and spectroscopic properties of a new dye for solar cells based on ZnO A.Adala, L.Bencharif, M.Guergouri
P49	Générateur tout fibré d'impulsions lumineuses picoseconde à une cadence de 320 Ghz M.O. Saouchi, K. Saouchi, A. Hamouda
P50	Phase and morphology of CuInSe ₂ powders prepared by shs process for solar cells applications L.Saad Hamideche, A. Amara, F. Boutarfa, A.Benaljia
P51	Substitution d'oxyde de MnO ₂ dans les céramiques supraconducteur Bi(2212) N. Bouaziz, F. Bouaïcha, I.Grabsi, M.-F. Mosbah, A. Belgroune
P52	Effect of the electric field induced birefringence on the slab waveguide evanescent-wave sensor sensitivity, application PLZT ceramic and LiNbO ₃ thin films as wave guiding films A. Cherouana, A. Bencheikh, I. Bouchama
P53	Broadband laser source based on supercontinuum generation in all-normal dispersion chalcogenide photonic crystal fiber A.Medjouri, T.Mesbahi, D. Abed
P54	Study the electric field dependence of the electron transport in AlN, GaN, InN, AlInN and AlGaIn B. Berrabah, C. Sayah, S. Derouiche
P55	Theoretical investigation of structural and electronic properties of the ternary alloy Al _x Ga _{1-x} Sb for solar cell application D. Benabdelaziz, S. Berrah, N.Bourahla, A.Boukortt
P56	Analyse par spectroscopie infrarouge des couches minces ni-mo obtenues par électrodéposition H.Boudjehem, H. Moumeni, A.Nemamcha, J. L.Rehspringer
P57	Formation and physical properties of new glasses Sb ₂ O ₃ -NaPO ₃ -WO ₃ N. Guesmia, M. Hamzaoui, L. Beghdadi, M.T. Soltani, D. De Ligny