## 6<sup>th</sup> International Conference on Smart Materials and Spectroscopy

(SMS'2023)

July 04 - 07, 2023 – Monastir, Tunisia

















## **Scientific Program**

	Tuesday 4 July 2023
14h-16h30	Reception and Registration
16h30-17h	Opening ceremony: Chairs: Essebti DHAHRI /Samir GUERMAZI/ Mohamed GARGOURI
17h-17h40	Plenary Conferences (Hall 1), Chairman Essebti DHAHRI  Manuel Pedro FERNANDES GRAÇA  University of Aveiro, Portugal  Influence of specific cations insertion on the electrical and biological properties of a modified 45S5 Bioglass
17h40-18h20	Plenary Conferences (Hall 1), Chairman Essebti DHAHRI  Hamza Abid  Djillali Liabes University of Sidi Bel Abbes, Algeria  Etude des propriétés électroniques des alliages semi-conducteurs
	Oral presentations

	Dielectric Materials and Nanocomposites	Magnetic and Multiferroic Materials	Organics/Inorganics materials	Optical Materials and Laser Technology
	Hall 1: Chairman Samir Guermazi	Hall 2: Chairman <mark>Fathi Bahri</mark>	Hall 3: Chairman Abdelaziz Zouari	Hall 4: Chairman Mohamed Boujelben
18h20-18h30	Amira Saidi Effect of frequency on classical and relaxor ferroelectric behavior of substituted titanate Ba <sub>0.7</sub> Er <sub>0.16</sub> Ca <sub>0.05</sub> Ti <sub>0.91</sub> Sn <sub>0.09</sub> O <sub>3</sub> compound	Abir Arfa Large magnetocaloric effect and magnetoresistance properties in La <sub>0.8</sub> MnO <sub>3</sub> manganite	Hanen Elgahami Investigation of structural and ionic conductivity in the new organic inorganic bromide: [(C <sub>3</sub> H <sub>7</sub> ) <sub>4</sub> P] <sub>2</sub> Cd <sub>2</sub> Br <sub>6</sub>	Sourour Ben Yahya Morphology, UV–visible and ellipsometric studies of a lithium-cobalt germanate compound
18h30-18h40	<b>Imen Ibrahmi</b> Elaboration et caractérisation du composé Li <sub>2</sub> ZrO <sub>3</sub>	Ala Hajji  Elaboration and structural, microstructural and magnetic characterization of barium hexa-ferrite BaFe <sub>12</sub> O <sub>19</sub>	Arafet Ghoudi Structural and spectroscopic properties of a new hybrid compound C <sub>6</sub> H <sub>9</sub> N <sub>2</sub> SbCl <sub>4</sub>	Imen Elhamdi Experimental determination and modeling of structural, vibrational and optical properties of the $ZnAl_{2-x}Cr_xO_4$ (x = 0 and 0.05) spinels
18h40-18h50	Minyar Mnakri Study on the morphological, structural, and electrical proprieties of α-LiCrO <sub>2</sub> prepared using solid-state reaction	Boutheina Abdellaoui Synthesis and characterization of new spinel ferrite compound for gas sensor application	Iheb Garoui Synthesis, Crystal structure and Electrical characterization of the new bi- (2-amino-5-methylpyridinium) hexa- chlorostannate compound	Sara Saidi Diagnostic électrique et optique d'une DBD dans le mélange Ne-Xe
18h50-19h	Mouna Ajili Synthesis and ionic conductivity studies of a lithium zinc diphosphate compound	Rim Lassoued Effect of sodium doping on the magnetic and magnetocaloric properties of the perovskite manganite Nd <sub>0.6</sub> Sr <sub>0.4</sub> MnO <sub>3</sub>	Chedli Ghanmi Structural and spectroscopic properties of charged diatomic systems FrLi <sup>+</sup> and FrNa <sup>+</sup>	Lamia Saidi Optical and structural properties of zero- dimensional hybrid materials for up and down luminescence

## Diner

		Wednesday 5 July 2023			
09h00-09h40	Raman detection of analys	Plenary Conferences (Hall 1), Chairman Mohamed GARGOURI  Jean-François BARDEAU  University of Mans, France  Raman detection of analytes in the 10-6 – 10-8 M range: Highlight on commercial SERS substrates and on a low-cost nano-rough gold substrate			
09h40-10h20	Raman scattering and Phot	Plenary Conferences (Hall 1), Chairman Mohamed GARGOURI  Mustapha ZAGHRIOUI  University of Tours, France  Raman scattering and Photoluminescence on single crystals of rare earth orthochromite RCrO <sub>3</sub> (R = La, Pr, Nd and Sm)			
10h20-10h50		Coffee bre	eak + Posters		
		Oral pre	esentations		
Topics	Magnetic and Multiferroic Materials	Energy and mechanic storage Semiconductors and nanotechnology	Materials modeling	Clay Materials	
	Hall 1: Chairman Hajer Guermazi	Hall 2: Chairman Mohamed Dammak Chi	Hall 3: Chairman Houcine Ammar	Hall 4: Chairman Mounir Medhioub	
10h50-11h	Brahim Said Djellali Experimental and theoretical investigation of structural phase transition in the LaMnO3 nanocrystalline LMO magnetic perovskite	Bachir Bouderba Bending studies of functionally graded plates using piezoelectric materials under mechanical and electrical loadings	Youcef Megrouss Electrostatic Properties Through Theoretical Investigation of The Compound C <sub>14</sub> H <sub>8</sub> N <sub>2</sub> OS <sub>2</sub>	Aida Affouri Organic and inorganic geochemistry for source and paleoenvironment reconstruction of the Saouaf Formation (Tortonian) carbonaceous rich clays in central-eastern Tunisia	
11h-11h10	Mongi saliùni Ni–Cu–Co ferrite synthesized using the sol-gel method: effects of the Cr3+ ion concentration on its structural, electrical, and dielectric properties	Sabrine Baachaoui Polyimaide-based Laser-Induced Graphene Supercapacitors with Enhanced Energy Storage Performance	Rihab Aloui Mo V line widths in the hot white dwarfs RE 0503-289	Ghada Bruina Mineralogy, petrography and geochemical studies of the Aoueouat greenstone belt rocks (Tasiast, Mauritania) and the role of the host rock in the emplacement of gold mineralization.	

11h10-11h20	Raoua Fakraoui Magnetocaloric study,critical behavior and spantaneous magnetization estimation in La0.6Ca0.2Sr0.2MnO3 perovskite	Ichrak Ben Slima Study of structural and electrochemical properties of NaCu0.2Fe0.8-xMnxO2 samples (x= 0.4; 0.7)	Safa Mohsin Ibrahim Calculating the even-even radii of nickel isotopes	Houria Elloumi Study of the interaction between Triassic rocks and Neogene magmatism in the structure of Oued Belif (Nefza, northern Tunisia) Tunisia
11h20-11h30	Benmehrez Rached  Design and control of permanent magnet synchronous motor for steering system	Thamer Aloui Photoelectrochemical Impedance Spectroscopy (PEIS) analysis in CIGS photocathodes on modified mesoporous TiO <sub>2</sub> for CO <sub>2</sub> reduction and H <sub>2</sub> production: Energy and environment applications	Ichrak Gassoumi Comprehensive device modelling and performance analysis of MASnI 3 based perovskite solar cells using various transport materials	Rihem Jemai The removal of methyl orange dye from an aqueous solution using a composite of porous starch aerogel and organoclay
11h30-11h40	Hedi Garbouj Study of skyrmions properties in frustrated magnetic spin systems	Khaled Kharrati Thermal performances and environmental analysis of a new composite building material based on plaster and Luffa Sponges' Fibers of Tunisian	Sahbi El Hog Skyrmions on elastic surfaces	Chadha Mejri Quantitative XRD Investigation of external constraint coupling strength on cation exchange capacity of Clay Membranes
11h40-11h50	Abir Salhi Synthesis and characterization of new materials for magnetic refrigeration application at high temperature	Amal Raouafi Laser-Induced Graphene Electrodes Modified with Electroactive Polymers for Energy Storage	Hanen Souissi Spectroscopic Study of the Electronic Properties of AgH	Rim Rekik Ellouze  The potential use of the sands of northeastern Tunisia in the synthesis of ceramic pigments and their industrial applications
11h50-12h	Imen Chihi Understanding the critical behavior of $La_{0.6}Ba_{0.2}Sr_{0.2}Mn_{1-x}Fe_xO_3$ (x = 0; 0.03 and 0.06) compounds around the critical temperature	Mariam Azabou  Mechano-synthesis of nanostructured nickel-iron alloy: Microstructure, and Hyperfine properties	Salah Bouazizi  Molecular dynamics simulation of ethanol-water mixtures: Effect of solvent composition on structural and dynamical properties	Sihem Rmili Comparative characterization of OMrich levels by XRD and IR: example of El Haria (Paleocene) and Bou Dabbous (Ypresian)
12h-12h10	Emna Bouzaiene Assessment of structural, magnetic, magnetocaloric properties and critical behavior of La0.6Bi0.1Sr0.2Ca0.1Mn0.9Cu0.1 O3 manganites	Wissem Zayani Investigation of the electrode (AB5-type) / electrolyte interface properties through Electrochemical Impedance Spectroscopy as a function of immersion time	Mouna Medimagh Bonding and Noncovalent Interactions Effects in 2,6- Dimethylpiperazine-1,4-Diium Oxalate Oxalic Acid: DFT Calculation, Topological Analysis, NMR, and Molecular Docking Studies	<b>Najah Majouri</b> Characterization and Evaluation of Tunisian Clay to Develop New Thermal Insulating Building Materials

12h10-12h20	Sana Meftah Structural characterization, magnetic and magnetocaloric properties of the double perovskite La <sub>2</sub> NiMnO <sub>6</sub>	Mohamed Amine Djebbi Ultrasensitive Electrochemical Magnetoimmuno sensing of Cardiac Troponin-T Biomarker Based on Gold Nanoparticles Coated Nanoscale Zero-valent Irons	Slim Elleuch Experimental and theoretical studies on the structural and optical properties of a new Metal-Organic Framework material	Zeineb Hamden Bioethanol production from by- products date palm
12h20-12h30	Chedia moualhi Impact of the microstructure on the magnetic properties of biosynthetized Cd-substituted spinel ferrite nanoparticles	Halima Loukil Etude d'une pile à combustible à membrane échangeuse de proton (PEMFC) pour la production d'électricité	Mokhtaria Drissi Synthesis, Crystal Structure, DFT Calculations, NLO properties and Hirshfeld Surface and molecular docking analysis on (E)-N-(3- methoxybenzylidene)-2- (quinolin- 8-yloxy)acetohydrazide: A combined experimental and theoretical study	Monia Ben Ammar Study of the organic matter content from a qualitative and quantitative point of view in ancient sedimentary rocks using a coupling of TG/DTG and FTIR
12h30-12h40	Riadh Fersi Annealing effect on microstructure and magnetic features of nanocrystalline ZrFe films	Mohamed Nafti Bessadok Physical properties of SiO <sub>2</sub> /Zn <sub>2</sub> SiO <sub>4</sub> ceramic composite enriched by Eu <sup>3+</sup> ion with enhanced thermal sensitivity at low temperatures	Othmen Khaldi Methods to identify Phase transition in perovskite materials : Ab-initio and experimental point of views	Rihem Nouir Impact de la localisation géographique sur la composition de la matrice dentaire : étude par la technique LIBS
12h40-12h50	$\begin{array}{c} \textbf{Safa Mnefgui} \\ \textbf{Impact of B-site substitution on} \\ \textbf{structural and magnetocaloric} \\ \textbf{properties of } La_{0.5} SPr_{0.1} Sr_{0.35} Mn_{1-} \\ _{x} Ti_{x} O_{3} \text{ samples} \end{array}$	Chokri Khaldi Investigation of the electrode (AB5-type) / electrolyte interface properties through Electrochemical Impedance Spectroscopy as a function of immersion time	Tarek Larbi Combined experimental and DFT studies on the spinel oxide Mn <sub>3</sub> O <sub>4</sub> and NiMn <sub>2</sub> O <sub>4</sub> and a quantum mechanical prediction of the structural stability and vibrational properties of low dimensional Yttrium oxide Y <sub>2</sub> O <sub>3</sub>	Sabria Malika Mansour Valorization of marble waste combined with silica fume used as cement substitution in eco-self- compacting concrete
12h50-13h	Jemi dhahri  Magnetic, magnetocaloric, magnetotransport and magnetoresistance properties of manganites $La_{0.60}Ce_{0.05}Ba_{0.35}Mn_{1-}$ $_xRu_xO_3$ ( $0 \le x \le 0.2$ ) peroveskite	Yethreb Essouda  Magnetic properties of the perovskite  Pr <sub>0.9</sub> Sr <sub>0.1</sub> MnO <sub>3</sub> : Monte Carlo  Simulation versus experiments	Feriel Abid Development of "Greener" pathways for the synthesis of furanic polyesters	Mohamed Taibi Evaluation of the adsorptive capacities of local clay from the Tiaret region on the adsorption of jass Methylene blue (MB)
13h-15h	Lunch break			

15h30-16h10 16h10-16h50	Plenary Conferences (Hall 1), Chairman Samir GUERMAZI Gérard LEROY  University of Littoral Côte d'Opale, France Measurement and Analysis of electrochemical noise in Li-ion batteries Plenary Conferences (Hall 1), Chairman Samir GUERMAZI Amina TACHAFINE University of Littorale Côte d'Opale, France Impedance spectroscopy of Lead-free ferroelectric materials for environmentally friendly capacitors applications			
16h50-17h20		Coffe	e break	
		Oral Pr	esentation	
Topics	Optical Materials and Laser Technology	Dielectric Materials and Nanocomposites	Organics/Inorganics materials	Nanomaterial for environmental remediation
	Hall 1: Chairman	Hall 2: Chairman	Hall 3: Chairman	Hall 4: Chairman
	Mohamed Dammak Phy	Lassaad El Mir	Monem Krichen	Hajer Guermazi
17h20-17h30	Dhouha Hcini Structural and optical properties of Ni <sub>0.4</sub> Cu <sub>0.4</sub> Cd <sub>0.2</sub> Fe <sub>2-x</sub> Cr <sub>x</sub> O <sub>4</sub> (x=0;1) ferrites synthesized by sol-gel method	Wafa Zayoud Electric and dielectric characterization of Ta <sub>2</sub> O <sub>5</sub> /SiO <sub>2</sub> multilayer	Amal Abdouli Corrosion Inhibition of Stainless Steel in Acidic Medium by Ascorbic Acid/Layered Double Hydroxide Composite	Abdelkader Chougui Synthesis and application of modified membranes in the treatment of liquid effluents
17h30-17h40	Ahmed Bouri Eu-doped alpha-alumina incorporated in silica glass matrix for blue and red photoluminescence	Rania Lataoui Dielectric and electrical property analyses of La <sub>0.7</sub> Sr <sub>0.3</sub> O <sub>3</sub> and La <sub>0.7</sub> Sr <sub>0.3</sub> Fe <sub>0.8</sub> Ti <sub>0.2</sub> O <sub>3</sub> - ceramics	Soulayma Mastouri Crystal growth and characterization of benzimidazolium perchlorate	Jacem Wannassi HKUST-1 and conducting polymer- based electrochemical sensor for high- performance cadmium ion detection
17h40-17h50	Ayoub Cherni Binding energy and photoionization cross-suection of donor impurity in CdS/ZnSe core/shell spherical quantum dots	Youssef Moualhi Recognizing the contribution of hopping and tunneling processes to the conductivity behavior of the phase-separated manganite ceramics	Yassine Chaker Influence of chloride and hydrogensulfate anions in two polymerised ionic liquids based on the poly(1-2(Dihydroxyethyl)-3- vinylimidazolium	Meriem Bendjelloul Influence du greffage de groupements fonctionnels sur la surface de biopolymere lors de l'adsorption de polluants organiques
17h50-18h00	Soukaina Chahib Elaboration and characterization of cobalt-doped BaSnO3 thin films	Hamida Gouadria Spectroscopic properties, conduction mechanisms and Summerfield scaling of Bi and Fe based barium titanate ceramics.	Aya Toumi Synthesis, Crystal Structure, Hirshfeld surface and Vibrational behavior of a new organic-inorganic hybrid Material: [C <sub>10</sub> H <sub>10</sub> N <sub>2</sub> ] <sub>2</sub> (SbCl <sub>4</sub> ) <sub>2.2</sub> Cl	Basma Ben Salem Structural, Optical, and Electrical Properties of a Binary Metal Oxide Nanocomposite for Photocatalytic Applications

18h00-18h10	Iman Ouahab  Design and simulation of an All Optical Half-Substractor Based on Photonic Crystal Nanotechnology	Hayet Jellali Electrical properties and conduction mechanisms of 1D hybrid Perovskites (CH <sub>3</sub> ) <sub>2</sub> NH <sub>2</sub> Cd( <sub>1-x</sub> )Cu <sub>x</sub> Cl <sub>3</sub>	Oumaima Mastouri Crystal growth and optical properties of a supramolecular perchlorate salt of 4-aminopyridine.	Ferid Ben Nasr Synthesis, characterization of (Fe, Sn) doped and co-doped Copper oxide nanoparticles and evaluation of their antibacterial activities
18h10-18h20	Touka Dabbebi Investigations of microstructural and impedance spectroscopic properties of Mg <sub>0.5</sub> O <sub>0.5</sub> Fe <sub>1.6</sub> Al <sub>0.4</sub> ferrites prepared using sol-gel method	Hend Kacem Phase structure and energy storage performance for Ca and Sn doped BaTiO <sub>3</sub> -based lead-free ferroelectric ceramic	Khaoula Ben Brahim Structural phase transition and molecular dynamics in plastic organic-inorganic crystal: TBA FeCl <sub>4</sub>	Wael Albouchi Effect of reactant ratio and nanofillers type on the microstructural properties, porosity fluctuations and heavy metal removal ability of chitosan-clay hybrid materials
			Diner	

	Thursday 6 July 2023				
	Plenary Conferences (Hall 1), Chairwoman Hajer GUERMAZI				
8h30-9h10		Fatholla	h VARNIK		
			r-Bochum, Germany		
	Solvent e	ffects in shape memory polyme	ers: Experiments and computer	simulations	
			Chairwoman Hajer GUERMAZI		
		Abdalla	AL-KELSH		
9h10-9h50		University o	f Tripoli, Libya		
		Electro-physiological study	of the heart cases using ECG		
	Oral Presentations				
Topics	Semiconductors and	Dielectric Materials and	Optical Materials and Laser	Dielectric Materials and	
Topics	Nanotechnology	Nanocomposites	Technology	<b>Nanocomposites</b>	
	Hall 1: Chairman	Hall 2: Chairman	Hall 3: Chairman	Hall 4: Chairman	
	Fathi Bahri	Souha Kammoun	Thamer Dammek	Abdallah Ben Rhaiem	
	Fawzi Elmissawi Emna Gnenna Sana Jebali				
	Macho Anani	Study of alternative current	Effect of heat treatment on structural,	Impedance, Modulus properties, and	
10h00-10h10	III-nitrides semiconductor optical	conduction mechanisms on the	morphological, and optical properties	intrinsic mechanism of the	
	waveguide characterization	NaFe <sub>1/2</sub> Mn <sub>1/2</sub> O <sub>2</sub> - based electrode	of thermally evaporated In <sub>2</sub> S <sub>3</sub> thin	optoelectronic Ba <sub>(1-x)</sub> Co <sub>x</sub> TiO <sub>3</sub> nano-	
		positive	films	compounds	

10h10-10h20	Jihed Laifi Mosaic Structure of GaN film grown on sapphire substrate: Impact of thermal annealing on the Tilt and Twist angles	Hajer Saadi Improving the strucutral and dielectric behaivors of ZnO through Co doping	Halima Hammami Structural, morphological, linear, and nonlinear optical properties of Cu <sub>2</sub> CoSnS <sub>4</sub> thin films	Imane Layaida Conduction mechanisms and dielectric relaxor behavior of Li-Cr ferrite nanoparticles
10h20-10h30	Sabrine Mourad A comparative study of annealing effect on properties of IZO thins films grown on Si-p deposited by PLD	Hanen Dardouri Synthesis, structural, and ionic conductivity characterizations of Li3Fe <sub>2</sub> (PO <sub>4)3</sub> compound.	Oumayma Abbassi Structural and optical properties of thermally evaporated Cu <sub>14</sub> Sb <sub>4</sub> S1 <sub>3</sub> thin films annealed in air atmosphere	Ben Chamekh Marwa Complex impedance, dielectric properties and electrical mechanism of Ba <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> and Ba <sub>0.6</sub> Sr <sub>0.4</sub> TiO <sub>3</sub> perovskite oxide
10h30-10h40	Haykel Mzoughi Exploring the electro-thermal properties of dual metal gate AlGaN/GaN HEMTs at different gate lengths	Ammar Ghodhbani Impedance spectroscopy tool for the investigation of the electrical transport properties of La <sub>0.8</sub> Ca <sub>0.2</sub> Mn <sub>0.5</sub> Cu <sub>0.5</sub> O <sub>3</sub> compound	Maher Jdir  Development of hybrid nanocomposites P3HT/Indium-doped ZnO for Organic Field-Effect Transistor application: Fabrication, characterization and device performances	Omayma Amorri Impact of Bi doping on the structural and physical properties of LaCrO <sub>3</sub>
10h40-10h50	Mohammed Khadraoui Synthesis of (Bi <sub>2</sub> S <sub>3</sub> )(γ-MnS) composite thin films deposited by spray pyrolysis and their characterization	Raouia Jemai Admittance spectroscopy analysis of hydrogenated amorphous silicon deposited by PECVD and HWCVD	Mouna Idoudi Study of the optical properties via spectrophotometric and photoluminescence measurements of CuSbS <sub>2</sub> thin films deposited by the GLAD technique	Ahmed Suifi Ceramiques ferroelectriques nanostructurees
10h50-11h20		Coffee bre	ak + Posters	
11h20-11h30	Naoures Kedidi AsBiX3 (X = S, Se, Te) Monolayers: Auxetic Semiconductor with Highly Anisotropic Mechanical Properties	Seif Eddine Mnassri Microstructural, electrical, and dielectric characteristics of LaBaCeFeNiO <sub>3</sub> Composite produced by sol-gel technique were studied as a function of Ni doping concentration.	Kawthar Abid Unveiling the Unprecedented Clusteroluminescence Mechanism in a Novel 2D Hybrid Material with Tunable Photophysical Properties	Amira Zaafouri AC conductivity and dielectric behavior of a new double perovskite PrNaMnMoO <sub>6</sub> system
11h30-11h40	Hejer Ben Soltane Study of the effect of oxygen flux annealing on the physicochemical properties of silver oxide thin films	Abir Hadded Influence of cooper substitution on structural, magnetic and magnetocaloric properties of Cu <sub>x</sub> Mn <sub>3-x</sub> O <sub>4</sub> materials	Ikhlas Kachou Synthesis and characterization of nanophosphors doped rare earths for thermometry and display applications	Abd-Raouf JDIDI  Electrical and dielectric behaviors for Cu <sub>0.6</sub> Mg <sub>0.2</sub> Co <sub>0.2</sub> feCrO <sub>4</sub> spinel ferrite synthesized by sol–gel route at T=850°C

11h40-11h50	Mohamed Draoui The effect of nanoparticles powder on the Al-Si eutectic in a hypoeutectic Al-Si alloy	Amira Khlifi Structural, electrical and dielectric properties of (Ba <sub>0.8</sub> Sr <sub>0.2</sub> ) <sub>0.7</sub> (Bi <sub>0.9</sub> Sm <sub>0.1</sub> ) <sub>0.3</sub> Ti <sub>0.7</sub> Fe <sub>0.3</sub> O <sub>3</sub> ceramic	Zein El Abidine Aly Taleb Ultrasensitive optical thermometry via Tb <sup>3+</sup> doped NaSrGd(MoO4)3 based on single band ratiometric luminescence.	Moufida Borni AC and DC conductivities of $Si_5P_6O_{25}$ compound
11h50-12h00	Houssem Eddine Hannachi Moiré interlayer exciton in TMD heterobilayer for TeraHertz applications	Samia Kraiem  Electrical characterizations of the effect of Ga concentration on Ag/Ga:ZnO/p-Si/Au diode	Mouna Fhoula  Down conversion and luminescent thermometry of Pr <sup>3+</sup> /Yb <sup>3+</sup> doped  Y <sub>2</sub> Mo <sub>4</sub> O <sub>15</sub> phosphors	Ikhlass Ben Salem Electrical and magnetoresistive properties of Pr <sub>0.7</sub> Sr <sub>0.25 □0.05</sub> MnO <sub>3</sub>
12h00-12h10	Asma Miled Investigation of the effect of Antisolvent treatment on the chemical, morphological, optical, and electrical properties of hybrid perovskite solar cells	Abir Slimani The effect of sintering temperature on the structural and electrical properties of spinel ferrites $Mg_{0.4}Cd_{0.2}Cu_{0.4}FeCrO_4$	Nabiha Missaoui Study of the structural and optical properties of spinel ferrites NiCd <sub>0.3</sub> Co <sub>0.3</sub> Fe <sub>2</sub> O <sub>4</sub>	Walid Mansouri Study of structural, dielectric, and optical properties of Ni <sub>0.4</sub> Cu <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>2</sub> O <sub>4</sub> spinel ferrite for electrical and optical applications
12h10-12h20	Narimen Chakchouk Optical studies and electric response of the semiconducting CuMO <sub>4</sub> (M=Mo and W) compounds	Fatma Namouchi Enhanced conductivity and conduction mecanisms in hybrid Epoxy based nanocomposites for dielectric applications	Nihel Hsouna Europium and Terbium Co-Doped Phosphate Glasses for White luminescence Applications	Sarra Hajlaoui Structural, electrical and dielectric modulus studies of Cu <sub>0.6</sub> Cd <sub>0.2</sub> Mg <sub>0.2</sub> Cr <sub>2</sub> O <sub>4</sub> spinel oxide
12h20-12h30	Ameni Koutty Elaboration et caractérisations des couches minces à base de Sn2Sb2S5 déposées sur des substrats inclinés et/ou en mouvement de rotation	Mohamed Mounir Bouzayani Investigation of structural, morphological, and electrical characterization of KSr0.5Fe2O4 compound	Kamel Saidi Optical vacuum sensor based on lanthanide upconversion- luminescence thermometry as a tool for ultralow pressure sensing	Manel Ben Abdessalem Electrical properties of 0.8(Ba <sub>0.8</sub> Sr <sub>0.2</sub> )TiO <sub>3-</sub> 0.2(Bi <sub>0.85</sub> Yb <sub>0.15</sub> )FeO <sub>3</sub> compound
12h30-12h40	Sinda Alaoui Tin(IV) based organic—inorganic hybrid semiconductors with high thermal stability and electric properties	Chaima Ben Makhlouf Dielectric and Electrical Properties of Cu <sub>0.6</sub> Mg <sub>0.2</sub> CO <sub>0.2</sub> Fe <sub>2</sub> O <sub>4</sub> Ferrites Synthesized Using Sol-Gel Method	Safa Hamdi Effect of Dy dopant on the structural, optical and electrical properties of ZnO nanopowders synthesized by co- precipitation method	Houda Mansour Co-precipitation preparation and characterization of (Mg, Cu) co-doped TiO <sub>2</sub> nanoparticles
13h:00-15h	Lunch break			

		Friday 7 July	2023	
8h30-9h10		Ali 2	), Chairman Lassad ELMIR <mark>Zaoui</mark> Bel-Abbès of Algeria	
	New semi		applications: Structure & P	Properties
9h10 – 9h50	New Serial		), Chairman Lassad ELMIR	
9H10 - 9H50		Lotfi E	Bessais Control of the Control of th	
		University of Paris-	Est Creteil, France.	
		Multifunctional Co-bas	sed intermetallic alloys	
		Oral Present	tations	
Topics	Nanomaterial for environmental	<b>Magnetic and Multiferroic</b>	Dielectric Materials and	Optical Materials and Laser
Topics	remediation	Materials	Nanocomposites	Technology
	Hall 1: Chairman	Hall 2: Chairman	Hall 3: Chairman	Hall 4: Chairman
	Hichem Smaoui	Mohamed Ellouz	Abdelhedi Aydi	Karim Karoui
10h00-10h10	Moncef Ben Amor Étude des propriétés physiques de l'oxyde de cuivre Cu2O en couche mince : Application à la détection de l'éthanol	Samia Aydi Structural and spectroscopic studies of LiMnNbO <sub>4</sub> spinel ceramic	Leila Miladi Ionic conducting characteristics of the solid electrolyte LiMgPO <sub>4</sub>	Ibtissem Riahi Influence of sputtering power on the properties of Zinc-Tin-Oxide thin films
10h10-10h20	Imen Hemmedi Chemically reduced Graphene Oxide thin films for Methylene Bleu photocatalytic degradation	Rawaa Abdallah Electrical and Magnetimarwac characterizations of an organic AnE- PVstat material	Yosra Zidi Preparation and characterization of Barium Strontium Titanate by solid- state reaction	Sonia Ben Slama Effect of Ni metal on the structural and optoelectronic properties of thin silicon layers
10h20-10h30	Mohamed Mastouri  Molecular Dynamic Investigation for the Immobilization of a Novel Peptide anti-OTA into Graphene Surface	Khouloud Abiedh Evaluating the optoelectronic properties of individual CsPbBr3 microcrystal by Conductive-AFM characterization	Marwa Ben Chamekh Complex impedance, dielectric properties and electrical mechanism of Ba <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> and Ba <sub>0.6</sub> Sr <sub>0.4</sub> TiO <sub>3</sub> perovskite oxide	Abdelkarim Rjiba Water Structure in a mesoporous bioactive glass studied by DSC and <sup>1</sup> H MAS NMR
10h30-10h40	Amel Gouasmia Electrical and dielectric study of ZnO and ZnO nanoparticles doped by 5% Bi <sub>2</sub> O <sub>3</sub>	Ahmed Selmi Impact of 5% Mn-substitution on magnetic and magnetocaloric properties in Pr0.7Ca0.3MnO3 (Cr, Ni, Co and Fe)	Darine Harrabi Structural and dielectric properties of Mg0.6M0., ,4Cr2O4 (M = Ni and Cu) chromites synthesized by sol-gel method	Imen Romdhane Structural, optical, and vibrational proprieties of the inorganic perovskite material of formula Cs2ZnCl4

	Imene Feddal	Sarra Elaskri	Aymen Mbarki	Oumayma Ayari
10h40-10h50	Élimination d'un pesticide, Diuron,	Structural, magnetic, and	Quelques propriétés physiques et	Characterization of optical properties
101140-101130	par une argile algérienne modifiée	magnetocaloric properties of the	diélectriques sur les matériaux avec	of Sm <sup>3+</sup> doped phosphate glasses for
	pour la protection de l'environnement	sample $Pr_{0.9}Sr_{0.1}Mn_{0.91}Ti_{0.1}O_3$	élaboration solide_solide	reddish-orange light applications
10h50-11h20		Coffee	e break	
11h20-11h30	Fawzi Khachnaoui Structural properties of MgxCu1-xO nanopowder Prepared by the sol-gel method and their application as antibacterial activity	Mouna Wali  Effect of sodium deficiency on the critical behavior near the paramagnetic to ferromagnetic phase transition temperature in La0.8 Na <sub>0.2-x</sub> <sub>□x</sub> MnO <sub>3</sub> oxides	Olfa Rahal Structural, Microstructural and Electrical transport properties of Pr <sub>0.9</sub> Sr <sub>0.1</sub> Mn <sub>0.95</sub> Ti <sub>0.05</sub> O <sub>3</sub> manganite compound	Salim Karim Physical properties of spray pyrolyzed ZnO thin films obtained from nitrate, acetate and chloride precursors: Comparative study for Solar Cell Applications
11h30-11h40	Karim Omri Effect of Mn2O3-doped on physical and photocatalytic properties of Mn2O3/Dy2O3 nanocomposites	Tarek Ben Slimen Synthesis and study of the structural and magnetic properties of cobaltite compound La <sub>0.57</sub> Nd <sub>0.1</sub> Sr <sub>0.18</sub> Ag <sub>0.15</sub> CoO <sub>3</sub>	Mansour Boukthir Development, characterization, and studies of the electrical and dielectric properties of the compounds α-NaMnO <sub>2</sub> and γ-NaMnO <sub>2</sub> optimized for battery-positive electrode materials	Fadwa Ayachi High sensitivity multi-mode ratiometric thermometry of coupled and non-coupled YP <sub>0.5</sub> V <sub>0.5</sub> O <sub>4</sub> tri- doped Er <sup>3+</sup> / Yb <sup>3+</sup> / Ho <sup>3+</sup> luminescent materials.am
11h40-11h50	Chahinaz Kandouci UhajlaWOC Systems Performance Study for Different Jerlov Water Types	Malek Lahbib  Hybrid nanocomposite made of chitosan, montmorillonite, and zinc oxide nanoparticles: microstructural and functional characteristics	Ibtihel Soudani Investigation of structural, and electrical properties of multifunctional spinel ferrite LiMg <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub>	Nabil Zorgui Luminescence properties of Dy <sup>3+</sup> doped phosphate glasses
11h50-12h00	Mehdi Messaad Synthesis, bioassay and molecular docking of novel pyrazole and pyrazolone derivatives as acetylcholinesterase inhibitors	Hajer Jeidi Effect of the pyrolysis temperature on the negative differential resistance in carbon/vanadium nanocomposite	Mohamadou Ba  Effect of gallium-doped zinc oxide nanoparticles on the electrical characteristics bouof Organic Thin-Film Field-Effect Transistors based on P3HT: GZO hybrid blend	Jamila Dhahri Structural and optical properties of Co-Cu substituted Cd-Ni spinel ferrites for optoelectronic applications
12h00-12h10	Afef Dhaffouli A sensitive electrochemical sensor based on ZnO, SiO <sub>2</sub> -APTES for high detection of Pb(II) and Cd(II) ions	Malek Djeribi Synthesis and characterization of a hybrid material based on glycine functionalized polyoxoanion [SeMo <sub>6</sub> O <sub>21</sub> (O <sub>2</sub> CCH <sub>2</sub> NH <sub>3</sub> ) <sub>3</sub> ] <sup>2-</sup>	Houda Felhi Deciphering the Structural Characterization, Hirshfeld Surface Analysis, Raman Studies, and Temperature-Dependent Magnetodielectric Properties of BiMn <sub>2</sub> O <sub>5</sub>	Nouha Mastour  Electroluminescence performance of P3HT-CdSe-P3HT light-emitting diodes and study of its energy transfer dependence

12h10-12h20	Oukacha Douinat  Etude de potentiel d'élimination de la Fluorescéine par un biosorbant nature	Nabiha ouled nasser Influence of Na addition on the magnetic and magnetocaloric properties of La <sub>2-x</sub> Na <sub>x</sub> NiMnO <sub>6</sub> (x=0 and x=0.4) double perovskite.	Marwa Jebli Synthesis, dielectric and relaxation behavior of lead-free La <sup>3+</sup> and Nb <sup>5+</sup> doped BaTiO <sub>3</sub> ceramic compound	Nozha Ben Amar Synthesis, characterization and optical thermometry of GdPO <sub>4</sub> :Er <sup>3+</sup>
12h20-12h30	Mohammed Amin Chemrak Synthesis of recycled PET membranes for methane gas dehydration	Saber Boubakri Highly efficient adsorption of anionic dyes using MgAl layered double hydroxide from aqueous solutions	Intissar Ghamgui Impedance spectroscopy study of Erdoped NBZT ceramics.	Jaber Elghoul Synthesis, structural and optical properties of Dy co-doped ZnO:Al nanoammaparticles
12h30-13h00	Closing			
13h00	Lunch break			

Poster Presentations (Wednesday 5 July 2023: 10:20h-10h50)				
Name	Title			
Brahim Said Djellali	Kinetics, Phase Transformations and Sintering of Mg-doped LaMnO <sub>3</sub>			
Malika Ben Gzaiel	Advances and property investigation of organic-inorganic semi-conductor: [(CH <sub>3</sub> ) <sub>4</sub> P] <sub>2</sub> CoBr <sub>4</sub>			
Noureddine Mhadhbi	Palladium complex with 3-picolylamine ligand: Synthesis, physicochemical studies and DFT calculations			
Abdelkader Yakoubi	Influence of the modified Becke-Johnson exchange potential on electronic properties: application to a series of half-heusler compounds XMSb			
Karim Karoui	A new supramolecular semiconductor palladium (II) complex [(CH3)3N(CH2)3Br]2Pd2Cl6: structural study, optical and electrical properties			
Ouiza Cherif	Valorization of djbel onk phosphate by flotation process using fatty acids derived from paraffin oil			
Abdallah Askri	Structural, morphological and dielectric characteristics of ZnO/SiO2 /Nb205 composite for energy storage applications			
Rima Mohammed Abraheem Altalib	Synthesis, Structure, and property investigation of organic-inorganic compound [(C <sub>6</sub> H <sub>9</sub> N <sub>2</sub> ] <sub>3</sub> Bi <sub>2</sub> Cl <sub>9</sub>			
Fadhel Hajlaoui	Synthesis, Structure and Photoluminescence Properties of 0D Hybrid Tin (IV) Halide Perovskites-Like: [Cl-(CH <sub>2</sub> ) <sub>2</sub> -NH <sub>3</sub> ] <sub>2</sub> SnX6 (X = Cl; Br)			
Salem Yahiaoui	Experimental and theoretical structural determination, intermolecular charge transfer, Hirshfeld surface, NCI-RDG, and molecular docking for a novel 1,2,4-oxadiazole derivative			
Amar Djemli	Prepared cordierite-mullite composite using local raw materials			
Wala Trigui	Crystal structure, phase transitions and Raman scattering in the new non-centrosymmetric [(C3H7)4N]3Bi3Br12 compound			
Yosra Zidi	First principal study of electronic, dielectric, and elastic properties of Sr-doped BaTiO <sub>3</sub>			
Sara Saidi	Diagnostic électrique et optique d'une DBD dans le mélange Ne-Xe			
Nabil Zouari	LEAd-Free perovskite nanocrystals embedded in polymeric electrospun nanofibers for fluorescent sensors (LEAF)			
Nissaf Mzabi	Effects of synthesis medium on structural, dielectric and conduction properties of zinc oxide nanoparticles			
Khalil Lazaar	A study of the potential to remove pollutant dyes cationic and anionic from wastewater by Tunisian natural clay			
Macho Anani	Au/SiC-6H Schottky Barrier Diode Interface States Characterization Related To Temperature			
Nadia Khlifi	Evaluation of physicochemical and antibiofilm properties of copper oxide based nanomaterials			

Sara Lebid	Optical Sensor For Dissolved Oxygen Measurements In Water		
Malek gassoumi	Electrical and dielectric behaviors for Cu <sub>0.6</sub> Mg <sub>0.2</sub> Co <sub>0.2</sub> feCrO <sub>4</sub> spinel ferrite synthesized by sol–gel route at T=850°C		
Hichem Chaalal	Mathematical modeling of the Hg (II) removal from aqueous solutions onto granular activated carbon prepared from olive stones in a fixed-bed column		
Mohamed Ben Bechir	Photoluminescence, Raman and Photosensitive Dielectric Properties of Lead-Free Antimony-Based Cs <sub>3</sub> Sb <sub>2</sub> Br <sub>9</sub> Single Crystals for energy storage devices		
Amal Ayadi	Impact of Fe-doping on the structural and optical properties of CuO nanoparticles		
Marwa Jeddi	Impact of Potassium substitution on magnetocaloric and magnetotransport properties of Nd <sub>0.6</sub> Sr <sub>0.4-x</sub> K <sub>x</sub> MnO <sub>3</sub> manganite		
Amira Deloum	Investigating the Structural and Electronic Properties of AIN/GaN Superlattices Along (110), (110), and (111) Growth Axes Using First Principles		
Mimouna Oukli	Strong Orbital Coupling and Bowing EFFect in GaAsN		
Sihem Menassel	Morphology and superconductivity studies of Sndoped Bi-2212 single crystals		
Lotfi Sellaoui	Adsorption of herbicide Diuron on activated carbons: Isotherms, modelling and thermodynamic studies		
Mounya Zenasni	Electrochemical Synthesis of TiC/TiO <sub>2</sub> nanocomposites based on nanostructured materials employing electroactive polymers.		
Abdelhedi Lachabi	First-principles study of cubic B <sub>x</sub> Al <sub>1-x</sub> N alloys		
Meriem Hambi	Influence of thickness on the properties of ZnO thin films deposited by spray pyrolysis method for photovoltaic application		
Ahmed Hichem Yahi	Improved structural, optical and electrical Properties of Al doped ZnO thin films deposited by spray pyrolysis for Solar Cell Applications		
	Poster Presentations (Thursday 6 July 2023: 10:50h-11h20)		
Hajer Souissi	Experimental and optical studies of the new organic-inorganic Chloride: [(C <sub>3</sub> H <sub>7</sub> ) <sub>4</sub> N] <sub>2</sub> CoCl <sub>4</sub>		
Houari Khachai	First principal study of the mechanical and, thermal properties of the fluoro-perovskite		
Souad Chkoundali	Study of ceramic material (Ba0.7Sr0.3)0.4Na0.6(Ti0.9Sn0.1)0.4Nb0.6O3 by Dielectric and X-Ray Diffarction		
Saber Nasri	AC conductivity, Electric modulus analysis and Electrical conduction mechanism of RbFeP2O7 ceramic compound		
Aicha Ayadi	Synthesis of ZnO –Al <sub>2</sub> O <sub>3</sub> nanocomposite powders and their use in the field of water pollution control		
Naoufel Khemiri	Influence of Calcination Temperature on Structural properties of Cu2ZnSnS4 Powders		
Adel Hammouda	Effect of the deposition angle on the optical properties of copper oxide thin films prepared by the GLAD technique		
Ilias Mohalmmed	Numerical Analysis of Surface Optimization of a combined adhesive joint between two adhesives under thermomechanical loading, and the influence of		
Amine Ghermaoui	overlap length		
Mohamed Loucif	CO <sub>2</sub> capture by porous materials functionalized with amine sources		
<b>Kawther Ezzine</b>	The investigation of the physical properties of the compound perovskite CsPbCl <sub>3</sub>		
Arslane Hatem	Effect of the ultra-thin GaN interlayer on the surface photovoltage in Au/GaAs Schottky barrier diodes		
Kacha			
Ezzine Mohammed	Damage and failure of single lap joints with two adhésives		
Chamseddine Amal Elghoul	Synthesis, Structure and Photoluminescence Properties of 0D Hybrid Tin(IV) Halide Perovskites-Like: [Cl-(CH2)2-NH3]2SnX6 (X=Cl;Br)		

Hajer Bouznif	Synthesis and characterization of metal complexes for applications in sensing and optoelectronics		
Yessine Belhadj	Layered Arrangement in the Lead-Free Hybrid material (bromoethyltrimethylammonium)3Bi2Br9 : Structural Investigations and Properties		
Souad Brick chaouche	Elaboration et caractérisation des nanoparticules d'oxyde de Fer par chimie verte: application à l'adsorption du colorant bleu de Méthylène		
Ahmed Haddad	Elaboration et caractérisation des nanoparticules Bi-M par la méthode de Co précipitation		
Yasser Abderrahim Khachai	First-principles study of lead-free halide perovskites		
Hadj Barkat Kaarour	Optical and electric properties study of quantum perovskite light-emitting diodes		
Yassine Wali	Elaboration and Optical studies on a new self-organized quantum dots crystal [C8H10N3]2CdCl5		
Sondes Hajlaoui	Structural phase transition in [N(C3H7)4]2SnBr6 compound: X Ray powder diffraction, DSC measurement and Raman scattering investigation		
Abdelfatteh Bouzidi	Dysprosium ion effect on the structural, optical, and dielectric characteristics of epoxy resin polymer composite panels for use as a transducer material		
Foudil Sahnoune	Crystallization kinetics of LaMnO3 from sol-gel synthesized precursors		
Bouthaina Shili	Electronic, optical and elastic properties of TiO2, Ta2O5 and Ti0.75Ta0.25O2 (TiTaO)		
Yassine Ben Ali	Adsorptive Removal of Methylene Blue (MB) Dye From Aqueous Solution By Using Environmental-Friendly Adsorbent Composite Based on Hydroxyapatite/Xanthan Gum		
Souha Gharbi	Study of the dielectric and optical properties of the double Delafossite Li2Fe2O4 compound synthesized by auto-combustion		
Issa El Heda	Study of structural, morphological, optical, and electrical properties of spinel ferrite nanoparticles Mn <sub>0.5</sub> Fe <sub>2.5</sub> O <sub>4</sub> synthesized by the auto-combustion method		
Najet BAKI	Etude des propriétés Structurales, Optoélectroniques et Thermoélectriques des matériaux Pérovskites à base d'halogènes CsSnX3 (X=Cl, Br		
Mahdi Hdidar	Elaboration and impedance spectroscopic study of polyvinyl alcohol crosslinked by 30% Oxalic Acid doped by various concentrations of potassium ionic liquid		
Ikram Zidani	Double junction InGaP/Si using multiple quantum well with Improve efficiency		
Bochra Ben Salah	Exploration of New Chiral Hybrid Semiconducting Palladium Halide Complexes: [(R)/(S)-2-Methylpiperazinediium]PdCl4		
Ilhem Bargaoui	Reduced graphene oxide thin films thickness dependency for Chemical warfare agents detection		
Nadjet Metadjer	Electronic and magnetic properties of Fe <sub>2</sub> SiC		
Mohammed Nadhir			
Djamel Eddine	Study of the effect of strain rate and temperature on the mechanical behavior of polycarbonate PC		
Cherief			
Rania Mahdadi	Characterization of single-crystal Cu <sub>2</sub> ZnSn(S <sub>x</sub> Se <sub>1-x</sub> ) <sub>2</sub> ingot grown by melting method for thin film solar cell application		
Abdesselam Bouloufa	Numerical simulation of graded-bandgap Cu2Sn x-1 GexS3 thin film solar cell for high efficiency		
Nabila bitri hamdi	Chemically reduced Graphene Oxide thin films for Methylene Bleu photocatalytic degradation"		
Ridha Briki	Synthesis and structural, electric, optical characterization of a new hybrid organic-inorganic compound		