



The Moroccan Association of Physics of Advanced Materials and Their Applications organizes

THE 3RD INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS FOR PHOTONICS, SENSING AND ENERGY APPLICATIONS (AMPSECA' 2019)

30 OCTOBER, 1 NOVEMBER, 2019
MARRAKECH, MOROCCO

PROGRAM



Program

The 3rd International conference on Advanced Materials for Photonics, Sensing and Energy Applications (AMPSECA' 2019)

30 October, 01 November, 2019, Marrakech, Morocco

A Conference on Advanced Materials, Emerging and Transferring New Technologies
Organized by Moroccan Society of Advanced Materials Physics and their Applications
(SMPM2A)



Partnerships



Chouaib Doukkali University, El Jadida, Morocco

Hassan II University, Casablanca, Morocco

Mohammed V University, Rabat, Morocco



Caddi Ayad University, Marrakech, Morocco

Sultan Moulay Slimane University, Beni-Mellal, Morocco

Haut de France Polytechnique University, Famars, France



Evora University, Evora, Portugal



Tuesday, 29 October

15:00–19:00

Registration

19:15–20:00

Welcome Reception

Wednesday, 30 October

07:30- 10:00

Registration

08:30–09:30

Opening Ceremony

PLENARY CONFERENCE

9:30 - 10:00

From Biopolymers to Functional Materials: Fabrication, Characterization and Application
Teofil Jesionowski - Poznan University of Technology, Poland

10:00- 10:30

Bismuth Sodium Titanate Based Ferroelectric Ceramics for Capacitor and Transducer Applications
Wang Genshui - Shanghai Institute of Ceramics, China



10:30- 11:00

Coffee break



SYMPOSIUMS 1

	Session A	Session B	Session C
11:00- 11:20	Fabrication and Pyroelectric Properties of SBN-based Ferroelectric Ceramics Shaobo Guo - Shanghai Institute of Ceramics, China	Metal oxides-based hybrid materials with defined utility potential Filip Ciesielczyk - Poznan University of Technology	
11:20 - 11:30	IoT based Real-time Photovoltaic panel's Behavior Analysis at the Operation Phase compare with standard condition Rashel Masud Rana – University of Evora Portugal	Characterization of metal microlayers using dispersive propagation of surface acoustic waves in 20-125 MHz frequency range Smagin Nikolay – University of Valenciennes, France	Wireless surface acoustic wave sensors network for concrete humidity monitoring Mouad Kiassi – University of El Jadida, Morocco
11:30 - 11:40	The Daily Electrical Performance of the Photovoltaic Panel with Phase Change Material as a Passive Cooling Technique Sellami Assia – University of El Jadida, Morocco	Piezoelectric-thermoelectric hybrid material for energy harvesting Salhi Imane – University of El Jadida, Morocco	Reference-free imaging technique based on repetitive defect probing under low frequency mechanical vibration Marina Terzi – University of Valenciennes, France
11:40 - 11:50	Piezoelectric properties of biobased poly(L-lactide) stretched films for energy harvesting applications Ben Achour Mohamed Aymen - Polytechnic University of Hauts-de-France, Valenciennes, France	Dynamical Properties and Scaling Behavior of Self-propelled Particles: Langevin Equation Treatment Amallah Layla – University of Casablanca, Morocco	Elaboration and characterization of TiO ₂ thin films by Spray Pyrolysis (SP) Doubi Youssef – University of Casablanca, Morocco
11:50 - 12:00	The use of taguchi method to elaborate a good ZnO thin films by sol gel associated to dip coating Pilor Modou – University of Casablanca, Morocco	First principle investigation on hydrogen solid storage in Zr _{1-x} Nb _x NiH ₃ (x = 0 and 0.1) Mourad Rkhis – University of El Jadida, Morocco	Metal-Insulator-Metal structures for sensing applications Andam Najat - Moroccan Foundation for Advanced Science and Innovation and Research, Rabat, Morocco
12:00 - 12:10	Improving the rate capability of high voltage 5V LMNO cathode material by cobalt doping using coprecipitation method for Lithium Ion Batteries (LIBs) Garhi Ghita – University of Marrakech, Morocco	DFT study of structural electronic and magnetic properties of X ₂ YZ a Full-Heusler Compound Ab initio calculations El Krimi Youssef – University of Marrakech, Morocco	Application of Taguchi method to optimize the parameters for elaboration of tin dioxide thin films by spray pyrolysis for gas sensors applications Maha Hinna – University of Casablanca, Morocco

12:10 - 12:20	Adsorption of NO _x , CO, H ₂ O and CO ₂ over isolated divalent cations in Faujasite Zeolite Ayoub Daouli – University of Nancy, France	Influence of electromagnetic field on water pH at kinetic conditions and monitoring of time magnetization using the spectroscopy impedance Redouane Mghaiouini - University of El Jadida, Morocco	Structural and optical properties of Mgq2 Thin films Loug dali Meriem - University of Casablanca, Morocco
12:20 - 12:30	Optimization of the energy harvesting using piezoelectric effect in thin multilayers Fakkar Hachim – University of El Jadida, Morocco		Structural properties of self-assembled thin films of phthalocyanine derivatives El Aallaoui Najla – University of Casablanca, Morocco
12:30 - 12:40	Performances analysis of a grid-connected PV system- hydrogen electrolyser - fuel cell system for cogeneration in buildings Boulmrharj Sofia – University of El Jadida, Morocco		
12:40 - 12:50	Wearable Microstrip Patch Antenna by Using Textile Material for Ambient RF Energy Harvesting El Batal Khadija – University of Casablanca, Morocco		



13:00–14:30	Lunch break
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PLENARY CONFERENCE	
14:30- 15:00	Properties of some two-dimensional materials for application to energy conversion and storage Abdelilah Benyoussef - Mohammed of Rabat, Morocco

SYMPOSIUMS 2

30 October, 2019

	Session A	Session B	Session C
15:05- 15:25	Properties & Functionality of Nanomaterials Spintronics, Biomedical & Environment M. Bououdina - University of Bahrain, Kingdom of Bahrain	Ionic polymer transduction : from physics to numerical modeling Grondel Sébastien - Polytechnic University Hauts-de-France, France	Disruptive equipment for nondestructive teste of marble, granite and limestone blocks Mouhaydine Tlemçani – University of Evora, Portugal
15:25 - 15:35	The phase diagram determination of a high temperature superconductor Bghour Mustapha – University of Agadir, Morocco	PEDOT:PSS-based micro-transducers for soft MEMS Eric Cattan – University of Valenciennes, France	Physical Properties of Yellow Naturel Moroccan Dye Anoua Rania – University of El Jadida, Morocco
15:35 - 15:45	Non-iterative MPPT Method a Comparative Study Ahmed Md Tofael – University of Evora, Portugal	Three-dimensional printing of a piezoelectric cellular polymer film Najihi Ikrame – University of El Jadida, Morocco	Vectorial motion of matter and surface relief gratings in azo-polymers Moujdi Sara – University of Rabat, Morocco
15:45 - 15:55	Pb(Mg _{1/3} Nb _{2/3}) _{1-x} Ti _x O ₃ multifunctional smart material for sensor-generator applications Amine Alaoui-Belghiti – University of El Jadida, Morocco	The effect of sintering temperature on densification and mechanical properties of hydroxyapatite-tricalcium phosphate composite Es-Saddik Mohammed – University of Agadir, Morocco	Optical and Colour properties of Mn-doped Forsterite Siragi Nouha – University of Marrakech, Morocco
15:55 - 16:05	Energy management of a nanogrid agglomeration based on artificial intelligence methods Aoukach Basma – University of Casablanca, Morocco	Structural and optical propertes of Cd _{1-x} Ni _{0.02} Mg _x S (0.01 ≤ x ≤ 0.07) thin films prepared by spray pyrolysis : photovoltaic applications Garmim Taoufik – University of El Jadida, Morocco	Optical and structural properties of LaPO ₄ :Ce ³⁺ -Yb ³⁺ nanoparticles Aitmellal Oussama – University of Beni Mellal, Morocco
16:15 - 16:25	Structural, electronic and optical properties of ZnS-nanowires : DFT Study Es Smairi Adil – University of Casablanca, Morocco	Ab initio investigation of electronic and magnetic proprties of allotropic graphite forms of carbon and nickel-doped graphite Abdellah Sellam – University of Marrakech, Morocco	On Optically Induced Birefringence in Azo-polymers Elhani Sanaa – Universitu of Rabat, Morocco
16:25 - 17:00	Coffee break		

17:00 - 17:10	Preparation and characterization of Paraffin/LDPE/MWCNTs for building energy storage Harmen Yasser – University of El Jadida, Morocco	Structural and energetic study of 2D silagraphene materials Chataoui Hassan – University of Marrakech, Morocco	Optical and structural properties of oxides thin films Lamkaouane Hind – University of Casablanca, Morocco
17:10 - 17:20	The broadening of the resistive transition region of single crystal $YBa_2Cu_3O_{7-\delta}$ high temperature superconductor optimally doped Labrag Abdelaziz – University of Agadir, Morocco	The energy released during the cracking of fibers randomly oriented in the composite materials Boufass Siham – University of Casablanca, Morocco	Electronic band structures of InAs/InxGa1-xSb type II superlattices long wave infrared detectors Benaadad Merieme – University of Agadir, Morocco
17:20 - 17:30	Comparative study of solar tracking and fixed-tilt photovoltaic modules in Eljadida Morocco Mrhar Oumaima – University of El Jadida, Morocco	Eco-friendly synthesis of titania with reduced band-gap for environmental remediation El Jemli Yousra - University of Marrakech, Morocco	Ab-initio study of structural, electronic, optical and thermoelectric properties of TiO ₂ phases Mohamed Aazi – University of Casablanca, Morocco
17:30 - 17:40	Impedance spectroscopy as a tool to investigate the electrical behavior of Al/p-Si/ZnTPyP/Au heterojunction for hybrid solar cell applications El Ghayati Nabil – University of El Jadida, Morocco	Molecular dynamics investigation of temperature effect on tensile mechanical and structural properties of the tungsten nanowire Tahiri Abdellah – University of Casablanca, Morocco	Quantum magneto-transport properties of GaAs/AlxGa1-xAs weakly coupled quantum wells for near wavelength infrared detection and photovoltaic applications Melkoud Samir – University of Agadr, Morocco
17:40 - 17:50	Deep understanding of pure Ge Based Kesterite synthesis Benhaddou Nada – University of Rabat, Morocco	Microstructural study of F-doped zinc oxide prepared using wet chemical method Konan Fransisco – University of Abidjan, Republic of Côte d'Ivoire	Laser Nanofabrication in Photoresists by Two-Photon Polymerization Bougdid Yahya - Moroccan Foundation for Advanced Science and Innovation and Research, Rabat, Morocco
17:50 - 18:00	Effect of NaCl addition on the microstrucutre and electrical conductivity of forsterite El Asri Saloua – University of Marrakech, Morocco	Molecular-dynamics study of self-diffusion: of the Au ₄ ;Au ₄ / Ag(110) system Eddiai Fouad – University of Beni Mellal, Morocco	



18:15- 19:00	Poster Session 1
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20:30- 22:00	GALA DINNER
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Thursday, 31 October

PLENARY CONFERENCE

9:30- 10:00	New 2D materials: silicene and phosphorene Hamid Oughaddou - Université of Cergy- Pontoise, France
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SYMPOSIUMS 3

	Session A	Session B
10:05- 10:25	compact thermal models and model reduction, a review and applications Jacques Jay - INSA of Lyon, France	Magnetic ceramics for domestic and cryogenic magnetic refrigeration El Kebir Hlil - University of Grenoble, France
10:25 - 10:35	Numerical modeling and thermal simulation of phase change materials for improving the building thermal inertia Louanate Amal – University of El Jadida, Morocco	Investigation on structural optical and electrical properties of Al ₂ O ₃ films deposited by two different techniques Moumine Hajar – University of Casablanca, Morocco
10:35 - 10:45	A DFT Study of the Structural, Electronic and Optical Properties of CsGeI ₂ Br Halide Perovskite El Fatouaki Fatima - University of Marrakech	Investigating NiAl alloy formation on Ni substrates: Molecular dynamics simulation El Azrak Hicham – University of Beni Mellal, Morocco
10:45 - 10:55	CuSbSe ₂ thin films electrodeposited in one step Abouabassi Khadija – University of Rabat, Morocco	First principle study of electronic structure and magnetic properties of LaCaBiMn ₂ O ₇ Rachid Chami – University of Casablanca, Morocco
11:00- 11:30	Coffee break	
11:45 - 11:55	Simulation of thermal properties of building materials using the microstructural model Lkouen Ahmed – University of Casablanca, Morocco	3D Modeling of the Human Ear Using Mass Spring damper System Aziz Chahbi – University of El Jadida, Morocco



11:55 - 12:05	Experimental studies of the aging mechanism of activated carbon supercapacitors by chemical and analytical methods Erradi Amine – University of El Jadida, Morocco	Non-linear transverse vibrations of discrete systems of multiple degrees of freedoms with cubic and geometric non-linearities cases of beams simply supported Moukhliiss Anass – University of Casablanca, Morocco
12:05 - 12:15	Convection of nanofluid in a cubical cavity with heating and cooling by sinusoidal temperature profiles on one side: radiation effect Jamal Bouchaib – University of Marrakech, Morocco	The Scaling Laws Of Stochastic Fluid Intrusion Process In Porous Media Hariti Yassine – University of Casablanca, Morocco
12:15 - 12:25	Cobalt doped copper oxide thin films for solar selective absorbers application El Aakib Hind – University of Marrakech, Morocco	Magnetization plateaux and jumps in a frustrated four-leg spin tube under a magnetic Field by the EFT method Farchakh Abdeslam - University of Casablanca, Morocco
12:25 - 12:35	Numerical investigation of the thermal performance of a passive refrigerated trailer using a phase change material Amagour Mohamed El Habib - University of Rabat, Morocco	Monte carlo investigation of mixed - spin (1/2, 1) system with blume-emery-griffiths model Elidrysy Anouar - University of Casablanca, Morocco


13:00–14:30

Lunch break



SYMPOSIUM 4

	Session A	Session B
14:35- 14:55	Advanced technologies for measurements of energy material properties Lachkar Pierre - University of Grenoble, France	Modelling of plasma surface interactions: application to the etching processes Ahmed Rhallabi – University of Nantes, France
14:55 - 15:05	Theoretical and Experimental Studies of Magnetic, Magnetocaloric, and Critical Behavior of $\text{Pr}_{0.65}\text{Sr}_{0.35}\text{MnO}_3$ Omari Lhaj El Hachemi - University of Casablanca, Morocco	Ab initio study of electron and phonon coupling and the phonon bottleneck effect in silicon El Mliles Mustapha – University of Casablanca, Morocco
15:05 - 15:15	Study of the effect of temperature and solar irradiation on the performance of the photovoltaic panel under real conditions Kabil Fatima Azzahrae - University of Casablanca, Morocco	Effect of Fe substitution on the magnetocaloric properties of $\text{La}_{1-x}\text{NaxMnO}_3$ manganites Sara Ait Bouzid - University of Beni Mellal, Morocco

15:15 - 15:25	Investigation of nucleation and growth mechanism during electrochemical deposition of Bismuth Telluride Bi_2Te_3 on ITO substrate Youbi Boubaker - University of Casablanca, Morocco	Study of the physical behavior of the fly ash-based composite material coal-fired power plant El Kanzaoui Mustapha - University of Rabat, Morocco
15:25 - 15:35	Chemical analysis and mapping of outdoor dust and soiling on PV panels in several Moroccan regions Bouchra Laarabi - University of Rabat, Morocco	Characterization of Magneto-Electrochemical Growth of Co and Ni Nanowires Labchir Nabil - University of Agadir, Morocco
15:35 - 15:45	Towards the exploitation of dew in PV modules cleaning Dounia Dahlioui - University of Rabat, Morocco	Characterization of the failure process in composite materials: effect of the matrix-fiber interaction on maximum number of intact fiber monomer Tanasehte Mohammed - University of Casablanca, Morocco
15:45 - 15:55	Numerical modeling of tsunamis propagation wave in shallow basin Khalid Machrouhi - University of Beni Mellal, Morocco	
15:55 - 16:05	Investigation of nucleation and growth of manganese oxide electrodeposited on ITO substrate Ait Himi Mohammed - University of Casablanca, Morocco	
		
16:15- 17:00	Coffee break	
17:00 - 17:10	Design of a digital platform for estimating solar irradiance in Morocco Rachid Boutahri - Morocco	The Inverse Magnetocaloric Effect in mixed spin -1 and 1/2 anisotropic Heisenberg system Abderrazak Boubekri - University of Casablanca, Morocco
17:10 - 17:20	Power and deposition time effects on the structural and optical properties of ZnO nanowires for photovoltaic application Said Nasih - University of Casablanca, Morocco	Pyrrhotite ash based Fe_2O_3 nanoparticles: synthesis and characterization for electromagnetic and photocatalytic applications Badreddine Hatimi - University of El Jadida, Morocco
17:20 - 17:30	Time-periodic temperature effect on natural convection phenomenon in a square cavities: solar collector cooling application Bendaraa Anass - University of Beni Mellal, Morocco	First principals DFT study of tin dioxide SnO_2 for solar energy Ibrahim Bziz - University of Casablanca, Morocco

17:30 - 17:40	Control of a flexible microgrid during islanded mode with presence of nonlinear loads Hicham Lhachimi - University of Casablanca, Morocco	Simulation of NaCl separation from seawater in membrane contactor Salama Latifa - University of Casablanca, Morocco
17:45- 18:20	Poster Session 2	
18:25- 19:00	Discussions and closing remarks	



Friday, 01 November	
9:00	Excursion & Free time

Poster Session 1



P01	Piezoelectric and electromagnetic hybrid energy harvester for powering sensors: Road applications Ennawaoui Chouaib - University of El Jadida
P02	Development of new smart system for mechanical harvesting energy from vehicle suspension El Mouden Mahmoud - University of El Jadida
P03	Modeling and effect of some parameter optimization in Solar cells with SCAPS-P1D software El Farri Haytham - University of El Jadida
P04	Planar organic photovoltaic cells based on the heterojunction electron donor / C60, importance of the HOMO value of the electron donor El Jouad Zouhair - University of Kenitra
P05	A study of friction and wear performance of disc brake pads using the pyroelectric effect Tabbai Yassine - University of El Jadida
P06	Effect of annealing temperature on some physical properties of CZTS thin films elaborated by sol gel method Ahmed Ziti - University of Casablanca
P07	Luminescence properties in rare earth doped Bi ₂ O ₃ -P ₂ O ₅ -SrO phosphate glasses for solar cells Bouabdalli El Mahdi- University of El Jadida
P08	Development of a piezoelectric nano-generator based on PU/KNN/Gr Chelli Zakia - University of Tizi Ouzou, Algeria
P09	Preparation and characterization of CuInS ₂ and CuInGaS ₂ thin films for photovoltaic applications Kotbi Ahmed - University of Casablanca
P10	Quantum entanglement versus spin and charge correlations in qubits system Kazaz Mohamed – University of Rabat, Morocco
P11	Structural, optical and electrical characteristics of Zinc oxide and Copper Oxide films for Solar Cells Applications Lahcen Nkhaili – University of Marrakech
P12	The theoretical and experimental characteristics of novel material based on strandberg-type hybrid complex (C ₆ HP10N ₂) ₂ [Co(H ₂ O) ₄ P ₂ Mo ₅ O ₂₃].6H ₂ O Baaalla Nora - University of Rabat
P13	Development of a communication system between Electric Vehicles and Smart Grids using ITS-G5 technology Riham Farhani - University of El Jadida
P14	Mechanical energy harvesting from human arm using a piezoelectric ceramic Lifi Houda - University of El Jadida
P15	Polymerization in situ of the PMMA and PANI: Synthesis and characterization Naar Nacira - University of Alger, Algeria
P16	Elaboration and characterization of Ni and Al co-doped SnO ₂ thin films prepared by spray pyrolysis technique, intended for photovoltaic applications Bouabdalli El Mahdi - University of El Jadida
P17	Absorption enhancement in a Glass/Metamaterial/GaAs structure in visible and near infrared ranges Mokhtari Bouchra - University of Meknes
P18	Preparation and characterisation of cis thin films for cost effective solar cells Boukaddat Lahcen - University of Agadir



P19	Forecasting hourly global solar radiation using support vector machine in évora city, Portugal Ali Ou Salah Hamza - University of Casablanca
P20	Structural, optical and electrical properties of SnS thin films deposited by sol-gel spin coating: Experimental and theoretical studies Garmim Taoufik - University of El Jadida
P21	Poly(L-Lactide) (PLA): A Biobased Material with Piezoelectric Properties For Emerging Applications Ben Achour Mohamed Aymen - University of Valenciennes, France
P22	Nonlinear Control Strategy of Active Power Filter Connected to Photovoltaic System Abouelmahjoub Younes - University of El Jadida
P23	Study of the Parameters degradation of PV modules installed in the tropical region Niasse Oumar.Absatou - University of Dakar, Senegal
P24	Synthesis and characterization of new pyrazolopyrimidine derivatives as hole transporting materials for hybrid solar cell application Bouihi Fatiha - University of Tours, France
P25	Influence of the Europium concentration and the excitation wavelength on the optical properties of Zinc Oxide thin films Eljouad Mohamed - University of El Jadida
P26	Quantum correlation analysis in Heisenberg systems Noureddine Benrass
P27	Three-dimensional analysis of Combined Natural convection and conduction through a hollow block Jamal Bouchaib University of Marrakech
P28	IoT based fault identification system for real operational PV panels Rashel Masud Rana - University of Evora, Portugal
P29	Stability Structural, electronic and optical properties of ZnS monolayer codoped Al-Cu : DFT Study Adil ES SMAIRI - University of Casablanca
P30	Heating Floor: Modeling, Analysis and Comparison Salim Belkhadir - University of El Jadida
P31	Null Controllability for Heat Equation with Bilinear Boundary Control Mohamed El Azzouzi - University of El Jadida
P32	Modeling of Pyroelectric Energy Harvesting Trough Natural Convection Yacouti Fatima Zahra - University of Casablanca
P33	Flexible hybrid polymer nanocomposite films for energy harvesting Fouad Belhora - University of El Jadida
P34	Study of polyelectrolyte membranes for the dispositive of the fuel cell used for the storage of energy. Amina Talby - University of Casablanca
P35	Concept, implementation and performances of the piezoelectric/pyroelectric $Pb(Mg_{P1/3}Nb_{2/3})_{P1-x}Ti_xO_3$ single crystals. A. Alaoui-Belghiti - University of El Jadida
P36	Thermal behaviour and energy saving in a building on a real scale in semi-arid climate Salma Ouhaibi - University of Casablanca
P37	Inverse Reduced Order Model for Temperature Monitoring: sensor's positions influence Jacques Jay - INSA of Lyon, France

P38	A new approach to parameter extraction of a photovoltaic panel: a comparison study Oumaima Mesbahi – University of Evora Portugal
P39	Correlation between outdoor soiling and PV glass transmittance in Morocco Abdelfattah Barhdadi - University of Rabat, Morocco



Poster Session 2	
P01	Angular distribution of sputtered particles from copper target during sputtering: Experiment and simulation study Afkir Ahmad - University of Marrakech
P02	Reinforcement of Hydroxyapatite Bioceramic by Addition of ZrO ₂ and Al ₂ O ₃ Laasri Said - University of El Jadida
P03	Mechanical and thermal studies of limestone marl-algae or lime material composites for ecological building Graich Abderrazzak - University of El Jadida
P04	Life time and temperature effects on degradation of the dielectric, mechanical and piezoelectric proprieties of Porous Poly (Ethylene-co-Vinyl Acetate) Ennawaoui Chouaib - University of El Jadida
P05	Frequency and temperature effects on dielectric properties on PEDOT-VK copolymer Ouafae NINIS – University of Tetouan
P06	New Honeycomb Structures of Phosphorene: A structural and energetic analysis Chataoui Hassan - University of Marrakech
P07	Monte Carlo simulations of noble-gas ion beam sputtering yield of MgO, CaO, SrO and BaO with various thin coatings in AC-PDP cells El Marsi Meriem - University of Casablanca
P08	Detailed Structural and Electronic characterizations of CdZnTe Alloy Asmae Arbaoui - University of Rabat
P09	Structural and Electro-optical Properties of Mo-doped VO ₂ Films Elaborated by Spray Pyrolysis Mrigal Asmaa - University of Kenitra
P10	The performance of Hydroxyapatite in the synthesis of ceramic microfiltration membrane based on natural clay: Studied of structural change and membrane properties Hatimi Badreddine - University of El Jadida
P11	Correlation between surface properties and photocatalytic activity of deployed ZnO-Hydroxyapatite nanocomposites for the removal of drug residues El Bekkali Chaimaa - University of Rabat
P12	Density Functional Theory Study on Structural and Energetic Characteristics of Graphene Intercalation Compounds Omar Farkad - University of Marrakech
P13	Effect of Chirality and Diameter on Band Gap of Single-Walled Carbon Nanotubes Takassa Rabie - University of Marrakech
P14	Micro-bridge of YBa ₂ CuO ₇ : Magneto-resistivity, Activation energy and Irreversibility Line Abou El Hassan Ahmed - University of Agadir
P15	Device integration of transducer in the gigahertz frequency range and the first step to achieve ultrasound imaging by time reversal Dahmani Hatem - University of Lille, France
P16	Transparent, stretchable artificial skin: proximity and touch sensibility



	Eric Cattan - University of Valenciennes, France
P17	Optimization of Acoustical Field Emission of Chirped Interdigital Transducers Devoted to Non-Destructive Evaluation of Surfaces and Thin Coatings Smagin Nikolay - University of Valenciennes, France
P18	Avalanche breaking kinetic and scaling law in failure process of composite materials with randomly oriented fibers Imad Achik - University of Casablanca
P19	Langevin dynamics study of the mean flow rate- energy stochastic fluid intrusion process in porous media Hader Ahmed - University of Casablanca
P20	Electrodeposition of highly oriented ZnO nanorods by two-step; effect of seed layer time Aithssi Abderrahim - University of Agadir
P21	Design and realization of MEMS devices for measuring thermal conductivity Tiferras Sara - University of Casablanca
P22	Magnetic properties of six-legs spin Ising nanotube Elmaddahi Zakaria - University of Casablanca
P23	Optical and electronic properties of orthorhombic hybrid CH ₃ NH ₃ PbI ₃ , by ab-initio calculations Benali Hajar - University of Casablanca
P24	Organic Acid Precursors Effects of Synthesis, Microstructure and Electrochemical Performance of LiCoPO ₄ Olivine Compound Hlil E.k. - University of Grenoble, France
P25	DFT investigation of structural, electronic, and electrical properties of tetragonal barium titanate Amounas Said - University of Agadir
P26	Structural and electronic properties of the positive electrode material « LiMnPO ₄ and LiMn _{0.75} Fe _{0.25} PO ₄ » Oukahou Said - University of Beni Mellal
P27	Hetero-epitaxy of a CuxZrP100-x (x=50) binary copper zirconium alloy on Si(P100) substrate Ataalite Hassan - University of El Jadida
P28	Impedance study of giant dielectric constant in LaFe _{0.5} Cr _{0.5} O ₃ perovskite Boudad Lahcen - University of Rabat
P29	Spectroscopic, optical and magnetic investigation of the new orthoborate Ba ₂ Co(BO ₃) ₂ N'faoui Fatima-Ezzahra - University of Rabat
P30	Physicochemical characterization study fly ash from coal fired power plant El Kanzaoui Mustapha - University of Rabat
P31	Optical and Electronic properties of V ₂ O ₅ under Temperature effect using Ab initio calculation Temsamani Rajae – University of Tetouan, Morocco
P32	Numerical study of the major modes failure in holding spheres and growth of life time using non destructive control Badia Battach - University of Casablanca, Morocco
P33	Characterisation and numerical modellig of fatigue crack in weld seams of holding spheres with non destructive inspection. Rajaa Safir - University of Casablanca, Morocco
P34	Exploitation of ambient noise and ultrasound coda properties for low-resource Structural Health-Monitoring applications Emmanuel Moulin - University of Valenciennes, France



Partnership and sponsors

