

Fifth International Symposium on Dielectric Materials and Applications

ISyDMA'5 Virtual Edition

April 15-17 2020

DETAILED PROGRAM

Wednesday, April 15th 2020

Opening ceremony

Since 15:00 - 14:00 (GMT)

- Documentary about ISyDMA Symposia
- ISyDMA'5: data Conference
- Speech of the chair of ISyDMA'5: Pr. ACHOUR Mohammed Essaid
- Speech of the chair of ISyDMA'5: Pr. OUERIAGLI Amane
- Speech of the chair of ISyDMA'5: Pr. LEBLANC Roger M

Talk Session: 1

Talk 1:

Pr. Leblanc Roger

University of Miami, 1301 Memorial Drive

États-Unis

Email : rml@miami.edu;

Physicochemical Characterization of a Novel Carbon Nanomaterial: Carbon Dots

Talk 2:

Pr. Cho Yasuo

Research Institute of Electrical Communication, Tohoku University, Sendai

Japan

Email : vasucho@riec.tohoku.ac.jp;

Scanning nonlinear dielectric microscopy nano science and technology for next generation ultra-high density ferroelectric data storage beyond hard disk drive and flash memory

Talk 3:

Pr. San Sait Eren

Department of Physics, Kocaeli University, Kocaeli
Turkey

Email : rensan@gmail.com;

Dielectric Analysis of cheap polymeric structures for Electronics

Talk 4:

Pr. ALONTSEVA Darya

**East-Kazakhstan State Technical University, Ust-Kamenogorsk,
Kazakhstan**

Email : dalontseva@mail.ru;

Fabrication and characterization of Zr microplasma coatings for biomedical applications

Poster session : Session 1

PP1, PP2, , PP20

Thursday, April 16th 2020

Talk Session: 2

Talk 5:

Pr. Hikmat S. Hilal

**An-Najah National University, Nablus
Palestine**

Email : hshilal@najah.edu;

Charge transfer catalysts embedded inside dielectric polymer matrix-modified metal chalcogenide film electrodes in photoelectrochemical processes

Talk 6:

Pr. Tachafine Amina

**Unité de Dynamique et Structure des Matériaux Moléculaires, Université du Littoral ,
Calais
France**

Email : tachafin@univ-littoral.fr;

Doping effect on macroscopic and nanoscopic electrical properties of BST and BZT thin films synthesized by sol-gel process

Talk 7:

Pr. Aktaş Bülent

**Harran University osmanbey campus Engineering Faculty, Mechanical Engineering
Department, Sanliurfa
Turkey**

Email : baktas@harran.edu.tr;

Ionic conductivity of BaO-doped 8 mol% yttria-stabilized cubic zirconia (8YSZ)

Talk 8:

Pr. TRIKI Asma

**Faculty of Sciences of Sfax, 3018 Sfax, University of Sfax,, Sfax
Tunisia**

Email : trikilamacop@yahoo.fr;
Dielectric analysis of interfacial polarization of Jute-carbon black hybrid composite materials

Talk 9:
Pr. BOUHAFS Benamar
Université de Tlemcen, Faculté des Sciences, Laboratoire de Physique Théorique,
Tlemcen
Algeria
Email : bouhafs_ben@yahoo.fr;
Effect of Porous Silicon Carbide on Resonant Coupled Modes in a Multilayer Sensor

Break

Poster session : Session 2 PP21, PP22,....., PP40

Break

Talk Session: 3

Talk 10:
Pr. TSIULYANU Dumitru
Department of Physics, Technical University, , Chisinau
Moldova
Email : tsiudima@gmail.com;

Talk 11:
Pr. Vaseashta Ashok
International Clean Water Institute, Manassas, VA USA,
Email : prof.vaseashta@ieee.org;avforesight2018@gmail.com;
Water Quality-Environmental Factors and Impact

Talk 12:
Pr. Odagawa Hiroyuki
Kumamoto College, Koshi-shi,, Kumamoto
Japan
Email : odagawa@kumamoto-nct.ac.jp ;
Application of scanning nonlinear dielectric microscopy for various piezoelectric domain structure measurement

Talk 13:

Pr. Zdanowska-Frączek Maria
Mariana Smoluchowskiego 17, Poznań
Poland

Email : mzf@ifmpan.poznan.pl;

Influence of pressure on electrical properties of proton conductors

Talk 14:

Pr. Fathy Salman
Benha University, Faculty of Science., Benha
Egypt

Email : prof.fathy.salman@gmail.com;

A simple Analysis of Complex impedance Measurements

Break

Poster session : Session 3

[PP41, PP42,,](#)

Friday, April 17th 2020

Talk Session: 4

Talk 15:

Pr. Striccoli Marinella
University of Bari
CNR-IPCF Bari, Italy, Bari
Italy

Email : m.striccoli@ba.ipcf.cnr.it ;

Nanocrystal Coupled Systems for Energy and Charge Transfer Processes

Talk 16:

Pr. Curri Lucia
University of Bari
CNR-IPCF Bari, Italy, Bari
Italy

Email : m.striccoli@ba.ipcf.cnr.it ;

Colloidal nanomaterials: engineering surface chemistry for life science applications

Talk 17:

Pr. Khenfouch Mohammed

Africa Graphene Center, Physics department, Eureka building, CSET, UNISA-Florida Campus, Roodepoort, 1709 Gauteng, South Africa,

South Africa

Email : khenfouch@yahoo.fr;

Advanced 2D materials and their applications

Talk 18:

Pr. Kamanina Natalia

Kadetskaya Liniya V.O., dom.5, korpus 2, St.- Petersburg, 199053, , St.- Petersburg,
Russia

Email : nvkamanina@mail.ru;

Nanotechnology approaches in solar energy, laser and general photonics materials

Talk 19:

Pr. Chaynane Rachid

Faculté des Sciences Appliquées Ait Melloul Université Ibno Zohr, Agadir
Morocco

Email : r.chaynane@uiz.ac.ma;

Effective Parameters Extraction of Metamaterials based on Split-Ring Resonators

Break

Talk Session: 5

Talk 20:

Pr. Cyril Popov

Heinrich-Plett-Str. 40, Kassel
Germany

Email : popov@ina.uni-kassel.de;

Diamond nanostructures for photonic and sensor applications

Talk 21:

Pr. Rabaa Hassan

BP 133, Kenitra 14000, Morocco, Kenitra
Morocco

Email : hraabaa@hotmail.fr;

*Cluster modeling approach of hydroxylated compounds [Nb₂O₅]_n with
(n=2,5,6)coordinated to glucose and cysteine probing Inhibition Activities*

Talk 22:

Pr. FRECHERO Marisa

Universidad Nacional del Sur.Bahía Blanca, Buenos Aires
Argentina

Email : frechero@uns.edu.ar ;

Talk 23:

Pr. Graca M. Pedro Fernandes
Physics Department, Aveiro
Portugal
Email : mpfg@ua.pt;

Talk 24:

Pr. Goumri Said Souraya
College of Science, Alfaaisal University,, Riyadh
Saudi Arabia
Email : sosaid@alfaisal.edu;

Break

Talk Session: 6

Talk 25:

Pr. Barzinjy Azeez
Salahaddin University-Erbil, Kurdistan Region, Iraq, Erbil
Iraq
Email : azeez.azeez@su.edu.krd;

Green Synthesis and Characterization of Zinc Oxide Nanoparticles: the effects of plant extracts and zinc salts

Talk 26:

Pr. Mousa Marwan S.
Mu'tah University,, Al-Karak
Jordan

Email : marwansmousa@yahoo.com;mmousa@mutah.edu.jo;

Mechanism of the Electron Emission from cathodes consist of metallic or fiber core coated with layer of Polystryne or Polyethylene

Talk 27:

Pr. Saadoune Ismael
Boulevard Prince Moulay Abdellah, Marrakech 40000, MARRAKECH
Morocco
Email : i.saadoune@uca.ma;

Talk 28:

Pr. Turky Gamal
12622-Giza, Cairo
Egypt
Email : gamalturky10@gmail.com;

Nanostructured Materials & Dielectric Investigations

Talk 29:

Pr. Soreto Sílvia

Campus Universitário de Santiago, 3810-193 Aveiro, Aveiro
Portugal

Email : silvia.soreto@ua.pt;

Synthesis of lithium ferrites nanoparticles by biogenic method

Talk 30:

Pr. EHLALI Souad

Université Mohamed V - Faculté des Sciences de Rabat, Rabat
Morocco

Email : eh.souad@gmail.com;

Energy Harvesting Technologies in Wireless Sensor Networks (EHT-WSN): A Review

Closing Ceremony
Since 14:00 - 15:00 (GMT)

- Speech of the chair of ISyDMA'5: Pr. M. Mabrouki
- Speech of the chair of ISyDMA'5: Pr. M. Ait Ali
- Speech of the chair of ISyDMA'5: Pr. A.Tachafine

Poster Presentations (Session 1)

PP1 : Electrochemical Impedance Spectroscopy study of Zinc electrodeposition
EL FAZAZI Asmae, Ibn Tofail University , Kenitra, Morocco asmae.elfazazi@uit.ac.ma;

PP2 : Influence of RF-power on the optical, structural, and morphological properties of ZnS:Cr thin films

Cheikh Mohamed, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco
cheikhmohamed5@gmail.com:

PP3 : Structural and impedance spectroscopic study of Zinc doped in tetragonal tungsten bronze

BENDAHOU (1) Amine, Faculté des sciences Oujda , Nador, Morocco
amine.bendahhou@usmba.ac.ma;

PP4 : Relationships between crystalline structure and dielectric properties in Sr₂NdxSm(1-x)Ti₂Nb₃O₁₅ ceramics

CHOURTI Karim, Multidisciplinary Faculty of Nador, Department of Chemistry, Mohammed First University , Nador, Morocco chokarim@gmail.com:

PP5 : Corrosion inhibition performance of two imidazole derivatives on mild steel in 1M hydrochloric acid: electrochemical, thermodynamical and theoretical calculation
ARIBOU Zakia, Ibn Tofail University , Kenitra, Morocco zakia.aribou@gmail.com;

PP6 : Effect of incorporating two gate insulators (SiO_2 and Al_2O_3) on the performance of the a -IGZO-based TFT transistor
TAMOUM Mostefa, Université Djillali Liabes de Sidi Bel Abbes , Sidi Bel Abbes, Algeria tamoummostefa@yahoo.fr;

PP7 : Effect of microcrystalline cellulose on dielectric properties of latex hybrid composites
LARGUECH Salma, Faculty of Sciences of Sfax, University of Sfax, BP 3018 Sfax, Tunisia , Sfax, Tunisia salma.larguech1993@gmail.com;

PP8 : Characterization and thermal conductivity of cellulose based cement composite
RBIHI SARA, Université Sultan Moulay Slimane Faculté des Sciences et Techniques Beni Mellal , Beni Mellal, Morocco rbihi.sara@gmail.com;

PP9 : Using different DFT implementations for studying structural, electronic and electrical properties of tetragonal $BaTiO_3$ and $PbTiO_3$
Amounas said, Polydisciplinary Faculty of Ouarzazate, Ibn Zohr University , Ouarzazate, Morocco physiquesalam@gmail.com;

PP10 : Electrical study of a composite material based on an epoxy polymer containing cyclotriphosphazene
DAGDAG Omar, Ibn Tofail University , Kenitra, Morocco omar.dagdag@uit.ac.ma;

PP11 : Coupled Heat Transfer by Natural Convection and Surface Radiation in an Open Cavity
Charqui Zouhair, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco zouhair.charqui@edu.uca.ac.ma;

PP12 : Numerical study of AgInTe₂ solar cells using SCAPS
Benseddik Nadia, Laboratory of Applied Microelectronics, Department of Electronics, , Sidi Bel Abbes, Algeria benseddik@yahoo.fr;

PP13 : Crossover from VRH E-S to NNR VRH in 2D p-GaAs at B=0
DLIMI SAID, Physics department, University Ibn zohr, Faculty of sciences, , Agadir, Morocco dlimi1975@gmail.com;

PP14 : Contribution to the study of elementary magnetic excitations in multilayer Fe/Pt systems
KARAM MAROUAN, Faculty of Sciences. University of Ibn Tofail.Kenitra , Kenitra, Morocco marouan.karam@uit.ac.ma;

PP15 : Natural convection in a square cavity containing two heat-generating conducting body
Hidki Rachid, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco rachid.hidki@gmail.com;

PP16 : Numerical simulation of natural convection in partially open cavity with vertical conductive obstacle
Azagar Khalid, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco khalid.azagar@edu.uca.ac.ma;

PP17 : Thermal and electrical characterization of Poly(butylene succinate) (PBS) / Polypropylene (PP) with different blend ratio

TAKTAK Sirine, Faculty of Sciences of Sfax, University of Sfax, BP 3018 Sfax, Tunisia , Sfax, Tunisia taktaksirine8@gmail.com:

PP18 : Influence of Heat Sources/Sinks on Unsteady Natural Convection in a Differentially Heated Enclosure Temperature

Boukendil Mohammed, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco m.boukendil@uca.ac.ma:

PP19 : Carriers mobility determination in PS/PANI films by the potential decay technique

Mezdour Douniazad, Jijel University , Jijel, Algeria mezdourd@gmail.com:

PP20 : The temperature effect on the physical properties of PbS nanocrystalline developed by the chemical bath deposition method (CBD)

El madani Aziz, Ibn tofail university , Kenitra, Morocco aziz.elmadani@uit.ac.ma:

Poster Presentations (Session 2)

PP21 : Optimization of factors influencing the brightness of nickel deposition: application and modeling by design of experiment

khemmou Nidal, ibn tofail university , Kenitra, Morocco khemmou2@gmail.com:

PP22 : CaSi2: a promising material for the synthesis of novel functionalized two-dimensional crystalline silicon nanosheets

Nayad Abdallah, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco abdallahnayad@gmail.com:

PP23 : A comparative study on the effect of corona discharge and dielectric barrier discharge treatment on polypropylene films

Bougharouat Ali, University of Bouira , Bouira, Algeria ali_boug@live.fr:

PP24 : Structural and optical properties of transparent magnesium oxide thin film

Djaaboube Halima, Université de Constantine Algérie , Constantine, Algeria halimadjaaboube@gmail.com:

PP25 : Organic – inorganic hybrids, obtained by sol-gel approach at different inorganic catalysts

Ilcheva Vania, nstitute of Electrochemistry and Energy Systems - BAS , Sofia, Bulgaria vania.ilcheva@iees.bas.bg:

**PP26 : STUDY OF FERRITE BY RESONANT NUCLEAR SCATTERING
MANGANES- IRON : NOTSTOICHIOMETRIC**

BENLALLI ABDELKRIM, Radiation Physics Laboratory, Department of Physics, Faculty of Sciences, Badji Mokhtar University , Annaba, Algeria a_benlalli@yahoo.fr:

PP27 : Structural and Magnetoelectrical properties of La_{0.6}Y_{0.1}Ba_{0.2}Sr_{0.1}MnO₃ manganite

MERICHE Faiza, Laboratory of Materials Studies (LEM), Department of Physics, Mohamed Seddik Ben Yahia University , Jijel, Algeria fzmeriche@gmail.com:

PP28 : Electrical impedance spectroscopy (EIS) as a tool to investigate the complexation process of Gum Arabic and Chitosan solution: a review

ZAIM Soumia, université chouaib doukkali , El jadida, Morocco soumia.zaim@gmail.com;

PP29 : Electrical studies of reduced graphene oxide/epoxy polymer nanocomposites

NIOUA Yassine, Université Ibn Tofail, Faculté des Sciences , Kenitra, Morocco
yassinenioua200@gmail.com;

PP30 : NUMERICAL SIMULATION OF COMBINED HEAT TRANSFER THROUGH HOLLOW BRICKS WALL

Bouchaib Jamal, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco
bouchaib.jamal@ced.uca.ma;

PP31 : Studies on the Electrical and Thermal properties of PMMA/Carbon-dots nanocomposites

EL-ANSARY Zakaria, Université Ibn-Tofail, Faculté des Sciences - Kénitra , Kenitra, Morocco
zak.ansa.95@gmail.com;

PP32 : Design the antenna with new dielectric substrate for new generation (5G)

El Hasnaoui Yassine, University Ibn Tofail, National School of Applied Sciences (ENSA) , Kenitra, Morocco yassine.elhasnaoui@uit.ac.ma;

PP33 : Phase transition in high-mobility Si MOSFETs

Limouny Lhoussine, Physics department, University Ibn zohr, Faculty of sciences, , Agadir, Morocco
LIMOUNY@GMAIL.COM;

PP34 : Structural, electrical, and impedance spectra analysis of PMMA/PPy composite materials

Aribou Najoia, LASTID Laboratory, Physics Department, Faculty of Sciences, Ibn Tofail University , Kenitra, Morocco najoia.aribou@uit.ac.ma;

PP35 : Structural, optical, dielectrical and electrical properties of Aloe Vera leaf exudate: Application as natural dye in solar cell

HNAWI Salma Kaotar, Faculty of Sciences Semlalia, Cadi Ayyad University , MARRAKECH, Morocco hnavi.salma@gmail.com;

PP36 : SANS characterization and impedance spectra analyses of polyester/graphite composite

Belhimria Rajae, LASTID Laboratory, Department of Physics, Faculty of Sciences, University Ibn Tofail, Kenitra, Morocco , Kenitra, Morocco bhr.rajae@gmail.com;

PP37 : Thermal and dielectric behavior of ternary composites Carbon nanotubes/Graphite/Polyester

Samir zineb, LASTID Laboratory, Physics Department, Faculty of Sciences, Ibn Tofail University , Kenitra, Morocco zineebsamir@gmail.com;

PP38 : Electrical and Dielectric Properties of Gt/CNT/Engine Oil Nanofluids

Barnoss Sanae, faculté de sciences, université Ibn Tofail kénitra , kénitra, Morocco
barnoss1702@gmail.com;

PP39 : Analysis of the dielectric function of Aluminum (Al) in bulk and nanometric states

AIT HAMMOU Brahim , Faculté des Sciences d'Agadir , Agadir, Morocco
Brahim.aithammou1985@gmail.com;

PP40 : Structural, dielectric and impedance spectroscopy analysis of lead free ($Ba_0.85Ca_0.15Zr_0.1Ti_0.9O_3$) ceramics synthesized by sol-gel method

KHARDAZI Said , CADI AYYAD UNIVERSITY , MARRAKECH, Morocco
khardazzisaid@gmail.com

PP41 : Anisotropy of conductivity and nonlinear effects in ϵ -GaSe crystals

AL-HATTAB Mohamed , Université Sultane moulay slimane Beni mellal , Beni mellal, Morocco
kh.rahamani@hotmail.fr

PP42 : Study on the effect Er dopant on the optoelectronic properties of nanostructured ZnO

ACHEHBOUNE Mohamed , Sidi Mohamed Ben Abdellah University/ Faculty od Sciences , Fes, Morocco achehboune.mohamed01@email.com

PP43 : Graphene oxide coated flower-shaped ZnO NRs for UV detection application

BOUKHOUBZA ISSAM , Sidi Mohamed Ben Abdellah University/ Faculty od Sciences , Fes, Morocco boukhoubza.issam00@gmail.com

PP44 : Effect of conduction band non-parabolicity on the intersubband transitions in GaInN/AlInN quantum well heterostructures

MOUDOU L'hocine , Université Sultane moulay slimane Beni mellal , Beni mellal, Morocco
moudou1993@@email.com

PP45 : Promising antiviral, antimicrobial and therapeutic properties of green nano-ceria

Mohamed Hamza , 1 Old Faure Road, Po Box 722,Somerset West, Cape Town, South Africa, 7130 , Cape Town, South Africa hamza@aims.ac.za

PP46 : Optical and electrical properties of some skin of tomatoes, potatoes and peppers

C. N. Abouloula , Nanomaterials for Energy and Environment Laboratory (N2EL), Faculty of Sciences, Semlalia, Marrakesh, Morocco,

PP47 : Investigating the electrical transport mechanisms of pentafunctional epoxy resin/natural phosphate composites

A. Taoufik, LASTID Laboratory, Department of Physics, Faculty of Sciences, University Ibn Tofail, Kenitra, Morocco , Kenitra, Morocco, med.elhasnaoui@uit.ac.ma

PP48 : Estimating of dew yield from the calcite dew condenser

Benlattar , Laboratoire de Physique de la Matière Condensée, Faculté des Sciences Ben M'Sik, Université Hassan II, Casablanca, Morocco. benlatta1975@gmail.com

PP49 : Diamagnetic susceptibility, polarisability and photoionization cross section of a single dopant in GaAs core/shell Quantum Dot.

S. M'Zerd, I. Zorkani, E. Feddi, M. Khenfouch, University of Sidi Mohammed Ben Abdallah Faculty of Science Dhar El Mahraz Fes

PP50 : Resonant optical properties of AlGaAs/GaAs multiple-quantum-well under the effect of hydrostatic pressure

Y. Chrifih, Kh. Rahmani, M.Khenfouch, O.Bajjou , I. Zorkani, Faculty of Polydisciplinary, (ERPTM), BP 590, 23000 Beni Mellal-Morocco younescharifh@gmail.com

PP51 : Structural, and dielectric properties of BaO-K₂O-TiO₂ -P₂O₅ glasses and its associated glass-ceramics

E. Haily ,L. Bih , S. Yousfi , A. El bouari , B. Manoun, Equipe Physico-Chimie la Matière Condensée (PCMC), Faculté des Sciences de Meknès, Maroc.

PP52 : Effect of tin doping on structural, optical and electrical properties of ZnO thin films prepared by sol-gel method

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PP53 : Field Electron Emission from Carbon Black Nanotips: Characterization and Analysis

Hatem A. Albraikat, Mohammad M. Allaham, M-Ali H. Al-Akhras and Marwan S. Mousa, Department of Physics, The University of Jordan, Amman, Jordan. mmousa@mutah.edu.jo

PP54 : Field Electron Emission from W – Tips Coated with various Thicknesses of Polystyrene – Characteristics & Analysis

Mo'tasam Alabth, Moneeb T. Shatnawi1, Mohammad M. Allaham and Marwan S. Mousa, Department of Physics, The University of Jordan, Amman, Jordan. mmousa@mutah.edu.jo

PP55 : Influence of Polystyrene layer on the Field Electron Emission Performance of Nano-Apex Carbon Fiber Emitters

Saleh H. Fawaeer, Moneeb T. Shatnawi, Mohammad M. Allaham and Marwan S. Mousa, Department of Physics, The University of Jordan, Amman, Jordan. mmousa@mutah.edu.jo

PP56 : Observations on the effect of coating Nano-Tip Apex with a thin layer of dielectric material on both electron and Ion Emission Mechanisms

Ammar Al Soud, Torben Boll, Alexandr Knápek, Marwan S. Mousa, Surface Physics and Materials Technology lab, Department of Physics, Mutah University, Jordan.

PP57 : Temperature influence on the density of two-dimensional electron gas in Al0.18 Ga0.82 N/GaN HEMT

F.DJELTI , A. OULD-ABBAS , Research unit of Materials and Renewable energies (URMER),University Abou Bakr Belkaïd, Tlemcen, Algeria fdjeltiphd@gmail.com

PP58 : A facile route for synthesis of copper iron tin sulfide thin films

D. Ait lhaj, A. EL Kissani, F. Welatta, H. Chaib, A. Oueriaghli, A. Outzourhit Cadi Ayyad University (UCA),Marrakech,Morocco aitelhajdris@yahoo.fr

PP59 : Optimization photoelectrochemical of the cuprous oxide (Cu₂O), by electrodeposition

E. Floric Rakotonarivo, C. N. Abouloula, A. Narjis, L. Nkhaili, F. Brouillette, A. Oueriagli, Laboratoire des Matériaux de l'Energie et de l'Environnement (LaMEE, ex-LN2E), Faculté des Sciences Semlalia,Université Cadi Ayyad, Marrakech, Morocco