



People's Democratic Republic of Algeria  
Ministry of Higher Education and Scientific Research  
Ecole Normale Supérieure of Ouargla  
Department of Science exact

ORGANIZE

THE 1<sup>ST</sup>  
INTERNATIONAL  
CONFERENCE ON  
RENEWABLE  
MATERIALS  
AND ENERGIES  
ICRME2022

OUARGLA  
26-27 OCTOBER 2022



**28 Managers**



**66 Scientific experts**



**38 Coordinators**



**465 Communicants**

**ICRME**  
2022

1<sup>st</sup> International Conference on  
Renewable Materials and Energies

October 26-27, 2022, Ouargla-ALGERIA



<https://icrme2022.sciencesconf.org/>

# ICRME 2022 SCHEDULE

**DAY ONE 26 OCTOBER**

**08:00 - 8:20**  
OPENING CEREMONY

**08:20 - 8:50**  
PLENARY CONFERENCE

<https://youtu.be/-kjlWdA5N4A>



**09:00 - 12:00**  
ORAL & POSTER SESSIONS

**13:00 - 17:00**  
ORAL & POSTER SESSIONS

**DAY TWO 27 OCTOBER**

**09:00 - 12:00**  
ORAL & POSTER SESSIONS

**14:00 - 15:00**  
CLOSING CEREMONY

<https://youtu.be/zlbK5ciCIRw>





SCHEDULE OF  
**ORAL** COMMUNICATIONS

# ICRME 2022

1<sup>st</sup>. International Conference on  
Renewable Materials and Energies

October 26-27, 2022, Ouargla-ALGERIA

26 Octobre 2022

08 : 00 – 09:00

Conférence plénière 01 : Pr. Ibrahim S. Yahia  
26 Octobre 2022

Liens de la conférence : <https://youtu.be/-kjlWdA5N4A>

## DESIGN OF NANOMATERIALS USING COST-EFFECTIVE TECHNIQUES FOR FUTURE APPLICATIONS

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### Abstract

Nanomaterials are a fascinating new class of materials that includes various examples with at least one dimension in the 1 to 100 nm range. Through careful planning, nanomaterials can be created with unprecedentedly large surface areas. Nanomaterials' remarkable magnetic, electrical, optical, mechanical, and catalytic properties are notably distinct from their bulk ones. Its properties can be adjusted by carefully manipulating the nanomaterial's size, shape, synthesis conditions, and functionalization. In our labs.,

we use various low-cost methods for producing nanomaterials, including mechanical ball milling, sol-gel, auto-combustions, microwave, and hydrothermal synthesis. Future applications of nanomaterials in energy, wastewater treatments, environmental applications, climate change, health, and agriculture all point toward the need for large-scale industrial production of nanomaterials.

**Keywords:** Synthesis of nanomaterials, Cost-effective techniques, Applications of nanomaterials

26 Octobre 2022  
09 : 00 – 12:30

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O.1	<b>GHEZAL Fathi</b> <a href="mailto:ghezalfathi@yahoo.fr">ghezalfathi@yahoo.fr</a>	Development of CuInSe <sub>2</sub> (CIS) thin film on FTO substrates by electrodeposition (ED) process for photovoltaic application <i>Tahar Belal, Yacine Bara</i>
O.2	<b>BOURENANE CHERIF Younes</b> <a href="mailto:younes.bourenane@unamur.be">younes.bourenane@unamur.be</a>	Effect of decorated MWCNTs by bismuth oxide nanoparticles on the thermoelectric properties of polypyrrole-based nanocomposites <i>Zineb Mekhalif , Ahmed Mekki , Zakaria Bekkar ,Djelloul Sayah</i>
O.3	<b>MAHI Khaled</b> <a href="mailto:khaled.mahi@univ-tiaret.dz">khaled.mahi@univ-tiaret.dz</a>	Numerical determination of p-n junction based cell parameters, using the forward I-V model <i>Hocine Aït-Kaci</i>
O.4	<b>GHALEM Naima</b> <a href="mailto:ghalem.naima@yahoo.fr">ghalem.naima@yahoo.fr</a>	Using Multi-Layer Perceptron (MLP-ANN) Neural Networks Predicting the Thermal Conductivity of R-1233zd (E) Refrigerant <i>Salah Hanini, Fatma Zohra Saidoun, Abdeltif Amrane</i>
O.5	<b>CHERIET Arbia</b> <a href="mailto:arbia.cheriet@yahoo.fr">arbia.cheriet@yahoo.fr</a>	Analysis of a GaSb/AlAsSb/GaSb based thermophovolatic cell : Effect of the of the AlAsSb barrier characteristic. <i>Lina Mardhi , Imen Aouad, Mohammed Mebarki, Hocine Ait Kaci</i>
O.6	<b>MARDHI Lina</b> <a href="mailto:arbia.cheriet@yahoo.fr">arbia.cheriet@yahoo.fr</a>	GaSb-based p-n homojunction for TPV conversion : Effect of p-GaSb base layer characteristics. <i>Arbia. Cheriet , Hocine. Aït-Kaci, M. Mebarki</i>
O.7	<b>ZEGADI Rami</b> <a href="mailto:ramizegadi@univ-setif.dz">ramizegadi@univ-setif.dz</a>	Enhanced mid-infrared gas absorption spectroscopic detection using Multilayer Vertical Optical Structures <i>Abdelouahab Zegadi, Chemseddine Zebiri, Said Mosbah, Samira Mekki, Mohamed Lamine Bouknia, Hanane Bendjedi.</i>
O.8	<b>HALIMI Yasmine</b> <a href="mailto:jasmine01@gmx.fr">jasmine01@gmx.fr</a>	Contrubution to Enhancing the Functionality of Orgnaic Cells: Aplication on Grätzel Cells <i>Zakaria BOUZID</i>
O.9	<b>ZEGADI Rami</b> <a href="mailto:ramizegadi@univ-setif.dz">ramizegadi@univ-setif.dz</a>	Theoretical investigation of sensitive photonic crystal blood cell sensor in NIR-IR <i>Abdelouahab Zegadi, Chemseddine Zebiri, Said Mosbah, Samira Mekk, Mohamed Lamine Bouknia, Hanane Bendjedi</i>



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O.10	<b>MAIFI Lyes</b> <a href="mailto:maifi@umc.edu.dz">maifi@umc.edu.dz</a>	Thermal, optical and spectroscopic characterization of a semi-conductor polymer PMMA doped with ZnO <i>Kamel AGROUI , Ouided HIOUAL and Abdelhamid CHARI</i>
O.11	<b>SENOUCI BEREKSI Nadia</b> <a href="mailto:nadia.sbr.sm@gmail.com">nadia.sbr.sm@gmail.com</a>	Ba doping effect on the PZT as perovskite material structure <i>Amina Kermad, Sanaa El-Korso, Zineb Choukchou-Braham, Mouhamed Reda Ramdani, Amel Boudjemaa, Khaldoun Bachari, Abderrahim Choukchou-Braham</i>
O.12	<b>ELOTTRI Ahmed</b> <a href="mailto:a_elottri@yahoo.fr">a_elottri@yahoo.fr</a>	Applied Control technologies for Three-Phase Shunt Active Power Filter <i>Lakhdar Mazouz , Abdellah Kouzou , Ali Teta 1 and Elmabrouk Khelifi</i>
O.13	<b>MAHGOUN Mohamed Seddik</b> <a href="mailto:mahgounm@yahoo.fr">mahgounm@yahoo.fr</a>	A Comparative study between MPPT using PI and Fuzzy Logic Control for Wind Turbine system
O.14	<b>JAOUAF Salah-Eddine</b> <a href="mailto:jaouaf.salah@gmail.com">jaouaf.salah@gmail.com</a>	Enhance the thermal and energy efficiency of a Primary school in the Wilaya of Ain Temouchent by concentrating on solar gains <i>Bourassia Bensaad</i>
O.15	<b>MOUFTAHI Mawaheb</b> <a href="mailto:mouftahimawaheb123@gmail.com">mouftahimawaheb123@gmail.com</a>	Fatty acid methyl ester (FAME) synthesis using response surface methodology (RSM): a case study using used frying oil <i>Nejib Hidouri</i>
O.16	<b>GHAZI Sara</b> <a href="mailto:sara.ghazi@edu.uca.ma">sara.ghazi@edu.uca.ma</a>	Synthesis of Sulfate-doped Silver Carbonate SO <sub>4</sub> -Ag <sub>2</sub> CO <sub>3</sub> with Enhanced Visible Light Photocatalytic Activity
O.17	<b>MAHGOUN Mohamed Seddik</b> <a href="mailto:mahgounm@yahoo.fr">mahgounm@yahoo.fr</a>	Maximum Power Point Tracking of Wind Energy Conversion System using Sliding Mode and Backstepping Controllers
O.18	<b>AOUN Narimene</b> <a href="mailto:aoun.narimene95@gmail.com">aoun.narimene95@gmail.com</a>	Natural solar light activated NiFe <sub>2</sub> O <sub>4</sub> photocatalyst as green process for the removal of naproxen from aqueous solution <i>Hadjira Boucheloukh, Harrouche Kamal , Tahar Sehili</i>
O.19	<b>BOUALLEG Cheyma</b> <a href="mailto:chaimaboualleg497@gmail.com">chaimaboualleg497@gmail.com</a>	An investigation of structural, electronic and magnetic properties of ferromagnetic half-metallic NaNiO <sub>3</sub> using LSDA+U <i>Athmane Meddour , Esma Semassel</i>

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**ICRME**  
2022

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O.20	<b>BOUTRA Belgassim</b> <a href="mailto:boutrabelkacem@gmail.com">boutrabelkacem@gmail.com</a>	Photocatalytic removal of dyes in aqueous solution using semiconductors under UV <i>Aicha Sebti, Sarah Mahidine, Wassila Yazid, Roumaïsa Charfi, Mohamed Trari</i>
O.21	<b>BENSALEM Salah-Eddine</b> <a href="mailto:s.bensalem@cder.dz">s.bensalem@cder.dz</a>	Theoretical investigation of the mechanical stability of diamond-like materials under a pressure gradient <i>Mohamed Chegaar, Abdelmadjid Bouhemadou, Nasreddine Belhaouas, Amar Hadj Arab</i>
O.22	<b>SEMASSEL Esmâ</b> <a href="mailto:asma248@hotmail.fr">asma248@hotmail.fr</a>	First Theoretical Study of The electronic and Magnetic properties of Mg <sub>0.75</sub> Co <sub>0.25</sub> S <i>Athmane Meddour , Cheyma Boualleg</i>
O.23	<b>TOULI Souheil</b> <a href="mailto:touili.souheil@univ-ouargla.dz">touili.souheil@univ-ouargla.dz</a>	Design and analysis of an off-grid PV system in Ouargla city, Algeria using PVsyst software <i>Khadidja Bouali , Naima Benbouza , Mohamed Seghir Bensaci , Ahmed Zouhir Kouache</i>
O.24	<b>TURKI Mimouna</b> <a href="mailto:mturki@usthb.dz">mturki@usthb.dz</a>	Enhanced proton acceleration from materials of low Z <i>Djamila Bennaceur-Doumaz</i>
O.25	<b>KHEMIS Marwa</b> <a href="mailto:khemismarwa08@gmail.com">khemismarwa08@gmail.com</a>	On periodic solutions for a first-order neutral delay hematopoiesis model <i>Ahlème Bouakkaz, Rabah Khemis</i>
O.26	<b>GOUDJIL Mohamed Bilal</b> <a href="mailto:billal12@gmail.com">billal12@gmail.com</a>	Green synthesis of Silver nanoparticles by aqueous leaves extract of Thymus capitatus (Lamiaceae) : Effect of silver nitrate concentration on the type of product <i>Segni Ladjel , Souad Zighmi, Djamila Hamada , Zineb Mahcene, Salah Eddine Bencheikh</i>
O.27	<b>MEGHCHOUCHE Houssam</b> <a href="mailto:houssam.meghchouche@univ-annaba.org">houssam.meghchouche@univ-annaba.org</a>	Investigation of Structural, Magnetic, Elastic and Electronic properties of quaternary Heusler alloy LiCaPO: first-principles study <i>Malika Labidi</i>
O.28	<b>FRIOUI Hadjer</b> <a href="mailto:friouihadjer@gmail.com">friouihadjer@gmail.com</a>	Phase stability, magnetic, electronic, half-metallic and mechanical properties of a new equiatomic quaternary Heusler compound VScRhSn: A first-principles investigation. <i>Athmane Meddour</i>
O.29	<b>BELDJANI Charafeddine</b> <a href="mailto:charafeddine.beldjani@univ-biskra.dz">charafeddine.beldjani@univ-biskra.dz</a>	CFD based performance analysis on Air Heating Solar Collector provided with artificial roughness for indirect type solar dryer. <i>Mohamed Aymen Kethiri , Kamel Aoues , Noureddine Belghar , Yousra Bouteraa , Momen Sami Mohamed Saleh</i>
O.211	<b>KAHOUL Fares</b> <a href="mailto:kahoul.fares@gmail.com">kahoul.fares@gmail.com</a>	Preparation, development of phases, microstructures and electrical properties of xCement-(1-x)PZT ceramics <i>HAMZIOUI Louanes, GUEMACHE Abderrezak</i>



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O.30	<b>AOUFI Ismail</b> <a href="mailto:aoufi.ismail@univ-ouargla.dz">aoufi.ismail@univ-ouargla.dz</a>	Parameter extraction of proton exchange membrane fuel cell models using a new mutated Invasive Weed Optimization <i>Oussama Hachana, Belkacem Aoufi and Med Amin Sid</i>
O.31	<b>BOUOUTA Fatima</b> <a href="mailto:fatima.boutouta@mail.univ-djelfa.dz">fatima.boutouta@mail.univ-djelfa.dz</a>	Comparative study between two-level and three-level T-Type voltage source inverters used in photovoltaic systems for grid-tied Applications <i>Abdellah Kouzou, Abdelkader Beladl</i>
O.32	<b>RAHMANI Rabea</b> <a href="mailto:rah.physique@gmail.com">rah.physique@gmail.com</a>	Study of magnetism in new Heusler alloys based on no-magnetic elements SrZN <sub>2</sub> (Z = K, Rb, Na). <i>Hayat Sediki, Nour El. Houda Djezzar, Atika Guendouz, Abdelkader Nebatti- ech-cherqui, Bouhalouane Amrani, Kouider Driss Khodja.</i>
O.33	<b>BETCHINE Fatima</b> <a href="mailto:f.betchine@univ-batna2.dz">f.betchine@univ-batna2.dz</a>	Comparative Study Between PI and Synergetic Mechanical Speed based MPPT Control in Wind Energy Conversion Systems <i>Samira Benaicha</i>
O.34	<b>CHAOUCH Nawal</b> <a href="mailto:nawaldalila@yahoo.fr">nawaldalila@yahoo.fr</a>	Complexation of l-serine and its derivatives with copper and nickel <i>Adil Ali Othmane</i>
O.35	<b>CHAOUI Zakaria</b> <a href="mailto:m.teggar@lagh-univ.dz">m.teggar@lagh-univ.dz</a>	Assessment of wind power in Laghouat area <i>Mohamed Tegggar, Mohamed Amine Zitouni</i>
O.36	<b>HAMDI Dounia</b> <a href="mailto:hamdidounia14@gmail.com">hamdidounia14@gmail.com</a>	Structural and optical properties of La <sup>3+</sup> doped BaTiO <sub>3</sub> powders prepared by sol-gel method. <i>Djahida Talantikite-Touati</i>
O.37	<b>BENMESSAOUD Ouarda</b> <a href="mailto:ouarda.benmessaoud@univ-biskra.dz">ouarda.benmessaoud@univ-biskra.dz</a>	Effect of Deposition Time on Optical and Structural properties of Copper Oxide Thin film <i>Abdelouahab Ouahab, Saad Rahmane, Boutheina Saadi</i>
O.38	<b>LABIB Issma</b> <a href="mailto:labibisma@yahoo.fr">labibisma@yahoo.fr</a>	TiO <sub>2</sub> -Montmorillonite nanomaterial contribution to degrade colored solution <i>Hussein Khalaf, Hocine Boutoumi</i>
O.39	<b>HEBALI Mourad</b> <a href="mailto:mourad.hebali@univ-mascara.dz">mourad.hebali@univ-mascara.dz</a>	Effect of GaAs Layer Position on Electrical Performance of ITO/Si/GaAs/Si/ITO Solar Cell <i>Benaoumeur Ibari, Hocine Abdelhak Azzeddine, Menaouer Bennaoum, Abdelkader Maachou, Djilali Chalabi</i>

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2022

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O.41	<b>MESSAST Sarah</b> <a href="mailto:messastsarah@gmail.com">messastsarah@gmail.com</a>	Plectranthus amboinicus leaf extract-assisted biosynthesis of ZnO nanoparticles and their biocidal activity <i>Sihem Abderrahmane, Nabila Bouasla</i>
O.42	<b>ALLAL Adel</b> <a href="mailto:a.allal@lagh-univ.dz">a.allal@lagh-univ.dz</a>	First principles study of oxygen terminated 2D-dimensional tungsten carbide as anode material for lithium ion battery
O.43	<b>SENGRA Dounia Ikram</b> <a href="mailto:dounia.sengra11@gmail.com">dounia.sengra11@gmail.com</a>	A comparative study of different metals on back contact for CZTS solar cell <i>Meriem Kerara , Abdelkrim Naas</i>
O.44	<b>BOUSBA Salim</b> <a href="mailto:bousba.salim@gmail.com">bousba.salim@gmail.com</a>	Removal of Ibuprofen from water by a new magnetic adsorbent prepared from sawdust <i>Malek Dorsaf Allam, Safia Bougherara, Ahlem Sara Saadi</i>
O.45	<b>KELLOU Hamza</b> <a href="mailto:hamza.kellou@ummto.dz">hamza.kellou@ummto.dz</a>	Bismuth three oxyde Nanopowder electrode for the production of hydrogen by photoelectro-chemical Water splitting <i>Salem Boudinar, Abdelhafid Souici, Nassima Benbrahim</i>
O.46	<b>BELOUFA Nabil</b> <a href="mailto:beloufa.nabil@gmail.com">beloufa.nabil@gmail.com</a>	First principles study of Structural electronic and optical properties of TixZn1-xO alloys with (x = 0, 0.0125, 0.25 and 0.375)
O.47	<b>KHELLAFI Habib</b> <a href="mailto:khellafi29@univ-mascara.dz">khellafi29@univ-mascara.dz</a>	Correction and maintenance of natural gas pipes made of polymers under pressure <i>Hadj miloud Meddah, El bahri Ould Chikh , Djilali Bouha</i>
O.48	<b>TAIR Sabrina</b> <a href="mailto:abdelkader.nebatti@daad-alumni.de">abdelkader.nebatti@daad-alumni.de</a>	Unsophisticated two-step synthesis of Pristine Tin Sulfides (SnS <sub>2</sub> ) thin film via Spray Coated approach <i>Abdelkader Nebatti Ech-Chergui, Ali sadek Kadari, M'hamed Guezzoul, Bouhalouane Amrani</i>
O.49	<b>BERRABAH Salah Eddine</b> <a href="mailto:se_berrabah@hotmail.com">se_berrabah@hotmail.com</a>	Comparative study between the World Health Organization guideline of permissible copper in drinking water and the detection limit of an electrochemical sensor based on Zn(OH) <sub>2</sub> <i>Abdelkader Benchettara , Fatiha Smaili , Sabrina Tabti, Abdelhakim Benchettara</i>
O.217	<b>TOUATI Naima</b> <a href="mailto:matou178@yahoo.fr">matou178@yahoo.fr</a>	Physico-Mechanical Properties of Diss Fiber Reinforced Composites: A Comparative Study <i>Lynda ZAIDI, Idris ZEMBOUAI</i>

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O.50	<b>BELKADDOUR Leila</b> <a href="mailto:leilabelkaddour@yahoo.com">leilabelkaddour@yahoo.com</a>	Analysis of the mechanical behavior of the composite patch repair of a corroded and cracked plate <i>BELGACEM Souad, BENZINEB Hayet, BERRAHOU Mohamed , MEDJDOUB Sidi Mohamed</i>
O.51	<b>KEMERCHOU Imad</b> <a href="mailto:kemerchou.imad@univ-ouargla.dz">kemerchou.imad@univ-ouargla.dz</a>	The effect of the angle of inclination on the productivity of solar stills in the southeast of Algeria (El-Oued) <i>KHECHEK HOUCHE Abderrahmane , BELLILA Abdelkader DLASH Walid , HABITA Ismail</i>
O.52	<b>STAMBOULI Arslane Boudghene</b> <a href="mailto:arslanne@gmail.com">arslanne@gmail.com</a>	Study On the Behavior of the Self-biased Voltage Generated by the Electrical Asymmetry Effect in DF-CCP Discharges <i>Rafik Benallal , Sodfa Handouzi, Omar Hennane, Hocine Messaad</i>
O.53	<b>CHERIF Sonia</b> <a href="mailto:cherif14sonia@hotmail.com">cherif14sonia@hotmail.com</a>	Degradation of the mixture of two textile dyes using ZnO immobilized on the glass substrate <i>Pierre Bonnet, Lawrence Frezet, Abdoulaye Kane, Aymen Amine Assadi, Mohamed Trari, Hynda Yazid, Hayet Djelal</i>
O.54	<b>FEDAOUI Dalila</b> <a href="mailto:dalilafedaoui@yahoo.com">dalilafedaoui@yahoo.com</a>	Dimeric Spin-Crossover of fe(II) Complexes: Mössbauer and x-ray crystallographic study <i>Yasser Bouchebcheb , Messaoud Liacha</i>
O.55	<b>BOUTERA Yousra</b> <a href="mailto:yousra.boutera@univ-biskra.dz">yousra.boutera@univ-biskra.dz</a>	Computational analysis of the thermal performance of an earth air heat exchanger with a novel sectional pipe shape <i>Momen Saleh, Nora Boultif, Amar Rouag, Nouredine Moumami, Mohamed Aymen Kethiri, Charafeddine Beldjani</i>
O.56	<b>HANDOUZI Sodfa</b> <a href="mailto:sohandouzi@gmail.com">sohandouzi@gmail.com</a>	Investigation of Applied RF Voltage Amplitudes on a Capacitively Coupled Plasma <i>Rafik Benallal, Arslane Boudghène Stambouli , Hocine Messaad, Omar Henane</i>
O.57	<b>NEMLA Fatima</b> <a href="mailto:f.nemla@ens-setif.dz">f.nemla@ens-setif.dz</a>	Contribution to structural and morphological study of long time electrodeposited Mo layers coated on Cu substrate under current density <i>Djellal Cherrad</i>
O.58	<b>HIBER Ouafa</b> <a href="mailto:hiberwaf@yahoo.fr">hiberwaf@yahoo.fr</a>	Active Filtering In The Presence Of Wind Energy <i>Abdelouahab Bouafia</i>
O.59	<b>CHABIRA Fares</b> <a href="mailto:f.chabira@univ-boumerdes.dz">f.chabira@univ-boumerdes.dz</a>	Hydrothermal synthesis of zinc oxide nanoparticles for Photocatalytic Degradation of Methylene Blue under UV irradiation <i>Mahdia Toubane , Razika Tal-Ighil, Djedjiga, Haouanoh</i>
O.216	<b>HELAL Yazid</b> <a href="mailto:Helalyzid555@gmail.com">Helalyzid555@gmail.com</a>	Investigation of Nondestructive Testing Methods for linear Friction Welding steel and aluminum <i>BARRI Aziz</i>



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O.60	<b>DAFRI Mourad</b> <a href="mailto:dafri.mourad@gmail.com">dafri.mourad@gmail.com</a>	Integration frequency effect in Preisach model associated with the Student distribution function using the finite element method <i>Abdelaziz Ladjimi, Ahcene Lemzadmi</i>
O.61	<b>GHOOGALI Saida</b> <a href="mailto:ghoggalisaida@yahoo.fr">ghoggalisaida@yahoo.fr</a>	Study of the influence of materials used for dental implants by three-dimensional finite element analysis <i>OUTTAS Toufik, LATRECHE Saber</i>
O.62	<b>LATRECHE Samia</b> <a href="mailto:ksamia2002@yahoo.fr">ksamia2002@yahoo.fr</a>	Design Of The Automatic Structure Of Actuators, Process And Sensors Faults To Diagnose Photovoltaic Installation <i>KHEMLICHE Mabrouk , BOUMOUS Samira</i>
O.63	<b>KADRI Laid</b> <a href="mailto:kadrilaid@live.fr">kadrilaid@live.fr</a>	Effect of H <sub>2</sub> -plasma treatment on the spin-coated perovskite solar cells <i>ABDERRAHMANE Abdelkader, KHIAT Abd Elmadjid , BENHARRAT Lyes, GHOSH Paheli, ADNANE Mohamed, KRISHNAMURTHY Satheesh</i>
O.64	<b>GAGUI Souheyla</b> <a href="mailto:souheyla_gagui@yahoo.fr">souheyla_gagui@yahoo.fr</a>	Structural, electronic and optical properties of AuBY <sub>2</sub> (Y= Te, S, Se) semiconductors : First-principles study
O.65	<b>BOUZID Zakaria</b> <a href="mailto:bzd.zakaria@gmail.com">bzd.zakaria@gmail.com</a>	A Complete Methodology for Sizing Stand-Alone Photovoltaic/Wind Energy System with Storage in Algeria's Isolated Communities: An Optimized Techno-Economic Analysis <i>HALIMI Yasmine , GHELLAI Nassera</i>
O.66	<b>MENACER Fatma</b> <a href="mailto:menacer.fatima@univ-ouargla.dz">menacer.fatima@univ-ouargla.dz</a>	DFT- Simulation based on different properties of gold clusters Aun+1 (n = 1-3) <i>BENTOUILA Omar, AIADI Kamal Eddine , MAHTOUT Sofiane , LASMI Mustapha , DJAADI Soumaia, BENAIDA Meriem</i>
O.67	<b>ALANE Arezki</b> <a href="mailto:arezkialane95@gmail.com">arezkialane95@gmail.com</a>	Lignocellulosic fibers from cladodes of opuntia ficus indica reinforced polylactic acid biocomposites <i>ZEMBOUAI Idris , BENHAMIDA Aida</i>
O.68	<b>MESSAI Youcef</b> <a href="mailto:essai.youcef@ymail.com">essai.youcef@ymail.com</a>	Green synthesis and magnetic properties of NiO nanoparticles using Nigella Sativa seeds extract <i>BEZZI Hamza , BOUARROUDJ Tayab</i>
O.69	<b>MESSAI Youcef</b> <a href="mailto:essai.youcef@ymail.com">essai.youcef@ymail.com</a>	Green synthesized NiO nanoparticles for non-enzymatic glucose sensing <i>BEZZI Hamza , BOUARROUDJ Tayab</i>
O.215	<b>ZAIDI Lynda</b> <a href="mailto:lynda.zaidi@univ-bejaia.dz">lynda.zaidi@univ-bejaia.dz</a>	Laboratoire des Matériaux Polymères Avances (LMPA), Université de Bejaia 06000, Algeria <i>ZEMBOUAI Idris, TOUATI Naima, KACI Mustapha</i>

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O.70	<b>CHADEL Meryem</b> <a href="mailto:ch_meriem_ph@yahoo.fr">ch_meriem_ph@yahoo.fr</a>	The effect of Holes transport layer thickness on solar cell performance based on CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> <i>CHADEL Asma, BOUCHIKHI Chaima , BENYOUCEF Boumediene</i>
O.71	<b>MESSAAD Hocine</b> <a href="mailto:hocinemesad@yahoo.fr">hocinemesad@yahoo.fr</a>	Study of the Low Frequency Influence on the Plasma Discharge <i>BENALLAL Rafik; STAMBOULI Arslane Boudghene , HANDOUZI Sodfa , HENNANE Omar</i>
O.72	<b>HAMIDA Zineb</b> <a href="mailto:hamida.zine@univ-biskra.dz">hamida.zine@univ-biskra.dz</a>	Light emitting diode based on the material InGaN <i>HAMDI Nour , TIBERMACHINE Tawfik</i>
O.73	<b>NASRI Djazia</b> <a href="mailto:djazia.nasri@univ-mascara.dz">djazia.nasri@univ-mascara.dz</a>	First principle study of Ba <sub>0.75</sub> V <sub>0.25</sub> Se <i>MONIR Mohammed El Amine , BALTACHE Hadj</i>
O.74	<b>TAFERGUENNIT Manel</b> <a href="mailto:maneltaferguennit@gmail.com">maneltaferguennit@gmail.com</a>	Green synthesis of a 3D flower-like copper oxide nanostructure using a coordination complex: Toward enhancing the photo-degradation of hazardous dye crystal violet <i>KICHOU Noura , HANK Zakia, TRARI Mohamed</i>
O.75	<b>LARBI Rekia</b> <a href="mailto:rekia.larbi@univ-mascara.dz">rekia.larbi@univ-mascara.dz</a>	The structural, electronic and optical properties of Ba <sub>2</sub> EuMoO <sub>6</sub> <i>SAHNOUN Omar, SAHNOUN Mohamed</i>
O.76	<b>FEZAZI Omar</b> <a href="mailto:fezaziomarfz@gmail.com">fezaziomarfz@gmail.com</a>	Adaptive control of hydroelectric power system <i>AYAD Ahmed Nour Elislam, MAROUF Mohamed Yasser, FEZAZI Fatima</i>
O.77	<b>FEZAZI Omar</b> <a href="mailto:fezaziomarfz@gmail.com">fezaziomarfz@gmail.com</a>	Energy management system for a microgrid based on renewable energy <i>AYAD Ahmed Nour Elislam</i>
O.78	<b>BOUZEKRI Hanane</b> <a href="mailto:bouzekrihanane55@gmail.com">bouzekrihanane55@gmail.com</a>	Structural and optical characterizations of Cu (In, Al) Se <sub>2</sub> films growth by electrodeposition <i>BACHA Abdelkader</i>
O.79	<b>TAHIR Amina</b> <a href="mailto:tahiramina9@gmail.com">tahiramina9@gmail.com</a>	Radiative transfer calculation of Ar-Cu thermal plasmas <i>LIANI Bachir</i>
O.212	<b>SAOUDEL Abdelmalek</b> <a href="mailto:abdelmalek.saoudel@gmail.com">abdelmalek.saoudel@gmail.com</a>	Effect of GdF <sub>3</sub> substitution on the structure and electrical properties of Bi <sub>1.6-x</sub> Gd <sub>x</sub> Pb <sub>0.4</sub> Sr <sub>2</sub> Ca <sub>1</sub> Cu <sub>2</sub> O <sub>8</sub> F <sub>3x</sub> superconductors <i>HAMANE Ahmed , ALLAG Hicham, Sevgi Polat ALTINTAS</i>
O.213	<b>MESKHER Hicham</b> <a href="mailto:hicham.meskher@g.enp.edu.dz">hicham.meskher@g.enp.edu.dz</a>	Synthesis and Characterization of a Novel Organic-Inorganic nano-Hybrid: A new prospective material for Electrochemical sensing. <i>ACHI Fethi</i>

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O.80	<b>KHARROUBI Abdelmalek</b> <a href="mailto:abdelmalek.kharroubi@univ-tiaret.dz">abdelmalek.kharroubi@univ-tiaret.dz</a>	Optical and electrical properties of Bi doped CuCo <sub>2</sub> O <sub>4</sub> thin films <i>BENRABAH Bedhiaf , KHALI Aboulkacem , BENHEBAL Hadj , SADOUKI Belal</i>
O.81	<b>HARECHE Mohamed Lokmane</b> <a href="mailto:harechemohamedlokmane@gmail.com">harechemohamedlokmane@gmail.com</a>	Bi-objective approach for optimal allocation of photovoltaic power system and DSTATCOM in distribution networks based modified salp swarm algorithm <i>LADJICI Ahmed Amine</i>
O.82	<b>CHELGHAM Mounira</b> <a href="mailto:chmou2013@gmail.com">chmou2013@gmail.com</a>	Experimental study of a single slope solar still with difference the glass <i>BELHADJ Mohmmmed Mostepha , CHELGHAM Fatiha</i>
O.83	<b>HENNANE Omar</b> <a href="mailto:omar.paix@hotmail.fr">omar.paix@hotmail.fr</a>	The High Frequency Influence in a Dual Frequency Signal Applied to Plasma Discharge <i>STAMBOULI Arslane Boudghene , BENALLAL Rafik , MESSAAD Hocine , HANDOUZI Sodfa</i>
O.84	<b>SALHI Meryem</b> <a href="mailto:salhimeryem94@gmail.com">salhimeryem94@gmail.com</a>	Synthesis, characterization of a new material and application in heterogeneous catalysis <i>RIDA Kamel</i>
O.85	<b>MELAAB Loubna</b> <a href="mailto:melaab.loubna@gmail.com">melaab.loubna@gmail.com</a>	Rashba Spin-Orbit Effect in [100] Grown GaAs/AlGaAs Double Quantum Wells <i>LAMARI Saadi</i>
O.86	<b>MOKHBI Yasmina</b> <a href="mailto:mokhbi26@gmail.com">mokhbi26@gmail.com</a>	Photocatalytic process for removal of pollutant from aqueous solutions <i>KORICHI Mourad</i>
O.87	<b>REZIG Walid</b> <a href="mailto:walidrzg@gmail.com">walidrzg@gmail.com</a>	Characterization of hybrid biosiliceous iron modified Diatomite modified with titanium dioxide as a catalyst in photocatalysis used UV lamp
O.88	<b>BARA Djemai</b> <a href="mailto:dbara@cdta.dz">dbara@cdta.dz</a>	Optimization of the Target Material Choice for High Quality Laser Protontherapy Dosimetry Deposition <i>BOUMEDDINE Lydia , BENNACEUR-DOUMAZ Djamilia</i>
O.89	<b>BENALIA Amina</b> <a href="mailto:benaliaamina96@gmail.com">benaliaamina96@gmail.com</a>	Substituent effects on the structural, optical and electronic properties of naphthalene derivatives: A DFT study <i>BOUKAOUD Abdelali</i>
O.209	<b>MESSAI Youcef</b> <a href="mailto:messai.youcef@gmail.com">messai.youcef@gmail.com</a>	Green synthesized NiO nanoparticles for non-enzymatic glucose sensing <i>BEZZI Hamza , BOUARROUDJ Tayab</i>
O.210	<b>BEN MOUSSA Fatah</b> <a href="mailto:fateh.benmoussa95@gmail.com">fateh.benmoussa95@gmail.com</a>	Molecularly imprinted polymer supported on green synthesized rGO@AgNPs for sensitive electrochemical detection of Lactic acid <i>ACHI Fethi , BELKHALFA Hakim</i>



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O.90	<b>ZIDANI Ikram</b> <a href="mailto:zidaikram@gmail.com">zidaikram@gmail.com</a>	Substituent effects on the structural, optical and electronic properties of naphthalene derivatives: A DFT study <i>BENSAAD Zouaoui, ABID Hamza, HAFAIFA Ahmed</i>
O.91	<b>GAGUI Souheyla</b> <a href="mailto:souheyla_gagui@yahoo.fr">souheyla_gagui@yahoo.fr</a>	Structural, electronic and optical properties of AuBY2 (Y= Te, S, Se) semiconductors : First-principles study <i>GHEMID Sebti, HADJOUJJA Bouzid , Hocine ERADJI , CHOUIAL Baghdadi</i>
O.92	<b>DOUIB Haiet</b> <a href="mailto:haietdouib@gmail.com">haietdouib@gmail.com</a>	Magnetic and Photophysical properties of nd4f and 4f4f' Heterobimetallic Complexes Involving Tetrathiafulvalene–Based Ligand. <i>DOUIB Zoubir, GONZALEZ Jessica Flores, LEFEUVRE Bertrand, DORCET Vincent, CADOR Olivier, POINTILLART Fabrice , GOUASMIA Abdelkrim.</i>
O.93	<b>BOURACHID Imad</b> <a href="mailto:imadbourachid95@gmail.com">imadbourachid95@gmail.com</a>	Predictions of the structural, electronic, mechanical and optical properties of inorganic lead bromide perovskite RbPbBr3 <i>RACHED Youcef , TAIBI Ilies , RACHED Djamel , ABIDRI Boualem</i>
O.94	<b>ZEGHLOUL Ammar</b> <a href="mailto:ammar.zeghloul@g.enp.edu.dz">ammar.zeghloul@g.enp.edu.dz</a>	A roadmap for renewable energy sources, prospects of green hydrogen in Algeria. <i>ARABI Abderraouf, GHENDOUR Nabil , AZZI Abdelwahid</i>
O.95	<b>BELOUFA Nabil</b> <a href="mailto:beloufa.nabil@gmail.com">beloufa.nabil@gmail.com</a>	Structural electronic and optical properties of BxAl1-xSb an :ab initio Study
O.96	<b>CHERRAD Djellal</b> <a href="mailto:djellal.cherrad@univ-setif.dz">djellal.cherrad@univ-setif.dz</a>	Ab initio study of the structural, electronic, elastic and thermodynamic properties of chalcogenides AgSbX2 (X=Se,Te) in B1 phase. <i>NEMLA Fatima</i>
O.97	<b>KHATIRI Mahdjouba</b> <a href="mailto:mahdjoubakhatiri96@gmail.com">mahdjoubakhatiri96@gmail.com</a>	Site preference, magnetic, electronic and half-metallic properties of full Heusler V2FeAs and V2FeSb alloy: A first-principles study <i>FAID Fares , BENMAKHOULF Abdenour, HANIFI Mebarki , BOUROUROU Yahia</i>
O.98	<b>NOUASRIA Fatima Zohra</b> <a href="mailto:nouasria.fatimazohra@gmail.com">nouasria.fatimazohra@gmail.com</a>	Improvement of the photocatalytic degradation of methylene blue using ZnO thin films by Cu doping and additional coupling with Cu2O <i>SELLOUM Djamel, HENNI Abdellah, ABBA Alia Besma</i>
O.99	<b>DERRAR Amina</b> <a href="mailto:amina.derrar@yahoo.com">amina.derrar@yahoo.com</a>	Robust Tuning Parameters of Pid-Pss Using Ga under Uncertainty <i>NACERI Abdelatif</i>
O.208	<b>RAHMANI Abdellah</b> <a href="mailto:abdellah.rahmani@lagh-univ.dz">abdellah.rahmani@lagh-univ.dz</a>	Fabrication of SnO2 gas sensor for volatile organic compounds (VOCs) detection using spray pyrolysis <i>AOUCHE Abdelaziz, CHAFAA Kheireddine</i>
O.218	<b>KEDDAR Mohamed Nadir</b> <a href="mailto:m.keddar@univ-ouargla.dz">m.keddar@univ-ouargla.dz</a>	Impact of different culture conditions on bioenergetic potential of native microalgae Selenastrum sp.



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O.100	<b>KETEB Mohamed</b> <a href="mailto:drketebmohamed@gmail.com">drketebmohamed@gmail.com</a>	Theoretical prospecting of new materials for spintronics <i>ZEMOULI, Mostefa BOUTALEB Habib, AMARA Kadda, AKIL Zoheir, KADI Fatima, ELKEURTI Mohammed</i>
O.101	<b>ATTIA selma</b> <a href="mailto:elma.attia13@yahoo.com">elma.attia13@yahoo.com</a>	Effect of Ni toward the optical and transport properties of the spinel solid solution NixCu1-xFe2O4 nanoparticles
O.102	<b>CHIOUKH Labiba</b> <a href="mailto:labiba.chioukh@univ-setif.dz">labiba.chioukh@univ-setif.dz</a>	Examination the impact of addition titanate on the dielectric permittivity of binary composite materials <i>BOUZIT Nacerdine , DELFOUF Rabah</i>
O.103	<b>OSMANI Nadjat</b> <a href="mailto:osmaninadjat@yahoo.fr">osmaninadjat@yahoo.fr</a>	SEM and AFM study of radiation damage induced by neutron transmutation doping of silicon
O.104	<b>MERRAD Amel</b> <a href="mailto:a.merrad@univ-chlef.dz">a.merrad@univ-chlef.dz</a>	Prediction of Half-metallicity in the New Heusler CsScN2 and CsScO2 Compounds <i>RACHED Habib, BENICHOU Boucif, BOUCHENAFI Halima, RACHED Ahmed Azzouz</i>
O.105	<b>KAROUA Housseyn</b> <a href="mailto:karoua.housseyn@gmail.com">karoua.housseyn@gmail.com</a>	Investigation study of a small-scale parabolic trough collector coupled with the Organic Rankine Cycle under the Algerian climate <i>LECHEHEB Sabrina , LAISSAOUI Mohammed , BOUHALLASSA Amar</i>
O.106	<b>TAIBI Ilies</b> <a href="mailto:iliestaibi95@gmail.com">iliestaibi95@gmail.com</a>	DFT theoretical investigations of $\pi$ -conjugated molecules based on thieophene and fullerene derivatives for organic photovoltaic cells <i>BASSOU Ghaouti , GAFOUR Mohamed Hichem, BOURACHID Imad, SAIL Karima</i>
O.107	<b>KETHIRI Mohamed Aymen</b> <a href="mailto:aymen.kethiri@univ-biskra.dz">aymen.kethiri@univ-biskra.dz</a>	The characterization of date palm leaflet as renewable materials for using as green materials in constructions <i>BELDJANI Charafeddine , CHIKHI Mourad , BELGHAR Nouredine , TEDESCHI Cristina, BOUTERA Yousra , MOMEN SAMI Mohammed Saleh, CARANGI Maria Cecilia</i>
O.108	<b>BOUDJENANE Fatima Zohra</b> <a href="mailto:yossra.fatima@gmail.com">yossra.fatima@gmail.com</a>	Anion exchange, x-ray diffraction, infrared spectroscopy of a novel layered double hydroxide <i>BAHMANI Abdellah, BOURAHLA Nassima , CHOUAIH Abdelkader , BOUKABCHA Nouredine</i>
O.109	<b>BOUMOUS Zouhir</b> <a href="mailto:zohir.boumous@univ-soukahras.dz">zohir.boumous@univ-soukahras.dz</a>	Application of the MPPT Control in the photovoltaic system of the Oued Elkebrit-Souk Ahras- <i>BOUMOUS Samira , DJEGHADER Yacine, BENAOUJ Mahdi</i>



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O.110	<b>BOUMOUS Samira</b> <a href="mailto:samira.boumous@univ-soukahras.dz">samira.boumous@univ-soukahras.dz</a>	Influence of photovoltaic panel manufacturing material on plant efficiency <i>BOUMOUS Zouhir, DJEGHADER Yacine, LATRÉCHE Samia, NOURI Hamou</i>
O.111	<b>BOUDIAR Meriem</b> <a href="mailto:mmeriemboudiarm@gmail.com">mmeriemboudiarm@gmail.com</a>	Al Doped TiO <sub>2</sub> thin films prepared by sol-gel method for waveguiding applications <i>HANINI Faouzi, SOUFI Djihene, BRAKTIA Dhikra, LEMITA Roumaissa, BOUABELLOU Abderrahmane, TAABOUCHE Adel, BOUACHIBA Yacine</i>
O.112	<b>KHERCHOUCHE Hemza</b> <a href="mailto:h.kherchouche@univ-batna2.dz">h.kherchouche@univ-batna2.dz</a>	Experimental study of dried loquat under vacuum and indirect solar dryers in semi-arid regions of Algeria <i>LAHBARI Miloud 2, RAHAL Samir</i>
O.113	<b>TADJOURI Younes</b> <a href="mailto:tadjouriyounes7@gmail.com">tadjouriyounes7@gmail.com</a>	Validation by Simulation and Experimental Dosimetry Measurement of the CLCCT's Linac Irradiation Head in Small Field Radiotherapy <i>BARA Djemai, OUABRI Khedidja, DAHI El Hadj</i>
O.114	<b>MERRAD Samiya</b> <a href="mailto:s.merrad@univ-boumerdes.dz">s.merrad@univ-boumerdes.dz</a>	SrTiO <sub>3-δ</sub> synthesis, characterization and application in photodegradation <i>ABBAS Moussa, BRAHIMI Razika, TRARI Mohamed</i>
O.115	<b>ZAMOUCHE Meriem</b> <a href="mailto:meriem.zamouche@univ-constantine3.dz">meriem.zamouche@univ-constantine3.dz</a>	Removal of cationic dye from aqueous solution by Fenton's oxidation <i>BOULEDJEMER Iheb Nour Elhak, FILALI Oumaima, MAZOUZ Safa</i>
O.116	<b>AIT OUMERACI Mohamed</b> <a href="mailto:m.aitoumeraci@gmail.com">m.aitoumeraci@gmail.com</a>	The influence of powdering the plant on structural and photocatalytic activity of nanomaterial synthesized by Green method <i>Tarek BERRAMA, TIZI Hayet, SAHOUI Ferial, KADMI Yassine</i>
O.117	<b>FEDDAL Imene</b> <a href="mailto:fimene22@hotmail.com">fimene22@hotmail.com</a>	Development and characterization of a new material from an algal biomass - application to the removal of Methylene Blue- <i>MAHROUG Meriem, MIMANNE Goussef, TALEB Safia</i>
O.118	<b>BENABDELLAZIZ Ourdia</b> <a href="mailto:o.benabdellaziz95@univ-chlef.dz">o.benabdellaziz95@univ-chlef.dz</a>	Study Of The Dispersion Efficiency Of Kenics Type Static Mixers <i>KAMLA Youcef, KARAS Abdelkader</i>
O.119	<b>DEBBAL Mohammed</b> <a href="mailto:debbal.mohammed@gmail.com">debbal.mohammed@gmail.com</a>	Optical energy splitter based on photonic crystal fibers <i>BOUREGAA Mouweffeq, CHIKH-BLED Hicham, OUADAH Mohammed Chamse Eddine, CHIKH-BLED Mohammed El Kebir</i>
O.207	<b>TARAD Houssam Eddine</b> <a href="mailto:houssam.trad@gmail.com">houssam.trad@gmail.com</a>	Frequency shifts of photons emitted by rotating particles and Kerr-Newman black hole parameters



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O.120	<b>AMEUR-ZAIMECHE Ouafi</b> <a href="mailto:ouafigeology@gmail.com">ouafigeology@gmail.com</a>	Integrating of useful substances material in renewable energy development from the Algerian Sahara: a review of potentialities <i>KECHICHED Rabah</i>
O.121	<b>RAHMANI Abdellatif</b> <a href="mailto:dr.rahmani.univ.ouargla@gmail.com">dr.rahmani.univ.ouargla@gmail.com</a>	Biopiles microbienne à base de microalgues une application pertinente des énergies renouvelable <i>TLILI Salah, DJAFER Lahcene , ZERROUKI Djamel</i>
O.122	<b>DAHA Rania</b> <a href="mailto:rania.daha@ensmm-annaba.dz">rania.daha@ensmm-annaba.dz</a>	Comparative analysis of the chemical synthesis of rare earth Cerium doped cobalt ferrite nanoparticles <i>BOULOUEDNINE Manel, KHIAT Abdelmajid</i>
O.123	<b>SEBBAGH Hafidha</b> <a href="mailto:sebbagh.hafidha@gmail.com">sebbagh.hafidha@gmail.com</a>	Solving a Nonhomogeneous Multi-Pantograph Equations using the Adomian Decomposition Method <i>DERHAB Mohammed , ABDELLAOUI Ghouti</i>
O.124	<b>CHAHED Faiza</b> <a href="mailto:faizachahed22@gmail.com">faizachahed22@gmail.com</a>	Structural, Electronic And Magnetic Properties Of Diluted Magnetic Semi-Conductor <i>DJOUDI Lakhdar, BOUCHAREF Mohamed</i>
O.125	<b>DADOU Salima</b> <a href="mailto:salima.dadou@yahoo.fr">salima.dadou@yahoo.fr</a>	High photocatalytic efficiency of a natural hematite for pharmaceutical products degradation <i>BERRAMA Tarek, BERIBER Assia , ZEKKAOUI Chemseddine , DOUFENE Nassim</i>
O.126	<b>RAMDANE Ouahiba</b> <a href="mailto:ouahiba.ramdane@univ-annaba.org">ouahiba.ramdane@univ-annaba.org</a>	Study of the half-metallic behavior in SrMnO <sub>3</sub> perovskite by ab initio DFT calculations <i>LABIDI Malika, LABIDI Salima, BOUOUDINA Mohamed</i>
O.127	<b>Lina CHOUICHI</b> <a href="mailto:l.chouichi@esti-annaba.dz">l.chouichi@esti-annaba.dz</a>	Computational Fluid Dynamic Simulation of Micro-combustion for Thermo-photovoltaic Devices <i>MANSOURI Zakaria, AZZOUC Salaheddine</i>
O.128	<b>NOUI Nassira</b> <a href="mailto:novisben.noui67@gmail.com">novisben.noui67@gmail.com</a>	The energy strategy in Algeria: Policy and obstacles to an energy transition, Case of the future Annaba metropolis <i>KORCHI Meriem, ROUAG SAFFIDINE Djamilia</i>
O.129	<b>SOUDANI Leyla</b> <a href="mailto:soudanileyla301@gmail.com">soudanileyla301@gmail.com</a>	Existence of solutions for hybrid fractional differential equation model of the thermostat with hybrid boundary conditions <i>AMARA Abdelkader</i>
O.206	<b>NECIB Hichem</b> <a href="mailto:n.hichem1@gmail.com">n.hichem1@gmail.com</a>	Effect of building materials and comfort temperature on the energy saving of habitats <i>BENNACER Mohamed Akram, BENFERDIA Hadja</i>



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O.130	<b>MENAA Sabah</b> <a href="mailto:sabahmenaal1@gmail.com">sabahmenaal1@gmail.com</a>	Biosensors based on nanomaterials for the electrochemical determination of lead ions <i>ACHI Fethi</i>
O.131	<b>KSOURI Ahlem</b> <a href="mailto:ahlem.ksouri@univ-biskra.dz">ahlem.ksouri@univ-biskra.dz</a>	A new ceramic material's morphological study PZT <i>MEKLID Abdelhek, NECIRA Zelikha</i>
O.132	<b>ZITOUNI Ikram</b> <a href="mailto:z.ikram30@gmail.com">z.ikram30@gmail.com</a>	Theoretical study of thulium-doped optical fiber laser (TDFL) <i>BOUANANE Rabah, BENTOUILA Omar, Kamal Eddine</i>
O.133	<b>KERAMSI Fouâd</b> <a href="mailto:keramsifouad@gmail.com">keramsifouad@gmail.com</a>	Physical properties of the new MAX phases Mnn+1SiCn: ab-initio calculations <i>MEBREK Moued, BEZZERGA Djamel</i>
O.134	<b>MAHDADI Rania</b> <a href="mailto:abdeslam_bouloufa@yahoo.fr">abdeslam_bouloufa@yahoo.fr</a>	Investigation of temperature-dependent electrical properties in Cu <sub>2</sub> SnS <sub>3</sub> by Hall effect measurements <i>BOULOOUFA Abdesselam, BEN AYADI Zouhaier</i>
O.135	<b>BENDERRADJI Razik</b> <a href="mailto:razik.benderradji@univ-msila.dz">razik.benderradji@univ-msila.dz</a>	Effect of the hybrid nanofluid (Ag–CuO/water) on the heat transfer characteristics by natural convection in a square cavity: numerical study <i>BRAHIMI Meryem, KHALFALLAH Fares</i>
O.136	<b>LAFANE Slimane</b> <a href="mailto:slafane@cdta.dz">slafane@cdta.dz</a>	Laser-induced plasma parameters dependent of laser pulse number for vanadium dioxide smart thin films deposition <i>DIF Yacine, ABDELLI-MESSACI Samira</i>
O.137	<b>BENZOUID Hichem</b> <a href="mailto:hichembenz25@gmail.com">hichembenz25@gmail.com</a>	Microstructural and Morphological study of Ti/TiN/TiAlN Thin Layers Deposited by PVD Magnetron Sputtering <i>BOUDEBANE Said, BIN NAYAN Nafarizal</i>
O.138	<b>KOUACHE Ahmed Zouhir</b> <a href="mailto:kouache.ahmed@univ-ouargla.dz">kouache.ahmed@univ-ouargla.dz</a>	Experimental Investigation of a Solar Hydrogen Production System Through the PEM Electrolyzer <i>DJAFOUR Ahmed, GOUGUI Abdelmoumen, BENZAOUI Khaled</i>
O.139	<b>MEDAKENE Amel</b> <a href="mailto:am.medakene@gmail.com">am.medakene@gmail.com</a>	Structural, Stabilities and Energetic properties of Silver clusters: A DFT Study <i>BENTOUILA Omar, AIADI Kamal Eddine, BENAIDA Meriem</i>
O.204	<b>BENHADJIRA Abderrahamane</b> <a href="mailto:abenhadjira97@gmail.com">abenhadjira97@gmail.com</a>	Glass transition temperature via machine learning <i>BENTOUILA Omar, AIADI Kamel Eddin</i>
O.205	<b>NECIB Hichem</b> <a href="mailto:n.hichem1@gmail.com">n.hichem1@gmail.com</a>	Saved energy in habitats by improving the thermal conductivity of concrete slabs <i>BENNACER Mohamed Akram, GOUTAR Hafnaoui, SAHRAOUI Nesrine</i>

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2022

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O.140	<b>BELALEM Abdelkader Khalil</b> <a href="mailto:belalemkhalilou@gmail.com">belalemkhalilou@gmail.com</a>	Structural and optical properties of perovskite nanomaterials <i>KHIAT Abdelmadjid, ZERDALI Mokhtar</i>
O.141	<b>ZIANI Hamza</b> <a href="mailto:hamza_ziani1991@yahoo.com">hamza_ziani1991@yahoo.com</a>	Hydrogen storage properties of intermetallic-hydrides obtained from firstprinciples calculations <i>GUEDDIM Ahmed</i>
O.142	<b>TOUAIBIA Ilham</b> <a href="mailto:touaibia.ilham@gmail.com">touaibia.ilham@gmail.com</a>	The electronic and optical properties of double perovskite Ca <sub>2</sub> MnIrO <sub>6</sub> <i>CHEMAM Faïçal</i>
O.143	<b>ZEREG Alaeddine</b> <a href="mailto:alaeddine.zereg@univ-batna.dz">alaeddine.zereg@univ-batna.dz</a>	A parametric study of a small Darreuis vertical axis wind turbine using Qblade <i>LEBAAL Nadhir, AKSAS Mounir, BAHLOUL Derradji, LAGHROUCHE Salah</i>
O.144	<b>BENSAADIA Labib</b> <a href="mailto:labib.bensaadia@univ-msila.dz">labib.bensaadia@univ-msila.dz</a>	Hybrid fuzzy sliding mode control of the power generated by wind energy conversion system (WECS) based of a doubly fed induction generator (DFIG) <i>ROUABHI Riyadh, KHODJA Djaleddine, HERIZI Abdelghafour</i>
O.145	<b>TADJINE Katia</b> <a href="mailto:katiatadjine@gmail.com">katiatadjine@gmail.com</a>	Optimization of Hybrid Photovoltaic/Wind Turbine System including Battery Storage <i>REKIOUA Djamilia, SERIR Chafiaa, BENSMAIL Samia</i>
O.146	<b>LEKCIR Fathia</b> <a href="mailto:lekcirfathia84@gmail.com">lekcirfathia84@gmail.com</a>	Effects of suprathemal electrons in TNSA regime of laser proton beams acceleration on dosimetry distribution <i>BARA Djemai, BENNACEUR-DOUMAZ Djamilia</i>
O.147	<b>HOCINE Salima</b> <a href="mailto:s.hocine@uiv-boumerdes.dz">s.hocine@uiv-boumerdes.dz</a>	A pH-sensitive hydrogel for protein delivery <i>GHEMATI Djamilia, ALIOUCHE Djamel</i>
O.148	<b>MAHDADI Rania</b> <a href="mailto:abdeslam_bouloufa@yahoo.fr">abdeslam_bouloufa@yahoo.fr</a>	Investigation of temperature-dependent electrical properties in Cu <sub>2</sub> SnS <sub>3</sub> by Hall effect measurements <i>BOULOUBFA Abdesselam , BEN AYADI Zouhaier</i>
O.149	<b>BENBOUZID Zineb</b> <a href="mailto:zineb.benbouzid.etu@univ-mosta.dz">zineb.benbouzid.etu@univ-mosta.dz</a>	Investigation of the effect for incorporating an ultrathin Al <sub>2</sub> O <sub>3</sub> BSF layer on the performance of CIGS-based solar cells <i>BENSTALLI Wafa, RAHAL Leila , BENZIDANE Ridha, Noureddine HASSINI</i>
O.203	<b>BOUKAROURA Abdelkader</b> <a href="mailto:boukaroura_abdelkader@yahoo.com">boukaroura_abdelkader@yahoo.com</a>	Optimal Allocation of Renewable Distributed Generation Using Artificial Ecosystem-based Optimization Considering Multiple Objectives <i>Mohammed Amroune, Arif bourzami</i>
O.214	<b>ZEMBOUAI Idris</b> <a href="mailto:idris.zembouai@univ-bejaia.dz">idris.zembouai@univ-bejaia.dz</a>	Effect of electron beam irradiation on the properties and ecotoxicity of PHBV/PLA/C30B nanocomposites for food packaging applications <i>ZAIDI Lynda, KACI Mustapha, BRUZAUD Stéphane</i>

27 Octobre 2022

08 : 00 – 09:00

Conférence plénière 02 : Pr. S.K.K. Shaat

27 Octobre 2022

Liens de la conférence : <https://meet.google.com/pdg-zvko-gri>

## SYNTHESIS AND CHARACTERIZATION OF ZNO NANOPARTICLES USING SOLUTION COMBUSTION TECHNIQUE FOR PHOTOANODES OF DYE SENSITIZED SOLAR CELLS

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### Abstract

ZnO nanoparticles (NPs) were synthesized using solution combustion method with different urea percent (UP) i.e. U1, U2, U3 and U3. The obtained ZnO NPs were characterized by X-ray diffraction (XRD), high resolution transmission electron microscope (HRTEM), UV-VIS spectroscopy and photoluminescence spectroscopy (PL). XRD analysis confirmed the wurtzite structure of the prepared ZnO NPs and the estimated average crystallite size reduced from 28.03 nm to 17.33 nm with increasing of UP. HRTEM image showed an irregular spherical shape for the prepared ZnO NPs. The absorption spectra analysis exhibited that the optical band gap energy ( $E_g$ ) for the ZnO NPs increased with increasing of UP from 2.84 eV to 3.13 eV. Two groups (I and II) of dye sensitized solar cell (DSSCs)

device based on the synthesized ZnO NPs were fabricated. In group I, 0.32 mM Eosin B (EB) used as photosensitizer for the samples U1, U2, U3 and U4, which showed that the overall conversion efficiency ( $\eta$ ) increased from 0.09 % to 0.13 %, under a light intensity of 100 mW/cm<sup>2</sup> due to the increasing of UP. Group II different photosensitizer Eosin Y (EY), EB, and Rhodamine B (RB) used to sensitized the U4, where the EY exhibited the best photosensitizing. The conversion efficiency showed a significant improvement from 0.13 to 1.26 %. The combustion method can be considered as a promising method to produce good photoanode semiconductors such ZnO subsequently increase the efficiency of the solar cell.

27 Octobre 2022  
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O.151	<b>KHEMLOUL Fakhereddine</b> <a href="mailto:f.khemloul@lagh-univ.dz">f.khemloul@lagh-univ.dz</a>	A DFT study of the electronic and optical properties of a photovoltaic absorber materials BRb <sub>3</sub> Pn <sub>2</sub> (Pn= P, As) <i>SELMANE Naceur, HALIT Mohamed, BENMAKHOULF Abdennour, MAABED Said, BOUCHENAFI Mohamed</i>
O.152	<b>KHEMLOUL Fakhereddine</b> <a href="mailto:f.khemloul@lagh-univ.dz">f.khemloul@lagh-univ.dz</a>	Computational modelling of the thermoelectric properties of Zintl compounds RELi <sub>3</sub> Sb <sub>2</sub> (RE= Y, La) <i>HALIT Mohamed, BENMAKHOULF Abdennour, BOUCHENAFI Mohamed, MAABED Said, SELMANE Naceur</i>
O.153	<b>MOKDAD Hayat</b> <a href="mailto:hayet-mkd@hotmail.fr">hayet-mkd@hotmail.fr</a>	Adsorption Isotherms of Acid Dye on Activated Carbon from Almond Shells. <i>MIMANNE Goussef, ABDALLAH TOUATI Manel, BOUSSAID Rihab, BRASSI AICHA</i>
O.154	<b>RABAH Moussa</b> <a href="mailto:moussa-rabah@hotmail.com">moussa-rabah@hotmail.com</a>	First principle study of structural, electronic and optical properties of the zinc blende mowxse <sub>1-x</sub> ternary alloy <i>KHARROUBI Mohamed, KHENATA Rabah, ABDICHE Ahmed</i>
O.155	<b>BELBAHI Sawsen</b> <a href="mailto:sawseb.belbahi@univ-annaba.org">sawseb.belbahi@univ-annaba.org</a>	Structural, electronic and magnetic of the perovskite CaCrO <sub>3</sub> : density functional theory <i>LABIDI Malika, LABIDI Salima, BOUOUDINA Mohamed</i>
O.156	<b>BEDJAOUI Marwa</b> <a href="mailto:m.bedjaoui@esti-annaba.dz">m.bedjaoui@esti-annaba.dz</a>	A mathematical model for intermittent microwave drying of materials <i>AZZOUZ Salah-eddine, AZZOUZ Soufien</i>
O.157	<b>BOURACHID Imad</b> <a href="mailto:imadbourachid95@gmail.com">imadbourachid95@gmail.com</a>	Magneto-electronic and thermoelectric properties of V-based Heusler in ferrimagnetic phase <i>YAHIAOUI Ihab Eddine, RACHED Youcef, RACHED Djamel, ABIDRI Boualem</i>
O.158	<b>BENAZZOUC Afak</b> <a href="mailto:benazzouzafak96@gmail.com">benazzouzafak96@gmail.com</a>	Numerical simulation of a parabolic trough solar collector based on nanofluids <i>MARIF Yacine, ACHOURI Intissar</i>
O.159	<b>SLAMANI Samira</b> <a href="mailto:samira.slamani@yahoo.fr">samira.slamani@yahoo.fr</a>	Degradation of diclofenac in water by coupling the Fenton and plasma GAD processes <i>DBDELMALEK Fatiha, GHEZZAR Mouffok Redouane, ADDOU Ahmed</i>
O.202	<b>TAOUALIT Nadjet</b> <a href="mailto:ntaoualit@hotmail.fr">ntaoualit@hotmail.fr</a>	Influence of Operational Parameters on the Retention of Basic Fuchsin Dye onto Moringa Oleifera Seeds <i>BOUTEMAK Khalida, BENSACIA Nabila, CHITACHE Chaima, MERABET Sarah</i>



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O.161	<b>BENZIDANE Mohammed Ridha</b> <a href="mailto:ridha.benzidane.etu@univ-mosta.dz">ridha.benzidane.etu@univ-mosta.dz</a>	Design a power Dual-Layer Inductor of a DC-DC Boost Converter for a Photovoltaic Application. <i>BENBOUZID Zineb, MELATI Rabia, BOUKORTT Abdelkader, ADDA BENATTIA Tekkouk</i>
O.162	<b>MIHI Sana</b> <a href="mailto:sm2210730@gmail.com">sm2210730@gmail.com</a>	Optical absorption and visible emission analysis of novel reddish-orange Pr <sup>3+</sup> doped antimony-based glasses materials for laser applications <i>SOLTANI Mohamed Toufik, WONDRACZEK Lothar</i>
O.163	<b>SELMANE Naceur</b> <a href="mailto:n.selmane@lagh-univ.dz">n.selmane@lagh-univ.dz</a>	A numerical simulation of a new solar cell structure based CIGS and CZTSe absorber layers <i>BOUKHELKHAL Feriha Afrah, CHEKNANE Ali, KHEMLOUL Fakhereddine, HILAL Hikmat</i>
O.164	<b>BENCHAA Sayhia</b> <a href="mailto:benchaasayhia@gmail.com">benchaasayhia@gmail.com</a>	Mineralogy and morphology study of dunes sand samples taken from Touggourt region of Algeria southeast <i>BOUGOFFA Mohammed Seyf Eddine, ACHOURI Abderrahim, GHERIANI Rachid, TOUIL Meriem, BENESSEDDIK Rabiaa</i>
O.165	<b>BOUKHELKHAL Feriha Afrah</b> <a href="mailto:af.boukhelkhal@lagh-univ.dz">af.boukhelkhal@lagh-univ.dz</a>	Physical properties study of new materials based CZTSSe for photovoltaic applications <i>SELMANE Naceur, CHEKNANE Ali</i>
O.166	<b>BEKROU Sarra</b> <a href="mailto:bekrousara2@gmail.com">bekrousara2@gmail.com</a>	Synthesis of V <sub>2</sub> O <sub>5</sub> nanoparticles with sol gel method and their application in a degradation process <i>DJERAD Souad</i>
O.167	<b>BOUCHIKHI Noria</b> <a href="mailto:nbouchikhi@outlook.fr">nbouchikhi@outlook.fr</a>	Development and characterization of a mesoporous nanomaterial: Application on antibacterial activity <i>ADJDIR Mehdi, LAKHACHE Mohamed El hadi, EILDLER Peter. G</i>
O.168	<b>ELHAMRA Fatima</b> <a href="mailto:f.elhamra@lagh-univ.dz">f.elhamra@lagh-univ.dz</a>	Electronic, optical and elastic properties of CsGeBr <sub>3</sub> perovskite <i>DAHAME Tahar</i>
O.169	<b>BELKHIR Mohamed Lamine</b> <a href="mailto:ma.belkheir@lagh-univ.dz">ma.belkheir@lagh-univ.dz</a>	The inorganic wide bandgap n-type materials, such as TiO <sub>2</sub> on opto-electronic as electron transport material for perovskites solar cells. <i>GUEDDOUH Ahmed, SARHANI Mohamed Elsaid</i>

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O.170	<b>LOUKRIZ Abdelouadoud</b> <a href="mailto:abdelouadoud.loukriz@univ-biskra.dz">abdelouadoud.loukriz@univ-biskra.dz</a>	<b>Artificial Neural Network-Based Control for MPPT DC/DC Converter in Standalone PV System with Improved Performance under Variable Climate Conditions</b> <i>BOUCHELEGEM Ahmed, SAIGAA Djamel, DRIF Mahmoud, BENDIB Ahmed, KHERBACHI Abdelhamid</i>
O.171	<b>ZEFFANE Soumia</b> <a href="mailto:zeffanesoumia@yahoo.com">zeffanesoumia@yahoo.com</a>	<b>Structural, Electronic and magnetic properties of Mn<sub>2</sub>RuSn Husler alloy under hydrostatic pressure.</b> <i>DAHMANE Fethallah, MOKHTARI Mohamed</i>
O.172	<b>DJEMAI Lylia</b> <a href="mailto:lylia.djemaiai@ummo.dz">lylia.djemaiai@ummo.dz</a>	<b>BOR-FDTD study of the diffraction of a radially polarized light beam by rotationally symmetric metallic objects</b> <i>MEZEGHRANE Abdelaziz, BELKHIR Abderrahmane, BAIDA Fadi Issam</i>
O.173	<b>BACHA Oussama</b> <a href="mailto:bacha.oussama@gmail.com">bacha.oussama@gmail.com</a>	<b>Electrocatalytic performance of zinc oxide nanostructures electrodeposited on ITO glass substrate for the oxidation of ethanol</b> <i>BAKA Ouidad, GHEZALI Khaoula</i>
O.174	<b>FABA Sarra</b> <a href="mailto:fafasarra18@gmail.com">fafasarra18@gmail.com</a>	<b>Ion imprinting polymer for the development of an electrochemical sensor for the selective detection of cadmium(II) ions</b> <i>ZAZOUA Ali</i>
O.175	<b>MEHANI Hanane</b> <a href="mailto:mehanihanane6@gmail.com">mehanihanane6@gmail.com</a>	<b>Synthesis of copper with sodium dithionite and its application in the degradation of methylene blue via Fenton process</b> <i>DJERAD Souad</i>
O.176	<b>BENDOUMI Amina</b> <a href="mailto:aminabendoumi@hotmail.com">aminabendoumi@hotmail.com</a>	<b>Influence of laser power on microstructure and mechanical proprieties of C45 carbon steel after laser borided treatment.</b> <i>CHEGROUNE Redouane</i>
O.177	<b>AGGOUNE Ayoub</b> <a href="mailto:ayoubaggoune@gmail.com">ayoubaggoune@gmail.com</a>	<b>The effect of a phase change material on a building's walls on reducing the electricity consumption</b> <i>HAMDANI Maamar, Yacine MARIF, BEKKOUCHE Sidi Mohammed El Amine, Mohamed Kamal Cherier, DJEFFAL Rachid</i>
O.178	<b>DJOU DI Yasmina</b> <a href="mailto:djoudiyasminal@gmail.com">djoudiyasminal@gmail.com</a>	<b>Structural and physical characterization of a new yts-pzt ceramic</b> <i>KAHOUL Fares</i>
O.179	<b>TOUILI Souheil</b> <a href="mailto:touili555@gmail.com">touili555@gmail.com</a>	<b>Sizing and analysis of a grid-connected PV system using PVsyst software in Ouargla city, Algeria</b> <i>BOUALI Khadidja, BENBOUZA Naima, BENSACI Mohamed Seghir, KOUACHE Ahmed Zouhir</i>

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O.180	<b>KASSAA Ammar</b> <a href="mailto:a.kassaa@yahoo.fr">a.kassaa@yahoo.fr</a>	Influence of compositional variation on structural and optical characteristics of $\text{CuAl}_x\text{Ga}_{1-x}\text{Te}_2$ <i>BENSLIM Nouredine, AMARA Otmani</i>
O.181	<b>FADHEL Sara</b> <a href="mailto:sara.fadhel2014@yahoo.com">sara.fadhel2014@yahoo.com</a>	Thermodynamics properties of Hydrogen-like ions in spatially non-uniform magnetic field. <i>METAH Mohammed Tayeb</i>
O.182	<b>ABDELSADEK Zoulikha</b> <a href="mailto:zoulisabrina@yahoo.fr">zoulisabrina@yahoo.fr</a>	Ni/Co(MgAl) Hydrotalcite Derived Catalysts in the Dry Reforming of Methane <i>MASSET Patrick J.</i>
O.183	<b>ATTIA Selma</b> <a href="mailto:selma.attia13@yahoo.com">selma.attia13@yahoo.com</a>	Effect of Ni toward the optical and transport properties of the spinel solid solution $\text{Ni}_x\text{Cu}_{1-x}\text{Fe}_2\text{O}_4$ nanoparticles <i>HELAÏLI Nassima, BESSEKHOUD Yacine, AZOUDJ Yacine, TRARI Mohamed</i>
O.184	<b>HELIM Rabiaâ</b> <a href="mailto:rabiaahelim86@gmail.com">rabiaahelim86@gmail.com</a>	Use of bio-based materials for the design and development of electrochemical sensors for selective detection of non-organic pollution <i>ZAZOUA Ali, KORRI YOUSOUFI Hafsa</i>
O.185	<b>GHARBI Brahim</b> <a href="mailto:gharbi.brahim@gmail.com">gharbi.brahim@gmail.com</a>	Study of n-ZnO/p-CuO thin film Heterojunctions deposition by spray pyrolysis for solar cell applications <i>TAABOUCHE Adel, BRELLA Maroua, BOUACHIBA Yassine, MAMMERI Abdelouadoud, SERRAR Hacene, HADJADJ Alarbi, HADJADJ Hocine, BEN KHELIFA Taha</i>
O.186	<b>MASSET Patrick J</b> <a href="mailto:patrick.masset@technallium.com">patrick.masset@technallium.com</a>	Functionalized surfaces in high temperature applications
O.187	<b>MERABTI Abdelhak</b> <a href="mailto:merabti73@yahoo.com">merabti73@yahoo.com</a>	Design and performance improvement of a piezoelectric energy harvester <i>MOUGHLI Hassan, AISSANI Houcine, NOUR Sabira</i>
O.188	<b>HAMDANI Soumia</b> <a href="mailto:hamdanisoumia92@gmail.com">hamdanisoumia92@gmail.com</a>	Interatomic potential effect on the mechanical behavior of Fe and V single crystals, at molecular dynamic simulation <i>SAAD Abdeslam</i>
O.189	<b>ZERIBI Fatma</b> <a href="mailto:zeribifatma@gmail.com">zeribifatma@gmail.com</a>	Synthesis and Characterization of La-doped $\text{TiO}_2$ Nanoparticles by Sol-Gel (Spin-Coating) Process for Photovoltaic Application <i>ATTAF Abdallah, BENMEBROUK Lazhar</i>
O.201	<b>REDOUANE Fares</b> <a href="mailto:redouane.fares@univ-relizane.dz">redouane.fares@univ-relizane.dz</a>	Optimized Entropy of Hybrid ( $\text{Al}_2\text{O}_3\text{-Cu/H}_2\text{O}$ ) Nanofluidic Flow in Cylindrical Chamber under a Parallel Magnetic Field



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**ICRME**  
2022

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O.190	<b>BEROUAKEN Malika</b> <a href="mailto:malika.berouaken@gmail.com">malika.berouaken@gmail.com</a>	Lithium storage performances of Zn doped V2O5/Ni-foam <i>YADDADENE Chafiaa , CHEBOUT Katia, AYATA Maha , TORKI Chaima, CHERIET Abdelhak, MERAZGA Saloua, BOUDEFFAR Fatima, MANSERI Amar, GABOUZE Nouredine</i>
O.191	<b>CHIBANI Lotfi</b> <a href="mailto:chibani.lotfi.1993@gmail.com">chibani.lotfi.1993@gmail.com</a>	Entropy and convection effect on Cu-Al2O3/H2O hybrid nanofluid flow inside a special cavity with moving wall. <i>FARES Redouane</i>
O.192	<b>SADAOUI Yacine</b> <a href="mailto:yacine205@gmail.com">yacine205@gmail.com</a>	Experimental investigation of salt water vapor temperature's effect on freshwater production of hybrid desalination system working by solar and geothermal energy <i>BELAKROUM Rassim, CHERAD Nouredine</i>
O.193	<b>SERIR Chafiaa</b> <a href="mailto:serir.chafiaa@gmail.com">serir.chafiaa@gmail.com</a>	Intelligent energy management of a wind-photovoltaic system with storage battery <i>BENSMAIL Samia, TADJINE katia, REKIOUA Djamilia</i>
O.194	<b>HAMOUDI Youness</b> <a href="mailto:hamoudi555hamoudi@gmail.com">hamoudi555hamoudi@gmail.com</a>	Device modeling and analysis of lead free CH3NH3SnI3/CdS and CH3NH3SnI3/CdTe heterojunction solar cells with different ETMs <i>MOUCHAAL Younes, KHELIL Abdelbace</i>
O.195	<b>BOUCHAL Wissam</b> <a href="mailto:wissem.bouchel@gmail.com">wissem.bouchel@gmail.com</a>	Synthesis and Characterization of Bismuth Oxide by Self-Combustion Method. <i>DJANI Faiçal , MAZOUZI Djamel Eddine</i>
O.196	<b>M'HAMED EZZINE Mohamed</b> <a href="mailto:mohamedmhamedezzine92@gmail.com">mohamedmhamedezzine92@gmail.com</a>	Rotational vibrational energies of the potassium dimer using the Feynman path integrals formalism <i>DIAF Ahmed</i>
O.197	<b>ROGUAI Sabrina</b> <a href="mailto:sabrinaroguai@gmail.com">sabrinaroguai@gmail.com</a>	The impact of cobalt doping on structural, microstructural, optical, and magnetic properties of ZnO thin films <i>DEJELLOUL Abdelkader</i>
O.198	<b>BENMEBAREK Rabab</b> <a href="mailto:r.benmebarek@uinv-boumerdes.dz">r.benmebarek@uinv-boumerdes.dz</a>	2D numerical simulation of hydrogen-methane premixed flames <i>OUALI Sofiane, HACHEMI Madjid</i>
O.199	<b>HASSAINE Imen</b> <a href="mailto:hassaine.imen@univ-ouargla.dz">hassaine.imen@univ-ouargla.dz</a>	Study of the Structural and Electronic Properties of MgFe2 substitution Using the Density Functional Theory <i>BOUANANE Rabah</i>
O.200	<b>REMILA Brahim</b> <a href="mailto:brahim.remila@univ-bejaia.dz">brahim.remila@univ-bejaia.dz</a>	Contribution of surface treatments by alkalization and silanization to the reinforcement of composites based on vegetable fibers and poly(3-hydroxybutyrate-co-3-hydroxyvalerate) <i>Idris Zembouai, Lynda Zaidi</i>





SCHEDULE OF  
**POSTER** COMMUNICATIONS

# ICRME 2022

1<sup>st</sup>. International Conference on  
Renewable Materials and Energies

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October 26-27, 2022, Ouargla-ALGERIA

26 Octobre 2022

08 : 00 – 09:00

Conférence plénière 01 : Pr. Ibrahim S. Yahia  
26 Octobre 2022

Liens de la conférence : <https://youtu.be/-kjlWdA5N4A>

## DESIGN OF NANOMATERIALS USING COST-EFFECTIVE TECHNIQUES FOR FUTURE APPLICATIONS

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### Abstract

Nanomaterials are a fascinating new class of materials that includes various examples with at least one dimension in the 1 to 100 nm range. Through careful planning, nanomaterials can be created with unprecedentedly large surface areas. Nanomaterials' remarkable magnetic, electrical, optical, mechanical, and catalytic properties are notably distinct from their bulk ones. Its properties can be adjusted by carefully manipulating the nanomaterial's size,

shape, synthesis conditions, and functionalization. In our labs., we use various low-cost methods for producing nanomaterials, including mechanical ball milling, sol-gel, auto-combustions, microwave, and hydrothermal synthesis. Future applications of nanomaterials in energy, wastewater treatments, environmental applications, climate change, health, and agriculture all point toward the need for large-scale industrial production of nanomaterials.

**Keywords:** Synthesis of nanomaterials, Cost-effective techniques, Applications of nanomaterials

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09 :00 - 12 :00

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## ROOM POSTER P.1

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P1	<b>YAKOUBI Hadja</b> yakoubihadja34@gmail.com	Vibration control by piezoelectric materials of wind blades <i>Aïda Chérif , Mounir Meddad, Issam Meghlaoui</i>
P2	<b>BOUFELGHA Fayssal</b> boufelghalem@yahoo.fr	Optical and electrical properties of Sn-TiO <sub>2</sub> thin films <i>Fayçal Labrèche, Karima Ramdane and Nour-Eddine Brihi</i>
P3	<b>BOURENANE Aissa</b> bourenane.aissa@gmail.com	Adaptation of SODART code for simulation of sodium heat pipes <i>Lylia Hamidatou , Mourad Dougdag , Mohamed Laid Yahiaoui</i>
P4	<b>BENCHIKH Imen</b> benchikh_imene@yahoo.fr	Synthesis and characterization of nanozeolites Cu-FAU, Cu-MOR and their composites for antimicrobial properties <i>DEHBI Atalah, MOKADEM khadra , ALLAL Farida, DJAFRI Fatih</i>
P5	<b>ACHOUR Wafa</b> achour.wafa47@gmail.com	Electrodeposition of NiCoO on carbon felt for high performance supercapacitor electrode <i>Toufik HADJERSI and Mohammed KEHOUANE</i>
P6	<b>MEMOUCHI Wissem</b> nemouchiwissem@gmail.com	Prediction of hybrid system (photovoltaic - wind turbine) power based on climatic data using ANN technique . <i>Youssouf Amrane, Hichem Nemouchi</i>
P7	<b>KHEMISSI Aicha</b> a.khemissi@univ-chlef.dz	Electronic transport properties in symmetrical binary (BN) Cx armchair heteronanotubes <i>Hafid Khalfoun</i>
P8	<b>TOUGHERGHI Fatah</b> ftougherghi@usthb.dz	The effect of Heat Treatment on the Microstructure and Mechanical Properties of NiCrBSiFe-WC Hardfacing <i>KHENFER Khadija, Soal imene , MEHENNI Mohamed,TERKI Mania</i>

P9	<b>REDDAH Taki</b> reddahtaki@yahoo.fr	<b>Study of the conjugate heat transfer in the receiver tube of parabolic trough solar collector</b> <i>Hocine Benmoussa, Fares Mohamed Laid Rekbi</i>
P10	<b>BOUDEN Hanane</b> hanane.bouden@univ-biskra.dz	<b>Thermal and optical properties of Sb<sub>2</sub>O<sub>3</sub>-PbO-MoO glasses</b> <i>Mourad Baazouzi, Sayah Rezgui</i>
P11	<b>BOUCHERABINE Djihed</b> djihed.boucherabine@univ-setif.dz	<b>Synthesis, Spectroscopic and electrochemical properties of a tetradentate diazomethine iron complex. The single crystal of (FeCIL) DMSO</b> <i>Kamel Ouari</i>
P12	<b>MEZILET Oumkeltoum</b> mezilet.oumkeltoum@yahoo.com	<b>Electronic Properties of Yttrium Aluminium Nitride (YxAl<sub>1-x</sub>N) Alloys: A First-Principles Study</b> <i>Abdenacer Assali, Said Meskine, Abdelkader Boukortt</i>
P13	<b>HADRI Nassima</b> hadrinassima@yahoo.com	<b>Valorization of olive oil by-products as valuable source for development and characterization of biopolymer thin film</b> <i>Zineb Macene, Sara Hasni, and Mohamed Didi Ould Elhadj</i>
P14	<b>GUERRAICHE Khaled</b> khguerraiche@yahoo.fr	<b>Fuel Cell / Micro-Turbine Hybrid Micro Grid Reliability Optimization</b> <i>Latifa Dekhici, Abdelkader Zeblah</i>
P15	<b>BENHANIFIA Kada</b> hanafi.kada@gmail.com	<b>Entropy and Galerkin finite element study for mixed convection (MWCNT-Fe<sub>2</sub>O<sub>3</sub>/H<sub>2</sub>O) hybrid-nanofluidic flow in a special cavity adopting to the Darcy-Furchheimer model.</b> <i>Fares Redouane, Lakhdar Rahmani, Mebarki Brahim, Ahmed Remlaoui, Toufik serier, Bouddou Riyadh</i>
P217	<b>DHEHBI Housseyn</b> dehbi.housseyn@gmail.com	<b>Elaboration, Structure and morphology of the FeCo-10%Cr nanostructures: Effect of milling time</b> <i>HEMMAOUS Messaoud, GUITTOUM Abed Rahim, IDOUMOU Mohamed</i>

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P16	<b>GUECHI Nassima</b> guechi.physique@gmail.com	<b>Study Of Structural, Dynamics And Thermodynamics Properties For The Semiconductors Compounds Libex(As, Sb And Bi)</b> <i>Badis Benncer</i>
P17	<b>KHELIFA Siham</b> sihamsiam71@gmail.com	<b>Artificial neural network based direct power control strategy applied to doubly fed induction generator-based wind turbine</b> <i>Abdelhafid Semmah</i>
P18	<b>BARBARI Karima</b> karima.barbari@hotmail.fr	<b>Use of solar energy for photocatalytic water treatment</b> <i>Rachid Delimi , Totozafy Jean Chrisologue</i>
P19	<b>MIMMI Abdelatif</b> abdelatifmimi94@gmail.com	<b>Effets des paramètres de soudage sur la résistance mécanique des joints soudés</b> <i>Mohamed Mezoug , Nabila Dellal , Mohamed Amine Adda Hanifi</i>
P20	<b>LAIADI Widad</b> widadlaiadi@gmail.com	<b>Deep traps effect created by proton irradiation on performance degradation of solar cells</b> <i>Chaker Laiadi , Afak Meftah</i>
P21	<b>LAIADI Widad</b> widadlaiadi@gmail.com	<b>Al<sub>x</sub>Ga<sub>1-x</sub>As window layer thickness effect on solar cell output parameters</b> <i>Chaker Laiadi , Afak Meftah</i>
P22	<b>CAID Messaoud</b> caidmessa@gmail.com	<b>Computational study of structural, electronic and optical properties of (InAs)<sub>m</sub>(AlSb)<sub>n</sub> superlattices</b> <i>Djamel Rached , Habib Rached</i>
P23	<b>CAID Messaoud</b> caidmessa@yahoo.fr	<b>Insight into the structural, electronic and optical properties of double perovskite LaBaFeTiO<sub>6</sub></b> <i>Djamel Rached , Habib Rached</i>



P24	<b>KADARI Ali sadek</b> aligauss22@gmail.com	Vanadium doping effect on structural, morphological and optical properties of ZnO thin films developed by spray pyrolysis <i>Nourddine Benaïoun , Abdelkader Nebatti Ech-Chergui , Brahim Aïssa , Rahmani Rabea Adjdir Mehdi Kouider Driss-Khodja , Bouhalouane Amrani</i>
P25	<b>BEKHEDDA Kheira</b> bekhedda.tssm@gmail.com	Effect of annealing temperature on opto-structural properties of cerium doped silicon nitride <i>Hamid Menari ,Faiza Tiour, Fatima Boudeffar , Brahim Mahmoudi</i>
P26	<b>SOUFI Hadjer</b> hadjersoufi1@gmail.com	Device simulation of formamidinium tin iodide ( [FASnI <sub>3</sub> ] ) based perovskite solar cell using SCAPS-1D <i>Khadidja Rahmoun</i>
P27	<b>ZEKKAOUI Chemseddine</b> ch.zekkaoui@gmail.com	Optimization study of an organophosphorus pesticide degradation with photo-Fenton process: Identification of by-products with GC-MS/MS <i>Tarek Berrama, Salima Dadou, Assia Beriber, Nassim Doufen, Yassine Kadmi</i>
P28	<b>BOUTAMI Kenza</b> k.boutami@univ-chlef.dz	Extend the anharmonic oscillator to study the light hypernuclei <i>Belabbas Mohamed</i>
P29	<b>BELDJANI Charafeddine</b> charafeddine.beldjani@univ-biskra.dz	Improvement of a photovoltaic modules cooling using hybrid nano fluids <i>Yousra Bouteraa, Nouredine Belghar , Kamel Aoues , Momen Sami Mohamed Saleh, Mohamed Aymen Kethiri</i>
P30	<b>SASSOUI Messaouda</b> messaouda.sassoui@univ-biskra.dz	Thermal and Optical Properties of TiO <sub>2</sub> doped Sb <sub>2</sub> O <sub>3</sub> -CNa <sub>2</sub> O <sub>3</sub> -ZnO glasses <i>Mohamed Toufik Soltani</i>

# ROOM POSTER P.3



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CODE	Author email	Title of communication <i>Co-authors</i>
P31	<b>LANGUEUR Omar</b> gueuomar@gmail.com	Some applications of the Biconfluent Heun differential equation in physics
P32	<b>HAMADA Halima</b> hamadahalima41@gmail.com	Structural electronic properties for the intermetallic alloy CeCuSi <i>Kadda Amara , Samira Hamada, Fatiha Saadaoui</i>
P33	<b>GAFOUR Mohamed Hicham</b> gafour_chimiste@yahoo.fr	Theoretical study of Endohedral Fullerene in Periodic Boundary Conditions <i>Karima Saïl , Ghaouti Bassou , Ahmed Haouzi, Maloufi Nabila</i>
P34	<b>HAMADA Samira</b> samirahem20@gmail.com	Structural, Elastic, Electronic , And Optical Properties Of Cubic Si <sub>3</sub> N <sub>4</sub> : A First Principles Study <i>Mohammed Driss-Khodja , Fatima-Zohra Driss-Khodja, Hamada Halima, Fatiha Saadaoui</i>
P35	<b>ADDOU Oussama</b> oussama.fr1996@gmail.com	Theoretical study of the structural, electronic and optical properties of Half-Heusler TaIrPd <i>Amina Touia , Karima Benyahia</i>
P36	<b>SAÏL Karima</b> k.sail@esi-sba.dz	Structural Study and Modeling of a Solar Cell based on Thiophene derivative and Fullerene <i>Mohamed Hicham Gafour, Ghaouti Bassou and Nabila Maloufi</i>
P37	<b>ZAGHOU Nasreddine</b> nacerzagh@yahoo.fr	Approximate analytical solutions of the effective mass Dirac equation for the Hulthen potential with any k-value by using the SUSYQM approach <i>Boutheyna Nekkaz , Farid Benamira , Larbi Guechi</i>
P38	<b>CHAOUCHE Yassine</b> ch.yassine@gmail.com	DFT study of the structural and electronic properties of Scandium alloys <i>Yamina Benkrima, Ahd Louafi and Amira EL Hassasna</i>

P39	<b>MARBOUH Norredine</b> nd.marbouh@yahoo.fr	<b>Ab-initio study of the thermoelectric performance of perovskite ZrBeO<sub>3</sub> compound</b> <i>Abdelkader Bentayeb, Benyamna Belkacemi</i>
P40	<b>HAMBLI Nawel</b> hamblinawel@gmail.com	<b>Modulation of instability in higher-order nonlinear Schrödinger equation with cubic-quintic non-Kerr terms</b> <i>Faiçal Azzouzi, Abdesselam Bouguerra, Basma Hamdi</i>
P41	<b>KHELAIFA Hamad</b> khelaifah@gmail.com	<b>Effect of waste tyre rubber on mechanical properties of cement mortar</b> <i>Ilyas Soulimane, Ammar Khelaifa</i>
P42	<b>DJIDA Rokaya</b> rokaya.djida@g.ens-kouba.dz	<b>Study of the finite-mass effects on some response functions for the system of the hadronic gas-quark gluon plasma phases coexisting in a finite volume</b> <i>Amal Ait El Djoudi, Hafida Ghobrini, Houda Mebdoua</i>
P43	<b>CHAALA Mohamed</b> chaalamohamed07@gmail.com	<b>Synthesis of biopolymer-based hydrogels and study of their applications</b> <i>Fatima Zohra Sebba, Maria Gloria Villora Cano, Guzman Carissimi, Marta G. Fuster, Mercedes García</i>
P44	<b>BELASLI Azem</b> djenane6@yahoo.es	<b>Effect of renewable leaves of <i>Satureja hortensis</i> L. essential oil on the shelf-life of liquid whole eggs during storage</b> <i>Lidia Ait Ouahioune, Yamina Benmiri, Sarah Merad, Thalsa Benali, Djaffar Bouksil, Djamel Djenane</i>
P218	<b>LABDELLI Boutaleb</b> labdelliB@crtse.dz	<b>Investigation of Diffusion Parameters in PN Junction Using Phosphorus Doped Paper Sheets.</b> <i>BOUCHEHAM Abdelghani, Abdelkader, Lyes BENHARRAT1, MAREF Abbas, NASRAOUI Chahinez, AOUAK Romaisa, AOUF Sihem</i>

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P45	<b>TOUAM Selma</b> selmatouam@gmail.com	<b>AB initio calculation of structural, electronic, elastic and Optical properties of <math>\text{YxGa}_{1-x}</math> As alloys</b> <i>Khaled Boubendira, Fatma Guenfoud, Hocine Meradji, Sebti Ghemid</i>
P46	<b>LAIDI Rebah</b> laidi-rebah@univ-eltarf.dz	<b>A simulation model of the dense compaction of bidimensional mixture</b> <i>Locif Redouani</i>
P47	<b>LAHAG Lemya</b> lemya.lahag@univ-biskra.dz	<b>Synthesis And Structural Characterization Of A Composite Material Ni-Wc, And Study The Different Concentrations Of Wc Particles</b> <i>Hachemi Ben Temam, Elhachmi Guettaf Temam</i>
P48	<b>BENDJILALI Hadjer</b> hadjer.bendjilali@yahoo.com	<b>Electronic and Optical Properties of the Double Perovskite <math>\text{Rb}_2\text{PtCl}_6</math> Semiconductor via First-Principles Calculations</b> <i>Slimane Gheriballa, Abbes Chahed1, Habib Rozale, Abdelkader Bouhenna</i>
P49	<b>BOUZANA Nouha</b> bouzananouha@gmail.com	<b>AB - initio study of structural, electronic and Optical properties of GaBi and GaP binary compounds</b> <i>Selma Touam, Sebti Guemid, Hocine Meradji, Billel Ati, Maroua Gacem</i>
P50	<b>SAADI Bothaina</b> bouthina.saadi@univ-biskra.dz	<b>The optical, structural, morphological, and electrical properties of <math>\text{Cr}_2\text{O}_3</math> thin films elaborated by pneumatic spray at different concentration</b> <i>Saâd Rahmane, Ouarda Ben Messaoud</i>
P51	<b>MAHMOUD Nassima</b> nassima_mahmoud@yahoo.com	<b>Soft Chemical Synthesis and Electrochemical Characterization of the Scheelite <math>\text{SrMoO}_4</math>: Application to Photocatalytic Degradation of Rhodamine B.</b> <i>Ali Boudina, Mohamed Trari</i>
P52	<b>BOUFOUDI Fatah</b> fatah.boufoudi@ummt.dz	<b>Study of the performance of a solar thermal collector on different locations in Algeria</b> <i>MIHOUB Sofiane, ZOUAOUI Salah, FERHAT Maroua</i>
P53	<b>FAR Houda</b> houdafar.phys@gmail.com	<b>Structural, optical, morphological and photocatalytic properties of calcium-doped iron oxide nanostructures deposited by sol-gel process</b> <i>HAMICI Melia, BRIHI Nouredine</i>

P54	<b>ABBAD Sara</b> saraphysique92@gmail.com	<b>Characterization of TiO<sub>2</sub> Nanopowders Elaborated by Sol-gel</b> <i>GUERGOURI Kamel</i>
P55	<b>MADJI Sérine</b> serine.madji@gmail.com	<b>Removal of an organic pollutant by photo-catalytic processes in aqueous solution. Environmental application</b> <i>MÉKATEL El hadj</i>
P56	<b>BERRAHOU Noria</b> berahou.noria@univ-mascara.dz	<b>Effect of temperature, layer thickness, ND and NA densities on performance of metal oxide solar cell</b>
P57	<b>DEBACHE Loubna</b> debacheloubna@gmail.com	<b>Theoretical prediction of structural, elastic and electronic properties of the CaMg<sub>2</sub>Al<sub>2</sub>N<sub>4</sub> and SrMg<sub>2</sub>Al<sub>2</sub>N<sub>4</sub> materials</b> <i>MEDKOUR Youcef , DJEGHLOUL Fatima , KHAROUBIMakhlouf , ROUMILI Abdelkrim</i>
P58	<b>GOUCHIDA Zineb Ibtissem</b> ibtissam.gouchida@gmail.com	<b>Study of a thin film solar cells based on CZTSSe using SCAPS-1D Simulator - Effects of doping in the absorber layer, and its operating temperature</b> <i>MAACHE Mostefa , BENBOUZID Yazid</i>
P59	<b>KHENFER Hana</b> khenferhannaa@gmail.com	<b>First principles study structural and electronic properties of hydrogen storage in Li<sub>6</sub>AlNaH<sub>8</sub> hydride</b> <i>MOHAMMEDI Lazhar , BENMEBROUKLazhar</i>
P60	<b>BOULAHDJEL Sara</b> boulahdjelsarah@gmail.com	<b>Temperature effect on optical and structural properties of CdS thin films grown by chemical bath deposition</b> <i>KERMADI Salim, SALI Samira, ZOUGARLyas, LABECHE Hadjira, CHAIEB Zoubir</i>

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## ROOM POSTER P.5

CODE	Author email	Title of communication <i>Co-authors</i>
P61	<b>OMARI Souhila</b> omari.souhila@gmail.com	Efficiency of wastewater treatment doped with organic dye by adsorption process <i>NEDJHIOUI Mohamed</i>
P62	<b>OMARI Souhila</b> omari.souhila@gmail.com	Development of an activated carbon based on agricultural waste for the treatment of polluted water <i>NEDJHIOUI Mohamed</i>
P63	<b>ZENKHRI Djamel Eddine</b> zenkhridjameledine@gmail.com	Calculation of inelastic cross section in hot plasma <i>MEFTAH Mohammed Tayeb, KHELFAOUI Fethi</i>
P64	<b>DJEMA Oussama</b> djemaoussama@crtse.dz	Ag capping layers for stabilization of copper solar cell contacts <i>MEZIANI Samir , CHAOUCHI Sofiane, YADDADENE Chafiaa, BEROUAKEN Malika</i>
P65	<b>MELKI Rafik</b> melki.rafik@hotmail.com	Synthesis, characterization and photocatalytic performance of TiO <sub>2</sub> nanotubes <i>LAOUFI Nadia Aicha, DAIMALAH Meriem, MOUHEB Abdelkader</i>
P66	<b>Meriem DAIMALAH</b> meriem.daimalah@gmail.com	Synthesis of polystyrene decorated with CuCr <sub>2</sub> O <sub>4</sub> nanoparticles for enhanced photodegradation of Cefixime under visible light <i>LAOUFI Nadia Aicha , MELKI Rafik, MOUHEB Abdelkader</i>
P67	<b>YOUSFI Abdelkader</b> a.yousfi@univ-dbkm.dz	Comparative Study of Different Intelligent MPPT Techniques for PV System <i>BOT Youcef</i>
P68	<b>AZZAOUI Walid</b> walid.azzaoui22@gmail.com	Physical properties studies of spray pyrolyzed Sn, Al doped and co-doped CdO thin films <i>MEDLES Mourad , SALIM Karim, MILOUA Redouane , BOUZIDI Attoya , NEKRALA Abdelkader, KHADAROUI Mohamed</i>

P69	<b>TABTI Hadja Alia</b> hadjaalia.tabti@email.com	<b>Synthesis of nanomaterials Fe-LDHs with different molar ratios Fe/Al.</b> <i>ADJDIR Mehdi</i>
P70	<b>BENGERABI Khadra</b> khadra10bengerabi@gmail.com	<b>Algebraic solutions of shape invariant systems with position dependent effective mass</b> <i>BENAMIRA Farid</i>
P71	<b>ALLALI Djamel</b> djamel.allali@univ-msila.dz	<b>A first principles investigation on the structural, elastic and thermodynamic properties of Ag-based oxides KAgO and RbAgO as a function of pressure</b> <i>ALLAF Hatem, RADJAI Missoum, AMARI Rabie, DEGHFEL Bahri, BOUKHARI Ammar</i>
P72	<b>BRADJI Bouthaina</b> bouthaina.bradji@univ-tebessa.dz	<b>A Comparative Study of Electronic Properties of Bulk MSe<sub>2</sub>(M=Mo, W) and Its Monolayer Using DFT</b> <i>BENKHEDIR Mohammed Lotfi</i>
P73	<b>OUDRANE Dawoud</b> AdnaneOudrane@gmail.com	<b>Computational insights in predicting structural and optical properties of EuAlO<sub>3</sub> cubic-perovskite using FP-LAPW method</b> <i>BOURACHIDE Imade, ABIDRI Boualem</i>
P74	<b>ZAUCHE Chouaieb</b> zaouchechouaieb@gmail.com	<b>Physical and Optical Properties of Zinc Doped Nickel Oxide Thin Films Fabricant Semiconductor</b> <i>BELBEL Abdeldjabbar, DAHBI Laid</i>
P75	<b>FOURA Iman</b> zineeddine.touati@yahoo.fr	<b>Simulation Study of Ultra-Thin Insulated Gate Bipolar Transistor IGBT</b> <i>ZITOUNI Messai, TOUATI Zine-eddine</i>

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## ROOM POSTER P.6

CODE	Author email	Title of communication <i>Co-authors</i>
P76	<b>TALBI Lamia</b> lamiatalbi@gmail.com	<b>Investigation of HCl-PANI / PSiC thin film for application in energy storage</b> <i>BEROUAKEN Malika , KAHIA Chaima, HENTOUS Amira, BENFADEL Karima, KACI Samira, KEFFOUS Aissa, MANSERI Amar</i>
P77	<b>BENBOUCHI Nacéra1</b> nacera.benbouchi@univ-mascara.dz	<b>The electronic, magnetic and half-metallic predictions of Ga<sub>1-x</sub>TM<sub>x</sub>P (TM = Cr, V, and x = 0, 0.125 and 0.25) alloys</b> <i>, DAHOU Fatima.Zohra, MONIR Mohammed El Amine</i>
P78	<b>SOUALMI Saida</b> soualmisaida@gmail.com	<b>Electrochemical reactivity of bipyridinecoordinated with chlorotriethylsilane</b>  <i>JOUIKOV Viatcheslav</i>
P79	<b>BELBEL Abdeldjabbar</b> belbel.dj@gmail.com	<b>Zr-pillared montmorillonite clay as host to cationic and anionic organic molecule</b> <i>ZAUCHE Chouaib</i>
P80	<b>BECHEFFAR Youcef</b> youcefrko@gmail.com	<b>Mixed Convection of Power-Law Fluid in Solar Collector with Two Lateral lids Moving Heated from Below</b> <i>BEKHADRA Mokhtar</i>
P81	<b>ZORGANI Roquiya Nour El Houda</b> zournour@outlook.fr	<b>DFT and TD-DFT calculation of silafluoréne-based small molecules for organic solar cells</b> <i>Fouad LEBSIR , Farouk HAMZA REGUIG, Mohammed Aymen ZORGANI</i>
P82	<b>GACEM Maroua</b> maroua2018gacem@gmail.com	<b>Ab-initio study of the structural, electronic and optical properties of III-V semi-conductors</b> <i>ATI Billel, BENDJEDID Ibtissem, TOUAM Selma, MERADJI Hocine, GHEMID Sebti</i>
P83	<b>GHARBI Abderrezak</b> gharbi_abdou2000@yahoo.fr	<b>The effect of temperature on the elaboration of thin films in nickel oxide</b> <i>ZEDOURI Aziez , FELAH Lahcen</i>

P84	<b>ZORGANI Mohammed Aymen</b> aymenzorgani98@gmail.com	<b>Synthesis and characterization of Cerium Oxide CeO<sub>2</sub> nanoparticles.</b> <i>SEBBA Fatima Zohra, ZORGANI Roquiya Nour El Houda, ZAOUI Farouk</i>
P85	<b>HAOUAM Marwa</b> ma.haouam@univ-soukahras.dz	<b>Study of the structural, electronic and mechanical properties of novel Zintl compound SrGa<sub>2</sub>P<sub>2</sub></b> <i>HAMIDANI Ali, ZANAT Kamel, Nor REBAHI</i>
P86	<b>OUKLI Mimouna</b> mounaoukli@yahoo.fr	<b>First-principles calculations on the origins of the optical band gap bowing of zinc blend GaAs<sub>1-x</sub>N<sub>x</sub> alloys</b> <i>NOUAR Fadila Souad</i>
P87	<b>OUKLI Mimouna</b> mounaoukli@yahoo.fr	<b>Theoretical investigation of optoelectronic properties of (InN)/(GaN)<sub>n</sub> superlattices</b> <i>GHLAM Karima, MOULAY Fatima</i>
P88	<b>DELLAL nabila</b> dellalnabila93@gmail.com	<b>Report of process parameters and the mechanical behavior of sheets welded by the fs laser process.</b> <i>MEBARKI Hicham, MIMMI Abdelatif, MERZOUG Mohamed,</i>
P89	<b>SAADAOUI Fatiha</b> saadaouifatih@yahoo.fr	<b>First-principles calculations of structural, elastic, electronic, and optical properties of Na<sub>3</sub>BrO</b> <i>DJAAFRI Tayeb, ZEMOULI Mostefa, CHAMI Nadir, DRISS-KHODJA Fatima Zohra, HAMADA Halima, DRISS-KHODJA Mohammed</i>
P90	<b>FERDJAOUI Mostapha</b> moustafa.fardjaoui@gmail.com	<b>Non-relativistic eigensolutions of V<sub>H</sub>, TiC, TiH Under exponential-type potential</b>

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P91	<b>DROUNI Wassila Abir</b> wassila.drouni@gmail.com	<b>Ab Initio Investigation of Structural, Electronic, Elastic and Mechanical Properties of Half-Heusler Alloys</b> <i>CHIKER Fafa</i>
P92	<b>CHAIB Wafa</b> ch98wafa@gmail.com	<b>Structural and electronic properties of a rare earth dihydride LaH<sub>2</sub></b>  <i>AYAT Zahia, BOUCHELLIG Hadjer, MEKKAOUI Nesrine, BOUKRAA Aomar, ACHOURI Abderrahim</i>
P93	<b>HACHEMI Nadir</b> hach.Nadir@univ-adrar.edu.dz	<b>Structural and microstructural study of degraded solar panels</b> <i>TAIBI Fatna, SAKHER Elfahem, BOURAIYOU Ahmed, NECAIBIA Ammar, TIGRIN Rachide, BELLUCCI Stefano, BOUOUDINA Mohamed</i>
P94	<b>BELFENNACHE Djamel Eddine</b> belfennachedjamel@gmail.com	<b>Kinetics of reactivation of phosphorus in hydrogenated silicon based Schottky diodes during thermal annealing</b> <i>MADI Djamel, BENKRIMA Yamina</i>
P95	<b>LATIF Aya</b> latif.aya@univ-biskra.dz	<b>Influence of Bi Doping on Structural and Optical Properties of ZnO</b> <i>ARAB Louiza</i>
P96	<b>BOUDJENANE Fatima Zohra</b> yossra.fatima@gmail.com	<b>A combined experimental and DFT approach of a new organic material</b> <i>CHOUAIIH Abdelkader 1, BOUKABCHA Nouredine</i>
P97	<b>DJEBABLIA Ikram</b> ik.djebablia@univ-soukahrass.dz	<b>Stability and hydrogen storage on pristine two dimension material Si<sub>3</sub>N<sub>4</sub> : Ab initio study</b> <i>HAMIDANI Ali, ZANAT Kamel, REBAH Nor</i>
P98	<b>GUENFOUD Fatma</b> guenfoudfatma36@gmail.com	<b>DFT Study of structural, electronic, elastic and Optical properties of BAs and BP binary compounds</b> <i>TOUAM Selma, MERADJI Hocine, GHEMID Sebti</i>



P99	<b>BOUDIAR Abid</b> boudiarabid11@gmail.com	Increasing the efficiency of solar panels by using two-dimensional graphene lenses. <i>BENDIFALLAH Habala , ZIANI Faten</i>
P100	<b>ACHOURI Intissar</b> intissarachouri.05@gmail.com	Storage and recovery of solar energy collected by the Parabolic Trough Collector <i>SOUDANI Mohammed Elbar , MARIF Yacine , BENAZZOUZ Afak</i>
P101	<b>HASSANI Nacera</b> hassaninacera1@gmail.com	Experimental analysis and modelisation the degradation of concrete elements. <i>DEHMOUS Hocine</i>
P102	<b>BENNIA Ayoub</b> ayoubbennia@gmail.com	A two-dimensional numerical study of turbulent nanofluid (Iron oxide-water) flow under a magnetic field. <i>BOUAZIZ Mohamed Najib , ALLICHE Sidahmed</i>
P103	<b>BENDIFALLAH Habala</b> bendifallahhabala@gmail.com	Increasing the effectiveness of solar panels by using 2D materials. <i>BOUDIAR Abid , ZIANI Faten</i>
P104	<b>BOUAICHA Salah</b> bouaicha1salah@gmail.com	Mechanical Characterization of Thin Films in CrN, Deposited by Magnetron Spraying on XC42 Steel. <i>TOUHAMI Mohamed Zine , BADJI Riad , LAGGOUNE Khaled</i>
P105	<b>CHEBABHI Ardjouna</b> ardjcheb@gmail.com	Design of sizing the renewable energies into microgrid system <i>TEGANI Ilyes, KRAA Okba</i>

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P106	<b>AZZEMOU Fatiha</b> leila.rahal@univ-mosta.dz	<b>Optimisation of the intrinsic passivation layers in HIT solar cells.</b> <i>Wassila Leila RAHAL, Djaaffar RACHED</i>
P107	<b>ROUMILA Yasmina</b> yas.roumila@gmail.com	<b>Dye degradation by Fenton like processes using hydroxyapatite catalysts</b> <i>MEZIANI Djaaffar, BELKHETTAB Ilyas , TRARI Mohamed</i>
P108	<b>Adel TEKILI</b> tekili7513adel@gmail.com	<b>Plasma Study into Nitrogen Ambience for AlN Pulsed Laser Deposition</b> <i>ABDELLI-MESSACI Samira , KALOUNE Samia , LAFANE Slimane</i>
P109	<b>GACEM Maroua</b> maroua2018gacem@gmail.com	<b>Ab-initio study of the structural, electronic and optical properties of III-V semi-conductors</b> <i>BENDJEDID Ibtissem , TOUAM Selma , MERADJI Hocine , GHEMID Sebti</i>
P110	<b>BENDJEDID Ibtissem</b> ibtissembendjedid@gmail.com	<b>DFT study of the structural, electronic and optical properties of BaSe, BaTe, YN and Ybi</b> <i>KHELIL Imane, GACEM Maroua, TOUAM Selma , MERADJI Hocine, GHEMID Sebti</i>
P111	<b>BELARBI Mousaab</b> moussaab.belarbi@enp-oran.dz	<b>Numerical simulation and analysis of Cu<sub>2</sub>ZnSnS<sub>4</sub> solar cells performance using various buffer layers</b> <i>Oussama ZEGGAI , Meziane CHEKKAL , Souad LOUHIBI-FASLA</i>
P112	<b>HAFIFA Loumafak</b> moufakm13@gmail.com	<b>Modeling and Simulation of Cu (In<sub>1-x</sub>Gax) Se<sub>2</sub> tandem thin-film solar cells</b> <i>MAACHE Mostefa</i>
P113	<b>HENNI Wafaâ</b> wafaa.henni@gmail.com	<b>Optimization of CdS buffer layer for high efficiency CZTS solar cells</b> <i>RAHAL Wassila Leila , RACHED Djaaffar</i>

P114	<p><b>KACI Samira</b> kacisamirahdr@gmail.com</p>	<p><b>Elaboration of Low Dimensional Cu-PbS-Si Structures for Sunlight Harvesting</b> <i>BENFADEL Karima, ANAS BOUSSAA Sabiha, TALBI Lamia, TORKI Chaima, OUADAH Yahia, BOUKEZZATA Assia, NASRAOUI Chahinez, MANSERI Amar</i></p>
P115	<p><b>BENYETTOU Samia</b> samia.benyettou@univ-msila.dz</p>	<p><b>First-principles calculations to investigate the structural, mechanical and thermodynamic properties of the cubic perovskite abo<sub>3</sub></b> <i>SAIB Salima</i></p>
P116	<p><b>KHAMMAR Messaouda</b> khammarbb@yahoo.fr</p>	<p><b>Mn Doped ZnO Piezoelectric Thin Films for SAW Applications</b> <i>MESSAOUDI Meriem , KANOUNI Fares , GUITOUM Djamel addine, DAAMOUCHE Mesbah</i></p>
P117	<p><b>YOUS Radhia</b> radia_yr@yahoo.fr</p>	<p><b>Influence of the modification of an Algerian clay on the adsorption of a heavy metal</b> <i>CHERIFI Hakima, KHALLADI Razika</i></p>
P118	<p><b>BOUKERCHE Ghania</b> ghaniaboukerche477@gmail.com</p>	<p><b>Comparison between both Commands Photovoltaic MPPT of the system: algorithm IncCond and FLC</b> <i>OMAIRI Amar , MERABT Hichem</i></p>
P119	<p><b>LECHEHEB Sabrina</b> lecheheb.sabrina@gmail.com</p>	<p><b>Optimizing Nanofluids Heat Exchanges in the Parabolic-Through Collectors Solar Receiver</b> <i>LAISSAOUI Mohamed , BOUHALLASSA Amar , KAROUA Housseyn, BENAMAR Zakaria</i></p>
P120	<p><b>BOUCHERKA Teldja</b> boucherkateldja@yahoo.fr</p>	<p><b>The effect of Ni doping on the optical and electrical properties of nanomaterial SnO<sub>2</sub> :Ni thin films for optoelectronic applications</b> <i>TOUATI Mariem , BRIHI Nouredine</i></p>

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P121	<b>MESSAOUDI Meriem</b> messaoudi_phlmd@yahoo.fr	<b>Structural and Electrical Properties of CZTS Films for Solar Cell Applications: Effect of Thin Film Thickness</b> <i>KHAMMAR Messaouda , AIDA Mohammed Salah</i>
P122	<b>MOUFFOKI Abderrahmane</b> mouffoki.abdo@yahoo.fr	<b>A shear deformation model for free vibration behaviour of functionally graded nanobeams in thermal environment</b> <i>REGUIEG YESAAD Abdellah , HOUARI Mohammed Sid Ahmed</i>
P123	<b>CHAHED Faiza</b> faizachahed22@gmail.com	<b>Theoretical Study Of Semi-Conductor Alloys</b> <i>DJOUDI Lakhdar , BOUCHAREF Mohamed</i>
P124	<b>BOUCHETA Abderrahmane</b> boucheta206@gmail.com	<b>Application of the refined shear deformation Hamilton approach to the nonlinear buckling and free vibrations analysis of FGM nanobeams</b> <i>BOUAZZA mokhtar , BECHERI Tawfiq</i>
P125	<b>BOUHALLASSA Amar</b> ammarbnv@gmail.com	<b>A numerical simulation study on the effect of heat transfer by convection on the performance of a volumetric tubular receiver in CSP.</b> <i>LAISSAOUI Mohamed , KAROUA Housseayne , LECHEHEB Sabrina , TAKILALTE Abdellatif , HAZMOUN Messaoud , BENAMAR Zakaria</i>
P126	<b>HORIMEK Cherifa</b> gueddouh_a@yahoo.fr	<b>Physical properties of full and half Heusler alloys Co<sub>2</sub>CrAl and CoCrSb. First principal study.</b> <i>GUEDDOUH Ahmed , BELKHIR Mohamed lamine</i>
P127	<b>BENICHOU Boucif</b> boucif_benichou@yahoo.fr	<b>Structural, Mechanical, Electronic, and Magnetic Properties of Pd<sub>2</sub>TiZ (Z = Al, Ga) Full-Heusler Compounds: a DFT-Based First Principle Investigation</b> <i>BOUCHENAFI Halima, NABI Zakia, BOUABDALLAH Badra</i>
P128	<b>RAHRAH Meriem</b> rahraheriem1@gmail.com	<b>Crystal structure and electronic properties of complex hydride</b> <i>LEBGA Noudjoud, LATRECHE Abdelhakim</i>

P129	<b>GASMI Meriem</b> meriem40gasmi@gmail.com	<b>Synthesis and Characterization of NiO-ZnO thin film doped with Ag for photocatalytic degradation of Methylene blue</b> <i>IAICHE Sabrina , DJELLOUL Abdelkader</i>
P130	<b>DECHOUK Lamia Fahima</b> lamiafahima.dechouk@gmail.com	<b>Computational calculations, molecular docking and antibacterial activity of palladium complex derived from furopyran-3,4-dione ligand</b> <i>SI LARBI Karima, BOUCHUCHA Afaf , ABDI Yamina, ZAATER Sihem</i>
P131	<b>BRAHIMI Meryem</b> razik.benderradji@univ-msila.dz	<b>Numerical Study of Heat Transfer by Mixed Convection in a Cavity Filled with Nanofluid</b> <i>BENDERRADJI Razik , KHALFALLAH Fares</i>
P132	<b>FARES Asma</b> asmafrs12229@gmail.com	<b>Biological properties study of biomaterial diopside prepares from raw materials</b> <i>ZOUAI Souhaila</i>
P133	<b>BOUCHELGA Fatma</b> fatbouchelga@gmail.com	<b>Simulation study of the electrical field's distribution effect on the self-cleaning phenomenon of superhydrophobic coating</b> <i>HAMOUR Khaled, BOUDISSA Rabah, KORNHUBER Stefan</i>
P134	<b>KHARROUBI Mohamed</b> y.bourezg@univ-djelfa.dz	<b>Electrical behavior of zinc phosphate glass doped with Ce<sup>3+</sup>: Application of Joncher's power law</b> <i>BOUREZG Yousf Islem</i>
P135	<b>SALEH Momen SM</b> momen@univ-tiaret.dz	<b>Numerical study of the thermal performance of a hybrid nano-fluid in a trapezoidal channel with obstacles.</b> <i>BELDJANI Charafeddine, MEKROUSSI Said , KHERRIS Sahraoui, BELGHAR Nourredine, BOUTERAA Yousra, KETHIRI Mohamed Aymen</i>
P216	<b>HENNI Abderrahmane</b> henni.abderrahmane2020@gmail.com	<b>Influence of the laser power on the return photon flux of a laser guide star LGS</b> <i>MOUSSAOUI Nouredine</i>

# ROOM POSTER P.10



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P136	<b>SMAHI Zineb</b> ghahmed2012@gmail.com	<b>Physical properties of the quaternary Heusler alloy NbVMnAl. First principle study.</b> <i>GUEDDOUH Ahmed, BELKHIR Mohamed lamine</i>
P137	<b>TAGREROUT Abdallah</b> tagroutabdalah@outlook.fr	<b>Phase stability and optoelectronic properties of Cd-doped of Cu<sub>2</sub>ZnSnS<sub>4</sub> compound for the solar cell systems</b> <i>OULD YUCEF Djamel, RACHED Habib, GUERMIT Youcef, DRIEF Mouhamed</i>
P138	<b>BERREHAL Hamza</b> amza.berrehal@gmail.com	<b>An efficient analytical approach to investigate thermal behavior of a wetted longitudinal porous fin of different profiles: Optimal Homotopy Asymptotic Method</b> <i>SOWMYA Ganeshappa</i>
P139	<b>BENTRAR Hakim</b> bentrarhakim@gmail.com	<b>Free vibration of the fundamental frequencies of isotropic square/rectangular plates using the p-version of the finite element method</b> <i>BELALIA Sid Ahmed , CHORFI Sidi Mohamed</i>
P140	<b>BACHIRI Zeyneb</b> zeyneb.bachiri@univ-msila.dz	<b>First principles Study of Some Fundamental Physical Properties of the half Heusler alloy LiGaSi</b> <i>BENYETTOU Samia</i>
P141	<b>CHIBANI Aboubaker</b> chibani1490@gmail.com	<b>Optical Properties Of Fe<sub>2</sub>O<sub>3</sub> ,Dope Cobalt Thin Films deposited by spry pyrolysis</b> <i>BENHAOUA Boubaker, DJAMEL Kendil</i>
P142	<b>MANCER Hemza</b> H.mancer@univ-chlef.dz	<b>First-principles study of electronic structure and magnetic properties of diluted magnetic Semiconductor Be<sub>1-x</sub>FexS.</b> <i>RACHED Habib</i>
P143	<b>BAHROUNE Mouflida</b> moufidabahroune@yahoo.fr	<b>Physico-chemical proprieties of aluminium coatings</b> <i>GUENFOUD Fatma, SAKER Abdelhamid</i>

P144	<b>CHELLI Amel</b> Maysazed@yahoo.com	The effect of nano silica filler on the mechanical and thermal characteristics of rubber blend <i>HEMMOUCHE Larbi , AIT SADI Hassiba, ZELLAGUI Rihab</i>
P145	<b>ARAREM Mohammed</b> Muhammed.ararem@gmail.com	Solar towers are a promising future for renewable energies and an important source of electrical energy production
P146	<b>REGUIEG YSSAAD Abdellah</b> reguiegysaaad@gmail.com	Appropriateness of the finite element method at the atomic level and studying the elastic properties of the carbon nanostructures <i>MOUFFOKI Abderrahmane, LAIB Salah Eddine</i>
P147	<b>TOUNSI Assia</b> tounsiassia56@gmail.com	Capacitance performance of FTO/MnO <sub>2</sub> thin films synthesized by direct and pulse potentiostatic methods <i>LAMIRI Leila, HABELHAMES Farid, BAHLOUL Ahmed</i>
P148	<b>BOUZIANE Khadidja</b> khadidja.c@gmail.com	Application of photovoltaic system at wastewater station in ouargla city <i>CHAOUCH Noura</i>
P149	<b>ALLOUCHE Asma</b> asma.allouche@univ-mascara.dz	First-principles calculation of Structural, Electronic, and Thermoelectric properties of Mn <sub>2</sub> PtCo Heusler alloys <i>BEKHTI SIAD Amaria, BAIRA Melouka, KHENATA Rabah</i>
P150	<b>TALEM Naima</b> talemnaima1998@gmail.com	Study of structural and electronic properties of ternary alloys $GaxTi_{1-x}P$ (x = 0.25, 0.5 or 0.75) <i>BOUMIA Lakhdar, MIHOUB Sofiane</i>
P215	<b>SAIGHI Nabila</b> nabila.saighi@g.enp.edu.dz	Valorisation of recycled SiC from cutting fluid for the manufacture of a ceramic membrane <i>HECINI Mouna, KERCHICHE Yacine, TABLAOUI Meftah, FRIHA Seif Eddine</i>
P237	<b>BENATHMANE Halima</b> <a href="mailto:benathmane.h@yahoo.com">benathmane.h@yahoo.com</a>	Study of ZnS/ZnO heterostructure, with chemically deposited ZnS <i>AZIZI Amor, GUEMMAZ Mohamed</i>
P238	<b>NAIM Houcine</b> <a href="mailto:houcine.naim@univ-relizane.dz">houcine.naim@univ-relizane.dz</a>	Développement d'une cellule solaire hétérojonction n-ZnO/p-Si. <i>BOUADI Abed, BENABADJI Noureddine, REDOUANE Fares</i>

27 Octobre 2022

08 : 00 – 09:00

Conférence plénière 02 : Pr. S.K.K. Shaat

27 Octobre 2022

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## SYNTHESIS AND CHARACTERIZATION OF ZNO NANOPARTICLES USING SOLUTION COMBUSTION TECHNIQUE FOR PHOTOANODES OF DYE SENSITIZED SOLAR CELLS

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### Abstract

ZnO nanoparticles (NPs) were synthesized using solution combustion method with different urea percent (UP) i.e. U1, U2, U3 and U3. The obtained ZnO NPs were characterized by X-ray diffraction (XRD), high resolution transmission electron microscope (HRTEM), UV-VIS spectroscopy and photoluminescence spectroscopy (PL). XRD analysis confirmed the wurtzite structure of the prepared ZnO NPs and the estimated average crystallite size reduced from 28.03 nm to 17.33 nm with increasing of UP. HRTEM image showed an irregular spherical shape for the prepared ZnO NPs. The absorption spectra analysis exhibited that the optical band gap energy ( $E_g$ ) for the ZnO NPs increased with increasing of UP from 2.84 eV to 3.13 eV. Two groups (I and II) of dye sensitized solar cell (DSSCs)

device based on the synthesized ZnO NPs were fabricated. In group I, 0.32 mM Eosin B (EB) used as photosensitizer for the samples U1, U2, U3 and U4, which showed that the overall conversion efficiency ( $\eta$ ) increased from 0.09 % to 0.13 %, under a light intensity of 100 mW/cm<sup>2</sup> due to the increasing of UP. Group II different photosensitizer Eosin Y (EY), EB, and Rhodamine B (RB) used to sensitized the U4, where the EY exhibited the best photosensitizing. The conversion efficiency showed a significant improvement from 0.13 to 1.26 %. The combustion method can be considered as a promising method to produce good photoanode semiconductors such ZnO subsequently increase the efficiency of the solar cell.

27/10/2022  
09 :00 - 12 :30

# ROOM POSTER P.11



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P151	<b>MISSOUM Khadidja</b> khadidja.missoum.etu@univ-mosta.dz	First-principles study of the global stability of LaBa for Hydrogen storage. <i>MESKINE Saïd, MEHTOUGUI Nabila, BOUKORTT Abdelkader</i>
P152	<b>ABCHICHE Hacina</b> abchichehacina@yahoo.fr	Effect of concentration and salinity on the rheological behavior of a drilling polymer <i>HADDADI Walid, SAADA Nouara, BENZIA Fateh, SAIB Meriem</i>
P153	<b>AZIBI Mourad</b> mazibi@cdta.dz	Indentation hardness evaluation of ZrN coatings deposited with HIPIMS technique <i>SAOULA Nadia, BOUKHOUIDEM Khadidja</i>
P154	<b>BOZETINE Isma</b> bozetineisma@yahoo.fr	Study of Si:C ratio of the electrochemical properties of silicon/carbon based paste anode for Li ion batteries. <i>CHERIET Abdelhak, YADDADENE Chafiaa, BOUDEFFAR Fatima, KEFFOUS Aissa, Amar Manseri</i>
P155	<b>SAM Chouaib</b> sam.chouaib85@gmail.com	Structural properties of superconducting ceramics Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+d</sub> <i>TOUIL Ouafia, MOSBAH Mohamed-Faycel</i>
P156	<b>Ferahtia SAMIA</b> samia.ferahtia@univ-msila.dz	Theoretical investigation of rock-salt and zinc blende structures of scandium carbide and yttrium carbide <i>SAIB Salima</i>
P157	<b>BENICHOU Boucif</b> boucif_benichou@yahoo.fr	Structural, mechanical, electronic, and magnetic properties of Pd <sub>2</sub> TiZ (Z = Al, Ga) full-Heusler compounds: a DFT-based first principle investigation <i>BOUCHENAFHA Halima, NABI Zakia, BOUABDALLAH Badra</i>

P158	<b>BOUCHENAFHA Halima</b> bouchenafa_halima@yahoo.fr	Temperature dependence on optical characteristics of $[\text{In}]_{0.4} [\text{Ga}]_{0.6} \text{N} / [\text{Al}]_{0.2} [\text{Ga}]_{0.8} \text{N}$ quantum well diode lasers <i>BENICHOUC Boucif</i>
P159	<b>KARKOUR Selma</b> selmakarkoursetif@gmail.com	Structural, electronic and optical properties of the spinel oxide $\text{SiZn}_2\text{O}_4$
P160	<b>KAAROUR Hadj Barkat</b> hadjbarkatkaarour@gmail.com	Physical and Optical Properties Studies of Perovskite ( $\text{CH}_3\text{NH}_3\text{PbBr}_3$ ) based PeLEDs <i>SOUDINI Belabbas, ABID Hamza</i>
P161	<b>BELLILA Abdelkader</b> kaderbellila3@gmail.com.	Study of the effect of copper residues on the productivity of simple solar distillation in southeastern Algeria. <i>LAIB Abdllatif</i>
P162	<b>SOFRANI Fatima</b> sofranifatima14@gmail.com	Structural, Elastic, Electronics, and Magnetic Properties for Quaternary Heusler $\text{CoFeTiSi}$ Compound <i>BOUDIA Keltouma 2, KHELFAOUI Friha</i>
P163	<b>BOT Youcef</b> y.bot@univ-dbkm.dz	Influence of Single-Phase PV Control On Three-Phase LV Network <i>YOUSFI Abdelkader, ALLALI Ahmed</i>
P164	<b>BELLILA Abdelkader</b> kaderbellila3@gmail.com	Study of the effect of copper residues on the productivity of simple solar distillation in southeastern Algeria
P165	<b>RAMDANI Halima</b> amdanihalima96@gmail.com	Effect of thermal heating rate on the crystallization kinetics parameters of Zinc Sodium Phosphate glass. <i>BOURZEG Yousf Islem, KHARROUBI Mohamed, SAHNOUNE Foudil</i>
P214	<b>MESSABIH Khedidja</b> meskhadija@gmail.com	Fabrication of lithium orthosilicate sorbents from diatomite for $\text{CO}_2$ uptake <i>BENDJABALLAH-LAALAOUI Nadia, BOUCHEFFA Youcef</i>
P239	<b>BOULAARAS Zineb</b> <a href="mailto:Zineb.boulaaras@univ-tebessa.dz">Zineb.boulaaras@univ-tebessa.dz</a>	FOPID Control Based on Evolutionary Algorithms for Quarter Car Nonlinear Active Suspension System
P240	<b>KAREK Rabie</b> <a href="mailto:karek.rabie@univ-ouargla.dz">karek.rabie@univ-ouargla.dz</a>	Charpy Test of a Renewable Material (Bioplastic Starch). <i>ZINE Abdallah</i>
P247	<b>SOUIGAT Abdelkader</b> <a href="mailto:souigataek@gmail.com">souigataek@gmail.com</a>	Improving the productivity of a single slope solar still <i>SLIMANI Driss, KORICHI Zineb, BENKRIMA Yamina, BENGUEHZA Mohammed Lakhdar</i>



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P166	<b>GUIA Djamel Eddine</b> guia-djameleddine@univ-eloued.dz	<b>Ca<sub>1-x</sub>La<sub>x</sub>FeO<sub>3</sub> (0.3≤x≤0.6), a potential material for cathode applications in SOFC.</b> <i>MAHBOUB Mohammed Sadok , BEN ALI Ouarda , ZEROUAL Soria, RIHIA Ghani, BOULAHBEL Hani , MIMOUNI Mourad, GHOUGALI Mebrouk, BEGGAS</i>
P167	<b>MIHI Sana</b> sm2210730@gmail.com	<b>An application MATLAB for Standard and modified Judd-Ofelt theories analysis from Pr<sup>3+</sup> absorption and emission spectra</b> <i>SOLTANI Mohamed Toufik, WONDRACZEK Lothar</i>
P168	<b>LAIB Abdellatif</b> abdellatif-laib@univ-eloued.dz	<b>Optical and electrical conductivity of Li:NiO films deposited by spray pyrolysis.</b> <i>BENHAOUA Atman, BELLILA Abdelkader</i>
P169	<b>ADDA BENATTIA Tekkouk</b> tekkouk.addabenattia@univ-mosta.dz	<b>Dimensioning and realization of an LTCC multilayer capacitor for energy conversion</b> <i>MELATI Rabia , BENZIDANE MOHAMMED Ridha</i>
P170	<b>ABBES EI Habib</b> habib.abbes.etu@univ-mosta.dz	<b>Ab-initio study for the elastic stability, structural and electronic properties of Rh<sub>2</sub>CuGe full Heusler alloy.</b> <i>ABBASSA Hamza, BOUHAMOU Imen</i>
P171	<b>GARADI Fatima</b> f.garadi@lagh-univ.dz	<b>Ab-initio study of Skutterudite compounds, for thermoelectric application</b> <i>HALIT Mohemed, HANIFI Mebarki</i>
P172	<b>BOUALLAG Sihem</b> S.bouallegue@univ-boumerdes.dz	<b>One-step Electrosynthesis of Cuprous Oxide-Sodium Dodecyl Sulfate Cu<sub>2</sub>O-SDS as Electrode Materials for Super- Capacitors application</b> <i>ZABAT Mokhtar, MOUGARI Ahmed, BELYADI Adel</i>
P173	<b>BANZAIDI Ikram</b> ikrambenzaidi8@gmail.com	<b>Study of the electronic, mechanical stability of compounds based on alkali and alkaline-earth metals</b>

P174	<b>GOUDJIL Sarra</b> sarragoudjil46@gmail.com	<b>Production of carbon nanofiber on supported metal catalysts</b> <i>BENAMAR Aicha, AZAZ Mohamed, GOUDJIL Sabrina</i>
P175	<b>DJEMOUI Kheira</b> djemouikheira33@email.com	<b>A theoretical study to feed the requirements of a farm and a house in an isolated area by PV solar panels in the region of Ouargla</b> <i>SOUDANI Mouhamed El bar</i>
P176	<b>KHALFALLAH Fares</b> fares.khalfallah@univ-msila.dz	<b>Numerical study of heat transfer by mixed convection in a ventilated cavity filled with hybrid nano-fluid</b> <i>BENDERRADJI Razik, BRAHIMI Meryem, AOUACHE Elhadj</i>
P177	<b>DEHBI Atallah</b> dehbi.atallah@yahoo.com	<b>Computational Materials Science In Catalysts And Applications</b> <i>BENCHKH Imene</i>
P178	<b>MEFOUED Amine</b> amefoued@hotmail.com	<b>Morphology, spectroscopy and photoluminescence properties of neodymium-coated silicon nanostructures</b> <i>MAHMOUDI Bedra , BENREKAA Nasser, MENARI Hamid, MEZGHICHE Saleh, MANSERI Amar, BRIK Afaf, TIOUR Faiza, Moustafa DEBBAB</i>
P179	<b>KEZIZ Ahcen</b> ahcen.keziz@univ-msila.dz	<b>Characterization of cordierite/mullite composites prepared by sol-gel technique</b> <i>HERAIZ Meand, SAHNOUNE Foduil</i>
P180	<b>BOURICHE Sabrina</b> sabrinabouriche740@gmail.com	<b>Synthesis of graphene from graphite rods recycled from electrical storage devices -Microwave treatment effect</b> <i>MAKHLOUF Mourad, KADARI Mohamed, BENMAAMAR Zoubir</i>
P213	<b>GOUASMIA Takrim</b> gouasmia.takrim@gmail.com	<b>Structural and Microstructural Study of Binary Iron Based Alloy Prepared via Mechanical Alloying</b> <i>BELAKROUM Karima, LOUDJANI Nadia</i>
P241	<b>BENABIDI Bilal</b> <a href="mailto:benabidi.bilal@univ-ouargla.dz">benabidi.bilal@univ-ouargla.dz</a>	<b>Production of environmentally safe softeners of rubbers and gums</b> <i>GAYLE Alexander , KUZICHKIN Nikolai</i>
P242	<b>DERABLA Riad</b> <a href="mailto:rderabla@gmail.com">rderabla@gmail.com</a>	<b>Formulation of a Self-compacting Eco-Concrete based on Recycled Tile Waste Aggregates</b> <i>MEDAOUED Nadjwa</i>

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## ROOM POSTER P.13

CODE	Author email	Title of communication <i>Co-authors</i>
P181	<b>BOURICHE Sabrina</b> sabinabouriche740@gmail.com	<b>Smart membrane absorbing electromagnetic waves based on polyvinyl chloride/graphene composites</b> <i>MAKHLOUF Mourad, KADARI Mohamed, BAKLI Hind, HAMOUMI Yacine, BENAICHA Bouabdellah, TAIBI Aicha, BENMAAMAR Zoubir</i>
P182	<b>BOUBENDIRA Khaled</b> k.boubendira@univ-soukahrass.dz	<b>Study of the structural, electronic properties of AIP, BP compounds and their Al<sub>1-x</sub>B<sub>x</sub>P alloy</b> <i>TOUAM Selma, Hocine Meradji, Sebti Ghemid</i>
P183	<b>BOUCHAKER Hana</b> hana.bouchaker@student.umc.edu.dz	<b>Forced convection heat transfer in triangular corrugated backward facing step with nanofluid</b> <i>BENCHABI Rahima, HEGUHOUG Karima</i>
P184	<b>BOUCHAREB Mohammed Lamine</b> laminebouchareb95@gmail.com	<b>Critical buckling loads of SWCNT under longitudinal magnetic field embedded in Kerr's foundation using NL-EBT</b> <i>SEMMAH Abdelwahed1, BENZAIER Abdenour1, BENMANSOUR Leila Djazia</i>
P185	<b>DELLOUM Amira</b> amiradelloum28@gmail.com	<b>Modeling of a temperature sensor based on plasmonic structures</b>
P186	<b>AYACHE Khireddine</b> ayache.khireddine@gmail.com	<b>Study &amp; improvement of the buildings thermal insulation for better energy efficiency: Ouargla region</b> <i>BEN MENIN Djamel</i>
P187	<b>TEMMAR Fatma</b> temmar_f@yahoo.fr	<b>Study of the structural, electronic and optique properties of the perovskite LiTaO<sub>3</sub> with the rhomboedric structure</b> <i>KHALFAOUI Frayha, BENMEDDAH Nabila</i>
P188	<b>BENBEDRA Abdesamed</b> abdesamed.benbedra@gmail.com	<b>Piezoelectric effect in strained III-nitride alloys</b> <i>MESKINE Said, ABBASSA Hamza, BOUKORTT Abdelkader</i>

P189	<b>BOURAHLA Nassima</b> nassoum0487@gmail.com	High-k material gate effect on power consumption, and reliability enhancement of ultra-thin- DG-FinFET transistor for RF applications <i>BOUDJENANE Fatima Zohra</i>
P190	<b>ZIANI Faten</b> faten.ziani@univ-tebessa.dz	Simulation of Electronic Properties of Materials using Quantum Espresso: Application to Silicon and Functionalized Graphene. <i>BOUDIAR Abid, BEN DIFALLAH Habala</i>
P191	<b>BOUHAMOU Imen</b> imen.bouhamou.etu@univ-mosta.dz	AB-initio calculations of structural, electronic, elastic and thermodynamics properties of Rh <sub>2</sub> CuGe full-Heusler alloy <i>ABBASSA Hamza, ABBES Charef, ABBES El Habib</i>
P192	<b>OULD KADA Mokhtaria</b> Olmokhtaria@yahoo.fr	Electronic, thermo-elastic and lattice dynamical properties of CeSn <sub>3</sub> <i>SEDDIK Taieb, KHENATA Rabah</i>
P193	<b>BAIRA Fayçal</b> baira.fayc@gmail.com	Effect of deformation on the electrical mechanical, and structural behavior of copper wire (DUCAB) of electric cables. <i>ZIDANI Mosbah, BAUDIN Thery</i>
P194	<b>LAADJEL Djouda</b> djoudalaadjel10@gmail.com	Influence of chemical polishing solution on surface quality <i>BELKHIR Nabil</i>
P195	<b>REMIL Aicha</b> remil_aicha@yahoo.com	Dynamic behavior of laminated composite plates <i>BOUAMOU Ahmed, DRAICHE Kada, TOUNSI Abdelouahad</i>
P212	<b>NEHAOUA Nadia</b> n.nehaoua@univ-boumerdes.dz	Comparative study of the structural and electronic properties of pure and doped MO (M=Mg, Zn): DFT <i>AMI Ismahen, MEZIANI Hadjer, MEBTOUCHE Farouk, ABAIDIA Sedik El</i>
P245	<b>BRELLA Maroua</b> <a href="mailto:brellamar@gmail.com">brellamar@gmail.com</a>	Study of The Structural, Morphological and Optical Properties of The Nano-structured TiO <sub>2</sub> Thin Films <i>TAABOUCHE Adel, GHARBI Brahim, GHERIANI Rachid</i>
P246	<b>TAMISSA Younes</b> <a href="mailto:tamissayounes@gmail.com">tamissayounes@gmail.com</a>	Pattern Recognition and Diagnosis of Multiple Open Circuit Faults in the Inverter Feed of an Induction Motor Drive Using Neural Networks <i>CHARIF Fella, BENCHABANE Abderrazak, KADRI Farid</i>



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P196	<b>TAIBI Fatna</b> taibi.fatna@univ-adrar.edu.dz	<b>Structural and microstructural study of nanomaterial CuCoCr prepared by mechanical alloying</b> <i>HACHEMI Nadir, SAKHER Elfahem, BOUDAOUED Lhouaria, SMILI Billel, BELLUCCI Stefano, BOUOUDINA Mohamed</i>
P197	<b>OUZANI Assia</b> ouzaniassia96@gmail.com	<b>Study of the removal of a basic dye from a material of biological nature</b> <i>MAACHOU Hamida, ZOUMBIA Yamina</i>
P198	<b>BEKADDOUR Abderrahmane</b> abdelrahmane.bekkadour1995@gmail.com	<b>Surface Metal Effect on Barrier Height in Homogeneities in a Ti/SiC-6H Schottky n-type Diode</b> <i>TIZI Schahrazade, ZEBENTOUT Baya, BENAMARA Zineb, AKKAL Boudali</i>
P199	<b>BELHOUL Talit</b> talitboughani@gmail.com	<b>Distribution of electric field lines in the system with hyper-insulating barrier under strong AC voltage</b> <i>BEKAKRIA Adel, BOUCHELGA Fatma, SAHLI Zahir, KORNHUBER Stefan</i>
P200	<b>BELHOUL Talit</b> talitboughani@gmail.com	<b>Breakdown characteristics of dielectric barrier under AC voltage</b> <i>BEKAKRIA Adel, BOUCHELGA Fatma, SAHLI Zahir, KORNHUBER Stefan</i>
P201	<b>KHELLADI Oumeria</b> khelladioumeria@gmail.com	<b>DFT study of highly correlated systems under pressure</b> <i>BENAYAD Nawel, DJERMOUNI Mostefa, ZAOUI Ali</i>
P202	<b>BELHADJ Mokhtaria</b> mokhtaria.belhadj@univ-mosta.dz	<b>Structural, electronics properties of sodium based fluoroperovskites NaCaF3: First principles calculations</b> <i>BOUKORTT Abdelkader</i>
P203	<b>ZEGGAI Oussama</b> o.zeggai@univ-chlef.dz	<b>Numerical modeling of a carbon dioxide (CO<sub>2</sub>) sensor based on a thin layer of zinc oxide (ZnO)</b> <i>BELARBI Mousaab, MOULOUDJ Hadj, BOUHENNA Abdesslam, OULEDABBES Amaria</i>
P204	<b>HOUICHER Salah-Eddine</b> houichersalah@gmail.com	<b>The Effect of Earth Current in the Variation of Lateral Profile Magnetic Field under High Voltage Overhead Transmission Line</b> <i>DJEKIDEL Rabah, BESSEDIK Sid Ahmed</i>

P205	<b>SEGMANE Imène</b> segimeneamouna@gmail.com	<b>Design guidelines of InGaN nanowire arrays for photovoltaic Applications</b> <i>SAYAD Yassine, SELATNI Nesrine, NOURI Ad elkader</i>
P206	<b>HADJADJ Khouloud</b> khouloudhadjadj52@gmail.com	<b>Synthesis, characterization and photocatalytic behavior of Zn doped SnO<sub>2</sub> thin film</b> <i>CHIH Smaïl, BENSOUICI Faycal, BOUOUDINA Mohamed</i>
P207	<b>SALHI Abd Elmoumene</b> a.salhi.usthb@gmail.com	<b>Stimulated Raman and Brillouin scattering in a linear cavity</b> <i>MALLEK Djouher, HIDEUR Ammar</i>
P208	<b>MALOUI Meriem</b> maloufimeriem@hotmail.com	<b>Synthesis, characterisation and antibacterial activity of composite films biopolymer – silver nanoparticles</b> <i>HASNAOUI M.Abdelkrim, BENGUEDDACH bdelkader, SASSI Mohamed</i>
P209	<b>LAKHDARI Yahia Abdelhamid</b> y.lakhdari@hotmail.com	<b>Thermal Behavior of an Algerian Building Envelope Integrating a Hybrid Phase Change Material under Mediterranean climate</b> <i>CHIKH Salah</i>
P210	<b>MAHIEDDINE Abdelkadir</b> abdelkadir.mahieddine@gmail.com	<b>Li<sub>2</sub>Cu(WO<sub>4</sub>)<sub>2</sub>@Ag Nanoparticles as Anode with Superior Electrochemical Performance for Supercapacitors</b> <i>ADNANE-AMARA Leila, GABOUZE Nouredine</i>
P211	<b>ADDA HANIFI Mohamed Amine</b> addahanifimohamedamine29@gmail.com	<b>Optimization on composite material using solidworks simulation in the case of tensile test.</b> <i>ZEMRI Mokhetar, MIMMI Abdelatif, ARRAB Mustapha</i>
P243	<b>OKBI Farid</b> <a href="mailto:faridokbi@yahoo.fr">faridokbi@yahoo.fr</a>	<b>The Study of the Electronic Properties of the Ga<sub>x</sub>Al<sub>1-x</sub>P Ternary alloy</b> <i>FAID Fares</i>
P244	<b>AZZAOUI Mohammed</b> <a href="mailto:mohazzaoui@gmail.com">mohazzaoui@gmail.com</a>	<b>Etude des spectres d'émission optique lors de déposition de couches minces de silicium avec la technique MDEC</b> <i>KHELFAOUI Fethi, SOUIGA Ad elkader</i>





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P219	<b>LAZREG Mohamed Haithem</b> <a href="mailto:mohamedhaithem.lazreg@univ-tlemcen.dz">mohamedhaithem.lazreg@univ-tlemcen.dz</a>	Grid connected hybrid Wind-PV Energy Systems using MPPT algorithm with Battery Backup <i>Abderrahim BENTAALLAH, Mourad LOUCIF, Hamza MESAI-AHMED</i>
P220	<b>CHOUIA Fateh</b> <a href="mailto:fatehchouia@gmail.com">fatehchouia@gmail.com</a>	Effect of natural phosphate content on the growth kinetics of hydroxyapatite crystals grown from kaolin clay <i>SAHRAOUI Toufik, BOUREZG Yousef Islem</i>
P221	<b>GUERRIDA Houria</b> <a href="mailto:guerridahouria47@gmail.com">guerridahouria47@gmail.com</a>	Calculation of the electric microfield distribution function of a magnetized plasma <i>CHEENI Keltoum, MEFTAH Mohammed Tayeb</i>
P222	<b>BEKHOUCHE Randa</b> <a href="mailto:bekhouche.randa@gmail.com">bekhouche.randa@gmail.com</a>	Schrödinger's equation for different potentials using different definitions of the fractional derivative <i>MEFTAH Mohammed Tayeb, KORICHI Zineb</i>
P223	<b>DELIOU Adel</b> <a href="mailto:deliouadel15@gmail.com">deliouadel15@gmail.com</a>	Etude des Paramètres des Performances d'un Distillateur Solaire de Type Chapelle <i>BELKAID Khmissi, DEHBI Meriem</i>
P224	<b>BENESSEDDIK Rabiaa</b> <a href="mailto:rabi3abenesseddik@gmail.com">rabi3abenesseddik@gmail.com</a>	A contribution to a physicochemical study of the sands of the Tamanrasset region <i>ACHOURI Abderrahim, TOUIL Meriem, BENCHAA Sayhia</i>
P225	<b>TOUIL Meriem</b> <a href="mailto:meriemtouil97@gmail.com">meriemtouil97@gmail.com</a>	Physicochemical properties of the Tevernin sands as a potential source of quartz mineral <i>MEFTAH Nassima; ACHOURI Abderrahim, BENESSEDDIK Rabiaa, BENCHAA Sayhia</i>
P226	<b>BERRA Sarra</b> <a href="mailto:berrasara50@gmail.com">berrasara50@gmail.com</a>	Sol gel of ZnO pure and Mg doped ZnO thin films: preparation and characterization <i>MAHROUG Abdelhafid, HAMRIT Samir</i>
P227	<b>BENDHAFER Soumia</b> <a href="mailto:soumiabendhafer@gmail.com">soumiabendhafer@gmail.com</a>	Investigation of layered LiFeO <sub>2</sub> -based material for Li-ion battery cathode by DFT+DMFT method <i>BOUFELFEL Ahmed, ZANAT Kamel</i>
P228	<b>GOUGUI Abelmoumen</b> <a href="mailto:abdelmoumen.gougui@gmail.com">abdelmoumen.gougui@gmail.com</a>	Technico-economic study of a hybrid PV/fuel cell/battery <i>DJAFOUR Ahmed, DANOUNE Mohamed Bilal, KAOUACHE Ahmed Zouhir, REHOUMA Youcef</i>
P229	<b>BERGOUG Sadia</b> <a href="mailto:yasmina5adra@gmail.com">yasmina5adra@gmail.com</a>	Investigation of the optical properties of Fe-doping ZnO thin films
P230	<b>DAOUI Hafsa</b> <a href="mailto:physiquephysique3@gmail.com">physiquephysique3@gmail.com</a>	Structural study of rock samples from the Ouargla region using spectroscopic methods <i>BOUCHAALA Afaf, BENMEBROUK Lazhar</i>
P231	<b>BOUCHAALA Afaf</b> <a href="mailto:afafbouchaala@gmail.com">afafbouchaala@gmail.com</a>	Study of the structural and optical properties under the influence of the deposition temperature of the films by chemical bath deposition method <i>DAOUI Hafsa, BENMEBROUK Lazhar</i>
P232	<b>BENREZKALLAH Anfal</b> <a href="mailto:benrezkallah.anfal@univ-ouargla.dz">benrezkallah.anfal@univ-ouargla.dz</a>	Study the effect of heat transfer fluids on the efficiency of Parabolic trough collector (PTC) <i>SOUDANI Mohammed Elbar, BENKRIMA Yamina, ZINE Abdallah</i>
P233	<b>AOUACHERIA1 Fatima Zohra</b> <a href="mailto:aouacheria.fatimaz@gmail.com">aouacheria.fatimaz@gmail.com</a>	Electronic structural and optical properties for Zn <sub>1-x</sub> MgxO using Ab-initio study <i>TELIA Azzedine</i>

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P234	<b>BENDIDA Imane</b> <a href="mailto:bendidaimane3@gmail.com">bendidaimane3@gmail.com</a>	<b>Net emission coefficient of H2O-Air thermal plasmas at atmospheric pressure</b> <i>LIANI Bachir, CRESSAULT Yann</i>
P235	<b>KHEREDDINE Abd el yazid</b> <a href="mailto:khereddiney@yahoo.fr">khereddiney@yahoo.fr</a>	<b>Improved metal-insulator-transition performance in VO2 Thin Films fabricated by pulsed laser deposition</b> <i>LAFANE Slimane, AIT-DJAFER Zouina Amina , SMAALI-LAFANE Assia, ABDELLI-MESSACI Samira</i>
P236	<b>BOUFAS Houria</b> <a href="mailto:houriaboufas23@gmail.com">houriaboufas23@gmail.com</a>	<b>Propagation of femtosecond solitons in silica fibers</b> <i>DAOUI Abdel Kader, TRIKI Houria</i>

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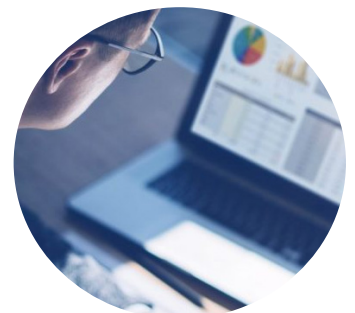
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