



The research team "Engineering and Applied Physics Team (EAPT)" at Higher School of Technology, Sultan Moulay Slimane University, Beni Mellal, Morocco

Program

The local time is Greenwich Mean Time + 1, (GMT + 1): Time (Beni Mellal city)

The 2024 1st International Conference on Materials Sciences and Mechatronics for Sustainable Energy and the Environment

MSMS2E 2024

Conference program



BENI MELLAL, MOROCCO



1-3 OCTOBER 2024



Solar Energy
And Sustainable Development

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1st Day: 01/10/2024

Opening and registration

8:00 AM

9:00 AM

Welcoming speech

Mustapha Aboumaarouf, **President** of Sultan Moulay Slimane University, Beni Mellal, Morocco

Opening speech

Abdelkhalek Oussama, **Director** of the Higher School of Technology Beni Mellal, Morocco

9:30 AM

10:00 AM

Keynote speaker 1

Pr. Malik Maaza – UNESCO-UNISA Africa Chair in Nanosciences, University of South Africa, Muckleneuk ridge, Pretoria – SOUTH AFRICA

Keynote speaker 2

Pr. Rabah Boukherroub – Université de Lille, Lille – FRANCE

11:20 AM

11:50 AM

Keynote speaker 3

Pr. Charaf Laghlimi – Université Abdelmalek Essaadi, Tetouan – MOROCCO

Discussion





1st Session (In person)

From 2:00 PM to 6:00 PM (01/10/2024)

ID : MSMS2E-D-001. Rachida Ouaabou, Lahcen.Hssaini, Said.Ennahli, Jalal.ISAAD. Laboratory of research and development in engineering sciences, Faculty of Sciences and Techniques Al Hoceima, Abdelmalek Essaadi University. Solar Drying Of Agricultural Produce

ID : MSMS2E-O-002. GOURDO lahoucine, Hicham. Fatnassi, Ahmed. Chraibi, Hassan. Demrati, Khadija. Achgar , Ahmed. Wifaya, Rachid. Bouharroud, Ahmed. Aharoune, Lahcen.Bouirden. Facultés des sciences , Université IBN ZOUHR. Enhancing Greenhouse Agriculture: A Study on Passive Solar Heating Using Water-Filled Sleeves for Improved Microclimate and Yield

ID : MSMS2E-O-003. GOURDO lahoucine, H.Fatnassi, K.Achgar , H.Demrati, F.Z. Allali , A.Wifaya, R.Bouharroud, A.Aharoune, L.Bouirden. Facultés des sciences , Université IBN ZOUHR. Opportunities in Implementing Solar Energy Technologies in Moroccan Greenhouses

ID : MSMS2E-D-006. Souad Ourabit, Mohamed Elghachi. université sultan moulay slimane faculté des lettres et des sciences humaines Beni Mellal. Variabilité spatio-temporelle urbaine des températures maximales estivales de juillet 2022 à Kasba Tadla, Maroc

ID : MSMS2E-O-011. Abdelaziz El kharraz, Tarik El hafi, Soufiane Assouli, Omar Bajjou, Youssef Lachtioui. Laboratory of Engineering in Chemistry and Physics of Matter (LICPM), Faculty of Sciences and Technics Sultan Moulay Slimane University, B.P 523, 23000, Beni Mellal, Morocco. Structural behavior of copper monoatomic metallic glass under various cooling conditions

ID : MSMS2E-D-012. Asmae Laksir, Marieme kacem, Mustapha Dib, Rachid Touzani, Aziz Boulouiz. Université Mohammed Premier OUJDA. MOFs-based materials: A trendy hybrid material for hydrogenation of aromatic nitro compounds

ID : MSMS2E-O-013. Zineb Tchorbo, Mustapha Dib , Kacem Mariem , Essaddek Abderrahim , Mounsef Neffa J. M. Doña Rodriguez . University Mohammed first. MOFs-based materials: Functionalized layered double hydroxides: Synthesis, properties and perspectives towards potential applications

ID : MSMS2E-D-026. Mustapha MADI, El Houssine Atmani, Ahmed El MANOUNI, Najma FAZOUA, Imtqi Hamza. Hassan II University, Faculty of Sciences and Techniques, Laboratory of Physics of Condensed Matters and Renewables Energies Casablanca. First-principles calculations of structural, electronic and optical properties of undoped and Se doped Sb₂S₃ using density functional theory"

ID : MSMS2E-O-027. ACHRAF EL OUALI, Yassine LAKHAL , Mohamed BENCHAGRA , Hamid CHOJAA. Team of engineering and applied physics Higher school of Technology of Beni Mellal, Morocco. Comparative Study of Controllers for a Wind Energy Conversion System Based on a DFIG

ID : MSMS2E-O-034. Lhouceine Moulaoui, Abdhfid Najim, Abdelmounaim Laassouli, Archi Marouane Omar Bajjou, Khalid Rahmani, Bouzid Manaut. LRPSI, Faculty of Polydisciplinary, Sultan Moulay Slimane University, B.P 592, 23000, Beni Mellal-Morocco. Computational Study of Germanium-Doped CH₃NH₃PbI₃ Perovskite: Optical and Electronic Properties and Modulation Potential

ID : MSMS2E-D-035. SEMLAL M'hamed, KHUILI Mohamed. FST Mohammedia, Hassan University. Numerical performance simulation of a MoSe₂-based solar cell using SCAPS-1D simulator

ID : MSMS2E-D-038. Afaf El Azaoui, Othamne Essahili, Abdelamjid Almaggoussi, Mohamed Ilsouk. University Mohammed IV Polytechnic / Applied Chemistry & Engineering Research Center of Excellence (ACER CoE). Organometallic Complexes Based on Copper(I) for Light Energy Conversion

ID : MSMS2E-D-039. Abdelaziz Youssfi, Youssef Ait El Kadi. Engineering and Applied Physics Research Team (EAP). Improved power sharing and reinforced stability of an isolated AC microgrid by implementing robust droop and enhanced droop control

ID : MSMS2E-D-042. nadia anter, Mohamed yassine GUIDA , Ahlam CHENNANI, Abdelouahid MEDAGHRI-ALAOUI, Abdellah HANNIOUI. USMS FST. Kinetic Analysis And Thermal Behavior Of Main Components Of Redwood (Pinus Sylvestris L.)



ID : MSMS2E-O-047. Abdelhafid Najim, Abdelmounaim Laassouli, Lhouceine Moulaoui, Omar Bajjou, Khalid Rahmani. Laboratory of Engineering in Chemistry and Physics of Matter (LPCM), Faculty of Sciences and Technics, Sultan Moulay Slimane University, B.P 523, 23000 Beni Mellal, Morocco. Impact of Cs Substitution on the Electronic and Optical Properties of $\text{CH}_3\text{NH}_3\text{SnI}_3$ Perovskite: A Density Functional Theory Study

2nd Session (In person)

From 2:00 PM to 6:00 PM (01/10/2024)

ID : MSMS2E-D-049. Taibi ZIDOUZ, Abdelatif TALBI, Abdelwahab ABARANE, Abdessamad DIDI2, El mahjoub CHAKIR, Elmehdi ALIBRAHMI, Abderahim ALLACH, Najoua ELIDRISSI. LPMS, Faculty of Sciences, Ibn Tofail Univ. Metrological Study of Gamma irradiator at CNESTEN's LEGX Calibration laboratory using Monte Carlo Simulation MCNP

ID : MSMS2E-O-051. Abdelkebir Ejjabli, Abdelkebir EJJABLI, Mohamed KAROUCHI, Hamza ERRAHOUI, Omar BAJJOU, Khalid RAHMANI, Youssef LACHTIOUI. Laboratory of Engineering in Chemistry and Physics of Matter Faculty of Sciences and Technics, Sultan Moulay Slimane University. Electronic and Optical Properties of Double Perovskite Oxide LaFeWO_6 : A Theoretical Understanding from DFT Calculations

ID : MSMS2E-O-052. Soufiane ASSOULI, Tarik EL HAFI, Abdelaziz EL KHARRAZ, Omar BAJJOU, Youssef LACHTIOUI. Laboratory of Engineering in Chemistry and Physics of Matter, Sultan Moulay Slimane University, Faculty of Science and Technics of Beni Mellal. Exploring mechanical and structural properties of monoatomic iron metallic glasses under varying cooling rates and pressures: Insights from molecular dynamic simulation

ID : MSMS2E-O-057. Hamza Errahoui, Mohamed Karouchi, Abdelkebir Ejjabli, Aymene Elhaji, Abdelmounaim Laassouli, Youssef Lachtioui, Omar Bajjou. Laboratory of Engineering in Chemistry and Physics of Matter Faculty of Sciences and Technics, Sultan Moulay Slimane University. Impact of Calcium Doping on the Electronic and Optical Characteristics of Strontium Hydride (SrH_2): A DFT Study

ID : MSMS2E-O-058. Mohamed Karouchi, Abdelkebir EJJABLI, Maroune ARCHI, Mohamed AMHIJANE, Aymane Elhaj, Hamza Errahoui, Omar BAJJOU, Youssef LACHTIOUI. Laboratory of Engineering in Chemistry and Physics of Matter Faculty of Sciences and Technics, Sultan Moulay Slimane University, BP 523, 23000, Beni Mellal, Morocco. Enhancing the Optoelectronic Properties of TiPbO_3 perovskite through Lanthanum Doping: An Insightful Investigation

ID : MSMS2E-D-059. Mohammed Miri, Younes Ziat, Youssef Ait El Kadi, Hamza Belkhanchi, Ayoub Koufi. Engineering and Applied Physics Team (EAPT), Sultan Moulay Slimane University, Beni Mellal, Morocco.. Study the effect of pressure on the structural, mechanical, and optoelectronic properties of InGeF_3 perovskite by DFT method.

ID : MSMS2E-O-066. jamal Guerroum, Mohamed AL-HATTAB, Mohamed KAROUCHI, Younes CHRAFIH, L'houcine MOUDOU, Khalid RAHMANIb, Youssef LACHTIOUI, Omar BAJJOUa,. Laboratory of Engineering in Chemistry and Physics of Matter (LICPM), Faculty of Sciences and Technics, Sultan Moulay Slimane University, BP 523, 23000 Beni Mellal,

ID : MSMS2E-D-067. AARAB iliasse, BOUNOUIRA Hamid, CHAKIR El Mahjoub, BADAGUE Abdelwahab, AMSIL Hamid, DIDI Abdessamad,. physique nucléaire et application. Elemental Analysis of Ten Medicinal Plants Species Growing in North of Morocco Using Neutron Activation Analysis

ID : MSMS2E-O-068. Mohammed Haiek, Lakhel yassine, Ben Said Amrani Nabil, Sarsri Driss. ENSA de Tanger. METAMODELING FOR PREDICTING THE BEHAVIOR OF AIRFOILS OF WIND TURBINE BLADES: AN INTEGRATION OF ARTIFICIAL NEURAL NETWORKS

ID : MSMS2E-D-074. RAJI Hajar, Abdelghani BOUDAUD, Mounaim AQIL. University Sultan Moulay Slimane, Superior School of Technology. Advancements and Challenges in the Photovoltaic Energy Supply Chain: Insights from a Global Perspective

ID : MSMS2E-D-076. Omaima Elkbichi, Layati Elhoucein, Mohamed Elghachi. Landscape Dynamics, Risks, and Heritage Laboratory, Sultan Moulay Slimane University, Faculty of Letters and Human Sciences, Beni Mellal, Morocco. The impact of climatic variability on water resources in the Ououmana River basin in the Middle Atlas of Morocco (November 2021-May 2022)

ID : MSMS2E-D-081. ZELMIMI Nouredine, JERDIOUI Souhail, ZEHRAOUI Khadra. Synthesis and Characterization of Phosphocalcic Apatites with Phosphite Ions for Biomedical Applications

ID : MSMS2E-D-083. Oumayma Haddad, A. Ait Hssi, A. Soussi, N. Labchir, K. Abouabassi, R. Markazi, A. Elfanaoui, A. Ihlal. Laboratory for Renewable Materials and Energies, Ibn Zohr University. Growth and Characterization of Semiconductor ZnO Nanorods for Photovoltaic Applications

ID : MSMS2E-D-084. EL HAJJAMI Kaoutar, BERRABAH Mohamed. Université mohammed premier faculté des sciences oujda. Determination of the Chemical Composition of *Ptychotis ammoides* Extracts



3rd Session (Virtual)

From 2:00 PM to 6:00 PM (01/10/2024)

ID : MSMS2E-O-005. Azizjon Kurbanov, Andijan state university. Synthesis of SnS₂-graphene nanocomposites for application as the anode materials in lithium-ion batteries

ID : MSMS2E-D-010. Fatima-zahra Moufakkir, H. El Mouahid1, A. Guessous. Laboratoire des Matériaux Nanotechnologie et Environnement. Innovative phosphate electrode materials: From synthesis to application in pseudocapacitors

ID : MSMS2E-O-014. Mazabalo BANETO, Alphonse Déssoudji Gboglo, Ognanmi Ako, Muthiah Haris, M. Senthilkumar. Université de Lomé. pH Effect on Structural, Morphological and Optical Properties of ZnO Mesoporous Thin Films Obtained by Chemical Bath Deposition for Dye-Sensitized Solar Cells Applications

ID : MSMS2E-O-015. Tulkun Nasirov, Nasirov Tulkun. University of geological sciences. Electronis states in two-dimensions space approximation

ID : MSMS2E-O-016. R.N. Ergashev, S.M. Otajonov, Z. Xaydarov, K.A. Botirov, M. Bahromov, T. Axmedov, M. Raxmonkulov. Fergana state university. Creation of an optical sensor based on the pCdTe – nCdS and pCdTe – nCdSe heterostructure for detecting polluted air

ID : MSMS2E-O-017. Kamaludin Abdulvakhidov, Zhengyou Li, Salim Otajonov, Nurzod Yunusov. Fergana state university. IMPEDANCE SPECTROSCOPY IN NANOSTRUCTURED COMPOSITES BASED ON "(1-x)AF_e12O19-xBTiO₃ (A-Ba,Pb,Sr; B-Ba,Pb)" AFTER MECHANICAL ACTIVATION

ID : MSMS2E-O-018. Korcan ÜNAL. OSTİM Technical University. Damaged Steel Pipelines: Composite Wrapping Method and Other System Components for Maintaining Operational Continuity

ID : MSMS2E-D-019. Mihade EL AKKEL, Mounia Achqraoui, Hamid EZ-ZAHRAOUI. Mohammed V University. A first-principles study of the Indium halide perovskites RbInX₃ (X= F, Cl, Br, I) for photovoltaic and photocatalytic applications

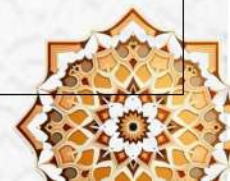
ID : MSMS2E-D-020. Mounia Achqraoui, Houda Jebari , Naoual Bekkioui , Hamid Ez-Zahraouy. Mohammed V University of Rabat. Tensile Effect on Photocatalytic and Optoelectronic Properties of MoS₂ for Hydrogen Production: DFT Study

ID : MSMS2E-O-021. Mohammad Zain Khan, Saima Sultana. Aligarh Muslim University. Developing Circular Economy Through Sustainable Production of Biofuels Using Electrochemical Systems

ID : MSMS2E-D-022. Ibtissam Jamaï, Meryem ziati, Naoual Bekkioui, Hamid Ez-zahraouy. Mohammed V University, faculty of sciences Rabat. Exploring the structural, electronic, and optical properties of CaGa₂X₄ (X = S, Se) chalcogenide spinels for potential solar cell applications: DFT study

ID : MSMS2E-O-023. Dessy Rachmawatie, . Universitas Muhammadiyah Yogyakarta. Urbanization, Industrialization and Carbon Emission on The Short and Long-Term Economic Growth: Encouraging Sustainable Cities in ASEAN Countries

ID : MSMS2E-O-024. Dessy Rachmawatie, Dessy Rachmawatie. Universitas Muhammadiyah Yogyakarta. The Key Factor Sustainability of Solar Energy: Evidence in Yogyakarta, Indonesia



4th Session (Virtual)

From 2:00 PM to 6:00 PM (01/10/2024)

ID : MSMS2E-O-028. Zaynolobidinova Sapura Malikovna, Yuldashev Shahjahan, Yuldashev Abror, Islomova Shaxrizoda. Fergana state university. DEVELOPMENT OF AFM EFFECT IN NON-HOMOGENOUS CHALCOGENIDE THIN FILMS

ID : MSMS2E-D-029. Zakaria Barbouch, Abdellatif El-Habib, Jamal Zimou, Mustapha Beraich, Elarbi Laghchim, Khalid Fareh, Abderrahim Raidou, Khalid Nouneh, Nadia Elharfaoui, Mounir Fahoume. Laboratory of Materials Physics and Subatomic, Department of Physics, Faculty of Science, Ibn Tofail University. Synthesis, structural and optical characteristics of Ni-doped Co₃O₄ layers deposited by spray pyrolysis

ID : MSMS2E-O-030. Akbarjon Baymirzaev, Khusanboy Makhhammadjanov, Nuriddin Muhiddinov, Fayzullokh Yakubjonov, Akramjon Otaquziev. Andijan Machine Building Institute. SELECTION OF THE FURNACE FOR THE PRODUCTION OF BEARING PARTS FROM IRON-COMPOSITE MATERIALS AND PREPARATION OF THE MOLDING FORM

ID : MSMS2E-O-031. Alphonse Déssoudji Gboglo, Mazabalo Baneto, Komlan Segbéya Gadedjisso-Tossou, Ayayi Claude Ahyi, Ognanmi Ako, M. Haris, Kekeli N'konou, Bruno Grandidier, M. Senthilkumar, Katawoura Beltako, Komi Apéléte Amou, Milohum Mikesokpo Dzagli. Centre d'Excellence Régional pour la Maîtrise de l'Electricité (CERME), University of Lomé. Effect of Deposition Time on ZnO Mesoporous Thin Films Properties for Dye-Sensitized Solar Cells Applications

ID : MSMS2E-D-032. Aicha Eddemani, Ahmed Aharoune, Lahcen Bouirden, Ahmed Ihlal. Faculty of sciences, Ibn Zoher university. Comparative study of the performance of packed beds using different types of thermal storage materials

ID : MSMS2E-D-033. Safae Ahsissene, Fatima Zahrae Rhziel, Naoufal Raissouni. Abdelmalek Essaâdi University. A Bibliometric Analysis of Outdoor Thermal Comfort Research in Smart Cities: Trends and Methodologies

ID : MSMS2E-D-041. Ilham AIT BRAIM, Anas Ouled Aitouna, Abdellah Zeroua, Ahmed BENHARREF1, Ahmed CHEKROUN. 1 Laboratory of chemistry of natural substances, Faculty of Sciences Semlalia, Cadi Ayyad University, P.O. Box 2390, Marrakech, Morocco.. Synthesis and DFT studies, of epoxidation reactions of halogen derivatives of himachalen with m-CPBA

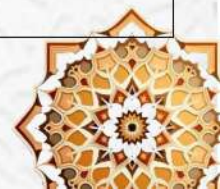
ID : MSMS2E-D-044. Said Bogtob, A. Samiri, H. Kourbani, A. Hasnaoui, K. Sbiaai. Université sultane moulay slimane, FST. Molecular dynamics simulation study of fatigue mechanical properties and microstructural evolution of Al metallic glasses under cyclic loading

ID : MSMS2E-D-045. Abdellatif El-Habib, Zakaria Barbouch, Bilal Brioual, Abdessamad Aouni, Mustapha Diani, Mohammed Jbilou and Mohammed Addou. Materials, Systems and Energy Engineering Laboratory (MaSEEL), ERCMN, (UAE/U01FST), Abdelmalek Essaâdi University, Tetouan, Morocco. Comparative study on the properties of Zn and In-doped CeO₂ nanostructured thin films grown by spray pyrolysis method: application to electrochromic devices

ID : MSMS2E-D-048. Hajar SADEQ, Abdelkader NASSER, Abdelhamid KERKOUR EL MIAD and Najib AMAR. Mohammed First University Oujda, Faculty of Science Oujda, Laboratory of Materials, Wave, Energy and Environment (LaMOn2E), MEGCE team ESTO. A Review of Oxide Layer Formation and Corrosion Dynamics in Reinforced Concrete

ID : MSMS2E-D-053. Aicha EDDEMANI, Ahmed Aharoune, Lahcen Bouirden, Ahmed Ihlal. Faculty of Sciences, University of Ibn Zohr,. Comparative study of the performance of packed beds using different types of thermal storage material

ID : MSMS2E-O-061. Salman Mustafa Salih Zebari, Bakhityar Al Harki, Nareen M. Nadhif, Mahmood Dheyaaldin. Akre University for Applied Sciences AUAS, Akre Technical Institute, Surveying Department. Role of nano particles in enhancing the behaviour of asphalt concrete: A review





2nd Day: 02/10/2024

Keynote speaker 4

Pr. Mounaim Aqil – Ecole Supérieure de Technologie Beni Mellal, Beni Mellal – MOROCCO

09:30 AM

10:00 AM

Keynote speaker 5

Pr. Noureddine Lakouari – Consejo Nacional de Humanidades, Ciencias y Tecnologías, Mexico – MEXICO

Keynote speaker 6

Pr. Youssef Ait El Kadi – Higher School of Technology Beni Mellal ; Sultan Moulay Slimane University– MOROCCO

11:00 AM

Discussion





1st Session (In person)

From 2:00 PM to 6:00 PM (02/10/2024)

ID : MSMS2E-D-087. Taoufik GOURTI, Mohamed LAABD, Mahmoud RAHAL, Nouh AARAB and Abdallah ALBOURINE. Materials and Environment Laboratory (LME), Department of Chemistry, Faculty of Science of Agadir (FSA), Ibn Zohr University.. DFT Study of the Energetic, Electronic, and Structural Aspects of Hemimellitic and Pyromellitic Acids

ID : MSMS2E-D-088. SERGENT Chaymae, KARZAZI Yasser. Faculty of Sciences, University Mohammed I, Oujda.. Theoretical Design of New Organic Materials for Application in Solar Cells: DFT and TD-DFT investigation.

ID : MSMS2E-D-089. Mohammed Taibi, Younes Abouelhanoune, and Fouad Dimane. LSIA, ENSAH Al-Hoceima, Abdelmalek Essaadi University. Modeling Hygrothermal Transfer in bio-based Construction Materials using Künzel Model

ID : MSMS2E-D-091. M. Karim , M. Tanaschte , N. Tafsi , R. Moulif , A. Hader , Y. Ezaier , I. Tarras , R. ET Touzi and F.Z. Kreimech. LPMC , Faculty of sciences Ben M'sik . University Hasan II. Casablanca, Morocco. Modeling of storage and degradation Lithium-Ion Battery

ID : MSMS2E-O-093. Abdelmounaim Laassouli, Lhouceine Moulouai, Abdelhafid Najim, Hamza Errahoui, Omar Bajjou, Khalid Rahmani, Youssef Lachtioui. Faculty of Sciences and Technics, Sultan Moulay Slimane University. Phosphorus Doping Effects on the Optoelectronic Properties of K₂AgAsBr₆ Double Perovskites

ID : MSMS2E-D-096. Abdelaziz MOUTCINE, Charaf Laghlimi, Younes Ziat, Hamza Belkhanchi . Sultan Moulay Slimane University. Development and preparation of a novel carbon paste sensor modified with NP-ZnO for the simultaneous detection of hazardous metal ions

ID : MSMS2E-D-098. Mohamed Amine Atillah, Hicham Stitou, Abdelghani Boudaoud, Mounaim Aqil. Engineering and Applied Physics Team (EAPT), Superior School of Technology, Sultan Moulay Slimane University. Comparative Study of Two ANFIS-Based MPPT Controls under Uniform and Partial Shading Conditions

ID : MSMS2E-D-099. Abdelaziz EL AAMRANI, B. AKHSASSI, O. OUZAGUINE, A. BOUDDOUCH, B. BAKIZ, A. TAOUFYQ, A. BENLHACHEMI. Materials and Environment Laboratory (LME), Faculty of Science, Ibn Zohr University, B.P 8106,

Cite Dakhla, Agadir, Morocco.. Strontium substitution effects on the crystal structure, microstructure, optical and electronic properties of Ba_{2-x}Sr_xMM'O₆ (M/M'= Ti, Mn, Zr) double perovskites

ID : MSMS2E-D-107. Jalal Isaad, Rachida Ouaabou. ERCI2A, FSTH, Abdelmalek Essaadi University,. Recent trends in sustainable eco-friendly materials for chemical detection and removal of emerging contaminants from water.

ID : MSMS2E-D-109. M'hamed SEMLAL, Mohamed KHULI, Nejma FAZOUAN, El Houssine ATMANI. FST Mohammedia, Hassan 2 University. Study of the performance of a CH₃NH₃SnI₃-based solar cell using the SCAPS-1D simulator

ID : MSMS2E-D-112. ANASS KHARISSI, Mohamed karouchi, Youssef Lachtioui ,Rachida Moulif. LPMC, FSBM - Hassan II University, BP 7955, Casablanca, Morocco. Structural, electronic and optical properties of La-doped FAPbI₃ perovskite: A DFT Study

ID : MSMS2E-D-113. Hicham Stitou, Mohamed anime Atillah, Abdelghani Boudaoud, Mounaim Aqil. Engineering and Applied Physics Team (EAPT), Superior School of Technology, Sultan Moulay Slimane University. ETAP software based power flow analysis of Electrical Structures of the 225/60/11KV substation in Tinghir

ID : MSMS2E-D-115. Mohammed BENFARS, Abdelmounaim Alioui, Youness Azalam, Mourad Kaddiri, Mustapha Mabrouki . Laboratory of Industrial and Surface Engineering, Faculty of Science and Technologies, Sultan Moulay Slimane University, 2300, Beni Mellal, Morocco. Dynamic simulations of thermal performance of a building based on earth bricks in six climatic zones of Morocco

ID : MSMS2E-D-118. Ayoub Etrini, Said Oukahou, Mohamed Maymoun, Abdelali Elomrani, Khalid Sbiaai, and Abdellatif Hasnaoui. University Sultan Moulay Slimane. TiB₂P₂ monolayer: A potential anode material with high storage capacity for Lithium-Ion Batterie



2nd Session (In person)

From 2:00 PM to 6:00 PM (02/10/2024)

ID : MSMS2E-D-121. Khalid El Harti, Mohamed touil, Rachid Saadani, Miloud Rahmoune. Laboratory of Advanced Materials Studies and Applications, FS-EST, Moulay Ismail University of Meknes, Meknes, Morocco. Vibration Control of Tapering FGM Beam Using Piezoelectric Materials

ID : MSMS2E-O-127. Ayoub Koufi, Younes Ziat, Hamza Belkhanchi, Mohammed Miri and Nouredine Lakouari. Engineering and Applied Physics Team (EAPT), Superior School of Technology, Sultan Moulay Slimane University, Beni Mellal, Morocco+The Moroccan Association of Sciences and Techniques for Sustainable Development (MASTSD), Beni Mellal, Morocco+Consejo Nacional de Humanidades, Ciencias y Tecnologías, Ciudad de México 03940, Mexico. A computational study of the structural and thermal conduct of $MgCrH_3$ and $MgFeH_3$ perovskite-type hydrides: FP-LAPW and BoltzTraP insight

ID : MSMS2E-O-128. Abdellah Abouziad, Younes Ziat, Hamza Belkhanchi. Engineering and Applied Physics Team (EAPT), Superior School of Technology, Sultan Moulay Slimane University, Beni Mellal, Morocco + The Moroccan Association of Sciences and Techniques for Sustainable Development (MASTSD), Beni Mellal, Morocco, Ab initio study of the structural, electronic, and optical properties of $MgTiO_3$ perovskite materials doped with N and P

ID : MSMS2E-D-129. Ayoub Koufi, Younes Ziat, Hamza Belkhanchi. Engineering and Applied Physics Team (EAPT), Superior School of Technology, Sultan Moulay Slimane University, Beni Mellal, Morocco+ The Moroccan Association of Sciences and Techniques for Sustainable Development (MASTSD), Beni Mellal, Morocco. Thermoelectric Properties of $XAlH_3$ ($X = Be, Na, K$) as hydrogen storage perovskite using DFT and the BoltzTrap SoWare Package

ID : MSMS2E-D-131. Essaid JAOIDE, Mbark OUTAZKRIT, Faicel EL AAMRI, Abdelhadi RADOUANE, Azeddine MOUHSEN. Hassan First University of Settat, Faculté Sciences et Technique, Laboratoire IRM, Settat, Morocco. Comparative Analysis of PWM Schemes for Quasi-Z-Source Inverters

ID : MSMS2E-D-133. Othmane El baz, Sarah Derbali, Abdelmajid Almaggoussi, Mohamed Ilsouk. ACER CeO. Novel self-assembled monolayer-based HTLs for inverted perovskite solar cell application

ID : MSMS2E-D-135. Meryem BAHAJ, Abdechafik ELHARRAK. LIMSET-UM6P. Techno-Economic Analysis for Enhanced Ammonia Production: A Case Study of Morocco

ID : MSMS2E-D-138. Abdelaziz Youssfi, Youssef Ait El Kadi. Engineering and Applied Physics Research Team (EAP). A new advanced strategy for controlling the charging and discharging of a storage unit in a microgrid using a finite control set predictive model

ID : MSMS2E-D-140. Charaf Laghlimi, Abdelaziz Moutcine, Younes Ziat, and Hamza Belkhanchi. ERCI2A, FSTH, Abdelmalek Essaadi University, Tetouan, Morocco + The Moroccan Association of Sciences and Techniques for Sustainable Development (MASTSD), Beni Mellal, Morocco+ Molecular Electrochemistry and Inorganic Materials Team, Faculty of Science and Technology, Sultan Moulay Slimane University, Beni Mellal, Morocco + Engineering and Applied Physics Team (EAPT), Sultan Moulay Slimane University, Beni Mellal, Morocco. Hydrogen: chronology and electrochemical production

ID : MSMS2E-D-141. Ahmed Ouezgan, Aziz MAZIRI, El Hassan MALLI, Anas EL MALIKI, Jamal ECHAABI. EST of Fez, Sidi Mohamed Ben Abdellah University. Numerical investigation on the effect of baffle position and number on thermal stratification in hot water tanks

ID : MSMS2E-D-143. Ahmed Ouezgan, Aziz MAZIRI, El Hassan MALLI, Anas EL MALIKI, Jamal ECHAABI. EST of Fez, Sidi Mohamed Ben Abdellah University. Series and parallel connected thermal solar energy storage tanks for large-scale storage: Numerical investigation

ID : MSMS2E-D-144. Brahim ADDOU, Abdessamad BALOUKI, Abderrahim Ben-Richou. Laboratory of Energy Engineering and Materials (LEEM), Faculty of Sciences and Technologies, Sultan Moulay Slimane University. Analysis of Thermal Diffusion in Materials for the Detection of Internal Corrosion Defects: Numerical Validation Using the Finite Volume and Lattice Boltzmann Methods

ID : MSMS2E-O-145. Mohammed EL HALAOUI, Mustapha EL HALAOUI, Lahcen AMHAIMAR, Laurent CANALE, Bousselham SAMOUDI. Intelligent System Design Laboratory, Research Team: Optics, Materials and Systems, Faculty of Sciences, Abdelmalek Essaadi University, Tetouan, Morocco+Higher School of Applied Arts, Hassan 2 University of Casablanca, Casablanca, Morocco+Université Toulouse III–Paul Sabatier, LAPLACE, UMR 5213, (CNRS, INPT, UPS), Toulouse, France. The Effect of ETL and HTL Thickness on the Electrical and Optical Properties of OLED Devices

ID : MSMS2E-D-146. Salma Zahid, Youness Tahiri, Mohamed Oubaouz, Mustapha Oukbab, Aziz Zaroual and Abdelilah Chtaini, Equipe d'Electrochimie Moléculaire et Matériaux Inorganiques, LGI, Faculté des Sciences et Techniques, Université Sultan Moulay Slimane, Maroc. Bacteria Modified Stainless Steel Anode for Glucose Fuel Cell



3rd Session (Virtual)

From 2:00 PM to 6:00 PM (02/10/2024)

ID : MSMS2E-O-062. Salman Mustafa Salih Zebari, Bakhtiyar Al- Harki, Heja Hasan, and Nareen M. Nadhif. Akre University for Applied Sciences AUAS, Akre Technical Institute, Surveying Department. Use of Byproducts and waste materials in the development of asphalt mixture

ID : MSMS2E-D-063. ABDELAZIZ AGUILAL, BENACEUR OUTTAJ. Laboratory of Economic analysis and Modeling (LEAM) Faculty of Law, Economics and Social Sciences –Souissi Mohammed V University -Rabat, Morocco. IS THERE A RELATIONSHIP BETWEEN RENEWABLE ENERGY CONSUMPTION AND CO2 EMISSIONS IN MOROCCO: AN EMPIRICAL INVESTIGATION USING THE TODA YAMAMOTO APPROACH

ID : MSMS2E-D-065. Abssane Sara, Outzourhit Abdelkader, Amatoul Fatima-Zahra. . Energy Management Strategy for Hybrid PV and Fuel Cell Systems: A Case Study in Morocco Essaouira city.

ID : MSMS2E-D-070. Hayat EL BAAMRANI, Abdelaaziz Yagourb , Ahmed Aharoune , Abdallah Boukhris. Thermodynamics and Energetics Laboratory, Faculty of Science, Ibn Zohr University, BP8106, 80006 Agadir, Morocco. Experimental study of falling film evaporation on a vertical plate

ID : MSMS2E-D-071. Hassan Haddouchy, Mustapha Oukbab, Youness Tahiri, Saliha Loughmari , Mohamed Oubaouz, Abdelilah Chtaini and Salah Eddine El Qouatli. Laboratory of Physical Chemistry Environment and Material, Moulay Ismail University, Faculty of Sciences and Technologies, Boutalamine 52000 Errachidia , Morocco.. Development of Polymer-graphite Composites as Electrodes for Methanol-operated Microbial Fuel Cells

ID : MSMS2E-D-072. Hamza Belkhanchi, Younes Ziat. Charaf Laghlimi, Sultan Moulay Slimane University. Optoelectronic Performance of Epoxy/Silicone Blends with N-Doped CNT Composites and CNT-Modified ZnO/TiO₂ Thin Films: A Study of Surface Morphology and Loading Rate

ID : MSMS2E-O-073. Tarik EL HAFI, Soufiane ASSOULI, Abdelaziz EL KHARRAZ, Omar BAJJOU, Youssef LACHTIOUI. Laboratoire d'Ingénierie en Chimie et Physique de la Matière, Université Sultan Moulay Slimane, Faculté des Sciences et Techniques de Beni Mellal. Molecular Dynamics Analysis of Atomic Diffusion and Crystallization Behavior of Pure Silver in the Vitreous State under Varied External Pressures

ID : MSMS2E-D-077. Oussama BELHAIDOURI, R. Moulitif , L. Mouakkir. Faculty of sciences ben m'sik. Modeling and performance study of CZTS solar cell using TMD material as buffer Layer

ID : MSMS2E-D-078. Mustapha OUKBAB, Hassan HADDOUCHY, Youness TAHIRI, Salma ZAHID, Mohamed OUBAOUZI, Salah Eddine ELQOUATLI, And Abdelilah CHTAINI .. Molecular Electrochemistry and Inorganic Materials Team, Faculty of Sciences and Technologies, Sultan Moulay Slimane University, Morocco.. Quality control method for toothpaste

ID : MSMS2E-D-086. EL MOSTAFA EL MESBAHI, A Elmelouky, Y Hairch, R Elmoznine, M Monkade. Faculty of Sciences /Chouaib Doukkali University. Application of magnetized water to plant growth and development research

ID : MSMS2E-D-095. Abderrahim Aitlhaj, Brahim Ouazik, Mohamed El Hasnaoui, Hassan Chaib. Ibn Tofail University. Theoretical Investigation of Structural and Electronic Properties of SnO₂ Using DFT+U+V Approach

ID : MSMS2E-D-097. Doha Kabouchi, El Mehdi Salmani, Hamid Ez-Zahraouy, Abdelaziz Mhirech and Halima Zaari. Laboratory of Condensed Matter and Interdisciplinary Sciences (LaMCScI), Faculty of Sciences, University Mohammed V in Rabat. Exploring the Photocatalytic Characteristics of Perovskite ABX₃ for Optimized Hydrogen Generation

ID : MSMS2E-D-106. Chaymaa Nougaa, Essediya Cherkaoui , Mohamed Khamar. ESTS. Impact des projets d'aménagement de la vallée de Bouregreg sur les ressources halieutiques du oued Bouregreg



4th Session (Virtual)

From 2:00 PM to 6:00 PM (02/10/2024)

ID : MSMS2E-D-111. Abed OUBARI, Khalid NOUNEH, Elmehdi HAMZAOU, Hafid AMAYOUD, Khalid FATHI. Ibn Tofail University. Optimization of Photovoltaic Power Efficiency Using an IoT-Based Automatic Solar Panel Cleaning System and Anti-Dust Coating

ID : MSMS2E-D-114. youness azalam, mohammed benfars, abdelmounaim alioui, mustapha mabrouki, el maati bendada. Laboratory of Industrial and Surface Engineering Sultan Moulay Slimane FST. Improving Adobe's Mechanical Properties through Sawdust Reinforcement: A Comparative Study of the effect of varying Sawdust Dimensions

ID : MSMS2E-D-116. Abdelmounaim Alioui, Youness Azalam, Mohammed Benfars, El Maati Bendada, Mustapha Mabrouki. Polydisciplinary Faculty, Sultan Moulay Slimane University. Comparative analysis of energy performance between clay-based and conventional building materials: A case study in Moroccan semi-arid climate

ID : MSMS2E-D-117. SOUBAI OTHMAN, ABOU EL HANOUNE YOUNES. Université Abdelmalek Essaâdi. Modelling Thermal Properties of Graphene: An Integrated DFT and Boltzmann Transport Equation Approach

ID : MSMS2E-D-120. Hicham El Mouahid, Fatima-Zahra Moufakkir, youssef Bou-ouzoukni, Aicha Guessous. Mohammed V University. Elaboration of MnPO₄.H₂O thin film on recycled graphite using a Pulsed Potential Electrodeposition method for pseudocapacitors applications

ID : MSMS2E-D-121. Hamza Belkhanchi, Younes Ziat. Charaf Laghlimi, Sultan Moulay Slimane University. Investigation of Structural and Optoelectronic Properties in doped LiMgP and LiMgN Half-Heusler Compounds: A Comprehensive DFT study

ID : MSMS2E-O-126. Zakaryaa Zarhri. CONAHCYT- Faculty of Chemical Sciences and Engineering, The Autonomous University of Morelos State, Av Universidad 1001, C.P. 62209, Cuernavaca, Morelos, Mexico, Ab Initio Study of Li₂FeSO Antiperovskite for Energy Storage.

ID: MSMS2E-D-130. Soukayna AZZOUZI, Mohamed KHAMAR, Abderrahman NOUNAH, Essediya CHERKAOUI & Abdelmjid ZOUAHRI. Civil engineering and environment laboratory. Study of the physico-chemical parameters of irrigated soil with different chromium concentrations

ID : MSMS2E-O-134. Salima EL Amrani, Mickael Sun, M. Reda Britel, Adel Bouajaj, Sirona Valdueza Feli, Frenando B. Naranjo. Laboratory of Innovative Technologies, National School of Applied Sciences of Tangier, Abdelmalek Essaadi University, Tetouan. Optimizing n-AllnN/p-Si Heterojunction Solar Cell Growth by RF Sputtering via Down-Converting Layers Co-Doped with Tb³⁺/Yb³⁺ Rare Earth Ions

ID : MSMS2E-O-136. Oumaima gouzta, . . Modeling Ag₂BeSnTe₄ kesterite solar energy cells : SCAPS-1D assessment

MSMS2E-O-139. Ayoub Laarej, Julio César Pérez-Sansalvador, Noureddine Lakouari, Hamid Ez-zahraouy, Laboratoire de Matière Condensée et Sciences Interdisciplinaires (LaMCScI), URL-CNRST, P. O. Box 1014, Faculty of Sciences, Mohammed V University in Rabat, Morocco. Study of Energy Dissipation and Satisfaction Rates in Mixed Traffic Flow with Lights: A Two-Lane Cellular Automaton Approach

ID : MSMS2E-D-147. Oussama Ifiguis, Fouzia Ammou, Abdelaziz MOUTCINE, Charaf Laghlimi, The Moroccan Association of Sciences and Techniques for Sustainable Development (MASTSD), Beni Mellal, Morocco. Theoretical and experimental study on the thermodynamic parameters and adsorption of methylene blue on "Argania shells" in industrial waters

