

AFMOLPhA'2022 PROGRAM

Tuesday 14-06	
8h30 – 12h00	Registration
9h00 – 9h30	Opening Ceremony Prof. Azzeddine EL MIDAOU , President of the Ibn Tofail University, Kenitra, Morocco Prof. Hassan ERGUIG , Director of the Superior School of Technology, Ibn-Tofail University, Kenitra, Morocco Prof. Mohammed EBN TOUHAMI , Dean of the Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco His Excellency Krzysztof KARWOWSKI , Ambassador of Poland in Morocco Chairs: Prof. Bouchta SAHRAOUI, Dr. Tarek CHTOUKI, Prof. Khalid NOUNEH
9h30 – 10h00	Plenary Speaker 9h30. Tuesday Organic widely real-time tunable lasing Prof. Jaroslaw MYSLIWIEC (Wroclaw University of Science and Technology, Poland)
10h00 – 10h30	Coffee Break
10h30 – 11h00	Plenary Speaker 10h30. Tuesday Optical effects in thin films of hybrid organic-inorganic halide perovskites Prof. Anna ZAWADZKA (Nicolaus Copernicus University, Poland)
11h00 – 12h20	Tuesday Invited Speakers 11h00-11h20: Prof. Aurelian Catalin GALCA , P-type emerging materials for photovoltaics: facts and artifacts in optical and structural characterization (Romania) 11h20-11h40: Prof. Konstanty MARSZALEK , Cr+ implanted copper oxide absorber thin films for photovoltaics (Poland) 11h40-12h00: Dr. Serap YIGIT GEZGIN , Modelling of plasmonic CZTS/Si heterojunction solar cell (Turkey) 12h00-12h20: Dr. Karim BOUCHOUIT , DFT analysis and third-harmonic generation properties of one series of electronic push-pull organics compounds (Algeria)
12h20 – 14h00	Lunch Chairs: Prof. Jaroslaw MYSLIWIEC & Prof. Mohamed EL HASNAOUI
14h00 – 16h00	Tuesday Invited Speakers 14h-14h20: Prof. Liu LIWEI , Label-free Multimodal Microscopic Imaging Technology (China) 14h20-14h40: Dr. Annamaria PANNIELLO , Fluorescent Carbon Dots: Emerging Materials towards Optoelectronic Applications (Italy) 14h40-15h00: Prof. Khalid NOUNEH , Environmental friendly thin films and nanoparticles deposited by soft chemistry synthesis for energy and environment (Morocco) 15h00-15h20: Prof. Jacek ZAKRZEWSKI , Photothermal Determination of the Surface Treatment of II-VI Mixed Crystals (Poland) 15h20-15h40: Prof. Mohssin ZEKRITI , Waveguide-Coupled Long-Range Surface Plasmon Optical Sensors for Accurate Diagnosis of Breast Cancer (Morocco)
15h40 – 16h10	Coffee Break & Poster Session
16h10 – 17h50	Oral presentations Session 1: Photovoltaics Chairs: Prof. Khalid NOUNEH & Prof. Anna ZAWADZKA Session 2: Nonlinear optics & Laser Chairs: Dr. Tarek CHTOUKI & Prof. Konstanty MARSZALEK
16h10-16h20:	Dr. I. Chabri . CsSnI ₃ -based perovskite solar cell: Numerical analysis of inverted- structure with 24.18% efficiency (Morocco)
16h10-16h20:	Prof. Z. Ramzi . Synthesis, thermal and optical properties of amorphous phases in Bi ₂ O ₃ -SrO-P ₂ O ₅ system (Morocco)
16h20-16h30:	Mr. J. Mhalla . Contribution of magnons created in volume and within the surface in low-dimensional dilute magnetic semiconductor: eTBA Calculation for Sn _{1-x} Co _x O ₂ (Morocco)
16h20-16h30:	Prof. K. Bahedi . Morphology Effect on Linear Optical and Nonlinear Optical Properties predicted by Spectroscopic Study of Sprayed ZnO: W Thin Films (Morocco)
16h30-16h40:	Mr. A.I. N'Guessan . Copper Indium Sulfur (CIS) and quaternary chalcopyrite Copper Indium Gallium Sulfur (CIGS) deposited by the spray pyrolysis technique (Spain)
16h30-16h40:	Mrs. I. El Fengouchi . Study of structural and optical properties of a novel pentafunctional epoxy resin reinforced with graphite and multiwalled carbon nanotube (Morocco)
16h40-16h50:	Dr. A. Soussi . Both optical and electronic characteristics of anatase TiO ₂ thin films: A DFT and sol-gel studies (Morocco)
16h40-16h50:	Mrs. S. Chib . Diffraction of doughnut beams by a helical axicon (Morocco)
16h50-17h00:	Mrs. R. El Amri . Growth and Characterization of α Fe ₂ O ₃ thin films prepared by RF magnetron sputtering (Morocco)
16h50-17h00:	Dr. K. Lakaal . Rashba Spin-Orbit Interaction and Size Effects on the Nonlinear Optical Properties of Si _{0.7} Ge _{0.3} /Si Quantum Dots (Morocco)
17h00-17h10:	Mrs. R. Anoua : Experimental and theoretical (DFT method) investigations of the natural dye extracted from Curcuma for dye-sensitized solar cells application (Poland)
17h00-17h10:	Dr. M. Lougdali . Absorbance and Photoluminescence properties of Niq ₂ Thin film for OLED application (Morocco)
17h10-17h20:	Mr. B. Lamuadi . Estimation of Solder Layer Degradation of an Insulated Gate Bipolar Transistor Power Module (Morocco)
17h10-17h20:	Dr. A. Farchakh . Analytical study of the magnetic behavior of a triangular single-walled nanotube with mixed spins ($\frac{1}{2}$, 1) (Morocco)
17h20-17h30:	Dr. N. Mhiri . Integration of New Analog Maximum Power Point Tracking Circuit of Photovoltaic Panels (Tunisia)
17h20-17h30:	Dr. A. Ait Hssi : Synthesis and characterization of heterostructures: p-Cu ₂ O/n-ZnO-NRs/FTO by two-step electrochemical deposition technique (Morocco)
17h30-17h40:	Mr. H. Najih . Effect of the Bromine doping on the structural and optical properties of CH ₃ NH ₃ PbI ₃ Perovskite thin films via spin coating deposition (Morocco)
17h30-17h40:	Mr. K. Fathi . Design, Modeling, and Realization of New Efficient SILAR Equipment (Morocco)
17h40-17h50:	Mr. Y. Charif-Alaoui . Magnetic and magnetocaloric properties in metallic antiperovskite compound Mn ₃ InC (Morocco)
17h40-17h50:	Dr. R. Atir . Carbazole-Based Hole-Transport Materials for Efficient Perovskite Solar Cells. A Computational Study- come back HTMs, thanks to improving solubility (Morocco)

Wednesday 15-06

Chairs: Prof. Hamdi ŞÜKÜR KILIÇ & Prof. Aurelian Catalin GALCA

9h00 – 10h00	Plenary Speakers	
9h00. Wednesday	Some selected advanced functional materials for nonlinear optics and nanophotonics applications Prof. Bouchta SAHRAOUI (University of Angers, France)	
9h30. Wednesday	Thiophene based molecular materials for nonlinear optics Dr. Abdelkrim EL-GHAYOURY (University of Angers, France)	
10h00 – 11h35	Invited Speakers	
10h00–10h20:	Dr. Tarek CHTOUKI , Influence of the Excitation Wavelength on Tunability of Random and Distributed Feedback Lasing (Morocco)	
10h20–10h40:	Dr. Dominique GUICHAOUA , Phase-Matched Magnetization-Induced Second-Harmonic Generation in Epitaxial Iron Garnet Thin Films (France)	
10h40–11h00:	Dr. Ikhwan Syafiq MOHD NOOR , Preparation and characterization of gel polymer electrolyte for perovskite solar cell (Malaysia)	
11h00–11h20	Dr. Karol STRZAŁKOWSKI , Photopyroelectric calorimetry in thermal characterization of solids samples, theoretical and practical aspects (Poland)	
11h20 – 11h50	Coffee Break	
11h50 – 13h00	Oral presentations	
	Session 1: Photovoltaics Chairs : Dr. Yesemin GÜNDOĞDU & Prof. Khalid NOUNEH	Session 2: Nonlinear optics & Laser Chairs : Prof. Mohssin ZEKRITI & Dr. Tarek CHTOUKI
11h50-12h00:	Dr. Y. Salhi . Elaboration of CZTS films via CZT precursor layer electrodeposition followed by Mist-CVD sulfuration (Morocco)	11h50-12h00: Mrs. N. El Biyari . 3D Printing of Optical Micro-Lenses via Stereolithography for Laser Beam Collimating and Focusing (Morocco)
12h00-12h10:	Prof. A. Rmili . Synthesis and characterization of Fe-doped CdS thin layers deposited via the sol gel method by spin coating for solar cells applications (Morocco)	12h00-12h10: Mr. A. Jouamaa . Composites based on PMMA and spherical or rod-shaped TiO ₂ nanocrystals: optical and structural investigation (Morocco)
12h10-12h20:	Mr. M. Boutamart . Self-cleaning glass based on superhydrophobic coating for photovoltaic application (Morocco)	12h10-12h20: Mr. A. Ahmidi . Angular spectrum decomposition method For evaluating the beam shape coefficients of the pseudo-nondiffracting beams: A comparison with the localized approximation method (Morocco)
12h20-12h30:	Dr. J. El Hamdaoui . Ab initio study of structural, electronic and optical properties of GeSnS ₂ (Morocco)	12h20-12h30: Dr. S. Bayoud . Enhanced visible emission of Lithium doped ZnO Thin Films Prepared by Spray Pyrolysis (Morocco)
12h30-12h40:	Mr. L. Moulaoui . Numerical simulation of FaPbL ₃ perovskite based solar cells with graphene oxide as hole transport layer using SCAPS-1D (Morocco)	12h30-12h40: Dr. E. El Halba . Focus shaping of cylindrically polarized generalized Spiraling Beams by a linear axicon (Morocco)
12h40-12h50:	Mrs. I. Driouch . Precipitation synthesis of Zn doped MnWO ₄ for energy storage application (Morocco)	12h40-12h50: Dr. A. Tarbi . Optimization of the absorption of the III-V distorted quaternary (Morocco)
13h00 – 14h00	Lunch	
	Chairs: Dr. Karol STRZAŁKOWSKI & Dr. Abdelkrim EL-GHAYOURY	
14h00 – 16h00	Invited Speakers	
14h-14h20:	Dr. Said TABOUKHAT , Control of NLO properties of selected Organometallic Complexes due to functionalization by different transition metals (France)	
14h20-14h40:	Prof. Mohamed EL HASNAOUI , Improvement of dielectric properties and thermal characterizations of innovative composite: Experimental and modeling (Morocco)	
14h40-15h00:	Prof. George A. STANCIU , Superresolution imaging by using far field and near field label free microscopy techniques, Romania	
15h00-15h20 :	Dr. Przemysław PŁÓCIENNIK , Examples of the construction of solar cells and techniques for measuring their basic parameters (Poland)	
15h20-15h40 :	Dr. Sidiki ZONGO , State of nanotechnology research in sub-Saharan countries: opportunities and challenges (Burkina Faso)	
15h40 – 16h30	Coffee Break & Poster Session	
16h40 – 17h40	Oral presentations	
	Session 1: Photovoltaics Chairs : Prof. Khalid NOUNEH & Dr. Serap YIĞIT GEZGIN	Session 2: Nonlinear optics & Laser Chairs : Dr. Tarek CHTOUKI & Dr. Dominique GUICHAOUA
16h40–16h50:	Mr. A. Ouhammou . Indirect-to-Direct Band Gap Transition of Cs ₂ Na _{1-x} InxBiF ₆ for photovoltaic application (Morocco)	16h40–16h50: Mr. B. El Mechate . Generation of parabolic-like beams (Morocco)
16h50–17h00:	Mrs. S. Lidaighbi . A new hybrid method to estimate the single-diode model parameters of solar photovoltaic panel (Morocco)	16h50–17h00: Dr. K. Bria . Angular distribution of sputtered Inconel 718 alloys: Simulation Study (Morocco)
17h00–17h10:	Dr. L. Boulkaddat . Elaboration and characterization of Cu ₂ ZnSnS ₄ thin films for low cost solar cells (Morocco)	17h00–17h10: Prof. M. Zekriti . Waveguide-Coupled Long-Range Surface Plasmon Optical Sensors for Accurate Diagnosis of Breast Cancer (Morocco)
17h10-17h20:	Mr. K. Kone . Surface engineering of Zinc Oxide thin as an electron transport layer for perovskite solar cells (Spain)	17h10-17h20: Dr. M. Soumane . Design and Characterization of One-Dimensional SnO ₂ using Forcespinning technique for optoelectronic application (Morocco)
17h20-17h30:	Msc. M. Bounbaa . First principles study of molybdenum dichalcogenides monolayers for lithium-ion batteries applications (Morocco)	17h20-17h30: Dr. V. Ovdenko . The substituent effect on laser beam self-action and elastic light scattering manifestation in thin films of azo-azomethine PMMA composites (Ukraine)
17h30-17h40:	Dr. M. Bouachri . Effect of cycle numbers on optical properties of nanostructured Bi ₂ S ₃ thin films deposited using SILAR Method for Solar Cells light harvesting (Morocco)	17h30-17h40: Dr. P. Forouzandeh . MXenes based nanocomposites for supercapacitor-based energy storage devices (Ireland)
20h00 – 22h00	Gala Dinner	

Thursday 16-06	
Chairs: Prof. Mohamed EL HASNAOUI & Prof. Youssef EL KOUARI	
9h00 – 10h00	Plenary Speakers
	9h00. Production and Optical Characterization of Indium gallium zinc oxide (IGZO) Thin Film with Pulsed Laser Deposition (PLD) Method Prof. Hamdi Şükür KILIÇ (University of Selçuk, Konya, Turkey)
	9h30. Laser Induced Breakdown Spectroscopy (LIBS) for Food Quality and Authenticity Applications Prof. Stelios COURIS (Institute of Chemical Engineering Sciences (ICE-HT), FORTH-Hellas, Patras, Greece)
10h00 – 10h15	Coffee Break
Chairs: Prof. Anna ZAWADZKA & Dr. Przemysław PŁÓCENNIK	
10h15– 12h00	Invited Speakers
	10h15– 10h35: Dr. Sahaya DENNISH BABU , Metal Halide Perovskite Nanomaterials for Advanced Optoelectronic Applications (India)
	10h35–10h55: Dr. Yesemin GÜNDOĞDU , Investigation and Interpretation of Nonlinear Optical Properties of Cu ₂ SnS ₃ (CTS) Thin films Synthesized by Using Pulsed Laser Deposition Technique (Turkey)
	10h55–11h15: Dr. Mohammed MAKHA , Thin Film Solar Cell Technologies: Exploring New Materials and Manufacturing Processes to Improve Performance (Morocco)
	11h15–11h35: Dr. Amal BOUICH , Opportunities and Challenges of Halide Perovskites for high efficiency and stable solar cells (Spain)
	11h35– 11h55: Prof. Abdelhafed TALEB , Optical properties of metallic nanoparticles and their potential to improve solar energy conversion (France)
12h00 – 13h20	Oral Lectures
	Session 1: Photovoltaics Chairs : Dr. Amal BOUICH & Dr. Mohammed MAKHA
	12h00–12h10: Mr. A. Idrissi . Designing new thiophene-based hole transporting materials for perovskite solar cells (Morocco)
	12h10–12h20: Mr. Z. El Fakir . The effect of the π -bridge in Carbazole-based HTMs for Perovskite Solar Cells (Morocco)
	12h20–12h30: Mr. S. Drissi . Synthesis and characterization of the new Cu ₂ Fe _{1-x} CoxSn ₄ thin films for solar cells (Morocco)
	12h30–12h40: Mrs. A. Dloo . Effect of buffer layer thickness on the growth of ZnO nanowires array toward photovoltaic application (Morocco)
	12h40-12h50: Mr. Y. Doumbia . Boosting the stability and growth of Methylammonium Lead Bromide through FA dopant for solar cells (Morocco)
	12h50-13h00: Mr. A. El Rharib . The study of electronic and optical properties of double perovskite Rb ₂ AgBiBr ₆ using first-principle (Morocco)
	13h00-13h10: Mr. O. Jhabli . Self-cleaning glass based on superhydrophobic coating for photovoltaic application (Morocco)
	13h10-13h20: Dr. H. Saadi . Elaboration of zinc oxide (ZnO) nanopowders for a photovoltaic application (Morocco)
Session 2: Nonlinear optics & Laser Chairs: Dr. Tarek CHTOUKI & Dr. Said TABOUKHAT	
12h00–12h10: Dr. M. Bensada . Numerical modeling of Nd-YAG laser melting process of X ₃₀ Cr ₁₃ stainless steel (Morocco)	
12h10–12h20: Mr. P.S.B. Macheso . Reviewing the Role of Fiber Bragg Grating Temperature Sensors in Smart Factories (Morocco)	
12h20–12h33: Dr. Douhi . Improvement of ultra-wideband (UWB) All-Textile Antenna performance using Metamaterial for radiofrequency (RF) energy harvesting: SAR reduction and gain enhancement (Morocco)	
12h30–12h40: Dr. M.Y. Zaki . Sequential magnetron sputtering approach for the synthesis of Cu ₂ ZnSn ₄ films (Morocco)	
12h40-12h50: Dr. M. Tair . Hydrogene storage technology (Morocco)	
12h50-13h00: Dr. S. Dahbi . Chalcogens' impurities and a single F-center in SHO: Ab initio calculations (Morocco)	
13h00-13h10: Dr. M. Boumzough . Structural, Electronic, Optical and Thermoelectric Properties of Molybdenum Dichalcogenides Monolayers MoX ₂ (X=S,Se,Te) for optoelectronic application (Morocco)	
13h20 – 13h50	Closing Ceremony
13h50 – 14h50	Lunch
<i>Excursion</i>	

From P-1 to P-20

From P-21 to P-40

- P1_H. Nabil, A. Balhamri, A. Belafhal. *Evolution properties of Some Laser Beams propagating in Jet Engine Exhaust.*
- P2_H. Nassiri, I. Driouch, M.Y. Messous, R. El Bouayadi. *Precipitation synthesis of Cr doped TiO₂ for dye-sensitized solar cell application*
- P3_Y. Benhouria, M. Kibbou, A. Oubelkacem, I. Essaoudi, A. Ainane. *Anti-perovskite Mn₃PdN: Potential candidates for an application in magnetic refrigeration*
- P4_O. Aitmellal, L. Oufni, M.Y. Messous, M.M. Trandafir, S. Neatu, M. Florea, M. Secu, F. Neatu. *Structural, optical, and photoluminescence investigations of CeO₂:Mn₃O₄:(0.5%Tb₂O₃-3.5%La₂O₃-Al₂O₃) phosphor for solar cell application*
- P5_Abdellatif El-Habib, Abdesamad Aouni, Mustapha Diani, Khalid Nouneh, Jamal Zimou, Mohammed Addou. *Investigation of physical and electrochemical properties of Gd doped CeO₂ nanocrystalline thin films*
- P6_I. EL Ouedghiri-Idrissi, A. Zawadzka, Z. Sofiani. *Investigations of photophysical properties of organic material 2,3-Triphenyl-1H-Imidazole*
- P7_M.Y. Messous, I. Driouch, O. Aitmellal, H. Nassiri, Z. Sadoune. *Influence of Ytterbium-doping on the Structural properties of LaMnO₃ perovskite oxide nanoparticles*
- P8_Zakaria Barbouch, Nadia Elharfaoui, Jamal Zimou, Abdellatif El-Habib, Mustapha Beraich, Khalid Nouneh, Mounir Fahoume. *Synthesis, structural and optical characteristics of Zn-doped Co₃O₄ layers deposited by spray pyrolysis*
- P9_M. Beraich. *Experimental and DFT study of new kesterite Cu₂NiGeS₄ thin film synthesized via spray ultrasonic technic*
- P10_K. Fri, A. Laazizi, M. El Jai, I. Akhrif, M. Bensada. *The influence of laser power and speed on SLM additive manufacturing*
- P11_Ilyass Jellal, Othmane Daoudi, Khalid Nouneh, Mounir Fahoume, Jamal Naja. *Low-temperature growth of highly crystalline ZnO thin films by mist chemical vapor deposition technique*
- P12_M. A. Hachimi, T. Chtouki, H. Erguig. *Review of structural, morphological, linear, and nonlinear optical properties of SnO₂ thin films deposited by spray pyrolysis technique*
- P13_L. Nkhaili, A. El Kissani, A. Narjis, M. Bousata, A. Outzourhit, S. Elmassi, H. Amiri, K. El Assali. *Growth and mechanism of CTS films by RF-sputtering*
- P14_A. Laouid, A. Alaoui Belghiti, K. Wisniewski, A. Hajjaji, Przemysław Plóciennik, Janusz Strzelecki, Anna Zawadzka. *Structural and optical properties of ZnS thin films prepared by the physical vapor deposition.*
- P15_A. Abouais, A. Alaoui Belghiti, K. Strzalkowski, A. Hajjaji. *Photopyroelectric PPE Method*
- P16_Z. El-Ansary, E. Petronijevic, A. Belardini, T. Cesca, C. Scian, G. Mattei, C. Sibilina, M. El Hasnaoui. *Experimental characterization of chiro-optical properties and origin of circular dichroism in 2D Arrays of Nanoholes in Silver*
- P17_A. El Haimeur, M. El Ghayyaty, P. Fernández Sánchez, K. Nouneh, H. Bakkali, E. Blanco, M. Dominguez. *Optoelectronic properties of TiO₂/ZnO and TiO₂/Ni-doped ZnO thin films*
- P18_M. Karam, A. Fahmi, A. Qachaou. *Effect on the magnetic properties created in a thin film superlattice based on a Ge_{1-x}Fe_x/Ge magnetic semiconductor*
- P19_S. Khalid, N. Dkhireche, M. Galai, R. Belakhmima. *Study of the effect of some derivatives of Quinoline Hydrochloride on the corrosion of brass in 3% NaCl medium*
- P20_Y. Selmani, H. Labrim, D. Zejli, R. El bouaydi, L. Bahmad. *Band-gap engineering in CaZrO_{3-x}S_x (x=0, 1, 2 and 3) simple perovskites for photovoltaic applications*
- P21_B. Daoudi, K. Nouneh, A. talbi, I. el bakkali, A. Rmili, O. drissi, S. Mtougui. *Synthesis and characterization of CuS thin film deposited by SILAR*
- P22_M. El-Mrabet, T. Chtouki, A. El Halouani, H. Erguig. *A critical review on the power conversion efficiency (PCE) of solar cells perovskite prepared by cation based methylammonium (MA), formamidinium (FA) and mixture of methylammonium/formamidinium (MA/FA).*
- P23_S. Benkhirat, K. Nouneh, G. Plantard. *Development of macroporous geopolymer foams functionalized by a photocatalyst.*

-
- P24_Safia Dassallem, Nouneh Khalid, Abdelhafed Taleb. *Design and realization of electrodes modified by hierarchical nanostructures for the detection of environmental pollutants*
-
- P25_A. Lemnawar, K. Nouneh, H. Labrim, R. El Bouayadi, S. Ziti, Y. Benhouria, N. El Harfaoui, A. Talbi. *Magneto-optic properties of the perovskite SmFeO_3*
-
- P26_M. Lougdali, Y. El kouari, R. Anoua, M. Zazoui, A. Zawadzka, Y. Abboud, P. Płóciennik, K. Waszkowska, B. Sahraoui. *Linear and Non Linear Optical properties of Niq2 Thin film*
-
- P27_R. Anoua, S. Touhtouh, M. El Jouad, A. Hajjaji, M. Bakasse, B. Sahraoui, P. Płóciennik, Anna Zawadzka. *Absorbance, photoluminescence and electronic properties of Curcuma for dye-sensitized solar cells*
-
- P28_O. Drissi, K. Nouneh, N. El Harfaoui, R. Hsissou, B. Daoudi, M. Azogagh. *Green synthesis of silver nanoparticles using aqueous pulp extract of *Argania spinosa* (L). Skeels*
-
- P29_A. Abouais, A. Alaoui Belghiti, K. Strzalkowski, A. Hajjaji. *Crystal growth of semiconductor materials*
-
- P30_M. Oubakalla, M. Taibi, A. Zarrouk, M. Fahoume. *The impact of copper concentration on the $\text{Cu}_2\text{CoSnS}_4$ thin films properties co-electrodeposited on the FTO substrate*
-
- P31_O. Daoudi, I. Jellal, M. Lharch, K. Nouneh, M. Fahoume. *Comparative Study of Zn, Ni and Al doped CuO thin films deposited by SILAR method: Structural, morphological and optical properties*
-
- P32_S. Derbali, N. Bouri, M. Florea, L. N. Leonat, V. Stancu, A. Tomulescu, A. C. Galca, M. Secu, L. Pintilie, M. Ebn Touhami, K. Nouneh. *Potassium-containing triple-cation perovskite solar cells*
-
- P33_J. Zimou, Y. Khaaissa, K. Nouneh, L. El Gana, Z. Barbouch, A. El-Habib², M. Addou. *Experimental and numerical study of $\text{Ce}_{1-x}\text{FexO}_2$ thin films for photovoltaic applications*
-
- P34_M. Hanine, J. Hemine, A. Daoudi. *Dielectric spectroscopy of polymer stabilized ferroelectric liquid crystal*
-
- P35_M. El-Mrabet, T. Chtouki and H. Erguig. *Review of third-order nonlinear optical response in pure and doped nickel oxide materials (NiO): experimental and theoretical aspects*
-
- P36_I. El Housni, S. Mtougui, N. El Mekkaoui, R. Khalladi, S. Idrissi, S. Ziti, H. Labrim, L. Bahmad. *Magnetic properties of the nano brownmillerite KBiFe_2O_5 : Monte Carlo simulations*
-
- P37_R. El Otmani, A. El Manouni, A. Almaggoussi. *Numerical Simulation of CZTSe Based Solar Cells Using Different Back Surface Field Layers: Improvement and Comparison*
-
- P38_F. Mansouri, A. Talbi, Y. Khaaissa, K. Nouneh. *Effect of Al doping rate on physical properties of ZnS thin films prepared by Mist CVD technique*
-
- P39_L. Znaidi, K. Nouneh, M. Fahoume. *Characterization and photocatalytic properties of CuO thin films prepared by successive ionic layer adsorption and reaction method (SILAR)*
-
- P40_F. Khalid, B. Faiçal, F. Mounir. *Elaboration and characterization of thin layers of MgAl_2O_4 prepared by electrodeposition at fixed applied potential.*
-
- P41_S.Abed, H. Djaaboube, K. Waszkowska, K. Bouchouit, R. Aouati, and A. Bouabellou
The effect of Zn doping on the optical and nonlinear optical properties of MgO thin films deposited by dip coating technique
-