

POSTER SESION I

MONDAY 12:30 PM – 14:30 PM

LOCATION: TEATRO CALDERON

ID	SIMPOSIUM	TITLE	PRESENTER
73	Atomic Layer Deposition	DESIGN AND MANUFACTURING OF ATOMIC LAYER DEPOSITION SYSTEM TO DEPOSIT SEMICONDUCTOR AND DIELECTRIC THIN FILMS	Jackeline Navarro Rodríguez
63	Biomaterials and Polymers	ELABORATION OF PCL/GO AND PCL/CNT COMPOSITES AND THEIR MECHANICAL CHARACTERIZATION FOR APPLICATIONS AS BIOCOMPATIBLE SCAFFOLDS	José Luis Jiménez Pérez
109	Biomaterials and Polymers	ADHESION OF OSTEOBLASTS ON NANOCRYSTALLINE HYDROXYAPATITE COATINGS FOR ORTHOPEDIC IMPLANTS	Fernando Francisco Rios Pimentel
121	Biomaterials and Polymers	Surface structure and physical properties of a biomaterials: the cuticle of prickly pear (<i>Opuntia ficus indica</i>)	Mauricio Alejandro Tapia García
197	Biomaterials and Polymers	COMPOSITION OF CALCIUM PHOSPHATE PASTES USED IN ADDITIVE PRINTING OF BONE SCAFFOLDS	Alfredo Morales Rojas
279	Biomaterials and Polymers	PREPARATION AND CHARACTERIZATION OF CONTROLLED RELEASE SYSTEMS OF BIOHERBICIDA@QUITOSANO	Josefina Aguila-López
281	Biomaterials and Polymers	WO ₃ thin films grown on Transparent Wood by RF-Sputtering for application in electronic devices.	Ruben Zaragoza
289	Biomaterials and Polymers	Simulation of Brinell hardness testing for Ti6Al4V using numerical methods	Gloria Rosendo Bacilio
23	Characterization and Metrology	Morphological and structural characterization of catalysts synthesized from fly ashes to be used during the hydrodesulfurization of straight-run gas oil	Jessica Katherine Lamus Sanguino

75	Characterization and Metrology	Characterization of a silicon photomultiplier for its implementation in a particle detector.	Manuel Reveles
97	Characterization and Metrology	SOLAR ABSORTANCE OF N- TYPE POROUS SILICON ELABORATED BY ELECTROCHEMICAL ANODIZATION	URIEL NOGAL LUIS
157	Characterization and Metrology	Commercial UV-C LED characterization for lamp design.	Jose Enrique Moreno Araujo
189	Characterization and Metrology	EFFECT OF LOW PRECIPITATION TEMPERATURE ON THE STRUCTURAL, MORPHOLOGICAL AND OPTICAL PROPERTIES OF MoO ₃ POWDERS.	Cecilio Santos Hernandez
297	Characterization and Metrology	BISMUTH-BASED NANOPARTICLES SYNTHESIZED BY THE LASER ABLATION OF SOLIDS IN LIQUIDS TECHNIQUE: INFLUENCE OF LIQUID MEDIA.	César Benjamín Morales Ramos
305	Characterization and Metrology	DETECTION OF INTERNAL FLAWS IN METALLIC MATERIALS BY LASER-INDUCED ULTRASOUND TWO-DIMENSIONAL IMAGES	Melissa Rojas-Romero
335	Characterization and Metrology	Fabrication and Measurement of Directionality of Needle-Like Photoacoustic Sensors	Orlando M Medina-Cázares
355	Characterization and Metrology	OPTICAL ABSORPTION SPECTRUM OF URINE IN AN ANIMAL MODEL OF SEPTIC SHOCK.	Sindy Janneth Olvera Vazquez
29	Luminescence Phenomena: Materials and Applications	Green Photoluminescence Signal of the [Tb-DPA] Complex: A Promising Luminescent Thermometer	Raúl Erick Guzman-Silva
55	Luminescence Phenomena: Materials and Applications	Synthesis of hydroxyapatite enriched with Er (III) and Yb (III) ions focused on detection in organic media.	Guadalupe Genoveva Méndez Ramos
191	Luminescence Phenomena: Materials and Applications	GREEN SYNTHESIS AND LUMINESCENT PROPERTIES OF CsVO ₃ ;Mn PEROVSKITE	Maria Leonor Porrás Sanchez

309	Microelectronics and MEMS	Implementation of NMOS logic gates with In-Ga-Zn-O thin film transistors	Pablo Gilberto Toledo Guizar
311	Microelectronics and MEMS	Self-aligned In-Ga-Zn-O thin film transistors	Pablo Gilberto Toledo Guizar
321	Microelectronics and MEMS	TEOS matrix functionalized with gallium oxide	Alessandra Yadira Escobar Vera
337	Multifunctional and Magnetic Materials	OPTICAL AND MAGNETIC CHARACTERIZATION OF LiCoO ₂ AND LiNiO ₂ NANOPARTICLES	Maria del Pilar Gutiérrez-Amador
51	Nanostructures	STUDYING THE INTERACTION OF GRAPHENIC SUBSTRATES WITH HUMAN INTERLEUKIN-6 AND ITS MONOCLONAL ANTIBODY BY RAMAN IMAGES	Emmanuel de la O Cuevas
67	Nanostructures	GREEN SYNTHESIS OF STABLE GOLD AND SILVER NANOPARTICLES USING AQUEOUS EXTRACT OF SARGASSUM SPP. AND THEIR APPLICATION IN CATALYSIS	Jeshua Alejandro Ramírez Moreno
71	Nanostructures	MORPHOLOGY, COMPOSITION, AND STRUCTURE IMPACT ON OPTICAL RESPONSE IN NANOSTRUCTURED HEMATITE THIN FILMS	Ana Luisa Martínez-García
79	Nanostructures	ELECTRONIC AND OPTICAL PROPERTIES OF BLACK-PHOSPHORENE/MoS ₂ BILAYER WITH VACANCIES.	Rebeca González Reyes
85	Nanostructures	ACTIVATED CARBON FROM MORINGA OLEIFERA SHELLS FOR REMOVAL OF ATRAZINE	BERTHA LIZBETH FLORES CAMACHO
89	Nanostructures	TUNING OF THE CAVITY STATES AND RELATED ELECTRIC FIELD IN A ONE-DIMENSIONAL DIELECTRIC-GRAPHENE PHOTONIC CRYSTAL WITH A CAVITY INCORPORATED	Jesús Madrigal Melchor
99	Nanostructures	Photocatalytic materials based on SiNWs tested under different light intensities for the degradation of contaminants	Alejandra Xochitl Maldonado Pérez
137	Nanostructures	EVALUATION OF TiO ₂ NANOTUBE Ag-DOPED BY ANODIZATION AS ELECTRODE FOR THE DETECTION OF ASCORBIC ACID	Zaira Mora Mora
139	Nanostructures	LOW-DIMENSIONAL THERMOELECTRICITY IN FIBONACCI BILAYER GRAPHENE SUPERLATTICES	José Alberto Briones-Torres

143	Nanostructures	EFFECT OF THE APERIODICITY ON SPIN-VALLEY TRANSPORT PROPERTIES IN COMPLEX MAGNETIC SILICENE STRUCTURES	Luis Alberto Díaz Valerio
147	Nanostructures	STUDY OF THE EFFECT ON THE TEXTURAL PROPERTIES OF ZnTe NANOSTRUCTURED FUNCTIONALIZED WITH ETHYLENDIAMINE THROUGH A HYDROTHERMAL METHOD.	Jose Josue Rodriguez Pizano
151	Nanostructures	EXTENDED STATES IN DISORDERED DIMER SUPERLATTICES IN GRAPHENE	Rogelio Rodríguez González
161	Nanostructures	Biosynthesis of Ag and Au NPs and their interaction with bacterial spores of Bacillus subtilis species.	Fernando Luna Alvarez
185	Nanostructures	A FIRST PRINCIPLES STUDY OF HYDROGEN ADSORPTION ON DOPED (Li, Ca, K) γ -GRAPHYNE.	César Arturo Quej Solís
201	Nanostructures	QUANTUM TUNNELING IN 2D NANOWIRE SUPERLATTICES: A THEORETICAL STUDY	Reyna Méndez-Camacho
207	Nanostructures	OPTICAL CHARACTERIZATION OF SELF-ASSEMBLED SEMICONDUCTOR QUANTUM WIRES WITH A SYMMETRICAL SILICON-DELTA-DOPING GROWN BY MBE	Elihu-Hazel Sánchez-Martínez
211	Nanostructures	CRYSTALLINE PHASE TRANSFORMATION OF ELECTROSPUN ZnO NANOFIBERS CARRIED OUT BY HEAT TREATMENT	Oscar Secundino
217	Nanostructures	STUDY OF TiO ₂ @BiOBr HETEROJUNCTION IN PHOTOCATALYTIC ACTIVITY UNDER VISIBLE LIGHT IRRADIATION	Diana Sofia Michell Flores Saldaña
221	Nanostructures	OBTENTION OF MoS ₂ USING LIQUID PHASE EXFOLIATION OF MOLYBDENITE RESIDUES FROM THE WUZHOU MINE.	Jose Guadalupe Aguilar Ramírez
237	Nanostructures	STUDY OF InAs QDs SEMICONDUCTOR DEVICES IN ASYMMETRIC (Al)GaAs MATRICES FROM THE MANIPULATION OF GROWTH PARAMETERS IN THE PROCESS BY MBE	J. P. Olvera Enríquez
291	Nanostructures	Modeling of an SPR biosensor based on 2D materials for sensing different glucose concentrations	Ireri Aydée Sustaita-Torres
343	Nanostructures	EFFECT OF DRY OXIDATION ON THE OPTICAL RESPONSE AND MORPHOLOGY OF FIBONACCI STRUCTURES WITH ASYMMETRIC MIRRORS	María del Rayo Jiménez Vivanco

345	Nanostructures	INFLUENCE OF As CONTENT ON STRUCTURAL AND SURFACE PROPERTIES OF InGaAsSb EPILAYERS	Uriel Alcides Torices Saucedo
351	Nanostructures	Synthesis of nanostructures from electronic waste	Daniel González-Aradillas
359	Nanostructures	Electrochemical synthesis of graphite nanoparticles and its relationship with quantum confinement.	Juan José López Hernández
361	Nanostructures	MANIPULATION OF ELECTRONIC PROPERTIES IN GaN BILAYERS WITH TWO STACKING CONFIGURATIONS VIA EXTERNAL ELECTRIC FIELD	RUBEN ARON REYNA LARA
37	Plasma and Vacuum	INFLUENCE OF TEMPERATURE ON THE OPTICAL AND ELECTRICAL PROPERTIES OF ZnO:Al THIN FILMS	Pablo Calderon
123	Plasma and Vacuum	Study of Insulating materials using the Spark-Induced Breakdown Spectroscopy (SIBS) technique	Marco Martinez
39	Renewable Energy: Materials and Devices	Gold recovery from e-waste processors leached in seawater and its recycling for the synthesis of gold nanoparticles.	Veronica Arellano
149	Renewable Energy: Materials and Devices	STUDY OF THE INFLUENCE THE SUBSTRATE POSITION INSIDE THE REACTOR CONTAINER ON THE OPTOELECTRONIC PROPERTIES OF CdS ULTRA THIN-FILMS DEPOSITED BY CHEMICAL BATH DEPOSITION TECHNIQUE	Maria de Lourdes Albor Aguilera
155	Renewable Energy: Materials and Devices	Synthesis and characterization of quantum dots sensitized solar cells	Angelica Itzel Ovalle Ulloa
203	Renewable Energy: Materials and Devices	GaAs-BASED SCHOTTKY SOLAR CELLS WITH EMBEDDED GaNAs/GaAs QUANTUM WELLS SYSTEM FOR MULTI-PHOTON ABSORPTION	T. A. Pérez-Oviedo

205	Renewable Energy: Materials and Devices	STUDY OF RAPID THERMAL ANNEALING EFFECT ON THE OPTICAL AND ELECTRICAL PROPERTIES OF III-N-V MULTI-QUANTUM WELLS HETEROSTRUCTURES FOR PHOTOVOLTAIC APPLICATIONS	P. A. Vera Gallegos
215	Renewable Energy: Materials and Devices	PHOTOTHERMAL APPLICATIONS OF NANOFUIDS OBTAINED THROUGH GREEN SYNTHESIS OF COPPER OXIDE AND THEIR POTENTIAL USE IN SOLAR COLLECTORS.	Fernanda Vianey Brito Gabino
247	Renewable Energy: Materials and Devices	Study of the interfaces between porous silicon and conductive polymers as an effective medium for charge accumulation	Mauricio Pacio
253	Renewable Energy: Materials and Devices	CdTe surface modification during CdCl ₂ and MgCl ₂ thermal treatment and their performance on CdTe solar cells	Cesar Hernandez Vasquez
257	Renewable Energy: Materials and Devices	MODELING AND ANALYSIS OF THE STRUCTURE OF A SOLAR TREE BY VECTOR CALCULATION	Emiliano Molina-Valdes
267	Renewable Energy: Materials and Devices	IN-SITU SOLUTION-BASED DOPING OF CdS APPLIED ON THIN FILMS CAPACITORS	José Manuel Flores Márquez
307	Renewable Energy: Materials and Devices	MONITORING CONGO RED DISCOLORATION USING THERMAL PROPERTIES IN PHOTOCATALYTIC PROCESSES: A NEW APPROACH	José Luis Jiménez-Pérez

323	Renewable Energy: Materials and Devices	HETEROGENEOUS CATALYSIS IN THE COPRODUCTION OF BIODIESEL AND HYDROGEN	Nanci Ruby Cabrera Álvarez
331	Renewable Energy: Materials and Devices	Heterogeneous direct transesterification to produce biodiesel from castor seed	Diego Eduardo Martínez Bedolla
333	Renewable Energy: Materials and Devices	ELECTROCHEMICAL CHARACTERIZATION OF ELECTRODE MATERIALS TYPE PEROVSKITE ABO ₃ BY REPLACEMENT OF RARE-EARTH IONS	Mike Frankjerry Bañuelos García
41	Semiconductors	Simulation of Gallium nitride and Aluminum Gallium nitride structures for UV-C photodetectors.	Lizette A. Zebadua-Chavarria
57	Semiconductors	STUDY OF POWER INFLUENCE IN THE PERFORMANCE OF BROADBAND PHOTODETECTORS BASED ON SPUTTERED NiOX/n-Si HETEROJUNCTION DIODES OBTAINED AT ROOM TEMPERATURE	Francisco David Mateos Anzaldo
59	Semiconductors	SÍNTESIS DE NANOCOMPOSITES TiO ₂ -Au MEDIANTE ABLACIÓN LÁSER DE SÓLIDOS EN LÍQUIDOS Y PRECIPITACIÓN	Jose Guadalupe Quiñones Galvan
61	Semiconductors	Influence of dopaje with transition metals on properties of CdS _{0.5} Se _{0.5} thin films	Cid Ortega Hernández
141	Semiconductors	PHOTOCURRENT IN NANOSTRUCTURED ZINC OXIDE FILMS WITH GOLD NANOPARTICLES.	Cristhian Jared Torres
169	Semiconductors	THIN FILMS OF SnO ₂ /TiO ₂ PHOTOCATALYSTS FOR BLUE METHYL DEGRADATION	Yolanda Peña
223	Semiconductors	INFLUENCE OF GRAPHENE ON THE GROWTH OF GaSb FILMS	Nayeli Colin
245	Semiconductors	SYNTHESIS AND CHARACTERIZATION OF CDS THIN FILMS WITH THE ADITION OF CARBON QUANTUM DOTS FROM GARLIC BY THE CHEMICAL BATH METHOD (DBQ)	Ricardo Mata

263	Semiconductors	SPECTROSCOPY CHARACTERIZATION OF AlGaAs/GaAs MULTI-QUANTUM WELLS	M. F. Mora Herrera
287	Semiconductors	Estimation of carrier concentration of p-type InGaAsSb quaternary alloys for applications in infrared devices	Gerardo Villa-Martínez
339	Semiconductors	Optical-Thermal characterization of cubic InGaN thin films growth by MBE.	Carmen Lizet Estefani Seminario Panta
341	Semiconductors	Optical-Thermal characterization of Aluminium Nitride thin films growth by MBE.	E.A. Contreras
353	Semiconductors	Study of the Effects of Exposure Time to UV/Ozone on GaAs Surfaces	Luis Vargas Hernández
95	Theory and Simulation of Materials	OPTIMIZATION OF LINEAR AND NON-LINEAR CLUSTER-CHAINS OF Au AND Ag NPs FOR SERS APPLICATION	Paulina De Leon Portilla
183	Theory and Simulation of Materials	Ab initio study of the electronic and optical properties of BiFeO ₃ by GGA+U	Roberto Silva González
213	Theory and Simulation of Materials	Ab initio study of SO ₂ adsorption on Ag-doped BaTiO ₃ (001)2x2 surface	María Teresa Romero de la Cruz
49	Thin Films	RESEARCH OF MULTILAYERS OF BiFeO ₃ /SrTiO ₃ FOR ENERGY STORAGE AND BIOSENSORS.	Jonathan Vera Montes
65	Thin Films	NON-DESTRUCTIVE THERMAL STUDY OF THIN FILMS THERMAL DIFFUSIVITY USING THE LOCK-IN THERMOGRAPHY TECHNIQUE	José Luis Jiménez Pérez
125	Thin Films	Nanostructures core-shell Si/SiO _x embedded in a ZnO matrix produced by RF sputtering.	Miguel Meléndez-Lira
165	Thin Films	temperature control device for chemical bath deposition method	Jonathan Josue Trejo Gracia
171	Thin Films	Aluminum-doped Zinc oxide polycrystalline thin films prepared by co-sputtering from a ZnO–Al target	Marcelino Becerril-Silva
209	Thin Films	Manufacture of a semiconductor deposit device by nebulizarían, as an alternative to spray pyrolysis.	Miguel Ángel Mendoza Davila

229	Thin Films	SYNTHESIS AND CHARACTERIZATION OF ZnO THIN FILMS BY THE sol-gel METHOD WITH ADITTION OF WATERMELON QUANTUM DOTS	André Zamora Arellano
231	Thin Films	SYNTHESIS AND CHARACTERIZATION OF CdS THIN FILMS WITH THE ADDITION OF CARBON QUANTUM DOTS BY THE CHEMICAL BATH DEPOSITION METHOD (DBQ)	Gerardo Hernández Reyes
77	Tribology, Surfaces and Interfaces	SYNTHESIS AND CHARACTERIZATION OF Al _x O _y THIN FILMS BY PULSED DC MAGNETRON SPUTTERING AT CONSTANT CURRENT AND CONSTANT POWER	Estrella Teran
195	Tribology, Surfaces and Interfaces	Study of the wear of chitosan films produced by electrochemical deposition on a copper substrate.	Luis Antonio Díaz Montiel
219	Tribology, Surfaces and Interfaces	Analysis of adhesion on coating using norm ISO standard	Ana Geraldine Espinoza