

POSTER SESION II

TUESDAY 17:15 PM – 19:15 PM

LOCATION: TEATRO CALDERON

ID	SIMPOSIUM	Title	Presenting
56	Atomic Layer Deposition	EFFECT OF ANNEALING IN ELECTRICAL AND OPTICAL PROPERTIES OF MULTILAYER Al ₂ O ₃ /ZnO NANOLAMINATE STRUCTURES DEPOSITED BY ATOMIC LAYER DEPOSITION	Jesús Martínez
230	Atomic Layer Deposition	Thermal and Plasma Enhanced Atomic Layer Deposition of NiOx with water and oxygen as oxidating agents	Lilián Garay-Cervantes
110	Biomaterials and Polymers	OBTAINING NANOCRYSTALLINE HYDROXYAPATITE BY CONTINUOUS SYSTEM	Manuel Alejandro Valdez Madrigal
250	Biomaterials and Polymers	Biodegradation of polyurethane by the filamentous fungi Cladosporium sp.	Amir Maldonado Arce
252	Biomaterials and Polymers	MICROSTRUCTURAL CHARACTERIZATION OF POLY(VINYLDENE FLUORIDE) FILMS BY SOLVENT CASTING METHOD	Diana Laura Mejia Duran
256	Biomaterials and Polymers	Optical absorption and emission properties of broccoli infusions	J.G. Quiñones-Galván
312	Biomaterials and Polymers	Antimicrobial effect of silver nanoparticles in dental biofilm of patients with motor and intellectual disabilities.	Carolina Holguin
342	Biomaterials and Polymers	Biosensors based on Zinc Oxide Thin-Film Transistors (ZnO-TFT) using recyclable plastic substrates as an alternative for real-time pathogen detection	Rafael A. Salinas
68	Characterization and Metrology	Physicochemical Characterization of Magnesium Borates doped with Dysprosium for the Detection of Ionizing Radiation	Carina Oliva Torres-Cortes

270	Characterization and Metrology	Detection of methylene blue by SERS effect in gold nano-island deposits	Lucero Guadalupe Plata Flores
328	Characterization and Metrology	Effects of NH ₄ SCN Additive in the FAPbI ₃ Perovskite Films in a Sequential Deposition Method	Jorge Luis Miró Zárate
166	Luminescence Phenomena: Materials and Applications	STUDY OF QUANTUM YIELD AND PHOTOTHERMAL MEASUREMENTS OF POLYACRYLONITRILE (PAN)-BASED GRAPHENE OXIDE SEMICONDUCTOR QUANTUM DOTS	José Luis Jiménez Pérez
258	Luminescence Phenomena: Materials and Applications	Photoluminescence study of carbon quantum dots obtained from banana peel by a dehydration process	J.G. Quiñones-Galván
272	Luminescence Phenomena: Materials and Applications	Effect of TEA Concentration on ZnO QDs Stability	David Alejandro Arias Cajero
350	Luminescence Phenomena: Materials and Applications	GdAlO ₃ :Dy como Conversor de energía	Daniel Nolasco-Altamirano
354	Luminescence Phenomena: Materials and Applications	Emisión luminiscente en películas delgadas ZnO:RE (Tm ⁺³ /Eu ⁺³) obtenidas por la técnica de rocío prolítico ultrasónico	Daniel Alberto Rodriguez Reyes
280	Microelectronics and MEMS	Design of a photodetector in the infrared region to be applied in the detection of nutrients during the drying of agricultural products in situ	Heber Vilchis
292	Microelectronics and MEMS	A comparative study on a-IGZO thin-film transistors fabricated on rigid or flexible substrate	Isai S Hernandez-Luna

308	Microelectronics and MEMS	CO gas sensors application of ZnO thin films deposited by SILAR	José Luis Escamilla Peña
310	Microelectronics and MEMS	Pseudo-CMOS inverters fabricated with In-Ga-Zn-O thin film transistors	Isai S Hernandez-Luna
316	Microelectronics and MEMS	Graphite incorporation to TEOS for CO2 sensors	Rogers García Domínguez
14	Multifunctional and Magnetic Materials	Effective properties of multi-laminated Cosserat elastic composites with quasi-periodic structure	Y. Espinosa-Almeyda
8	Nanostructures	FABRICATION OF A ZnO NANOSTRUCTURES-BASED MIS DIODE THROUGH CHEMICAL ROUTES	Rubén Jonatán Aranda García
26	Nanostructures	SURFACE MORPHOLOGY OF AMORPHOUS SiO2 SUBSTRATES IMPLANTED WITH 1.8 MeV Au ION	Cristian Felipe Cruz-García
30	Nanostructures	SURFACE PLASMON RESONANCE BIOSENSOR BASED ON GRAPHENE-METAL-GRAPHENE STRUCTURES: RECURRENCE RELATION THEORY	Gerardo González de la Cruz
36	Nanostructures	ZINC OXIDE ELECTROSPUN NANOFIBERS: ADVANCEMENTS IN PHOTOVOLTAIC DEVICE APPLICATIONS	Rodrigo Hernández
46	Nanostructures	STUDY DFT OF ELECTRONIC STRUCTURE AND OPTICAL PROPERTIES FOR 2D GaAs WITH AMPHOTERIC Si, Ge, AND Sn DOPANTS.	Gerardo Jafet González Loera
64	Nanostructures	WATER TREATMENT SUPERVISION THROUGH THERMAL WAVE RESONANT CAVITY, AN EFFICIENT TOOL TO EVALUATE PHOTOCATALYTIC ACTIVITY	José Luis Jiménez Pérez
76	Nanostructures	EVALUATION OF SiO2-TiO2 COATING FOR WATER-REPELLENT COTTON TEXTILE	Brandon Daniel Ortiz Pérez
78	Nanostructures	SYNTHESIS AND CHARACTERIZATION OF SILVER NANOPARTICLES FOR THEIR APPLICATION AS A FUNGICIDE	José Saúl Arias Cerón
94	Nanostructures	ELECTROMAGNETIC WAVE PROPAGATION IN 1D DIELECTRIC-GRAPHENE PHOTONIC CRYSTALS OF BI-PERIODIC UNIT CELL	Arsenio Sánchez Arellano

98	Nanostructures	SYNTHESIS OF SI NANOPARTICLES BY LASER ABLATION OF BULK SI IN HYDROGEN PEROXIDE SOLUTIONS	Aarón Fiol Rodríguez
114	Nanostructures	Au and Ag nanostructures obtained by galvanic displacement in LOC devices for dynamic surface modification.	Evelyn Magaña Leyva
160	Nanostructures	Physicochemical properties of ZnTiO ₃ /BiOCl nanoparticles and their photocatalytic application	Oscar Ceballos Sanchez
198	Nanostructures	Efficient Photocatalytic heterojunction of La ₂ Ti ₂ O ₇ @BiOBr decorated with metallic NPs for RhB degradation by visible light	Laura Marcela Prieto Zuleta
204	Nanostructures	PHOTOCATALYTIC ACTIVITY OF HETEROUNIONS ZnO@BiOX (X=Cl, Br, I), AS PHOTOCATALYST ACTIVATED WITH VISIBLE LIGHT	Daniel Coghlan Cárdenas
210	Nanostructures	PROCESSING OF DIRECT COATED ZINC FERRITE (ZnXFe ₃ -XO ₄) NANOPARTICLES WITH NATURAL EXTRACTS: CLOVE (SYZYGIUM AROMATICUM), STAR ANISE (ILICIDIUM VERUM) AND MEXICAN OREGANO (LIPPIA GRAVEOLENS)	Nidia Esther Moreno Cabrera
224	Nanostructures	Bi ₂ O ₃ /BiOX MULTIFUNCTIONAL HETEROJUNCTIONS FOR THE DEGRADATION OF POLLUTANTS IN WATER	Ana Laura Ruiz Castillo
236	Nanostructures	STRAIN AND SHAPE CONNECTION IN QUANTUM DOTS SELF-ASSEMBLING.	J. Hernández Medina
244	Nanostructures	Synthesis and characterization of Ti-Ce nanoalloys by hydrothermal method with different bases for potential catalytic applications (photocatalysis, lithium ion battery and/or hydrogen generation)	Sergio Eduardo Negrete Durán
276	Nanostructures	PREPARATION OF NANOTEXTILES CONTAINING SILVER NANOPARTICLES WITH ANTIBACTERIAL ACTIVITY	Josefina Aguila-López
286	Nanostructures	RAMAN IN SITU STUDY OF TiO ₂ -CeO ₂ NANOCUBE NANOALLOYS SUBJECTED TO HIGH TEMPERATURE AND THEIR PHOTOCATALYTIC APPLICATION	Diana Elienay Moreno Hernandez
302	Nanostructures	INDIUM CONCENTRATION IN CUBIC In _x Ga _{1-x} N/GaN QUANTUM WELLS BY XPS AND ANALYSIS OF OPTICAL PROPERTIES	Marlene Camacho Reynoso

346	Nanostructures	Heavy Si doping in n-GaN/AlN/Si (111) heterostructures grown by molecular beam epitaxy	Mario Alberto Zambrano Serrano
356	Nanostructures	INFLUENCE OF Au NANOPARTICLES ON THE SCHOTTKY BARRIER OF Au/ α -MoO ₃ HETEROJUNCTION	Alberto Rafael Mendoza Sánchez
360	Nanostructures	Synthesis of Molybdenum disulfide through thermocolloidal method.	ARACELI FLORES CONDE
246	Plasma and Vacuum	CsPbBr ₃ thin-films deposited by single-source thermal evaporation	Marisol Hernandez
122	Renewable Energy: Materials and Devices	Structural and electronic properties of (CdTe) _{1-x} (In ₂ Te ₃) _x films, with x = 0.3 and 0.7, grown by RF sputtering and its evaluation as photovoltaic material.	Miguel Meléndez-Lira
152	Renewable Energy: Materials and Devices	Hysteresis index for 2D/3D perovskite solar cells	Vladimir Ledezma
154	Renewable Energy: Materials and Devices	Perovskite solar cells under low intensity indoor lights	Zyanya Esquivel
158	Renewable Energy: Materials and Devices	XPS AND SIMS CHARACTERIZATIONS OF A NON-FULLERENE ACCEPTOR ORGANIC SOLAR CELL	Ian Flores
202	Renewable Energy: Materials and Devices	DESIGN, GROWN PROCESS, AND ASSEMBLY OF A PHOTOVOLTAIC MODULE COMPOSED OF GaAs-BASED SOLAR CELL WITH EMBEDDED GaNAs/GaAs NANOSTRUCTURES	T. A. Pérez Oviedo
222	Renewable Energy:	REDUCED GRAPHENE OXIDE SYNTHESIS AND CHARACTERIZATION FOR POTENTIAL APPLICATION AS TRIBOELECTRIC MATERIAL	Iván Hans Frías Romero

	Materials and Devices		
322	Renewable Energy: Materials and Devices	PRODUCTION OF ACTIVE CHLORINE FOR THE DEGRADATION OF SULFAMETHOXAZOLE USING AN ELECTROCHEMICAL REACTOR	Beatriz Elena Bonola Barrientos
324	Renewable Energy: Materials and Devices	Functionalization of 3-aminopropyltrimethoxysilane Self-Assembled Monolayers on ZnO/Au nanowires: Role of the Seed layer	José Francisco Malagón García
326	Renewable Energy: Materials and Devices	Enhancement of ciprofloxacin degradation using BiVO ₄ chemically modified with Rubidium	Gloria Isabel Siller-Monroy
330	Renewable Energy: Materials and Devices	Device for obtaining drinking water through the condensation of air humidity	Pastor Alan Rodríguez Echeverría
332	Renewable Energy: Materials and Devices	Vanadium oxide thin films by ultrasonic spray pyrolysis for energy applications	Sandra Xaxil García Ramírez
84	Semiconductors	CuCo ₂ O ₄ films as a proposal of sensitive material for CO detection inside a commercial aircraft	Juan Carlos López-Gutiérrez
86	Semiconductors	AUTOMATION OF A ROBOTIC DEVICE FOR THE CHEMICAL DEPOSITION BYSPRAY PYROLYSIS TECHNIQUE	
120	Semiconductors	Co-sputtering of CdTe and Aluminum to produce semiconductor alloys	Alejandra Garcia-Sotelo
128	Semiconductors	Es una prueba para el funcionamiento	Cristo Yee

148	Semiconductors	ACQUISITION DATA DEVICE FOR MEASURING RESISTIVITY IN SEMICONDUCTOR MATERIALS	ALONDRA MAYBETH VAQUERA DOMINGUEZ
206	Semiconductors	ELECTRICAL EVALUATION OF GaNAs/GaAs SEMICONDUCTOR NANOSTRUCTURES FOR SCHOTTKY DIODES.	M. I. Bustos Ibarra
208	Semiconductors	Modulation of the optical properties of Sn-doped GaNAs thin films grown by Molecular Beam Epitaxy through annealing treatment	I. G. Pérez Ortiz
220	Semiconductors	Development of GaAs/G heterostructures by the CSVT technique	Jose de Jesus Cruz Bueno
226	Semiconductors	Thermal, Structural, and Optical Characterization of GaAs Surface Passivation	M.A. Ramírez-Orozco
262	Semiconductors	DIMENSIONALITY EFFECTS ON THE CONFINED ENERGY STATES OF MULTI QUANTUM WELL HETEROSTRUCTURES GROWN BY MBE	D. Lopez Vilchis
352	Semiconductors	Analysis of Twinning in Zincblende GaN Thin Films Grown on GaAs by plasma-assisted MBE.	Raúl Trejo-Hernández
12	Theory and Simulation of Materials	A candidate exchange-biased vdW heterostructure based on Cr ₂ NO ₂ and Cr ₂ CF ₂ MXenes	Rodrigo Ponce Perez
174	Theory and Simulation of Materials	Adsorption of the SCI ₂ molecule on the doped-boron phosphide monolayer	Gregorio Hernández cocoletzi
186	Theory and Simulation of Materials	AB INITIO BOND ELASTIC CONSTANTS IN β 12-BOROPHENE	César Arturo Quej Solís
188	Theory and Simulation of Materials	FIRST PRINCIPLES INVESTIGATION OF MOLECULAR HYDROGEN ADSORPTION ON β 12-BOROPHENE	César Arturo Quej Solís
200	Theory and Simulation of Materials	Structural and electronic properties of carbon and boron nanotubes (BC ₂ NNTs) with cisplatin: a DFT study	María Teresa Romero de la Cruz

278	Theory and Simulation of Materials	Surface morphology effects on the mechanical and electronic properties of halogenated porous 3C-SiC: a DFT study	Ricardo Bermeo-Campos
296	Theory and Simulation of Materials	GEOMETRIC QUANTIFICATION OF CHIRALITY IN CARBON NANOTUBES	José de Jesús Pelayo Cárdenas
318	Theory and Simulation of Materials	THEORETICAL STUDY OF THE RELATIONSHIP BETWEEN THE STRUCTURE AND THE ELECTRONIC PROPERTIES OF SrZrO ₃ NANOWIRES USING DFT	Miguel Arteaga Varela
334	Theory and Simulation of Materials	Thermal finite diffusion time solution of the one-dimensional wave equation for the laser induced ultrasound	José Mario Derramadero-Domínguez
338	Theory and Simulation of Materials	Geometrical methods to build theoretically van der Waals heterostructures: A real and reciprocal space approach.	Francisco Sánchez-Ochoa
32	Thin Films	Effect of the substrate and temperature variation on the physical properties in MnS thin films synthesized by SILAR method.	Brandon Lauro Martinez Lopez
40	Thin Films	Comparison, development and implementation of PID Controller by chemical bath deposition method	Yehoshua Juarez Elias
42	Thin Films	Study of electrical properties ball milling with zinc acetate for FZO films deposited by ultrasonic spray.	GABRIELA BOBADILLA BARRON
90	Thin Films	THIN FILMS FABRICATION OF COBALT ANTIMONATE (CoSb ₂ O ₆) BY RF SPUTTERING TECHNIQUE	María Guadalupe Cárdenas de la Cruz
92	Thin Films	Electrical, optical and morphological properties of NiOx thin films grown by Sol-Gel method for application in optoelectronic devices	Giselle Perla Soto Quezada
142	Thin Films	STUDY OF THE FORMATION OF NANOGANULAR SILVER DEPOSITS BY THERMAL EVAPORATION	Cristhian Jared Torres
150	Thin Films	DDA NUMERICAL SIMULATION OF OPTICAL PROPERTIES OF NbN/Nb AND TIN/TI NANOSTRUCTURED BILAYERS: EFFECT OF ROUGHNESS	Jorge Alberto Polito Lucas

168	Thin Films	STUDY OF EDIBLE GOLD IMITATION SHEETS USING FRAUNHOFER DIFFRACTION	Elton Everardo Díaz Figueroa
180	Thin Films	Waterborne Antifouling Paints Containing Nanometric Copper and Silver against Marine Bacillus Species	Idania De Alba Montero
288	Thin Films	Non-enzymatic glucose sensor based on metal electrodes modified with 2D materials.	Jacob Collazo
290	Thin Films	Study of the topography, optics, and electric properties of self-assembled nanomaterial thin films for the development of THz devices.	Gustavo Hilario Perez
20	Tribology, Surfaces and Interfaces	Optimization of polymeric mixture with reused and new materials for the manufacturing industry.	Aaron Guerrero Basilio
182	Tribology, Surfaces and Interfaces	Finite element study of cutter rolls with different surface treatments used in the manufacturing industry	Oscar David Gonzalez Arias
216	Tribology, Surfaces and Interfaces	Study of the corrosion attack on boride and non-boride surfaces of AISI 8620 in NaCl solution	Daniel Eduardo Tuxpan-Espinosa
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:	Green Photoluminescence Signal of the [Tb-DPA] Complex: A Promising Luminescent Thermometer	Raúl Erick Guzman-Silva

	Materials and Applications		
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 Porras 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:	STUDY OF THE INFLUENCE THE SUBSTRATE POSITION INSIDE THE REACTOR CONTAINER ON THE OPTOELECTRONIC PROPERTIES OF CdS	Maria de Lourdes Albor Aguilera

	Materials and Devices	ULTRA THIN-FILMS DEPOSITED BY CHEMICAL BATH DEPOSITION TECHNIQUE	
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:	MODELING AND ANALYSIS OF THE STRUCTURE OF A SOLAR TREE BY VECTOR CALCULATION	Emiliano Molina-Valdes

	Materials and Devices		
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
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263	Semiconductors	SPECTROSCOPY CHARACTERIZATION OF AlGaAs/GaAs MULTI-QUANTUM WELLS	M. F. Mora Herrera
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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
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183	Theory and Simulation of Materials	Ab initio study of the electronic and optical properties of BiFeO ₃ by GGA+U	Roberto Silva González
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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
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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