



LUIS CASTAÑEDA AVIÑA

Datos Generales

Nombre: LUIS CASTAÑEDA AVIÑA

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 10 años

Nombramientos

Último: PROFESOR ASIGNATURA A TP No Definitivo
Facultad de Ciencias
Desde 01-01-2009 hasta 15-03-2009

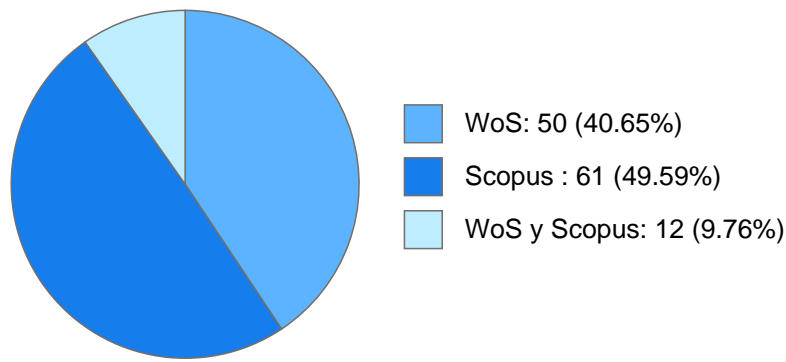
Estímulos, programas, premios y reconocimientos

SNI II 2017 - 2023
SNI I 2011 - 2016
PEPASIG Nivel C (Doctorado) 2008 - 2009, 6 horas asignadas

LUIS CASTAÑEDA AVIÑA

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Caustics and wavefronts produced by multiple refraction-reflections through plane-parallel plates	MAXIMINO AVENDAÑO ALEJO ISMAEL VELAZQUEZ GOMEZ OSVALDO PONCE HERNANDEZ et al.	JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION	2023
2	Design and fabrication of a linear Fresnel-type reflector for solar concentration based on caustic surfaces by reflection	MAXIMINO AVENDAÑO ALEJO ISMAEL VELAZQUEZ GOMEZ OSVALDO PONCE HERNANDEZ et al.	Proceedings of SPIE	2023
3	Transparent conductive stannic oxide coatings employing an ultrasonic spray pyrolysis technique: The relevance of the molarity content in the aerosol solution for improvement the electrical properties	LUIS CASTAÑEDA AVIÑA	Journal of Semiconductors	2022
4	Designing afocal achromatic doublet lenses	MARIA DEL CARMEN LOPEZ BAUTISTA MAXIMINO AVENDAÑO ALEJO ISMAEL VELAZQUEZ GOMEZ et al.	Proceedings of SPIE	2021
5	Optical and dielectric studies for the determination of gap states of the 'polypyrrole'	LUIS CASTAÑEDA AVIÑA	EMERGING MATERIALS RESEARCH	2021

LUIS CASTAÑEDA AVIÑA

6	Surface analysis by GXRD and XPS in the austenitic steel DIN by nickel ions	LUIS CASTAÑEDA AVIÑA	Heliyon	2020
7	The particulars properties of annealing temperature and spacer thickness on cross-relaxation and decay dynamics in Aluminum Oxide upon Thulium(III) oxide nanolaminated silicon-based electroluminescent and optoelectronics devices	LUIS CASTAÑEDA AVIÑA	OPTICAL MATERIALS	2020
8	Caustic surface produced by a simple lens considering a point source placed at arbitrary position along the optical axis	OSVALDO PONCE HERNANDEZ MAXIMINO AVENDAÑO ALEJO LUIS CASTAÑEDA AVIÑA	Proceedings of SPIE	2020
9	2D nanomaterial-based surface plasmon resonance sensors for biosensing applications	LUIS CASTAÑEDA AVIÑA Singh S. Singh P.K. et al.	MICROMACHINE S	2020
10	Study of nonlinear properties of N-(2-hydroxyphenyl)-2-propylpentanamide in polymeric solution	MAXIMINO AVENDAÑO ALEJO LUIS CASTAÑEDA AVIÑA JORGE ALEJANDRO REYES ESQUEDA et al.	Optik	2019
11	Huygens principle: exact and approximate wavefronts propagated through conic lenses	MAXIMINO AVENDAÑO ALEJO MARIA DEL CARMEN LOPEZ BAUTISTA LUIS CASTAÑEDA AVIÑA et al.	APPLIED OPTICS	2019
12	Sagittal and tangential foci produced by tilted plane wavefronts refracted through simple lenses	MAXIMINO AVENDAÑO ALEJO JESUS ALBERTO DEL OLMO MARQUEZ LUIS CASTAÑEDA AVIÑA et al.	APPLIED OPTICS	2019
13	Study of dielectric and optical constants of Benzobis(thiazole)-based copolymer thin films for designing optoelectronic devices	LUIS CASTAÑEDA AVIÑA	PHYSICA B-CONDENSED MATTER	2019
14	Non-invasive blood glucose measurement by spectroscopy	LUIS CASTAÑEDA AVIÑA Ramalingam M.	Journal Of Bionanoscience	2018
15	Photoluminescence emission at aging in ambient air of ZnO:Ag nanocrystals obtained by ultrasonic spray pyrolysis	LUIS CASTAÑEDA AVIÑA Lozada E.V. Torczynska T.	AIP Conference Proceedings	2018
16	Aluminum concentration and substrate temperature in chemical sprayed ZnO:Al thin solid films	LUIS CASTAÑEDA AVIÑA Lozada E.V. Aguilar E.A.	AIP Conference Proceedings	2018
17	Effect of sintering temperature on photocatalytic activity of cadmium monoxide plus cadmium titanate thin solid films deposited by the sol-gel technique	LUIS CASTAÑEDA AVIÑA	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2018

LUIS CASTAÑEDA AVIÑA

18	Retraction notice to Electrical and optical properties of nanostructured indium doped zinc oxide thin films deposited by ultrasonic chemical spray technique, starting from zinc acetylacetonate and indium chloride Materials Science in Semiconductor Processing, Volume 26, October 2014, Pages 288-293 (S1369800114002558) (10.1016/j.mssp.2014.05.011))	LUIS CASTAÑEDA AVIÑA CARLOS TORRES TORRES Maldonado A. et al.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2018
19	Caustic surfaces produced by a plane wavefront refracted through cemented doublet lenses	MAXIMINO AVENDAÑO ALEJO MARIA DEL CARMEN LOPEZ BAUTISTA LUIS CASTAÑEDA AVIÑA	Proceedings of SPIE	2018
20	The effects of warmness plasma, and high frequency electrical field on beam-1 plasma interaction in plasma waveguide	LUIS CASTAÑEDA AVIÑA	JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE	2018
21	Formation of tin dioxide thin films using chemical spray techniques: The importance of the substrate temperature for enhancing the electrical and optical properties	LUIS CASTAÑEDA AVIÑA Lozada, E.V.	JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS	2017
22	Porous silicon and indium doped zinc oxide junctions: Synthesis, characterization, and application to electroluminescent devices	LUIS CASTAÑEDA AVIÑA Severiano, F. García, G. et al.	JOURNAL OF NANOMATERIALS	2017
23	Analytic conic constants to reduce the spherical aberration of a single lens used in collimated light	MAXIMINO AVENDAÑO ALEJO LUIS CASTAÑEDA AVIÑA VICTOR IVAN MORENO OLIVA et al.	APPLIED OPTICS	2017
24	Thin solid films semiconducting metal oxide gas sensors: A brief review	LUIS CASTAÑEDA AVIÑA MAXIMINO AVENDAÑO ALEJO Gonzalez-Alatriste, M.	SENSOR LETTERS	2016
25	Exact wavefronts and caustic surfaces produced by planar ripple lenses	MAXIMINO AVENDAÑO ALEJO LUIS CASTAÑEDA AVIÑA Moreno, Ivan	OPTICS EXPRESS	2015
26	Exclusive-OR encryption by photoconduction and two-photon absorption in Carbon nanotubes	CARLOS TORRES TORRES NOEMI ROSA REBOLLO FRANCO LUIS CASTAÑEDA AVIÑA et al.	JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY	2015
27	Design of electronic control board to obtain the photovoltaic module power voltage curve as temperature function	LUIS CASTAÑEDA AVIÑA Vega-Pérez J. Vega-Pérez S.	Mechanisms And Machine Science	2015

LUIS CASTAÑEDA AVIÑA

28	Photoluminescence trend in mixture of zinc oxide and carbon nanoparticles after mechanical processing	LUIS CASTAÑEDA AVIÑA Lozada E.V. Torchynska T. et al.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2015
29	Importance of the electrolyte in obtaining porous silicon and how it modifies the optical and structural properties: Optical and microstructural investigation	LUIS CASTAÑEDA AVIÑA Severiano F. García G. et al.	JOURNAL OF NANOMATERIALS	2015
30	Electroluminescent Devices Based on Junctions of Indium Doped Zinc Oxide and Porous Silicon	LUIS CASTAÑEDA AVIÑA Severiano, F. García, G. et al.	JOURNAL OF NANOMATERIALS	2014
31	Physical Characterization and Effect of Effective Surface Area on the Sensing Properties of Tin Dioxide Thin Solid Films in a Propane Atmosphere	LUIS CASTAÑEDA AVIÑA Gomez-Pozos, Heberto Luis Gonzalez-Vidal, Jose et al.	SENSORS	2014
32	Electrical and optical properties of nanostructured indium doped zinc oxide thin films deposited by ultrasonic chemical spray technique, starting from zinc acetylacetonate and indium chloride	LUIS CASTAÑEDA AVIÑA CARLOS TORRES TORRES Maldonado, A. et al.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2014
33	Study of the electroluminescent properties of crystalline silicon wafers in devices based on junctions of indium-doped zinc oxide and porous silicon	LUIS CASTAÑEDA AVIÑA Severiano, F. Garcia, G.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2014
34	Photoluminescence Mapping Study of InAs/InGaAs Quantum Dot Nanostructures	LUIS CASTAÑEDA AVIÑA Austria-Aguilar, E.	JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS	2014
35	Photoluminescence and Morphological Characterization of Silver-Doped Zinc Oxide Novel Nanostructures Obtained by Ultrasonic Spray Pyrolysis	LUIS CASTAÑEDA AVIÑA	JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS	2013
36	Emission variety in ZnO nanocrystals obtained at different growth temperatures	LUIS CASTAÑEDA AVIÑA Velázquez Lozada E.	Materials Research Society Symposium Proceedings	2013

LUIS CASTAÑEDA AVIÑA

37	Photoluminescence variation with temperature in ZnO:Ag nanorods obtained by ultrasonic spray pyrolysis	LUIS CASTAÑEDA AVIÑA Velázquez Lozada E. Mera Luna S.	Materials Research Society Symposium Proceedings	2013
38	Emission variety in ZnO nanocrystals obtained at different growth temperatures	LUIS CASTAÑEDA AVIÑA Velázquez Lozada E.	Animal	2013
39	Structure and mechanism formation of polyelectrolyte complex obtained from PSS/PAH system: effect of molar mixing ratio, base-acid conditions, and ionic strength	LUIS CASTAÑEDA AVIÑA Marquez-Beltran, Cesar Enciso-Aguilar, M. et al.	COLLOID AND POLYMER SCIENCE	2013
40	Photoconductive Multiplexing by ZnO:Zr:F Thin Solid Films	CARLOS TORRES TORRES LUIS CASTAÑEDA AVIÑA Torres-Martinez, R.	Advances in Materials Science and Engineering	2013
41	Optical Kerr phase shift in a nanostructured nickel-doped zinc oxide thin solid film	CARLOS TORRES TORRES LUIS CASTAÑEDA AVIÑA Can-Uc, B. A. et al.	OPTICS EXPRESS	2013
42	Chemisorptive detection by electrical and nonlinear optical absorption properties of a nanostructured ruthenium-doped zinc oxide film	LUIS CASTAÑEDA AVIÑA CARLOS TORRES TORRES Moreno-Valenzuela, J.	Optik	2013
43	Huygens' Principle: Exact wavefronts produced by aspheric lenses	MAXIMINO AVENDAÑO ALEJO LUIS CASTAÑEDA AVIÑA NASER QURESHI et al.	OPTICS EXPRESS	2013
44	Formation of indium-doped zinc oxide thin films using ultrasonic spray pyrolysis: The importance of the water content in the aerosol solution and the substrate temperature for enhancing electrical transport	LUIS CASTAÑEDA AVIÑA Biswal, Rajesh Moctezuma, Rosario et al.	Materials	2012
45	Evolution of the optical response in a nanostructured fluorine doped zinc oxide thin film	CARLOS TORRES TORRES LUIS CASTAÑEDA AVIÑA Torres-Martinez, R.	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	2012
46	Enhancement of the optical Kerr effect by photobleaching in nanostructured indium-doped zinc oxide thin films	LUIS CASTAÑEDA AVIÑA CARLOS TORRES TORRES Rangel-Rojo, R. et al.	PHYSICA SCRIPTA	2012
47	Participation of the Third Order Optical Nonlinearities in Nanostructured Silver Doped Zinc Oxide Thin Solid Films	CARLOS TORRES TORRES LUIS CASTAÑEDA AVIÑA MARTIN DANIEL TREJO VALDEZ et al.	JOURNAL OF NANOMATERIALS	2012

LUIS CASTAÑEDA AVIÑA

48	Improving electrochromic behavior of spray pyrolysed WO ₃ thin solid films by Mo doping	JESUS MANUEL ORTEGA RUEDA DE LEON DWIGHT ROBERTO ACOSTA NAJARRO LUIS CASTAÑEDA AVIÑA et al.	ELECTROCHIMICA ACTA	2011
49	Fluorine doped zinc oxide thin films deposited by chemical spray, starting from zinc pentanedionate and hydrofluoric acid: Effect of the aging time of the solution	VELUMANI SUBRAMANIAM LUIS CASTAÑEDA AVIÑA Biswal, R. R. et al.	MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS	2010
50	Synthesis and characterization of ZnO micro- and nano-cages	LUIS CASTAÑEDA AVIÑA	ACTA MATERIALIA	2009
51	Influence of Colloidal Silver Nanoparticles on the Performance of Novel Flower-Like Titanium Dioxide Oxygen Sensor	LUIS CASTAÑEDA AVIÑA	SENSORS AND MATERIALS	2009
52	Morphological, optical, and nonlinear optical properties of fluorine-indium-doped zinc oxide thin films	OMAR GUILLERMO MORALES SAAVEDRA LUIS CASTAÑEDA AVIÑA J. GUADALUPE BAÑUELOS MUÑETON et al.	LASER PHYSICS	2008
53	Second harmonic generation of fluorine-doped zinc oxide thin films grown on soda-lime glass substrates by a chemical spray technique	OMAR GUILLERMO MORALES SAAVEDRA LUIS CASTAÑEDA AVIÑA	OPTICS COMMUNICATIONS	2007
54	Synthesis and structural characterization of novel flower-like titanium dioxide nanostructures	LUIS CASTAÑEDA AVIÑA MAURICIO TERRONES MALDONADO	PHYSICA B-CONDENSED MATTER	2007
55	Composition and morphological characteristics of chemically sprayed fluorine-doped zinc oxide thin films deposited on Si(1 0 0)	LUIS CASTAÑEDA AVIÑA JUAN CARLOS CHEANG WONG MAURICIO TERRONES MALDONADO et al.	PHYSICA B-CONDENSED MATTER	2007
56	Effects of palladium coatings on oxygen sensors of titanium dioxide thin films	LUIS CASTAÑEDA AVIÑA	MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS	2007
57	On the effect of acetic acid on physical properties of chemically sprayed fluorine-doped ZnO thin films	LUIS CASTAÑEDA AVIÑA Rodríguez-Báez J. Maldonado A. et al.	Thin Solid Films	2007

LUIS CASTAÑEDA AVIÑA

58	Chemically sprayed ZnO:F thin films deposited from diluted solutions: Effect of the time of aging on physical characteristics	LUIS CASTAÑEDA AVIÑA Tirado-Guerra S. de la L. Olvera M. et al.	SOLAR ENERGY MATERIALS AND SOLAR CELLS	2006
59	Influence of indium concentration and substrate temperature on the physical characteristics of chemically sprayed ZnO:In thin films deposited from zinc pentanedionate and indium sulfate	LUIS CASTAÑEDA AVIÑA OMAR GUILLERMO MORALES SAAVEDRA JUAN CARLOS CHEANG WONG et al.	JOURNAL OF PHYSICS-COND ENSED MATTER	2006
60	Dynamic angle-scanning reflectometer device	AUGUSTO GARCIA VALENZUELA GABRIEL EDUARDO SANDOVAL ROMERO CELIA ANGELINA SANCHEZ PEREZ et al.	REVIEW OF SCIENTIFIC INSTRUMENTS	2006
61	Structural, morphological, optical, and nonlinear optical properties of fluorine-doped zinc oxide thin films deposited on glass substrates by the chemical spray technique	LUIS CASTAÑEDA AVIÑA OMAR GUILLERMO MORALES SAAVEDRA DWIGHT ROBERTO ACOSTA NAJARRO et al.	PHYSICA STATUS SOLIDI A- APPLICATION S AND MATERIALS SCIENCE	2006

LUIS CASTAÑEDA AVIÑA

LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Compendio De Análisis De Matemáticas Básicas Para Aplicaciones En Medicina	LUIS CASTAÑEDA AVIÑA	Libro Completo	2022	9786079974602
2	Diseño, Construcción E Instrumentación De Dos Respiradores Auxiliares De Emergencia De Bajo Costo Para El Apoyo Al Sector Salud Ante El Covid-19	LUIS CASTAÑEDA AVIÑA	Libro Completo	2022	9786079974619
3	Assembly and electroluminescence of sheet-like zinc oxide/silicon light-emitting diode by a radio frequency magnetron sputtering technique	LUIS CASTAÑEDA AVIÑA	Capítulo de un Libro	2021	9780128240076
4	Use of ultrasonic spray-pyrolysis process: A brief review	LUIS CASTAÑEDA AVIÑA	Capítulo de un Libro	2013	9781622576852



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



LUIS CASTAÑEDA AVIÑA

PARTICIPACIÓN EN PROYECTOS

No se encuentran registros en la base de datos de SISEPRO asociados a:

LUIS CASTAÑEDA AVIÑA



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



LUIS CASTAÑEDA AVIÑA

PARTICIPACIÓN EN TESIS

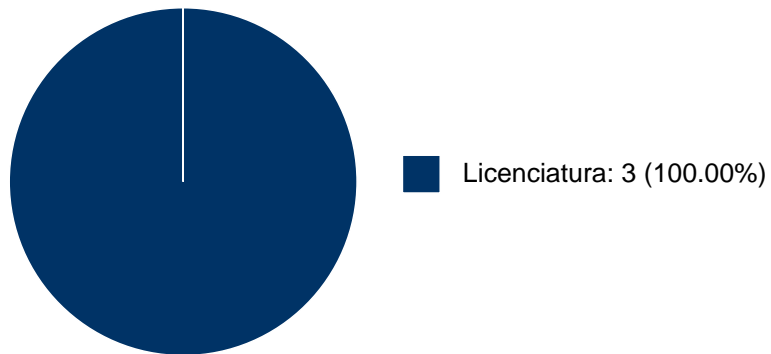
No se encuentran registros en la base de datos de TESIUNAM asociados a:

LUIS CASTAÑEDA AVIÑA

LUIS CASTAÑEDA AVIÑA

DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	LABORATORIO DE FENOMENOS COLECTIV.	Facultad de Ciencias	9	2009-1
2	Licenciatura	LABORATORIO DE MECANICA	Facultad de Ciencias	17	2008-2
3	Licenciatura	FISIC CLASIC II OND FLUI Y C	Facultad de Ciencias	1	2008-1



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



LUIS CASTAÑEDA AVIÑA

TUTORIAS EN POSGRADO

No se encuentran registros en la base de datos de SIIPosgrado asociados a:

LUIS CASTAÑEDA AVIÑA



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



LUIS CASTAÑEDA AVIÑA

PATENTES

No se encuentran registros en la base de datos de patentes asociados a:

LUIS CASTAÑEDA AVIÑA

LUIS CASTAÑEDA AVIÑA

FUENTES DE INFORMACIÓN

Internos

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2024
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2024
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2024
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

Externos

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2024
9	Documentos Indexados	Thomson Reuters	WoS	2008-2024
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2024
11	Patentes	IMPI	SIGA	2008-2024