



Sistema Integral de Información Académica

Coordinación de Planeación, Evaluación y Simplificación de la Gestión Institucional

Reporte individual



WOLF LUIS MOCHAN BACKAL

Datos Generales

Nombre: WOLF LUIS MOCHAN BACKAL

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 44 años

Nombramientos

Vigente: INVESTIGADOR TITULAR C TC Definitivo

Instituto de Ciencias Físicas

Desde 01-01-2008 (fecha inicial de registros en el SIIA)

Estímulos, programas, premios y reconocimientos

SNI III - VIGENTE

PRIDE D - 2024

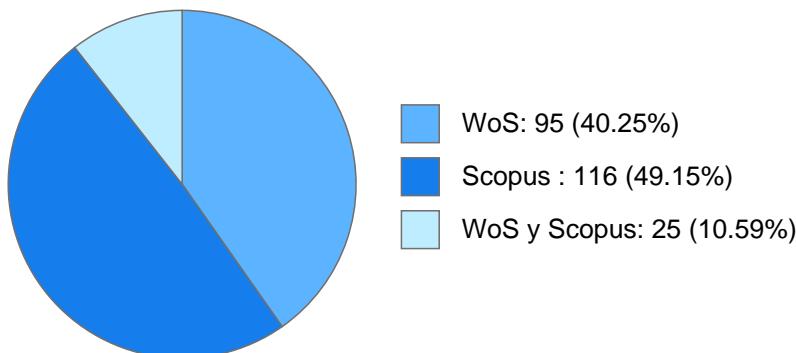
RDUNJA Investigación en ciencias exactas 1994

PUN Investigación en ciencias exactas 2011

WOLF LUIS MOCHAN BACKAL

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Porous silica based controllable reversible freestanding Bragg structures: From omnidirectional mirrors to transparency	WOLF LUIS MOCHAN BACKAL Castillo-Gallardo V. Puente-Díaz L.E. et al.	CERAMICS INTERNATIONAL	2025
2	Anisotropic optical response of the cuticle of arthropods	WOLF LUIS MOCHAN BACKAL L. A. Rodriguez H. C. Achitte Schmutzler et al.	Optica Pura y Aplicada	2023
3	Analytical model for the current density in the electrochemical synthesis of porous silicon structures with a lateral gradient	WOLF LUIS MOCHAN BACKAL Ospina-Delacruz C.A. Agarwal V.	OPTICAL MATERIALS	2021
4	Ab initio theory of the Drude plasma frequency	WOLF LUIS MOCHAN BACKAL Bernardo S. Mendoza	JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS	2021
5	Optimization of wide-band quasi-omnidirectional 1-D photonic structures	AUGUSTO DAVID ARIZA FLORES WOLF LUIS MOCHAN BACKAL Castillo-Gallardo V. et al.	OPTICAL MATERIALS	2021



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6	Analytical theory for three-wave mixing processes in a slightly deformed nanowire	WOLF LUIS MOCHAN BACKAL Singla R.	PHYSICAL REVIEW B	2021
7	Recursive Calculation of the Optical Response of Multicomponent Metamaterials	WOLF LUIS MOCHAN BACKAL Singla R. Juárez L. et al.	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2020
8	Mie Scattering in the Macroscopic Response and the Photonic Bands of Metamaterials	WOLF LUIS MOCHAN BACKAL Lucila Juarez-Reyes Bernardo S. Mendoza	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2020
9	N-doped oxidized carbon dots for methanol sensing in alcoholic beverages	WOLF LUIS MOCHAN BACKAL M. Latha R. Aruna-Devi et al.	RSC ADVANCES	2020
10	Stable calculation of optical properties of large non-periodic dissipative multilayered systems	GUILLERMO ARTURO ORTIZ JOYA JOSE SAMUEL PEREZ HUERTA HECTOR PEREZ AGUILAR et al.	SUPERLATTICES AND MICROSTRUCTURES	2020
11	Rough 1D photonic crystals: A transfer matrix approach	GUILLERMO ARTURO ORTIZ JOYA WOLF LUIS MOCHAN BACKAL Leandro L. Missoni et al.	OPTICAL MATERIALS	2020
12	Second-harmonic generation in nanostructured metamaterials	WOLF LUIS MOCHAN BACKAL Meza U.R. Mendoza B.S.	PHYSICAL REVIEW B	2019
13	Analytical theory of second harmonic generation from a nanowire with noncentrosymmetric geometry	WOLF LUIS MOCHAN BACKAL Raksha Singla	PHYSICAL REVIEW B	2019
14	Keller's theorem revisited	GUILLERMO ARTURO ORTIZ JOYA WOLF LUIS MOCHAN BACKAL	NEW JOURNAL OF PHYSICS	2018
15	Reflectivity of 1D photonic crystals: A comparison of computational schemes with experimental results	WOLF LUIS MOCHAN BACKAL J. S. Perez-Huerta D. Ariza-Flores et al.	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2018
16	Magnetic Response of Metamaterials	WOLF LUIS MOCHAN BACKAL Lucila Juarez-Reyes	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2018
17	Fabrication of ordered tubular porous silicon structures by colloidal lithography and metal assisted chemical etching: SERS performance of 2D porous silicon structures	JOSE OCTAVIO ESTEVEZ ESPINOZA WOLF LUIS MOCHAN BACKAL R. F. Balderas-Valadez et al.	APPLIED SURFACE SCIENCE	2018
18	Optical and electrical properties of nanostructured metallic electrical contacts	WOLF LUIS MOCHAN BACKAL Toranzos, V.J. Ortiz, G.P. et al.	MATERIALS RESEARCH EXPRESS	2017



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19	How a Drug and Explosives Detector Proved Useless Military Use of the GT200	WOLF LUIS MOCHAN BACKAL Ramirez-Solis, A.	IEEE TECHNOLOGY AND SOCIETY MAGAZINE	2017
20	Tailored optical polarization in nanostructured metamaterials	WOLF LUIS MOCHAN BACKAL Mendoza, Bernardo S.	PHYSICAL REVIEW B	2016
21	Effective non-retarded method as a tool for the design of tunable nanoparticle composite absorbers	WOLF LUIS MOCHAN BACKAL Ortiz, Guillermo Inchaussandague, Marina et al.	JOURNAL OF OPTICS	2014
22	Macroscopic optical response and photonic bands	JOSE SAMUEL PEREZ HUERTA WOLF LUIS MOCHAN BACKAL Ortiz, Guillermo P. et al.	NEW JOURNAL OF PHYSICS	2013
23	Birefringent nanostructured composite materials	WOLF LUIS MOCHAN BACKAL Mendoza, Bernardo S.	PHYSICAL REVIEW B	2012
24	On the definition of the Poynting vector: A non-local derivation	RUBEN GERARDO BARRERA Y PEREZ WOLF LUIS MOCHAN BACKAL AUGUSTO GARCIA VALENZUELA et al.	PHYSICA B-CONDENSED MATTER	2010
25	Optical properties of nanostructured metamaterials	WOLF LUIS MOCHAN BACKAL Cortes, Ernesto Mendoza, Bernardo S. et al.	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2010
26	Efficient homogenization procedure for the calculation of optical properties of 3D nanostructured composites	WOLF LUIS MOCHAN BACKAL Ortiz, Guillermo P. Mendoza, Bernardo S.	OPTICS EXPRESS	2010
27	Algebraic methods applied to the study of energy transfer in anharmonic systems	A. Mendoza Garcia A. Romero Depablos JOSE FRANCISCO RECAMIER ANGELINI et al.	MOLECULAR PHYSICS	2010
28	Energy transfer to an anharmonic diatomic system	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL	MOLECULAR PHYSICS	2009
29	Effective optical response of metamaterials	WOLF LUIS MOCHAN BACKAL Ortiz, Guillermo P. Martinez-Zerega, Brenda E. et al.	PHYSICAL REVIEW B	2009
30	Nonlinear coherent states and some of their properties	JOSE FRANCISCO RECAMIER ANGELINI M. Gorayeb WOLF LUIS MOCHAN BACKAL et al.	INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS	2008
31	Casimir energy in spherical cavities	WOLF LUIS MOCHAN BACKAL CARLOS VILLARREAL LUJAN	JOURNAL OF PHYSICS A-MATHEMATIC AL AND THEORETICAL	2008



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32	Dipole model for the linear response of adsorbed overlayers	WOLF LUIS MOCHAN BACKAL Vázquez-Nava R.A. Arzate N. et al.	Physica Status Solidi C-Current Topics in Solid State Physics	2008
33	Optical properties of nanostructured metamaterials	WOLF LUIS MOCHAN BACKAL Martínez B. Ortiz G.P. et al.	LEOS Summer Topical Meeting	2008
34	Comparison between the Morse eigenfunctions and deformed oscillator wavefunctions	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL Gorayeb M. et al.	AIP Conference Proceedings	2008
35	Fictitious cavity approach to the Casimir effect	WOLF LUIS MOCHAN BACKAL CARLOS VILLARREAL LUJAN	REVISTA MEXICANA DE FISICA	2007
36	The Casimir effect	CARLOS VILLARREAL LUJAN WOLF LUIS MOCHAN BACKAL	AIP Conference Proceedings	2006
37	Casimir torque	WOLF LUIS MOCHAN BACKAL Torres-Guzmán J.C.	J PHYS A-MATH GEN	2006
38	Uncertainty relations for a deformed oscillator	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL ROCIO JAUREGUI RENAUD et al.	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2006
39	Second harmonic surface response of a composite	WOLF LUIS MOCHAN BACKAL Mendoza B.S.	OPTICAL MATERIALS	2006
40	Casimir effect for arbitrary materials: Contributions within and beyond the light cone	WOLF LUIS MOCHAN BACKAL CARLOS VILLARREAL LUJAN	NEW JOURNAL OF PHYSICS	2006
41	Coherent superposition of quadrupolar SHG from isotropic materials using two orthogonally polarized laser beams	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P. et al.	Optics InfoBase Conference Papers	2006
42	Casimir-like tunnelling-induced electronic forces	CARLOS VILLARREAL LUJAN WOLF LUIS MOCHAN BACKAL Procopio L.M.	J PHYS A-MATH GEN	2006
43	Spatial dispersion in Casimir forces: A brief review	RAUL PATRICIO ESQUIVEL SIRVENT CARLOS VILLARREAL LUJAN WOLF LUIS MOCHAN BACKAL et al.	J PHYS A-MATH GEN	2006
44	Lie algebraic method applied to a pulsed anharmonic oscillator	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL Gorayeb M. et al.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	2006
45	Two-beam second-harmonic generation	WOLF LUIS MOCHAN BACKAL Sun L. Cattaneo S. et al.	Optics and Photonics News	2005



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46	Erratum: Exact surface impedance formulation of the Casimir force: Application to spatially dispersive metals (Physical Review A (2003) 68 (052103))	RAUL PATRICIO ESQUIVEL SIRVENT CARLOS VILLARREAL LUJAN WOLF WOLF LUIS MOCHAN BACKAL	PHYSICAL REVIEW A	2005
47	Quadrupolar SHG enhancement in isotropic materials using two orthogonally polarized laser beams	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P. et al.	Optics InfoBase Conference Papers	2005
48	Non-local effects in the casimir force	WOLF LUIS MOCHAN BACKAL RAUL PATRICIO ESQUIVEL SIRVENT CARLOS VILLARREAL LUJAN et al.	AIP Conference Proceedings	2005
49	Surface screening in the Casimir force	WOLF LUIS MOCHAN BACKAL Contreras-Reyes A.M.	PHYSICAL REVIEW A	2005
50	Second-harmonic spectroscopy of nano-interfaces	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P. et al.	Physica Status Solidi C: Conferences	2005
51	SHG from bulk and surface of nanoparticle composites	WOLF LUIS MOCHAN BACKAL	Physica Status Solidi C: Conferences	2005
52	Nonlinear response of a deformed oscillator	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL Maytorena J.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	2005
53	Nonadditivity of poynting vector within opaque media	WOLF LUIS MOCHAN BACKAL Ortiz G.P.	JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION	2005
54	Excitons: From excitations at surfaces to confinement in nanostructures	WOLF LUIS MOCHAN BACKAL Cocoletzi G.H.	SURF SCI REP	2005
55	Single-beam and enhanced two-beam second-harmonic generation from silicon nanocrystals by use of spatially inhomogeneous femtosecond pulses	WOLF LUIS MOCHAN BACKAL Figliozi P. Sun L. et al.	PHYSICAL REVIEW LETTERS	2005
56	Nonresonant quadrupolar second-harmonic generation in isotropic solids by use of two orthogonally polarized laser beams	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P. et al.	OPTICS LETTERS	2005
57	Nonlinear response of a harmonic diatomic molecule: Algebraic nonperturbative calculation	WOLF LUIS MOCHAN BACKAL JESUS ALBERTO MAYTORENA CORDOVA Racamier J.	PHYSICAL REVIEW A	2005



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58	Understanding and enhancing second-harmonic generation from silicon nanocrystals	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P.C. et al.	Osa Trends In Optics And Photonics Series	2004
59	Exact non linear response of a harmonic oscillator	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL Maytorena J.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2004
60	Nonlinear optical nanoscope with depth resolution	WOLF LUIS MOCHAN BACKAL CATALINA LOPEZ BASTIDAS JESUS ALBERTO MAYTORENA CORDOVA et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2004
61	Second-harmonic generation in arrays of spherical particles	WOLF LUIS MOCHAN BACKAL JESUS ALBERTO MAYTORENA CORDOVA Mendoza B.S. et al.	PHYSICAL REVIEW B	2003
62	Scaling condition for multiple scattering in fractal aggregates	WOLF LUIS MOCHAN BACKAL Ortiz G.P.	PHYSICA B-CONDENSED MATTER	2003
63	Bulk response of composites from finite samples	CATALINA LOPEZ BASTIDAS JESUS ALBERTO MAYTORENA CORDOVA WOLF LUIS MOCHAN BACKAL et al.	PHYSICA B-CONDENSED MATTER	2003
64	Depth resolved nonlinear optical nanoscopy	WOLF LUIS MOCHAN BACKAL CATALINA LOPEZ BASTIDAS JESUS ALBERTO MAYTORENA CORDOVA et al.	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2003
65	Second harmonic generation from a collection of nanoparticles	WOLF LUIS MOCHAN BACKAL JESUS ALBERTO MAYTORENA CORDOVA Brudny V.L. et al.	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2003
66	Scaling of light scattered from fractal aggregates at resonance	WOLF LUIS MOCHAN BACKAL GP Ortiz	PHYSICAL REVIEW B	2003
67	Casimir forces in nanostructures	RAUL PATRICIO ESQUIVEL SIRVENT CARLOS VILLARREAL LUJAN WOLF LUIS MOCHAN BACKAL et al.	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2002



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68	Optical properties and scaling in fractal aggregates	WOLF LUIS MOCHAN BACKAL Ortiz G.P.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2001
69	On the apparent superluminality of evanescent waves	WOLF LUIS MOCHAN BACKAL Brudny V.L.	OPTICS EXPRESS	2001
70	Comment on "noncausal time response in frustrated total internal reflection?" (multiple letters)	WOLF LUIS MOCHAN BACKAL Brudny V.L. Carey J.J. et al.	PHYSICAL REVIEW LETTERS	2001
71	Influence of d electrons on the dispersion relation of Ag surface plasmons for different single-crystal faces	CATALINA LOPEZ BASTIDAS WOLF LUIS MOCHAN BACKAL Liebsch A.	PHYSICAL REVIEW B	2001
72	Second-harmonic generation from spherical particles	WOLF LUIS MOCHAN BACKAL Brudny V.L. Mendoza B.S.	PHYSICAL REVIEW B	2000
73	Optical second harmonic generation from a thin chiral film	WOLF LUIS MOCHAN BACKAL Brudny V.L.	PHYS STATUS SOLIDI A	1999
74	Surface plasmon dispersion at silver single-crystal surfaces	CATALINA LOPEZ BASTIDAS WOLF LUIS MOCHAN BACKAL	PHYSICAL REVIEW B	1999
75	Electron energy-loss spectroscopy on the surface of conducting superlattices in the presence of plasma waves	WOLF LUIS MOCHAN BACKAL RA Vazquez-Nava GH Coccoletzi et al.	PHYSICAL REVIEW B	1998
76	Comment on: "Evidence for a deep bound-state level in the $^4\text{He}-\text{NaCl}(001)$ potential" by G. Benedek, A. Glebov, W. Silvestri, J.G. Skofronick, J.P. Toennies [Surf. Sci. 381 (1997) L540]	WOLF LUIS MOCHAN BACKAL Vargas M.C.	SURFACE SCIENCE	1998
77	Atom-surface band structure and bound-state resonances a theoretical study	WOLF LUIS MOCHAN BACKAL Vargas M.C.	SURFACE SCIENCE	1998
78	Magnetic dipolium model of magnetization-induced surface second harmonic generation	WOLF LUIS MOCHAN BACKAL Brudny V.L. Mendoza B.S. et al.	IEEE TRANSACTIONS ON MAGNETICS	1998
79	Direct photon-phonon coupling at (001) surfaces of zinc-blende structure crystals	JOSE FRANCISCO RECAMIER ANGELINI WOLF LUIS MOCHAN BACKAL Pérez-Rodríguez F.	SURFACE SCIENCE	1998
80	Visible-infrared difference frequency generation at CN- covered Au	WOLF LUIS MOCHAN BACKAL JESUS ALBERTO MAYTORENA CORDOVA Mendoza B.S.	PHYS STATUS SOLIDI A	1998



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81	Theory of 45° reflectometry from metal surfaces	JESUS ALBERTO MAYTORENA CORDOVA CATALINA LOPEZ BASTIDAS WOLF LUIS MOCHAN BACKAL	PHYS STATUS SOLIDI A	1998
82	Local field effects in the dynamical response of Ag	CATALINA LOPEZ BASTIDAS WOLF LUIS MOCHAN BACKAL	PHYS STATUS SOLIDI A	1998
83	Energy exchange in second-order nonlinear optics in centrosymmetric media	WOLF LUIS MOCHAN BACKAL JESUS ALBERTO MAYTORENA CORDOVA Petukhov A.V. et al.	PHYS STATUS SOLIDI A	1998
84	A model for second harmonic generation from magnetized surfaces	WOLF LUIS MOCHAN BACKAL Brudny V.L. Petukhov A.V. et al.	PHYS STATUS SOLIDI A	1998
85	An optical spectroscopy for detecting quantized polarization waves of excitons	JESUS ALBERTO MAYTORENA CORDOVA WOLF LUIS MOCHAN BACKAL Madrigal-Melchor J. et al.	APPLIED PHYSICS LETTERS	1997
86	Polarizable-bond model for second-harmonic generation	WOLF LUIS MOCHAN BACKAL BS Mendoza	PHYSICAL REVIEW B	1997
87	Plasmons in a spatially modulated quasi-one-dimensional quantum wire	MARCELO DEL CASTILLO MUSSOT WOLF LUIS MOCHAN BACKAL BS Mendoza	PHYSICAL REVIEW B	1996
88	Exactly solvable model of surface second-harmonic generation	WOLF LUIS MOCHAN BACKAL Mendoza B.S.	PHYSICAL REVIEW B	1996
89	Local-field effect in the second-harmonic-generation spectra of Si surfaces	WOLF LUIS MOCHAN BACKAL Mendoza B.S.	PHYSICAL REVIEW B	1996
90	Hydrodynamic model of second-harmonic generation at metal surfaces	JESUS ALBERTO MAYTORENA CORDOVA WOLF LUIS MOCHAN BACKAL Mendoza Bernardo S.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	1996
91	Minimum energy 2D patterns of atoms adsorbed on a hexagonal lattice	JORGE HUMBERTO ARCE RINCON WOLF LUIS MOCHAN BACKAL Gutiérrez J.J.	SURFACE SCIENCE	1996
92	Bound state spectroscopy of He adsorbed on NaCl(001): Band structure effects	WOLF LUIS MOCHAN BACKAL Vargas M.C.	SURFACE SCIENCE	1996



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93	Exactly solvable model of surface second harmonic generation	WOLF LUIS MOCHAN BACKAL Mendoza Bernardo S.	Ieee Nonlinear Optics: Materials, Fundamentals And Applications - Conference Proceedings	1994
94	Optical reflectance anisotropy of Ag and Au (110) single crystals	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ Borensztein Y. et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	1994
95	Preface	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	1994
96	Large anisotropy in the optical reflectance of Ag(110) single crystals: Experiment and theory	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ Borensztein Y. et al.	PHYSICAL REVIEW LETTERS	1993
97	Generalized hydrodynamic model of inhomogeneous conductors in three, two and one dimensions	MARCELO DEL CASTILLO MUSSOT WOLF LUIS MOCHAN BACKAL Mendoza B.S.	JOURNAL OF PHYSICS-CONDENSED MATTER	1993
98	Ordered ground states for alkali overlayers on FCC(100) metals	JORGE HUMBERTO ARCE RINCON WOLF LUIS MOCHAN BACKAL	JOURNAL OF PHYSICS-CONDENSED MATTER	1993
99	Minimum energy configurations of atoms adsorbed on a lattice	JORGE HUMBERTO ARCE RINCON WOLF LUIS MOCHAN BACKAL ADONIS GERMINAL COCHO GIL	SURFACE SCIENCE	1993
100	Optical anisotropies of Ag single crystals	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ Borensztein Y. et al.	Thin Solid Films	1993
101	Effective dielectric response of a composite with aligned spheroidal inclusions	RUBEN GERARDO BARRERA Y PEREZ WOLF LUIS MOCHAN BACKAL Giraldo J.	PHYSICAL REVIEW B	1993
102	Second harmonic generation at crystal surfaces	WOLF LUIS MOCHAN BACKAL Mendoza B.S.	JOURNAL OF PHYSICS-CONDENSED MATTER	1993
103	Infrared anisotropy as a surface probe	WOLF LUIS MOCHAN BACKAL JOSE FRANCISCO RECAMIER ANGELINI	JOURNAL OF PHYSICS-CONDENSED MATTER	1993



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104	Collective surface modes of Ag single crystals	WOLF LUIS MOCHAN BACKAL Tarriba J.	PHYSICAL REVIEW B	1992
105	Local-field effects on the reflectance anisotropy of Si(110):H	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ Del Sole R.	PHYSICAL REVIEW B	1991
106	Optical properties of bimetallic superlattices	WOLF LUIS MOCHAN BACKAL López Olazagasti E. Cocoletzi G.H.	SOLID STATE COMMUNICATIONS	1991
107	Effective dielectric response of polydispersed composites	RUBEN GERARDO BARRERA Y PEREZ WOLF LUIS MOCHAN BACKAL GUILLERMO MONSIVAINS GALINDO et al.	PHYSICAL REVIEW B	1990
108	Reflectance anisotropy of the (110) reconstructed surface of gold	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ Wang S.	PHYSICAL REVIEW B	1990
109	Surface plasmon effects on the optical reflectivity of adsorbed molecular multilayers	MARCELO DEL CASTILLO MUSSOT RUBEN GERARDO BARRERA Y PEREZ WOLF LUIS MOCHAN BACKAL et al.	SOLID STATE COMMUNICATIONS	1989
110	A diagrammatic approach to the optical properties of composites	RUBEN GERARDO BARRERA Y PEREZ WOLF LUIS MOCHAN BACKAL Monsivals G. et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	1989
111	Renormalized polarizability in the Maxwell Garnett theory	RUBEN GERARDO BARRERA Y PEREZ GUILLERMO MONSIVAINS GALINDO WOLF LUIS MOCHAN BACKAL et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	1989
112	Photon	WOLF LUIS MOCHAN BACKAL JOSE FRANCISCO RECAMIER ANGELINI	PHYSICAL REVIEW LETTERS	1989
113	Note on hydrodynamic models of spatially dispersive conductor boundaries	MARCELO DEL CASTILLO MUSSOT WOLF LUIS MOCHAN BACKAL	SOLID STATE COMMUNICATIONS	1987
114	Erratum: Intrinsic surface-induced optical anisotropies of cubic crystals: Local-field effect (Physical Review Letters (1985) 55, 25, (2829))	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ	PHYSICAL REVIEW LETTERS	1985
115	SURFACE LOCAL-FIELD EFFECT.	WOLF LUIS MOCHAN BACKAL RUBEN GERARDO BARRERA Y PEREZ	Journal De Physique. Colloque	1984
116	OPTICAL PROPERTIES OF ROUGH NON-LOCAL SURFACES.	RUBEN GERARDO BARRERA Y PEREZ WOLF LUIS MOCHAN BACKAL Fuchs R.	Journal De Physique. Colloque	1984



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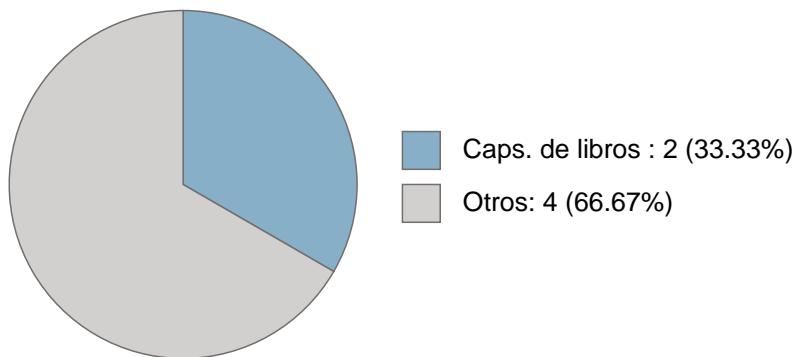


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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	SHG from nanoparticles of noncentrosymmetric geometry	WOLF LUIS MOCHAN BACKAL Singla R.	Conferenc e Paper	2018	9781557528209
2	Dispositivos ópticos y pintura renacentista	WOLF LUIS MOCHAN BACKAL	Capítulo de un Libro	2016	9786070307768
3	Second harmonic generation in nanostructured metamaterials	WOLF LUIS MOCHAN BACKAL Mendoza B.S. Solís I.	Conferenc e Paper	2014	9781557528254
4	El Quehacer de la Ciencia, prólogo a la sección	WOLF LUIS MOCHAN BACKAL	Capítulo de un Libro	2011	9786079568207
5	Coherent superposition of quadrupolar SHG from isotropic materials using two orthogonally polarized laser beams	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P. et al.	Conferenc e Paper	2006	1557528136
6	Quadrupolar SHG enhancement in isotropic materials using two orthogonally polarized laser beams	WOLF LUIS MOCHAN BACKAL Sun L. Figliozi P. et al.	Conferenc e Paper	2005	1557527962



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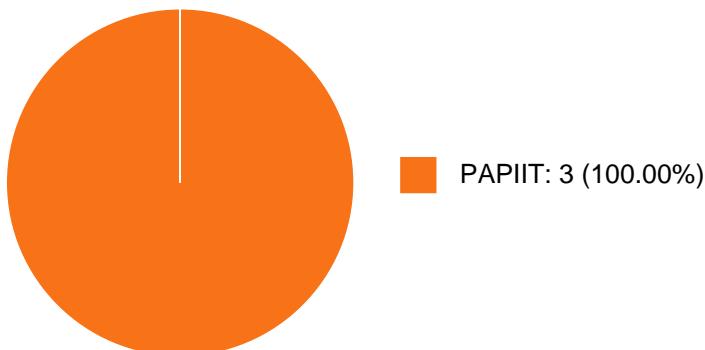
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PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Óptica lineal, no lineal y coherente en sistemas atómicos, moleculares y nanoestructurados	WOLF LUIS MOCHAN BACKAL	Recursos PAPIIT	01-01-2016	31-12-2018
2	Óptica lineal, no lineal y coherente en sistemas atómicos, moleculares y nanoestructurados.	WOLF LUIS MOCHAN BACKAL	Recursos PAPIIT	01-01-2019	31-12-2021
3	Óptica lineal, no lineal y coherente en sistemas atómicos, moleculares y nanoestructurados	WOLF LUIS MOCHAN BACKAL JOSE FRANCISCO RECAMIER ANGELINI	Recursos PAPIIT	01-01-2022	31-12-2024



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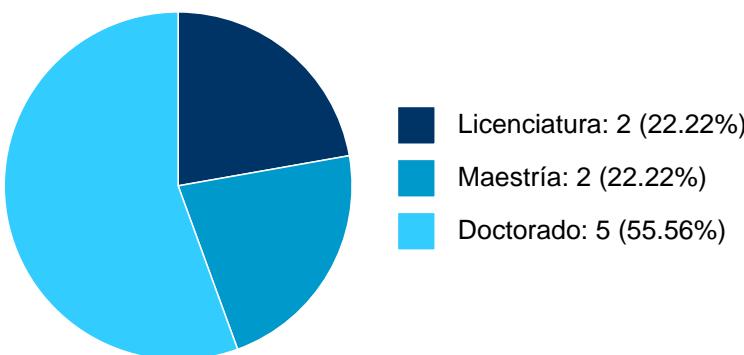


Reporte individual

WOLF LUIS MOCHAN BACKAL

PARTICIPACIÓN EN TESIS

Histórico de Colaboraciones en Tesis



#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Evolución temporal aproximada para sistemas optomecánicos híbridos	Tesis de Maestría	ROCIO JAUREGUI RENAUD,	WOLF LUIS MOCHAN BACKAL, Medina Dozal, Luis Alberto,	Instituto de Ciencias Físicas, Instituto de Física,	2021
2	Effect of noncentrosymmetric geometry on second order optical properties of nanostructures	Tesis de Doctorado	WOLF LUIS MOCHAN BACKAL,	Singla, Raksha,	Instituto de Ciencias Físicas,	2020
3	La función dieléctrica macroscópica de sistemas estructurados	Tesis de Doctorado	WOLF LUIS MOCHAN BACKAL,	Pérez Huerta, José Samuel,	Instituto de Ciencias Físicas,	2014
4	Aumento de la emisión de fotoluminiscencia de nanocristales de Si embebidos en sílice (SiO ₂) usando implantación de iones metálicos (Ag, Au, Pt)	Tesis de Doctorado	WOLF LUIS MOCHAN BACKAL,	ALICIA MARIA OLIVER Y GUTIERREZ, JORGE ALEJANDRO REYES ESQUEDA, et al.	Instituto de Ciencias Físicas, Instituto de Física,	2014



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5	Espectroscopía no lineal en nanocompositos isotrópicos y anisotrópicos de Au y Ag	Tesis de Maestría	ROCIO JAUREGUI RENAUD,	WOLF LUIS MOCHAN BACKAL, JORGE ALEJANDRO REYES ESQUEDA, et al.	Instituto de Ciencias Físicas, Instituto de Física,	2010
6	Reflexion de ondas electromagnéticas en dispositivos conductores en multicapas (super redes)	Tesis de Licenciatura	WOLF LUIS MOCHAN BACKAL,	Vazquez Nava, Raul Alfonso,		1993
7	Respuesta optica y magnetica de sistemas con interfaces	Tesis de Doctorado	WOLF LUIS MOCHAN BACKAL,	Tarriba Unger, Jesus Maria,		1993
8	Propiedades opticas de superficies, interfaces y superredes	Tesis de Doctorado	WOLF LUIS MOCHAN BACKAL,	Hernandez Cocoletzi, Gregorio,		1991
9	Efectos de apantallamiento y campo local en anisotropias inducidas en la superficie de metales	Tesis de Licenciatura	WOLF LUIS MOCHAN BACKAL,	Tarriba Unger, Jesus Maria,		1987



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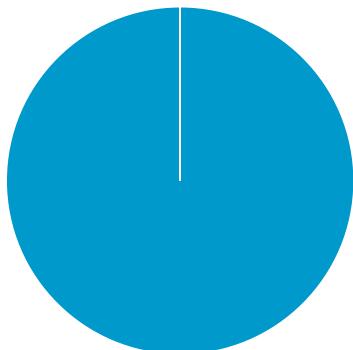
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WOLF LUIS MOCHAN BACKAL

DOCENCIA IMPARTIDA

Histórico de docencia



■ Maestría: 1 (100.00%)

#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	ELECTRODINÁMICA CLÁSICA I	Instituto de Ciencias Físicas	2	2024-2



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PATENTES

#	Título	Inventores	Sección	Año
1	METODO PARA SINTETIZAR IMAGENES EN MOVIMIENTO.	WOLF LUIS MOCHAN BACKAL,	PERFORMING OPERATIONS; TRANSPORTING	2015



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FUENTES DE INFORMACIÓN

Internos

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2025
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

Externos

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024