



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



**MUFEI XIAO WU**

## Datos Generales

**Nombre:** MUFEI XIAO WU

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 30 años

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## Nombramientos

**Vigente:** INVESTIGADOR TITULAR C TC Definitivo  
Centro de Nanociencias y Nanotecnología en la UNAM  
Desde 01-01-2008 (fecha inicial de registros en el SIIA)

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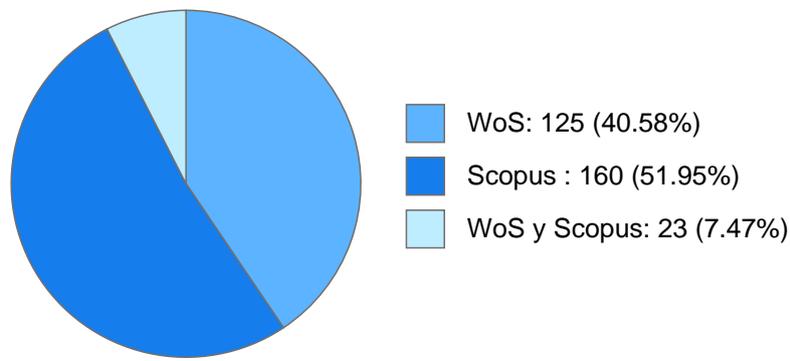
## Estímulos, programas, premios y reconocimientos

SNI II 2014 - VIGENTE  
SNI III - 2013  
PRIDE B 2020 - 2024  
PRIDE C 2014 - 2018  
PRIDE Fijo 2014  
PRIDE C 2014  
PRIDE D - 2014

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**DOCUMENTOS EN REVISTAS**

**Histórico de Documentos**



#	Título	Autores	Revista	Año
1	Theoretical study of the electronic and optical properties of a composite formed by the zeolite NaA and a magnetite cluster	JOEL ANTUNEZ GARCIA VITALI PETRANOVSKI AFANASIEVNA H'LINH HMOK et al.	BEILSTEIN JOURNAL OF NANOTECHNOLOGY	2025
2	An efficient red light-emissive process from Eu <sup>3+</sup> doped amorphous-derived CaAl <sub>2</sub> Si <sub>2</sub> O <sub>8</sub> ceramic powders: Down-shifted luminescence with high thermal stability under 532 nm excitation	MUFEI XIAO WU Rakov N. Matias F.	CERAMICS INTERNATIONAL	2024
3	Additive-free synthesis of layer-like Faujasite-type zeolite X	MUFEI XIAO WU VITALI PETRANOVSKI AFANASIEVNA ARMANDO REYES SERRATO et al.	JOURNAL OF MATERIALS SCIENCE	2024
4	Theoretical investigation of Fe and Cu cations hosted within the MOR zeolite framework	VITALI PETRANOVSKI AFANASIEVNA ARMANDO REYES SERRATO MUFEI XIAO WU et al.	Materials Today Communications	2024
5	The near-infrared emission of Er <sup>3+</sup> -doped yttrium oxy-fluoride ceramic powders: Temperature reading using uncoupled and thermally coupled energy levels	MUFEI XIAO WU Rakov N. Matias F. et al.	JOURNAL OF LUMINESCENCE	2023

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6	Frequency Response Analysis of FAU, LTA and MFI Zeolites Using UV-Vis and Electrochemical Impedance Spectroscopy	FABIAN NATANAEL MURRIETA RICO JOEL ANTUNEZ GARCIA ROSARIO ISIDRO YOCUPICIO GAXIOLA et al.	Optics	2023
7	First-Principles Study of Optical Properties of Linde-Type A Zeolite	MUFEI XIAO WU ARMANDO REYES SERRATO VITALI PETRANOVSKI AFANASIEVNA et al.	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	2023
8	Transient propagation: An explanation for superluminal phenomena	MUFEI XIAO WU	Results In Optics	2022
9	Erbium doped gadolinium oxyorthosilicate powder for optical thermometry at the visible and near-infrared	MUFEI XIAO WU Rakov N. Maciel G.S.	JOURNAL OF LUMINESCENCE	2022
10	Near field spectral dispersion of dipole radiation: The maximum red and blue shifts, and the near and far field boundary	MUFEI XIAO WU	Results In Optics	2021
11	Fine tuning of quantum particle plasmon	MUFEI XIAO WU	Optik	2020
12	Search for disappearing tracks in proton-proton collisions at $s=13\text{TeV}$	MUFEI XIAO WU Sirunyan A.M. Tumasyan A. et al.	PHYSICS LETTERS B	2020
13	Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ and constraints on anomalous quartic couplings	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
14	Determination of the strong coupling constant $\alpha_S(m_Z)$ from measurements of inclusive $W^\pm$ and Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 7$ and $8 \text{ TeV}$	MUFEI XIAO WU DIEGO GIOVANNI GONZALEZ VALLEJO SUBHASH SHARMA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
15	Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp Collisions at $\sqrt{s} = 13 \text{ TeV}$	MUFEI XIAO WU SUBHASH SHARMA DWIGHT ROBERTO ACOSTA NAJARRO et al.	PHYSICAL REVIEW LETTERS	2020
16	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at $13 \text{ TeV}$ with the CMS experiment	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK JOSE MANUEL HERNANDEZ ALCANTARA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
17	Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK JOSE MANUEL HERNANDEZ ALCANTARA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020

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18	Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s}=13\text{TeV}$	JULIO SOLANO GONZALEZ HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	EUROPEAN PHYSICAL JOURNAL C	2020
19	Constraints on the $\rho_{c1}$ versus $\rho_{c2}$ Polarizations in Proton-Proton Collisions at $\sqrt{s}=8\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICAL REVIEW LETTERS	2020
20	Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $\sqrt{s}=13\text{TeV}$	HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO SUBHASH SHARMA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
21	Measurement of the $\Upsilon(1S)$ pair production cross section and search for resonances decaying to $\Upsilon(1S)\mu+\mu-$ in proton-proton collisions at $\sqrt{s}=13\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICS LETTERS B	2020
22	Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at $\sqrt{s}=13\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICS LETTERS B	2020
23	Study of central exclusive [Equation not available: see fulltext.] production in proton-proton collisions at $\sqrt{s}=5.02$ and $13\text{TeV}$	JULIO SOLANO GONZALEZ HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	EUROPEAN PHYSICAL JOURNAL C	2020
24	Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at $5.02\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
25	Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at $\sqrt{s}=13\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
26	Measurement of the cross section for $t\bar{t}$ production with additional jets and b jets in pp collisions at $\sqrt{s}=13\text{TeV}$	MUFEI XIAO WU SUBHASH SHARMA JOSE MANUEL HERNANDEZ ALCANTARA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
27	The production of isolated photons in PbPb and pp collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
28	Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF INSTRUMENTATION	2020
29	Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques	JULIO SOLANO GONZALEZ MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK et al.	JOURNAL OF INSTRUMENTATION	2020

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30	Measurements of $t\bar{t}[\text{over } \gamma]H$ Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICAL REVIEW LETTERS	2020
31	Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at $\sqrt{s} = 8$ TeV	YAN GAO CARLOS GAY Y GARCIA MARIA DEL PILAR GUTIERREZ AMADOR et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
32	Search for a light pseudoscalar Higgs boson in the boosted $\mu\tau$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
33	Search for physics beyond the standard model in events with jets and two same-sign or at least three charged leptons in proton-proton collisions at $\sqrt{s}=13\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	EUROPEAN PHYSICAL JOURNAL C	2020
34	Search for dijet resonances using events with three jets in proton-proton collisions at $\sqrt{s}=13\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICS LETTERS B	2020
35	A measurement of the Higgs boson mass in the diphoton decay channel	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICS LETTERS B	2020
36	Study of $J/\psi$ meson production inside jets in pp collisions at $\sqrt{s}=8\text{TeV}$	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICS LETTERS B	2020
37	Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICAL REVIEW LETTERS	2020
38	Measurement of properties of $B_s^0 \rightarrow \mu^+\mu^-$ decays and search for $B^0 \rightarrow \mu^+\mu^-$ with the CMS experiment	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
39	Search for supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV with $137 \text{ fb}^{-1}$ in final states with a single lepton using the sum of masses of large-radius jets	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	PHYSICAL REVIEW D	2020
40	A search for the standard model Higgs boson decaying to charm quarks	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
41	Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\mu\tau$ and $e\tau$ in proton-proton collisions at $\sqrt{s} = 13$ TeV	HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO SUBHASH SHARMA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020

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42	Search for a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at $\sqrt{s} = 13$ TeV	HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO SUBHASH SHARMA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
43	Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
44	Search for new neutral Higgs bosons through the $H \rightarrow Z\gamma \rightarrow l+l-b\bar{b}$ process in pp collisions at $\sqrt{s} = 13$ TeV	MUFEI XIAO WU HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
45	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV	HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO SUBHASH SHARMA et al.	JOURNAL OF HIGH ENERGY PHYSICS	2020
46	A multi-dimensional search for new heavy resonances decaying to boosted $WW$ , $WZ$ , or $ZZ$ boson pairs in the dijet final state at 13 Te	JULIO SOLANO GONZALEZ HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO et al.	EUROPEAN PHYSICAL JOURNAL C	2020
47	Optical trapping of sub-wavelength objects with point-like slot waveguides	MUFEI XIAO WU	Optik	2019
48	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV	MUFEI XIAO WU Sirunyan A.M. Tumasyan A. et al.	JOURNAL OF HIGH ENERGY PHYSICS	2019
49	First principles study of electronic structure and optical properties of beryllium nitride in $\beta$ phase ( $\beta$ -Be <sub>3</sub> N <sub>2</sub> )	ARMANDO REYES SERRATO MUFEI XIAO WU Zarmiento-García R.	Optik	2018
50	Super-resolution imaging based on the temperature-dependent electron-phonon collision frequency effect of metal thin films	MUFEI XIAO WU Chenliang Ding Jingsong Wei	JOURNAL OF APPLIED PHYSICS	2018
51	Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV Using Isolated Photon-Tagged Jets	CHUMIN WANG CHEN HELGI HELENE GISELA FRANZISKA JUNG COOK Usai E. et al.	PHYSICAL REVIEW LETTERS	2018
52	Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV	HELGI HELENE GISELA FRANZISKA JUNG COOK DIEGO GIOVANNI GONZALEZ VALLEJO SUBHASH SHARMA et al.	PHYSICAL REVIEW D	2018
53	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s} = 13$ TeV	MUFEI XIAO WU Sirunyan A.M. Tumasyan A. et al.	JOURNAL OF HIGH ENERGY PHYSICS	2018

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54	Search for pair production of vector-like quarks in the $bWb\bar{q}$ channel from proton-proton collisions at $\sqrt{s}=13\text{TeV}$	LIMEI ZHANG JI CHUMIN WANG CHEN HELGI HELENE GISELA FRANZISKA JUNG COOK et al.	PHYSICS LETTERS B	2018
55	Observation of the Higgs boson decay to a pair of $\tilde{\nu}$ leptons with the CMS detector	LIMEI ZHANG JI CHUMIN WANG CHEN HELGI HELENE GISELA FRANZISKA JUNG COOK et al.	PHYSICS LETTERS B	2018
56	High-speed maskless nanolithography with visible light based on photothermal localization	MUFEI XIAO WU Wei, Jingsong Zhang, Kui et al.	SCIENTIFIC REPORTS	2017
57	Measurement of charged pion, kaon, and proton production in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$	JULIO SOLANO GONZALEZ CHUMIN WANG CHEN HELGI HELENE GISELA FRANZISKA JUNG COOK et al.	PHYSICAL REVIEW D	2017
58	Erratum to: Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ (Journal of High Energy Physics, (2017), 2017, 3, (61), 10.1007/JHEP03(2017)061)	MUFEI XIAO WU The CMS collaboration Sirunyan A.M. et al.	JOURNAL OF HIGH ENERGY PHYSICS	2017
59	Comparative optical spectroscopy of gallium-nitride and aluminum-nitride nanostructures deposited onto silicon substrate	MUFEI XIAO WU	Optik	2016
60	Thickness dependence of infrared reflectance of ultrathin metallic films: Influence of quantum confinement	MUFEI XIAO WU Villagomez, Ricardo	Optik	2016
61	Analytic Aharonov-Bohm rings: Currents readout from Zeeman spectrum	MUFEI XIAO WU ARMANDO REYES SERRATO	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2016
62	Size and temperature dependent plasmons of quantum particles	MUFEI XIAO WU Rakov, Nikifor	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2015
63	Upconversion fluorescence and its thermometric sensitivity of $\text{Er}^{3+}:\text{Yb}^{3+}$ co-doped $\text{SrF}_2$ powders prepared by combustion synthesis	MUFEI XIAO WU Rakov, Nikifor Maciel, Glauco S.	ELECTRONIC MATERIALS LETTERS	2014
64	Synthesis and optical nondestructive evaluation of GaN nanorods on silicon surfaces with gold catalyst	Conett Huerta Escamilla MUFEI XIAO WU Carbajal Arizaga, Gregorio Guadalupe	Optik	2014
65	Synthesis and optical nondestructive evaluation of GaN nanorods on silicon surfaces with gold catalyst	MUFEI XIAO WU Carbajal Arizaga G.G. Huerta Escamilla C.	Optik	2014

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66	Pseudo-nonlinear absorption in z-scan measurements	MUFEI XIAO WU Wang, Rui Wei, Jingsong	JOURNAL OF OPTICS	2013
67	Laser pulse induced micropatterning on sandwiched thin films	MUFEI XIAO WU Wei, Jingsong Liu, Qian	APPLIED SURFACE SCIENCE	2013
68	Phase mixture and anti-reflection window in visible of annealed beryllium-nitride thin films on silicon crystal	Conett Huerta Escamilla Fabio Chale Lara MARIO HUMBERTO FARIAS SANCHEZ et al.	Optik	2012
69	PHOTONIC GAPS OF ALUMINIUM-NITRIDE FILM RELATED WITH STRUCTURE AND DEPOSITION	Conett Huerta Escamilla Fabio Chale Lara MUFEI XIAO WU	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2011
70	Giant optical nonlinearity of silver-doped silicon thin film at low power input: laser-triggered cluster resonance	MUFEI XIAO WU Wei, Jingsong Liu, Jing	APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING	2011
71	Negative refraction in ferromagnetic materials under external magnetic field: a theoretical analysis	MUFEI XIAO WU Wei Jing-Song	CHINESE PHYSICS B	2010
72	Temperature dependence of thermal properties of Ag <sub>8</sub> In <sub>14</sub> Sb <sub>55</sub> Te <sub>23</sub> phase-change memory materials	Jingsong Wei MUFEI XIAO WU Jiao, Xinbing et al.	APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING	2009
73	Optical properties of pulse laser deposited AlN thin films on silicon	MARIO HUMBERTO FARIAS SANCHEZ Conett Huerta Escamilla MUFEI XIAO WU et al.	MATERIALS LETTERS	2009
74	The origin of the super-resolution via a nonlinear thin film	Jingsong Wei MUFEI XIAO WU	OPTICS COMMUNICATIONS	2008
75	Coupling efficiency of probes in emission-mode scanning near-field optical microscopy	MUFEI XIAO WU Alvarez, L.	JOURNAL OF MICROSCOPY	2008
76	Super-resolution scanning laser microscopy with a third-order optical nonlinear thin film	J. Wei MUFEI XIAO WU	APPLIED PHYSICS B-LASERS AND OPTICS	2008
77	Laser pulse induced bumps in chalcogenide phase change films	Jingsong Wei MUFEI XIAO WU Jiao, Xinbing et al.	JOURNAL OF APPLIED PHYSICS	2008

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78	Laser tunable Toraldo superresolution with a uniform nonlinear pupil filter	Jingsong Wei MUFEI XIAO WU	APPLIED OPTICS	2008
79	A Z-scan model for optical nonlinear nanometric films	Jingsong Wei MUFEI XIAO WU	J OPT A-PURE APPL OP	2008
80	Negative refraction via domain wall resonances in a homogeneous mixture of ferro- and nonmagnetic substances	MUFEI XIAO WU Wei J.	JOURNAL OF PHYSICS-COND ENSED MATTER	2007
81	Electric and magnetic losses and gains in determining the sign of refractive index	MUFEI XIAO WU Wei J.	OPTICS COMMUNICATIO NS	2007
82	On the dynamic readout of sub-diffraction-limit pit arrays with a silver thin film	MUFEI XIAO WU Wei J.	JOURNAL OF PHYSICS-COND ENSED MATTER	2007
83	Theoretical analyses on the resolution of collection mode scanning near-field optical microscopy	MUFEI XIAO WU Alvarez L.	OPT REV	2006
84	Optical transmission larger than 1 ( $T > 1$ ) through ZnS-SiO <sub>2</sub> /AgOx/ZnS-SiO <sub>2</sub> sandwiched thin films	MUFEI XIAO WU Wei J.	APPLIED PHYSICS LETTERS	2006
85	Super-resolution with a nonlinear thin film: Beam reshaping via internal multi-interference	MUFEI XIAO WU Wei J. Zhang F.	APPLIED PHYSICS LETTERS	2006
86	The role of propagating and evanescent waves in scanning near-field optical microscopy	MUFEI XIAO WU Alvarez L.	OPTICS COMMUNICATIO NS	2006
87	Theoretical and experimental study on optical near and far field transmission of thin metallic films with randomly distributed subwavelength holes	MUFEI XIAO WU Rakov N. Alvarez L.	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2006
88	Reflection of diffusion at boundary causes anomalous transient photo-currents in amorphous materials	MUFEI XIAO WU	Optics InfoBase Conference Papers	2005
89	Complete normalized orthogonal set including evanescent modes for circular dielectric waveguides	MUFEI XIAO WU Alvarez L.	JOURNAL OF ELECTROMAGNE TIC WAVES AND APPLICATIONS	2005
90	Resolution dependence of scanning near field optical microscopy on probe sample distance	MUFEI XIAO WU Alvarez L.	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2005
91	Optical properties of a dielectric-metallic superlattice: The complex photonic bands	MUFEI XIAO WU Soto-Puebla D. Ramos-Mendieta F.	PHYSICS LETTERS A	2004

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92	Surface metallic state of aluminum-nitride (AlN) thin films prepared by direct current (DC)-reactive magnetron sputtering: Optical spectroscopic analysis with incoherent light	MUFEI XIAO WU Rakov N. Mahmood A.	SCRIPTA MATERIALIA	2004
93	Disorder-tunable photonic properties of periodic dielectric/metal superlattices	MUFEI XIAO WU Soto-Puebla D. Ramos-Mendieta F.	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2004
94	Linear and nonlinear optics of thin metal films with randomly distributed subwavelength holes	MUFEI XIAO WU Rakov N.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2004
95	Strong photoluminescence and cathodoluminescence due to f-f transitions in Eu <sup>3+</sup> doped Al <sub>2</sub> O <sub>3</sub> powders prepared by direct combustion synthesis and thin films deposited by laser ablation	GUSTAVO ALONSO HIRATA FLORES MUFEI XIAO WU Rakov N. et al.	APPLIED PHYSICS LETTERS	2003
96	Deposition-and-substrate tunable photonic bandgap in optical responses of hydrogenated amorphous silicon carbide thin films	MUFEI XIAO WU Rakov N. Mahmood A.	MODERN PHYSICS LETTERS B	2003
97	Influence of deposition conditions on optical properties of aluminum nitride (AlN) thin films prepared by DC-reactive magnetron sputtering	MUFEI XIAO WU Mahmood A. Rakov N.	MATERIALS LETTERS	2003
98	Enhanced optical near-field transmission through subwavelength holes randomly distributed in a thin gold film	MUFEI XIAO WU Rakov N.	JOURNAL OF PHYSICS-CONDENSED MATTER	2003
99	Optical transmission of a subwavelength aperture: Size and fiber parameter dependence of near-field resolution	MUFEI XIAO WU Alvarez L. Saucedo A.	OPTICS COMMUNICATIONS	2003
100	Surface propagation with a large spectral red-shift on a gold thin film containing subwavelength holes	MUFEI XIAO WU Rakov N.	PHYSICS LETTERS A	2003
101	Strong second-harmonic radiation from a thin silver film with randomly distributed small holes	MUFEI XIAO WU Rakov N. Ramons F.E.	JOURNAL OF PHYSICS-CONDENSED MATTER	2003

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102	Evanescent and propagating electromagnetic fields in scattering from point-dipole structures: Comment	MUFEI XIAO WU	JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION	2002
103	A simple method of forming small gold particles on a thin gold film	MUFEI XIAO WU	MATERIALS LETTERS	2002
104	A calculation of dispersion relation $K(?)$ for Ag/MgF <sub>2</sub> one-dimensional photonic band-gap structure	MUFEI XIAO WU	MATERIALS LETTERS	2002
105	Current-heating formation of small holes in thin gold or silver films	MUFEI XIAO WU Perea-López N. Rakov N.	REVIEW OF SCIENTIFIC INSTRUMENTS	2002
106	Plasmon changes in rectangular quantum dots under one-, two-, and three-dimensional quantum-confinement	MUFEI XIAO WU	Optik	2001
107	Resonant field enhancement by a finite-size periodic array of surface scatterers	MUFEI XIAO WU Bozhevolnyi S.I.	JOURNAL OF PHYSICS-CONDENSED MATTER	2001
108	On the coupling efficiency of metal-coated near-field probes	LUIS AGUSTIN ALVAREZ ICAZA LONGORIA MUFEI XIAO WU	JOURNAL OF MICROSCOPY	2001
109	Equivalent-circuit interpretation of the dielectric dispersion in ferroelectric superlattice capacitor	MUFEI XIAO WU	MATERIALS LETTERS	2001
110	Contribution of edge recoiling of diffusion to anomalous transient photo-currents in amorphous materials	MUFEI XIAO WU Picos-Vega A.	PHYSICS LETTERS A	2001
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112	Nonlocal and spontaneous material responses: Reply to comment on "Rigorous solution for transient propagation of electromagnetic waves through a medium: Causality plus diffraction in time"	MUFEI XIAO WU	OPTICS LETTERS	2001
113	Reply: On the evanescent field of dipole	MUFEI XIAO WU	JOURNAL OF MODERN OPTICS	2000

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115	Rigorous solution for transient propagation of electromagnetic waves through a medium: Causality plus diffraction in time	MUFEI XIAO WU	OPTICS LETTERS	2000
116	On the evanescent field of dipole	MUFEI XIAO WU	JOURNAL OF MODERN OPTICS	2000
117	Electromagnetic transmission of nanometric circular aperture on top of a metal coated optical fiber tip: Theory	MUFEI XIAO WU Alvarez L.	J VAC SCI TECHNOL B	2000
118	Different spectra in near and far field of dipole	MUFEI XIAO WU	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	1999
119	Numerical comparison between constant-height and constant-intensity images in scanning near field optical microscopy	MUFEI XIAO WU Chen X.	OPTICS COMMUNICATIONS	1999
120	Atom-surface interaction potential for 4He-NaCl(001) system: a diffused-pairwise near-absorption calculation	MUFEI XIAO WU Cruz D.A.	SURFACE SCIENCE	1999
121	Spectral changes in near field radiation of dipole	MUFEI XIAO WU	Optik	1999
122	Evanescent fields do contribute to the far field	MUFEI XIAO WU	JOURNAL OF MODERN OPTICS	1999
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127	Atom-surface interaction potential for 4He-NaCl(001) system: A modified pairwise close-coupling calculation	MUFEI XIAO WU Cruz D.A.	CHEMICAL PHYSICS LETTERS	1998
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129	Optical intersubband absorption of coupled double quantum wells embedded in an asymmetric Fabry-Perot microcavity subjected to an electric field	MUFEI XIAO WU Chen X.	JOURNAL OF PHYSICS-CONDENSED MATTER	1998
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141	Theoretical treatment for scattering scanning near-field optical microscopy	MUFEI XIAO WU	JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION	1997
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151	Imaging with reflection near-field optical microscope: Contributions of middle and far fields	MUFEI XIAO WU Bozhevolnyi S.	OPTICS COMMUNICATIONS	1996
152	Infrared scanning gap optical microscope with far field pickup	MUFEI XIAO WU JESUS MARIA SIQUEIROS BELTRONES Negrete-Regagnon P.	Optik	1996
153	Cutting off the diffraction: A numerical solution in scanning near-field optical microscopy	MUFEI XIAO WU	APPLIED PHYSICS LETTERS	1996
154	A study of resolution limit in optical microscopy: Near and far field	MUFEI XIAO WU	OPTICS COMMUNICATIONS	1996
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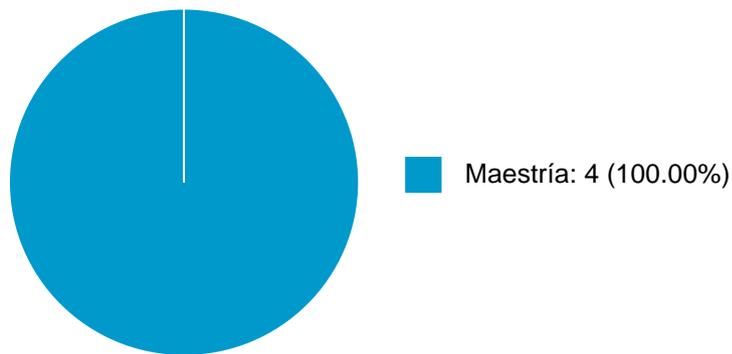
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**DOCENCIA IMPARTIDA**

**Histórico de docencia**



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	FÍSICA ATÓMICA I (FÍSICA CUÁNTICA, ATÓMICA Y MOLECULAR)	Centro de Nanociencias y Nanotecnología en la UNAM	1	2024-1
2	Maestría	FÍSICA ATÓMICA I (FÍSICA CUÁNTICA, ATÓMICA Y MOLECULAR)	Centro de Nanociencias y Nanotecnología en la UNAM	2	2023-1
3	Maestría	FÍSICA ATÓMICA I (FÍSICA CUÁNTICA, ATÓMICA Y MOLECULAR)	Centro de Nanociencias y Nanotecnología en la UNAM	1	2022-1
4	Maestría	TEMAS SELECTOS DE MATERIALES ELECTRONICOS	Instituto de Investigaciones en Materiales	1	2012-1



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**PATENTES**

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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**

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9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024