



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



FERMIN CASTILLO MEJIA

Datos Generales

Nombre: FERMIN CASTILLO MEJIA

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 47 años

Nombramientos

Vigente: TECNICO ACADEMICO TITULAR C TC Definitivo
Instituto de Ciencias Físicas
Desde 01-06-2013

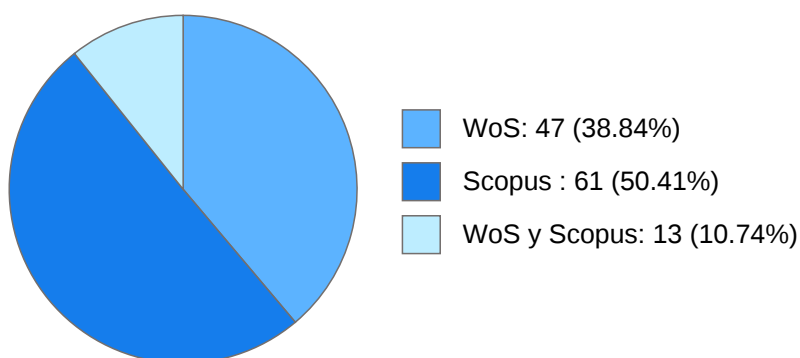
Estímulos, programas, premios y reconocimientos

SNI I - VIGENTE
PRIDE D - 2024

FERMIN CASTILLO MEJIA

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Development of a Miniaturized 2-Joule Pulsed Plasma Source Based on Plasma Focus Technology: Applications in Extreme Condition Materials and Nanosatellite Orientation	FERMIN CASTILLO MEJIA Soto L. Pavez C. et al.	MICROMACHINE S	2024
2	Artificial neural networks for predicting potentiodynamic tests of brass 70-30	JOSE FERNANDO FLORES ALVAREZ ITZEL REYES CHAPARRO FERMIN CASTILLO MEJIA et al.	INTERNATIONAL CONFERENCES & EXHIBITION ON NANOTECHNOLOGIES, ORGANIC ELECTRONICS & NANOMEDICINE, NANOTECHNOLOGY 2020, PT 1	2023
3	Hydrogen Diffusion in Nickel Superalloys: Electrochemical Permeation Study and Computational AI Predictive Modeling	BERNARDO FABIAN CAMPILLO ILLANES FERMIN CASTILLO MEJIA OSVALDO FLORES CEDILLO et al.	Materials	2023
4	Degradation of Acid Red 1 Catalyzed by Peroxidase Activity of Iron Oxide Nanoparticles and Detected by SERS	EDNA VAZQUEZ VELEZ HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA	NANOMATERIAL S	2021

FERMIN CASTILLO MEJIA

5	Numerical and semi-analytical solutions of the compound layer growth kinetics in cylindrical surfaces during plasma nitriding of pure iron	FERMIN CASTILLO MEJIA Hernández, E.M. Santiago, R.D. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2017
6	Study of DC Ar-CO ₂ mixture plasma using optical emission spectroscopy and mass spectrometry techniques	FAROOK BASHIR YOUSIF FERMIN CASTILLO MEJIA Martinez, H. et al.	PHYSICS OF PLASMAS	2017
7	Arsenic contamination in irrigation water, agricultural soil and maize crop from an abandoned smelter site in Matehuala, Mexico	FERMIN CASTILLO MEJIA MIGUEL AVALOS BORJA Ruíz-Huerta, E.A. et al.	JOURNAL OF HAZARDOUS MATERIALS	2017
8	Identification of diagenetic calcium arsenates using synchrotron-based micro X-ray diffraction	FERMIN CASTILLO MEJIA MIGUEL AVALOS BORJA Jamieson H. et al.	BOLETIN DE LA SOCIEDAD GEOLOGICA MEXICANA	2015
9	The plasma focus as a tool for plasma-wall-interaction studies	JOSE JULIO EMILIO HERRERA VELAZQUEZ FERMIN CASTILLO MEJIA Ramos G. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2015
10	Optical and electrical characterization of C ₃ H ₆ O/Ar glow discharge	FERMIN CASTILLO MEJIA OSVALDO FLORES CEDILLO HORACIO MARTINEZ VALENCIA et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2015
11	Striations in an ethyl alcohol glow discharge	HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Reyes P.G. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2015
12	Study of N ₂ /He DC glow discharge	OSVALDO FLORES CEDILLO FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2015
13	Study of the Rogowski coil response in a plasma focus device	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Perusquía S. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2015
14	Neutron emission characterisation at the FN-II Dense Plasma Focus	FERMIN CASTILLO MEJIA MARIA ISABEL GAMBOA DE BUEN JOSE JULIO EMILIO HERRERA VELAZQUEZ et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
15	Characterization a low pressure of plasma of methanol (CH ₄ O) alcohol	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Villa M. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014

FERMIN CASTILLO MEJIA

16	Low-pressure plasma discharge of Ar/N ₂ /CH ₄ ternary mixture: Experimental simulation of Titan's atmosphere	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Salazar-Flores L. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
17	Analysis of the different zones of glow discharge of ethyl alcohol (C ₂ H ₆ O)	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Torres C. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
18	Experimental study of a glow discharge of CH ₂ -C ₁₂	HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Gomez A. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
19	Characterization of direct current He-N ₂ mixture plasma using optical emission spectroscopy and mass spectrometry	OSVALDO FLORES CEDILLO FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA et al.	PHYSICS OF PLASMAS	2014
20	Filamentary structures in dense plasma focus: Current filaments or vortex filaments?	FERMIN CASTILLO MEJIA Soto, Leopoldo Pavez, Cristian et al.	PHYSICS OF PLASMAS	2014
21	Characterization of the axial plasma shock in a table top plasma focus after the pinch and its possible application to testing materials for fusion reactors	FERMIN CASTILLO MEJIA Soto, Leopoldo Pavez, Cristian et al.	PHYSICS OF PLASMAS	2014
22	Study of ions and neutrons from a dense plasma focus instrument by means of nuclear tracks detectors	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ HORACIO MARTINEZ VALENCIA et al.	AIP Conference Proceedings	2014
23	MEASUREMENTS OF FAST NEUTRONS BY BUBBLE DETECTORS	FERMIN CASTILLO MEJIA BENJAMIN LEAL ACEVEDO HORACIO MARTINEZ VALENCIA et al.	AIP Conference Proceedings	2013
24	Soft x-ray measurements in the FN-II dense plasma focus device for different anode configurations	CELIA LUZ ROJO BLANCO FERMIN CASTILLO MEJIA JOSE RANGEL GUTIERREZ et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2012
25	Paschen law for argon glow discharge	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Torres C. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2012
26	Dynamics of the expansion discharge originated by a dense plasma focus	MARCO ANTONIO MARTINEZ FUENTES FERMIN CASTILLO MEJIA JOSE RANGEL GUTIERREZ et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2012

FERMIN CASTILLO MEJIA

27	Diagnostics of parameters by optical emission spectroscopy and Langmuir probe in a discharge of Ar/N ₂ /CH ₄ ternary mixture	HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Guerrero A. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2012
28	Measurements of electron temperature, and ion density, in a mixture of O ₂ and Ar plasma	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Reyes G. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2010
29	Langmuir Probe and Optical Emission Spectroscopy Studies of Low-Pressure Gas Mixture of CO ₂ and N ₂	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Mendez-Martinez, E. F. et al.	PLASMA SCI TECHNOL	2010
30	AC plasma induced modifications in Sb ₂ S ₃ thin films	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA AARON SANCHEZ JUAREZ et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2010
31	Electron transfer in p-Ar collisions at keV energies	FIDEL BENJAMIN ALARCON HERNANDEZ HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA	AIP Conference Proceedings	2009
32	Small dimensions flash X-ray source generated by bremsstrahlung based on a cold-cathode triode [Fuente pulsada de rayos X de pequeñas dimensiones generados por bremsstrahlung basada en un triodo de cátodo frío]	FERMIN CASTILLO MEJIA Niedbalski J.J. Milanese M. et al.	Optica Pura y Aplicada	2009
33	Optical emission spectroscopy of CO ₂ glow discharge at low pressure	FERMIN CASTILLO MEJIA Reyes P.G. Mendez E.F. et al.	Physica Status Solidi C-Current Topics in Solid State Physics	2008
34	Measurements of electron temperature and ion density in an ac pulsed CO plasma study	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA	Physica Status Solidi C-Current Topics in Solid State Physics	2008
35	Radiation characteristics of the FNall dense plasma focus device	FERMIN CASTILLO MEJIA MARIA ISABEL GAMBOA DE BUEN JOSE RANGEL GUTIERREZ et al.	AIP Conference Proceedings	2008
36	Neutron yield and pressure evolution during a dense plasma focus device shot series	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE RANGEL GUTIERREZ	JOURNAL OF PHYSICS D-APPLIED PHYSICS	2007

FERMIN CASTILLO MEJIA

37	Angular distribution of fusion products and x rays emitted by a small dense plasma focus machine	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ MARIA ISABEL GAMBOA DE BUEN et al.	JOURNAL OF APPLIED PHYSICS	2007
38	Comparative study on the decomposition process of N-isopropylacrylamide in He, N2 and air plasmas	HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Rodríguez-Lazcano Y.	PLASMA SOURCES SCIENCE & TECHNOLOGY	2007
39	High voltage trigger-pulse generator for marxes and plasma FOCI	FERMIN CASTILLO MEJIA Robledo-Martinez A. Vega R. et al.	Ppps-2007 - Pulsed Power Plasma Science 2007	2007
40	Nuclear track methodology for the analysis of isotropic components in a plasma focus neutron yield	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE RANGEL GUTIERREZ et al.	REVISTA MEXICANA DE FISICA	2007
41	On the angular distribution of neutrons protons and X-rays from a small dense plasma focus machine	JOSE JULIO EMILIO HERRERA VELAZQUEZ FERMIN CASTILLO MEJIA MARIA ISABEL GAMBOA DE BUEN et al.	AIP Conference Proceedings	2006
42	Time integrated and time resolved neutron measurements in a plasma focus device	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE IGNACIO DE LA INMACULADA GOLZARRI Y MORENO et al.	AIP Conference Proceedings	2006
43	Neutron emission and angular distribution in compact plasma focus devices operating at hundreds of joules	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ Silva P. et al.	AIP Conference Proceedings	2006
44	AC glow discharge plasma in N2O	FAROOK BASHIR YOUSIF HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA et al.	AIP Conference Proceedings	2006
45	Pressure evolution in the chamber of a dense plasma focus device	JOSE JULIO EMILIO HERRERA VELAZQUEZ FERMIN CASTILLO MEJIA JOSE RANGEL GUTIERREZ	AIP Conference Proceedings	2006
46	Spectroscopic study of electrical glow discharges in gases	FERMIN CASTILLO MEJIA JOSE RANGEL GUTIERREZ Reyes P.G. et al.	AIP Conference Proceedings	2006
47	Cross-calibration of neutron detectors for the dense plasma focus FN-II time of flight analysis	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE RANGEL GUTIERREZ	AIP Conference Proceedings	2006
48	Isotropic and anisotropic components of neutron emissions at the FN-II and PACO dense plasma focus devices	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE RANGEL GUTIERREZ et al.	PLASMA PHYSICS AND CONTROLLED FUSION	2003

FERMIN CASTILLO MEJIA

49	Experimental studies on the formation of argon atoms in Ar ⁺ -atoms collisions	HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Reyes P.G. et al.	INTERNATIONAL JOURNAL OF MASS SPECTROMETRY	2003
50	Neutron angular distribution in a plasma focus obtained using nuclear track detectors	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE RANGEL GUTIERREZ et al.	RADIATION PROTECTION DOSIMETRY	2002
51	N ⁺ charge transfer in N ₂ at low-keV collisions	FERMIN CASTILLO MEJIA Martínez H. Reyes P.G.	INTERNATIONAL JOURNAL OF MASS SPECTROMETRY	2002
52	The atomic force microscope as a fine tool for nuclear track studies	JOSE IGNACIO DE LA INMACULADA GOLZARRI Y MORENO FERMIN CASTILLO MEJIA Vázquez-López C. et al.	RADIATION MEASUREMENTS	2001
53	Small plasma focus studied as a source of hard X-ray	FERMIN CASTILLO MEJIA Milanese M.M. Moroso R.L. et al.	IEEE TRANSACTIONS ON PLASMA SCIENCE	2001
54	Experimental investigation of the formation of N atoms in N ⁺ -Ne, Kr, and Xe collisions	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Reyes P.G.	INTERNATIONAL JOURNAL OF MASS SPECTROMETRY	2001
55	Experimental study of single-electron loss by Ar ⁺ ions in rare-gas atoms	FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Reyes P.G.	JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS	2001
56	Evidence of thermal and non-thermal mechanisms coexisting in dense plasma focus D-D nuclear reactions	FERMIN CASTILLO MEJIA Milanese M. Moroso R. et al.	JOURNAL OF PHYSICS D-APPLIED PHYSICS	2000
57	Some experimental research on anisotropic effects in the neutron emission of dense plasma-focus devices	FERMIN CASTILLO MEJIA Milanese M. Moroso R. et al.	JOURNAL OF PHYSICS D-APPLIED PHYSICS	1997
58	Dynamic model of FN II plasma focus	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ Acuna H. et al.	IEEE International Conference on Plasma Science	1996

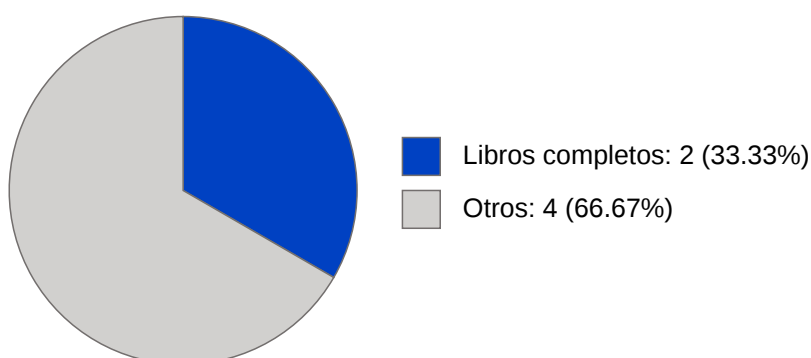
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59	Fuego Nuevo II dense plasma focus	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ JOSE RANGEL GUTIERREZ et al.	IEEE International Conference on Plasma Science	1996
60	Soft x-rays measurements in a dense plasma focus	FERMIN CASTILLO MEJIA Milanese M. Moroso R. et al.	IEEE International Conference on Plasma Science	1994
61	Energy study of accelerated ions from a dense plasma focus by means of CR-39 track detector	FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ GUILLERMO CIRANO ESPINOSA GARCIA	Nuclear Tracks And Radiation Measurements (1993)	1993
62	Uranium determination in mineral rocks by SSNTD	MARIA ISABEL GAMBOA DE BUEN JOSE IGNACIO DE LA INMACULADA GOLZARRI Y MORENO FERMIN CASTILLO MEJIA et al.	NUCLEAR TRACKS AND RADIATION MEASUREMENTS	1984
63	HOMOGENEITY AND FISSURE DETERMINATION IN URANIUM BARS WITH SOLID STATE NUCLEAR TRACK DETECTORS.	FERMIN CASTILLO MEJIA MARIA ISABEL GAMBOA DE BUEN Somogyi G. et al.	Nuclear Tracks	1983

FERMIN CASTILLO MEJIA

LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Física Experimental 2022	MARIA DEL CARMEN CISNEROS GUDIÑO EDNA VAZQUEZ VELEZ FERMIN CASTILLO MEJIA et al.	Libro Completo	2023	9786073079761
2	Física experimental 2022	MARIA DEL CARMEN CISNEROS GUDIÑO EDNA VAZQUEZ VELEZ FERMIN CASTILLO MEJIA et al.	Libro Completo	2023	9786073080040
3	Study of an atmospheric-pressure discharge in air	FERMIN CASTILLO MEJIA OSVALDO FLORES CEDILLO BERNARDO FABIAN CAMPILLO ILLANES et al.	Conferenc e Paper	2019	9781538633861
4	Study of an atmospheric-pressure discharge in air	FERMIN CASTILLO MEJIA OSVALDO FLORES CEDILLO BERNARDO FABIAN CAMPILLO ILLANES et al.	Proceedin gs Paper	2017	9781538633861
5	Deuterium retention in tungsten at Fuego Nuevo II	JOSE JULIO EMILIO HERRERA VELAZQUEZ FERMIN CASTILLO MEJIA Ramos G.	Conferenc e Paper	2013	9781479901715



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Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



FERMIN CASTILLO MEJIA

6	Use of triple Langmuir probes in the study of expanding shocks from a dense plasma focus	MARCO ANTONIO MARTINEZ FUENTES FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ et al.	Conferenc e Paper	2012	9781622769810
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Reporte individual



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PARTICIPACIÓN EN PROYECTOS

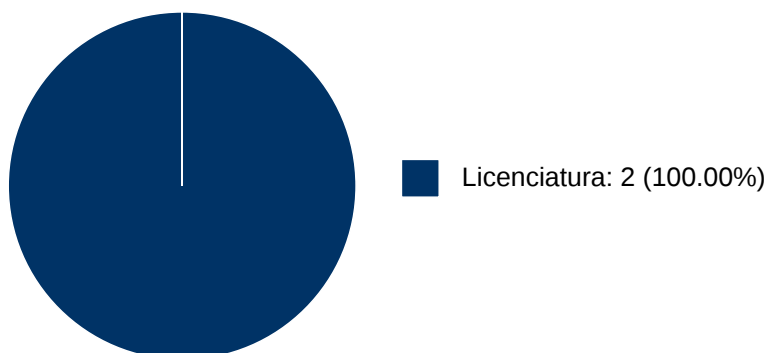
No se encuentran registros en la base de datos de SISEPRO asociados a:

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PARTICIPACIÓN EN TESIS

Histórico de Colaboraciones en Tesis



#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Estudio de la descarga capacitiva en el plasma focus fuego nuevo II	Tesis de Licenciatura	FERMIN CASTILLO MEJIA,	Aupart Acosta, Adrián,	Instituto de Ciencias Físicas,	2015
2	Estudio de las estrias en una descarga luminiscente de baja presión	Tesis de Licenciatura	FERMIN CASTILLO MEJIA,	Sakaguchi Mujica, Victor Hugo,		1996



FERMIN CASTILLO MEJIA

DOCENCIA IMPARTIDA

Histórico de docencia

#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Curso de Bachillerato	Física 3	Instituto de Ingeniería	0	
2	Curso de Licenciatura	Análisis espectral de las descargas eléctricas en gases	Instituto de Ingeniería	0	



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PATENTES

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

FERMIN CASTILLO MEJIA

FERMIN CASTILLO MEJIA

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