



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



**IVAN ORTEGA BLAKE**

## Datos Generales

**Nombre:** IVAN ORTEGA BLAKE

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 46 años

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## Nombramientos

**Vigente:** INVESTIGADOR TITULAR C TC Definitivo  
Instituto de Ciencias Físicas  
Desde 01-09-2008

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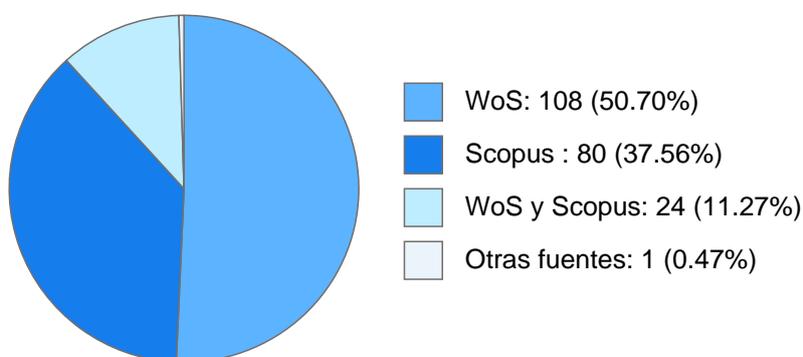
## Estímulos, programas, premios y reconocimientos

SNI III 2020 - VIGENTE  
SNI III 2009 - 2018  
PRIDE D - 2024

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**DOCUMENTOS EN REVISTAS**

**Histórico de Documentos**



#	Título	Autores	Revista	Año
1	Effect of ergosterol or cholesterol on the morphology and dynamics of the POPC/sphingomyelin bilayer	JORGE HERNANDEZ COBOS ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE et al.	BIOPHYSICAL CHEMISTRY	2025
2	Liposome size and surface tension affect zeta potential	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE Herminio N. Rivera et al.	BIOPHYSICAL JOURNAL	2025
3	Notable enhancement of Amphotericin B channel activity by applied pressures in the range of MS channel activation	IVAN ORTEGA BLAKE Haro-Reyes T.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES	2024
4	A Promising Amphotericin B Derivative Induces Morphological Alterations, Mitochondrial Damage, and Oxidative Stress In Vitro and Prevents Mice from Death Produced by a Virulent Strain of <i>Trypanosoma cruzi</i>	IGNACIO MARTINEZ MARTINEZ ARTURO GALVAN HERNANDEZ LOURDES TERESA AGREDANO MORENO et al.	Microorganisms	2024
5	Physicochemical characterization of lipid mixtures for liposomal formulations of polyenes	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE Joseline A. Bahena-Herrera et al.	BIOPHYSICAL JOURNAL	2023

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6	Nanoscale dynamics of membrane domains with different sterols	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2023
7	Amphotericin A21 reduces cell proliferation and modulates anti- and pro-apoptotic proteins in MCF-7 cells.	IVAN ORTEGA BLAKE ARTURO GALVAN HERNANDEZ Lourdes Rodriguez-Fragoso et al.	JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS	2023
8	Formation and Nanoscale Characterization of Asymmetric Supported Lipid Bilayers Containing Raft-Like Domains	ARMANDO ANTILLON DIAZ IVAN ORTEGA BLAKE ROBERTO CARLOS MUÑOZ GARAY et al.	Methods in Molecular Biology	2022
9	Exploring electrostatic properties of biomolecules by a combination of soft-lithography and Kelvin force microscopy	LEONARDO IBOR RUIZ ORTEGA IVAN ORTEGA BLAKE ARTURO GALVAN HERNANDEZ	BIOPHYSICAL JOURNAL	2022
10	The effect of sterols on the structure and dynamics of membrane domains and the action of polyenes	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE Fernando Favela-Rosales	BIOPHYSICAL JOURNAL	2022
11	Polyene Antibiotics Physical Chemistry and Their Effect on Lipid Membranes; Impacting Biological Processes and Medical Applications	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE Haro-Reyes T. et al.	Membranes	2022
12	Asymmetric bilayers mimicking membrane rafts prepared by lipid exchange: Nanoscale characterization using AFM-Force spectroscopy	ARMANDO ANTILLON DIAZ IVAN ORTEGA BLAKE ROBERTO CARLOS MUÑOZ GARAY et al.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES	2021
13	Preclinical safety evaluation of amphotericin A21: A novel antifungal	IVAN ORTEGA BLAKE JOSE IGNACIO REGLA CONTRERAS ARTURO GALVAN HERNANDEZ et al.	BASIC & CLINICAL PHARMACOLOGY & TOXICOLOGY	2021
14	Validation of methane and carbon monoxide from Sentinel-5 Precursor using TCCON and NDACC-IRWG stations	MICHEL ALEXANDRE GRUTTER DE LA MORA IVAN ORTEGA BLAKE WOLFGANG MICHAEL HELMUT STREMME et al.	ATMOSPHERIC MEASUREMENT TECHNIQUES	2021
15	TBCID10C is a cytoskeletal functional linker that modulates cell spreading and phagocytosis in macrophages	ARMANDO ANTILLON DIAZ IVAN ORTEGA BLAKE ROBERTO ROSALES REYES et al.	SCIENTIFIC REPORTS	2021
16	A molecular dynamics study proposing the existence of statistical structural heterogeneity due to chain orientation in the POPC-cholesterol bilayer	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	BIOPHYSICAL CHEMISTRY	2020

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17	Biophysical characterization of the insertion of two potent antimicrobial peptides-Pin2 and its variant Pin2[GVG] in biological model membranes	BRANDT BERTRAND SATHISHKUMAR MUNUSAMY GERARDO ALFONSO CORZO BURGUETE et al.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMB RANES	2020
18	Morphology and dynamics of domains in ergosterol or cholesterol containing membranes	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS ARMANDO ANTILLON DIAZ et al.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMB RANES	2020
19	Study on Ergosterol and Cholesterol Conformational Freedom and Their Different Interaction with a Popc/Sm Bilayer. An AFM and MD Study	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS ARMANDO ANTILLON DIAZ et al.	BIOPHYSICAL JOURNAL	2020
20	TROPOMI-Sentinel-5 Precursor formaldehyde validation using an extensive network of ground-based Fourier-transform infrared stations	MICHEL ALEXANDRE GRUTTER DE LA MORA IVAN ORTEGA BLAKE WOLFGANG MICHAEL HELMUT STREMME et al.	ATMOSPHERIC MEASUREMENT TECHNIQUES	2020
21	Tetraspanin 33 (TSPAN33) regulates endocytosis and migration of human B lymphocytes by affecting the tension of the plasma membrane	DAVID EDUARDO MEZA SANCHEZ GUILLERMO JUAREZ VEGA ARTURO GALVAN HERNANDEZ et al.	FEBS JOURNAL	2020
22	A general purpose acetonitrile interaction potential to describe its liquid, solid and gas phases	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Martínez J.M. et al.	JOURNAL OF MOLECULAR LIQUIDS	2020
23	EVALUATION OF ANTITUMORAL EFFECT OF THE COMBINATION OF L-HISTIDINE METHYL ESTER HYDROCHLORIDE OF ANFOTERICIN B WITH ANTINEOPLASTICS ON A549 CELLS	IVAN ORTEGA BLAKE Rubi Escobar-Resendiz Jorge Reyes-Esparza et al.	FASEB JOURNAL	2020
24	Influence of Sterol in Ternary Mixtures Containing Sphingomyelin: An All-Atom Molecular Dynamics Study	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2019
25	Morphology and Dynamic Effect of Ergosterol or Cholesterol on Domains Present in POPC-Esm-Sterol SLB	ARTURO GALVAN HERNANDEZ ARMANDO ANTILLON DIAZ JORGE HERNANDEZ COBOS et al.	BIOPHYSICAL JOURNAL	2019
26	Adsorption of Polyene Antibiotics on Supported Lipid Bilayers of Different Lipid Compositions	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE	BIOPHYSICAL JOURNAL	2018
27	Lateral Heterogeneity of Cholesterol on Binary Lipid Mixtures of POPC/Chol Imaged with AFM	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2017
28	Voltage and Time Dependence of Amphotericin B Channel Activity in Lipidic Membranes	IVAN ORTEGA BLAKE Recamier, Karla S. Parmananda, Punit	BIOPHYSICAL JOURNAL	2017

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29	Lateral Heterogeneity of Cholesterol on Binary Lipid Mixtures of POPC/CHOL: a Molecular Dynamics Study	ARTURO GALVAN HERNANDEZ JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2017
30	Multi-Phase Solvation Model for Biological Membranes: Molecular Action Mechanism of Amphotericin B	IVAN ORTEGA BLAKE Falcon-Gonzalez, J. M. Jimenez-Dominguez, G. et al.	JOURNAL OF CHEMICAL THEORY AND COMPUTATION	2017
31	Electrical resonance of Amphotericin B channel activity in lipidic membranes	IVAN ORTEGA BLAKE PUNIT PARMANANDA Recamier, Karla S.	Chaos	2017
32	Toxicological evaluation of L-histidine methyl ester of Amphotericin B in vivo.	IVAN ORTEGA BLAKE Sanchez-Pena, Walfred Reyes-Esparza, Jorge et al.	FASEB JOURNAL	2017
33	Tetraspanin 33 regulates migration, adhesion and invasion properties of human B cells.	IVAN ORTEGA BLAKE ARMANDO ANTILLON DIAZ LEOPOLDO SANTOS ARGUMEDO et al.	MOLECULAR BIOLOGY OF THE CELL	2017
34	Myo1g Is An Active Player in Maintaining Cell Stiffness in B-Lymphocytes	IVAN ORTEGA BLAKE ARMANDO ANTILLON DIAZ MARIA GUADALUPE PATIÑO LOPEZ et al.	Cytoskeleton	2016
35	An Amphotericin B Derivative Equally Potent to Amphotericin B and with Increased Safety	ARMANDO ANTILLON DIAZ JAVIER GONZALEZ DAMIAN MANUEL LOPEZ ORTIZ et al.	PLOS ONE	2016
36	Multigram Scale Synthesis of A21, A New Antibiotic Equally Effective and Less Toxic than Amphotericin B	MANUEL LOPEZ ORTIZ RICARDO MAGAÑA FIGUEROA IVAN ORTEGA BLAKE et al.	ORGANIC PROCESS RESEARCH & DEVELOPMENT	2016
37	Study of Self-Association of Amphotericin B and its Synthetic Derivatives using UV-Vis Spectroscopy	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE Morales-Nava, Rosmarbel et al.	BIOPHYSICAL JOURNAL	2016
38	Is there a lo plus ld Coexistence Phase in the POPC-chol Mixture? An Insight through Molecular Dynamics Simulations	Cesar Millan Pacheco JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2016
39	X-ray accelerated photo-oxidation of as(III) in solution	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE CancheTello, Jesus et al.	JOURNAL OF PHYSICAL CHEMISTRY A	2015
40	Phase Diagram of Lipid-Cholesterol Mixture: Comparison between Different Force Fields	Cesar MillanPacheco HUMBERTO SAINT MARTIN POSADA IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2015
41	Improved Protocol for the Hydrophobization of Glass Pipettes for Use in Patch-Clamp Experiments; Tera-Seals and Tenths of Fa Noise	ARTURO GALVAN HERNANDEZ IVAN ORTEGA BLAKE	BIOPHYSICAL JOURNAL	2015
42	Liquid-Ordered Phase Formation in Cholesterol-Popc Bilayers: All-Atom Molecular Dynamics Simulations	IVAN ORTEGA BLAKE Favela-Rosales, Fernando Carbajal-Tinoco, Mauricio D.	BIOPHYSICAL JOURNAL	2014

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43	Resonance of Amphotericin B Channel Activity in Lipidic Membranes	Karla S. Recamier JAVIER GONZALEZ DAMIAN IVAN ORTEGA BLAKE	BIOPHYSICAL JOURNAL	2014
44	Amphotericin B Versus a Reduced Toxicity Chemical Analog in Aqueous and Lipid Media: An Md Comparative Study	IVAN ORTEGA BLAKE Espinosa-Caballero, Marcel I. Periole, Xavier et al.	BIOPHYSICAL JOURNAL	2014
45	Cell penetrating peptides and cationic antibacterial peptides: Two sides of the same coin	Jonathan G. Rodriguez Plaza ROSMARBEL MORALES NAVA Christian Diener et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2014
46	Interpretation of X-ray absorption spectra of As(III) in solution using Monte Carlo simulations	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Canche-Tello, Jesus et al.	JOURNAL OF PHYSICAL CHEMISTRY A	2014
47	Hydrophobization of Glass Pipettes for use in Patch-Clamp Experiments	Arturo Galvan IVAN ORTEGA BLAKE ROSMARBEL MORALES NAVA	BIOPHYSICAL JOURNAL	2013
48	Activity of Amphotericin B on the Membrane Structure Presenting Macro, Modulated and Nano Domains in Mixtures of DSPC/DOPC/POPC/CHOL	ROSMARBEL MORALES NAVA IVAN ORTEGA BLAKE	BIOPHYSICAL JOURNAL	2013
49	Aggregation States Driven by Dipole Interactions Regulates Action Mechanism of Polyene Antibiotics	IVAN ORTEGA BLAKE Carrillo-Tripp, Mauricio Periole, Xavier et al.	BIOPHYSICAL JOURNAL	2013
50	Pharmacological effect of amphotericin B and its analogue A21 in a murine candidiasis model	Odon Vite Vallejo IVAN ORTEGA BLAKE Alvarez-Ayala, Elizabeth et al.	FASEB JOURNAL	2013
51	Hydrophobization of Glass Pipettes for use in Tip-Dip Experiments	IVAN ORTEGA BLAKE Arturo Galvan Hernandez JAVIER IÑIGUEZ STAHL	BIOPHYSICAL JOURNAL	2012
52	Activity of AmB along a Phase Diagram Presenting Micro and Nanodomains	ROSMARBEL MORALES NAVA Gloria Amaya IVAN ORTEGA BLAKE	BIOPHYSICAL JOURNAL	2012
53	Theoretical study of the aqueous solvation of HgCl <sub>2</sub> : Monte Carlo simulations using second-order Moller-Plesset-derived flexible polarizable interaction potentials	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Ramirez-Solis, A. et al.	JOURNAL OF CHEMICAL PHYSICS	2012
54	Theoretical studies on the optimal X (OH) <sub>3</sub> -H <sub>2</sub> O (X = N, P, Sb) complexes: Interaction energies and topological analysis of the electronic density	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Ramirez-Solis, A. et al.	CHEMICAL PHYSICS LETTERS	2012
55	Simultaneous Determination of the Elastic Properties of the Lipid Bilayer by Atomic Force Microscopy: Bending, Tension, and Adhesion	Erasmio Ovalle Garcia Jose J. Torres Heredia ARMANDO ANTILLON DIAZ et al.	JOURNAL OF PHYSICAL CHEMISTRY B	2011

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56	Theoretical study of the optimal As(OH)(3)-H <sub>2</sub> O complex: Interaction energy and topological analysis of the electronic density	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Ramirez-Solis, A. et al.	COMPUTATIONAL AND THEORETICAL CHEMISTRY	2011
57	A refined potential for hydroxylamine clusters and the liquid phase	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Gonzalez-Espinoza, Alfredo	JOURNAL OF CHEMICAL PHYSICS	2011
58	Networking of sterols in lipid bilayers	HUMBERTO SAINT MARTIN POSADA IVAN ORTEGA BLAKE Millan-Pacheco, C. et al.	EUROPEAN JOURNAL WITH BIOPHYSICS LETTERS	2011
59	Pharmacological and toxicological study of two analogues of amphotericin by using in vitro models	IVAN ORTEGA BLAKE Leon-Buitimea, Angel Morales-Nava, Rosmarbel et al.	FASEB JOURNAL	2010
60	Molecular Action Mechanism of Amphotericin B and Structural Analogs on Biological Membranes	Rogelio Hernandez HUMBERTO SAINT MARTIN POSADA IVAN ORTEGA BLAKE et al.	BIOPHYSICAL JOURNAL	2010
61	Determination of the Number of Molecules Involved in Different Types of Amphotericin B Channels	JAVIER IÑIGUEZ STAHL JAVIER GONZALEZ DAMIAN IVAN ORTEGA BLAKE	BIOPHYSICAL JOURNAL	2010
62	Segmental Motions of Rat Thymidylate Synthase Leading to Half-The-Sites Behavior	Cesar Millan Pacheco IVAN ORTEGA BLAKE Swiniarska, Monika et al.	Biopolymers	2010
63	A theoretical study of the hydration of Rb <sup>+</sup> by Monte Carlo simulations with refined ab initio-based model potentials	JORGE HERNANDEZ COBOS HUMBERTO SAINT MARTIN POSADA IVAN ORTEGA BLAKE et al.	THEORETICAL CHEMISTRY ACCOUNTS	2010
64	Aqueous solvation of As(OH)(3): A Monte Carlo study with flexible polarizable classical interaction potentials	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Vargas, M. Cristina et al.	JOURNAL OF CHEMICAL PHYSICS	2010
65	Effect of membrane structure on the action of polyenes: I. Nystatin action in cholesterol- and ergosterol-containing membranes	JOSE FRANCISCO RECAMIER ANGELINI JAVIER GONZALEZ DAMIAN IVAN ORTEGA BLAKE et al.	JOURNAL OF MEMBRANE BIOLOGY	2010
66	Effect of Membrane Structure on the Action of Polyenes II: Nystatin Activity along the Phase Diagram of Ergosterol- and Cholesterol-Containing POPC Membranes	JAVIER GONZALEZ DAMIAN IVAN ORTEGA BLAKE	JOURNAL OF MEMBRANE BIOLOGY	2010
67	Joining patch-clamp and atomic force microscopy techniques for studying black lipid bilayers	IVAN ORTEGA BLAKE Ovalle-García E.	APPLIED PHYSICS LETTERS	2007

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68	Liquid methanol Monte Carlo simulations with a refined potential which includes polarizability, nonadditivity, and intramolecular relaxation	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Vald'z-González M. et al.	JOURNAL OF CHEMICAL PHYSICS	2007
69	A theoretical study of the hydration of Li+ by Monte Carlo simulations with refined ab initio based model potentials	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE San-Román M.L. et al.	THEORETICAL CHEMISTRY ACCOUNTS	2006
70	Ion hydration in nanopores and the molecular basis of selectivity	IVAN ORTEGA BLAKE Carrillo-Tripp M. San-Román M.L. et al.	BIOPHYSICAL CHEMISTRY	2006
71	Water liquid-vapor equilibria predicted by refined ab initio derived potentials	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Saint-Martin H. et al.	JOURNAL OF CHEMICAL PHYSICS	2005
72	Water models based on a single potential energy surface and different molecular degrees of freedom	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Saint-Martin H.	JOURNAL OF CHEMICAL PHYSICS	2005
73	Minimalist molecular model for nanopore selectivity	IVAN ORTEGA BLAKE Carrillo-Tripp M. Saint-Martin H.	PHYSICAL REVIEW LETTERS	2004
74	A comparative study of the hydration of Na+ and K+ with refined polarizable model potentials	IVAN ORTEGA BLAKE Carrillo-Tripp M. Saint-Martin H.	JOURNAL OF CHEMICAL PHYSICS	2003
75	Amphotericin B channels in the bacterial membrane: Role of sterol and temperature	HELIODORO CELIS SANDOVAL IVAN ORTEGA BLAKE Venegas B. et al.	BIOPHYSICAL JOURNAL	2003
76	Development of first-principles interaction model potentials. An application to the study of the bromide hydration	IVAN ORTEGA BLAKE Ayala R. Martínez J.M. et al.	JOURNAL OF CHEMICAL PHYSICS	2002
77	Coupling a polarizable water model to the hydrated ion-water interaction potential: A test on the Cr3+ hydration	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE HUMBERTO SAINT MARTIN POSADA et al.	JOURNAL OF CHEMICAL PHYSICS	2000
78	A mobile charge densities in harmonic oscillators (MCDHO) molecular model for numerical simulations: The water-water interaction	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Saint-Martin H. et al.	JOURNAL OF CHEMICAL PHYSICS	2000
79	On the Molecular Basis of Water Hydrolysis. A Detailed ab Initio Study	IVAN ORTEGA BLAKE Bernal-Uruchurtu M.I.	JOURNAL OF PHYSICAL CHEMISTRY A	1999
80	An ab initio study of the isomerization of Mg- and Ca-pyrophosphates	IVAN ORTEGA BLAKE HUMBERTO SAINT MARTIN POSADA McCarthy W.J. et al.	JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	1998

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81	On the role of sterol in the formation of the amphotericin B channel	IVAN ORTEGA BLAKE Cotero B.V. Rebolledo-Antúnez S.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMB RANES	1998
82	New effective potentials extraction method for the interaction between cations and water	IVAN ORTEGA BLAKE Periole X. Allouche D. et al.	JOURNAL OF PHYSICAL CHEMISTRY B	1998
83	On the molecular basis of hydrophobicity: A Monte Carlo study of propionic acid hydration	IVAN ORTEGA BLAKE SanRomán-Zimbrón M.L.	JOURNAL OF CHEMICAL PHYSICS	1997
84	Many-body forces and electron correlation in small metal clusters	ILYA KAPLAN SAVITSKY JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE et al.	PHYSICAL REVIEW A	1996
85	Toward an understanding of the hydrolysis of Mg-PP(i). An ab initio study of the isomerization reactions of neutral and anionic Mg-pyrophosphate complexes	IVAN ORTEGA BLAKE HUMBERTO SAINT MARTIN POSADA Ruiz-Vicent L.E. et al.	JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	1996
86	A refined Monte Carlo study of Mg <sup>2+</sup> and Ca <sup>2+</sup> hydration	IVAN ORTEGA BLAKE Bernal-Uruchurtu M.I.	JOURNAL OF CHEMICAL PHYSICS	1995
87	The role of hydration in the hydrolysis of pyrophosphate. A Monte Carlo simulation with polarizable-type interaction potentials	IVAN ORTEGA BLAKE HUMBERTO SAINT MARTIN POSADA Les A. et al.	BIOCHIMICA ET BIOPHYSICA ACTA-PROTEIN STRUCTURE AND MOLECULAR ENZYMOLGY	1994
88	A refined Monte Carlo study of aqueous urea solutions	JORGE HERNANDEZ COBOS IVAN ORTEGA BLAKE Bonilla-Marín M. et al.	JOURNAL OF CHEMICAL PHYSICS	1993
89	On the existence of very large nonadditivities for clusters of distorted water molecules	IVAN ORTEGA BLAKE Pastor N.P.	JOURNAL OF CHEMICAL PHYSICS	1993
90	Four-body nonadditivity in liquid water	IVAN ORTEGA BLAKE Gil-Adalid L.	JOURNAL OF CHEMICAL PHYSICS	1991
91	Ab initio calculations of the pyrophosphate hydrolysis reaction	IVAN ORTEGA BLAKE HUMBERTO SAINT MARTIN POSADA Les A. et al.	BIOCHIMICA ET BIOPHYSICA ACTA-PROTEIN STRUCTURE AND MOLECULAR ENZYMOLGY	1991

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92	A microscopic electrostatic model for the amphotericin B channel	IVAN ORTEGA BLAKE Bonilla-Marín M. Moreno-Bello M.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES	1991
93	Effect of Na <sub>3</sub> VO <sub>4</sub> on the P state of <i>Nitella translucens</i>	IVAN ORTEGA BLAKE Cruz-Mireles R.M.	PLANT PHYSIOLOGY	1991
94	Nonadditivity in an analytical intermolecular potential: The water-water interaction	IVAN ORTEGA BLAKE HUMBERTO SAINT MARTIN POSADA Medina-Llanos C.	JOURNAL OF CHEMICAL PHYSICS	1990
95	Electronic structure of substitutional oxygen in silicon	IVAN ORTEGA BLAKE JULIA TAGUEÑA PARGA RAFAEL ANGEL BARRIO PAREDES et al.	SOLID STATE COMMUNICATIONS	1989
96	A cluster calculation of group IV impurities in Si and Ge	JULIA TAGUEÑA PARGA RAFAEL ANGEL BARRIO PAREDES LUIS ENRIQUE SANSORES CUEVAS et al.	JOURNAL OF NON-CRYSTALLINE SOLIDS	1989
97	Tautomerism of uracil, cytosine, isocytosine, and some of their thio-derivatives	IVAN ORTEGA BLAKE Les, A.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	1986
98	A theoretical study of tautomerism: 2- and 4-oxopyrimidine and some of their derivatives	IVAN ORTEGA BLAKE Les, A.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	1985
99	A group theory analysis of the ambiguities in the genetic code: on the existence of a generalized genetic code	ARMANDO ANTILLON DIAZ IVAN ORTEGA BLAKE	JOURNAL OF THEORETICAL BIOLOGY	1985
100	Erratum: Ab initio Mg-(He <sup>0</sup> , He <sup>+</sup> , He <sup>2+</sup> ) potentials and ion scattering by atomic strings and planes (Physical Review a (1985) 32, 5, (3147))	IVAN ORTEGA BLAKE Barthelat J.C. Cruz S.A. et al.	PHYSICAL REVIEW A	1985
101	Ab initio Mg-(He <sup>0</sup> , He <sup>+</sup> , He <sup>2+</sup> ) potentials and ion scattering by atomic strings and planes	IVAN ORTEGA BLAKE Barthelat J.C. Cruz S.A. et al.	PHYSICAL REVIEW A	1985
102	The role of nonadditive effects in the second hydration shell of Mg <sup>2+</sup> and Ca <sup>2+</sup> . A molecular orbital study of the three-body potential energy surface	IVAN ORTEGA BLAKE OCTAVIO AUGUSTO NOVARO Y PEÑALOZA Hernandez J.	JOURNAL OF CHEMICAL PHYSICS	1984
103	The interaction of $\gamma$ -aminobutyric acid with hydrated Ca <sup>2+</sup> and Mg <sup>2+</sup> . A pseudopotential ab initio study	IVAN ORTEGA BLAKE Les A. Rybak S.	JOURNAL OF THEORETICAL BIOLOGY	1983

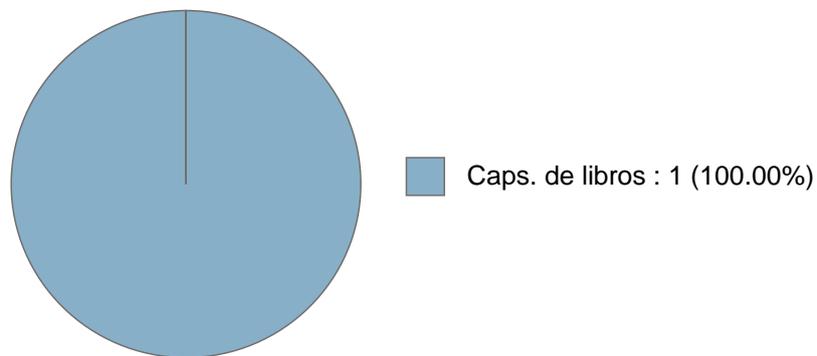
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104	Proton transference in hydrogen bonded systems. I. Uracil tautomerism	IVAN ORTEGA BLAKE Mondragón, A.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	1982
105	Doubly charged cation representation by pseudopotentials and its performance in predicting water-cation interactions	IVAN ORTEGA BLAKE Barthelat J.C. Costes-Puech E. et al.	JOURNAL OF CHEMICAL PHYSICS	1982
106	A molecular orbital study of the hydration of ions. The role of nonadditive effects in the hydration shells around Mg <sup>2+</sup> and Ca <sup>2+</sup>	IVAN ORTEGA BLAKE Novarob O. Les A. et al.	JOURNAL OF CHEMICAL PHYSICS	1981
107	Magnesium and calcium cation-ligand interactions within the pseudopotential approach. II. Cation-GABA interactions	IVAN ORTEGA BLAKE Les, A.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	1981
108	Erratum	IVAN ORTEGA BLAKE Les, A.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	1981
109	A.C. cable theory and its implications on the measurements of the membrane electric parameters	IVAN ORTEGA BLAKE	JOURNAL OF THEORETICAL BIOLOGY	1980
110	On the dissociation of doubly charged cations: (Mg-H <sub>2</sub> O) <sup>2+</sup> and [Mg-(H <sub>2</sub> O) <sub>2</sub> ] <sup>2+</sup>	IVAN ORTEGA BLAKE Les A. Del Conde P. G.	JOURNAL OF CHEMICAL PHYSICS	1980
111	The effect of cell excision and microelectrode perforation on membrane resistance measurements of <i>Nitella translucens</i>	IVAN ORTEGA BLAKE	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES	1979
112	Magnesium and calcium cation-ligand interactions within the pseudopotential approach. I. Cation-water interaction	IVAN ORTEGA BLAKE Les, A.	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	1979
113	A molecular mechanism for transcription of a closed DNA molecule	IVAN ORTEGA BLAKE	JOURNAL OF THEORETICAL BIOLOGY	1977

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**LIBROS Y CAPITULOS CON ISBN**

**Obras con registro ISBN**

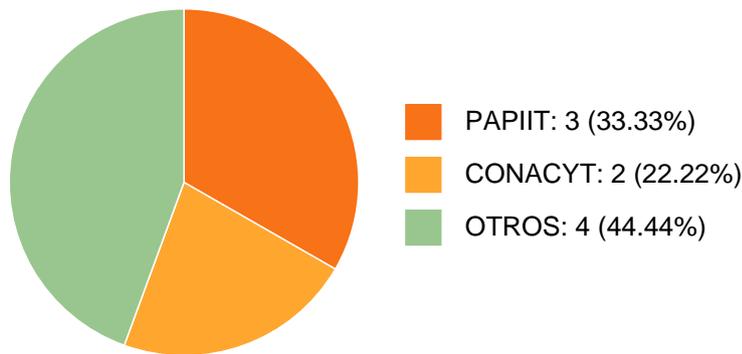


#	Título	Autores	Alcance	Año	ISBN
1	THE MICROSCOPIC STRUCTURE AND DYNAMICS OF WATER AT A SURFACE	HUMBERTO SAINT MARTIN POSADA IVAN ORTEGA BLAKE	Capítulo de un Libro	2024	9781040293225

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**PARTICIPACIÓN EN PROYECTOS**

**Histórico de participación en proyectos**



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Análisis no lineal del transporte iónico de canales unitarios en la membrana lipídica (Continuación del proyecto 165239)	IVAN ORTEGA BLAKE	Recursos CONACYT	29-07-2015	30-07-2018
2	Biofísica molecular	IVAN ORTEGA BLAKE	Recursos PAPIIT	01-01-2016	31-12-2018
3	Estructura y Dinámica de la membrana lipídica y su efecto en procesos biológicos.	IVAN ORTEGA BLAKE	Recursos PAPIIT	01-01-2020	30-11-2022
4	Nanodominios y balsas lipídicas: Origen, modulación, relevancia biológica y aplicaciones terapéuticas.	IVAN ORTEGA BLAKE	Recursos CONAHCyT	26-10-2020	05-11-2023

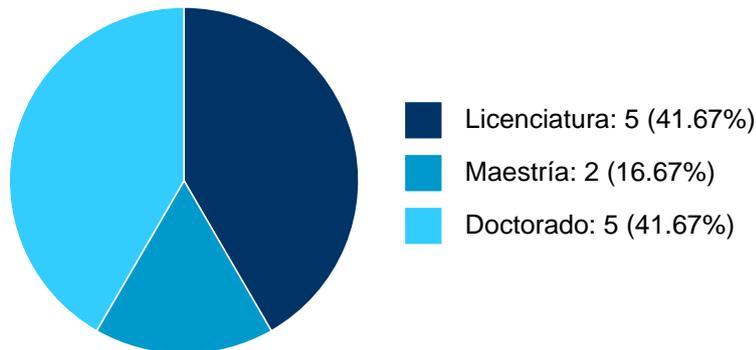
**IVAN ORTEGA BLAKE**

5	Mejoramiento de las estrategias de tratamientos contra enfermedades producidas por parásitos cinetoplastidos con importancia médica (Enfermedad de Chagas y Leishmaniasis): Uso de nanopartículas cargadas con drogas novedosas y oligonucleótidos anti sentido y el estudio de los mecanismos de muerte celular provocados por estos.	BERTHA JOSEFINA ESPINOZA GUTIERREZ IVAN ORTEGA BLAKE ARMANDO HERNANDEZ GARCIA	Recursos CONACYT	28-05-2021	27-05-2024
6	Mejoramiento de las estrategias de tratamientos contra enfermedades producidas por parásitos cinetoplásticos con importancia médica (Enfermedad de chagas y Leishmaniasis): Uso de nanoparticulas cargadas con drogas novedosas y oligonucleótidos anti sentido y el estudio de los mecanismos de muerte celular provocados por éstos.	IVAN ORTEGA BLAKE	Recursos CONAHcyT	28-05-2021	28-02-2025
7	Estudios biofísicos moleculares de estructura y dinámica de compuestos antibióticos; su interacción con la membrana celular y sus implicaciones en tratamientos terapéuticos	IVAN ORTEGA BLAKE	Recursos PAPIIT	01-01-2023	31-12-2025
8	Transferencia de un antibiótico innovador derivado de la anfotericina B: Hacia el desarrollo farmacéutico.	IVAN ORTEGA BLAKE	Recursos CONAHcyT	27-06-2018	31-12-2023
9	NANODOMINIOS Y BALSAS LIPÍDICAS: ORIGEN, MODULACIÓN, RELEVANCIA BIOLÓGICA Y APLICACIONES TERAPÉUTICAS	IVAN ORTEGA BLAKE	Recursos CONAHcyT	11-06-2024	31-12-2024

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### PARTICIPACIÓN EN TESIS

#### Histórico de Colaboraciones en Tesis



#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Efecto de ergosterol y colesterol sobre la morfología y dinámica de dominios presentes en bicapas lipídicas y sus implicaciones sobre la acción de antimicóticos poliénicos	Tesis de Doctorado	IVAN ORTEGA BLAKE,	Galván Hernández, Arturo,	Instituto de Ciencias Físicas,	2020
2	Dinámica de la expresión de poros transmembranales y sus mecanismos de acción	Tesis de Doctorado	IVAN ORTEGA BLAKE,	Recamier Méndez, Karla Susana,	Instituto de Ciencias Físicas,	2018
3	Determinación de la molaridad de los canales de amfotericina B y construcción de un modelo molecular de su ensamblaje	Tesis de Licenciatura	IVAN ORTEGA BLAKE,	Iñiguez Stahl, Javier,	Instituto de Ciencias Físicas,	2011
4	Estudio del canal unitario del antibiotico anfotericina b	Tesis de Licenciatura	IVAN ORTEGA BLAKE,	Rebolledo Antunez, Santiago,		1997

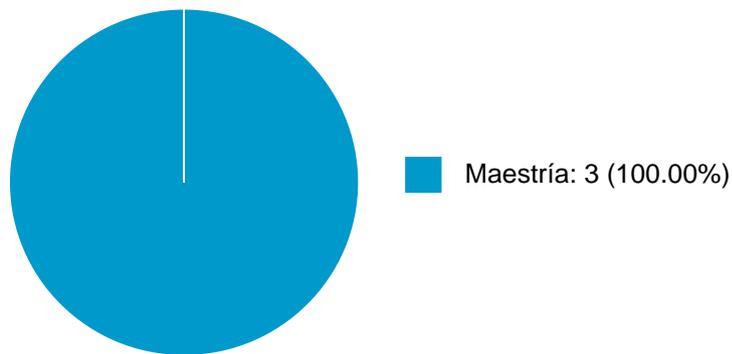
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5	Bases moleculares del efecto hidrofórico : estudios por Monte-Carlo de las soluciones acuosas de ácidos carboxílicos	Tesis de Doctorado	IVAN ORTEGA BLAKE,	San Roman Zimbron, Maria Luisa,	1997
6	Efectos estructurales de solutos en agua	Tesis de Doctorado	IVAN ORTEGA BLAKE,	Hernández Cobos, Jorge,	1995
7	Hidratación de iones metálicos : un estudio refinado por Monte Carlo	Tesis de Maestría	IVAN ORTEGA BLAKE,	Bernal Uruchurtu, Margarita Isabel,	1993
8	Cálculos moleculares y simulaciones numéricas de la reacción de hidrólisis del pirofosfato	Tesis de Doctorado	IVAN ORTEGA BLAKE,	Saint Martin Posada, Mibb Humberto,	1992
9	Efectos de hidratación : refinamiento de un modelo estereodinámico para el agua líquida	Tesis de Licenciatura	IVAN ORTEGA BLAKE,	Pastor Colon, Carmen Nina,	1992
10	La contribución de la bomba electrogénica a las características eléctricas del plasmalema y el tonoplasto en <i>Nitella translucens</i>	Tesis de Licenciatura	IVAN ORTEGA BLAKE,	Cruz Mireles, Raul Martin,	1990
11	No aditividad en un potencial analítico intermolecular. La interacción agua-agua	Tesis de Maestría	IVAN ORTEGA BLAKE,	Saint-Martin Posada, Humberto,	1988
12	Estudios moleculares sobre la estabilidad electrónica de las bases de ADN	Tesis de Licenciatura	IVAN ORTEGA BLAKE,	Mondragon Ceballos, Alfonso,	1981

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**DOCENCIA IMPARTIDA**

**Histórico de docencia**



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Ciencias Físicas	1	2014-1
2	Maestría	TEMAS SELECTOS	Instituto de Ciencias Físicas	1	2014-1
3	Maestría	SEMINARIO DE INVESTIGACION I	Instituto de Ciencias Físicas	1	2013-2



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



**IVAN ORTEGA BLAKE**

**PATENTES**

#	Título	Inventores	Sección	Año
1	NUEVOS COMPUESTOS ANALOGOS DE LA ANFOTERICINA Y COMPOSICIONES FARMACEUTICAS QUE LOS CONTIENEN.	IVAN ORTEGA BLAKE, ARMANDO ANTILLON DIAZ, ROSMARBEL MORALES NAVA,	CHEMISTRY; METALLURGYHUMAN NECESSITIES	2019
2	COMPOSICION FARMACEUTICA CONTENIENDO BENZNIDAZOL Y N-(L)-HISTIDINAMIDA DE ANFOTERICINA B PARA EL TRATAMIENTO DE TRIPANOSOMIASIS.	BERTHA JOSEFINA ESPINOZA GUTIERREZ, IGNACIO MARTINEZ MARTINEZ, IVAN ORTEGA BLAKE, et al.	HUMAN NECESSITIES	2022

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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