



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



ALBERTO DARSZON ISRAEL

Datos Generales

Nombre: ALBERTO DARSZON ISRAEL

Máximo nivel de estudios: POSDOCTORADO

Antigüedad académica en la UNAM: 34 años

Nombramientos

Vigente: INVESTIGADOR TITULAR C TC Definitivo
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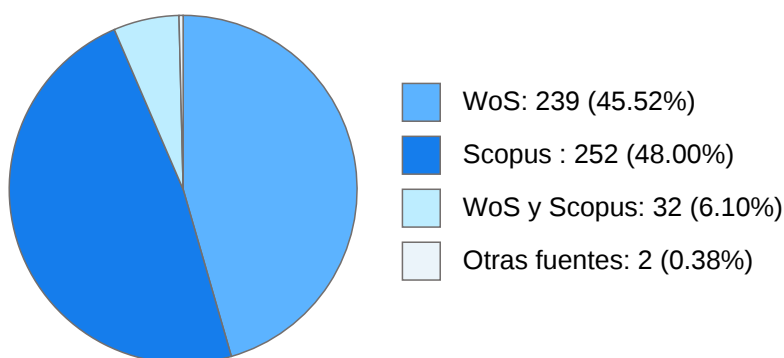
Estímulos, programas, premios y reconocimientos

SNI Emérito 2022 - VIGENTE
SNI III - 2021
PRIDE D - 2024
PASPA Estancias Sabáticas 2012 - 2013
PUN Investigación en ciencias naturales 2000

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DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Real-Time Acrosome Reaction and Intracellular Calcium Recordings in Mice Sperm	CLAUDIA SANCHEZ CARDENAS ARTURO HERNANDEZ CRUZ ALBERTO DARSZON ISRAEL et al.	Methods in Molecular Biology	2025
2	Differential role of bovine serum albumin and HCO32 in the regulation of GSK3 alpha during mouse sperm capacitation	ALBERTO DARSZON ISRAEL Mohanty G. Sanchez-Cardenas C. et al.	MOLECULAR HUMAN REPRODUCTION	2024
3	Cytosolic and Acrosomal pH Regulation in Mammalian Sperm	JULIO CESAR CHAVEZ ZAMORA SANDRA HERNANDEZ GARDUÑO CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	Cells	2024
4	Influence of extracellular ATP on mammalian sperm physiology	IGNACIO LOPEZ GONZALEZ ALBERTO DARSZON ISRAEL I. Oseguera-Lopez et al.	REPRODUCTION FERTILITY AND DEVELOPMENT	2024
5	A three-dimensional extension of the slope chain code: analyzing the tortuosity of the flagellar beat of human sperm	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO ERNESTO BRIBIESCA CORREA et al.	PATTERN ANALYSIS AND APPLICATIONS	2024
6	Reviewing mathematical models of sperm signaling networks	MAXIMINO ALDANA GONZALEZ GUSTAVO CARLOS MARTINEZ MEKLER ALBERTO DARSZON ISRAEL et al.	MOLECULAR REPRODUCTION AND DEVELOPMENT	2024

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7	Reorganization of the flagellum scaffolding induces a sperm standstill during fertilization	CLAUDIA SANCHEZ CARDENAS JOSE LUIS DE LA VEGA BELTRAN GABRIEL ISAAC CORKIDI BLANCO et al.	eLife	2024
8	Intracellular Mg ²⁺ concentrations are differentially regulated in the sperm head and mid-piece in acrosome reaction inducing conditions	CLAUDIA SANCHEZ CARDENAS JOSE LUIS DE LA VEGA BELTRAN YOLOXOCHITL SANCHEZ GUEVARA et al.	FASEB JOURNAL	2024
9	Computation of Human-Sperm Local Flagellar Instantaneous Velocity	JOSE DE JESUS FERNANDO MONTOYA NAVA ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO et al.	IFMBE Proceedings	2024
10	Deep Learning-Based Classification and Segmentation of Sperm Head and Flagellum for Image-Based Flow Cytometry	ALBERTO DARSZON ISRAEL ADAN OSWALDO GUERRERO CARDENAS Hernández-Herrera P. et al.	COMPUTACION Y SISTEMAS	2023
11	Artifacts Generated by the 3D Rotation of a Freely-Swimming Human Sperm in the Measurement of Intracellular Ca ²⁺	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO Bribiesca-Sánchez A. et al.	IFMBE Proceedings	2023
12	High-throughput screening method for discovering CatSper inhibitors using membrane depolarization caused by external calcium chelation and fluorescent cell barcoding	ALBERTO DARSZON ISRAEL Luque G.M. Schiavi-Ehrenhaus L.J. et al.	Frontiers In Cell And Developmental Biology	2023
13	Cholesterol-enriched nanodomains analysis by single molecule localization of UnaG-D4 cholesterol probe and transient formation and detection of BODIPY-cholesterol red-shifted dimers in the plasma membrane of mouse sperm	DAVID TORRES HERNANDEZ JOSE LUIS DE LA VEGA BELTRAN ALBERTO DARSZON ISRAEL et al.	BIOPHYSICAL JOURNAL	2023
14	ATP increases head volume in capacitated human sperm via a purinergic channel	IGNACIO LOPEZ GONZALEZ CLAUDIA SANCHEZ CARDENAS JOSE LUIS DE LA VEGA BELTRAN et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIO NS	2023
15	Two-pore channel 1 and Ca ²⁺ release-activated Ca ²⁺ channels contribute to the acrosomal pH-dependent intracellular Ca ²⁺ increase in mouse sperm	ALBERTO DARSZON ISRAEL Oliver E.I. Jabloński M. et al.	JOURNAL OF PHYSIOLOGY-LO NDON	2023
16	A Measure of Tortuosity for 3D Curves: Identifying 3D Beating Patterns of Sperm Flagella	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO ERNESTO BRIBIESCA CORREA et al.	Lecture Notes in Computer Science	2023

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17	Human sperm rotate with a conserved direction during free swimming in four dimensions	GABRIEL ISAAC CORKIDI BLANCO NEIL CHARLES BRUCE DAVIDSON ALBERTO DARSZON ISRAEL et al.	JOURNAL OF CELL SCIENCE	2023
18	C2CD6 regulates targeting and organization of the CatSper calcium channel complex in sperm flagella	JOSE LUIS DE LA VEGA BELTRAN ALBERTO DARSZON ISRAEL Yang F. et al.	Development	2022
19	Acrosomal alkalinization occurs during human sperm capacitation	ANDRES ALDANA GONZALEZ CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL et al.	MOLECULAR HUMAN REPRODUCTION	2022
20	Crosstalk between protein kinases A and C regulates sea urchin sperm motility	ARLET DEL CARMEN LOZA HUERTA ALBERTO DARSZON ISRAEL MA. DEL CARMEN BELTRAN NUÑEZ et al.	Zygote	2022
21	Human sperm acrosome becomes alkalinized during capacitation	CESAR TREVIÑO TREVIÑO ALBERTO DARSZON ISRAEL G. Carrasquel Martinez et al.	HUMAN REPRODUCTION	2022
22	3D+t feature-based descriptor for unsupervised flagellar human sperm beat classification	JOSE DE JESUS FERNANDO MONTOYA NAVA JIMENA OLVERES MONTIEL ALBERTO DARSZON ISRAEL et al.	IEEE Engineering in Medicine and Biology Society Conference Proceedings	2022
23	Extending resolution within a single imaging frame	YASEL GARCES SUAREZ ALBERTO DARSZON ISRAEL CHRISTOPHER DAVID WOOD et al.	NATURE COMMUNICATIONS	2022
24	Long-term segmentation-free assessment of head-flagellum movement and intracellular calcium in swimming human sperm	GABRIEL ISAAC CORKIDI BLANCO ALBERTO DARSZON ISRAEL Paul Hernandez-Herrera et al.	JOURNAL OF CELL SCIENCE	2021
25	Starvation induces an increase in intracellular calcium and potentiates the progesterone-induced mouse sperm acrosome reaction	CLAUDIA SANCHEZ CARDENAS JOSE LUIS DE LA VEGA BELTRAN ARTURO HERNANDEZ CRUZ et al.	FASEB JOURNAL	2021
26	Electrophysiological Characterization of CatSper Channel in Sea Urchin Sperm	MA. DEL CARMEN BELTRAN NUÑEZ ALBERTO DARSZON ISRAEL Veronica Loyo Celis et al.	BIOPHYSICAL JOURNAL	2021
27	Membrane hyperpolarization abolishes calcium oscillations that prevent induced acrosomal exocytosis in human sperm	CLAUDIA SANCHEZ CARDENAS ARTURO HERNANDEZ CRUZ ALBERTO DARSZON ISRAEL et al.	FASEB JOURNAL	2021
28	Direct activation of the proton channel by albumin leads to human sperm capacitation and sustained release of inflammatory mediators by neutrophils	ALBERTO DARSZON ISRAEL Zhao R. Dai H. et al.	NATURE COMMUNICATIONS	2021

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29	RETRACTION: Human sperm uses asymmetric and anisotropic flagellar controls to regulate swimming symmetry and cell steering (Retraction of Vol 6, art no EABA5168, 2021)	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO Hermes Gadelha et al.	Science Advances	2021
30	Discrete Dynamic Model of the Mammalian Sperm Acrosome Reaction: The Influence of Acrosomal pH and Physiological Heterogeneity	ANDRES ALDANA GONZALEZ GUSTAVO CARLOS MARTINEZ MEKLER ALBERTO DARSZON ISRAEL et al.	FRONTIERS IN PHYSIOLOGY	2021
31	Epac activation induces an extracellular Ca ²⁺ -independent Ca ²⁺ wave that triggers acrosome reaction in human spermatozoa	ALBERTO DARSZON ISRAEL CLAUDIA LYDIA TREVIÑO SANTA CRUZ Esperanza Mata-Martinez et al.	ANDROLOGY	2021
32	Cdc42 localized in the CatSper signaling complex regulates cAMP-dependent pathways in mouse sperm	ALBERTO DARSZON ISRAEL Guillermina M. Luque Xinran Xu et al.	FASEB JOURNAL	2021
33	CatSper channels in sea urchin sperm	MA. DEL CARMEN BELTRAN NUÑEZ ALBERTO DARSZON ISRAEL Veronica Loyo-Celis et al.	Cell Calcium	2021
34	Role of calcium oscillations in sperm physiology	CLAUDIA SANCHEZ CARDENAS JULIO CESAR CHAVEZ ZAMORA CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	Biosystems	2021
35	Role of calcium oscillations in sperm physiology (vol 209, 104524, 2021)	CLAUDIA SANCHEZ CARDENAS JULIO CESAR CHAVEZ ZAMORA ADAN OSWALDO GUERRERO CARDENAS et al.	Biosystems	2021
36	Mathematical model reveals that heterogeneity in the number of ion transporters regulates the fraction of mouse sperm capacitation	ANDRES ALDANA GONZALEZ ALBERTO DARSZON ISRAEL GUSTAVO CARLOS MARTINEZ MEKLER et al.	PLOS ONE	2021
37	Quantitative Intracellular pH Determinations in Single Live Mammalian Spermatozoa Using the Ratiometric Dye SNARF-5F	JULIO CESAR CHAVEZ ZAMORA ALBERTO DARSZON ISRAEL CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	Frontiers In Cell And Developmental Biology	2020
38	Modular analysis of the control of flagellar Ca ²⁺ -spike trains produced by CatSper and CaV channels in sea urchin sperm	ALBERTO DARSZON ISRAEL ADAN OSWALDO GUERRERO CARDENAS TAKUYA NISHIGAKI SHIMIZU et al.	PLOS COMPUTATIONAL BIOLOGY	2020
39	Sperm chemotaxis is driven by the slope of the chemoattractant concentration field	MA. DEL CARMEN BELTRAN NUÑEZ CHRISTOPHER DAVID WOOD ALBERTO DARSZON ISRAEL et al.	eLife	2020

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40	Differences and Similarities: The Richness of Comparative Sperm Physiology	ALBERTO DARSZON ISRAEL TAKUYA NISHIGAKI SHIMIZU IGNACIO LOPEZ GONZALEZ et al.	Physiology	2020
41	CaV3.1 channel pore pseudo-symmetry revealed by selectivity filter mutations in its domains I/II	ANDRES ALDANA GONZALEZ ALBERTO DARSZON ISRAEL TAKUYA NISHIGAKI SHIMIZU et al.	Cell Calcium	2020
42	Human sperm uses asymmetric and anisotropic flagellar controls to regulate swimming symmetry and cell steering	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO Hermes Gadelha et al.	Science Advances	2020
43	Seeing is believing: Current methods to observe sperm acrosomal exocytosis in real time	CLAUDIA SANCHEZ CARDENAS ALBERTO DARSZON ISRAEL Balestrini P.A. et al.	MOLECULAR REPRODUCTION AND DEVELOPMENT	2020
44	Tyrosine phosphorylation signaling regulates Ca ²⁺ entry by affecting intracellular pH during human sperm capacitation	ALBERTO DARSZON ISRAEL Brukman N.G. Nuñez S.Y. et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2019
45	Heterologous calcium-dependent inactivation of Orail by neighboring TRPV1 channels modulates cell migration and wound healing	ARLETTE BOHORQUEZ HERNANDEZ JONATHAN ENRIQUE PACHECO ROMERO ALICIA SAMPIERI GARCIA et al.	Communications Biology	2019
46	Analysis of sperm chemotaxis	ADAN OSWALDO GUERRERO CARDENAS ALBERTO DARSZON ISRAEL Ramírez-Gómez H.V. et al.	Methods in Cell Biology	2019
47	Nonenzymatically oxidized arachidonic acid regulates T-type Ca ²⁺ currents in mouse spermatogenic cells	GERARDO ALFONSO CORZO BURGUETE JOSE FEDERICO DEL RIO PORTILLA ALBERTO DARSZON ISRAEL et al.	FEBS LETTERS	2019
48	Transient Sperm Starvation Improves the Outcome of Assisted Reproductive Technologies	ALBERTO DARSZON ISRAEL Navarrete F.A. Aguila L. et al.	Frontiers In Cell And Developmental Biology	2019
49	3-D + t Human Sperm Flagellum Tracing in Low SNR Fluorescence Images	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO Paul Hernandez-Herrera et al.	IEEE TRANSACTIONS ON MEDICAL IMAGING	2018
50	CatSper channels are regulated by protein kinase A	JOSE LUIS DE LA VEGA BELTRAN ALBERTO DARSZON ISRAEL Orta G. et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2018
51	Super-resolution imaging of live sperm reveals dynamic changes of the actin cytoskeleton during acrosomal exocytosis	PAULINA TORRES RODRIGUEZ CLAUDIA SANCHEZ CARDENAS ADAN OSWALDO GUERRERO CARDENAS et al.	JOURNAL OF CELL SCIENCE	2018

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52	Role of human Hv1 channels in sperm capacitation and white blood cell respiratory burst established by a designed peptide inhibitor	ALBERTO DARSZON ISRAEL Ruiming Zhao Kelleigh Kennedy et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2018
53	Intracellular Ca ²⁺ threshold reversibly switches flagellar beat off and on	CLAUDIA SANCHEZ CARDENAS ARTURO HERNANDEZ CRUZ GABRIEL ISAAC CORKIDI BLANCO et al.	BIOLOGY OF REPRODUCTION	2018
54	Acrosomal alkalization triggers Ca ²⁺ release and acrosome reaction in mammalian spermatozoa	JULIO CESAR CHAVEZ ZAMORA JOSE LUIS DE LA VEGA BELTRAN PEDRO SERGIO URQUIJO TORRES et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2018
55	pH-dependent Ca ²⁺ oscillations prevent untimely acrosome reaction in human sperm	ALBERTO DARSZON ISRAEL CLAUDIA LYDIA TREVIÑO SANTA CRUZ Mata-Martínez E.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	2018
56	Disruption of protein kinase A localization induces acrosomal exocytosis in capacitated mouse sperm	JOSE LUIS DE LA VEGA BELTRAN ALBERTO DARSZON ISRAEL Cintia Stival et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2018
57	CFTR/ENaC-dependent regulation of membrane potential during human sperm capacitation is initiated by bicarbonate uptake through NBC	CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL Lis C. Puga Molina et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2018
58	Network model predicts that CatSper is the main Ca ²⁺ channel in the regulation of sea urchin sperm motility	Jesus Espinal Enriquez ALBERTO DARSZON ISRAEL MA. DEL CARMEN BELTRAN NUÑEZ et al.	SCIENTIFIC REPORTS	2017
59	Sperm flagellum center-line tracing in fluorescence 3D+t low SNR stacks using an iterative minimal path method	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO Hernandez-Herrera, P. et al.	Lecture Notes in Computer Science	2017
60	Essential Role of CFTR in PKA-Dependent Phosphorylation, Alkalinization, and Hyperpolarization During Human Sperm Capacitation	PAULINA TORRES RODRIGUEZ ALBERTO DARSZON ISRAEL CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2017
61	Are there intracellular Ca ²⁺ oscillations correlated with flagellar beating in human sperm? A three vs. two-dimensional analysis	GABRIEL ISAAC CORKIDI BLANCO CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL et al.	MOLECULAR HUMAN REPRODUCTION	2017

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62	Speract, a sea urchin egg peptide that regulates sperm motility, also stimulates sperm mitochondrial metabolism	ALBERTO DARSZON ISRAEL MA. DEL CARMEN BELTRAN NUÑEZ Garcia-Rincon, Juan	BIOCHIMICA ET BIOPHYSICA ACTA-BIOENERGETICS	2016
63	Regulation of Spermatogenic Cell T-Type Ca ²⁺ Currents by Zn ²⁺ : Implications in Male Reproductive Physiology	IGNACIO LOPEZ GONZALEZ CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL	JOURNAL OF CELLULAR PHYSIOLOGY	2016
64	A Specific Transitory Increase in Intracellular Calcium Induced by Progesterone Promotes Acrosomal Exocytosis in Mouse Sperm	CLAUDIA LYDIA TREVIÑO SANTA CRUZ ARTURO HERNANDEZ CRUZ ALBERTO DARSZON ISRAEL et al.	BIOLOGY OF REPRODUCTION	2016
65	Role of Ion Channels in the Sperm Acrosome Reaction	MA. DEL CARMEN BELTRAN NUÑEZ CLAUDIA LYDIA TREVIÑO SANTA CRUZ JULIO CESAR CHAVEZ ZAMORA et al.	Advances in Anatomy Embryology and Cell Biology	2016
66	The tyrosine kinase FER is responsible for the capacitation-associated increase in tyrosine phosphorylation in murine sperm	CLAUDIA SANCHEZ CARDENAS ALBERTO DARSZON ISRAEL Alvau, Antonio et al.	Development	2016
67	Transient exposure to calcium ionophore enables in vitro fertilization in sterile mouse models	ALBERTO DARSZON ISRAEL Navarrete, Felipe A. Alvau, Antonio et al.	SCIENTIFIC REPORTS	2016
68	Biphasic Role of Calcium in Mouse Sperm Capacitation Signaling Pathways	Claudia SanchezCardenas ALBERTO DARSZON ISRAEL Navarrete, Felipe A. et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2015
69	Flow Cytometry Analysis Reveals That Only a Subpopulation of Mouse Sperm Undergoes Hyperpolarization During Capacitation	ALBERTO DARSZON ISRAEL Escoffier, Jessica Navarrete, Felipe et al.	BIOLOGY OF REPRODUCTION	2015
70	Single cell imaging reveals that the motility regulator speract induces a flagellar alkalinization that precedes and is independent of Ca ²⁺ influx in sea urchin spermatozoa	Ana Laura GonzalezCota ALBERTO DARSZON ISRAEL Silva, Pedro Angelo et al.	FEBS LETTERS	2015
71	CRI SP1 as a novel CatSper regulator that modulates sperm motility and orientation during fertilization	Pablo MartinezLopez Gerardo Orta Dulce FigueirasFierro et al.	JOURNAL OF CELL BIOLOGY	2015

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72	Pharmacology of hSlo3 channels and their contribution in the capacitation-associated hyperpolarization of human sperm	Oscar SanchezCarranza PAULINA TORRES RODRIGUEZ ALBERTO DARSZON ISRAEL et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	2015
73	T-type Ca ²⁺ channels in spermatogenic cells and sperm	ALBERTO DARSZON ISRAEL ARTURO HERNANDEZ CRUZ	PFLUGERS ARCHIV-EUROPEAN JOURNAL OF PHYSIOLOGY	2014
74	Membrane hyperpolarization during human sperm capacitation	IGNACIO LOPEZ GONZALEZ P. Torres Rodriguez O. Sanchez Carranza et al.	MOLECULAR HUMAN REPRODUCTION	2014
75	Intracellular pH in sperm physiology	TAKUYA NISHIGAKI SHIMIZU Omar Jose Ana Laura Gonzalez Cota et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	2014
76	In Silico determination of the effect of multi-target drugs on calcium dynamics signaling network underlying sea urchin spermatozoa motility	Jesus Espinal Enriquez ALBERTO DARSZON ISRAEL ADAN OSWALDO GUERRERO CARDENAS et al.	PLOS ONE	2014
77	Zn(2+) induces hyperpolarization by activation of a K(+) channel and increases intracellular Ca(2+) and pH in sea urchin spermatozoa.	MA. DEL CARMEN BELTRAN NUÑEZ TAKUYA NISHIGAKI SHIMIZU ALBERTO DARSZON ISRAEL et al.	DEVELOPMENTAL BIOLOGY	2014
78	SLO3 K ⁺ channels control calcium entry through CATSPER channels in sperm	JOSE LUIS DE LA VEGA BELTRAN CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2014
79	Soluble adenylyl cyclase of sea urchin spermatozoa	Arlet Loza Huerta Juan Garcia Rincon ALBERTO DARSZON ISRAEL et al.	BIOCHIMICA ET BIOPHYSICA ACTA-MOLECULAR BASIS OF DISEASE	2014
80	Acrosome reaction and Ca ²⁺ imaging in single human spermatozoa: New regulatory roles of [Ca ²⁺] _i	CLAUDIA LYDIA TREVIÑO SANTA CRUZ ARTURO HERNANDEZ CRUZ ALBERTO DARSZON ISRAEL et al.	BIOLOGY OF REPRODUCTION	2014
81	The anti-inflammatory drug celecoxib inhibits t-type Ca ²⁺ currents in spermatogenic cells yet it elicits the acrosome reaction in mature sperm	E. Balderas C. Sanchez Cardenas JOSE LUIS DE LA VEGA BELTRAN et al.	FEBS LETTERS	2013

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82	Certain Strongylocentrotus purpuratus sperm mitochondrial proteins co-purify with low density detergent-insoluble membranes and are PKA or PKC-substrates possibly involved in sperm motility regulation	ARLET DEL CARMEN LOZA HUERTA ROSARIO VERA ESTRELLA ALBERTO DARSZON ISRAEL et al.	BIOCHIMICA ET BIOPHYSICA ACTA-GENERAL SUBJECTS	2013
83	Ca ²⁺ ionophore A23187 can make mouse spermatozoa capable of fertilizing in vitro without activation of cAMP-dependent phosphorylation pathways	Claudia Sanchez Cardenas ALBERTO DARSZON ISRAEL Tateno, Hiroyuki et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2013
84	Compartmentalization of distinct cAMP signaling pathways in mammalian sperm	JOSE LUIS DE LA VEGA BELTRAN Claudia Sanchez Cardenas ALBERTO DARSZON ISRAEL et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2013
85	Electrophysiological evidence for the presence of cystic fibrosis transmembrane conductance regulator (CFTR) in mouse sperm	Dulce Figueiras Fierro Pablo Martinez Lopez Enrique Balderas et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2013
86	Niflumic acid disrupts marine spermatozoan chemotaxis without impairing the spatiotemporal detection of chemoattractant gradients	ADAN OSWALDO GUERRERO CARDENAS Jesus Espinal CHRISTOPHER DAVID WOOD et al.	JOURNAL OF CELL SCIENCE	2013
87	Ion Permeabilities in Mouse Sperm Reveal an External Trigger for SLO3-Dependent Hyperpolarization	JOSE LUIS DE LA VEGA BELTRAN CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL et al.	PLOS ONE	2013
88	K ⁺ and Cl ⁻ Channels and Transporters in Sperm Function	G. Orta CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL et al.	Current Topics in Developmental Biology	2013
89	Mutant Analysis of the Determinants of Sperm Membrane Resting Potential	CLAUDIA LYDIA TREVIÑO SANTA CRUZ ALBERTO DARSZON ISRAEL JOSE LUIS DE LA VEGA BELTRAN et al.	BIOPHYSICAL JOURNAL	2012
90	Mouse Sperm Membrane Potential Hyperpolarization Is Necessary and Sufficient to Prepare Sperm for the Acrosome Reaction	JOSE LUIS DE LA VEGA BELTRAN Claudia Sanchez Cardenas CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2012
91	Acute Slices of Mice Testis Seminiferous Tubules Unveil Spontaneous and Synchronous Ca ²⁺ Oscillations in Germ Cell Clusters	Claudia Sanchez Cardenas ADAN OSWALDO GUERRERO CARDENAS CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	BIOLOGY OF REPRODUCTION	2012

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92	A segmentation algorithm for automated tracking of fast swimming unlabelled cells in three dimensions	JAIME ARTURO PIMENTEL CABRERA ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO et al.	JOURNAL OF MICROSCOPY	2012
93	Participation of the Cl ⁻ /HCO ₃ ⁻ Exchangers SLC26A3 and SLC26A6, the Cl ⁻ Channel CFTR, and the Regulatory Factor SLC9A3R1 in Mouse Sperm Capacitation	ALBERTO DARSZON ISRAEL CLAUDIA LYDIA TREVIÑO SANTA CRUZ JULIO CESAR CHAVEZ ZAMORA et al.	BIOLOGY OF REPRODUCTION	2012
94	Niflumic acid blocks native and recombinant T-type channels	Enrique Balderas Rogelio Ateaga Tlecuitl Manuel Rivera et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2012
95	Flow cytometry analysis reveals a decrease in intracellular sodium during sperm capacitation	ALBERTO DARSZON ISRAEL Escoffier, Jessica Krapf, D et al.	JOURNAL OF CELL SCIENCE	2012
96	Human spermatozoa possess a calcium-dependent chloride channel that may participate in the acrosomal reaction	Gerardo Orta Omar Jose CLAUDIA LYDIA TREVIÑO SANTA CRUZ et al.	JOURNAL OF PHYSIOLOGY-LONDON	2012
97	A caged progesterone analog alters intracellular Ca ²⁺ and flagellar bending in human sperm	M. Rocio Servin Vences ADAN OSWALDO GUERRERO CARDENAS ALBERTO DARSZON ISRAEL et al.	Reproduction	2012
98	Are TRP channels involved in sperm development and function?	ALBERTO DARSZON ISRAEL Claudia Sanchez Cardenas Gerardo Orta et al.	CELL AND TISSUE RESEARCH	2012
99	Permeability Changes of Manduca sexta Midgut Brush Border Membranes Induced by Oligomeric Structures of Different Cry Toxins (vol 212, pg 61, 2006)	ROBERTO CARLOS MUÑOZ GARAY J. Sanchez ALBERTO DARSZON ISRAEL et al.	JOURNAL OF MEMBRANE BIOLOGY	2012
100	The opening of maitotoxin-sensitive calcium channels induces the acrosome reaction in human spermatozoa: differences from the zona pellucida	Gerardo A. De Blas JOSE LUIS DE LA VEGA BELTRAN TAKUYA NISHIGAKI SHIMIZU et al.	ASIAN JOURNAL OF ANDROLOGY	2011
101	ION CHANNEL REGULATION BY CRISP4 IN MOUSE SPERMATOZOA, IMPLICATIONS FOR THE ACROSOME REACTION	ALBERTO DARSZON ISRAEL Koppers, Adam Gibbs, Gerard et al.	JOURNAL OF ANDROLOGY	2011
102	ION CHANNEL REGULATION BY CRISP4 IN MOUSE SPERMATOZOA, IMPLICATIONS FOR THE ACROSOME REACTION	ALBERTO DARSZON ISRAEL Koppers, A Gibbs, Gerard et al.	JOURNAL OF ANDROLOGY	2011
103	TRPM8 in Mouse Sperm Detects Temperature Changes and May Influence the Acrosome Reaction	Pablo Martinez Lopez CLAUDIA LYDIA TREVIÑO SANTA CRUZ JOSE LUIS DE LA VEGA BELTRAN et al.	JOURNAL OF CELLULAR PHYSIOLOGY	2011

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216	Endogenous activity of cyclic nucleotide-dependent protein kinase in plasma membranes isolated from Strongylocentrotus purpuratus sea urchin sperm	ALBERTO DARSZON ISRAEL Garcia-Soto J. Araiza L.M. et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	1991
217	High concentrations of guanidine chloride activate lactate dehydrogenase in low water media	GEORGINA REGINA GARZA RAMOS MARTINEZ ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	1990
218	Enzyme catalysis in organic solvents with low water content at high temperatures. The adenosinetriphosphatase of submitochondrial particles	GEORGINA REGINA GARZA RAMOS MARTINEZ ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU et al.	BIOCHEMISTRY	1990
219	Ca ²⁺ channels from the sea urchin sperm plasma membrane	ALBERTO DARSZON ISRAEL Liévano A. Vega-Saenzdemiera E.C.	JOURNAL OF GENERAL PHYSIOLOGY	1990
220	Purification and reconstitution of potassium channel proteins from squid axon membranes	ALBERTO DARSZON ISRAEL LOURIVAL DOMINGOS POSSANI POSTAY Prestipino G. et al.	FEBS LETTERS	1989

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221	Evidence for the activation of two different Ca^{2+} channels during the egg jelly-induced acrosome reaction of sea urchin sperm	ALBERTO DARSZON ISRAEL Guerrero A.	JOURNAL OF BIOLOGICAL CHEMISTRY	1989
222	Catalytic activity of cytochrome oxidase and cytochrome c in apolar solvents containing phospholipids and low amounts of water	JOSE EDGARDO ESCAMILLA MARVAN ARMANDO GOMEZ PUYOU ALBERTO DARSZON ISRAEL et al.	ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS	1989
223	Catalysis and thermostability of mitochondrial $\text{F}_1\text{-ATPase}$ in toluene-phospholipid-low-water systems	GEORGINA REGINA GARZA RAMOS MARTINEZ ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU et al.	BIOCHEMISTRY	1989
224	Egg jelly triggers a calcium influx which inactivates and is inhibited by calmodulin antagonists in the sea urchin sperm	ALBERTO DARSZON ISRAEL Guerrero A.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES	1989
225	Incorporation of ionic channels from yeast plasma membranes into black lipid membranes.	FROYLAN MIGUEL GOMEZ LAGUNAS ALBERTO DARSZON ISRAEL Liévano A. et al.	BIOPHYSICAL JOURNAL	1989
226	Sea urchin sperm head plasma membranes: characteristics and egg jelly induced Ca^{2+} and Na^{+} uptake	ANA MARIA LOPEZ COLOME ALBERTO DARSZON ISRAEL García-Soto J. et al.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES	1988
227	Transfer of spores, bacteria and yeast into toluene containing phospholipids and low amounts of water: Preservation of the bacterial respiratory chain	ALBERTO DARSZON ISRAEL JOSE EDGARDO ESCAMILLA MARVAN ARMANDO GOMEZ PUYOU et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	1988
228	Internal pH can regulate Ca^{2+} uptake and the acrosome reaction in sea urchin sperm	ALBERTO DARSZON ISRAEL García-Soto J. González-Martínez M. et al.	DEVELOPMENTAL BIOLOGY	1987
229	A fast transient hyperpolarization occurs during the sea urchin sperm acrosome reaction induced by egg jelly	ALBERTO DARSZON ISRAEL González-Martínez M.	FEBS LETTERS	1987
230	[36] Planar bilayers: A powerful tool to study membrane proteins involved in ion transport	ALBERTO DARSZON ISRAEL	Methods in Enzymology	1986
231	Simultaneous synthesis and hydrolysis of ATP regulated by the inhibitor protein in submitochondrial particles	MA. DEL CARMEN BELTRAN NUÑEZ ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU et al.	EUROPEAN JOURNAL OF BIOCHEMISTRY	1986
232	Thermostability of membrane enzymes in organic solvents	ARMANDO GOMEZ PUYOU ALBERTO DARSZON ISRAEL Ayala G. et al.	FEBS LETTERS	1986

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23 3	Ion Transport Mechanisms in Sea Urchin Sperm	ALBERTO DARSZON ISRAEL JORGE FELIX SANCHEZ QUINTANA GARCÍ-SOTO, J. et al.	DEVELOPMENT GROWTH & DIFFERENTIATION	1986
23 4	High pH-induced acrosome reaction and Ca ²⁺ uptake in sea urchin sperm suspended in Na ⁺ -free seawater	ALBERTO DARSZON ISRAEL García-Soto J.	DEVELOPMENTAL BIOLOGY	1985
23 5	Increasing intracellular pH of sea urchin sperm with NH ₄ Cl induces Ca ²⁺ uptake and acrosome reaction in the absence of egg jelly	ALBERTO DARSZON ISRAEL García-Soto J. de la Torre L.d.	FEBS LETTERS	1985
23 6	Extraction of mitochondrial membrane proteins into organic solvents in a functional state	ARMANDO GOMEZ PUYOU ALBERTO DARSZON ISRAEL Ayala G. et al.	BIOCHIMICA ET BIOPHYSICA ACTA-BIOENER GETICS	1985
23 7	Single-channel activity of bilayers derived from sea urchin sperm plasma membranes at the tip of a patch-clamp electrode	JORGE FELIX SANCHEZ QUINTANA ALBERTO DARSZON ISRAEL Lievano A.	DEVELOPMENTAL BIOLOGY	1985
23 8	Release of the inhibitory action of the natural ATPase inhibitor protein on the mitochondrial ATPase	MA. DEL CARMEN BELTRAN NUÑEZ ARMANDO GOMEZ PUYOU ALBERTO DARSZON ISRAEL et al.	EUROPEAN JOURNAL OF BIOCHEMISTRY	1984
23 9	Adenylate cyclase activity of membrane fractions isolated from sea urchin sperm	ALBERTO DARSZON ISRAEL Mourelle M. Vargas I.	Gamete Research	1984
24 0	Response of isolated sperm plasma membranes from sea urchin to egg jelly	ALBERTO DARSZON ISRAEL Gould M. De De La Torre L. et al.	EUROPEAN JOURNAL OF BIOCHEMISTRY	1984
241	Oxidative phosphorylation and the P(i) ATP exchange reaction of submitochondrial particles under the influence of organic solvents	ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU de Gomez-Puyou M.T. et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	1984
24 2	A small angle x-ray scattering study of a rhodopsin-lipid complex in hexane.	ALBERTO DARSZON ISRAEL Ramakrishnan V.R. Montal M.	JOURNAL OF BIOLOGICAL CHEMISTRY	1983
24 3	Strategies in the reassembly of membrane proteins into lipid bilayer systems and their functional assay	ALBERTO DARSZON ISRAEL	JOURNAL OF BIOENERGETICS AND BIOMEMBRANES	1983
24 4	Extraction of mitochondrial protein-lipid complexes into organic solvents: an approach to study the interaction between the ATPase and the mitochondrial ATPase-inhibitor protein.	ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU	EUROPEAN JOURNAL OF BIOCHEMISTRY	1982

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24 6	Interaction of mitochondrial ATPase with its inhibitor protein	ARMANDO GOMEZ PUYOU ALBERTO DARSZON ISRAEL Sanchez Bustamante V.J. et al.	ANNALS OF THE NEW YORK ACADEMY OF SCIENCES	1982
24 7	Rhodopsin-phospholipid complexes in apolar solvents: Characteristics and mechanism of extraction	ALBERTO DARSZON ISRAEL	VISION RES	1982
24 8	Extraction of mitochondrial protein-lipid complexes into organic solvents: Inhibition of cytochrome oxidase electron transport by dicyclohexylcarbodiimide and triphenyltin chloride	ALBERTO DARSZON ISRAEL ARMANDO GOMEZ PUYOU Barranco J.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	1981
24 9	Reassembly of protein-lipid complexes into large bilayer vesicles: perspectives for membrane reconstitution.	ALBERTO DARSZON ISRAEL Vandenberg C.A. Schönfeld M. et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	1980
25 0	Rhodopsin in model membranes: the kinetics of channel opening and closing in rhodopsin-containing planar lipid bilayers.	ALBERTO DARSZON ISRAEL Ramakrishnan V. Philipp M. et al.	ANNALS OF THE NEW YORK ACADEMY OF SCIENCES	1980
251	Channel activity in bilayers made from a purified rhodopsin-phosphatidylcholine complex.	ALBERTO DARSZON ISRAEL	ANNALS OF THE NEW YORK ACADEMY OF SCIENCES	1980
25 2	Incorporation of membrane proteins into large single bilayer vesicles. Application to rhodopsin	ALBERTO DARSZON ISRAEL Vandenberg C.A. Ellisman M.H. et al.	JOURNAL OF CELL BIOLOGY	1979
25 3	Purified rhodopsin-phosphatidylcholine complex in hexane: Formation and characterization	ALBERTO DARSZON ISRAEL Blair L. Montal M.	FEBS LETTERS	1979
25 4	Rhodopsin-phospholipid complexes in apolar environments: Photochemical characterization	ALBERTO DARSZON ISRAEL Strasser R.J. Montal M.	BIOCHEMISTRY	1979

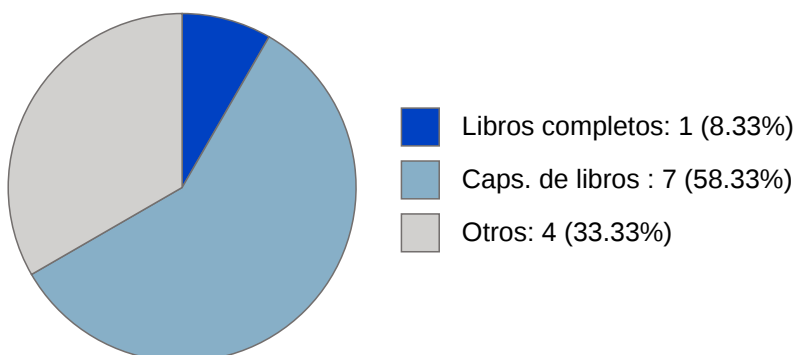
ALBERTO DARSZON ISRAEL

25 5	Rhodopsin-phospholipid complexes in apolar solvents: Formation and properties	ALBERTO DARSZON ISRAEL Philipp M. Zarco J. et al.	JOURNAL OF MEMBRANE BIOLOGY	1978
25 6	Light increases the ion and non-electrolyte permeability of rhodopsin-phospholipid vesicles	ALBERTO DARSZON ISRAEL Montal M. Zarco J.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	1977
25 7	Transmembrane channel formation in rhodopsin-containing bilayer membranes	ALBERTO DARSZON ISRAEL Montal M. Trissl H.W.	Nature	1977
25 8	Formation of detergent-free proteolipids from biological membranes: Application to rhodopsin	ALBERTO DARSZON ISRAEL Montal M. Philipp M.	FEBS LETTERS	1977
25 9	Rhodopsin in model membranes: Charge displacements in interfacial layers	ALBERTO DARSZON ISRAEL Trissl H.W. Montal M.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	1977
26 0	Labelling of rhodopsin moieties confined to the membrane lipid bilayer	ALBERTO DARSZON ISRAEL Klip A. Montal M.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	1976

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Human Sperm Flagellar 3D Fractal Dimension as Hyperactivation Indicator	JOSE DE JESUS FERNANDO MONTOYA NAVA ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO et al.	Conferencia e Paper	2025	9783031821226
2	Ion channels and transporters involved in calcium flux regulation in mammalian sperm	CLAUDIA SANCHEZ CARDENAS JULIO CESAR CHAVEZ ZAMORA ARTURO HERNANDEZ CRUZ et al.	Article	2025	9780323912419
3	ENZYMES IN REVERSE MICELLES CONTAINING PHOSPHOLIPIDS	ALBERTO DARSZON ISRAEL Shoshani L.	Capítulo de un Libro	2024	9781040293225
4	Biomolecules in Organic Solvents	ARMANDO GOMEZ PUYOU ALBERTO DARSZON ISRAEL MARIETTA TUENA SANGRI	Libro Completo	2024	9781040293225
5	Voltage-Dependent Calcium Channels (CaVs) and CatSper in Spermatogenic and Sperm Cells	ALBERTO DARSZON ISRAEL IGNACIO LOPEZ GONZALEZ Gerardo Orta et al.	Capítulo de un Libro	2022	9783031088810

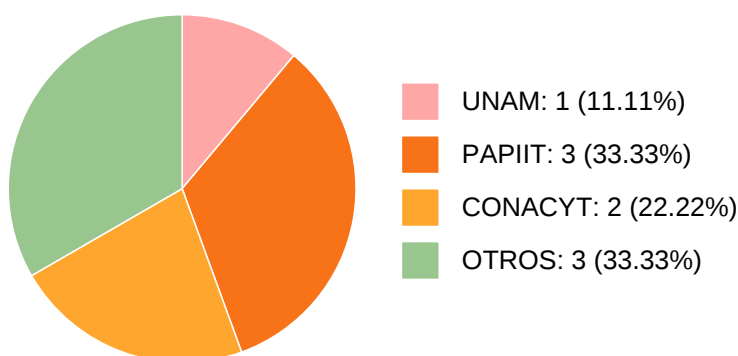
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6	Sperm Flagellum Center-Line Tracing in Fluorescence 3D+t Low SNR Stacks Using an Iterative Minimal Path Method	ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO	Capítulo de un Libro	2017	9783319598765
7	Role of Ion Channels in the Sperm Acrosome Reaction	MA. DEL CARMEN BELTRAN NUÑEZ CLAUDIA LYDIA TREVIÑO SANTA CRUZ JULIO CESAR CHAVEZ ZAMORA et al.	Capítulo de un Libro	2016	9783319305677
8	Sea Urchin Sperm Chemotaxis	CHRISTOPHER DAVID WOOD ADAN OSWALDO GUERRERO CARDENAS ALBERTO DARSZON ISRAEL	Capítulo de un Libro	2015	9781681081281
9	Imaging of the 3D dynamics of flagellar beating in human sperm	JAIME ARTURO PIMENTEL CABRERA ALBERTO DARSZON ISRAEL GABRIEL ISAAC CORKIDI BLANCO et al.	Conferencia Paper	2014	9781424479290
10	Cl ⁻ channels and transporters in sperm physiology	CLAUDIA LYDIA TREVIÑO SANTA CRUZ JOSE LUIS DE LA VEGA BELTRAN ALBERTO DARSZON ISRAEL	Capítulo de un Libro	2014	9784431545880
11	Three-dimensional image acquisition system for multi-sperm tracking	GABRIEL ISAAC CORKIDI BLANCO BLANCA ITZELT TABOADA RAMIREZ CHRISTOPHER DAVID WOOD et al.	Conferencia Paper	2008	9781424420032
12	Maitotoxin: A unique pharmacological tool for elucidating Ca ²⁺ -dependent mechanisms	CLAUDIA LYDIA TREVIÑO SANTA CRUZ LEONILA IRMA LAURA ESCOBAR PEREZ LUIS ALFONSO VACA DOMINGUEZ et al.	Capítulo de un Libro	2008	9781420007541

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PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Participación de los canales iónicos en la fisiología del espermatozoide.	ALBERTO DARSZON ISRAEL	Presupuesto de la UNAM asignado a la Dependencia	01-01-2014	30-06-2021
2	Nuevas herramientas de fluorescencia para identificar en nanodominios la actividad de Canales de Ca ²⁺ individuales y cambios en el pH local y potencial eléctrico importantes en la fisiología del espermatozoide	ALBERTO DARSZON ISRAEL	Recursos CONACYT	07-04-2016	15-05-2018
3	Crosstalk of calcium and other pathways in capacitation.	ALBERTO DARSZON ISRAEL	Otras Universidades, Centros o Institutos Nacionales	01-04-2014	31-03-2020
4	Papel del pH acrosomal en la reacción acrosomal del espermatozoide de mamífero	ALBERTO DARSZON ISRAEL	Recursos PAPIIT	01-01-2016	29-03-2018
5	Ampliación de la infraestructura para microscopía de reflexión interna total y de súper-resolución	ALBERTO DARSZON ISRAEL	Recursos CONACYT	08-05-2017	08-06-2018

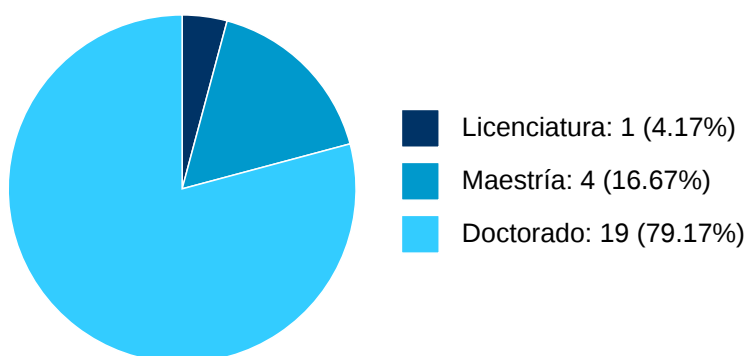
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6	Papel del pH acrosomal en la reacción acrosomal del espermatozoide de mamífero.	ALBERTO DARSZON ISRAEL	Recursos PAPIIT	01-01-2019	31-12-2021
7	Sperm Ca ²⁺ signaling and energy pathways in basic science and ART.	ALBERTO DARSZON ISRAEL	Universidades, Centros, Institutos u Organismos Internacionales	01-05-2021	30-04-2025
8	Canales iónicos modulados por el ayuno del espermatozoide de ratón que potencian la reacción acrosomal inducida por progesterona	ALBERTO DARSZON ISRAEL	Recursos PAPIIT	01-01-2022	31-12-2024
9	Nuevas herramientas de microscopía de fluorescencia para resolver la actividad individual y organización nanoscópica de canales de Ca ²⁺ intracelulares y entender su participación crucial en la fisiología del espermatozoide y en la fecundación	ALBERTO DARSZON ISRAEL	Recursos CONAHCyT	01-07-2023	30-11-2025

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PARTICIPACIÓN EN TESIS

Histórico de Colaboraciones en Tesis



#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Modelación y análisis automatizado de la reacción acrosomal inducida por cambios en el pH acrosomal	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Aldana González, Andrés,	Instituto de Biotecnología,	2022
2	Caracterización electrofisiológica del canal de calcio catsper en espermatozoides de erizo de mar	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Loyo Celis, Verónica,	Instituto de Biotecnología,	2022
3	Regulación del pH del acrosoma durante la capacitación de espermatozoides humanos	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Carrasquel Martínez, Gabriela,	Instituto de Biotecnología,	2022
4	Estudio de la actividad unitaria del receptor P2X4 humano por fluorescencia	Tesis de Maestría	ALBERTO DARSZON ISRAEL,	Ocelotl Oviedo, José Pablo,	Instituto de Biotecnología,	2018

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5	Relación espacio-temporal entre los cambios en el Ca^{2+} y el pH intracelular inducidos por un regulador de la movilidad en el espermatozoide de erizo de mar	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	González Cota, Ana Laura,	Instituto de Biotecnología,	2016
6	Identificación y caracterización del regulador de la conductancia transmembranal de fibrosis cística (cftr), canal de Cl^- en la membrana plasmática del espermatozoide de ratón mus musculus	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Figueiras Fierro, Dulce María,	Instituto de Biotecnología,	2014
7	Estudio del mecanismo del bloqueo de la corriente de Ca^{2+} tipo T por Acido Niflúmico y Celecoxibe en células espermátogénicas de ratón	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Balderas Ángeles, Enrique,	Instituto de Biotecnología,	2012
8	El aumento del sodio intracelular inducido por la eliminación de calcio externo regula la movilidad del espermatozoide humano	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	JUAN ARCADIO MOLINA GUARNEROS, LUIS MANUEL MONTAÑO RAMIREZ, et al.	Facultad de Medicina, Instituto de Biotecnología,	2011
9	El aumento del sodio intracelular inducido por la eliminación de calcio externo regula la movilidad del espermatozoide humano	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Torres Flores, Víctor Manuel,	Instituto de Biotecnología,	2011
10	Relación entre el Ca^{2+} y la movilidad quimiotáctica del espermatozoide del erizo de mar	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Guerrero Cárdenas, Adán Oswaldo,	Instituto de Biotecnología,	2011

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11	Estudio del canal de K ⁺ Slo3 y los canales de Ca ²⁺ tipo T del espermatozoide y su posible participación en procesos espermáticos	Tesis de Maestría	ALBERTO DARSZON ISRAEL,	Martínez López, Pablo,	2007
12	Corrientes iónicas en neuronas vinculadas al aprendizaje y la memoria en Drosophila	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Gasque Martínez, Gabriel Alberto,	2005
13	Influjo de Na ⁺ durante la respuesta al speract y en la reacción acrosomal en el espermatozoide de erizo de mar	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Rodríguez Miranda, Esmeralda,	2003
14	Caracterización de canales de K ⁺ en células espermáticas de ratón	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Muñoz Garay, Roberto Carlos,	2002
15	Modulación y farmacología de la corriente de Ca ²⁺ tipo T en células espermáticas de ratón	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	López González, Ignacio,	2002
16	Caracterización de los canales iónicos del espermatozoide del erizo de mar que participan en la respuesta al Speract	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Sanchez Herrera, Daniel Paulo,	2001
17	Participación de un canal de K ⁺ directamente modulado por GMPc en la respuesta inducida por el speract en el espermatozoide de erizo de mar S. purpuratus	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Galindo Barraza, Blanca Estela,	2000
18	Caracterización molecular de un canal de Ca ²⁺ que se expresa en células espermáticas	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Serrano Escobedo, Carmen Judith,	2000

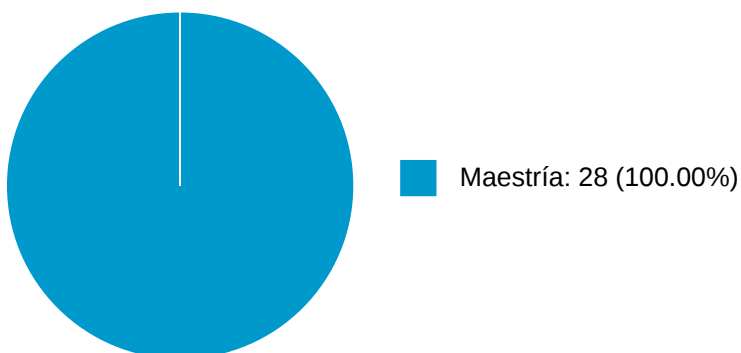
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19	Caracterización de canales iónicos y su participación en la fisiología del espermatozoide de ratón	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Espinosa Becerra, Felipe de Jesús,	1999
20	Estudio de las vías de movilización de calcio intracelular en células espermatogénicas aisladas del testículo del ratón	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	ARTURO HERNANDEZ CRUZ, Santi Grau Perez, Celia Maria,	1998
21	Transferencia directa de canales iónicos del espermatozoide de ratón a bicapas lipídicas	Tesis de Maestría	ALBERTO DARSZON ISRAEL,	Torres Perez, Eduardo,	1997
22	Relación estructura-función de la trifosfato isomerasa : estudios por fluorescencia	Tesis de Maestría	ALBERTO DARSZON ISRAEL,	Sepulveda Becerra, Marisa Angela,	1995
23	Bases iónicas de los cambios de permeabilidad inducidos por el speract en espermatozoides de erizo de mar	Tesis de Licenciatura	ALBERTO DARSZON ISRAEL,	Reynaud Garza, Enrique Alejandro,	1992
24	Canales iónicos de levaduras incorporados en bicapas lipídicas planas	Tesis de Doctorado	ALBERTO DARSZON ISRAEL,	Gomez Lagunas, Froylan Miguel,	1990

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	SEMINARIO DE INVESTIGACIÓN II	Instituto de Biología	1	2022-2
2	Maestría	TRABAJO DE INVESTIGACIÓN II	Instituto de Biología	1	2022-2
3	Maestría	TRABAJO DE INVESTIGACIÓN III	Instituto de Biología	1	2019-1
4	Maestría	TRABAJO DE INVESTIGACIÓN III	Instituto de Biología	1	2019-1
5	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biología	1	2018-2
6	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biología	1	2018-2
7	Maestría	SEMINARIO DE INVESTIGACION III-313480	Instituto de Biología	1	2017-1
8	Maestría	TRABAJO DE INVESTIGACION III-313540	Instituto de Biología	1	2017-1
9	Maestría	TRABAJO DE INVESTIGACION III-313549	Instituto de Biología	1	2017-1
10	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Biología	1	2016-2
11	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biología	1	2016-2
12	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biología	1	2016-2
13	Maestría	CURSO IV	Instituto de Biología	1	2016-1
14	Maestría	TRABAJO DE INVESTIGACION I	Instituto de Biología	1	2016-1
15	Maestría	CURSO IV	Instituto de Biología	4	2014-1
16	Maestría	CURSO III	Instituto de Biología	2	2014-1
17	Maestría	SEMINARIO DE INVESTIGACION III	Instituto de Biología	1	2013-2
18	Maestría	TRABAJO DE INVESTIGACION III	Instituto de Biología	1	2013-2
19	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Biología	1	2013-1
20	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biología	1	2013-1
21	Maestría	TRABAJO DE INVESTIGACION I	Instituto de Biología	1	2012-2
22	Maestría	TRABAJO DE INVESTIGACION III	Instituto de Biología	1	2010-1
23	Maestría	CURSO III	Instituto de Biología	6	2010-1
24	Maestría	CURSO IV	Instituto de Biología	5	2010-1



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



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25	Maestría	CURSO III	Instituto de Biotecnología	1	2009-2
26	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biotecnología	1	2009-2
27	Maestría	TRABAJO DE INVESTIGACION III	Instituto de Biotecnología	1	2009-1
28	Maestría	TRABAJO DE INVESTIGACION II	Instituto de Biotecnología	1	2008-2



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PATENTES

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

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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