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Coordinación de Planeación, Evaluación y
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Reporte individual



OCTAVIO HECTOR CASTAÑOS GARZA

Datos Generales

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Nombramientos

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Desde 16-02-2014

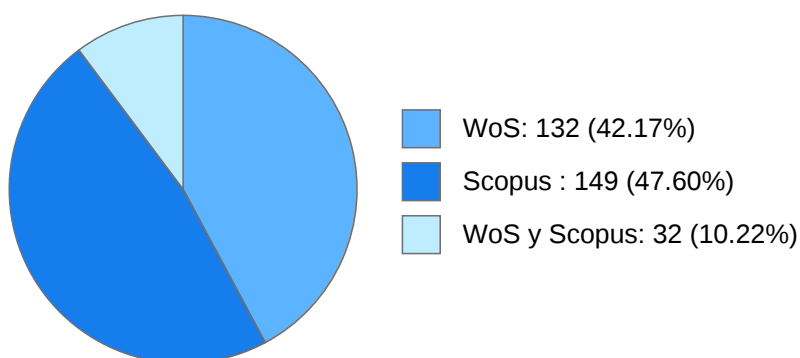
Estímulos, programas, premios y reconocimientos

SNI III - VIGENTE
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DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Capturing magic angles in twisted bilayer graphene from information theory markers	OCTAVIO HECTOR CASTAÑOS GARZA Calixto M. Mayorgas A.	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES	2025
2	Geometric properties of qudit systems	OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR RAMON LOPEZ PEÑA et al.	PHYSICA SCRIPTA	2025
3	GKLS vector field dynamics for Gaussian states	HANS CRUZ PRADO OCTAVIO HECTOR CASTAÑOS GARZA FRANCISCO NETTEL RUEDA et al.	ANNALS OF PHYSICS	2025
4	Faraday rotation and transmittance as markers of topological phase transitions in 2D materials	OCTAVIO HECTOR CASTAÑOS GARZA Manuel Calixto Alberto Mayorgas et al.	Scipost Physics	2024
5	Quantum revivals in HgTe/CdTe quantum wells and topological phase transitions	OCTAVIO HECTOR CASTAÑOS GARZA Alberto Mayorgas Manuel Calixto et al.	Scipost Physics Core	2024

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6	Entanglement of a three-level atom interacting with two-modes field in a cavity	ALEJANDRA DEL RIO LIMA FREDDY JACKSON POVEDA CUEVAS OCTAVIO HECTOR CASTAÑOS GARZA	JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS	2024
7	Storing quantum information in a generalised Dicke model via a simple rotation	RAMON LOPEZ PEÑA EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA et al.	JOURNAL OF PHYSICS A-MATHEMATIC AL AND THEORETICAL	2023
8	Effect of the atomic dipole-dipole interaction on the phase diagrams of field-matter interactions: Variational procedure	SERGIO ARTURO CORDERO REYES OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	PHYSICAL REVIEW A	2022
9	Signatures of topological phase transitions in higher Landau levels of HgTe/CdTe quantum wells from an information theory perspective	OCTAVIO HECTOR CASTAÑOS GARZA Calixto M. Cordero N.A. et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2022
10	Quantum phase diagrams of matter-field Hamiltonians I: Fidelity, Bures distance, and entanglement	SERGIO CORDERO REYES EDUARDO NAHMAD ACHAR RAMON LOPEZ PEÑA et al.	PHYSICA SCRIPTA	2021
11	Quantum phase diagrams of matter-field Hamiltonians II: Wigner function analysis	RAMON LOPEZ PEÑA SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR et al.	PHYSICA SCRIPTA	2021
12	Analogies between the topological insulator phase of 2D Dirac materials and the superradiant phase of atom-field systems	OCTAVIO HECTOR CASTAÑOS GARZA Manuel Calixto Elvira Romera	INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY	2021
13	Nonlinear description of quantum dynamics: Generalized coherent states	OCTAVIO HECTOR CASTAÑOS GARZA H. Cruz-Prado G. Marmo et al.	JOURNAL OF MATHEMATICAL PHYSICS	2021
14	Dynamics of quantum entanglement in matter field models	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRA DEL RIO LIMA	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2020
15	Reduced bases for a three-level atom interacting with a two-mode radiation field	SERGIO ARTURO CORDERO REYES OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	PHYSICAL REVIEW A	2019
16	Qubit representation of qudit states: correlations and state reconstruction	JULIO ALBERTO LOPEZ SALDIVAR OCTAVIO HECTOR CASTAÑOS GARZA Man?ko M.A. et al.	QUANTUM INFORMATION PROCESSING	2019

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17	A new mechanism of open system evolution and its entropy using unitary transformations in noncomposite qudit systems	JULIO ALBERTO LOPEZ SALDIVAR OCTAVIO HECTOR CASTAÑOS GARZA Man'ko M.A. et al.	ENTROPY	2019
18	Information theoretic analysis of Landau levels in monolayer phosphorene under magnetic and electric fields	OCTAVIO HECTOR CASTAÑOS GARZA Elvira Romera Manuel Calixto	MATERIALS RESEARCH EXPRESS	2019
19	Optimal basis for the generalized Dicke model	SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA et al.	PHYSICAL REVIEW A	2019
20	New entropic inequalities for qubit and unimodal Gaussian states	JULIO ALBERTO LOPEZ SALDIVAR OCTAVIO HECTOR CASTAÑOS GARZA M. A. Man'ko et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2018
21	Dynamic generation of light states with discrete symmetries	SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA et al.	PHYSICAL REVIEW A	2018
22	Wave packet dynamics, time scales and phase diagram in the IBM-Lipkin-Meshkov-Glick model	OCTAVIO HECTOR CASTAÑOS GARZA de los Santos F. Yáñez R. et al.	ANNALS OF PHYSICS	2018
23	Entropic bounds between two thermal equilibrium states	JULIO ALBERTO LOPEZ SALDIVAR OCTAVIO HECTOR CASTAÑOS GARZA Man'ko M.A. et al.	PHYSICAL REVIEW E	2018
24	Phase space properties of light within the generalised Dicke model	OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA EDUARDO NAHMAD ACHAR et al.	PHYSICA SCRIPTA	2018
25	Universal critical behaviour of 3-level atoms interacting dipolarly with radiation	OCTAVIO HECTOR CASTAÑOS GARZA SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2018
26	Geometry and entanglement of two-qubit states in the quantum probabilistic representation	JULIO ALBERTO LOPEZ SALDIVAR OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR et al.	ENTROPY	2018
27	The variational method for density states a geometrical approach	ARMANDO FIGUEROA ORTIZ OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2017

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29	Delocalization properties at isolated avoided crossings in Lipkin-Meshkov-Glick type Hamiltonian models	OCTAVIO HECTOR CASTAÑOS GARZA Romera, Elvira Calixto, Manuel et al.	JOURNAL OF STATISTICAL MECHANICS—THEORY AND EXPERIMENT	2017
30	A general system of n levels interacting with l electromagnetic modes	SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA et al.	PHYSICA SCRIPTA	2017
31	Extremal Density Matrices for the Expectation Value of a Qudit Hamiltonian	OCTAVIO HECTOR CASTAÑOS GARZA JUAN CARLOS LOPEZ VIEYRA RAMON LOPEZ PEÑA et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2017
32	Polyad breaking phenomenon associated with a local-to-normal mode transition and suitability to estimate force constants	RENATO LEMUS CASILLAS OCTAVIO HECTOR CASTAÑOS GARZA Bermúdez-Montaña, M.	MOLECULAR PHYSICS	2017
33	Evolution and Entanglement of Gaussian States in the Parametric Amplifier	JULIO ALBERTO LOPEZ SALDIVAR ARMANDO FIGUEROA ORTIZ OCTAVIO HECTOR CASTAÑOS GARZA et al.	JOURNAL OF RUSSIAN LASER RESEARCH	2016
34	Coupling n -level Atoms with l -modes of Quantised Light in a Resonator	OCTAVIO HECTOR CASTAÑOS GARZA SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2016
35	Time-evolution of quantum systems via a complex nonlinear Riccati equation. II. Dissipative systems	OCTAVIO HECTOR CASTAÑOS GARZA Cruz, Hans Schuch, Dieter et al.	ANNALS OF PHYSICS	2016
36	Fidelity, entropy, and Poincaré sections as tools to study the polyad breaking phenomenon	RENATO LEMUS CASILLAS OCTAVIO HECTOR CASTAÑOS GARZA Bermudez-Montana, M.	EPL	2016
37	Variational study of ρ and N atomic configurations interacting with an electromagnetic field of two modes	OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA EDUARDO NAHMAD ACHAR et al.	PHYSICAL REVIEW A	2016
38	Discretization of the Density Matrix as a Nonlinear Positive Map and Entanglement	JULIO ALBERTO LOPEZ SALDIVAR ARMANDO FIGUEROA ORTIZ OCTAVIO HECTOR CASTAÑOS GARZA et al.	JOURNAL OF RUSSIAN LASER RESEARCH	2016

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40	Time scales at quantum phase transitions in the Lipkin-Meshkov-Glick model	OCTAVIO HECTOR CASTAÑOS GARZA de Los Santos, F. Romera, E.	PHYSICAL REVIEW A	2015
41	Cold matter, quantum optics, and quantum information in Mexico	OCTAVIO HECTOR CASTAÑOS GARZA Man'ko, Margarita A.	PHYSICA SCRIPTA	2015
42	Symmetry adapted coherent states for three-level atoms interacting with one-mode radiation	RAMON LOPEZ PEÑA SERGIO ARTURO CORDERO REYES EDUARDO NAHMAD ACHAR et al.	PHYSICA SCRIPTA	2015
43	Phase diagrams of systems of two and three levels in the presence of a radiation field	EDUARDO NAHMAD ACHAR SERGIO ARTURO CORDERO REYES OCTAVIO HECTOR CASTAÑOS GARZA et al.	PHYSICA SCRIPTA	2015
44	Time-evolution of quantum systems via a complex nonlinear Riccati equation. I. Conservative systems with time-independent Hamiltonian	Hans Cruz OCTAVIO HECTOR CASTAÑOS GARZA Schuch, Dieter et al.	ANNALS OF PHYSICS	2015
45	Identifying the order of a quantum phase transition by means of Wehrl entropy in phase space	OCTAVIO HECTOR CASTAÑOS GARZA Calixto, Manuel PerezBernal, Francisco et al.	PHYSICAL REVIEW E	2015
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47	New supersymmetry-generated complex potentials with real spectra	OCTAVIO HECTOR CASTAÑOS GARZA RosasOrtiz, Oscar Schuch, Dieter	JOURNAL OF PHYSICS A-MATHEMATIC AL AND THEORETICAL	2015
48	Phase transitions in three-level systems in a cavity	EDUARDO NAHMAD ACHAR SERGIO ARTURO CORDERO REYES OCTAVIO HECTOR CASTAÑOS GARZA et al.	PHYS SCRIPTA	2014
49	Phase space analysis of first-, second- and third-order quantum phase transitions in the Lipkin-Meshkov-Glick model	OCTAVIO HECTOR CASTAÑOS GARZA Romera, Elvira Calixto, Manuel	PHYSICA SCRIPTA	2014
50	A triple point in 3-level systems	EDUARDO NAHMAD ACHAR SERGIO ARTURO CORDERO REYES RAMON LOPEZ PEÑA et al.	JOURNAL OF PHYSICS A-MATHEMATIC AL AND THEORETICAL	2014

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52	Fidelity, susceptibility and critical exponents in the Dicke model	MIGUEL ANGEL BASTARRACHEA MAGNANI OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
53	Single and collective regimes in three-level systems interacting with a one-mode electromagnetic field	OCTAVIO HECTOR CASTAÑOS GARZA SERGIO ARTURO CORDERO REYES RAMON LOPEZ PEÑA et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
54	Preface	OCTAVIO HECTOR CASTAÑOS GARZA	AIP Conference Proceedings	2014
55	Supersymmetry in the Jaynes-Cummings Model	OCTAVIO HECTOR CASTAÑOS GARZA	AIP Conference Proceedings	2013
56	Generalized creation and annihilation operators via complex nonlinear Riccati equations	OCTAVIO HECTOR CASTAÑOS GARZA Schuch D. Rosas-Ortiz O.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2013
57	Generalized coherent states for time-dependent and nonlinear Hamiltonian operators via complex Riccati equations	OCTAVIO HECTOR CASTAÑOS GARZA Schuch, Dieter Rosas-Ortiz, Oscar	JOURNAL OF PHYSICS A-MATHEMATIC AL AND THEORETICAL	2013
58	Quantum phase transitions of three-level atoms interacting with a one-mode electromagnetic field	SERGIO ARTURO CORDERO REYES RAMON LOPEZ PEÑA OCTAVIO HECTOR CASTAÑOS GARZA et al.	PHYSICAL REVIEW A	2013
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60	Mathematical methods in quantum optics: The Dicke model	EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	PHYSICA SCRIPTA	2013
61	Quantum phase crossovers with finite atom number in the Dicke model	JORGE GUSTAVO HIRSCH GANIEVICH OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR et al.	PHYSICA SCRIPTA	2013
62	A semi-classical versus quantum description of the ground state of three-level atoms interacting with a one-mode electromagnetic field	SERGIO ARTURO CORDERO REYES OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	JOURNAL OF PHYSICS A-MATHEMATIC AL AND THEORETICAL	2013
63	STEADY-STATE CORRELATIONS OF TWO ATOMS INTERACTING WITH A RESERVOIR	OCTAVIO HECTOR CASTAÑOS GARZA	QUANTUM INF COMPUT	2012

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64	A sequential niching memetic algorithm for continuous multimodal function optimization	JAVIER VITELA ESCAMILLA OCTAVIO HECTOR CASTAÑOS GARZA	APPLIED MATHEMATICS AND COMPUTATION	2012
65	Universal critical behavior in the Dicke model	OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR RAMON LOPEZ PEÑA et al.	PHYSICAL REVIEW A	2012
66	Quantum information approach to the description of quantum phase transitions	OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA EDUARDO NAHMAD ACHAR et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2012
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68	Universal critical behaviour in finite atom-field systems	EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	AIP Conference Proceedings	2012
69	Quantum behaviour mirrored by semi-classical states	EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	AIP Conference Proceedings	2012
70	Analytic description of the super-radiant regime in the dicke model	EDUARDO NAHMAD ACHAR OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	AIP Conference Proceedings	2012
71	Mean field description of the Dicke model	JORGE GUSTAVO HIRSCH GANIEVICH OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA et al.	AIP Conference Proceedings	2012
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73	Dynamics of Schrödinger cat states	OCTAVIO HECTOR CASTAÑOS GARZA JULIO ALBERTO LOPEZ SALDIVAR	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2012
74	AIP Conference Proceedings: Preface	OCTAVIO HECTOR CASTAÑOS GARZA	AIP Conference Proceedings	2011
75	Erratum: Superradiant phase in field-matter interactions (Physical Review A - Atomic, Molecular, and Optical Physics (2011) 84 (013819))	OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR RAMON LOPEZ PEÑA et al.	PHYSICAL REVIEW A	2011
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78	Entanglement and localization of a two-mode Bose-Einstein condensate	Citali Perez Campos Jose Raul Gonzalez Alonso OCTAVIO HECTOR CASTAÑOS GARZA et al.	ANNALS OF PHYSICS	2010
79	Potential energy surfaces in algebraic molecular models using coherent states	OCTAVIO HECTOR CASTAÑOS GARZA RENATO LEMUS CASILLAS	MOLECULAR PHYSICS	2010
80	Symmetry adapted states and the quantum phase transition in the Dicke model	OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR RAMON LOPEZ PEÑA et al.	AIP Conference Proceedings	2010
81	Symmetries in physics	OCTAVIO HECTOR CASTAÑOS GARZA	AIP Conference Proceedings	2010
82	Analytic approximation of the Tavis-Cummings ground state via projected states	OCTAVIO HECTOR CASTAÑOS GARZA EDUARDO NAHMAD ACHAR RAMON LOPEZ PEÑA et al.	PHYSICA SCRIPTA	2009
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84	A new approach to obtain the non-Condon factors in closed form for two one-dimensional harmonic oscillators	OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA RENATO LEMUS CASILLAS	JOURNAL OF MOLECULAR SPECTROSCOPY	2007
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93	Double-beta decay in deformed nuclei	JORGE GUSTAVO HIRSCH GANIEVICH OCTAVIO HECTOR CASTAÑOS GARZA PETER OTTO HESS BECHSTEDT et al.	CZECH J PHYS	2002
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101	Schrödinger cat states in a Penning trap	OCTAVIO HECTOR CASTAÑOS GARZA SAHEN HACRYAN SALERYAN RAMON LOPEZ PEÑA et al.	J PHYS A-MATH GEN	1998
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106	Energy surfaces of algebraic models	ENRIQUE LOPEZ MORENO OCTAVIO HECTOR CASTAÑOS GARZA	REVISTA MEXICANA DE FISICA	1996
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108	Schrödinger cat states of a non-stationary generalized oscillator	OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA Man'ko V.I.	J PHYS A-MATH GEN	1996
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113	Neutrinoless double beta decay in heavy deformed nuclei	JORGE GUSTAVO HIRSCH GANIEVICH OCTAVIO HECTOR CASTAÑOS GARZA PETER OTTO HESS BECHSTEDT	NUCLEAR PHYSICS A	1995
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121	Microscopic interpretation of potential energy surfaces	OCTAVIO HECTOR CASTAÑOS GARZA PETER OTTO HESS BECHSTEDT Draayer J.P. et al.	PHYSICS LETTERS B	1992
122	Noether's theorem and accidental degeneracy	OCTAVIO HECTOR CASTAÑOS GARZA RAMON LOPEZ PEÑA	J PHYS A-MATH GEN	1992
123	Relations between the nuclear shell model hamiltonian and the orthosymplectic superalgebra $Osp(1 2)$	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Balantekin A.B.	PHYSICS LETTERS B	1992
124	Transformation to pseudo-SU(3) in heavy deformed nuclei	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Quesne C.	PHYSICS LETTERS B	1992
125	Soluble extensions of the Dirac oscillator with exact and broken supersymmetry	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFELICH LUIS FERNANDO URRUTIA RIOS et al.	PHYSICAL REVIEW D	1991
126	Pseudo-symplectic model for strongly deformed heavy nuclei	OCTAVIO HECTOR CASTAÑOS GARZA PETER OTTO HESS BECHSTEDT Draayer J.P. et al.	NUCLEAR PHYSICS A	1991
127	Noether's theorem and dynamical groups in quantum mechanics	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFELICH RAMON LOPEZ PEÑA	J PHYS A-MATH GEN	1990
128	Resonant modes in light nuclei	OCTAVIO HECTOR CASTAÑOS GARZA Bahri C. Draayer J.P. et al.	PHYSICS LETTERS B	1990
129	Shell-model interpretation of the collective-model potential-energy surface	OCTAVIO HECTOR CASTAÑOS GARZA Draayer J.P. Park S.C.	PHYSICAL REVIEW LETTERS	1989
130	Contracted symplectic model with ds-shell applications	OCTAVIO HECTOR CASTAÑOS GARZA Draayer J.P.	NUCLEAR PHYSICS A	1989
131	Shape variables and the shell model	OCTAVIO HECTOR CASTAÑOS GARZA Draayer J.P. Leschber Y.	Zeitschrift Für Physik A Atomic Nuclei	1988
132	Quantum rotor and its SU(3) realization	OCTAVIO HECTOR CASTAÑOS GARZA Draayer J.P. Leschber Y.	COMPUTER PHYSICS COMMUNICATIO NS	1988
133	Collective 1^+ states in rare earth and actinide nuclei	OCTAVIO HECTOR CASTAÑOS GARZA Draayer J.P. Leschber Y.	NUCLEAR PHYSICS A	1987

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134	Matrix representation of the generators of symplectic algebras. I. The case of $sp(4, R)$	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY	J PHYS A-MATH GEN	1987
135	Towards a shell-model description of the low-energy structure of deformed nuclei II. Electromagnetic properties of collective MI bands	OCTAVIO HECTOR CASTAÑOS GARZA Draayer J.P. Leschber Y.	ANNALS OF PHYSICS	1987
136	Supersymmetric embedding of arbitrary n-dimensional scalar hamiltonians	OCTAVIO HECTOR CASTAÑOS GARZA JUAN CARLOS D'OLIVO SAEZ LUIS FERNANDO URRUTIA RIOS et al.	PHYSICS LETTERS B	1986
137	Boson realization of $sp(4, R)$. II. The generating kernel formulation	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Kramer P.	JOURNAL OF MATHEMATICAL PHYSICS	1986
138	Boson realization of $sp(4)$. I. The matrix formulation	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Chacón E. et al.	JOURNAL OF MATHEMATICAL PHYSICS	1985
139	Generating kernel for the boson realisation of symplectic algebras	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Kramer P.	J PHYS A-MATH GEN	1985
140	Collectivity and geometry. III. The three-dimensional case in the $Sp(6) \supset Sp(2) \times O(3)$ chain for closed shells	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Chacón E.	JOURNAL OF MATHEMATICAL PHYSICS	1984
141	Analytic expressions for the matrix elements of generators of $Sp(6)$ in an $Sp(6) \supset U(3)$ basis	OCTAVIO HECTOR CASTAÑOS GARZA MARCOS MOSHINSKY BORODINASKY Chacón E.	JOURNAL OF MATHEMATICAL PHYSICS	1984
142	A six-dimensional oscillator basis classified by $O(6) \supset O(2) \times U(3) \supset SO(3)$	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH Chacón E.	JOURNAL OF MATHEMATICAL PHYSICS	1984
143	Effective triaxial deformations in the interacting-boson model	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH Van Isacker P.	PHYSICAL REVIEW LETTERS	1984
144	Microscopic derivation of nuclear collective variables	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH PETER OTTO HESS BECHSTEDT et al.	PHYSICAL REVIEW C	1982
145	Study of the effective hamiltonian interacting boson approximation	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH Federman P. et al.	NUCLEAR PHYSICS A	1982
146	Complete set of states for microscopic nuclear collective models	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH PETER OTTO HESS BECHSTEDT et al.	JOURNAL OF MATHEMATICAL PHYSICS	1981

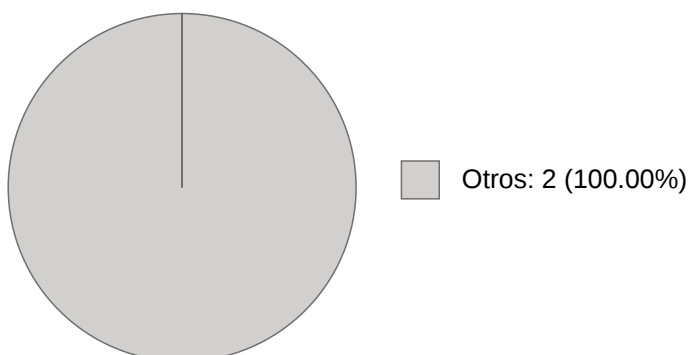
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147	Confrontations between the interacting boson approximation and the Bohr-Mottelson model	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH PETER OTTO HESS BECHSTEDT et al.	PHYSICAL REVIEW C	1981
148	The shape transition in the Sm isotopes and the structure of the IBA hamiltonian	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH Federman P.	PHYSICS LETTERS B	1979
149	The gradient formula for the $O(5) \supset O(3)$ chain of groups	OCTAVIO HECTOR CASTAÑOS GARZA ALEJANDRO FRANK HOEFLICH MARCOS MOSHINSKY BORODINASKY	JOURNAL OF MATHEMATICAL PHYSICS	1977

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN

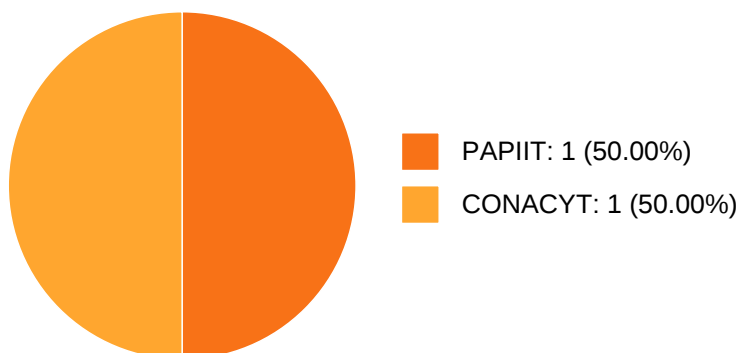


#	Título	Autores	Alcance	Año	ISBN
1	Phase diagrams of 3-level systems interacting with electromagnetic radiation	OCTAVIO HECTOR CASTAÑOS GARZA SERGIO ARTURO CORDERO REYES RAMON LOPEZ PEÑA et al.	Conferenc e Paper	2014	9781557528254
2	A real-coded niching memetic algorithm for continuous multimodal function optimization	JAVIER VITELA ESCAMILLA OCTAVIO HECTOR CASTAÑOS GARZA	Conferenc e Paper	2008	9781424418237

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PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Sistemas de N niveles en interacción con campos bosónicos y sus aplicaciones.	OCTAVIO HECTOR CASTAÑOS GARZA	Recursos CONACYT	15-05-2015	14-01-2019
2	Entrelazamiento, geometría y dinámica de sistemas cuánticos de dimensión finita.	OCTAVIO HECTOR CASTAÑOS GARZA	Recursos PAPIIT	01-01-2019	31-12-2021



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Reporte individual



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PARTICIPACIÓN EN TESIS

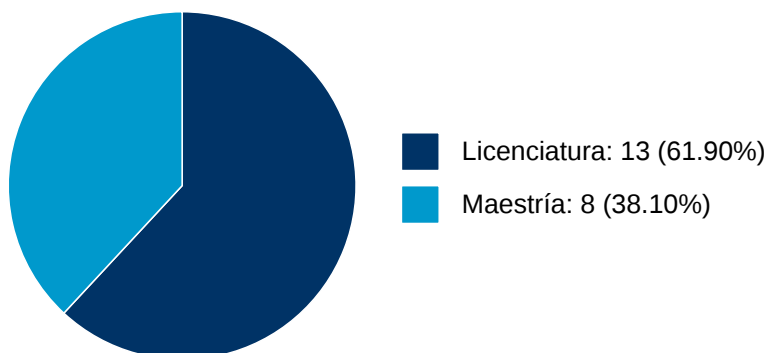
No se encuentran registros en la base de datos de TESIUNAM asociados a:

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	10	2022-2
2	Licenciatura	MECANICA CUANTICA	Facultad de Ciencias	21	2021-1
3	Licenciatura	MECANICA CUANTICA	Facultad de Ciencias	16	2020-2
4	Licenciatura	MECANICA CUANTICA	Facultad de Ciencias	7	2020-1
5	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	39	2019-2
6	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	44	2018-2
7	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	37	2017-2
8	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	13	2017-1
9	Licenciatura	MECANICA CUANTICA	Facultad de Ciencias	14	2015-2
10	Licenciatura	MECANICA CUANTICA	Facultad de Ciencias	9	2015-1
11	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	17	2013-2
12	Licenciatura	MECANICA ANALITICA	Facultad de Ciencias	3	2013-1
13	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Ciencias Nucleares	1	2012-2
14	Maestría	MECANICA CUANTICA II	Instituto de Ciencias Nucleares	2	2012-2
15	Maestría	MECANICA CUANTICA II	Instituto de Ciencias Nucleares	3	2012-1
16	Maestría	SEMINARIO DE INVESTIGACION I	Instituto de Ciencias Nucleares	1	2012-1
17	Maestría	MECANICA CUANTICA I	Instituto de Ciencias Nucleares	8	2011-2



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18	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Ciencias Nucleares	1	2010-2
19	Licenciatura	FISICA NUCLEAR Y SUBNUCLEAR	Facultad de Ciencias	14	2010-2
20	Maestría	MECANICA CUANTICA	Instituto de Ciencias Nucleares	14	2009-1
21	Maestría	MECANICA CUANTICA	Instituto de Ciencias Nucleares	11	2008-1



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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