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Coordinación de Planeación, Evaluación y
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Reporte individual



RAFAEL ANGEL BARRIO PAREDES

Datos Generales

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Nombramientos

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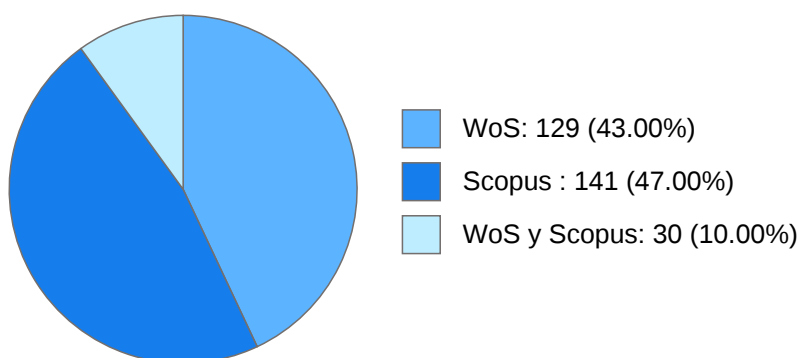
Estímulos, programas, premios y reconocimientos

SNI III - VIGENTE
PRIDE D - 2024
PASPA Estancias Sabáticas 2016 - 2017
PASPA Estancias Sabáticas 2007 - 2008

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DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Sustainable visions: unsupervised machine learning insights on global development goals	MIGUEL ANGEL ROBLES ROLDAN TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES et al.	PLOS ONE	2025
2	Role of TRIM24 in the regulation of proteasome-autophagy crosstalk in bortezomib-resistant mantle cell lymphoma	WENDY XOLALPA VILLANUEVA RAFAEL ANGEL BARRIO PAREDES Corentin Bouvier et al.	Cell Death Discovery	2025
3	Socio-economic pandemic modelling: case of Spain	RAFAEL ANGEL BARRIO PAREDES TZIPE SILVIA GOVEZENSKY ZACK Snellman J.E. et al.	SCIENTIFIC REPORTS	2024
4	Modelling the creation of friends and foes groups in small real social networks	TZIPE SILVIA GOVEZENSKY ZACK GERARDO GARCIA NAUMIS RAFAEL ANGEL BARRIO PAREDES et al.	PLOS ONE	2024
5	A modelling study to explore the effects of regional socio-economics on the spreading of epidemics	RAFAEL ANGEL BARRIO PAREDES Jan E. Snellman Kimmo K. Kaski et al.	Journal Of Computational Social Science	2024
6	Interfacial viscoelasticity in oscillating drops of cyclodextrin-surfactant aqueous solution: experiments and theory	JOSE ROBERTO ROMERO ARIAS MIGUEL ANTONIO COSTAS BASIN RAFAEL ANGEL BARRIO PAREDES et al.	Soft Matter	2024

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7	Organizational changes and research performance: A multidimensional assessment	JOSE LUIS JIMENEZ ANDRADE RICARDO ARENCIBIA JORGE MIGUEL ROBLES PEREZ et al.	RESEARCH EVALUATION	2024
8	Vesicle formation induced by thermal fluctuations	JOSE ROBERTO ROMERO ARIAS RAFAEL ANGEL BARRIO PAREDES Andreu F. Gallen et al.	Soft Matter	2023
9	Forecasting virus outbreaks with social media data via neural ordinary differential equations	RAFAEL ANGEL BARRIO PAREDES Núñez M. Barreiro N.L. et al.	SCIENTIFIC REPORTS	2023
10	Impact of institutional organization on research productivity and multidisciplinary	RAFAEL ANGEL BARRIO PAREDES TZIPE SILVIA GOVEZENSKY ZACK JULIA TAGUEÑA PARGA et al.	Frontiers In Physics	2023
11	Membrane rigidity regulates E. coli proliferation rates	RAFAEL ANGEL BARRIO PAREDES Salinas-Almaguer S. Mell M. et al.	SCIENTIFIC REPORTS	2022
12	Strategies for COVID-19 vaccination under a shortage scenario: a geo-stochastic modelling approach	TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES Barreiro N.L. et al.	SCIENTIFIC REPORTS	2022
13	Dynamical shapes of droplets of cyclodextrin-surfactant solutions	JOSE ROBERTO ROMERO ARIAS MIGUEL ANTONIO COSTAS BASIN RAFAEL ANGEL BARRIO PAREDES et al.	SCIENTIFIC REPORTS	2022
14	Modelling the interplay between epidemics and regional socio-economics	RAFAEL ANGEL BARRIO PAREDES Jan E. Snellman Kimmo K. Kaski et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2022
15	Modelling the interplay of SARS-CoV-2 variants in the United Kingdom	TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES Barreiro N.L. et al.	SCIENTIFIC REPORTS	2022
16	EXTRACTING REAL SOCIAL INTERACTIONS FROM A DEBATE OF COVID-19 POLICIES ON TWITTER: THE CASE OF MEXICO	JUAN ALBERTO GARCIA RODRIGUEZ TZIPE SILVIA GOVEZENSKY ZACK CARLOS GERSHENSON GARCIA et al.	ADVANCES IN COMPLEX SYSTEMS	2021
17	Social structure formation in a network of agents playing a hybrid of ultimatum and dictator games	RAFAEL ANGEL BARRIO PAREDES Jan E. Snellman Kimmo K. Kaski	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2021
18	Behavioral role of PACAP signaling reflects its selective distribution in glutamatergic and GABAergic neuronal subpopulations	LIMEI ZHANG JI VITO SALVADOR ROGELIO HERNANDEZ MELCHOR LILIAN ZAVALA ROMERO et al.	eLife	2021

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19	OCT4 expression in human embryonic stem cells: spatio-temporal dynamics and fate transitions	RAFAEL ANGEL BARRIO PAREDES L. E. Wadkin S. Orozco-Fuentes et al.	PHYSICAL BIOLOGY	2021
20	Dipole-dipole interactions control the interfacial rheological response of cyclodextrin/surfactant solutions	JOSE ROBERTO ROMERO ARIAS MIGUEL ANTONIO COSTAS BASIN RAFAEL ANGEL BARRIO PAREDES et al.	Soft Matter	2021
21	On Gaussian curvature and membrane fission	JOSE ROBERTO ROMERO ARIAS RAFAEL ANGEL BARRIO PAREDES Mara Denisse Rueda-Contreras et al.	SCIENTIFIC REPORTS	2021
22	Detecting infected asymptomatic cases in a stochastic model for spread of Covid-19: the case of Argentina	TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES Barreiro N.L. et al.	SCIENTIFIC REPORTS	2021
23	A model for social spreading of Covid-19: Cases of Mexico, Finland and Iceland	RAFAEL ANGEL BARRIO PAREDES TZIPE SILVIA GOVEZENSKY ZACK Kaski K.K. et al.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2021
24	Dynamics of hierarchical weighted networks of van der Pol oscillators	RAFAEL ANGEL BARRIO PAREDES Monsivais-Velazquez D. Bhattacharya K. et al.	Chaos	2020
25	The dynamics of shapes of vesicle membranes with time dependent spontaneous curvature	RAFAEL ANGEL BARRIO PAREDES Alarcon T. Hernandez-Machado A.	PLOS ONE	2020
26	Universal model for the skin colouration patterns of neotropical catfishes of the genus Pseudoplatystoma	TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES Scarabotti P. et al.	SCIENTIFIC REPORTS	2020
27	A Synaptically Connected Hypothalamic Magnocellular Vasopressin-Locus Coeruleus Neuronal Circuit and Its Plasticity in Response to Emotional and Physiological Stress	VITO SALVADOR ROGELIO HERNANDEZ MELCHOR RAFAEL ANGEL BARRIO PAREDES LIMEI ZHANG JI et al.	FRONTIERS IN NEUROSCIENCE	2019
28	Coherent directed movement toward food modeled in Trichoplax, a ciliated animal lacking a nervous system	TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES Carolyn L. Smith et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2019

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29	Model of the Structure of Cerium Oxide Crystalline Surfaces	RAFAEL ANGEL BARRIO PAREDES GABRIELA ALICIA DIAZ GUERRERO LUCIANO ANTONIO GOMEZ CORTES et al.	INTERNATIONAL CONFERENCES & EXHIBITION ON NANOTECHNOLOGIES, ORGANIC ELECTRONICS & NANOMEDICINE, NANOTEXNOLOGY 2020, PT 1	2019
30	Status maximization as a source of fairness in a networked dictator game	GERARDO IÑIGUEZ GONZALEZ RAFAEL ANGEL BARRIO PAREDES Jan E. Snellman et al.	Journal of Complex Networks	2019
31	Quantification of the morphological characteristics of hESC colonies	RAFAEL ANGEL BARRIO PAREDES Sirio Orozco-Fuentes Irina Neganova et al.	SCIENTIFIC REPORTS	2019
32	Generation of ECG signals from a reaction-diffusion model spatially discretized	VICTOR FRANCISCO BREÑA MEDINA JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES et al.	SCIENTIFIC REPORTS	2019
33	A physico-genetic module for the polarisation of auxin efflux carriers PIN-FORMED (PIN)	VALERIA HERNANDEZ HERNANDEZ RAFAEL ANGEL BARRIO PAREDES MARIANA BENITEZ KEINRAD et al.	PHYSICAL BIOLOGY	2018
34	Curvature-driven spatial patterns in growing 3D domains: A mechanochemical model for phyllotaxis	JOSE ROBERTO ROMERO ARIAS RAFAEL ANGEL BARRIO PAREDES Mara D. Rueda-Contreras et al.	PLOS ONE	2018
35	Modelling the dynamics of stem cells in colonic crypts	RAFAEL ANGEL BARRIO PAREDES Sirio, O.-F.	EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS	2017
36	Modelling trading networks and the role of trust	RAFAEL ANGEL BARRIO PAREDES TZIPE SILVIA GOVEZENSKY ZACK ELFEGO RUIZ GUTIERREZ et al.	PHYSICAL A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2017
37	Model of polar auxin transport coupled to mechanical forces retrieves robust morphogenesis along the Arabidopsis root	JOSE ROBERTO ROMERO ARIAS ERIKA VALERIA HERNANDEZ GARCIA MARIANA BENITEZ KEINRAD et al.	PHYSICAL REVIEW E	2017

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38	Modelling the structure of disordered cerium oxide thin films	RAFAEL ANGEL BARRIO PAREDES Pena Leal, Jose Juan	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2017
39	Modelling community formation driven by the status of individual in a society	GERARDO IÑIGUEZ GONZALEZ TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES et al.	Journal of Complex Networks	2017
40	Thirst Is Associated with Suppression of Habenula Output and Active Stress Coping: Is there a Role for a Non-canonical Vasopressin-Glutamate Pathway?	LIMEI ZHANG JI VITO SALVADOR ROGELIO HERNANDEZ MELCHOR RAFAEL ANGEL BARRIO PAREDES et al.	FRONTIERS IN NEURAL CIRCUITS	2016
41	The two gap transitions in Ge _{1-x} Sn _x : Effect of non-substitutional complex defects	RAFAEL ANGEL BARRIO PAREDES Querales-Flores, J. D. Ventura, C. I. et al.	JOURNAL OF APPLIED PHYSICS	2016
42	Thirst Is Associated with Suppression of Habenula Output and Active Stress Coping: Is there a Role for a Non-canonical Vasopressin-Glutamate Pathway?	LIMEI ZHANG JI VITO SALVADOR ROGELIO HERNANDEZ MELCHOR RAFAEL ANGEL BARRIO PAREDES et al.	FRONTIERS IN NEURAL CIRCUITS	2016
43	Notes on natural history and call description of the Critically Endangered Plectrohyla avia (Anura: Hylidae) from Chiapas, Mexico	RAFAEL ANGEL BARRIO PAREDES Grunwald, Christoph I. Franz-Chavez, Hector et al.	Amphibian & Reptile Conservation	2016
44	Electronic structure of Ge _{1-x} Si _x Sn _y ternary alloys for multijunction solar cells	RAFAEL ANGEL BARRIO PAREDES Ventura, Cecilia I. Querales Flores, Jose D. et al.	PROGRESS IN PHOTOVOLTAICS	2015
45	Phase-field modelling of the dynamics of Z-ring formation in liposomes: Onset of constriction and coarsening	RAFAEL ANGEL BARRIO PAREDES CARMEN JOSEFA LUCIANA VAREA Y GILABERT Picallo, C. B. et al.	EUROPEAN PHYSICAL JOURNAL E	2015
46	Extra-neurohypophyseal axonal projections from individual vasopressin-containing magnocellular neurons in rat hypothalamus	VITO SALVADOR ROGELIO HERNANDEZ MELCHOR Erika VazquezJuarez Mariana M. Marquez Y et al.	FRONTIERS IN NEUROANATOMY	2015
47	Dynamics of deceptive interactions in social networks	RAFAEL ANGEL BARRIO PAREDES TZIPE SILVIA GOVEZENSKY ZACK Dunbar, Robin et al.	JOURNAL OF THE ROYAL SOCIETY INTERFACE	2015

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48	A model based on mechanical forces for the auxin transport in the root apical meristem of plants	JOSE ROBERTO ROMERO ARIAS RAFAEL ANGEL BARRIO PAREDES	EUROPEAN BIOPHYSICS JOURNAL WITH BIOPHYSICS LETTERS	2015
49	Study of the morphospaces in the root meristems	RAFAEL ANGEL BARRIO PAREDES JOSE ROBERTO ROMERO ARIAS L. M. García-Iglesias	EUROPEAN BIOPHYSICS JOURNAL WITH BIOPHYSICS LETTERS	2015
50	Effects of deception in social networks	TZIPE SILVIA GOVEZENSKY ZACK RAFAEL ANGEL BARRIO PAREDES Iniguez, Gerardo et al.	PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES	2014
51	Cell Patterns Emerge from Coupled Chemical and Physical Fields with Cell Proliferation Dynamics: The Arabidopsis thaliana Root as a Study System	RAFAEL ANGEL BARRIO PAREDES JOSE ROBERTO ROMERO ARIAS Eugenio Azpeitia et al.	PLOS COMPUTATIONA L BIOLOGY	2013
52	Non-substitutional Sn defects in Ge1-x Snx alloys for opto- and nanoelectronics	RAFAEL ANGEL BARRIO PAREDES Querales Flores, J. D. Fuhr, J. D. et al.	JOURNAL OF SUPERCONDUCT IVITY AND NOVEL MAGNETISM	2013
53	Formation of non-substitutional β -Sn defects in Ge1- xSnx alloys	RAFAEL ANGEL BARRIO PAREDES Fuhr, J. D. Ventura, C. I.	JOURNAL OF APPLIED PHYSICS	2013
54	Nonlinear effects on Turing patterns: Time oscillations and chaos	JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES Woolley, T. E. et al.	PHYSICAL REVIEW E	2012
55	Are Opinions Based on Science: Modelling Social Response to Scientific Facts	JULIA TAGUEÑA PARGA RAFAEL ANGEL BARRIO PAREDES Iniguez, Gerardo et al.	PLOS ONE	2012
56	Phase change in an opinion-dynamics model with separation of time scales	RAFAEL ANGEL BARRIO PAREDES Iniguez, Gerardo Kertesz, Janos et al.	PHYSICAL REVIEW E	2011
57	Modelling opinion formation driven communities in social networks	RAFAEL ANGEL BARRIO PAREDES Iniguez, Gerardo Kertesz, Janos et al.	COMPUTER PHYSICS COMMUNICATIO NS	2011
58	Curvature multiphase field model for phase separation on a membrane	CARMEN JOSEFA LUCIANA VAREA Y GILBERT RAFAEL ANGEL BARRIO PAREDES Hernandez-Machado, A.	PHYSICAL REVIEW E	2011

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59	From ABC genes to regulatory networks, epigenetic landscapes and flower morphogenesis: Making biological sense of theoretical approaches	MARIA ELENA ALVAREZ BUYLLA ROCES Eugenio Azpeitia RAFAEL ANGEL BARRIO PAREDES et al.	SEMINARS IN CELL & DEVELOPMENTAL BIOLOGY	2010
60	Flower Development as an Interplay between Dynamical Physical Fields and Genetic Networks	RAFAEL ANGEL BARRIO PAREDES CARMEN JOSEFA LUCIANA VAREA Y GILABERT JOSE ROBERTO ROMERO ARIAS et al.	PLOS ONE	2010
61	Analysis of stationary droplets in a generic Turing reaction-diffusion system	JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES Woolley, Thomas E. et al.	PHYSICAL REVIEW E	2010
62	Dynamics of reaction-diffusion systems in a subdiffusive regime	DAMIAN HERNANDEZ HERRAN CARMEN JOSEFA LUCIANA VAREA Y GILABERT RAFAEL ANGEL BARRIO PAREDES	PHYSICAL REVIEW E	2009
63	Modeling the skin pattern of fishes	RAFAEL ANGEL BARRIO PAREDES Baker, Ruth E. Vaughan, Benjamin, Jr. et al.	PHYSICAL REVIEW E	2009
64	Nonsubstitutional single-atom defects in the Ge ₁ -xSn _x alloy	RAFAEL ANGEL BARRIO PAREDES Ventura, C. I. Fuhr, J. D.	PHYSICAL REVIEW B	2009
65	Statistical model for the formation of the Ge ₁ -xSn _x alloy	RAFAEL ANGEL BARRIO PAREDES Ventura, C. I. Fuhr, J. D.	PHYSICA B-CONDENSED MATTER	2009
66	Opinion and community formation in coevolving networks	Gerardo Iniguez RAFAEL ANGEL BARRIO PAREDES Kertesz, Janos et al.	PHYSICAL REVIEW E	2009
67	Soliton behaviour in a bistable reaction diffusion model	CARMEN JOSEFA LUCIANA VAREA Y GILABERT RAFAEL ANGEL BARRIO PAREDES Hernández D.	JOURNAL OF MATHEMATICAL BIOLOGY	2007
68	Complex turing patterns in non-linearly coupled systems	RAFAEL ANGEL BARRIO PAREDES Kytta K. Kaski K.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2007
69	Non-linear periodic structures	RAFAEL ANGEL BARRIO PAREDES	REVISTA MEXICANA DE FISICA	2007
70	Non-linear systems	RAFAEL ANGEL BARRIO PAREDES CARMEN JOSEFA LUCIANA VAREA Y GILABERT	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2006

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71	Wave-front dynamics in systems with directional anomalous diffusion	RAFAEL ANGEL BARRIO PAREDES CARMEN JOSEFA LUCIANA VAREA Y GILABERT Hernández D.	PHYSICAL REVIEW E	2006
72	Preface	RAFAEL ANGEL BARRIO PAREDES Kaski K.K.	No Identificado	2005
73	Coherent neuron response in ordered exponential networks	RAFAEL ANGEL BARRIO PAREDES Rozada I.	AIP Conference Proceedings	2005
74	Crystalline and non-crystalline growth of two-dimensional square-triangle lattices	RAFAEL ANGEL BARRIO PAREDES ROSARIO PAREDES GUTIERREZ	JOURNAL OF NON-CRYSTALLI NE SOLIDS	2005
75	Morphological transitions and bistability in Turing systems	RAFAEL ANGEL BARRIO PAREDES Leppänen T. Karttunen M. et al.	PHYSICAL REVIEW E	2004
76	Travelling Turing patterns with anomalous diffusion	CARMEN JOSEFA LUCIANA VAREA Y GILABERT RAFAEL ANGEL BARRIO PAREDES	JOURNAL OF PHYSICS-COND ENSED MATTER	2004
77	Theory of growth of amorphous semiconductors	RAFAEL ANGEL BARRIO PAREDES	JOURNAL OF NON-CRYSTALLI NE SOLIDS	2004
78	Theoretical method for non-crystalline growth	GERARDO GARCIA NAUMIS RAFAEL ANGEL BARRIO PAREDES ROSARIO PAREDES GUTIERREZ	JOURNAL OF NON-CRYSTALLI NE SOLIDS	2003
79	Dimensionality effects in Turing pattern formation	RAFAEL ANGEL BARRIO PAREDES Leppänen T. Karttunen M. et al.	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	2003
80	The Effect of Noise on Turing Patterns	RAFAEL ANGEL BARRIO PAREDES Leppänen T. Karttunen M. et al.	PROG THEOR PHYS SUPP	2003
81	Frustration effects on the electronic density of states of a random binary alloy	GERARDO GARCIA NAUMIS CHUMIN WANG CHEN RAFAEL ANGEL BARRIO PAREDES	PHYSICAL REVIEW B	2002
82	Turing patterns with pentagonal symmetry	JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES Torres M. et al.	PHYSICAL REVIEW E	2002
83	Frustration effects on the electronic density of states of a random binary alloy	GERARDO GARCIA NAUMIS CHUMIN WANG CHEN RAFAEL ANGEL BARRIO PAREDES	PHYSICAL REVIEW B	2002
84	A new dimension to Turing patterns	RAFAEL ANGEL BARRIO PAREDES LIMEI ZHANG JI Leppänen T. et al.	PHYSICA D-NONLINEAR PHENOMENA	2002
85	Size-dependent symmetry breaking in models for morphogenesis	RAFAEL ANGEL BARRIO PAREDES JOSE LUIS ARAGON VERA MANUEL TORRES LABANSAT et al.	PHYSICA D-NONLINEAR PHENOMENA	2002

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86	Models of disorder	RAFAEL ANGEL BARRIO PAREDES GERARDO GARCIA NAUMIS	GLASS PHYS CHEM+	2000
87	Self-consistent cluster CPA methods and the nested CPA theory	RAFAEL ANGEL BARRIO PAREDES Ventura C.I.	PHYSICA B-CONDENSED MATTER	2000
88	Turing patterns on a sphere	CARMEN JOSEFA LUCIANA VAREA Y GILBERT JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES	PHYS REV E	1999
89	Discerning phason coherency in quasicrystalline systems	GERARDO GARCIA NAUMIS CHUMIN WANG CHEN RAFAEL ANGEL BARRIO PAREDES	Materials Research Society Symposium Proceedings	1999
90	A two-dimensional numerical study of spatial pattern formation in interacting Turing systems	RAFAEL ANGEL BARRIO PAREDES CARMEN JOSEFA LUCIANA VAREA Y GILBERT JOSE LUIS ARAGON VERA et al.	BULLETIN OF MATHEMATICAL BIOLOGY	1999
91	Coherency of phason dynamics in Fibonacci chains	GERARDO GARCIA NAUMIS CHUMIN WANG CHEN RAFAEL ANGEL BARRIO PAREDES et al.	PHYSICAL REVIEW B	1999
92	Crecimiento estocástico de sólidos	ROSARIO PAREDES GUTIERREZ JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES	REVISTA MEXICANA DE FISICA	1999
93	Boroxol rings and the stochastic matrix method	GERARDO GARCIA NAUMIS RAFAEL ANGEL BARRIO PAREDES Kerner R. et al.	REVISTA MEXICANA DE FISICA	1998
94	Nonperiodic hexagonal square-triangle tilings	JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES ROSARIO PAREDES GUTIERREZ	PHYSICAL REVIEW B	1998
95	Hierarchically coupled ultradian oscillators generating robust circadian rhythms	RAFAEL ANGEL BARRIO PAREDES LIMEI ZHANG JI Maini P.K.	BULLETIN OF MATHEMATICAL BIOLOGY	1997
96	Confined turing patterns in growing systems	CARMEN JOSEFA LUCIANA VAREA Y GILBERT JOSE LUIS ARAGON VERA RAFAEL ANGEL BARRIO PAREDES	PHYS REV E	1997
97	Evaluation of the concentration of boroxol rings in vitreous B2O3 by the stochastic matrix method	RAFAEL ANGEL BARRIO PAREDES GERARDO GARCIA NAUMIS Kerner R. et al.	JOURNAL OF PHYSICS-COND ENSED MATTER	1997
98	Robust symmetric patterns in the Faraday experiment	RAFAEL ANGEL BARRIO PAREDES JOSE LUIS ARAGON VERA CARMEN JOSEFA LUCIANA VAREA Y GILBERT et al.	PHYS REV E	1997

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99	Hydrodynamic 5-fold diffusion-driven instabilities	RAFAEL ANGEL BARRIO PAREDES JOSE LUIS ARAGON VERA CARMEN JOSEFA LUCIANA VAREA Y GILABERT et al.	NONLINEAR ANALYSIS-THEORY METHODS & APPLICATIONS	1997
100	Bethe lattice studies in glasses	RAFAEL ANGEL BARRIO PAREDES GERARDO GARCIA NAUMIS CHUMIN WANG CHEN	JOURNAL OF NON-CRYSTALLINE SOLIDS	1995
101	Structural properties of alkali-borate glasses derived from a theoretical model	RAFAEL ANGEL BARRIO PAREDES Duruisseau J.-P. Kerner R.	Philosophical Magazine B: Physics Of Condensed Matter; Statistical Mechanics, Electronic, Optical And Magnetic Pr	1995
102	Rhythmic firing patterns in suprachiasmatic nucleus (SCN): the rôle of circuit interactions	LIMEI ZHANG JI RAUL ANTONIO AGUILAR ROBLERO RAFAEL ANGEL BARRIO PAREDES et al.	INT J BIOMED COMPUT	1995
103	Ionic conduction in $(1 - x)\text{B}_2\text{O}_3 + x\text{Li}_2\text{O}$	RAFAEL ANGEL BARRIO PAREDES Elliott R.J. Perondi L.	JOURNAL OF NON-CRYSTALLINE SOLIDS	1994
104	Effects of frustration and localization of states in the Penrose lattice	GERARDO GARCIA NAUMIS RAFAEL ANGEL BARRIO PAREDES CHUMIN WANG CHEN	PHYSICAL REVIEW B	1994
105	Tracer diffusion in lattices with double occupancy of sites	RAFAEL ANGEL BARRIO PAREDES Perondi L.F. Elliott R.J. et al.	PHYSICAL REVIEW B	1994
106	Spectrum: An educational computer game	RAFAEL ANGEL BARRIO PAREDES Lee J. Trigueros M. et al.	Physics Education	1993
107	Wave behavior in anharmonic Penrose lattices	CHUMIN WANG CHEN ORACIO NAVARRO CHAVEZ RAFAEL ANGEL BARRIO PAREDES et al.	JOURNAL OF NON-CRYSTALLINE SOLIDS	1993
108	Some physical inferences from the quasicrystalline topology of Penrose lattices	RAFAEL ANGEL BARRIO PAREDES Chumin Wang	JOURNAL OF NON-CRYSTALLINE SOLIDS	1993
109	Regular ring dynamics in AX ₂ tetrahedral glasses	RAFAEL ANGEL BARRIO PAREDES ESTEBAN MANUEL MARTINEZ SALAS Galeener F.L. et al.	PHYSICAL REVIEW B	1993
110	A new pattern of neuronal firing in the suprachiasmatic nucleus in vitro and a possible mechanism which induces rhythmicity.	LIMEI ZHANG JI RAUL ANTONIO AGUILAR ROBLERO RAFAEL ANGEL BARRIO PAREDES	Boletín De Estudios Médicos Y Biológicos	1992

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111	Model for the vibrational spectra of B ₂ O ₃ -xLi ₂ O	RAFAEL ANGEL BARRIO PAREDES Castillo-Alvarado F.D.L.	PHYSICAL REVIEW B	1992
112	Application of nested CPA theory to hydrogenated amorphous silicon	RAFAEL ANGEL BARRIO PAREDES Avendaño J. Castillo-Alvarado F.L.	JOURNAL OF NON-CRYSTALLI NE SOLIDS	1991
113	Structural and vibrational model for vitreous boron oxide	RAFAEL ANGEL BARRIO PAREDES Castillo-Alvarado F.L. Galeener F.L.	PHYSICAL REVIEW B	1991
114	Model of the electronic structure of amorphous germanium tin alloys	RAFAEL ANGEL BARRIO PAREDES JULIA TAGUEÑA PARGA Castillo-Alvarado F.L. et al.	SOLID STATE COMMUNICATIO NS	1990
115	Electronic structure of substitutional oxygen in silicon	IVAN ORTEGA BLAKE JULIA TAGUEÑA PARGA RAFAEL ANGEL BARRIO PAREDES et al.	SOLID STATE COMMUNICATIO NS	1989
116	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-CRYSTALLI NE SOLIDS	1989
117	The structure of defects in amorphous germanium tin-alloys	RAFAEL ANGEL BARRIO PAREDES Chambouleyron I. Marques F.C. et al.	JOURNAL OF NON-CRYSTALLI NE SOLIDS	1989
118	Calculation of the Raman spectra in compositional and topologically disordered semiconductors	RAFAEL ANGEL BARRIO PAREDES Castillo-Alvarado F.L. Contreras-Puente G.S.	JOURNAL OF PHYSICS-COND ENSED MATTER	1989
119	Barrio and Wang reply	RAFAEL ANGEL BARRIO PAREDES CHUMIN WANG CHEN	PHYSICAL REVIEW LETTERS	1989
120	Vibrational properties of amorphous Si-N and Ge-N alloys	RAFAEL ANGEL BARRIO PAREDES Carrico A.S. Marques F.C. et al.	JOURNAL OF PHYSICS-COND ENSED MATTER	1989
121	Mössbauer study of hydrogenated amorphous germanium-tin thin-film alloys	RAFAEL ANGEL BARRIO PAREDES Chambouleyron I. Marques F.C. et al.	JOURNAL OF APPLIED PHYSICS	1989
122	Theory of the raman response in fibonacci superlattices	CHUMIN WANG CHEN RAFAEL ANGEL BARRIO PAREDES	PHYSICAL REVIEW LETTERS	1988
123	An electron paramagnetic resonance study of γ-ba-cu-o-type ceramics in superconducting and nonsuperconducting phases	GUILLERMO AGUILAR SAHAGUN JORGE FERNANDO RAMIREZ SOLIS TATSUO AKACHI MIYAZAKI et al.	Journal Of Physics C: Solid State Physics	1988
124	Degradation effects in the high-Tc superconductor GdBa ₂ Cu ₃ O ₇ -	TATSUO AKACHI MIYAZAKI ROBERTO ESCUDERO DERAT RAFAEL ANGEL BARRIO PAREDES et al.	Journal Of Physics C: Solid State Physics	1988
125	A theoretical study of the vibrational properties of ultra-heavily doped semiconductors	RAFAEL ANGEL BARRIO PAREDES Castillo-Alvarado F.L. Contreras Puente G.S.	Journal Of Physics C: Solid State Physics	1988

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126	Variation of tight-binding parameters near surfaces	RAFAEL ANGEL BARRIO PAREDES MARCELO DEL CASTILLO MUSSOT	SOLID STATE COMMUNICATIONS	1988
127	Anomalous behaviour of Moessbauer parameters of a $\text{YBa}_2\text{Cu}_{2.875}\text{Fe}_{0.125}\text{O}_d$ superconductor around 110 K	VIVIANNE MARQUINA FABREGA TATSUO AKACHI MIYAZAKI ROBERTO ESCUDERO DERAT et al.	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	1988
128	Hydrogenated amorphous silicon as a binary alloy	JULIA TAGUEÑA PARGA RAFAEL ANGEL BARRIO PAREDES Castillo-Alvarado F.L.	Journal Of Physics C: Solid State Physics	1987
129	Measurements on the new high- T_c superconductor Nd-Ba-Cu oxide system	ROBERTO ESCUDERO DERAT TATSUO AKACHI MIYAZAKI RAFAEL ANGEL BARRIO PAREDES et al.	SOLID STATE COMMUNICATIONS	1987
130	Electron tunneling in the high- T_c superconductor Y-Ba-Cu-O	ROBERTO ESCUDERO DERAT TATSUO AKACHI MIYAZAKI RAFAEL ANGEL BARRIO PAREDES et al.	PHYSICAL REVIEW B	1987
131	Carbon in silicon: a cluster calculation	RAFAEL ANGEL BARRIO PAREDES JULIA TAGUEÑA PARGA LUIS ENRIQUE SANSORES CUEVAS	JOURNAL OF NON-CRYSTALLINE SOLIDS	1987
132	Indication of high local fields in the $\text{YBa}_2\text{Cu}_{2.9375}\text{Fe}_{0.0625}\text{O}$ superconductor by Mössbauer spectroscopy	VIVIANNE MARQUINA FABREGA TATSUO AKACHI MIYAZAKI ROBERTO ESCUDERO DERAT et al.	PHYSICAL REVIEW B	1987
133	Effects of electron-electron correlations on defect and interface states in amorphous Si and SiO_2 systems	RAFAEL ANGEL BARRIO PAREDES Elliott R.J. Carrico A.S.	PHYSICAL REVIEW B	1986
134	Modelling the raman spectrum of the amorphous-crystal si system	RAFAEL ANGEL BARRIO PAREDES Carrico A.S. Elliott R.J.	Journal Of Physics C: Solid State Physics	1986
135	Model of electronic states at the Si- SiO_2 interface	RAFAEL ANGEL BARRIO PAREDES Carrico A.S. Elliott R.J.	PHYSICAL REVIEW B	1986
136	Dihedral-angle-averaged Bethe lattice for vibrations in glasses	RAFAEL ANGEL BARRIO PAREDES ESTEBAN MANUEL MARTINEZ SALAS Galeener F.L.	PHYSICAL REVIEW B	1985
137	A Hartree-Fock approach to electronic structure of non-periodic systems	RAFAEL ANGEL BARRIO PAREDES JULIA TAGUEÑA PARGA ESTEBAN MANUEL MARTINEZ SALAS et al.	JOURNAL OF NON-CRYSTALLINE SOLIDS	1985
138	Vibrational decoupling of rings in amorphous solids	RAFAEL ANGEL BARRIO PAREDES ESTEBAN MANUEL MARTINEZ SALAS Galeener F.L. et al.	PHYSICAL REVIEW LETTERS	1984
139	Bond CPA for hydrogenated amorphous silicon	RAFAEL ANGEL BARRIO PAREDES LUIS ENRIQUE SANSORES CUEVAS Elliott R.J.	JOURNAL OF NON-CRYSTALLINE SOLIDS	1983

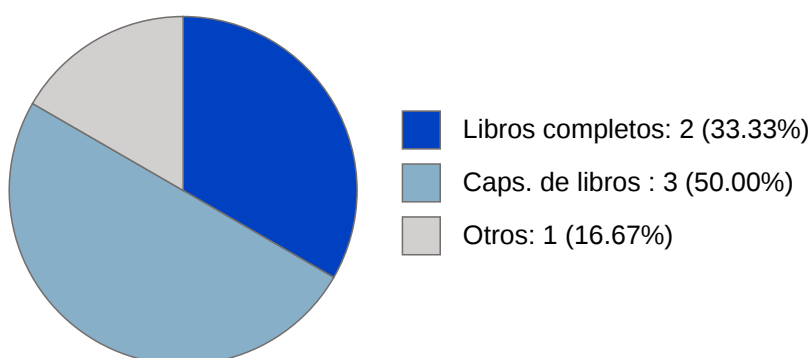
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140	Long-range correlations in Bethe lattices	RAFAEL ANGEL BARRIO PAREDES Yndurain F. Elliott R.J. et al.	PHYSICAL REVIEW B	1983
141	Inelastic neutron scattering from hydrogen in amorphous silicon	RAFAEL ANGEL BARRIO PAREDES Elliott R.J. Thorpe M.F.	Journal Of Physics C: Solid State Physics	1983
142	Vibrations of defects in amorphous Si	RAFAEL ANGEL BARRIO PAREDES Elliott R.J.	Journal Of Physics C: Solid State Physics	1982
143	The mechanical behaviour of cuprous oxide	GABRIEL JORGE TORRES VILLASEÑOR RAFAEL ANGEL BARRIO PAREDES Radcliffe S.V.	JOURNAL OF MATERIALS SCIENCE	1978

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN

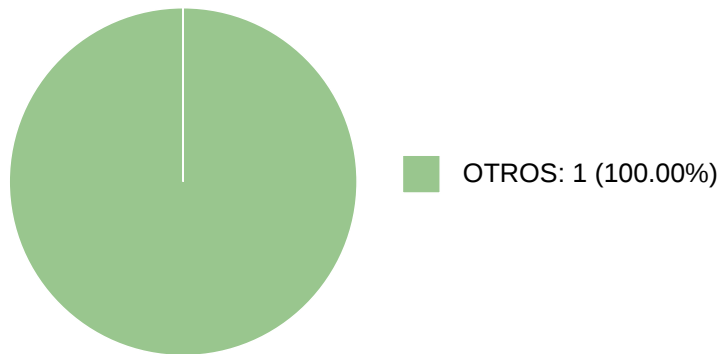


#	Título	Autores	Alcance	Año	ISBN
1	Morfogénesis	RAFAEL ANGEL BARRIO PAREDES	Capítulo de un Libro	2010	9786077630777
2	Tecnología I	IGNACIO RODRIGUEZ ROBLES JOSE LUIS ARAGON VERA RICARDO LOPEZ GUTIERREZ et al.	Libro Completo	2009	9786074540413
3	Turing systems: A general model for complex patterns in nature	RAFAEL ANGEL BARRIO PAREDES	Capítulo de un Libro	2008	9789812779953
4	Density of electronic states in the quantum percolation problem	GERARDO GARCIA NAUMIS RAFAEL ANGEL BARRIO PAREDES	Capítulo de un Libro	2005	9781860947209
5	Current topics in physics: In honor of Sir Roger J. Elliott	RAFAEL ANGEL BARRIO PAREDES Kaski K.K.	Libro Completo	2005	9781860947209
6	SELF CONSISTENT SOLUTION FOR ELECTRONS IN α -Si.	RAFAEL ANGEL BARRIO PAREDES JULIA TAGUEÑA PARGA LUIS ENRIQUE SANSORES CUEVAS et al.	Conferencia e Paper	1985	0387961089

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PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	La Física en Redes y Sistemas Dinámicos Complejos.	RAFAEL ANGEL BARRIO PAREDES	Recursos CONAHCyT	21-03-2018	29-01-2024



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Reporte individual



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PARTICIPACIÓN EN TESIS

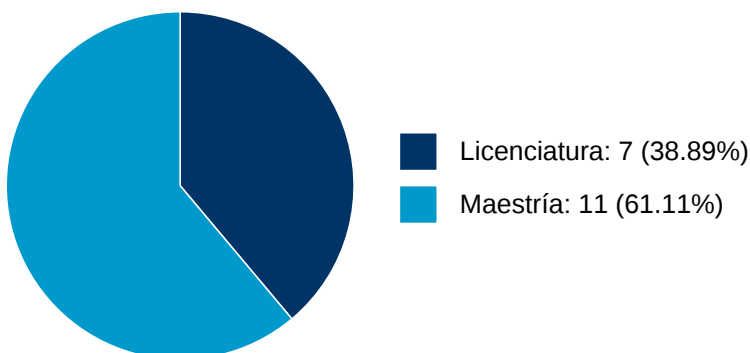
No se encuentran registros en la base de datos de TESIUNAM asociados a:

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	TEMAS SELECTOS FÍSICA NO LINEAL Y SISTEMAS COMPLEJOS	Instituto de Física	1	2024-1
2	Maestría	FÍSICA ESTADÍSTICA I	Instituto de Física	9	2023-1
3	Maestría	FÍSICA ESTADÍSTICA I	Instituto de Física	7	2022-1
4	Maestría	FÍSICA ESTADÍSTICA I	Instituto de Física	3	2021-1
5	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	7	2020-2
6	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	1	2018-2
7	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	24	2016-2
8	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Física	1	2016-1
9	Maestría	SEMINARIO DE INVESTIGACION I	Instituto de Física	1	2015-2
10	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	2	2015-2
11	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Física	1	2015-1
12	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	14	2014-2
13	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	15	2013-2
14	Licenciatura	FISICA ESTADISTICA	Facultad de Ciencias	28	2012-2
15	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Física	1	2011-2
16	Maestría	FISICA ESTADISTICA	Instituto de Física	6	2011-1
17	Maestría	SEMINARIO DE INVESTIGACION I	Instituto de Física	1	2011-1
18	Maestría	SEMINARIO DE INVESTIGACION II	Instituto de Física	1	2011-1



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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