

ANTONIO M. LALLENA ROJO

Grupo de Investigación: FÍSICA FUNDAMENTAL Y APLICACIONES (Cod.: FQM387)

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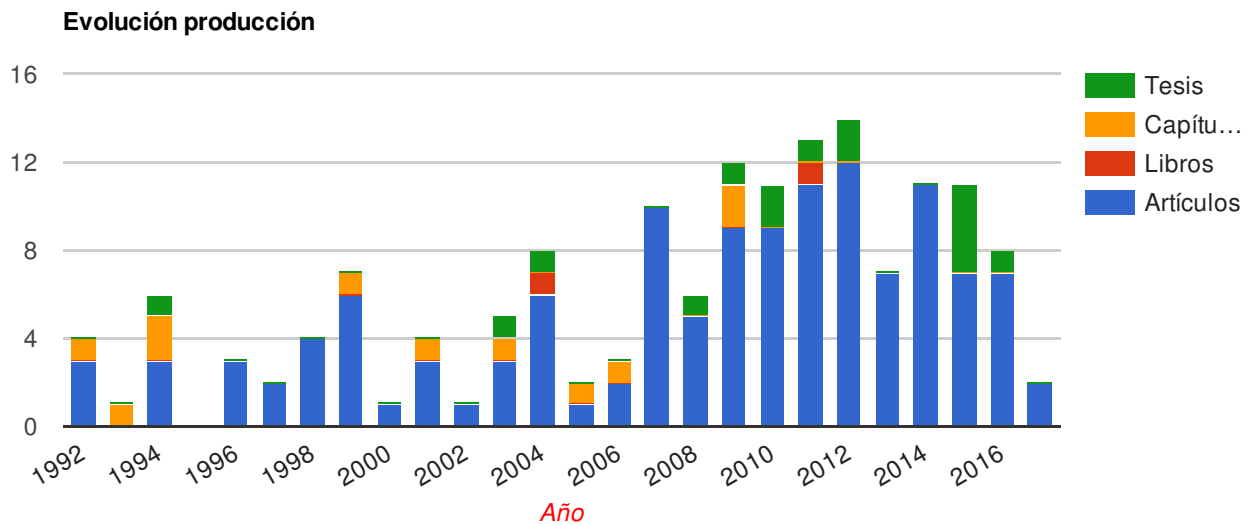
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Ficha del Directorio

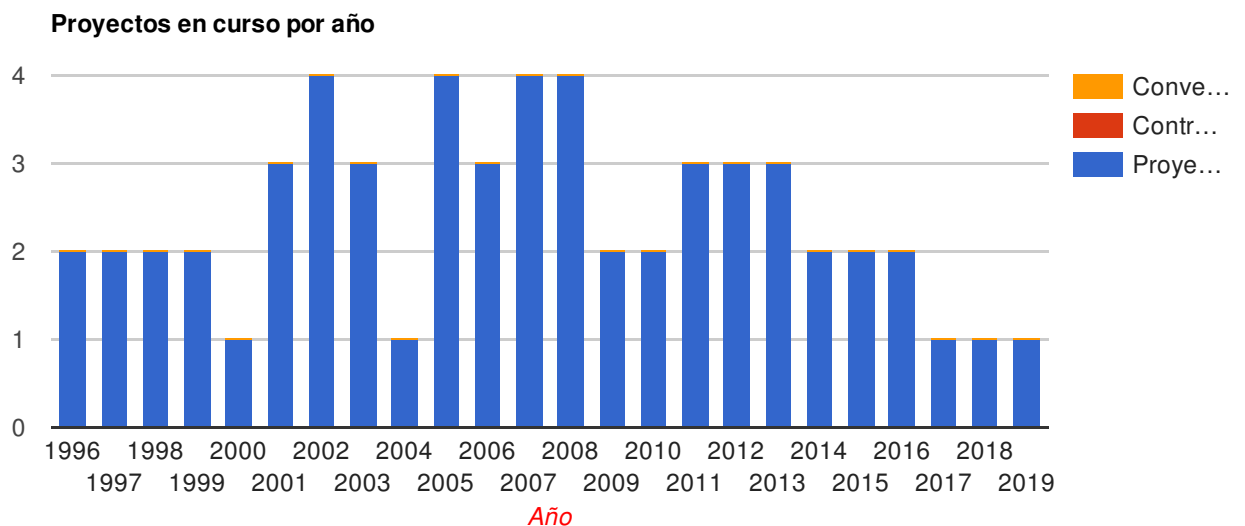
Producción 156

Artículos (128) Libros (2) Capítulos de Libros (11) Tesis dirigidas (15)



Proyectos dirigidos 15

Proyectos (15) Contratos (0) Convenios (0)



Actividades 9

Titulo publicación	Fuente	Tipo	Fecha
Monte carlo dosimetric characterization of the flexisource co-60 high-dose-rate brachytherapy source using penelope	Brachytherapy	Articulo	2017
Use of bcr sequential extraction procedures for soils and plant metal transfer predictions in contaminated mine tailings	Journal of geochemical exploration	Articulo	2017
A monte carlo analysis of breast screening randomized trials	Physica medica	Articulo	2016
Continuum random phase approximation with finite-range interactions	European physical journal a. hadrons and nuclei	Articulo	2016
Dosimetric response of radiochromic films to protons of low energies in the bragg peak region	Physical review special topics. accelerators and beams	Articulo	2016
Gogny interactions with tensor terms	European physical journal a. hadrons and nuclei	Articulo	2016
Interplay between pairing and tensor effects in the n = 82 even-even isotone chain	Nuclear physics a	Articulo	2016
Obtención de los factores de corrección de cámaras de ionización de uso en dosimetría física}		Tesis doctoral	2016
Photon beam quality correction factors for the ne2571a and ne2581a thimble ionization chambers using penelope	Physica medica	Articulo	2016
Self-consistent continuum random-phase approximation with finite-range interactions for charge-exchange excitations	Physical review c	Articulo	2016
A general photon source model for clinical linac heads in photon mode	Radiation physics and chemistry	Articulo	2015
A source model for the electron contamination of clinical linac heads in photon mode	Biomedical physics & engineering express	Articulo	2015
Caracterización y control de calidad de la energía de los haces de electrones empleados en radioterapia		Tesis doctoral	2015
Characterization of the ptw sourcecheck ionization chamber with the valencia lodgment for 125i seed verification	Physica medica	Articulo	2015
Comparative study of mosfet response to photon and electron beams in reference conditions	Sensors and actuators a: physical	Articulo	2015
Cálculo monte carlo de fracciones de absorción específicas mediante el código penelope		Tesis doctoral	2015
Electric quadrupole and magnetic dipole moments of odd nuclei near the magic ones in a self-consistent approach	Physical review c	Articulo	2015
Modelo de fuentes virtuales para cálculos monte carlo en radioterapia externa con haces de fotones		Tesis doctoral	2015
Monte carlo calculation of specific absorbed fractions: variance reduction techniques	Physics in medicine and biology	Articulo	2015
Optimización de la radioterapia externa del retinoblastoma por medio de simulación monte carlo con el código penelope		Tesis doctoral	2015
Pengeom - a general-purpose geometry package for monte carlo simulation of radiation transport in material systems defined by quadric surfaces	Computer physics communications	Articulo	2015
A method to relate startrack measurements to r50 variations in clinical linacs	Physica medica	Articulo	2014
A study of self consistent hartree-fock plus bardeen-cooper-schrieffer calculations with finite-range interactions	Journal of physics g: nuclear and particle physics	Articulo	2014
Charge-exchange excitations with finite range interactions including tensor terms	Physical review c	Articulo	2014

Coulomb and spin-orbit interactions in random-phase approximation calculations	Physical review c - nuclear physics	Articulo	2014
Dosimetric characterization of the 60co bebig co0.a86 high dose rate brachytherapy source using penelope	Physica medica	Articulo	2014
Electron beam quality kq,q0 factors for various ionization chambers: a monte carlo investigation with penelope	Physics in medicine and biology	Articulo	2014
General purpose mosfet for the dosimetry of electron beams used in intra-operative radiotherapy	Sensors and actuators a: physical	Articulo	2014
Monte carlo study for designing a dedicated 'd'-shaped collimator used in the external beam radiotherapy of retinoblastoma patients	Medical physics	Articulo	2014
On the shape of the tg-43 anisotropy factor for linear brachytherapy sources at short distances	Brachytherapy	Articulo	2014
Quality indexes based on water measurements for low and medium energy x-ray beams: a theoretical study with penelope	Medical physics	Articulo	2014
Study of zn, cu and pb content in plants and soils	Plant biosystems	Articulo	2014
A simple modification of tg-43 based brachytherapy dosimetry with improved fitting functions: application to the selectseed source	Physica medica	Articulo	2013
Calculation of beam quality correction factors for various thimble ionization chambers using the monte carlo code penelope	Physica medica	Articulo	2013
Dependence with air density of the response of the ptw sourcecheck ionization chamber for low energy brachytherapy sources	Medical physics	Articulo	2013
Nuclear proton and neutron distributions in the detection of weak interacting massive particles	Journal of cosmology and astroparticle physics	Articulo	2013
On the behaviour of fcq factors with quality indexes for medium energy x-ray beams: a monte carlo study with penelope	Radiation physics and chemistry	Articulo	2013
Pygmy and giant electric dipole responses of medium-heavy nuclei in a self-consistent random-phase approximation approach with a finite-range interaction		Articulo	2013
Study of zn, cu and pb content in plants and contaminated soils in sardinia	Plant biosystems	Articulo	2013
A monte carlo tool to study the mortality reduction due to breast screening programmes	Medical physics	Articulo	2012
A compact and low cost dosimetry system based on mosfet for in vivo radiotherapy	Sensors and actuators a: physical	Articulo	2012
Low-dose radiation hyper-radiosensitivity in multicellular tumour spheroids	British journal of radiology	Articulo	2012
Magnetic excitations in nuclei with neutron excess	Physical review c - nuclear physics	Articulo	2012
Mean-field calculations of the ground states of exotic nuclei		Articulo	2012
Monte carlo simulation of coms ophthalmic applicators loaded with bebig i25.s16 seeds and comparison with planning system predictions	Physica medica	Articulo	2012
Neutron dosimetry in organs of an adult human phantom using linacs with multileaf collimator in radiotherapy treatments	Medical physics	Articulo	2012
On the length of stabilograms: a study performed with detrended fluctutation analysis	Physica a. statistical mechanics and its applications	Articulo	2012
Optimizaci3n basada en algoritmos de colonias de		Tesis	

hormigas de la simulación monte carlo del transporte de radiación		Tesis doctoral	2012
Quality control for system count rate performance with scatter in gamma cameras	Physica medica	Articulo	2012
Retinoblastoma external beam photon irradiation with a special 'd'-shape collimator: a comparison between measurements, monte carlo simulation and a treatment planning system calculation	Physics in medicine and biology	Articulo	2012
Statistical control of the spectral quality index in electron beams	Radiotherapy and oncology	Articulo	2012
Tensor and tensor-isospin terms in the gogny effective interaction	Physical review c - nuclear physics	Articulo	2012
Variabilidad en radiobiología		Tesis doctoral	2012
Ambient neutron dose equivalent outside concrete vault rooms for 15 and 18 mv radiotherapy accelerators	Radiation protection dosimetry	Articulo	2011
Caracterización estabilométrica del sistema de control postural humano		Tesis doctoral	2011
Effective tensor forces and neutron rich nuclei		Articulo	2011
Estudio monte carlo de la dosimetría de fotoneutrones producidos en aceleradores de uso clínico	Ciemat	Libros	2011
Monte carlo simulation of the dynamic micro-multileaf collimator of a linac elekta precise using penelope	Physics in medicine and biology	Articulo	2011
Neutron dose equivalent and neutron spectra in tissue for clinical linacs operating at 15, 18 and 20 mv	Radiation protection dosimetry	Articulo	2011
Potencial use in phytoremediation of three plant species growing on contaminated mine-tailing soils in sardinia	Ecological engineering	Articulo	2011
Self-consistent continuum random-phase approximation calculations of 4he electromagnetic responses	Physical review c	Articulo	2011
Self-consistent continuum random-phase approximation calculations with finite-range interactions	Physical review c	Articulo	2011
Self-consistent random-phase approximation calculations of 4he electromagnetic responses	Physical review c - nuclear physics	Articulo	2011
Thermal drift reduction with multiple bias current for mosfet dosimeters	Physics in medicine and biology	Articulo	2011
Tensor effective interaction in self-consistent random-phase approximation calculations	Physical review c	Articulo	2011
The electron-ion scattering experiment elise at the international facility for antiproton and ion research (fair) - a conceptual design study	Nuclear instruments and methods in physics research a	Articulo	2011
A monte carlo tool to simulate breast cancer screening programmes	Physics in medicine and biology	Articulo	2010
A simple analytical expression to calculate the backscatter factor for low energy x-ray beams	Physica medica	Articulo	2010
Ant colony algorithm implementation in the electron and photon monte carlo transport: application to the commissioning of radiosurgery photon beams	Medical physics	Articulo	2010
Ant colony method to control variance reduction techniques in the monte carlo simulation of clinical electron linear accelerators of use in cancer therapy	Journal of computational and applied mathematics	Articulo	2010
Characterizing the human postural control system using detrended fluctuation analysis	Journal of computational and applied mathematics	Articulo	2010
Estudio del formalismo para la determinacion de la dosis	Universidad de granada física	Tesis	

absorbida en agua para haces de rayos x de energias bajas y medias	Universidad de granada. física atomica, molecular y nuclear	Tesis doctoral	2010
Estudio monte carlo con mcnp de la dosimetría de fotoneutrones producidos en aceleradores de uso clínico	Universidad de granada. física atomica, molecular y nuclear	Tesis doctoral	2010
Evaluation of neutron production in new accelerators for radiotherapy	Radiation measurements	Articulo	2010
Measurement of the ⁸ Li half-life	Physical review c - nuclear physics	Articulo	2010
Production of negative osmium ions by laser desorption and ionization	Review of scientific instruments	Articulo	2010
Readout techniques for linearity and resolution improvements in mosfet dosimeters	Sensors and actuators a: physical	Articulo	2010
Ant colony algorithm implementation in commissioning radiosurgery photon beams for monte carlo treatment planning	World congress on medical physics and biomedical engineering, september 7 - 12, 2009, munich, germany	Capítulo de libro	2009
Aplicación del método "detrended fluctuation analysis" a la trayectoria del centro de presión del cuerpo humano	Revista de física médica	Articulo	2009
Benchmark of penelope for low and medium energy x-rays	Physica medica	Articulo	2009
Efectos de la dispersión múltiple en la simulación realista de aceleradores lineales de uso clínico	Universidad de granada. física atomica, molecular y nuclear	Tesis doctoral	2009
Effective nucleon-nucleon interaction and low-lying nuclear magnetic states	Journal of physics: conference series	Articulo	2009
Evolution of the pygmy dipole resonance in nuclei with neutron excess	Physical review c - nuclear physics	Articulo	2009
Low-lying magnetic excitations of doubly-closed-shell nuclei and nucleon-nucleon effective interactions	Physical review c - nuclear physics	Articulo	2009
Multiple scattering of 13 and 20 mev electrons by thin foils: a monte carlo study with geant, geant4 and penelope	Medical physics	Articulo	2009
Monte carlo simulation using the penelope code with an ant colony algorithm to study mosfet detectors	Physics in medicine and biology	Articulo	2009
Readout techniques for linearity and resolution improvements in mosfet dosimeters	Sensors and actuators a: physical	Articulo	2009
Simulated and experimental angular response of a commercial mosfet used as dosimeter	2009 spanish conference on electron devices	Capítulo de libro	2009
Study of the human postural control system during quiet standing using detrended fluctuation analysis	Physica a. statistical mechanics and its applications	Articulo	2009
Diseño de un sistema dosimétrico portátil	Universidad de granada. electrónica y tecnología de computadoras	Tesis doctoral	2008
Effect of the multiple scattering of electrons in monte carlo simulation of linacs.	Radiotherapy and oncology	Articulo	2008
Effects of different olive-grove management systems on the organic carbon and nitrogen content of the soil in jaen (spain)	Soil & tillage research	Articulo	2008
Monte carlo simulation of the electron transport through air slabs: a comparative study of penelope, geant3, geant4 and egsrc monte carlo codes	IEEE transactions on nuclear science	Articulo	2008
Simple analytical expressions for the dose of point photon sources in homogeneous media	Physics in medicine and biology	Articulo	2008
Study of the formalism used to determine the absorbed dose for low-energy x-ray beams	Physics in medicine and biology	Articulo	2008
Ant colony method to control variance reduction techniques in the monte carlo simulation of clinical electron linear	Applied radiation and isotopes	Articulo	2007

accelerators			
Cálculo de la dosis dispersada y de los factores de acumulación para fuentes monoenergéticas de fotones usando el código de simulación monte carlo penelope	Revista de física médica	Articulo	2007
Dose distribution in water for monoenergetic photon point sources in the energy range of interest in brachytherapy: monte carlo simulations with penelope and geant4	Radiation physics and chemistry	Articulo	2007
Effect of the electron transport through thin slabs on the simulation of linear electron accelerators of use in therapy: a comparative study of various monte carlo codes	Applied radiation and isotopes	Articulo	2007
Effect of the electron transport through thin slabs on the simulation of linear electron accelerators of use in therapy: a comparative study of various monte carlo codes	Nuclear instruments and methods in physics research, section a: accelerators, spectrometers, detectors and associated eq	Articulo	2007
Influence of different post-planting treatments on the development in holm oak afforestation	Trees	Articulo	2007
Monte carlo analysis of the degradation of the spectrum produced by an x-ray tube in conventional radiography	Applied radiation and isotopes	Articulo	2007
Monte carlo simulation of the electron transport through thin slabs: a comparative study of penelope, geant3, geant4, egsnrc and mcnpX	Nuclear instruments and methods in physics research section b: beam interactions with materials and atoms	Articulo	2007
Obtención de los espectros de energía intrínsecos de un acelerador lineal de electrones a partir de la relación entre la corriente del desviador magnético y la dosis absorbida en agua	Revista de física médica	Articulo	2007
Superscaling in electroweak excitation of nuclei	Physical review c - nuclear physics	Articulo	2007
Evaluation of a low-cost commercial mosfet as radiation dosimeter	Sensors and actuators a: physical	Articulo	2006
Proton emission induced by polarized photons	Physical review c - nuclear physics	Articulo	2006
Variance reduction techniques in the monte carlo simulation of clinical electron linear accelerators driven by the ant colony method	Nature inspired cooperative strategies for optimization	Capítulo de libro	2006
Effects of bone- and air-tissue inhomogeneities on the dose distributions of the leksell gamma knife calculated with penelope	Physics in medicine and biology	Articulo	2005
Short-range nucleon-nucleon correlations effects in photon- and electron-nucleus reactions	Nuclear theory'23, proceedings of the xxiii international workshop on nuclear theory	Capítulo de libro	2005
A simplified model of the source channel of the leksell gamma knife (r): testing multisource configurations with penelope	Physics in medicine and biology	Articulo	2004
A simplified model of the source channel of the leksell gammaknife (r) tested with penelope	Physics in medicine and biology	Articulo	2004
Dosimetry characterization of p-32 intravascular brachytherapy source wires using monte carlo codes penelope and geant4	Medical physics	Articulo	2004
Dosimetría monte carlo en geometrías simples con interfases: aplicaciones en radioterapia	Universidad de granada. física moderna	Tesis doctoral	2004
Effect on tumour control of time interval between surgery and postoperative radiotherapy: an empirical approach using monte carlo simulation	Physics in medicine and biology	Articulo	2004
Evaluation of the bcr sequential extraction procedure applied for two unpolluted spanish soils	Environmental pollution	Articulo	2004

Photo-emission of two protons from nuclei	Nuclear physics. a	Articulo	2004
Proposal for the construction of a gamma-ray beam-line at the spanish synchrotron alba	Universidad de valencia	Libros	2004
A model for two-proton emission induced by electron scattering	Journal of physics g: nuclear and particle physics	Articulo	2003
Dose dependence of the growth rate of multicellular tumour spheroids after irradiation	British journal of radiology	Articulo	2003
Dosimetry for radiocolloid therapy of cystic craniopharyngiomas	Medical physics	Articulo	2003
Estudio monte carlo de la dosimetría del gamma knife	Universidad de granada. física moderna	Tesis doctoral	2003
Two proton emission with electromagnetic probes	Proceedings of the sixth workshop on electromagnetically induced two-hadron emission	Capítulo de libro	2003
Short-range correlations and meson exchange currents in photonucleon emission	Annals of physics	Articulo	2002
Correlated model for quasi-elastic responses in finite nuclear systems	Annals of physics	Articulo	2001
Mean field description of electron induced quasi-elastic excitation in nuclei	Electromagnetic response functions of nuclei	Capítulo de libro	2001
Short-range correlations in semi-exclusive electron scattering experiments	Annals of physics	Articulo	2001
Simulación de programas fraccionados de radioterapia: estudio del control tumoral y del efecto de la interrupción del tratamiento	Revista de física médica	Articulo	2001
Short-range correlations in low-lying nuclear excited states	Physical review c - nuclear physics	Articulo	2000
A method to determine the in-air spatial spread of clinical electron beams	Medical physics	Articulo	1999
Analysis of meson exchange and isobar currents in $(e,e\prime;p)$ reactions from ^{16}O	Physical review c - nuclear physics	Articulo	1999
Electron scattering with a short-range correlation model	Proceedings of the 4th workshop on electromagnetically induced two-hadron emission	Capítulo de libro	1999
La radiactividad	Ciencia digital	Articulo	1999
Nuclear currents based on the integral form of the continuity equation	Physical review c - nuclear physics	Articulo	1999
Quasielastic electron scattering from nuclei: random-phase vs ring approximations	Physical review c - nuclear physics	Articulo	1999
Spin-orbit interaction in hartree-fock calculations	Il nuovo cimento a series 11	Articulo	1999
Effective interaction in quasielastic electron scattering calculations	Physical review c - nuclear physics	Articulo	1998
Model of short-range correlations in the charge response	Physical review c - nuclear physics	Articulo	1998
Tensor interaction in hartree-fock calculations	Il nuovo cimento a series 11	Articulo	1998
Two-nucleon emission in the longitudinal response	Physical review c - nuclear physics	Articulo	1998
Meson-exchange contributions to the nuclear charge operator	Nuclear physics. a	Articulo	1997
Radiative pion capture in nuclei: a continuum shell-model approach	Nuclear physics. a	Articulo	1997
Continuity equation in electron scattering from nuclei	Physical review c - nuclear physics	Articulo	1996
Mean-field calculations of quasielastic responses in ^{4}He	Physical review c - nuclear physics	Articulo	1996
Parity violation in quasielastic electron scattering from closed-shell nuclei	Nuclear physics. a	Articulo	1996

Efecto de los grados subnucleares de libertad en la respuesta cuasielastica nuclear	Universidad de granada. física moderna	Tesis doctoral	1994
Finite size effects in the electromagnetic quasi-elastic responses of nuclei	International journal of modern physics e	Articulo	1994
Finite size effects in the electromagnetic quasi-elastic responses of nuclei	Dynamical features of nuclei and finite fermi systems	Capítulo de libro	1994
Meson exchange currents in the quasi-elastic peak	Electron-nucleus scattering	Capítulo de libro	1994
Meson-exchange current effects in elastic electron-scattering from polarized nuclei	Nuclear physics. a	Articulo	1994
Meson-exchange currents in quasi-elastic electron-scattering from c-12 and ca-40 nuclei	Nuclear physics. a	Articulo	1994
Respuesta cuasielastica nuclear en c-12 y ca-40	Xxiv reunion bienal de la real sociedad española de fisica	Capítulo de libro	1993
Magnetic states in ca-48 and the tensor part of the residual nucleon-nucleon interaction	Modern physics letters a	Articulo	1992
Meson exchange currents in the quasielastic response of c-12	Physics letters. section b: nuclear, elementary particle and high-energy physics	Articulo	1992
Meson exchange effects in medium nuclei	Pions in nuclei	Capítulo de libro	1992
Meson-exchange current effects in the magnetic electroexcitation of ca-48	Nuclear physics. a	Articulo	1992

	Título proyecto	Tipo	Inicio	Fin
1	Intercomparación de sistemas de dosimetría in vivo en radioterapia. caracterización y puesta en marcha de un nuevo sistema basado en mosfet	Proyecto	11/1/11	1/31/16
2	Intercomparación de sistemas de dosimetría in vivo en radioterapia. caracterización y puesta en marcha de un nuevo sistema basado en mosfet	Proyecto	1/1/10	12/31/13
3	Colision de sondas electrodebiles con nucleos y atomos	Proyecto	1/1/09	12/31/09
4	Colisión de sondas electrodebiles con nucleos y atomos	Proyecto	12/1/05	12/31/08
5	Colision de sondas electrodebiles con nucleos y atomos	Proyecto	12/31/05	12/31/08
6	Descripción teórica de excitaciones nucleares colectivas inducidas por sondas electrodebiles	Proyecto	5/1/07	4/30/08
7	No consta	Proyecto	6/30/05	12/31/05
8	Efecto de las correlaciones de corto alcance en la respuesta nuclear	Proyecto	1/1/98	12/31/03
9	Ayuda: cooperación con investigadores del instituto nacional de física nuclear de italia	Proyecto	6/30/03	12/31/03
10	Física nuclear a energías intermedias fqm0225	Proyecto	1/1/01	12/31/02
11	Ayuda: cooperación con investigadores del instituto nacional de física nuclear de italia	Proyecto	6/30/02	12/31/02
12	Física nuclear a energías intermedias	Proyecto	1/1/01	12/31/02
13	Dinamica de sistemas hadronicos en fisica nuclear a energias intermedias	Proyecto	9/11/96	9/11/99
14	Fisica nuclear a energias intermedias	Proyecto	10/1/96	10/1/97
15	Ayuda: cooperación con investigadores del instituto nacional de física nuclear de italia	Proyecto	6/30/03	

Actividades 9

Título actividad	Fuente	Tipo	Fecha
Socio real sociedad española de física		Comité científico en sociedad ci	Jul 1, 1990
Participación en: sociedad española de física médica ()		Comité científico en sociedad ci	Jan 1, 2001
Participación en: grupo especializado de física nuclear (real sociedad española de física)	Real sociedad española de física	Comité científico en sociedad ci	Jul 1, 1990
Participación en comité de revista: revista de fisica medica		Comités científicos de revista	Apr 1, 2001
Participación en comité de revista: physics in medicine and biology		Comités científicos de revista	Jan 1, 2003
Participación en comité de revista: european physical journal a		Comités científicos de revista	Mar 1, 2004
Participación en comité de revista: physica medica		Comités científicos de revista	Jan 1, 2007
Participación en comité de revista: medical physics		Comités científicos de revista	Jan 1, 2004
Participación en comité de revista: international journal of radiation biology		Comités científicos de revista	Jan 1, 2006

Colaboradores

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- RAFAEL GUERRERO ALCALDE (11)
- ALBERTO JOSE PALMA LOPEZ (9)
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- FERNANDO ARIAS DE SAAVEDRA ALÍAS (6)
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- MARÍA SOFÍA MARTÍNEZ GARCÍA (2)
- MERCEDES VILLALOBOS TORRES (2)
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