

Curriculum Vitae

Ivan Padron Diaz



Personal Information:

Name Ivan Padron Diaz
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Sex Male
Residential Address St. Stroitelei 8, apto 603, Dubna, Moscow Region, Russia
Professional Address FLNP (Frank Laboratory of Neutron Physics)
Dubna, Moscow Region, Russia
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Academic formation:

2004 - 2006 Post-Doctorate on Nuclear Structure
Heavy Ions Department, Universidad Federal Fluminense, UFF, Niterói, Brazil
1999 - 2003 Doctorate in Physics
Universidad Federal Fluminense, UFF, Niterói, Brazil
Title: "Influence of Break-up on nuclear fusion"
1986 - 1988 Master on Physics and Mathematics
Moscow State University, Moscow, Russia
Title: "Emission of light particles in the nuclear fission"
1982 - 1986 Bachelor in Experimental Nuclear Physics
Moscow State University, Moscow, Russia

Professional Positions

2024- Senior Researcher, FLNP (Frank Laboratory of Neutron Physics)
2018 - 2023 Director of CEADEN (Centro de Estudios Aplicados al Desarrollo Nuclear)
2016 - 2017 Visiting Senior Researcher, Institute of Physics, Sao Paulo University, Brazil
2009 - 2016 Director of CEADEN
2015 - 2009 Head of Radiobiology and Radiation Technologies Department (CEADEN)
1989 - 2008 Researcher at the CEADEN

Professional Activities

09/1990 - 12/2017 Associated Professor of the Instituto Superior de Ciencia y Tecnología Nuclear (INTEC)
(*Neutron Physics, Nuclear reactions, Mathematical modeling of nuclear processes*).

- 04/1994 - 02/1998 Installation of low energy particle accelerator and its commissioning for high flux neutron generator NG-12I.
Industrial and biomedical applications of neutrons.
- 03/1998 – 03/2000 I + D Project: Neutron TOF Spectrometry. Development of neutron detectors.
I + D: Experimental study of nuclear fusion with weakly bound and exotic nuclei.
- 03/1999 – 05/2004 Development of Time-of-Flight spectrometer at the Laboratorio Tandar, B.A., Argentina.
- 06/2004 – 05/2006 I+D: Development of neutron source for Boron Neutron Capture Therapy (BNCT).
- 06/2006 – 06/2016 I + D + i: Dosimetric characterization of laboratory scale Co-60 gamma irradiators. Monte Carlo simulation for gamma treatment optimization at the CEADEN.
I + D + i: Advising and commissioning of semi-industrial gamma plant at the Institute of Food Research in Havana, Cuba.
- 06/2016 – 12/2022 Monte Carlo modeling of optimal Co-60 sources pencil distribution for plant recharging.
Dose projection and risk tree calculations for the Radiation Protection Programme.

Membership on Advising Committees and Technical Missions:

- 1) Member of the Scientific Council of the Joint Institute for Nuclear Research (JINR), Dubna, Russia (2013 – 2015), (2017 - 2024)
- 2) President of the Scientific Council of CEADEN, Havana, Cuba (2008 – 2022)
- 3) Expert of the Project Program on Nuclear, Optics and Laser, Havana, Cuba (2010 – 2018),
- 4) Invited Professor at the Pelletron Laboratory, Institute of Physics, Sao Paulo University, Brazil (01/2016 – 02/2017)
- 5) IAEA Expert Mission for the Development of Radiation Protection Programme of the Industrial Gamma Irradiation Plant of El Alto, La Paz, Bolivia (04/2018)
Lectures: Computation modeling, dose projection and risk tree calculations for irradiation plant licensing.
- 6) Expert of the Geology National Project Program, Havana, Cuba (2012 – 2022)

International Projects and Research Contracts:

- 1988 - 1990 Participant on IAEA Project CUB/01/005 "Double differential neutron cross section measurements by TOF spectrometry"
- 1994 - 1997 Leader of IAEA National Project IAEA CUB/01/007 "Installation of a High Flux Neutron Generator"
- 1997 – 1999 Leader of the IAEA Coordinated Research Contract "Industrial application of bulk hydrogen analysis using neutrons"
- 1999 – 2006 Collaboration Project between CEADEN, Universidad Federal Fluminense (Niteroi, Brazil) and Laboratorio Tandar (CNEA, Argentina)
"Study of nuclear fusion with weakly bound projectiles"

- 2006 – 2009 Collaboration Project between CEADEN and CIEMAT (Madrid), Spain
Development of quasi-monoenergetic neutron source using the p+7LiF reaction.
Technical design and modeling by Monte Carlo method.
- 2012 – 2014 Leader of IAEA Coordinated Research Contract 16867 “Application of 3D Neutron Imaging and Tomography in Cultural Heritage Research”
- 2016 – 2017 Visiting senior researcher fellowship at the Institute of Physics, Sao Paulo University, Brazil.
Design of a real-time pulse processing data acquisition for neutron wall modular detector at the RIBRAS experiments.
- 2018 – 2022 Leader of IAEA Coordinated Research Contract 18924 “Developing Radiation Treatment Methodologies and New Resin Formulations for Consolidation and Preservation of Archived Materials and Cultural Heritage Artifacts”
- 2023 – Leader of IAEA Coordinated Research Contract 26646 “Gamma Treatment Implementation for Cultural Heritage Preservation”

Language proficiency:

	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>	<i>Understanding</i>
<i>English</i>	Good	Good	Good	Good
<i>Russian</i>	Good	Good	Good	Good
<i>Portuguese</i>	Good	Good	Good	Good

Scientific Awards

- 2010** National Prize of the Academy of Sciences of Cuba (ACC)
- 2003, 2005, 2006, 2007, 2012, 2018** Prizes for Relevant Scientific Results of the Nuclear Energy Agency of Cuba

Citations of scientific articles and Factor-H (Researchgate.net)

Indexed Articles : **44**
 Research Interest Score: **492.6**
 Citations: **1840** , Factor-H = **23**

Publications in International Journals with referees

- 1) ALVAREZ M.G, RODRIGUEZ GALLARDO M., GASQUES L.R., CHAMON L.C., OLIVEIRA J.R., SCARDUELLI V., ZAGATTO V.A., RANGEL J., LUBIAN J., **PADRON I.**, “Elastic scattering, inelastic excitation, and 1n pick-up transfer cross sections for $^{10}\text{B} + ^{120}\text{Sn}$ at energies near the Coulomb barrier”. PHYSICAL REVIEW C98 No.2, 024621 (August/2018). DOI: 10.1103/PhysRevC.98.024621
- 2) GASQUES L.R., FREITAS A.S., CHAMON L.C., OLIVEIRA J.R., MEDINA N.H., ALVAREZ M.G, ZAGATTO V.A., LUBIAN J., NOBRE G.P, **PADRON I.**, CARLSON B.V. “Elastic, inelastic, and 1n

transfer cross sections for the $^{10}\text{B}+^{120}\text{Sn}$ reaction". PHYSICAL REVIEW C97, 034629 (January/2018).

- 3) ZAGATTO V.A., LUBIAN J., GASQUES L.R., ALVAREZ M.G, CHAMON L.C., OLIVEIRA J.R., MEDINA N.H., **PADRON I.**, SHORTO J.M "The fundamental role of continuum coupling in $^7\text{Li} + ^{120}\text{Sn}$ reaction at energies around the barrier". PHYSICAL REVIEW C97, 034629 (January/2018).
- 4) GOMES, P. R. S., LINARES, R., LUBIAN, J., LOPES, C. C., CARDOZO, E. N., PEREIRA, B. H. F., **PADRON, I.**
Search for systematic behavior of incomplete-fusion probability and complete-fusion suppression induced by ^9Be on different targets. Physical Review. C. Nuclear Physics (Print), v.84, p.014615, (2011). *Home page:* [doi:10.1103/physrevc.84.014615]
- 5) GOMES, P.R.S., LUBIAN, J., PAES, B., GARCIA, V.N., MONTEIRO, D.S., **PADRÓN, I.**, FIGUEIRA, J.M., ARAZI, A., CAPURRO, O.A., FIMIANI, L., NEGRI, A.E., MARTÍ, G.V., FERNÁNDEZ NIELLO, J.O., GÓMEZ-CAMACHO, A., CANTO, L.F.
Near-barrier fusion, breakup and scattering for the $^9\text{Be}+^{144}\text{Sm}$ system. Nuclear Physics. A (Print), v.828, p.233 - 252, (2009).
Home page: [doi:10.1016/j.nuclphysa.2009.07.008]
- 6) GARCIA, A.R., LUBIAN, J., GOMES, P.R.S., **PADRON, I.**, CHAMON, L.C., PEREIRA, D.
Limitation of double folding potentials to simulate the polarization in reactions involving halo nuclei. Nuclear Physics. A (Print), v.806, p.146 - 155, (2008). *Home page:* [doi:10.1016/j.nuclphysa.2008.03.004]
- 7) GÓMEZ CAMACHO, A., GOMES, P., LUBIAN, J., **PADRON, I.**
Simultaneous optical model analysis of elastic scattering, fusion, and breakup for the $^9\text{Be}+^{144}\text{Sm}$ system at near-barrier energies. Physical Review. C. Nuclear Physics (Print), v.77, p.054606 - , (2008).
Home page: [doi:10.1103/physrevc.77.054606]
- 8) GOMES, P. R. S., **PADRON, I.**, CAPURRO, O. A., NIELLO, J. O. FERNÁNDEZ, MARTÍ, G. V., PACHECO, A. J., ARAZI, A., LUBIAN, J., CREMA, E.
X-ray spectrometry: a powerful tool for the measurement of complete fusion of weakly bound nuclei. X-Ray Spectrometry, v.37, p.512 - 516, (2008).
- 9) FIGUEIRA, J., NIELLO, J., ABRIOLA, D., ARAZI, A., CAPURRO, O., BARBARÁ, E., MARTÍ, G., HEIMANN, D., NEGRI, A., PACHECO, A., **PADRON, I.**, GOMES, P., LUBIAN, J., CORREA, T., PAES, B.
Breakup threshold anomaly in the elastic scattering of ^6Li on ^{27}Al . Physical Review. C. Nuclear Physics, v.75, p.017602 - , (2007).*Home page:* [doi:10.1103/physrevc.75.017602]
- 10) CAMACHO, A., GOMES, P., LUBIAN, J., AGUILERA, E., **PADRON, I.**
Detailed determination of the nuclear fusion radius by a simultaneous optical model calculation of elastic scattering and fusion cross sections in reactions involving weakly bound projectiles. Physical Review. C. Nuclear Physics (Print), v.76, p.044609 - , (2007).
Home page: [doi:10.1103/physrevc.76.044609]
- 11) BENJAMIM, E.A., LÉPINE-SZILY, A., MENDES JUNIOR, D.R., LICHTENTHÄLER, R., GUIMARÃES, V., GOMES, P.R.S., CHAMON, L.C., HUSSEIN, M.S., MORO, A.M., ARAZI, A., **PADRON, I.**, ALCANTARA NUÑEZ, J., ASSUNÇÃO, M., BARIONI, A., CAMARGO, O., DENKE, R.Z., DE FARIA, P.N., PIRES, K.C.C.
Elastic scattering and total reaction cross section for the $^6\text{He} + ^{27}\text{Al}$ system. Physics Letters. B, v.647, p.30 - 35, (2007).
Home page: [doi:10.1016/j.physletb.2007.01.048]
- 12) LICHTENTHÄLER, R., DE FARIA, P. N., LÉPINE-SZILY, A., GUIMARÃES, V., CAMARGO, O., DENKE, R., BENJAMIM, E. A., BARIONI, A., PIRES, K. C.C., MENDES, D. J., ASSUNÇÃO,

- M., ARAZI, A., **PADRON, I.**, GOMES, P. R.S.
Elastic scattering of $6\text{He} + 27\text{Al}$ and $7\text{Be} + 51\text{V}$ at RIBRAS. The European Physical Journal. Special Topics (Online). v.150, p.27 - 30, (2007).
Home page: [doi:10.1140/epjst/e2007-00257-9]
- 13) GOMES, P. R. S., **PADRON, I.**, LUBIAN, J.
Fusion of weakly bound nuclei. Journal of Radioanalytical and Nuclear Chemistry (Print). v.272, p.215 - 218, (2007). *Home page:* [doi:10.1007/s10967-007-0502-9]
- 14) GÓMEZ CAMACHO, A., AGUILERA, E.F., GOMES, P.R.S., LUBIAN, J., **PADRON, I.**
Optical model analysis of elastic scattering and fusion in reactions with weakly bound projectiles around the Coulomb barrier. Nuclear Physics. A (Print). , v.787, p.275 - 280, (2007).
Home page: [doi:10.1016/j.nuclphysa.2006.12.043]
- 15) FERNÁNDEZ NIELLO, J.O., FIGUEIRA, J.M., ABRIOLA, D., ARAZI, A., CAPURRO, O.A., MARTÍ, G.V., MARTÍNEZ HEINMANN, D., PACHECO, A.J., DE BARBARÁ, E., **PADRON, I.**, GOMES, P.R.S., LUBIAN, J.
Study of the Threshold Anomaly in the Scattering of Li Isotopes on 27Al . Nuclear Physics. A (Print). v.787, p.484 - 490, (2007). *Home page:* [doi:10.1016/j.nuclphysa.2006.12.072]
- 16) GARCIA, A., LUBIAN, J., **PADRON, I.**, GOMES, P.R.S., LACERDA, T., GARCIA, V., CAMACHO, A., AGUILERA, E.
Threshold anomaly in the elastic scattering of He6 on Bi209. Physical Review. C. Nuclear Physics (Print). v.76, p.067603 - , (2007).
Home page: [doi:10.1103/physrevc.76.067603]
- 17) LUBIAN, J., CORREA, T., PAES, B., FIGUEIRA, J.M., ABRIOLA, D., FERNÁNDEZ NIELLO, J.O., ARAZI, A., CAPURRO, O.A., DE BARBARÁ, E., MARTÍ, G.V., MARTÍNEZ HEINMANN, D., NEGRI, A.E., PACHECO, A.J., **PADRON, I.**, GOMES, P.R.S.
 7Li breakup polarization potential at near barrier energies. Nuclear Physics. A (Print). , v.791, p.24 - 35, (2007). *Home page:* [doi:10.1016/j.nuclphysa.2007.04.011]
- 18) FIGUEIRA, J., ABRIOLA, D., NIELLO, J., ARAZI, A., CAPURRO, O., BARBARÁ, E., MARTÍ, G., MARTÍNEZ HEINMANN, D., PACHECO, A., **PADRON, I.**, GOMES, P., LUBIAN, J.
Absence of the threshold anomaly in the elastic scattering of the weakly bound projectile 7Li on 27Al . Physical Review. C. Nuclear Physics (Print). , v.73, p.54603 - , (2006).
Home page: [doi:10.1103/physrevc.73.054603]
- 19) GOMES, P., **PADRON, I.**, CREMA, E., CAPURRO, O., NIELLO, J., ARAZI, A., MARTÍ, G., LUBIAN, J., TROTTA, M., PACHECO, A., TESTONI, J., RODRÍGUEZ, M., ORTEGA, M., CHAMON, L., ANJOS, R., VEIGA, R., DASGUPTA, M., HINDE, D., HAGINO, K.
Comprehensive study of reaction mechanisms for the $\text{Be}9 + \text{Sm}144$ system at near- and sub-barrier energies. Physical Review. C. Nuclear Physics (Print). , v.73, p.64606 - , (2006).
- 20) GOMES P.R.S., **PADRON I.**, CREMA, E., CAPURRO, O.A., FERNÁNDEZ NIELLO, J.O., MARTI, G.V., ARAZI, A., TROTTA, M., LUBIAN, J., ORTEGA, M.E., PACHECO, A.J., RODRÍGUEZ, M.D., TESTONI, J.E., ANJOS, R.M., CHAMON, L.C., DASGUPTA, M., HINDE, D.J., HAGINO, K.
Disentangling the reaction mechanisms of weakly bound nuclei. Physics Letters. B, v.634, p.356 - 361, (2006)
- 21) GOMES P. R. S., LUBIAN J, **PADRON I.**
Fusion, break-up and scattering of weakly bound nuclei. Revista Mexicana de Física. v.52, p.23 - 29, (2006).
- 22) GOMES P.R.S., **PADRON I.**, CAPURRO O.A., FERNÁNDEZ NIELLO J.O., MARTÍ G.V., ANJOS R. M., LUBIAN J., VEIGA R., CREMA E., PACHECO A.J., TESTONI J.E., ARAZI A., RODRÍGUEZ M.D., ORTEGA M. E., TROTTA M.

Complete fusion of weakly bound nuclei applying the delayed X-ray technique: the $^9\text{Be} + ^{144}\text{Sm}$ system. Brazilian Journal of Physics, v.35, p.902 - 905, (2005).

Home page: [doi:10.1590/s0103-97332005000500050]

- 23) GOMES P.R.S., RODRÍGUEZ M., MARTÍ G., **PADRON I.**, CHAMON L., FERNÁNDEZ NIELLO J., CAPURRO O., PACHECO A., TESTONI J., ARAZI A., RAMÍREZ M., ANJOS R., LUBIAN J., LIGUORI NETO R., CREMA E., ADDED N., TENREIRO C., HUSSEIN M.
Effect of the breakup on the fusion and elastic scattering of weakly bound projectiles on Zn^{64} . Physical Review C. , v.71, p.034608 - , (2005).
Home page: [doi:10.1103/physrevc.71.034608]
- 24) GOMES P.R.S, **PADRON I.**, NIELLO, J O FERNÁNDEZ, MARTÍ G.V., RODRÍGUEZ M.D., CAPURRO O.A, PACHECO A J, TESTONI J E, ARAZI A, LUBIAN J, ANJOS R M, CHAMON L C, CREMA E, HUSSEIN M
Fusion, break-up and elastic scattering of weakly bound nuclei. Journal of Physics G: Nuclear and Particle Physics. , v.31, p.S1669 - S1673, (2005).
Home page: [doi:10.1088/0954-3899/31/10/051]
- 25) MARTÍ, G., GOMES, P., RODRÍGUEZ, M., NIELLO, J., CAPURRO, O., PACHECO, A., TESTONI, J., RAMÍREZ, M., ARAZI, A., **PADRON, I.**, ANJOS, R., LUBIAN, J., CREMA, E.
Fusion, reaction, and breakup cross sections of ^9Be on a light mass target. Physical Review. C. Nuclear Physics (Print). v.71, p.27602 - , (2005).
Home page: [doi:10.1103/physrevc.71.027602]
- 26) GOMES P. R. S., LUBIAN J., **PADRON I.**, ANJOS R. M.
Uncertainties in the comparison of fusion and reaction cross sections of different systems involving weakly bound nuclei. Physical Review C. v.71, p.017601 - , (2005).
Home page: [doi:10.1103/physrevc.71.017601]
- 27) **Padron I.**, GOMES, P. R. S., LUBIAN, J.
"Break-up versus complete fusion for weakly bound nuclei". Nucleus. , v.35, p.11 - , (2004).
- 28) RODRÍGUEZ, M.D., **PADRON, I.**, MARTÍ, G.V., ANJOS, R.M., GOMES, P.R.S., LUBIAN, J., VEIGA, R.S.L., PACHECO, A.J., CAPURRO, O.A., FERNÁNDEZ NIELLO, J.O., TESTONI, J.E., ARAZI, A., RAMÍREZ, M.
Fusion cross section measurements for systems $^6\text{Li} + ^{27}\text{Al}$, ^{64}Zn at near-barrier energies. Brazilian Journal of Physics, v.34, p.869 - 870, (2004).
Home page: [doi:10.1590/s0103-97332004000500043]
- 29) **Padron, I.**, GOMES, P. R. S., LUBIAN, J.
Fusion Cross Section measurements for the $^{6,7}\text{Li} + ^{27}\text{Al}$, ^{64}Zn systems by the time of flight technique". Nucleus. , v.35, p.15 - , (2004).
- 30) GOMES, P.R.S., **PADRON, I.**, RODRÍGUEZ, M.D., MARTÍ, G.V., ANJOS, R.M., LUBIAN, J., VEIGA, R., LIGUORI NETO, R., CREMA, E., ADDED, N., CHAMON, L.C., FERNÁNDEZ NIELLO, J.O., CAPURRO, O.A., PACHECO, A.J., TESTONI, J.E., ABRIOLA, D., ARAZI, A., RAMÍREZ, M., HUSSEIN, M.S.
Fusion, reaction and break-up cross sections of weakly bound projectiles on ^{64}Zn . Physics Letters. B, v.601, p.20 - 26, (2004).
- 31) GOMES, P., ANJOS, R., MURI, C., LUBIAN, J., **PADRON, I.**, CHAMON, L., NETO, R., ADDED, N., FERNÁNDEZ NIELLO, J., MARTÍ, G., CAPURRO, O., PACHECO, A., TESTONI, J., ABRIOLA, D.
Threshold anomaly with weakly bound projectiles: Elastic scattering of $^9\text{Be} + ^{27}\text{Al}$. Physical Review. C. Nuclear Physics, v.70, p. 054605 ,(2004).
Home page: [doi:10.1103/physrevc.70.054605]

- 32) LUBIAN, J., GOMES, P.R.S., ANJOS, R.M., **PADRON, I.**, MURI, C., MORAES, S.B., ALVES, J.J.S., MACIEL, A.M.M., LIGUORI NETO, R., ADDED, N., MARTÍ, G.V., RAMÍREZ, M., PACHECO, A.J., CAPURRO, O.A., FERNÁNDEZ NIELLO, J.O., TESTONI, J.E., ABRIOLA, D., SPINELLA, M.R.
Influence of the break-up on the fusion and scattering processes. Brazilian Journal of Physics. v.33, p.323 - 327, (2003).
Home page: [doi:10.1590/s0103-97332003000200032]
- 33) **Padron, I.**, GOMES, P R S, ANJOS, R M
Fusion of stable weakly bound nuclei with ^{27}Al and ^{64}Zn . Physical Review. C. Nuclear Physics (Print), v.66, p.44608 - , (2002).
- 34) GOMES, P. R. S., LUBIAN, J., **Padron, I.**,
Low-lying inelastic channel couplings versus breakup effects on the fusion cross section. Physical Review. C. Nuclear Physics, v.64, p.27601 - , (2001).
- 35) GOMES, P. R. S., B, M. S., S, A. J. J., LUBIAN, J, **Padron, I.**
Fusion and elastic scattering of $^9\text{Be}+^{64}\text{Zn}$: A search of the breakup influence on these processes. Physical Review C. , v.61, p.64608 - , 2000.
- 36) MORAES, S.B., MACIEL, A.M.M., ANJOS, R. M., MURI, C., CABEZAS, R., LIGUORI NETO, R., LUBIAN, J., ALVES, J.J.S., Padron, I., ADDED, N., GOMES P. R.
Investigation of the role of the breakup process on the fusion and elastic scattering of weakly bound projectile induced reactions. Acta Physica Hungarica , v.11, p.361 - 371, (2000).

Publications in Proceedings of Conferences and Progress Reports:

- 1) **Padron I.** “Gamma Treatment Implementation for Cultural Heritage Preservation” **Second Progress Reports of IAEA Research Program 22082. October/2024.**
- 2) **Padron I.**, Prieto E. Chavez A., Otero I., Rodriguez D. “Development of national regulations for the preservation of cultural heritage documents using gamma radiation treatment” **In Proceedings of the Second International Conference on Applications of Radiation Science and Technology (ICARST 2022). Vienna, Austria. August/2022**
- 3) **Padron I.**, Prieto E., Chavez A., Otero I., Rodriguez D.
"Disinfection of posters and archival material from the Cuban Cinematheque using gamma radiation." **Progress Reports of IAEA Research Contract 18924 (CRP F23032) (2016-2020)**
- 4) **Padron I.**
"Monte Carlo Modeling for Planning and optimization of gamma radiation treatment". II in Proceedings of the **International Conference “Nuclear Technologies for Life”**. Havana, **February 2020.**
- 5) **Padron I.**, Alvarez M.G, Gasques L.R., Lepine-Scily A.
“A real time pulse processing DAQ for neutron wall modular detector on RIBRAS experiments”. In Proceedings of **WONP-NURT/2017. Havana, Cuba. November/ 2017.**
- 6) Gomes P.R.S., Lubian J., Linares R., **Padron I.**, et al.
“Systematic Results of Reactions and Scattering of Weakly Bound Nuclei at Near barrier Energies” in: IX Latin American Symposium on Nuclear Physics and Applications (LASNPA), Quito, Ecuador.

AIP Conference Proceedings, v. 1423, 2012. doi:10.1063/1.3688784

- 7) Paes B., Gomes P.R.S., Lubian J., Nunes V., **Padron I.**, Canto L. F., Alarcon R., Cole P., Kreiner A. J., Arellano H. F.
“Fusion of the ${}^9\text{Be}+{}^{144}\text{Sm}$ System at Near Barrier Energies” In: VIII LATIN AMERICAN SYMPOSIUM ON NUCLEAR PHYSICS AND APPLICATIONS, Santiago (Chile), 2010.
AIP Conference Proceedings, v. 1265, pag. 108, 2010. doi:10.1063/1.3480144
- 8) Paes B., Garcia V. N., Lubian J., Gomes P.R.S., **Padron I.**, Deppman A., Krug C., Zahn G. S., Rios J. L., Added N., Timoteo V. S.
“Breakup and Elastic Scattering in the ${}^9\text{Be}+{}^{144}\text{Sm}$ system at near barrier energies” In: XXXII BRAZILIAN WORKSHOP ON NUCLEAR PHYSICS, Sao Paulo (Brazil), 2010.
AIP Conference Proceedings, v. 1245, pag. 124, 2010. doi:10.1063/1.3448001
- 9) Figueira J. M., Abriola D., Fernández Niello J. O., Arazi A., Capurro O. A., Martí G. V., Martínez Heinmann D., Pacheco A. J., Testoni J. E., De Barbará E., **Padron I.**, Gomes P.R.S., Lubian J.
“Elastic scattering with weakly bound projectiles” In: VI LATIN AMERICAN SYMPOSIUM ON NUCLEAR PHYSICS AND APPLICATIONS, Iguazú (Argentina).
AIP Conference Proceedings, v. 884, pag 185, 2007. Wos: 000245812000045
- 10) De Barbará E., Martí G. V., Arazi A., Capurro O. A., Fernández Niello J. O., Figueira J. M., Pacheco A. J., Ramírez M., Rodríguez M. D., Testoni J. E., Verruno M., **Padron I.**, Gomes P.R.S., Crema E.
“Fusion cross sections for the ${}^{6,7}\text{Li}+{}^{27}\text{Al}$, ${}^9\text{Be}+{}^{27}\text{Al}$ systems” In: VI LATIN AMERICAN SYMPOSIUM ON NUCLEAR PHYSICS AND APPLICATIONS, Iguazu (Argentina).
AIP Conference Proceedings, v. 884, pag 189, 2007. Wos: 000245812000026
- 11) Gomes P. R.S., **PADRON I.**, Crema E., Lubian J., Chamon L.C., Canto L.F., Hussein M.S.
“Fusión and break-up of weakly bound nuclei”; in: International Conference on Reaction Mechanisms and Nuclear Structure, Venice, Italia, 2006.
AIP Conference Proceedings, v. 853, pag 55, 2006. Wos: 000240548300008
- 12) A. Lepine-Szily, E.A. Benjamin, R. Lichtenthaler, V. Guimarães, P.N. de Faria, P.R.S. Gomes, A. Arazi, **I. Padron**, J. Alcantara Nuñez, M. Assunção, A. Barioni, R.Z. Denke, D.R. Mendes Jr., K.C.C. Pires
“Elastic Scattering and reaction cross section of the ${}^6\text{He} + {}^{27}\text{Al}$ system close to the Coulomb barrier”; in: International Conference on Reaction Mechanisms and Nuclear Structure, Venice, Italia, 2006.
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Organization of international scientific events:

- 1) **First International School NUMAR-2024**, February/2024. Varadero, Cuba.
(Member of the Organizing Committee)
- 2) **XI International Workshop on Nuclear Physics (XI WONP) and X International Workshop on Nuclear Related Techniques (XNURT)**, February /2015. (President of the Organizing Committee)
- 3) **VIII International Workshop TECNOLASER**, April/2014. (President of the Organizing Committee)
- 4) **X International Workshop on Nuclear Physics (X WONP) and IX International Workshop on Nuclear Related Techniques (IXNURT)**, February/2013. (President of the Organizing Committee)
- 5) **VII International Workshop TECNOLASER**, April/2012. (President of the Organizing Committee)
- 6) **IX International Workshop on Nuclear Physics (IX WONP) and VIII International Workshop on Nuclear Related Techniques (VIII NURT)**, February/2011 (President of the Organizing Committee)
- 7) **VIII Intern Workshop on Nuclear Physics (VIII WONP) and VII International Workshop on Nuclear Related Techniques (VIINURT)**, February/2009
(Member of the Organizing Committee)
- 8) **VII International Workshop on Nuclear Physics (VII WONP)**, April / 2007.
(Member of the Organizing Committee)

- 9) **VI International Workshop on Nuclear and Related Techniques, (VI NURT)**, February/2005 (Member of the Organizing Committee)
- 10) **VI International Workshop on Nuclear Physics (VI WONP)**, October/2005. (Member of the Organizing Committee)

Scientific dissemination lectures and activities:

- 1) **Lecture: Ultraintense lasers applied to Life Science Research. International School NUMAR/2024**
- 2) **Article published on Scientific Popular Journal Juventud Técnica "Impact of Nuclear Techniques on the life", La Habana, 2011.**
- 3) **Lecture: "Extreme light: Interaction mechanisms and foreseen applications", Nov. 2011, INFN-LNS Sala Azzurra, Catania, Italia.**
- 4) **Interview on the Radio: "Nuclear technique applications at CEADEN", La Habana, 2012.**
- 5) **Interview on TV Program "A Tiempo", La Habana, 2014**
- 6) **Lecture: "Ultra-intense laser pulses: Potential Energy power solution and Perspectives for the particle accelerator dissemination", September 2010, Auditorio del Nivel +63 Edificio TANDAR, Buenos Aires Argentina.**
- 7) **Lecture: Advances on Nuclear Medicine in Cuba, 2010. Teatro AEN; La Habana; Organized by: Agencia de Energía Nuclear.**
- 8) **Lecture: CEADEN as Nuclear Technique promotor in Cuba, 2010. Local: Sala Yara del Capitolio; La Habana; Organized by: Academia de Ciencias de Cuba**
- 9) **Lecture: "Nuclear Fusion: Energy for future generations", 2010. La Habana; School on Nuclear Sciences. Organized by: CEADEN**
- 10) **Lecture: "Pulsed ultra-intense: State of the Art and Perspectives for table-top accelerator development", 2011. Museum Humboldt; La Habana; Pre-Congress School. Organized by: INSTEC**