



Part A. PERSONAL INFORMATION

CV date

07/11/25

First name	Pablo		
Family name	de Vera		
Gender (*)	Male	Birth date (dd/mm/yyyy)	05/04/1986
Social Security, Passport, ID number	Spanish ID:		
e-mail	pablo.vera@um.es	URL Web:	https://webs.um.es/pablo.vera/
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-5645-412X		

(*) Mandatory

A.1. Current position

Position	Profesor Contratado Doctor (Tenured Assistant Professor)		
Initial date	19/07/23		
Institution	Universidad de Murcia		
Department/Center	Departamento de Física – Centro de Investigación en Óptica y Nanofísica (CIOyN)	Facultad de Química	
Country	Spain	Teleph. number	+34 868881782 (Ext. 1782)
Key words	Ion beams, electron beams, hadrontherapy, nanoscience		

A.2. Previous positions (research activity interruptions, art. 14.2.b)

Period	Position/Institution/Country/Interruption cause
2021-2023	Profesor Contratado Doctor Interino (Acting Assistant Professor, tenure-track) / Departamento de Física, Universidad de Murcia / Spain
2021	Profesor Ayudante Doctor (Junior Assistant Professor, tenure-track) / Departamento de Física, Universidad de Murcia / Spain
2020-2021	Marie Curie Individual Fellow / European Centre for Theoretical Studies in Nuclear Physics and Related Areas (ECT*), Trento / Italy
2019-2020	Juan de la Cierva-Formación Fellow / Departamento de Física, Universidad de Murcia / Spain
2018-2019	Alexander von Humboldt Research Fellow / MBN Research Center, Frankfurt am Main / Germany
2017-2018	Investigador Doctor / Departamento de Física, Universidad de Murcia / Spain
2017	Research Associate / MBN Research Center, Frankfurt am Main / Germany
2015-2017	Marie Curie Early Stage Researcher / Queen's University Belfast / UK
2014-2015	Marie Curie Early Stage Researcher / Open University, Milton Keynes / UK
2010-2014	VALi+d Predoctoral Fellow / Departament de Física Aplicada, Universitat d'Alacant / Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Date
PhD Nanoscience (Physics)	University of Alicante	05/02/2016
MSc Nanoscience (Physics)	University of Alicante	30/06/2011
BSc Chemistry	University of Alicante	27/06/2009

Part B. CV SUMMARY

Pablo de Vera is an experienced researcher specialised in the theory and computer simulation of the interaction and effects of beams of ions and electrons with condensed matter and molecular systems, for applications which include biophysics, materials science, physical chemistry and nanotechnology. His interdisciplinary training includes a **BSc in Chemistry (Alicante, 2009, first student of promotion –Premio Extraordinario–)**, a **MSc in Nanoscience and Nanotechnology/Physics (Alicante, 2011, first student of promotion –Premio Extraordinario–)**, a **PhD in Nanoscience/Physics (Alicante, 2016, Extraordinary Thesis Award** and mention of International Doctor) and an extensive international postdoctoral experience. From October 2014 to March 2017 he participated in the **Marie Curie Initial Training Network ARGENT** (Advanced Radiotherapies, Generated by Exploiting Nanoprocesses and Technologies) at the **Open University** (Milton Keynes, United Kingdom) and **Queen's University** (Belfast, United Kingdom), while collaborating with **MBN (MesoBioNano) Research Center** (Frankfurt, Germany). During this period his research focused on the study of several physico-chemical phenomena occurring at the nanoscale in biomaterials as a result of ion beam irradiation, as well as sensitisation using nanoparticles for cancer therapy. Later, he made stays at the Centre for Research in Optics and Nanophysics (CIOyN, **University of Murcia**, 2017-2018, within the **Program for Research Groups of Excellence of the Region of Murcia**) and at the **MBN Research Center** (Frankfurt, Germany, 2018-2019), the latter as **Alexander von Humboldt Research Fellow**. Later he returned to the **University of Murcia** as a **Juan de la Cierva-Formación postdoctoral fellow** (Spanish Ministry of Science, 2019-2020). During this time, he mastered the computer simulation of charged particle transport and effects on different materials through the combined application of Monte Carlo and reactive classical molecular dynamics simulations, for its application to the modelling of radiation-induced chemistry during the use of nanofabrication techniques. From November 2020 to October 2021 he enjoyed a **Marie Curie Individual Fellowship** at the **European Center for Theoretical Studies in Nuclear Physics and Related Areas** (ECT*, Trento, Italy), leading the project *NanoEnHanCeMent* (*Nanoparticle Enhanced Hadron-therapy: a comprehensive Mechanistic description*), where he worked on the use of time-dependent density functional theory results to improve the Monte Carlo modelling of charged particle interaction with condensed matter. Being 39 years old, Pablo has published 43 works in international scientific journals and book chapters, has given more than 15 invited talks at international conferences and has visited various research centres in Spain, Germany, the United Kingdom, Italy and Denmark, where he has collaborated with both theoretical and experimental researchers.

Number of citations / h-index:

- Google Scholar: 909 / 19 (<https://scholar.google.com/citations?user=O7jxPYUAAAAJ&hl=es>)
- ResearchGate: 848 / 19 (<https://www.researchgate.net/profile/Pablo-De-Vera>)
- Scopus: 677 / 17 (<https://www.scopus.com/authid/detail.uri?authorId=36134224000>)
- Web of Science: 584 / 16 (<https://www.webofscience.com/wos/author/record/L-6674-2014>)

Number of articles published per journal quartile (corresponding to the year of publication):

Q1: 14 (of which **D1:** 5); **Q2:** 8; **Q3:** 10; **Q4:** 1;

Book chapters: 4; **Conference proceedings:** 5

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (IF and quartile, as per Journal Citation Reports, correspond to year of publication)

1. F. Matias*, N. E. Koval, P. de Vera, R. Garcia-Molina, I. Abril, J. M. B. Shorto, H. Yoriyaz, J. J. N. Pereira, T. F. Silva, M. H. Tabacniks, M. Vos, P. L. Grande, *Physical Review Letters* **135** (2025) 148003. IF: 9.0, **Q1/D1**.

2. A. M. Zamora-Vinaroz, P. de Vera*, I. Abril, R. Garcia-Molina, Simulation of depth-dose curves and water equivalent ratios of energetic proton beams in cortical bone, *Physical Review E* **110** (2024) 034405. IF: 2.4, **Q1**.
3. F. Cheng, P. de Vera*, R. Garcia-Molina, Assessing the electronic excitation spectra of chromium, palladium and samarium from their stopping quantities, *Physical Review B* **110** (2024) 235134. IF: 3.7, **Q2**.
4. P. de Vera*, I. Abril, R. Garcia-Molina, Electronic cross section, stopping power and energy-loss straggling of metals for swift protons, alpha particles and electrons, *Frontiers in Materials* (Sec. Computational Materials Science) **10** (2023) 1249517. IF: 3.2, **Q3**.
5. P. de Vera*, S. Taioli, P. E. Trevisanutto, M. Dapor, I. Abril, S. Simonucci, R. Garcia-Molina, Energy Deposition around Swift Carbon-Ion Tracks in Liquid Water, *International Journal of Molecular Sciences* **23** (2022) 6121 -39 pages-. IF: 6.208, **Q1**.
6. I. Abril, P. de Vera, R. Garcia-Molina*, Calculated energy loss of swift light ions in platinum and gold: importance of the target electronic excitation spectrum, *Journal of Physics: Conference Series* **2326** (2022) 012016.
7. P. de Vera*, S. Simonucci, P. E. Trevisanutto, I. Abril, M. Dapor, S. Taioli, R. Garcia-Molina, Simulating the nanometric track-structure of carbon ion beams in liquid water at energies relevant for hadrontherapy, *Journal of Physics: Conference Series* **2326** (2022) 012017.
8. S. Taioli*, P. E. Trevisanutto, P. de Vera, S. Simonucci, I. Abril, R. Garcia-Molina, M. Dapor*, Relative role of the physical mechanisms on complex biodamage induced by carbon irradiation *J. Phys. Chem. Lett.* **12**, 487 (2021). IF: 6.71, **Q1/D1**.
9. A. Pedrielli, P. de Vera, P. E. Trevisanutto, N. M. Pugno, R. Garcia-Molina, I. Abril, S. Taioli*, M. Dapor*, Electronic excitation spectra of cerium oxides: from ab initio dielectric response functions to Monte Carlo charge transport simulations, *Phys. Chem. Chem. Phys.* **23**, 19173 (2021). IF: 3.430, **Q1**.
10. P. de Vera*, I. Abril, R. Garcia-Molina, Excitation and ionisation cross-sections in condensed-phase biomaterials by electrons down to very low energy: application to liquid water and genetic building blocks. *Phys. Chem. Chem. Phys.* **23**, 5079 (2021). IF: 3.430, **Q1**.
11. Y. Fortouna, P. de Vera*, A. Verkhovtsev, A. V. Solov'yov, Molecular dynamics simulations of sodium nanoparticle deposition on magnesium oxide, *Theoretical Chemistry Accounts* **140**, 84 (2021). IF: 1.7, **Q4**.
12. P. de Vera*, M. Azzolini, G. Sushko, I. Abril, R. Garcia-Molina, M. Dapor, I. Solov'yov, A. Solov'yov, Multiscale simulation of the focused electron beam induced deposition process. *Scientific Reports* **10**, 208 (2020). IF: 3.998, **Q1**.
13. P. de Vera*, R. Garcia-Molina, Electron Inelastic Mean Free Paths in Condensed Matter Down to a Few Electronvolts. *J. Phys. Chem. C* **123**, 2075 (2019). IF: 4.309, **Q1**.
14. P. de Vera*, E. Surdutovich, A. V. Solov'yov, The role of shock waves on the biodamage induced by ion beam radiation. *Cancer Nano.* **10**, 5 (2019). IF: 4.700, **Q2**.
15. P. de Vera*, R. Garcia-Molina, I. Abril, Simulation of the energy spectra of swift light ion beams after traversing cylindrical targets: A consistent interpretation of experimental data relevant for hadron therapy, *Eur. Phys. J. D* **73** (2019) 209. IF: 1.611, **Q3**.
16. P. de Vera*, A. Verkhovtsev, G. Sushko, A. V. Solov'yov, Reactive molecular dynamics simulations of organometallic compound W(CO)₆ fragmentation, *European Physical Journal D* **73**, 215 (2019). IF: 1.611, **Q3**.
17. P. de Vera*, I. Abril, R. Garcia-Molina, Energy spectra of protons and generated secondary electrons around the Bragg peak in materials of interest in hadron therapy, *Radiation Research* **190**, 282-297 (2018). IF: 3.372, **Q2**.
18. P. de Vera*, E. Surdutovich, N. J. Mason, F. J. Currell, A. V. Solov'yov, Simulation of the ion-induced shock waves effects on the transport of chemically reactive species in ion tracks, *Eur. Phys. J. D* **72**, 147 (2018). IF: 1.611; **Q3**.
19. K. Haume, P. de Vera, A. V. Verkhovtsev*, E. Surdutovich, N. J. Mason, A. V. Solov'yov, Transport of secondary electrons through coatings of ion-irradiated metallic nanoparticles, *European Physical Journal D* **72**, 116 (2018). IF: 1.611; **Q3**.
20. R. Garcia-Molina*, M. Dapor, P. de Vera, I. Abril, Energy deposition around swift proton and carbon ion tracks in biomaterials, *Journal of Physics: Conference Series* **875**, 112006 (2017).

21. P. de Vera^{*}, E. Surdutovich, N. J Mason, A. V Solov'yov, Radial doses around energetic ion tracks and the onset of shock waves on the nanoscale, *European Physical Journal D* **71**, 281 (2017). IF: 1.393, **Q3**.
22. M. Dapor^{*}, I. Abril, P. de Vera, R. Garcia Molina, Energy deposition around swift proton tracks in polymethylmethacrylate: How much and how far, *Physical Review B* **96**, 064113 (2017). IF: 3.813, **Q2**.
23. P. de Vera, R. Garcia-Molina, I. Abril, Propagation of Swift Protons in Liquid Water and Generation of Secondary Electrons in Biomaterials (book chapter), *Nanoscale Insights into Ion-Beam Cancer Therapy*, pp. 61–98 (2017).
24. P. de Vera, N. J Mason, E. Surdutovich, A. V Solov'yov, Thermo-Mechanical Damage of Biomolecules Under Ion-Beam Radiation (book chapter), *Nanoscale Insights into Ion-Beam Cancer Therapy*, pp. 339–357 (2017).
25. M. Bolsa Ferruz, V. Ivošev, K. Haume, L. Ellis-Gibblings, A. Traore, V. Thakare, S. Rosa, P. de Vera, V.-L. Tran, A. Mika, D. Boscolo, S. Grellet, A. Verkhovtsev, B. A. Huber, K. T Butterworth, K. M. Prise, F. J. Currell, N. J Mason, J. Golding, E. Scifoni, G. García, F. Boschetti, F. Lux, O. Tillement, C. Louis, K. Stokbro, A. V. Solov'yov, S. Lacombe, New Research in Ionizing Radiation and Nanoparticles: The ARGENT Project (book chapter), *Nanoscale Insights into Ion-Beam Cancer Therapy*, pp. 379–434 (2017).
26. P. de Vera^{*}, N. J. Mason, F. J. Currell, A. V. Solov'yov, Molecular dynamics study of accelerated ion-induced shock waves in biological media, *European Physical Journal D* **70**, 183 (2016). IF: 1.288, **Q3**.
27. M. Wang^{*}, B. Rudek, D. Bennett, P. de Vera, M. Bug, T. Buhr, W. Y. Baek, G. Hilgers, H. Rabus, Cross sections for ionization of tetrahydrofuran by protons at energies between 300 and 3000 keV, *Physical Review A* **93**, 052711 (2016). IF: 2.925, **Q1**.
28. P. de Vera^{*}, R. Garcia-Molina, I. Abril, Angular and Energy Distributions of Electrons Produced in Arbitrary Biomaterials by Proton Impact, *Physical Review Letters* **114**, 018101 (2015). IF: 7.645, **Q1/D1**.
29. M. Dapor, I. Abril^{*}, P. de Vera, R. Garcia-Molina, Simulation of the secondary electrons energy deposition produced by proton beams in PMMA: influence of the target electronic excitation description, *The European Physical Journal D* **69**, 165 (2015). IF: 1.389, **Q1**.
30. A. Verkhovtsev^{*}, S. McKinnon, P. de Vera, E. Surdutovich, S. Guatelli, A. V. Korol, A. Rosenfeld, A. V. Solov'yov, Comparative analysis of the secondary electron yield from carbon nanoparticles and pure water medium, *European Physical Journal D* **69**, 116 (2015). IF: 1.208, **Q3**.
31. I. Abril^{*}, P. de Vera, R. Garcia-Molina, I. Kyriakou, D. Emfietzoglou, Lateral spread of dose distribution by therapeutic proton beams in liquid water, *Nuclear Instruments and Methods in Physics Research Section B* **352**, 176-180 (2015). IF: 1.208, **Q3**.
32. P. de Vera^{*}, E. Surdutovich, I. Abril, R. Garcia-Molina, A. V. Solov'yov, Analytical model of ionization and energy deposition by proton beams in subcellular compartments, *The European Physical Journal D* **68**, 96 (2014). IF: 1.228, **Q3**.
33. S. Limandri, P. de Vera, R. C. Fadanelli, L. C. C. M. Nagamine, A. Mello, R. Garcia-Molina, M. Behar, I. Abril^{*}, Energy deposition of H and He ion beams in hydroxyapatite films: A study with implications for ion-beam cancer therapy, *Physical Review E* **89**, 022703 (2014). IF: 2.288, **Q1**.
34. R. Garcia-Molina^{*}, I. Abril, P. de Vera, I. Kyriakou, D. Emfietzoglou, A study of the energy deposition profile of proton beams in materials of hadron therapeutic interest, *Applied Radiation and Isotopes* **83**, 109 (2014). IF: 1.056, **Q1**.
35. P. de Vera, I. Abril^{*}, R. Garcia-Molina, Water equivalent properties of materials commonly used in proton dosimetry, *Applied Radiation and Isotopes* **83**, 122 (2014). IF: 1.056, **Q1**.
36. P. de Vera^{*}, R. Garcia-Molina, I. Abril, A. V Solov'yov, Semiempirical Model for the Ion Impact Ionization of Complex Biological Media, *Physical Review Letters* **110**, 148104 (2013). IF: 7.728, **Q1/D1**.
37. R. Garcia-Molina, I. Abril, P. de Vera, H. Paul^{*}, Comments on recent measurements of the stopping power of liquid water, *Nuclear Instruments and Methods in Physics Research Section B* **299**, 51 (2013). IF: 1.186, **Q2**.

38. P. de Vera*, I. Abril, R. Garcia-Molina, A. V. Solov'yov, Ionization of biomolecular targets by ion impact: input data for radiobiological applications, *Journal of Physics: Conference Series* **438**, 012015 (2013).
39. I. Abril, R. Garcia-Molina*, P. de Vera, I. Kyriakou, D. Emfietzoglou, Inelastic Collisions of Energetic Protons in Biological Media, *Advances in Quantum Chemistry* **65**, 129 (2013). IF: 1.880, **Q3**.
40. R. Garcia-Molina, I. Abril, P. de Vera, I. Kyriakou, D. Emfietzoglou, Proton Beam Irradiation of Liquid Water: A Combined Molecular Dynamics and Monte Carlo Simulation Study of the Bragg Peak Profile (book chapter), *Fast Ion-Atom and Ion-Molecule Collisions* Vol. 1, pp. 271–304 (2013).
41. R. Garcia-Molina*, I. Abril, P. de Vera, I. Kyriakou, D. Emfietzoglou, Role of the interaction processes in the depth-dose distribution of proton beams in liquid water, *Journal of Physics: Conference Series* **373**, 012015 (2012).
42. P. de Vera*, I. Abril, R. Garcia-Molina, Inelastic scattering of electron and light ion beams in organic polymers, *Journal of Applied Physics* **109**, 094901 (2011). IF: 2.079, **Q2**.
43. I. Abril*, C. D Denton, P. de Vera, I. Kyriakou, D. Emfietzoglou, R. Garcia-Molina, Effect of the Bethe surface description on the electronic excitations induced by energetic proton beams in liquid water and DNA, *Nuclear Instruments and Methods in Physics Research Section B* **268**, 1763 (2010). IF: 1.042, **Q2**.

C.2. Congress

- Contributions to conferences (last 5 years): 23 international + 8 national (Spain)
- Contribution type (last 5 years): 7 invited talks + 16 talks + 10 posters
- Invited talks in the last 5 years:
 1. Pablo de Vera; Ana María Zamora-Vinaroz; Isabel Abril; Rafael Garcia-Molina; Biomaterials excitation by energetic charged particles: towards a detailed modelling of biomedical applications, CMD31 – General Conference of the Condensed Matter Division, Braga, Portugal, 03/09/24, International conference
 2. Pablo de Vera; Isabel Abril; Rafael Garcia-Molina; Excitation and ionisation cross-sections of charged particles in condensed-phase biologically-relevant materials, *From Hadrons to Therapy: Fundamental Physics Driving New Medical Advances*, European Centre for Theoretical Studies in Nuclear Physics and Related Areas (ECT*), Trento, Italy, 05/09/22 – 09/09/22, International conference
 3. Pablo de Vera; Paolo E. Trevisanutto; Stefano Simonucci; Simone Taioli; Maurizio Dapor; Isabel Abril; Rafael Garcia-Molina; Monte Carlo simulations in the multiscale modelling of radiation effects: the case of energetic ions in biomaterials, *Multiscale Irradiation and Chemistry Driven Processes and Related Technologies*, 1st Annual MultiChem Conference 2022, Boppard am Rhein, Germany, 16/05/22 – 18/05/22, International conference
 4. Pablo de Vera; Martina Azzolini; Gennady Sushko; Isabel Abril; Rafael Garcia-Molina; Maurizio Dapor; Ilia A. Solov'yov; Andrey V. Solov'yov; Multiscale simulation of the focused electron beam induced deposition process by the Monte Carlo-Irradiation Driven Molecular Dynamics approach, *Multiscale modelling of irradiation-driven processes for emerging technologies*, CECAM, Laussane, Switzerland, 16/03/22 – 18/03/22, International conference
 5. Pablo de Vera; Martina Azzolini; Gennady Sushko; Isabel Abril; Rafael Garcia-Molina; Maurizio Dapor; Ilia A. Solov'yov; Andrey V. Solov'yov; Irradiation driven molecular dynamics interfaced with Monte Carlo for detailed simulations of focused electron beam induced deposition, *6th International Conference "Dynamics of Systems on the Nanoscale" (DySoN) and 10th International Symposium "Atomic Cluster Collisions" (ISACC)*, Santa Margherita-Liguria, Liguria, Italia, 18/10/21 – 22/10/21, International conference
 6. Pablo de Vera; Andrea Pedrielli; Paolo E. Trevisanutto; Stefano Simonucci; Rafael Garcia-Molina; Isabel Abril; Simone Taioli; Maurizio Dapor; Electronic interactions of swift ions and their secondary electrons in biologically relevant materials, *International*

Symposium on Ion-Atom Collisions (ISIAC), Babes-Bolyai University, Romania (online), 14/07/21 – 17/07/21, International conference

7. Pablo de Vera; Martina Azzolini; Maurizio Dapor; Gennady Sushko; Ilia A. Solov'yov; Andrey V. Solov'yov; Isabel Abril; Rafael Garcia-Molina; Detailed simulations of the focused beam induced deposition process obtained by combining Monte Carlo and molecular dynamics techniques, *CMD2020GEFES - Biennial Meeting of the Condensed Matter Division*, European Physical Society, Madrid (online), 31/08/20 – 04/09/20, International conference

C.3. Research projects

1. PID2021-122866NB-I00: *Nanoscale Biodamage induced by Swift Ions: towards a detailed Modelling and Simulation*, Ministerio de Ciencia e Innovación (Proyectos de Generación de Conocimiento 2021), 01/09/2022 - 31/08/2026, 42.350 €, PI1: Pablo de Vera (Universidad de Murcia, Spain), PI2: Rafael Garcia-Molina (Universidad de Murcia, Spain), **Principal Investigator**.
2. 22081/PI/22: *Energetic Particles Against Cancer: Detailed Simulations For A Better Use*, Fundación Séneca, Región de Murcia (Grants for scientific and technical research projects by competitive groups 2022), 01/01/2023 - 31/12/2026, 33.220 €, PI1: Pablo de Vera (Universidad de Murcia, Spain), PI2: Rafael Garcia-Molina (Universidad de Murcia, Spain), **Principal Investigator**.
3. COST Action CA20129: *Multiscale irradiation and chemistry driven processes and related technologies* (MultiChem), European Commission (COST Actions), 04/10/2021 - 03/10/2025, ~200.000 €/year, PI: Alexey Verkhovtsev (MBN Research Center, Frankfurt, Germany), **Secondary proposer and member of the Management Committee**. <https://www.cost.eu/actions/CA20129/>
4. PGC2018-096788-B-I00: *Interaction of Low Energy Electrons with Nanosystems*, Ministerio de Ciencia e Innovación (Proyectos de I+D de Generación de Conocimiento), 01/01/2019 - 31/12/2021, 34.848 €, PI: Rafael Garcia-Molina (Universidad de Murcia, Spain), **Team member**.
5. 840752: *Nanoparticle Enhanced Hadron-therapy: a Comprehensive Mechanistic description*, European Commission (Marie Curie Individual Fellowships 2018), 01/11/2020 - 10/10/2021, 8.800 €, PI: Pablo de Vera (European Centre for Theoretical Studies in Nuclear Physics and Related Areas - ECT*, Trento, Italy), **Principal Investigator**.
6. *High-Z ceramic oxide nanosystems for mediated proton cancer therapy*, Fondazione Caritro, 01/10/2019 - 30/09/2021, 50.000 €, PIs: Andrea Pedrielli, Simone Taioli, Maurizio Dapor (European Centre for Theoretical Studies in Nuclear Physics and Related Areas - ECT*, Trento, Italy), **Team member**.
7. AICO/19/070: *Dose Estimation in Hadronic Therapy*, Conselleria d'Educació, Cultura i Esport, Generalitat Valenciana (Funding of consolidatable groups), 01/01/2019 - 31/12/2020, 40.000 €, PI: Carlos Lacasta-Llacer (Institut de Física Corpuscular, Valencia, Spain), **Team member**.
8. 1197139: *Response of biomolecular systems under high-LET ion irradiation*, Alexander von Humboldt Stiftung/Foundation (Alexander von Humboldt Research Fellowships), 06/08/2018 - 14/09/2019, 10.400 €, PI: Pablo de Vera (MBN Research Center, Frankfurt, Germany), **Principal Investigator**.
9. FIS2014-58849-P: *Generation, Transport and Effects of Electrons in Condensed Matter*, Ministerio de Economía y Competitividad (Proyectos de I+D de Generación de Conocimiento), 01/01/2015 - 31/12/2018, 36.300 €, PI: Rafael Garcia-Molina (Universidad de Murcia, Spain), **Team member**.
10. FIS2010-17225: *Damage Induced in Carbon Nanotubes and Biomaterials by Ionic Irradiation*, Ministerio de Ciencia e Innovación (Proyectos de I+D de Generación de Conocimiento), 01/01/2011 - 31/12/2014, 30.250 €, PI: Isabel Abril (Universitat d'Alacant, Spain), **Team member**.

C.4. Contracts, technological or transfer merits

C.5. Awards and recognitions

1. Highlighted article F. Matias, N. E. Koval, P. de Vera, R. Garcia-Molina, I. Abril, J. M. B. Shorto, H. Yoriyaz, J. J. N. Pereira, T. F. Silva, M. H. Tabacniks, M. Vos, P. L. Grande, *Physical Review Letters* **135** (2025) 148003 as “**PRL Editors’ Suggestion**”.
2. Highlighted article P. de Vera, I. Abril, R. Garcia-Molina, *Phys. Chem. Chem. Phys.* **23**, 5079 (2021) in the “**PCCP 2021 Hot Articles**” list.
3. Back cover for the article P. de Vera, I. Abril, R. Garcia-Molina, *Phys. Chem. Chem. Phys.* **23**, 5079 (2021).
4. Back cover for the article A. Pedrielli, P. de Vera, P. Trevisanutto, N. Pugno, R. Garcia-Molina, I. Abril, S. Taioli, M. Dapor, *Phys. Chem. Chem. Phys.* **23**, 19173 (2021).
5. Highlighted article: P. de Vera, R. Garcia-Molina, I. Abril, *Eur. Phys. J. D* **73**, 209 (2019): <https://epjb.epj.org/epjd-news/1802-epjd-highlight-modelling-ion-beam-therapy>
6. PhD Extraordinary Award (best of every 5 candidates), University of Alicante, 29/11/2019
7. Highlighted article: A. Verkhovtsev*, S. McKinnon, P. de Vera, E. Surdutovich, S. Guatelli, A. V. Korol, A. Rosenfeld, A. V. Solov'yov, *European Physical Journal D* **69**, 116 (2015): <https://www.europhysicsnews.org/vol-46-no-4-highlights?start=10>
8. MSc Extraordinary Award (first student of promotion), University of Alicante, 22/12/2011.
9. BSc Extraordinary Award (first student of promotion), University of Alicante, 25/11/2009.

C.6. Organisation of scientific events

1. *IV Symposium on Chemical and Physical Sciences for Young Researchers*, Facultad de Química, Universidad de Murcia, Spain, 13/06/2024 - 14/06/2024. **Member of organising committee**
2. *III Symposium on Chemical and Physical Sciences for Young Researchers*, Facultad de Química, Universidad de Murcia, Spain, 15/06/2023 - 16/06/2023. **Member of organising committee**
3. *From hadrons to therapy: fundamental physics driving new medical advances*, European Centre for Theoretical Studies in Nuclear Physics and Related Areas, Trento (Italy), 05/09/22-08/09/22. **Chair of organising committee**
4. *XXXVIII Reunión Bienal de la Real Sociedad Española de Física*, Universidad de Murcia, Spain, 11/07/22-15/07/22. **Member of organising committee**
5. *9th International Symposium on Atomic and Cluster Collisions*, University of Kent, Canterbury (UK), 31/07/2019 - 03/08/2019. **Member of organising committee**
6. *2nd Annual meeting of the Marie Curie Initial Training Network ARGENT*, Queen's University Belfast (UK), 22/02/2017 - 24/02/2017. **Member of organising committee**
7. *Mathematical Modelling of Radiation in Cancer Therapy*, Queen's University Belfast (UK), 11/01/2017 - 12/01/2017. **Member of organising committee**
8. *Nanoparticles for medicine*, Université Paris Saclay, Orsay (France), 12/12/2014. **Member of organising committee**

C.7. Participation in reviewing tasks and editorial committees

- Reviewer for 11 international scientific journals (*Physical Review Letters*, *Physical Review A*, *Nature Scientific Reports*, *Nuclear Instruments and Methods in Physics Research B*, *Medical Physics*, *Journal of Physical Chemistry*, *Frontiers in Materials*, *Cancer Nanotechnology*, *ACS Omega*, *Royal Society Open Science*, *European Physical Journal D*) and 1 national teaching innovation journal (*Eureka Journal on Science Teaching and Dissemination*).
- Project evaluator of the National Plan of the Spanish Ministry of Science and Innovation, Physical Sciences Area (Knowledge Generation Projects 2022 and 2023).
- Guest editor for the special issue “Atomic Cluster Collisions 2019” at *Eur. Phys. J. D*.