

CV Date	30/01/2023
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Part A. PERSONAL INFORMATION

First Name	Pablo		
Family Name	Garcia Fernandez		
Sex	Male	Date of Birth	10/07/1975
ID number Social Security, Passport			
URL Web	http://pgarcia.dieecs.com/		
Email Address	garciafpablo@uniovi.es		
Open Researcher and Contributor ID (ORCID)	0000-0001-9290-4514		

A.1. Current position

Job Title	Catedrático de Universidad		
Starting date	2022		
Institution	Universidad de Oviedo		
Department / Centre			
Country		Phone Number	
Keywords			

A.3. Education

Degree/Master/PhD	University / Country	Year
Programa Oficial de Doctorado en Control de Procesos, Electrónica Industrial e Ingeniería Eléctrica	Universidad de Oviedo	2006

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- Scientific paper.** Miguel Crespo; Irene Peláez; Pablo García; Ramy Georgious; Cristian Blanco; Igor Cantero. 2023. Series/Parallel Li-ion battery modules active equalisation considering load and no-load operation IEEE Transactions on Industry Applications. IEEE. <https://doi.org/10.1109/TIA.2023.3239045>
- Scientific paper.** Ángel Navarro-Rodríguez; Pablo García; Carlos Gómez-Aleixandre; Cristian Blanco. 2022. Cooperative Primary Control of a Hybrid AC/DC Microgrid Based on AC/DC Virtual Generator IEEE Transactions on Energy Conversion. IEEE. 37-4, pp.2837-2850. <https://doi.org/10.1109/TEC.2022.3203770>
- Scientific paper.** Cristian Blanco; Francisco Paz; Ignacio Galiano Zurbriggen; Pablo García; Martin Ordonez. 2022. Distributed Islanding Detection in Multisource DC Microgrids: Pilot Signal Cancellation IEEE Access. IEEE. 10, pp.78370-78383. <https://doi.org/10.1109/ACCESS.2022.3193491>
- Scientific paper.** Carlos Gómez-Aleixandre; Ángel Navarro-Rodríguez; Geber Villa; Cristian Blanco; Pablo García. 2022. Adaptive Droop Controller for a Hybrid 375 Vdc/48 Vdc/400 Vac AC/DC Microgrid IEEE Transactions on Industry Applications. IEEE. 58-4, pp.5104-5116. <https://doi.org/10.1109/TIA.2022.3176597>
- Scientific paper.** Blanco, Cristian; Suarez, Andres; Gomez-Aleixandre, Carlos; Pelaez, Irene; Garcia, Pablo. 2022. Passive and online DC bus Status Monitoring for Back-to-Back Converters applied to Doubly-Fed Induction Machines IEEE Transactions on Power Electronics. 37-4, pp.4697-4707. ISSN 1941-0107. <https://doi.org/10.1109/TPEL.2021.3128021>

- 6 **Scientific paper.** Villa, Geber; Saeed, Sarah; Garcia-Fernandez, Pablo; Gomez-Aleixandre Tiemblo, Carlos; Georgious, Ramy. 2021. Compensation Alternatives for Power Sharing Mismatch in Multi-Port DC/DC/AC Converters IEEE Transactions on Industry Applications. IEEE. 57-6, pp.6221-6236. ISSN 1939-9367. <https://doi.org/10.1109/TIA.2021.3115721>
- 7 **Scientific paper.** Pelaez, Irene; Garcia-Fernandez, Pablo; Villa, Geber; Saeed, Sarah. 2021. Real-time Measurement of Li-Ion Battery Cells Using Power Converter Pulse-Signal Injection and Fusion Methods IEEE Transactions on Industry Applications. IEEE. 57-6, pp.6350-6361. ISSN 1939-9367. <https://doi.org/10.1109/TIA.2021.3101777>
- 8 **Scientific paper.** RAMY GEORGIOUS ZAHER GEORGIOUS; JORGE GARCIA GARCIA; Sumner Mark; SARAH SAEED HAZKIAL GERGES; Pablo Garcia. (5/5). 2020. Fault Ride-Through Power Electronic Topologies for Hybrid Energy Storage Systems Energies (Switzerland). 13/1, pp.1-19. ISSN 1996-1073.
- 9 **Scientific paper.** ANGEL NAVARRO RODRIGUEZ; ANDRES SUAREZ GONZALEZ; Pablo Garcia; Geber Villa; JOSE MANUEL CANO RODRIGUEZ. (3/5). 2019. Sensorless Unbalance Modelling and Estimation as an Ancillary Service for LV 4-Wire/3-Phase Power Converters IEEE Transactions on Industry Applications. Early Acces. ISSN 0093-9994.
- 10 **Scientific paper.** Pablo Garcia; SARAH SAEED HAZKIAL GERGES; ANGEL NAVARRO RODRIGUEZ; JORGE GARCIA GARCIA; Hannes Schneider. (1/5). 2018. Switching Frequency Optimization for a Solid State Transformer With Energy Storage Capabilities IEEE Transactions on Industry Applications. 54/6, pp.6223-6233. ISSN 0093-9994. <https://doi.org/10.1109/TIA.2018.2860561>
- 11 **Scientific paper.** CRISTIAN BLANCO CHARRO; Pablo Garcia; ANGEL NAVARRO RODRIGUEZ; Mark Sumner. (2/4). 2018. Predictive frequency-based sequence estimator for control of grid-tied converters under highly distorted conditions IEEE Transactions on Industry Applications. 54/5, pp.5306-5317. ISSN 0093-9994. <https://doi.org/10.1109/TIA.2018.2846552>
- 12 **Scientific paper.** RAMY GEORGIOUS ZAHER GEORGIOUS; JORGE GARCIA GARCIA; ANGEL NAVARRO RODRIGUEZ; Pablo Garcia. (4/4). 2018. A Study on the Control Design of Non-Isolated Converter Configurations for Hybrid Energy Storage Systems IEEE Transactions on Industry Applications. 54/5, pp.4660-4671. ISSN 0093-9994. <https://doi.org/10.1109/TIA.2018.2838086>
- 13 **Scientific paper.** JOSE MANUEL CANO RODRIGUEZ; ANGEL NAVARRO RODRIGUEZ; ANDRES SUAREZ GONZALEZ; Pablo Garcia. (4/4). 2018. Variable Switching Frequency Control of Distributed Resources for Improved System Efficiency IEEE Transactions on Industry Applications. 54/5, pp.4612-4620. ISSN 0093-9994. <https://doi.org/10.1109/TIA.2018.2836365>
- 14 **Scientific paper.** RAMY GEORGIOUS ZAHER GEORGIOUS; JORGE GARCIA GARCIA; Pablo Garcia; ANGEL NAVARRO RODRIGUEZ. (3/4). 2018. A Comparison of Non-Isolated High-Gain Three-Port Converters for Hybrid Energy Storage Systems Energies (Switzerland). 11/3. ISSN 1996-1073. <https://doi.org/10.3390/en11030658>
- 15 **Scientific paper.** Pablo Garcia; Mark Sumner; ANGEL NAVARRO RODRIGUEZ; JUAN MANUEL GUERRERO MUÑOZ; JORGE GARCIA GARCIA. (1/5). 2018. Observer-Based Pulsed Signal Injection for Grid Impedance Estimation in Three-Phase Systems IEEE Transactions on Industrial Electronics. 65/10, pp.7888-7899. ISSN 0278-0046. <https://doi.org/10.1109/TIE.2018.2801784>
- 16 **Scientific paper.** RAMY GEORGIOUS ZAHER GEORGIOUS; JORGE GARCIA GARCIA; Pablo Garcia; ANGEL NAVARRO RODRIGUEZ. (3/4). 2018. A Comparison of Non-Isolated High-Gain Three-Port Converters for Hybrid Energy Storage Systems Energies (Switzerland). 11/3, pp.1-24. ISSN 1996-1073.
- 17 **Scientific paper.** ANGEL NAVARRO RODRIGUEZ; Pablo Garcia; RAMY GEORGIOUS ZAHER GEORGIOUS; JORGE GARCIA GARCIA; SARAH SAEED HAZKIAL GERGES. (2/5). 2017. Observer-based Transient Frequency Drift Compensation in AC Microgrids IEEE Transactions on Smart Grid. ISSN 1949-3053. <https://doi.org/10.1109/TSG.2017.2786085>

- 18 Scientific paper.** Juan Manuel Guerrero; Carlos Lumbreras; David Reigosa; Pablo García; Fernando Briz. (4/5). 2017. Control and Emulation of Small Wind Turbines Using Torque Estimators IEEE Transactions on Industry Applications. 53/5, pp.4863-4876. ISSN 0093-9994. <https://doi.org/10.1109/TIA.2017.2708027>
- 19 Scientific paper.** Pablo Arboleya; Pablo García; Bassam Mohamed; Cristina González-Morán. (2/4). 2017. Distributed resources coordination inside nearly-zero energy buildings providing grid voltage support from a symmetrical component perspective Electric Power Systems Research. 144, pp.208-214. ISSN 0378-7796. <https://doi.org/10.1016/j.epsr.2016.11.011>
- 20 Encyclopaedia article.** Ángel Navarro-Rodríguez; Pablo García; Juan M. Guerrero. 2023. Introduction to digital sampled systems and nyquist sampling theorem Encyclopedia of Electrical and Electronic Power Engineering. Elsevier. pp.652-656. ISBN 9780128232118. <https://doi.org/10.1016/B978-0-12-821204-2.00127-6>
- 21 Encyclopaedia article.** Ángel Navarro-Rodríguez; Juan M. Guerrero; Pablo García. 2023. Synchronous sampling and practical frequency selection Encyclopedia of Electrical and Electronic Power Engineering. Elsevier. pp.657-660. ISBN 9780128232118. <https://doi.org/10.1016/B978-0-12-821204-2.00128-8>
- 22 Encyclopaedia article.** Ángel Navarro-Rodríguez; Pablo García; Juan M. Guerrero. 2023. Z-transform: basics and main properties Encyclopedia of Electrical and Electronic Power Engineering. Elsevier. pp.661-667. ISBN 9780128232118. <https://doi.org/10.1016/B978-0-12-821204-2.00148-3>

C.3. Research projects and contracts

- 1 Project.** Soluciones para la respuesta rápida y el soporte a red mediante sistemas de almacenamiento con capacidades de grid-forming en redes eléctricas de baja inercia y alta penetración de generación distribuida y renovable. Cristian Blanco Charro. (Universidad de Oviedo). 01/12/2022-30/11/2024.
- 2 Project.** ENFYO-FLX. SV-PA-21-AYUD/2021/57546. Pablo García Fernández. (Universidad de Oviedo). 01/10/2021-30/09/2023. 124.400 €.
- 3 Project.** MCI-20-PID2019-111051RB-I00. Nuevas vías hacia la gestión descentralizada de la energía de edificio-a-edificio. agencia estatal de investigación. Pablo García Fernández. (Universidad de Oviedo). 01/06/2020-31/05/2023. 278.300 €.
- 4 Project.** UE-19-TALENT- 864459, COST EFFECTIVE TECHNOLOGICAL DEVELOPMENTS FOR ACCELERATING ENERGY TRANSITION. Pablo García. (Universidad de Oviedo). 01/10/2019-30/09/2022.
- 5 Project.** MCIU-18-RTC-2017-6338-3, SIBALI - Simulación de Baterías de Litio-ion. AGENCIA ESTATAL DE INVESTIGACION (Mº. ECON. IND.). Pablo García. (Universidad de Oviedo). 01/01/2018-31/12/2021. 131.464,88 €.
- 6 Project.** CI-MINECO-17-ENE2016-77919-R, TECNOLOGIAS DE CONVERSION DE ENERGIA EN REDES HIBRIDAS RESILIENTES AC/DC. Ministerio de Economía y Competitividad. JORGE GARCIA GARCIA. (Universidad de Oviedo). 30/12/2016-29/12/2019. Desarrollo de sistemas de control para integración de almacenamiento eléctrico en redes DC/AC
- 7 Project.** PAPI-18-GR-2015-0004, Plan Propio "Ayudas a Grupos de Investigación". JORGE GARCIA GARCIA. (Universidad de Oviedo). 01/01/2018-31/12/2018.
- 8 Project.** MINECO-16-RTC-2016-4792-3, SIETEC -Desarrollo de un sistema para la mejora de la eficiencia energética en edificios basado en técnicas de Cloud Computing. Ministerio de Economía y Competitividad. Pablo García. (Universidad de Oviedo). 07/03/2016-31/12/2018. 185.919,36 €. Desarrollo de plataforma para implementación de monitorización. Algoritmos de segregación de catgas
- 9 Project.** ENE2013-44245-R, Desarrollo De Una Aproximacion Holistica Y Sistemática Al Diseño Y La Gestion De Microrredes De Alterna (MICROHOLO). MINISTERIO DE ECONOMIA Y COMPETITIVIDAD. Pablo García Fernández. (Universidad de Oviedo). 01/01/2014-31/12/2016. 205.700 €. IP del proyecto