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IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Fecha del CVA	10.02.2025
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Part A. DATOS PERSONALES

Nombre	XOSE M LOPEZ FERNANDEZ		
Apellidos			
Sexo (*)		Fecha de nacimiento (dd/mm/yyyy)	
DNI, NIE, pasaporte			
Dirección email		URL Web	http://xmlopez.webs.uvigo.es/index.html
Open Researcher and Contributor ID (ORCID) (*)			

* *datos obligatorios*

A.1. Situación profesional actual

Puesto	TITULAR UNIVERSIDAD - Tiempo Completo		
Fecha inicio	01/09/2014		
Organismo/ Institución	UNIVERSIDAD DE VIGO		
Departamento/ Centro	INGENIERIA ELECTRICA		
País	ESPAÑA	Teléfono	
Palabras clave			

A.2. Situación profesional anterior (incluye interrupciones en la carrera investigadora, de acuerdo con el Art. 14. b) de la convocatoria, indicar meses totales)

Periodo	Puesto/ Institución/ País / Motivo interrupción
30/04/2012-31/08/2014	DIRECTOR I+D / EFACED ENERGIA / PORTUGAL TU a Tiempo Parcial / UVIGO / ESPAÑA
01/11/1999	TU Tiempo Completo / UVIGO / ESPAÑA

(Incorporar todas las filas que sean necesarias)

A.3. Formación Académica

Grado/Master/Tesis	Universidad/País	Año
INGENIERO INDUSTRIAL	UVIGO / ESPAÑA	1992
DOCTOR EUROPEO	UVIGO / ESPAÑA	1997

(Incorporar todas las filas que sean necesarias)

Parte B. RESUMEN DEL CV (máx. 5000 caracteres, incluyendo espacios): *MUY IMPORTANTE: se ha modificado el contenido de este apartado para progresar en la adecuación a los principios DORA. Lea atentamente las "Instrucciones para cumplimentar el CVA"*

Las líneas de actuación están centradas en la generación y transferencia de conocimiento al sector empresarial, específicamente en el ámbito de los transformadores eléctricos, a través de contratos de investigación. Además, se fomenta la transferencia de conocimiento mediante su integración en normas y guías, participando activamente en grupos de trabajo como miembro del IEEE Transformers Committee y de CIGRE.



Part C. LISTADO DE APORTACIONES MÁS RELEVANTES (últimos 10 años)- Pueden incluir publicaciones, datos, software, contratos o productos industriales, desarrollos clínicos, publicaciones en conferencias, etc. Si estas aportaciones tienen DOI, por favor inclúyalo.

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias (ver instrucciones).

AC: autor de correspondencia; (nº x / nº y): posición / autores totales

Si aplica, indique el número de citas y promedio por año

- Luis A. Alvarez-Gomez, Xose M. Lopez-Fernandez, Francisco de Leon, Angel Ramos, "Three-phase Three-legged Wye-Wye Transformers with Only One Neutral Grounded and no SW –Part II: Zero-sequence Permissible Temperature", in IEEE Transactions on Power Delivery, vol. 39, no. 3, pp. 1462-1473, June 2024, doi: 10.1109/TPWRD.2024.3365861
- Luis A. Alvarez-Gomez, Xose M. Lopez-Fernandez, Francisco de Leon, Angel Ramos, "Three-phase Three-legged Wye-Wye Transformers with Only One Neutral Grounded and no Stabilizing Winding – Part I: Zero-sequence Performance", in IEEE Transactions on Power Delivery, vol. 39, no. 3, pp. 1451-1461, June 2024, doi: 10.1109/TPWRD.2024.3365857 [IEEE PES Prize Paper Award received at the IEEE PES Transformer Committee Fall 2024 Meeting, held in St. Louis, MO, USA, on October 29, 2024. This award is for an outstanding technical paper published by IEEE and is selected by the Transformers Committee. This paper provided a high level of technical and practical content that was relevant to the industry.](#)
- Jim McBride, Tom Melle, Xose M. Lopez-Fernandez, Larry Goffeen, Robert Degeneff, Philip Hopkinson, Bertrand Poulin, Pierre Riffon, Angelica Da Rocha, Michael Spurlock, Loren Wagenaar, "Investigation of the interaction between substation transients and Transformers in HV and EHV Application", in IEEE Transactions on Power Delivery, vol. 36, no. 3, pp. 1768-1774, June 2021, doi: 10.1109/TPWRD.2020.3014595
- Xose M. Lopez-Fernandez and Luis A. Alvarez-Gomez, "Calculation of Stray Losses in Continuously Transposed Conductor Cable Transformer Windings by Multi-slice Methodology", International Journal of Electrical Power and Energy Systems, Vol. 111, pp. 25-33, 2019. (ISSN: 0142-0615)
- Hugo Rodriguez-Ignacio, Xose M. Lopez-Fernandez and Casimiro Alvarez-Mariño, "A Methodology for the Optimized Design of Power Transformer Insulation System", COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 37, No.3 , pp. 1002-1010, 2018. (ISSN 0332-1649)
- Hugo Rodriguez-Ignacio and Xose M. Lopez-Fernandez, "Numerical Verification of Turowski's Coefficient", COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 35, No. 6, pp. 1965-1972, 2016. (ISSN 0332-1649)
- Xose M. Lopez-Fernandez and Casimiro Alvarez-Mariño, "Induced Transient Voltage Performance Between Transformers and VCB. Severity Factors and Case Studies", IEEE Transactions on Power Delivery, Vol. 30, No. 3, pp. 1137-1144, June 2015. (ISSN 0885-8977)
- P. Penabad-Duran, Xose M. Lopez-Fernandez and J. Turowski, "3D non-linear magneto-thermal behavior on transformer covers", Electric Power Systems Research Journal, Elsevier, Vol. 121, pp. 333-340, April 2015. (ISSN 0378-7796)
- P. Penabad-Duran, Paolo Di Barba, Xose M. Lopez-Fernandez and J. Turowski, "Electromagnetic and Thermal Parameter Identification method for Best Prediction of Temperature Distribution on Transformer Tank Cover", COMPEL- International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 34, No. 2, pp. 485-495, 2015. (ISBN 0332-1649)



C.2. Congresos, indicando la modalidad de su participación (conferencia invitada, presentación oral, póster)

- Jim McBride, Xose M. Lopez-Fernandez, Casimiro Alvarez-Mariño, "Integration of TDSF Analysis into TECAM Transformer on Line Monitoring System", ARWtr 2019 - 6th International Advanced Research Workshop on Transformers, pp. 54-58, Cordoba-Spain, Oct 2019. (978-84-09-11743-7). – IEEE Xplore Digital Library.
- Xose M. Lopez-Fernandez, Luis A. Alvarez-Gomez, "3D Magneto-Thermal Evaluation on a Transformer Structural Parts Due to Zero-Sequence", ISEF 2019 - XIX International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, 2-pages, Nancy-France, Aug 2019.– IEEE Xplore Digital Library – (DOI: 10.1109/ISEF45929.2019.9097090)
- Xose M. Lopez-Fernandez, H. Rodriguez-Ignacio, C. Alvarez-Mariño. "HF-Dependent Parameter Calculation by FEM for Power Transformer", X Electromagnetic Fields in Mechatronics, 18th International Symposium on Electrical and Electronic Engineering (ISEF), Lodz, Poland, Sept. 2017. – IEEE Xplore Digital Library – (DOI 10.1109/ISEF.2017.8090686)
- Abdelghani Yahiou, Amar Maafa, Hacene Mellah, Abdelhafid Bayadi, Xose M. Lopez-Fernandez, Cesar M. A. Vasques,"Point on Wave Energization Strategy and Sequential Phase Shifting for Sympathetic Inrush Current Mitigation in Three-Phase Transformer - Measurement", ConTES 2023: International Conference on Technology, Engineering and Science, 11 pages, Volume 26, Pages 578-588, The Eurasia Proceedings of Science, Technology, Engineering & Mathematics (EPSTEM), 2023. ISSN: 2602-3199, doi.org/10.55549/epstem.1411094.
- Abdelghani Yahiou, Hacene Mellah, Abdelhafid Bayadi, Xose M. Lopez-Fernandez, Mokhtar Abid,"Load Influences on the Transient Current of Single-Phase Transformer", 3rd International Conference On Electronics & Electrical Engineering (IC3E'2022), 8 pages, Bouira- Algeria, Nov 2022.
- Abdelghani Yahiou, Abdelhafid Bayadi, Xose. M. Lopez-Fernandez,"Inrush Current Reduction by a Point-on-Wave Energization Strategy and Sequential Phase Shifting in Three-Phase Transformer", IC3E'2020 - 2nd International Conference On Electronics & Electrical Engineering, pp. 1-6, Bouira- Algeria, Nov 2020.
- Jim McBride, Xose M. Lopez-Fernandez, Casimiro Alvarez-Mariño,"Integration of TDSF Analysis into TECAM Transformer on Line Monitoring System", ARWtr 2019 - 6th International Advanced Research Workshop on Transformers, pp. 54-58, Cordoba-Spain, Oct 2019.(ISBN 978-84-09-11168-8)
- Xose M. Lopez-Fernandez, Luis A. Alvarez-Gomez,"3D Magneto-Thermal Evaluation on a Transformer Structural Parts Due to Zero-Sequence", ISEF 2019 - XIX International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, 4-pages, Nancy-France, Aug 2019.
- Xose M. Lopez-Fernandez, L. Rouco, C. Álvarez-Mariño, H. Gago and C. Vila, "[A High Frequency Power Transformers Model for Network Studies and TDSF Monitoring](#)", 147 CIGRE Session - CIGRE 2018, 10-pages París, France, Aug 2018.
- Hugo Rodriguez-Ignacio, Xose M. Lopez-Fernandez and Casimiro Alvarez-Mariño, "HF-Dependent Parameter Calculation by FEM for Power Transformer", ISEF 2017 - XVIII International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, 4-pages, Lodz-Poland, Sept 2017.
- Hugo Rodriguez-Ignacio, Xose M. Lopez-Fernandez and Casimiro Alvarez-Mariño, "Two-Dimensional Methodology for the Optimized Design of Power Transformer Insulation System", ARWtr 2016 - 5th International Advanced Research Workshop on Transformers, pp. 276-281, Spain, Oct 2016. [e-ARWtr2016 transformers book \(ISBN 978-84-617-9183-5\)](#)
- Luis Rouco, Xose M. Lopez-Fernandez, Casimiro Alvarez-Mariño and Hugo Gago, "[Fast Front Transients in Transformer Connected to Gas Insulated Substations: \(White+Black\) Box Models and TDSF Monitoring](#)", ARWtr 2016 - 5th International Advanced Research Workshop on Transformers, pp. 175-183, Spain, Oct 2016. [e-ARWtr2016 transformers book \(ISBN 978-84-617-9183-5\)](#)



- Adolfo Ibero, Javier Garcia, Xose M. Lopez-Fernandez and Hugo Rodriguez-Ignacio, "Power Voltage Transformers. Applications and Particularities", ARWtr 2016 - 5th International Advanced Research Workshop on Transformers, pp. 111-119, Spain, Oct 2016. [e-ARWtr2016 transformers book \(ISBN 978-84-617-9183-5\)](#)
- Hugo Rodriguez-Ignacio and Xose M. Lopez-Fernandez, "Design Review for Power Transformers. Technical Requirements, Methodologies and Tools", ARWtr 2016 - 5th International Advanced Research Workshop on Transformers, pp. 68-81, Spain, Oct 2016. [e-ARWtr2016 transformers book \(ISBN 978-84-617-9183-5\)](#)
- Xose M. Lopez-Fernandez, "Hotspot Assessment on Power Transformer Structural Parts", MyTransfo 2016, pp. 1-3, Italy, Nov. 2016.
- Xose M. Lopez-Fernandez and L. Alvarez-Gomez, "Fem Losses Computation in Transformer Windings Made of CTC (Continuously Transposed Cable)", ISEF 2015 - XVII International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, pp. 1-6, Spain, Sept 2015. (ISBN: 978-84-606-9102-0)
- H. Rodriguez-Ignacio and Xose M. Lopez-Fernandez, "Numerical Verification of Turowski's Coefficient", ISEF 2015 - XVII International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, pp. 1-6, Spain, Sept 2015. (ISBN: 978-84-606-9102-0)
- B. Baptista, M. Rial, A. Mendes, S. Cruz and Xose M. Lopez-Fernandez, "Performance Analysis of a Wound-Rotor Induction Machine with Eccentric Airgap using FEM", ISEF 2015 - XVII International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, pp. 1-8, Spain, Sept 2015. (ISBN: 978-84-606-9102-0)

C.3. Proyectos o líneas de investigación en los que ha participado, indicando su contribución personal. En el caso de investigadores jóvenes, indicar líneas de investigación de las que hayan sido responsables .

- Participante en "Actions for a Research and Innovation Staff Exchange (RISE)-EU in the Field of Power Transformers" (EUI2015-62827), 2015/2017

C.4. Participación en actividades de transferencia de tecnología/conocimiento y explotación de resultados *Incluya las patentes y otras actividades de propiedad industrial o intelectual (contratos, licencias, acuerdos, etc.) en los que haya colaborado. Indique: a) el orden de firma de autores; b) referencia; c) título; d) países prioritarios; e) fecha; f) entidad y empresas que explotan la patente o información similar, en su caso.*

PATENTE

"Procedure for Assessing the Dielectric Severity on Transformer Insulation" Patent number: ES2674329. Publication date: 22th January 2019

CONTRATOS

- "Generation of New Knowledge to Innovate in the Design of Core Type Power Transformers under FET", JST Transformateurs, Francia, 2020/2023
- "Study and Analysis of the Tank Walls and Structural Elements Heating due Zero Sequence Flux in Star-Star Transformers and the Influence of Tertiary Stabilizing Winding", UNION FENOSA DISTRIBUCION, España, 2016/2019
- "Calculation and Simulation of a 4MVA Transformer Cover Heating", COTRADIS Transformadores,, España, 2018
- "Efacec Quiet Transformer" (Adi / FEDER), EFACEC Energía, Portugal, 2013/2015
- "Project V: Development of Tools for the Versatile Calculation of Overvoltages in Dielectric Testing and Short-Circuit Transient Currents in EHV Shell and Core Type Transformer Windings" (QREN - FEDER), EFACEC Energía, PORTUGAL, 2011/2014