

CV Date	04/10/2023
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Part A. PERSONAL INFORMATION

First Name	PASCUALA		
Family Name	GARCIA MARTINEZ		
Sex		Date of Birth	
ID number Social Security, Passport			
URL Web			
Email Address	pascuala.garcia@uv.es		
Open Researcher and Contributor ID (ORCID)	0000-0002-8537-281X		
Researcher ID	E-3603-2012		
Scopus Author ID	7004325074		

A.1. Current position

Job Title				CATEDRÁTICA DE UNIVERSIDAD					
Starting date				2017					
Institution				Universitat de València					
Department / Centre				FACULTY OF PHYSICS / OPTICS AND OPTOMETRY AND VISION SCIENCES					
Country				Spain		Phone Number		963544717	
Keywords				Física y ciencias del espacio					

A.2. Previous positions (Research Career breaks included)

Period	Job Title / Name of Employer / Country
2017 -	Catedrática de Universidad / Dept. Óptica. Universitat de València
2012 -	Acreditada a Catedrática de Universidad / ANECA
Junio 2009	Reincorporación Prof. Titulat Universitat / Dept. Óptica.
Interrupción 5 meses	Excedencia por el cuidado de hijos menores 3 años
Interrupción 6 meses	Permiso Maternidad (Junio 2008-Diciembre 2008)
2002 -2017	Prof. Titulat Universitat / Dept. Óptica. Universitat de València
2001 -2002	Asociada TC / Dept. Óptica. Universitat de València
1998 -2001	Ayudante de Facultad (2º) / Dept. Óptica. Universitat de València
1996 -1998	Ayudante de Facultad (1º) / Dept. Óptica. Universitat de València
1994 -1996	Becaria de Investigación / Dept. Óptica. Universitat de València

A.3. Education

Degree/Master/PhD	University / Country	Year
Doctora en Física	Departament d'Òptica. Universitat de València	1998
Licenciada en Física	Facultat de Física. Universitat de València	1993

Part B. CV SUMMARY (according to DORA regulation)

Pascuala García-Martínez is Full Professor of Optics at the Optics Department in the University of Valencia. She has one son. According to SCOPUS she has 1883 citations and h=19, and 1703 citations h=24 in Google Scholar.

Her contributions to the generation of knowledge are focuses on the study of spatial modulators of light, basically in the characterization and application of liquid crystals, the processing optical-digital imaging, non-linear correlations and morphological processing. She is co-author of more

than 70 articles in international journals of high impact index, of 6 chapters of books and about 100 communications (25 of them invited and 1 plenary) international and national congresses. He has also collaborated in more than 30 projects R & D financed in public calls at both the state and regional level. In concrete has been Principal Investigator in some of them.

She was a visitor researcher in Georgia Tech Lorraine in Metz (France), Faculty of Electrical Engineering in Tel-Aviv University (Israel) and Centre d'Optique, Photonique et Lasers, Université Laval in Québec (Canada). She has also visited as researcher different Spanish universities as the University of Alicante and the University Miguel Hernández of Elche where currently she is developing her research as member of the group (Grupo de Tecnologías Ópticas y Optoelectrónicas <https://tecnopto.edu.umh.es/>).

She has been recognized as a Fellow Member of SPIE (2021) being the only one Spanish among 57 researchers from other countries for her contributions in the development of optical image processing systems, diffractive optics, and for her activity in the promotion of women in the Science. She is also honoured as Senior Member of OSA in 2015.

She has been consultant collaborator in companies: Assembled New Technologies S. L. (2008). IMPIVA (Instituto de Mediana y Pequeña Empresa Valenciana), (2006-7).

Regarding the development of individuals, since 2014 she is the IP of the 'Red Interuniversitaria de Innovación Docente para la Enseñanza de la Física: Óptica' (www.uv.es/ioptica), receiving continued funding from the Vice-Rector for Occupation and Training Programs from the University of Valencia, and coordinating more than ten professors from four Spanish universities. They have developed video-tutorials, interactive exercises, and different activities such as picture contests for International Day of Light celebration oriented to undergraduate students.

She has been invited by European Erasmus program to teach in Ecole Nationale Supérieure de Physique de Marseille, Université d'Aix Provence, in Marseille (France) in 2003. She was the coordinator of I National Virtual Meeting of Undergraduate Women in Physics on July 2021 to receive training in physics and gender and to create networks of cooperation and collaboration to eliminate barriers and obstacles that may find in their career path.

She is also involved in teaching courses about gender and science at University of Valencia, regarding how to include gender perspective in research and in teaching, organized by Servei de Formació Permanent. Those courses have more than 30 enrolled faculty members each edition.

Concerning the contributions to the wider research community and broader society, she is deeply committed to defending women's rights researchers: Coordinator of the node of the Valencian Community of the Association of Women Researchers and Technologists (AMIT) from 2005 to the present and member of the board of directors of AMIT, and from 2018 is the President of the Specialized 'Women in Physics' of the Royal Spanish Physics Society. Director of the Equality Commission of the Faculty of Physics (2010-2022).

She is also involved in board academic positions. She was vicedean of the faculty of Physics from 2018-2021, being the responsible of the degree studies at the faculty, which has been a challenge and an extraordinary work due to pandemic situation. From 2017-2019 she was elected member of the Council Government of the University of Valencia.

She is member of SPIE Conference Program Committee 'Optics, Photonics and Digital Technologies for Multimedia applications' in Photonics Europe SPIE meeting from 2008-2021, and she has been part of several SPIE organization and management committees.

Part C. RELEVANT ACCOMPLISHMENTS

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

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

- 1 **Scientific paper** Pascuala García-Martínez and Ignacio Moreno, (1/2) **2023**. “Dual polarization Fourier transform processor using geometric-phase lenses” Opt. Express pp16460-16470 <https://doi.org/10.1364/OE.490093>
- 2 **Scientific paper** Esther Nabadda, Pascuala García-Martínez, Ignacio Moreno, María del Mar Sánchez-López. (2/4) **2022** “Phase Shifting Common-Path Polarization Self-Interferometry for Evaluating the Reconstruction of Holograms Displayed on a Phase-Only Display” Frontiers in Physics. 4 citations p92011 <https://doi.org/10.3389/fphy.2022.920111>
- 3 **Scientific paper**. Pascuala García-Martínez; Ignacio Moreno; María del Mar Sánchez-López; Jordi Gomis; Pedro Martínez; Aarón Cofré. (1/5). **2021**. “Programmable Supercontinuum Laser Spectrum Generator Based on a Liquid-Crystal on Silicon Spatial Light Modulator” Frontiers In Physics. Frontiers Media S.A.. 9, pp.651147. ISSN 2296-424X. 2 citation Scopus. <https://doi.org/10.3389/fphy.2021.651147>
- 4 **Scientific paper**. Pascuala García-Martínez; David Marco; José Luís Martínez-Fuentes; María del Mar Sánchez-López; Ignacio Moreno. (1/5) **2020** “Efficient on-axis SLM engineering of optical vector modes Optics and Lasers in Engineering. 125, pp.105859. ISSN 0143-8166. 26 citations Scopus <https://doi.org/10.1016/j.optlaseng.2019.105859>
- 5 **Scientific paper**. David Marco; María del Mar Sánchez-López; Pascuala García-Martínez; Ignacio Moreno. (3/4). **2019**. Using birefringence colors to evaluate a tunable liquid crystal q-plate Journal of the Optical Society of America B-Optical Physics. 36-5. ISSN 0740-3224. 13 citations Scopus <https://doi.org/10.1364/JOSAB.36.000D34>
- 6 **Scientific paper**. A. Messaadi; M.M. Sánchez-López, A. Vargas, P. García-Martínez and I. Moreno. (4/5). **2018**. “Achromatic linear retarder with tunable retardance” Optics Letters. 43, pp.3277-3280. ISSN 0146-9592. 24 citations Scopus
- 7 **Scientific paper**. José Luís Martínez; Pascuala García-Martínez; Ignacio Moreno. (2/3). **2017**. “Microscope system with on axis programmable Fourier transform filtering” - Optics and Lasers in Engineering. 89, pp.116-122. ISSN 0143-8166. 8 citations Scopus <https://doi.org/10.1016/j.optlaseng.2016.04.008>
- 8 **Scientific paper**. Aaron Cofré, Pascuala García-Martínez; Asticio Vargas and Ignacio Moreno. (2/4). **2017**. “Vortex beam generation and other advanced optics experiments reproduced with a twisted-nematic liquid-crystal display with limited phase modulation” European Journal of Physics. 38, 014005. ISSN 01430807. 22 citation Scopus <https://doi.org/10.1088/1361-6404/38/1/014005>
- 9 **Scientific paper**. A. Meessadi, M. M. Sánchez-López, P. García-Martínez, A. Vargas and I. Moreno. (3/5). **2016**. Optical system for measuring the spectral retardance function in an extended range - Journal of the European Optical Society Rapid Publications 12, pp1-9. ISSN 1990-2573. 17 citations Scopus. <https://doi.org/10.1186/s41476-016-0023-7>
- 10 **Scientific paper**. Asticio Vargas; M. Mar Sánchez-López; Pascuala García-Martínez; Julia Arias; Ignacio Moreno. (3/5). **2014**. Highly accurate spectral retardance characterization of a liquid crystal retarder including Fabry-Perot interference effects - Journal of Applied Physics. American Institute of Physics. 115. ISSN 0021-8979. 18 citations Scopus <https://doi.org/10.1063/1.4861635>

C.2. Conferences and meetings

- 1 I. Moreno, E. Nabadda, P. García-Martínez and M. M. Sánchez López, “Complex-valued holograms displayed onto phase-only spatial light modulators: encoding technique and evaluation” Proc. SPIE 12318, Holography, Diffractive Optics, and Applications XII, 123181C (19 December 2022). SPIE/COS Photonics Asia, 2022 Online only.
- 2 Pascuala García-Martínez; David Marco; José Luís Martínez-Fuentes; María del Mar Sánchez-López e Ignacio Moreno. Vector modes generation using efficient on-axis systems. OSA Advanced Photonics Congress (AP) 2020 Signal Processing in Photonic Communications. Optical Society of America. 2020. United States of America. Participatory - Oral communication. Conference.
- 3 P. García-Martínez; J. L. Martínez-Fuentes; M. M. Sánchez-López; I. Moreno. Highly efficient generation of arbitrary vector beams. XXXVII Reunión Bienal de la Sociedad Española de Física. Universidad de Zaragoza. 2019. Spain. Participatory - poster. Conference.
- 4 David Marco; Pascuala García-Martínez; María del Mar Sánchez-López e Ignacio Moreno. Caracterización de retardadores ópticos estructurados mediante su color de

- birrefringencia. XIII Congreso Nacional de Color. SEDOPTICA. 2019. Spain. 'Participatory - poster. Conference.
- 5 A. Messaadi; P. García-Martínez; A. Vargas; M. M. Sánchez-López; e I. Moreno. Sistema desfasador con desfase acromático variable. XII Reunión Nacional de Óptica. 2018. Spain. 'Participatory - poster. Conference.
 - 6 Pascuala García-Martínez; José Luís Martínez; Ignacio Moreno. On axis programmable microscope using liquid crystal spatial light modulator. SPIE Optical Metrology. 2648 - SPIE. 2017. Germany. Participatory - oral communication. Conference.
 - 7 P. García-Martínez; C. J. Zapata-Rodríguez; C. Ferreira; I. Fernández; M. Nasenpour; I. Moreno; M. M. Sánchez-López; J. Espinosa; D. Mas; J. J. Miret. Optics and photonics innovative education networking synergies between universities around learning. 10th International Technology, Education and Development Conference. 2016. Spain. 'Participatory - poster. Conference.
 - 8 Venancio Calero; Pascuala García-Martínez; Jorge Alberro; Maria del Mar Sánchez-López; Ignacio Moreno. Large phase dynamic range using liquid crystal spatial light modulators. XXIII International Commission in Optics. 2014. Spain. Participatory - oral communication. Conference.
 - 9 Ignacio Moreno; Pascuala García-Martínez; Carlos Ferreira. Using ray matrices to derive analytical expressions of optical aberrations. ETOP'2013. 12th International Conference on Education and Training in Optics and Photonics. Sociedade Portuguesa de Óptica e Fotónica. 2013. Portugal. Participatory - oral communication. Conference.

C.3. Research projects and contracts

- 1 **Project:** PID2021-126509OB-C22, DISPOSITIVOS Y SISTEMAS DE LUZ ESTRUCTURADA PARA POLARIMETRIA Y CONTROL ESPECTRAL Ministerio de Ciencia e Innovación. Ignacio Moreno Soriano (UMH) y Pascuala García Martínez (UEV), 01/09/2022- 01/09/2025. 90.750,00€.
- 2 **Project.** RTI2018-097107-B-C33, SISTEMAS POLARIMETRICOS DE LUZ ESTRUCTURADA BASADOS EN FASE GEOMETRICA Y MODULADORES ESPACIALES DE LUZ. Ministerio de Ciencia e Innovación. Ignacio Moreno Soriano. (Universidad Miguel Hernández de Elche (España)). 01/01/2019-31/12/2021. 84.700 €
- 3 **Project.** PROMETEO-2017-154, DESARROLLO DE INSTRUMENTACIÓN ÓPTICA VECTORIAL Y POLARIMÉTRICA. Conselleria d'Educació, Investigació, Cultura i Esport. Generalitat Valenciana.. María del Mar Sánchez López. (Universidad Miguel Hernández de Elche (España)). 01/10/2017-31/12/2021. 283.565,13 €
- 4 **Project.** FIS2015-66328-C3-3-R, SISTEMAS OPTICOS AVANZADOS DE MODULACION ESPECTRAL Y DE POLARIZACION -APLICACIÓN EN DERMATOSCOPIA. MINECO. Ministerio de Economía y Competitividad. Ignacio Moreno Soriano. (Universidad Miguel Hernández de Elche (España)). 01/01/2016-31/12/2018. 132.000 €
- 5 **Project.** Scientific women in Optics and Light History. SPIE Education Outreach Grant. SPIE. Pascuala García-Martínez. (Universitat de València). 01/01/2015- 31/12/2015. 3.000 €
- 6 **Project.** FIS2012-39158-C02-02, SISTEMAS OPTICOS PROGRAMABLES BASADOS EN MODULADORES DE CRISTAL LIQUIDO PARA MICROSCOPIA, POLARIMETRIA Y CONTROL ESPECTRAL. Ministerio de Economía y Competitividad. Ignacio Moreno Soriano. (Universidad Miguel Hernández de Elche (España)). 01/01/2013- 31/12/2015. 148.590 €
- 7 **Project.** TEC2010-09834-E, Red Temática de Procesado de Imagen y Señal Multidimensional (PRISMA) (4a Renovación). Ministerio de Ciencia e Innovación. Dr. Juan Luis Nieves. (Universitat de València). 01/01/2011-31/12/2012. 12.000 €
- 8 **Project.** FIS2009-13955-C02-02, Generación y control de haces de luz estructurados mediante moduladores ópticos. Ministerio de Ciencia e Innovación. Ignacio Moreno Soriano. (Universidad Miguel Hernandez). 2010-2012. 90.750,01 €

C.4. Activities of technology / knowledge transfer and results exploitation

Patent of invention. Ignacio Moreno, María del Mar Sánchez-López, Aafon Cofré, Pascuala García-Martínez, Juan Campos. P201731300. Sistema láser con espectro digital sintonizable 07/11/2017.