



**César Luis FOLCIA BASA**

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## Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

I finished my PhD thesis in 1989. It was about ferroelectric materials with incommensurate phases. In particular I studied, by means of dielectric susceptibility and x-ray diffraction measurements, the peculiar dependence that certain magnitudes present in relation to the thermal history of the material (memory effects). After completing the thesis, my research work was oriented towards the area of optical properties of materials, including crystalline solids and liquid crystals. In relation to the first ones, it is worth mentioning my contribution to the implementation and optimization of a high-resolution universal polarimeter (HAUP method). However, most of my research work focused on the field of ferroelectric liquid crystals. Here, in reference to the optical properties, I performed the assembly of an experimental line for the study of second harmonic generation (SHG) in mesogenic materials. The SHG technique is used to determine the efficiency of the second harmonic light conversion and its relationship with the molecular structure. This technique, complemented with the observation of textures by optical polarization microscopy and analysis of electro-optical switching, is routinely used in its different variants (second-harmonic interferometry, second-harmonic response to applied electric fields, centrosymmetry test, etc.), and is a fundamental tool for the characterization of new materials. Since 2005, given the complexity that many of the new liquid crystal materials presented (undulated smectic phases, columnar phases, pseudo-crystallinity, etc.), it was essential to resort to X-ray diffraction techniques to obtain structural information on the basis of which different observed effects could be explained. Nowadays I use this technique in a routine way, not only with the equipment available in our laboratory but also using large facilities (synchrotron radiation), where we can highlight the experiments of resonant x-ray diffraction performed on liquid crystal columnar structures. An important contribution in this field is the analysis of structures using electronic density maps (Fourier maps). These maps are obtained from the diffracted intensities. They can represent selected sections of the bulk charge density as well as its projection along a given direction. A reliable image of the structure is finally obtained by positioning the molecules in the unit cell according to the information given by the map. Since we published the method in 2006, it has been used by different groups for the structural study of liquid crystalline phases.

Since 2014, I am working in the study of liquid crystal lasers. These are photonic materials constituted by chiral nematic (cholesteric) liquid crystals. The helical structure is here the resonator in which the light generated by the desexitation of dye molecules is amplified. In the last five years we published nine articles concerning different aspects of liquid crystal lasers and the behaviour of light in photonic structures, and is, together with the characterization of new materials, a field in which I will work on a routine basis. I also plan to extend the study to lasers based on liquid crystal emulsions and microlasers formed by drops of mesogen in suspension.

I have supervised four PhD theses. One of them was awarded with the Glenn Brown International Prize for the best thesis in liquid crystal physics granted biennially by the International Liquid Crystal Society.



## General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

Periods of research activity: 6

Last period: 2015 - 2020

Number of theses supervised in the last 10 years: 2

Total publications: 90

Publications in Q1: 59

Sum of times cited: 1584 - Without self citations: 1339

Average number of citations/year during the last 5 years (not including the current year): 90.4

h-index: 22

**César Luis FOLCIA BASA**

Surname(s): **FOLCIA BASA**  
Name: **César Luis**  
DNI: **16062887D**  
ORCID: **0000-0003-2607-2937**  
ResearcherID: **G-4615-2015**  
Date of birth: **20/06/1955**  
Gender: **Male**  
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**Current professional situation**

**Employing entity:** Universidad del País Vasco    **Type of entity:** University  
**Department:** Física de la Materia Condensada, Facultad de Ciencia y Tecnología  
**Professional category:** Catedrático de Universidad  
**Start date:** 28/04/2010  
**Type of contract:** Civil servant    **Dedication regime:** Full time  
**Primary (UNESCO code):** 220910 - Lasers; 220913 - Non-linear optics; 221093 - Liquid Crystals; 221105 - Crystal structure; 221124 - Optical properties  
**Identify key words:** Nonlinear optics; Lasers; Liquid crystals; Diffraction

**Previous positions and activities**

	<b>Employing entity</b>	<b>Professional category</b>	<b>Start date</b>
<b>1</b>	Universidad del País Vasco	Profesor Titular de Universidad	14/01/1994
<b>2</b>	Universidad del País Vasco	Profesor Titular Interino	01/03/1992
<b>3</b>	Universidad del País Vasco	Profesor Titular Interino	01/10/1991
<b>4</b>	Universidad del País Vasco	Profesor Asociado (doctor)	01/04/1989
<b>5</b>	Universidad del País Vasco	Profesor Asociado (no doctor)	01/01/1989
<b>6</b>	Instituto de Cooperación Iberoamericana	Becario	01/10/1984
<b>7</b>	Universidad de Buenos Aires	Auxiliar de Docencia	19/05/1983

- 1** **Employing entity:** Universidad del País Vasco    **Type of entity:** University  
**Department:** Física de la Materia Condensada, Facultad de Ciencia y Tecnología  
**Professional category:** Profesor Titular de Universidad    **Educational Management (Yes/No):** Yes  
**Start-End date:** 14/01/1994 - 27/04/2010    **Duration:** 16 years - 3 months - 14 days  
**Type of contract:** Civil servant  
**Dedication regime:** Full time  
**Field of management activity:** University



- 2** **Employing entity:** Universidad del País Vasco **Type of entity:** University  
**Department:** Física de la Materia Condensada, Facultad de Ciencia y Tecnología  
**Professional category:** Profesor Titular Interino **Educational Management (Yes/No):** Yes  
**Start-End date:** 01/03/1992 - 13/01/1994 **Duration:** 1 year - 10 months - 13 days  
**Type of contract:** Temporary  
**Dedication regime:** Full time  
**Field of management activity:** University
- 3** **Employing entity:** Universidad del País Vasco **Type of entity:** University  
**Department:** Física Aplicada I, Escuela Técnica Superior de Ingenieros Industriales y de Telecomunicación  
**Professional category:** Profesor Titular Interino **Educational Management (Yes/No):** Yes  
**Start-End date:** 01/10/1991 - 28/02/1992 **Duration:** 4 months - 28 days  
**Type of contract:** Temporary  
**Dedication regime:** Full time  
**Field of management activity:** University
- 4** **Employing entity:** Universidad del País Vasco **Type of entity:** University  
**Department:** Física Aplicada I, Escuela Técnica Superior de Ingenieros Industriales y de Telecomunicación  
**Professional category:** Profesor Asociado **Educational Management (Yes/No):** Yes (doctor)  
**Start-End date:** 01/04/1989 - 30/09/1991 **Duration:** 2 years - 6 months  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time  
**Field of management activity:** University
- 5** **Employing entity:** Universidad del País Vasco  
**Department:** Física Aplicada I, Escuela Técnica Superior de Ingenieros Industriales y de Telecomunicación  
**Professional category:** Profesor Asociado (no doctor) **Educational Management (Yes/No):** Yes  
**Start-End date:** 01/01/1989 - 31/03/1989 **Duration:** 3 months  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time  
**Field of management activity:** University
- 6** **Employing entity:** Instituto de Cooperación Iberoamericana **Type of entity:** State agency  
**Professional category:** Becario **Educational Management (Yes/No):** No  
**Start-End date:** 01/10/1984 - 30/09/1986 **Duration:** 2 years  
**Type of contract:** Grant-assisted student (pre or post-doctoral, others)  
**Dedication regime:** Full time  
**Field of management activity:** University
- 7** **Employing entity:** Universidad de Buenos Aires **Type of entity:** University  
**Department:** Física, Facultad de Ciencias Exactas y Naturales  
**Professional category:** Auxiliar de Docencia **Educational Management (Yes/No):** Yes  
**Start-End date:** 19/05/1983 - 30/09/1984



CURRÍCULUM VÍTAE NORMALIZADO

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**Type of contract:** Temporary employment contract

**Dedication regime:** Part time

**Field of management activity:** University



## Education

### University education

#### 1st and 2nd cycle studies and pre-Bologna degrees

**Name of qualification:** Licenciado en Ciencias Físicas

**City degree awarding entity:** Buenos Aires, Argentina

**Degree awarding entity:** Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires

**Type of entity:** University

**Date of qualification:** 22/05/1984

**Standardised degree:** Yes

#### Doctorates

**Doctorate programme:** Doctorado en Física

**Degree awarding entity:** Universidad del País Vasco **Type of entity:** University

**City degree awarding entity:** Spain

**Date of degree:** 02/03/1989

**Thesis title:** Efectos cinéticos en materiales ferroeléctricos con fases incommensurables

**Thesis director:** Juan Manuel Pérez Mato

**Thesis co-director:** Manuel José Tello León

**Obtained qualification:** Apto Cum-Laude

### Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English	A1	A1	A1	A1	A1

## Teaching experience

### Experience supervising doctoral thesis and/or final year projects

- Project title:** Propagación de la luz en medios anisótropos no homogéneos

**Type of project:** End of course project

**Entity:** Universidad del País Vasco **Type of entity:** University

**City of entity:** Spain

**Student:** Mikel Gómez Ruiz

**Obtained qualification:** 8

**Date of reading:** 12/07/2019



- 2** **Project title:** El microscopio de efecto túnel. Estudio de la superficie del grafito.  
**Type of project:** End of course project  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Ernesto Mamedaliev Guseinova  
**Obtained qualification:** 9  
**Date of reading:** 12/09/2018
- 3** **Project title:** Optical functionalities of liquid crystals: laser devices and nonlinear optics  
**Type of project:** Doctoral thesis  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Gerardo Sanz Enguita  
**Obtained qualification:** Sobresaliente Cum-Laude  
**Date of reading:** 02/12/2016  
**European doctorate:** Yes
- 4** **Project title:** Optimización de pseudo-orbitales atómicos confinados en dímeros  
**Type of project:** End of course project  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Deyviss Jesús Oroya Villalta  
**Obtained qualification:** 8  
**Date of reading:** 14/09/2016
- 5** **Project title:** Cristales líquidos no convencionales con funcionalidades diversas: óptica no lineal, fases columnares y ferroelectricidad  
**Type of project:** Doctoral thesis  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Sofía Rodríguez Conde  
**Obtained qualification:** Sobresaliente Cum-Laude  
**Date of reading:** 27/03/2015
- 6** **Project title:** Determinación estructural de cristales líquidos mediante difracción resonante de rayos x  
**Type of project:** End of course project  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Oier Arcelus Elcorobarrutia  
**Obtained qualification:** 8.1  
**Date of reading:** 10/07/2014
- 7** **Project title:** Second harmonic generation in a ferroelectric liquid crystal  
**Type of project:** Trabajo de Fin de Master  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Gerardo Sanz Enguita  
**Obtained qualification:** 9





**Date of reading:** 25/09/2012

- 8** **Project title:** Determinación estructural de algunas fases de cristales líquidos esmécticos mediante difracción resonante de rayos x  
**Type of project:** End of course project  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Jasone Garay García  
**Obtained qualification:** 9  
**Date of reading:** 15/07/2011
- 9** **Project title:** Nonlinear optical and structural properties of new bent-core liquid cristal materials  
**Type of project:** Doctoral thesis  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Ibon Alonso Villanueva  
**Obtained qualification:** Sobresaliente Cum-Laude  
**Date of reading:** 24/11/2008
- 10** **Project title:** Propiedades ópticas no lineales y estructurales en cristales líquidos tipo banana con unidades azobenceno  
**Type of project:** DEA  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Ibon Alonso Villanueva  
**Date of reading:** 20/11/2006
- 11** **Project title:** Cristales líquidos tipo banana: propiedades ópticas no lineales y estructurales  
**Type of project:** Doctoral thesis  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Jon Ander Gallastegui Mañaricua  
**Obtained qualification:** Sobresaliente Cum-Laude  
**Date of reading:** 14/12/2005
- 12** **Project title:** Generación de segundo armónico en cristales líquidos tipo banana  
**Type of project:** Minor thesis  
**Co-director of thesis:** Josu Ortega Aperribay  
**Entity:** Universidad del País Vasco **Type of entity:** University  
**City of entity:** Spain  
**Student:** Jon Ander Gallastegui Mañaricua  
**Date of reading:** 18/06/2002



## Scientific and technological experience

### Scientific or technological activities

#### R&D projects funded through competitive calls of public or private entities

- 1** **Name of the project:** Cristales líquidos, láseres y ferroelectricidad  
**Entity where project took place:** Universidad del País Vasco - GIU18/146  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 6  
**Start-End date:** 21/12/2018 - 20/12/2021  
**Total amount:** 28.654 €
- 2** **Name of the project:** Convocatoria Extraordinaria UPV/EHU para Grupos de Investigación del Gobierno Vasco  
**Entity where project took place:** Universidad del País Vasco - UPV/EHU PPG17/29  
**Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 6  
**Start-End date:** 01/01/2017 - 31/12/2018  
**Total amount:** 17.400 €
- 3** **Name of the project:** Materiales funcionales autoorganizados: estudio estructural, y fenomenología óptica y dieléctrica  
**Entity where project took place:** Universidad del País Vasco - MINECO MAT2012-38538-C03-02  
**Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 10  
**Start-End date:** 01/02/2013 - 31/12/2015  
**Total amount:** 128.700 €
- 4** **Name of the project:** Cristales líquidos  
**Entity where project took place:** Universidad del País Vasco - Gobierno Vasco GI/IT-449-10  
**Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** de la Fuente Lavín, M<sup>a</sup> Rosario  
**Nº of researchers:** 6  
**Start-End date:** 01/01/2010 - 31/12/2015  
**Total amount:** 388.000 €
- 5** **Name of the project:** Materiales funcionales supramoleculares: propiedades estructurales, ópticas y dieléctricas  
**Entity where project took place:** Universidad del País Vasco - MEC MAT2009-14636-C03-03  
**Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 8  
**Start-End date:** 01/01/2010 - 30/06/2013  
**Total amount:** 157.300 €



- 6** **Name of the project:** Propiedades físicas de cristales líquidos y polímeros piezoeléctricos  
**Entity where project took place:** Universidad del País Vasco - GRUPOS DEL SISTEMA UNIVERSITARIO VASCO 2007 IT-484-07 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** de la Fuente Lavín, M<sup>a</sup> Rosario  
**Nº of researchers:** 7  
**Start-End date:** 01/01/2007 - 31/12/2009  
**Total amount:** 85.834,11 €
- 7** **Name of the project:** Materiales ópticos y optoelectrónicos basados en organizaciones mesomorfas: Caracterización estructural y estudio de sus propiedades fenomenológicas  
**Entity where project took place:** Universidad del País Vasco - MEC MAT2006-13571-C02-02 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 8  
**Start-End date:** 01/10/2006 - 31/12/2009  
**Total amount:** 170.610 €
- 8** **Name of the project:** Materiales moleculares cristal líquido para aplicaciones en electrónica molecular  
**Entity where project took place:** Universidad del País Vasco - MEC MAT2003-07806-C02-02 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 6  
**Start-End date:** 01/12/2003 - 30/06/2007  
**Total amount:** 171.000 €
- 9** **Name of the project:** Propiedades físicas de cristales líquidos para aplicaciones ópticas y optoelectrónicas  
**Entity where project took place:** Universidad del País Vasco - GRUPOS DEL SISTEMA UNIVERSITARIO VASCO 2001 GIC01/42 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Pérez Jubindo, Miguel Ángel  
**Nº of researchers:** 9  
**Start-End date:** 04/10/2001 - 31/12/2006  
**Total amount:** 338.501,23 €
- 10** **Name of the project:** Supramolecular liquid crystal dendrimers  
**Entity where project took place:** Universidad del País Vasco, Universidad de Zaragoza - EC Human Capital & Mobility Network RTN1-1999-0311 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Serrano Ostáriz, José Luis  
**Start-End date:** 01/07/2000 - 30/06/2004
- 11** **Name of the project:** Nuevos materiales cristales líquidos para aplicaciones electroópticas y optoelectrónicas  
**Entity where project took place:** Universidad del País Vasco - MEC MAT2000-1293-C02-02 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 6  
**Start-End date:** 28/12/2000 - 27/12/2003  
**Total amount:** 128.616,6 €



- 12** **Name of the project:** Diseño, síntesis y caracterización de materiales basados en organizaciones supramoleculares para aplicaciones ópticas: fluorescencia, ferroeléctricas y óptica no lineal  
**Entity where project took place:** Universidad del País Vasco - MEC MAT97-0986-C02-02 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** de la Fuente Lavín, M<sup>a</sup> Rosario  
**Nº of researchers:** 5  
**Start-End date:** 01/10/1997 - 30/09/2000
- 13** **Name of the project:** Propiedades ópticas no lineales en mesógenos no convencionales  
**Entity where project took place:** Universidad del País Vasco - UPV/EHU UPV 063.310-EB158/97 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 4  
**Start-End date:** 01/12/1997 - 30/11/1999
- 14** **Name of the project:** Molecular design of functional liquid crystals  
**Entity where project took place:** Universidad del País Vasco, Universidad de Zaragoza - EC Human Capital & Mobility Network FMRX-CT97-0121 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Serrano Ostáriz, José Luis  
**Start-End date:** 01/11/1997 - 31/10/1999
- 15** **Name of the project:** Generación de segundo armónico en cristales líquidos ferroeléctricos  
**Entity where project took place:** Universidad del País Vasco - UPV/EHU UPV 063.310-EB228/95 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Folcia Basa, César Luis  
**Nº of researchers:** 3  
**Start-End date:** 16/10/1995 - 15/10/1997
- 16** **Name of the project:** Diseño, síntesis y estudio de materiales orgánicos avanzados para aplicaciones ópticas (electro y magnetoópticas) no lineales  
**Entity where project took place:** Universidad del País Vasco - MEC MAT94-0717-C02-02  
**Name principal investigator (PI, Co-PI....):** de la Fuente Lavín, M<sup>a</sup> Rosario  
**Nº of researchers:** 4  
**Start-End date:** 12/05/1994 - 12/05/1997
- 17** **Name of the project:** Molecular organization in liquid crystals resulting from particular intermolecular interactions  
**Entity where project took place:** Universidad del País Vasco, Universidad de Zaragoza - EC Human Capital & Mobility Network ERBCHRX-CT930161  
**Name principal investigator (PI, Co-PI....):** Serrano Ostáriz, José Luis  
**Start-End date:** 01/10/1993 - 30/09/1996
- 18** **Name of the project:** Cristales líquidos ferroeléctricos. Nuevos materiales para óptica no lineal  
**Entity where project took place:** Universidad del País Vasco - MEC MAT91-0962-C02-02 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Etxebarria Ecenarro, Jesús  
**Nº of researchers:** 7  
**Start-End date:** 05/08/1991 - 05/08/1994



- 19** **Name of the project:** Propiedades ópticas y acción láser de los iones Nd y Er en la matriz BIGaZYT  
**Entity where project took place:** Universidad del País Vasco - UPV/EHU UPV 057.345-E126/91 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Balda de la Cruz, M<sup>a</sup> Rolindes  
**Nº of researchers:** 5  
**Start-End date:** 01/01/1992 - 31/12/1992
- 20** **Name of the project:** Propiedades ópticas de iones 3D y tierras raras en matrices vítreas de vidrios fluoruros. Aplicaciones a láseres sintonizables de estado sólido  
**Entity where project took place:** Universidad del País Vasco - MEC MAT89-0188 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Fernández Rodríguez, Joaquín  
**Nº of researchers:** 9  
**Start-End date:** 17/11/1989 - 16/11/1992
- 21** **Name of the project:** Propiedades ópticas de iones luminiscentes en la nueva matriz BIGaZYT  
**Entity where project took place:** Universidad del País Vasco - : UPV/EHU UPV 057.345-E175/90 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Balda de la Cruz, M<sup>a</sup> Rolindes  
**Nº of researchers:** 5  
**Start-End date:** 01/01/1991 - 31/12/1991
- 22** **Name of the project:** Propiedades ópticas del Cr(III) en matrices vítreas basadas en vidrios pesados  
**Entity where project took place:** Universidad del País Vasco - UPV/EHU UPV 057.345-0165/89 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Balda de la Cruz, M<sup>a</sup> Rolindes  
**Nº of researchers:** 5  
**Start-End date:** 15/03/1990 - 31/12/1990
- 23** **Name of the project:** Estudio estructural de materiales inconmensurables y cuasicristales  
**Entity where project took place:** Universidad del País Vasco - MEC PB85-0466 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Pérez Mato Juan Manuel  
**Nº of researchers:** 6  
**Start-End date:** 01/01/1988 - 31/12/1988
- 24** **Name of the project:** Cristales inconmensurables: Caracterización física, estructural y efecto memoria  
**Entity where project took place:** Universidad del País Vasco - Gobierno Vasco GV 063.310-15/87 **Type of entity:** University  
**Name principal investigator (PI, Co-PI....):** Manuel José  
**Nº of researchers:** 8  
**Start-End date:** 17/09/1986 - 17/09/1988

## Scientific and technological activities

### Scientific production

#### Publications, scientific and technical documents

1

J. Ortega; C. L. Folcia; J. Etxebarria. Liquid-crystal-based resonant cavities as a strategy to design low-threshold electrically-tunable lasers. *Liquid Crystals*. 09/09/2021. Available on-line at: <<https://doi.org/10.1080/02678292.2021.1974584>>.

DOI: 10.1080/02678292.2020.1783587

Type of production: Scientific paper

Format: Journal

2

C. L. Folcia; J. Ortega; J. Etxebarria. Spot profile and beam divergence in cholesteric liquid crystal lasers. *Liquid Crystals*. 48 - 3, pp. 336 - 344. 2021. Available on-line at: <<https://doi.org/10.1080/02678292.2020.1783587>>.

DOI: 10.1080/02678292.2020.1783587

Type of production: Scientific paper

Format: Journal

3

C. L. Folcia; J. Ortega; J. Etxebarria. Anomalous light scattering in photonic cholesteric liquid crystals. *Liquid Crystals*. 47 - 6, pp. 958 - 965. 2020. Available on-line at: <<https://doi.org/10.1080/02678292.2019.1693645>>.

DOI: 10.1080/02678292.2019.1693645

Type of production: Scientific paper

Format: Journal

4

E. de Domingo; C. L. Folcia; J. Ortega; J. Etxebarria; R. Termine; A. Golemme; S. Coco; P. Espinet. Striking Increase in Hole Mobility upon Metal Coordination to Triphenylene Schiff Base Semiconducting Multicolumnar Mesophases. *Inorganic Chemistry*. 59, pp. 10482 - 10491. 2020. Available on-line at: <<https://doi.org/10.1021/acs.inorgchem.0c00794>>.

DOI: 10.1021/acs.inorgchem.0c00794

Type of production: Scientific paper

Format: Journal

5

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DOI: 10.1021/acsp Photonics.8b01011

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DOI: 10.1080/02678292.2017.1302010

Type of production: Scientific paper

Format: Journal



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**DOI:** 10.3390/ma11010005  
**Type of production:** Scientific paper **Format:** Journal
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**DOI:** 10.1021/jacs.6b06792  
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**Type of production:** Scientific paper **Format:** Journal
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**DOI:** 10.1063/1.4942010  
**Type of production:** Scientific paper **Format:** Journal
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**DOI:** 10.1364/OE.23.027369  
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**DOI:** 10.1002/adma.201500238

**Type of production:** Scientific paper

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**DOI:** 10.1039/c5tc01802a

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1364/OL.40.001262

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1021/ic402886t

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1039/c4tc00212a

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**DOI:** 10.1007/s00340-013-5678-9

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**DOI:** 10.1063/1.4866160

**Type of production:** Scientific paper

**Format:** Journal





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C. L. Folcia; J. Ortega; J. Etxebarria; S. Rodriguez-Conde; G. Sanz-Enguita; K. Geese; C. Tschierske; V. Ponsinet; P. Barois; R. Pindak; LiDong Pan; Z. Q. Liu; B. K. McCoy; C. C. Huang. Spontaneous and field-induced mesomorphism of a silyl-terminated bent-core liquid crystal as determined from second-harmonic generation and resonant X-ray scattering. *Soft Matter*. 10 - 1, pp. 196 - 205. 2014. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)>  
**DOI:** 10.1039/c3sm51277k

**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1021/cm302144f

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**DOI:** 10.1039/c2jm33612j

**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1103/PhysRevE.86.051707

**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1063/1.3592964

**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1103/PhysRevE.84.021707

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1103/PhysRevE.84.010701

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1039/b923616c

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**DOI:** 10.1021/ic1010665

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**DOI:** 10.1103/PhysRevE.82.041706

**Type of production:** Scientific paper

**Format:** Journal

**33**

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**DOI:** 10.1039/c0jm00012d

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1080/02678292.2010.521858

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1021/ic9005295



**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1039/b900832b

**Type of production:** Scientific paper

**Format:** Journal

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**Type of production:** Scientific paper

**Format:** Journal

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Nelida Gimeno; Joaquin Barbera; Jose Luis Serrano; M. Blanca Ros; M. Rosario de la Fuente; Ibon Alonso; Cesar L. Folcia. Terminal Chains as a Tool To Modulate the Properties of Bent-Core Liquid Crystals. *Chemistry of Materials*. 21 - 19, pp. 4620 - 4630.

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**DOI:** 10.1021/cm901678q

**Type of production:** Scientific paper

**Format:** Journal

**39**

J. Martinez-Perdiguero; I. Alonso; J. Ortega; C. L. Folcia; J. Etxebarria; I. Pintre; M.

B. Ros; D. B. Amabilino. Bent-core liquid-crystalline derivative of tetrathiafulvalene:

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**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1103/PhysRevLett.101.079801

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1103/PhysRevE.78.041701

**Type of production:** Scientific paper

**Format:** Journal

**42**

Inmaculada C. Pintre; Jose Luis Serrano; M. Blanca Ros; Josu Ortega; Ibon Alonso; Josu Martinez-Perdiguero; Cesar L. Folcia; Jesus Etxebarria; Faustyna Goc; David B. Amabilino; Josep Puigmarti-Luis; Elba

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**DOI:** 10.1039/b801196f

**Type of production:** Scientific paper

**Format:** Journal



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I. Alonso; J. Martinez-Perdiguero; J. Ortega; C. L. Folcia; J. Etxebarria. Characteristics of a liquid crystal display using optically isotropic phases of bent-core mesogens. *Liquid Crystals*. 34 - 5, pp. 655 - 658. 2007. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)>

**DOI:** 10.1080/02678290701251377

**Type of production:** Scientific paper

**Format:** Journal

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Inmaculada C. Pintre; Nelida Gimeno; Jose Luis Serrano; M. Blanca Ros; Ibon Alonso; Cesar L. Folcia; Josu Ortega; Jesus Etxebarria. Liquid crystalline and nonlinear optical properties of bent-shaped compounds derived from 3,4'-biphenylene. *Journal of Materials Chemistry*. 17 - 21, pp. 2219 - 2227. 2007. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)>

**Handle:** 10.1039/b700636e

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**DOI:** 10.1103/PhysRevE.76.011713

**Type of production:** Scientific paper

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**DOI:** 10.1107/S0021889807033663

**Type of production:** Scientific paper

**Format:** Journal

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C. L. Folcia; I. Alonso; J. Ortega; J. Etxebarria; I. Pintre; M. B. Ros. Achiral bent-core liquid crystals with azo and azoxy linkages: Structural and nonlinear optical properties and photoisomerization. *Chemistry of Materials*. 18 - 19, pp. 4617 - 4626. 2006. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)>

**DOI:** 10.1021/cm060256p

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1103/PhysRevE.74.031701

**Type of production:** Scientific paper

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**Type of production:** Scientific paper

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**Type of production:** Scientific paper**Format:** Journal

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**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1103/PhysRevE.72.041709

**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1103/PhysRevE.69.011703

**Type of production:** Scientific paper**Format:** Journal

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**Type of production:** Scientific paper**Format:** Journal

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**DOI:** 10.1080/02678290310001599206

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**Format:** Journal

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**DOI:** 10.1080/713935623

**Type of production:** Scientific paper

**Format:** Journal

**60**

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**DOI:** 10.1080/02678290210130847

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**Format:** Journal

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**DOI:** 10.1080/02678290260236403

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1107/S0108768102010066

**Type of production:** Scientific paper

**Format:** Journal

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**DOI:** 10.1107/S0108768100015597

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**DOI:** 10.1103/PhysRevE.64.011707

**Type of production:** Scientific paper

**Format:** Journal



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**DOI:** 10.1107/S0021889899014168

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**DOI:** 10.1063/1.371847

**Type of production:** Scientific paper**Format:** Journal

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N Pereda; CL Folcia; J Etxebarria; J Ortega. Switching dynamics in homeotropic ferroelectric liquid crystals. *Physical Review E*. 61 - 3, pp. 2799 - 2804. 2000. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)>  
**DOI:** 10.1103/PhysRevE.61.2799

**Type of production:** Scientific paper**Format:** Journal

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N Pereda; CL Folcia; J Etxebarria; J Ortega. Second harmonic generation in planar samples of ferroelectric liquid crystals. *Liquid Crystals*. 26 - 3, pp. 375 - 381. 1999. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)>  
**DOI:** 10.1080/026782999205146



**Type of production:** Scientific paper

**Format:** Journal

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CL Folcia; J Ortega; J Etxebarria. Study of the systematic errors in HAUP measurements. *Journal of Physics D-Applied Physics*. 32 - 17, pp. 2266 - 2277. 1999.

Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1088/0022-3727/32/17/318

**Type of production:** Scientific paper

**Format:** Journal

74

N Pereda; CL Folcia; J Etxebarria; J Ortega; MB Ros. Temperature dependence of the second-order susceptibility in calamitic ferroelectric liquid crystals. *Liquid Crystals*. 24 - 3, pp. 451 - 456. 1998. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

<[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1080/026782998207280

**Type of production:** Scientific paper

**Format:** Journal

75

J Etxebarria; N Pereda; CL Folcia; J Ortega. Type-II phase-matched second-harmonic generation in ferroelectric liquid crystals. *Physical Review E*. 57 - 5, pp. 5634 - 5638. 1998. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

<[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1103/PhysRevE.57.5634

**Type of production:** Scientific paper

**Format:** Journal

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J Ortega; CL Folcia; J Etxebarria; MB Ros; JA Miguel. Non-linear optical properties of metallorganic ferroelectric liquid crystals. *Liquid Crystals*. 23 - 2, pp. 285 - 291. 1997. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

<[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1080/026782997208569

**Type of production:** Scientific paper

**Format:** Journal

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J Ortega; CL Folcia; J Etxebarria; MC Artal; MB Ros; JL Serrano. Second harmonic generation in ferroelectric liquid crystal mixtures. *Advanced Materials*. 8 - 5, pp. 411 - +. 1996. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

<[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1002/adma.19960080508

**Type of production:** Scientific paper

**Format:** Journal

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P Espinet; J Etxebarria; CL Folcia; J Ortega; MB Ros; JL Serrano. Second harmonic generation with metal-containing ferroelectric liquid crystals. *Advanced Materials*. 8 - 9, pp. 745 - +. 1996. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

<[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1002/adma.19960080909

**Type of production:** Scientific paper

**Format:** Journal

79

J ORTEGA; J ETXEBARRIA; CL FOLCIA; T BRECZEWSKI. OPTICAL-ACTIVITY IN THE INCOMMENSURATE AND FERROELECTRIC PHASES OF RB<sub>2</sub>ZNCL<sub>4</sub>. *Journal of Physics-Condensed Matter*. 7 - 2, pp. 421 - 431. 1995. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

<[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:0](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0)

DOI: 10.1088/0953-8984/7/2/020

**Type of production:** Scientific paper

**Format:** Journal



80

J. Ortega; C. L. Folcia; J. Etxebarria; T. Breczewski. Simultaneous determination of the birefringence, optical activity and rotation of the indicatrix of triglycine fluoroberyllate. *Ferroelectrics*. 152 - 1-4, pp. 355 - 360. 1994. Available on-line at: <<http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=INSPEC&KeyUT=INSPEC>>  
**DOI:** 10.1080/00150199408017646

**Type of production:** Scientific paper**Format:** Journal

81

A. Mendioroz; J. Fernández; R. Balda; C. L. Folcia. TEMPERATURE-DEPENDENCE OF NONRADIATIVE RELAXATION PROBABILITIES OF CR<sup>3+</sup> IN BIGAZYT FLUORIDE GLASS MEASURED BY A PULSED PHOTOACOUSTIC TECHNIQUE. *Journal De Physique Iv*. 4 - C7, pp. 413 - 416. 1994. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS)>  
**DOI:** 10.1051/jp4:1994797

**Type of production:** Scientific paper**Format:** Journal

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C. L. Folcia; J. Ortega; J. Etxebarria; T. Breczewski. OPTICAL-PROPERTIES AND SYMMETRY RESTRICTIONS IN THE INCOMMENSURATE PHASE OF [N(CH<sub>3</sub>)<sub>4</sub>]<sub>2</sub>ZNCL<sub>4</sub>. *Physical Review B*. 48 - 2, pp. 695 - 700. 1993. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS)>  
**DOI:** 10.1103/PhysRevB.48.695

**Type of production:** Scientific paper**Format:** Journal

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C. L. Folcia; J. M. Pérez-Mato; F. J. Zúñiga; G. Madariaga; M. J. Tello. A MODEL FOR THE DIELECTRIC BEHAVIOR OF [N(CH<sub>3</sub>)<sub>4</sub>]<sub>2</sub>XCL<sub>4</sub> WITH X=CO, ZN. *Ferroelectrics*. 105, pp. 303 - 308. 1990. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS)>  
**DOI:** 10.1080/00150199008224659

**Type of production:** Scientific paper**Format:** Journal

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C. L. Folcia; J. M. Pérez-Mato. NONSOLITON MODEL FOR DIELECTRIC ANOMALIES AT THE INCOMMENSURATE-FERROELECTRIC PHASE-TRANSITIONS IN [N(CH<sub>3</sub>)<sub>4</sub>]<sub>2</sub>XCL<sub>4</sub> (X=CO,ZN). *Physical Review B*. 42 - 13, pp. 8499 - 8506. 1990. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS)>  
**DOI:** 10.1103/PhysRevB.42.8499

**Type of production:** Scientific paper**Format:** Journal

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C. L. Folcia; J. M. Pérez-Mato; M. J. Tello. THERMAL HISTORY AND DIELECTRIC BEHAVIOR OF [N(CH<sub>3</sub>)<sub>4</sub>]<sub>2</sub>ZNCL<sub>4</sub> AT THE INCOMMENSURATE-COMMENSURATE PHASE-TRANSITION. *Solid State Communications*. 74 - 8, pp. 717 - 720. 1990. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS)>  
**DOI:** 10.1016/0038-1098(90)90922-X

**Type of production:** Scientific paper**Format:** Journal

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C. L. Folcia; F. J. Zúñiga; G. Madariaga; J. M. Pérez-Mato; M. J. Tello. MEMORY EFFECTS AND COEXISTENCE OF INCOMMENSURATE AND COMMENSURATE PHASES IN [N(CH<sub>3</sub>)<sub>4</sub>]<sub>2</sub>COCL<sub>4</sub> - AN X-RAY-DIFFRACTION STUDY. *Physical Review B*. 40 - 16, pp. 11037 - 11043. 1989. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS)>  
**DOI:** 10.1103/PhysRevB.40.11037

**Type of production:** Scientific paper**Format:** Journal



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C. L. Folcia; J. M. Pérez-Mato; M. J. Tello. KINETIC-BEHAVIOR AND MEMORY EFFECT IN THE LOCK-IN PHASE OF A2BX4 INCOMMENSURATE FERROELECTRIC COMPOUNDS. *Physical Review B*. 38 - 7, pp. 5055 - 5058. 1988. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:A](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:A)>  
**DOI:** 10.1103/PhysRevB.38.5055

**Type of production:** Scientific paper

**Format:** Journal

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C. L. Folcia; J. M. Pérez-Mato; M. J. Tello. KINETIC-BEHAVIOR AND MEMORY EFFECTS AT THE INCOMMENSURATE PHASE OF RB2ZNBR4. *Ferroelectrics*. 79, pp. 569 - 572. 1988. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:A](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:A)>

**Type of production:** Scientific paper

**Format:** Journal

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C. L. Folcia; M. J. Tello; J. M. Pérez-Mato. EVIDENCE OF MEMORY EFFECTS IN A COMMENSURATE FERROELECTRIC PHASE. *Physical Review B*. 36 - 13, pp. 7181 - 7183. 1987. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:A](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:A)>  
**DOI:** 10.1103/PhysRevB.36.7181

**Type of production:** Scientific paper

**Format:** Journal

90

C. L. Folcia; M. J. Tello; J. M. Pérez-Mato; J. A. Zubillaga. THERMAL HYSTERESIS AND MEMORY EFFECT IN THE FERROELECTRIC INCOMMENSURATE TETRAMETHYLAMMONIUM TETRACHLORO COBALTATE. *Solid State Communications*. 60 - 7, pp. 581 - 585. 1986. Available on-line at: <[http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS\\_CPL&KeyUT=WOS:A](http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:A)>  
**DOI:** 10.1016/0038-1098(86)90274-7

**Type of production:** Scientific paper

## Works submitted to national or international conferences

**1 Title of the work:** Evidence of optical absorption enhancement in cholesteric liquid crystals at both edges of the photonic band gap

**Name of the conference:** 14th European Conference on Liquid Crystals

**City of event:** Moscú, Russia

**Date of event:** 25/06/2017

**End date:** 30/06/2017

J. Etxebarria; J. Ortega; C. L. Folcia.

**2 Title of the work:** Optimizing the performance of cholesteric liquid crystal lasers: the dependence on the sample thickness

**Name of the conference:** 14th European Conference on Liquid Crystals

**City of event:** Moscú, Russia

**Date of event:** 25/06/2017

**End date:** 30/06/2017

J. Ortega; J. Etxebarria; C. L. Folcia; G. Sanz-Enguita; I. Aramburu.

**3 Title of the work:** Bent-core structures as versatile building blocks for polar self-assembling systems

**Name of the conference:** 15th International Conference on Ferroelectric Liquid Crystals

**City of event:** Praga, Czech Republic

**Date of event:** 28/06/2015

**End date:** 03/07/2015



N. Gimeno; M. Cano; A. M. Bermejo-Sanz; J. Vergara; J. L. Serrano; M. C. López; A. Sánchez-Ferrer; D. O. López; C. L. Folcia; M. R. de la Fuente; M. B. Ros.

- 4** **Title of the work:** Ferroelectric switching in a chromonic nematic liquid crystal based on a bowl-shaped boron subphthalocyanine (SubPc) derivative  
**Name of the conference:** 15th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Praga, Czech Republic  
**Date of event:** 28/06/2015  
**End date:** 03/07/2015  
J. Guilleme; E. Cavero; T. Sierra; J. Ortega; C. L. Folcia; J. Etxebarria; D. González-Rodríguez; T. Torres.
- 5** **Title of the work:** Origin of the degradation of cholesteric liquid crystal lasers: Thermally-induced light scattering effects  
**Name of the conference:** 15th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Praga, Czech Republic  
**Date of event:** 28/06/2015  
**End date:** 03/07/2015  
J. Etxebarria; J. Ortega; C. L. Folcia; G. Sanz-Enguita; I. Aramburu.
- 6** **Title of the work:** Determination of nonlinear optical coefficients from micropowders in the presence of scattering: A revision of the Kurtz-Perry method  
**Name of the conference:** OSA's 98th Annual Meeting and APS/DLS Annual Meeting  
**City of event:** Tucson, United States of America  
**Date of event:** 19/10/2014  
**End date:** 23/10/2014  
I. Aramburu; J. Ortega; C. L. Folcia; J. Etxebarria.
- 7** **Title of the work:** Permanent polar order in a subphthalocyanine columnar liquid crystal  
**Name of the conference:** 25th International Liquid Crystal Conference  
**City of event:** Dublín, Ireland  
**Date of event:** 29/06/2014  
**End date:** 04/07/2014  
J. Guilleme; D. González-Rodríguez; T. Sierra; J. Ortega; C. L. Folcia; J. Etxebarria.
- 8** **Title of the work:** Spontaneous and field-induced phases of a thiophene derived bent-core liquid crystal with bulky groups at the end chains  
**Name of the conference:** 25th International Liquid Crystal Conference  
**City of event:** Dublín, Ireland  
**Date of event:** 29/06/2014  
**End date:** 04/07/2014  
C. L. Folcia; J. Ortega; J. Etxebarria; S. Rodríguez-Conde; G. Sanz-Enguita; K. Geese; C. Tschierske; P. Barois; R. Pindak; C. C. Huang.
- 9** **Title of the work:** Second and third harmonic generation in an azo-bridged ferroelectric trimesogen designed for nonlinear optical applications  
**Name of the conference:** Optics of Liquid Crystals 2013  
**City of event:** Honolulu, Hawaii, United States of America  
**Date of event:** 29/09/2013  
**End date:** 04/10/2013  
G. Sanz-Enguita; S. Rodríguez-Conde; C. L. Folcia; Y. Zhang; J. Ortega; U. Baumeister; C. Walker; J. Etxebarria; M. J. O'Callaghan; K. More.



- 10** **Title of the work:** Ferroelectricity and nanosegregation in Janus-type dendromesogens studied by SHG interferometry and X-ray diffraction  
**Name of the conference:** 12th European Conference on Liquid Crystals  
**City of event:** Rodas, Greece  
**Date of event:** 22/09/2013  
**End date:** 27/09/2013  
S. Rodríguez-Conde; G. Sanz-Enguita; N. Gimeno; J. Vergara; M. Cano; J. L. Serrano; M.B. Ros; J. Ortega; C. L. Folcia; J. Etxebarria.
- 11** **Title of the work:** Resonant x-ray scattering studies of smectic and columnar bent-core liquid crystal phases  
**Name of the conference:** APS March Meeting 2012  
**City of event:** Boston, Massachusetts, United States of America  
**Date of event:** 27/02/2012  
**End date:** 02/03/2012  
R. Pindak; P. Barois; V. Poinset; C. L. Folcia; J. Ortega; LiDong Pan; S. Wang; A. Wang; C. C. Huang.
- 12** **Title of the work:** Polarization Periodicity of columnar bent-core liquid crystals. A resonant x-ray diffraction study  
**Name of the conference:** 13th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Niagara Falls, Canada  
**Date of event:** 29/08/2011  
**End date:** 02/09/2011  
C. L. Folcia.
- 13** **Title of the work:** X-ray study of electric-field-induced phase transitions in bent-core compounds  
**Name of the conference:** 13th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Niagara Falls, United States of America  
**Date of event:** 29/08/2011  
**End date:** 02/09/2011  
J. Ortega; C. L. Folcia; J. Etxebarria; J. Martínez-Perdiguero; J. A. Gallastegui; P. Ferrer; N. Gimeno; M. B. Ros.
- 14** **Title of the work:** SHG in laterally azo-bridged H-shaped FLC's  
**Name of the conference:** 23rd International Liquid Cristal Conference  
**City of event:** Cracovia, Poland  
**Date of event:** 11/07/2010  
**End date:** 16/07/2010  
J. Martínez-Perdiguero; Y. Zhang; C. Walter; J. Etxebarria; C. L. Folcia; J. Ortega; M. J. O'Callaghan; U. Baumeister.
- 15** **Title of the work:** Structural Study of the columnar B1 to SmCP transition in bent-core liquid crystals  
**Name of the conference:** 23rd International Liquid Cristal Conference  
**City of event:** Cracovia, Poland  
**Date of event:** 11/07/2010  
**End date:** 16/07/2010  
J. Martínez-Perdiguero; J. Etxebarria; C. L. Folcia; J. Ortega; N. Gimeno; M. B. Ros.
- 16** **Title of the work:** Influence of polar groups on the self-organization of hydrogen-bonded bent-core liquid crystals  
**Name of the conference:** 12th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Zaragoza, Spain



**Date of event:** 31/08/2009

**End date:** 04/09/2009

M. J. Clemente; N. Gimeno; M. B. Ros; J. L. Serrano; W. Weissflog; C. L. Folcia; J. Ortega.

**17 Title of the work:** New local structure of the B4 phase

**Name of the conference:** 12th International Conference on Ferroelectric Liquid Crystals

**City of event:** Zaragoza, Spain

**Date of event:** 31/08/2009

**End date:** 04/09/2009

J. Martínez-Perdiguero; I. Alonso; C. L. Folcia; J. Etxebarria; J. Ortega; M. B. Ros.

**18 Title of the work:** Second harmonic generation in liquid crystals: State of the art

**Name of the conference:** 12th International Conference on Ferroelectric Liquid Crystals

**City of event:** Zaragoza, Spain

**Date of event:** 31/08/2009

**End date:** 04/09/2009

C. L. Folcia; J. Etxebarria; J. Ortega; I. Alonso; J. Martínez-Perdiguero; I. Pintre; N. Gimeno; M. B. Ros.

**19 Title of the work:** Study of the molecular arrangement and electric response in the SmA phase of a V-shaped mesogen

**Name of the conference:** 12th International Conference on Ferroelectric Liquid Crystals

**City of event:** Zaragoza, Spain

**Date of event:** 31/08/2009

**End date:** 04/09/2009

I. Alonso; J. Martínez-Perdiguero; C. L. Folcia; J. Ortega; J. Etxebarria; N. Gimeno; M. B. Ros.

**20 Title of the work:** B4 phase revisited: new structural results

**Name of the conference:** 22nd International Liquid Crystal Conference

**City of event:** Jeju - Korea,

**Date of event:** 29/06/2008

**End date:** 04/07/2008

J. Martínez-Perdiguero; I. Alonso; J. Ortega; C. L. Folcia; J. Etxebarria; I. Pintre; M. B. Ros.

**21 Title of the work:** New bent-core molecules designed for high nonlinear optical response

**Name of the conference:** 22nd International Liquid Crystal Conference

**City of event:** Jeju - Korea,

**Date of event:** 29/06/2008

**End date:** 04/07/2008

I. Alonso; J. Martínez-Perdiguero; J. Etxebarria; J. Ortega; C. L. Folcia; I. Pintre; M. B. Ros.

**22 Title of the work:** Banana-shaped structures in the liquid crystal field

**Name of the conference:** Workshop Banana'07

**City of event:** Tokio, Japan

**Date of event:** 10/09/2007

**End date:** 12/09/2007

M. B. Ros; R. Jiménez; J. L. Serrano; M. R. de la Fuente; J. Etxebarria; C. L. Folcia; J. Ortega; D. B. Amabilino; N. Martín; L. Sánchez.

**23 Title of the work:** Different approaches to the design of functional liquid crystals based on banana-shaped structures

**Name of the conference:** 11th International Conference on Ferroelectric Liquid Crystals





**City of event:** Sapporo, Japan

**Date of event:** 03/09/2007

**End date:** 08/09/2007

M. B. Ros; J. L. Serrano; J. Etxebarria; C. L. Folcia; J. Ortega; M. R. de la Fuente.

**24 Title of the work:** Nonlinear-optical properties of bent-shaped compounds derived from 3,4'-biphenylene

**Name of the conference:** 11th International Conference on Ferroelectric Liquid Crystals

**City of event:** Sapporo, Japan

**Date of event:** 03/09/2007

**End date:** 08/09/2007

I. Alonso; J. Martínez-Perdiguero; C. L. Folcia; J. Ortega; J. Etxebarria; N. Gimeno; I. C. Pintre; M. B. Ros.

**25 Title of the work:** Polar structures of bent-core mesogens with tetrathiafulvalene units

**Name of the conference:** 11th International Conference on Ferroelectric Liquid Crystals

**City of event:** Sapporo, Japan

**Date of event:** 03/09/2007

**End date:** 08/09/2007

J. Martínez-Perdiguero; I. Alonso; C. L. Folcia; J. Etxebarria; J. Ortega; I. C. Pintre; M. B. Ros.

**26 Title of the work:** Quantitative análisis of the x-ray diffraction intensities of undulated smectic phases in bent-core liquid crystals

**Name of the conference:** 11th International Conference on Ferroelectric Liquid Crystals

**City of event:** Sapporo, Japan

**Date of event:** 03/09/2007

**End date:** 08/09/2007

C. L. Folcia; J. Ortega; J. Etxebarria.

**27 Title of the work:** Achiral bent-core liquid crystals with azo and azoxy linkages: Structural, nonlinear optical properties and photoisomerization

**Name of the conference:** 21st International Liquid Crystal Conference

**City of event:** Keystone, Colorado, United States of America

**Date of event:** 02/07/2006

**End date:** 07/07/2006

C. L. Folcia; I. Alonso; J. Ortega; J. Etxebarria; I. Pintre; M. B. Ros.

**28 Title of the work:** Optically isotropic phases in a bent-core liquid crystal: Origin, structure and applications

**Name of the conference:** 21st International Liquid Crystal Conference

**City of event:** Keystone, Colorado, United States of America

**Date of event:** 02/07/2006

**End date:** 07/07/2006

I. Alonso; J. Martínez-Perdiguero; C. L. Folcia; J. Etxebarria; J. Ortega.

**29 Title of the work:** Structural study of a bent-core liquid crystal showing the B1-B2 transition

**Name of the conference:** 21st International Liquid Crystal Conference

**City of event:** Keystone, Colorado, United States of America

**Date of event:** 02/07/2006

**End date:** 07/07/2006

C. L. Folcia; J. Etxebarria; J. Ortega; M. B. Ros.



- 30** **Title of the work:** Do the B7-like textures represent a unique structure? The case of the reference material 8-OPIMB-NO<sub>2</sub>  
**Name of the conference:** 10th Conference on Ferroelectric Liquid Crystals  
**City of event:** Stare Jablonki, Poland  
**Date of event:** 12/09/2005  
**End date:** 17/09/2005  
C. L. Folcia; J. Etxebarria; J. Ortega; M. B. Ros.
- 31** **Title of the work:** Fabrication and nonlinear optical properties of monodomain polymers derived from bent-core mesogens  
**Name of the conference:** 10th Conference on Ferroelectric Liquid Crystals  
**City of event:** Stare Jablonki, Poland  
**Date of event:** 12/09/2005  
**End date:** 17/09/2005  
J. A. Gallastegui; J. Ortega; C. L. Folcia; J. Etxebarria; N. Gimeno; M. B. Ros.
- 32** **Title of the work:** Linear and nonlinear optical properties in a bent-core mesogen showing an electric-field-induced B1-B2 transition  
**Name of the conference:** 20th International Liquid Crystal Conference  
**City of event:** Ljubljana, Slovenia  
**Date of event:** 04/07/2004  
**End date:** 09/07/2004  
J. Ortega; C. L. Folcia; J. Etxebarria; J. A. Gallastegui; N. Gimeno; M. B. Ros.
- 33** **Title of the work:** Selection rules for x-ray scattering in the B7 and B1 phases  
**Name of the conference:** 20th International Liquid Crystal Conference  
**City of event:** Ljubljana, Slovenia  
**Date of event:** 04/07/2004  
**End date:** 09/07/2004  
C. L. Folcia; J. Ortega; J. Etxebarria.
- 34** **Title of the work:** Field-induced ferroelectric phase in a liquid crystal composed of achiral banana-shaped molecules  
**Name of the conference:** 6th Ibero-American Workshop on Complex Fluids and their Applications  
**City of event:** Lisboa, Portugal  
**Date of event:** 14/09/2003  
**End date:** 17/09/2003  
C. L. Folcia; J. Ortega; J. A. Gallastegui; J. Etxebarria; M. B. Ros.
- 35** **Title of the work:** Interpretation of unusual textures in the B2 phase of a liquid crystal composed of banana-shaped molecules  
**Name of the conference:** 6th Ibero-American Workshop on Complex Fluids and their Applications  
**City of event:** Lisboa, Portugal  
**Date of event:** 14/09/2003  
**End date:** 17/09/2003  
J. Ortega; C. L. Folcia; J. Etxebarria; N. Gimeno; M. B. Ros.
- 36** **Title of the work:** Structure-property relationship and liquid crystalline behaviour of new materials based on banana-shaped compounds  
**Name of the conference:** 6th Ibero-American Workshop on Complex Fluids and their Applications  
**City of event:** Lisboa, Portugal



**Date of event:** 14/09/2003

**End date:** 17/09/2003

J. Barberá; P. Forcén; N. Gimeno; L. Monreal; L. Puig; M. B. Ros; J. L. Serrano; C. L. Folcia; J. Ortega; S. Díez.

- 37** **Title of the work:** Optical properties of banana-shaped liquid crystals in aligned samples  
**Name of the conference:** 9th International Ferroelectric Liquid Crystals Conference  
**City of event:** Dublín, Ireland  
**Date of event:** 24/08/2003  
**End date:** 29/08/2003  
C. L. Folcia; J. Etxebarria; J. Ortega; J. A. Gallastegui; N. Gimeno; M. B. Ros.
- 38** **Title of the work:** Banana-shaped mesogens: unusual textures, ferroelectricity and antiferroelectricity  
**Name of the conference:** 7th European Conference on Liquid Crystals  
**City of event:** Jaca, Spain  
**Date of event:** 06/04/2003  
**End date:** 11/04/2003  
J. Ortega; C. L. Folcia; J. Etxebarria.
- 39** **Title of the work:** Characterisation of the second harmonic generation properties of banana-shaped liquid crystals  
**Name of the conference:** 7th European Conference on Liquid Crystals  
**City of event:** Jaca, Spain  
**Date of event:** 06/04/2003  
**End date:** 11/04/2003  
J. A. Gallastegui; C. L. Folcia; J. Etxebarria; J. Ortega; I. de Francisco; M. B. Ros.
- 40** **Title of the work:** Texture analysis of banana-shaped liquid crystals in aligned samples  
**Name of the conference:** 7th European Conference on Liquid Crystals  
**City of event:** Jaca, Spain  
**Date of event:** 06/04/2003  
**End date:** 11/04/2003  
J. A. Gallastegui; C. L. Folcia; J. Etxebarria; J. Ortega; N. Gimeno; M. B. Ros.
- 41** **Title of the work:** Determination of the helical pitch in the smectic  $C_{\square}$  by means of gyrotropy measurements  
**Name of the conference:** 19th International Liquid Crystal Conference  
**City of event:** Edimburgo, United Kingdom  
**Date of event:** 30/06/2002  
**End date:** 05/07/2002  
J. Ortega; C. L. Folcia; J. Etxebarria; P. Karahaliou; M. B. Ros.
- 42** **Title of the work:** Electroclinic effect around a smectic A-chiral nematic phase transition  
**Name of the conference:** 19th International Liquid Crystal Conference  
**City of event:** Edimburgo, United Kingdom  
**Date of event:** 30/06/2002  
**End date:** 05/07/2002  
C. L. Folcia; J. Ortega; J. Etxebarria.





- 43** **Title of the work:** Structure-property relationship and optical behaviour of new banana-shaped liquid crystal molecules  
**Name of the conference:** 19th International Liquid Crystal Conference  
**City of event:** Edimburgo, United Kingdom  
**Date of event:** 30/06/2002  
**End date:** 05/07/2002  
P. Forcén; N. Gimeno; L. Puig; M. B. Ros; J. L. Serrano; T. Sierra; C. L. Folcia; J. Ortega; J. A. Gallastegui.
- 44** **Title of the work:** Electroclinic effect around a smectic A-chiral nematic phase transition  
**Name of the conference:** 10th International Meeting on Ferroelectricity  
**City of event:** Madrid, Spain  
**Date of event:** 03/09/2001  
**End date:** 07/09/2001  
J. Ortega; C. L. Folcia; J. Etxebarria.
- 45** **Title of the work:** The problem of gyrotropy in nonhomogeneous media: the case of short pitch chiral-smectic-C liquid crystals and incommensurate structures  
**Name of the conference:** 10th International Meeting on Ferroelectricity  
**City of event:** Madrid, Spain  
**Date of event:** 03/09/2001  
**End date:** 07/09/2001  
J. Etxebarria; C. L. Folcia; J. Ortega.
- 46** **Title of the work:** Spatial dispersion and gyrotropic tensor in short-pitch SmC\* liquid crystals  
**Name of the conference:** 6th European Conference on Liquid Crystals  
**City of event:** Halle, Germany  
**Date of event:** 25/03/2001  
**End date:** 30/03/2001  
J. Etxebarria; C. L. Folcia; J. Ortega.
- 47** **Title of the work:** Switching dynamics in homeotropic ferroelectric liquid crystals  
**Name of the conference:** IV Workshop Iberoamericano de Fluidos Complejos y sus Aplicaciones  
**City of event:** Jaca, Spain  
**Date of event:** 26/09/1999  
**End date:** 29/09/1999  
N. Pereda; C. L. Folcia; J. Etxebarria; J. Ortega.
- 48** **Title of the work:** Electronic electrooptic study in photopolymers derived from ferroelectric liquid crystals  
**Name of the conference:** 7th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Darmstadt, Germany  
**Date of event:** 29/08/1999  
**End date:** 03/09/1999  
N. Pereda; J. Etxebarria; C. L. Folcia; J. Ortega; C. Artal; J. L. Serrano.
- 49** **Title of the work:** NLO properties of low molecular weight FLCs and several photopolymers derived from them  
**Name of the conference:** III Seminario Iberoamericano en Tecnología de Cristal Líquido  
**City of event:** Madrid, Spain  
**Date of event:** 26/10/1998  
**End date:** 28/10/1998  
N. Pereda; J. Etxebarria; J. Ortega; C. L. Folcia; C. Artal; M. B. Ros; J. L. Serrano.



- 50** **Title of the work:** NLO properties of low molecular weight FLCs and several photopolymers derived from them  
**Name of the conference:** 17th International Liquid Crystal Conference  
**City of event:** Strasbourg, France  
**Date of event:** 19/07/1998  
**End date:** 24/07/1998  
N. Pereda; J. Etxebarria; J. Ortega; C. L. Folcia; C. Artal; M. B. Ros; J. L. Serrano.
- 51** **Title of the work:** Second harmonic generation in planar samples of FLCs  
**Name of the conference:** 17th International Liquid Crystal Conference  
**City of event:** Strasbourg, France  
**Date of event:** 19/07/1998  
**End date:** 24/07/1998  
N. Pereda; J. Ortega; C. L. Folcia; J. Etxebarria.
- 52** **Title of the work:** Nonlinear optical properties of metal-containing FLCs  
**Name of the conference:** 5ta Reunión de la Red Europea (EC Human Capital & Mobility Network) de Cristales Líquidos  
**City of event:** Lekeitio, Spain  
**Date of event:** 12/09/1996  
**End date:** 16/09/1996  
J. Ortega; C. L. Folcia; J. Etxebarria.
- 53** **Title of the work:** Nonlinear optical properties of metallorganic ferroelectric liquid crystals  
**Name of the conference:** 16th International Liquid Crystal Conference  
**City of event:** Kent, Ohio, United States of America  
**Date of event:** 24/06/1996  
**End date:** 28/06/1996  
J. Ortega; C. L. Folcia; J. Etxebarria; R. Iglesias; M. B. Ros; J. L. Serrano; L. Díez; P. Espinet; J. A. Miguel.
- 54** **Title of the work:** Ferroelectric liquid crystal materials with electronic nonlinear response  
**Name of the conference:** 5th International Conference on Ferroelectric Liquid Crystals  
**City of event:** Cambridge, United Kingdom  
**Date of event:** 23/07/1995  
**End date:** 27/07/1995  
C. Artal; J. Etxebarria; C. L. Folcia; Y. González; J. Ortega; J. Osma; M. B. Ros; J. L. Serrano.
- 55** **Title of the work:** Second-order nonlinear optical studies in ferroelectric liquid crystals  
**Name of the conference:** European Conference on Liquid Crystals ECLC 95  
**City of event:** Bovec, Slovenia  
**Date of event:** 05/03/1995  
**End date:** 10/03/1995  
C. L. Folcia; J. Etxebarria.
- 56** **Title of the work:** Second harmonic generation in ferroelectric liquid crystals  
**Name of the conference:** 4ta Reunión de la Red Europea (EC Human Capital & Mobility Network) de Cristales Líquidos  
**City of event:** Vravra, Greece  
**Date of event:** 29/09/1994  
**End date:** 02/10/1994



C. L. Folcia.

- 57 Title of the work:** Optical properties of tetramethylammonium tetrachlorozincate in the incommensurate phase  
**Name of the conference:** The 8th International Meeting on Ferroelectricity  
**City of event:** Gaithersburg, Maryland, United States of America  
**Date of event:** 08/08/1993  
**End date:** 13/08/1993  
J. Ortega; C. L. Folcia; J. Etxebarria; T. Breczewski.
- 58 Title of the work:** Simultaneous determination of the birefringence, optical activity, and rotation of the indicatrix of TGFB  
**Name of the conference:** The 8th International Meeting on Ferroelectricity  
**City of event:** Gaithersburg, Maryland, United States of America  
**Date of event:** 08/08/1993  
**End date:** 13/08/1993  
J. Ortega; C. L. Folcia; J. Etxebarria; T. Breczewski.
- 59 Title of the work:** A model for the ferroelectric behaviour of TMAXCl<sub>4</sub> with X=Co, Zn  
**Name of the conference:** The 7th International Meeting on Ferroelectricity  
**City of event:** Saarbrücken, Germany  
**Date of event:** 28/08/1989  
**End date:** 01/09/1989  
C. L. Folcia; J. M. Pérez-Mato; F. J. Zúñiga; G. Madariaga; M. J. Tello.
- 60 Title of the work:** Efectos cinéticos en la transición lock-in en cristales ferroeléctricos incommensurables  
**Name of the conference:** XXI Reunión Bienal de la Real Sociedad Española de Física  
**City of event:** Salamanca, Spain  
**Date of event:** 04/10/1987  
**End date:** 10/10/1987  
C. L. Folcia; J. M. Pérez-Mato; M. J. Tello; E. H. Bocanegra.
- 61 Title of the work:** Propiedades estructurales y físicas de fases incommensurables  
**Name of the conference:** Primera Reunión Nacional de Grupos de Física del Estado Sólido (GEFES 1)  
**City of event:** El Escorial, Spain  
**Date of event:** 15/09/1987  
**End date:** 15/09/1987  
J. M. Pérez-Mato; G. Madariaga; F. J. Zúñiga; C. L. Folcia; M. J. Tello.
- 62 Title of the work:** Kinetic behaviour and memory effects at the incommensurate phase of Rb<sub>2</sub>ZnBr<sub>4</sub>  
**Name of the conference:** 6th European Meeting on Ferroelectricity  
**City of event:** Poznan, Poland  
**Date of event:** 07/09/1987  
**End date:** 11/09/1987  
C. L. Folcia; J. M. Pérez-Mato; M. J. Tello.
- 63 Title of the work:** Memory effect at the ferroelectric commensurate phase of some A<sub>2</sub>BX<sub>4</sub> compounds  
**Name of the conference:** 6th European Meeting on Ferroelectricity  
**City of event:** Poznan, Poland  
**Date of event:** 07/09/1987  
**End date:** 11/09/1987

C. L. Folcia; J. M. Pérez-Mato; M. J. Tello.