



**Emilio J. Palomares Gil**

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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.

### Ø Higher Education

- 2001 PhD in Chemistry. ITQ (CSIC)-Universitat Politècnica de Valencia, Spain. “Applied Photochemistry to the Study of Metals Incorporated in Metal Oxides and Structurally Ordered Aluminosilicates” Supervisor: Prof. Hermenegildo García Gómez.
- 1998-1999 MSc in Chemistry, Universitat de Valencia. “Novel phorbol-related diterpenes isolated from Euphorbia obtusifolia” Supervisor: Prof. Albero Marco.
- 1992-1997 BA in Biology. Speciality Biochemistry, Universitat de Valencia, Spain

### Ø Academic Appointments

- 2020- ICIQ Director - **(ICIQ)**
- 2019-2024 Energy and Environmental Solutions (E2S) **Chair at UPPA**, University of Pau et des Pays de l'Adour, Pau, France.
- 2008- **ICREA Research Professor – Institute of Chemical Research of Catalonia (ICIQ)**, Tarragona, Spain.
- 2006-2008 Ramon y Cajal Fellow at **Institute of Chemical Research of Catalonia (ICIQ)**, Tarragona, Spain.
- 2004-2006 Ramon y Cajal Fellow at the **ICMol-Universitat de Valencia**, Valencia, Spain.
- 2001 – 2004 Postdoctoral Researcher at **Imperial College**, United Kingdom, **(2001-2004)**. Supervisor Prof. James R. Durrant.

### Ø Fellowships and Awards

- 2024 Medalla Narcís Monturiol al mèrit científic i tecnològic de la Generalitat de Catalunya.
- 2023 **ERC Adv. Grant (Excited)**: “Engineering Excited States, Orbital Coupling and Quantum Coherence Phenomena in Photoelectrochemical Energy Conversion Devices”.
- 2023 Distintiu 9 d'Octubre from the City Hall of Cullera (Spain)
- 2021 Fellow of the **Spanish Royal Society of Chemistry (RSEQ)**
- 2015 **ERC Proof of Concept (2NanoSi)**: “Ratiometric FRET Based Nanosensor for Trypsin Related Human Recessive Diseases”.
- 2014 **Fellow of the Royal Society of Chemistry.**
- 2010 Innova **SUSCHEM-Spain Award** - Madrid, Spain.
- 2009 **ERC Starting Grant (Polydot)**: “Control of the Electronic Properties in Hybrid-Quantum Dot/polymer Materials for Energy Production.”
- 2008 **ICREA (Catalan Institution for Research and Advanced Studies) Research Award.**
- 2006 Spanish Royal Society of Chemistry ( **RSEQ**) **Young Chemist Award.**
- 2004 **SIGMA-ALDRICH Distinguished Lecture** for Young Chemists, Madrid, Spain.



- 2004 **Roscoe Medal** “2004 Younger European Chemist’s Conference”-Torino, Italy.  
2003 **Ramon y Cajal** Fellowship.  
2002 **Marie Curie Fellowship** HPMF-CT-2002-01744 ( **2002-2004**).  
1992-1997 Spanish Ministry of Science and Education (MEC) fellowships.

#### Ø Quality indicators

At the Institute of Chemical Research of Catalonia (ICIQ), I have successfully directed **21 PhD theses** (5 more researchers are right now engaged on their PhD studies), 3 of them have been awarded with the Best PhD Thesis Award of the Year by the Rovira i Virgili University, Tarragona, Spain. I have also supervised **19 post-Doctoral researchers**. **I am very proud that several of my former PhD students now hold positions in academia or industry** in Europe and overseas

#### Ø Selected papers

Some selected papers from 2021-2023 as corresponding author: ACS App Mater Interfaces 2023, 15, 14304; Nanoscale Adv 2023, 5, 6542; ACS Appl Energy Mater 2023, 6, 1239; ACS Appl Mater Interfaces 2022, 14, 17461; Energy Env Sci 2021, 14, 3976.



## 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.

I have published over **286 peer-reviewed publications** and **2 book chapters** with a **total number of citations of 17787** and **6 patents**, with his h-index of **68**. I have participated in **9 EU-funded research projects**, **16 national research projects**, and **8 research projects with industries** and given over 100 invited lectures at international and national conferences (39 in the last 5 years).

Avg. no. citations over last 5 years (WOS, 2019-2023): 824/year.

**Emilio J. Palomares Gil**

Surname(s): **Palomares Gil**  
 Name: **Emilio J.**  
 DNI: **73559843R**  
 ScopusID: **7004067460**  
 ResearcherID: **G-5251-2012**  
 Date of birth: **17/01/1974**  
 Gender: **Male**  
 Nationality: **Spain**  
 Contact province: **Tarragona**  
 Contact address: **Av. Països Catalans 16**  
 Postcode: **43007**  
 Contact country: **Spain**  
 Contact aut. region/reg.: **Catalonia**  
 Contact city: **Tarragona**  
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**Current professional situation**

**Employing entity:** FUNDACIÓ INSTITUT CATALÀ D'INVESTIGACIÓ QUÍMICA (ICIQ)      **Type of entity:** R&D Centre

**Professional category:** ICIQ Director

**City employing entity:** Tarragona, Catalonia, Spain

**Phone:** (34) 977 920 200

**Email:** [iciq@iciq.es](mailto:iciq@iciq.es)

**Start date:** 2020

**Type of contract:** Permanent employment contract

**Dedication regime:** Full time

**Employing entity:** FUNDACIÓ INSTITUT CATALÀ D'INVESTIGACIÓ QUÍMICA (ICIQ)

**Professional category:** ICREA Research Professor and ERCstg fellow

**Start date:** 2006

**Type of contract:** Permanent employment contract

**Dedication regime:** Full time

**Secondary (UNESCO code):** 221022 - Photochemistry

**Previous positions and activities**

	Employing entity	Professional category	Start date
1	Université de Pau et des Pays de l'Adour (UPPA)	E2S (Energy and Environment Solutions) Scientific Chair	2019
2	Instituto de Ciencia Molecular-Universidad de Valencia	Ramón y Cajal fellowship	2004



	Employing entity	Professional category	Start date
3	Imperial College. Centre for Electronic Materials and Devices	Postdoctor	2001
4	Universidad Politécnica de Valencia	Predoctoral position	1999

- 1** **Employing entity:** Université de Pau et des Pays de l'Adour (UPPA)  
**Professional category:** E2S (Energy and Environment Solutions) Scientific Chair  
**Start-End date:** 2019 - 2024
- 2** **Employing entity:** Instituto de Ciencia Molecular-Universidad de Valencia  
**Professional category:** Ramón y Cajal fellowship  
**Start-End date:** 2004 - 2006
- 3** **Employing entity:** Imperial College. Centre for Electronic Materials and Devices  
**Professional category:** Postdoctor  
**Start-End date:** 2001 - 2004
- 4** **Employing entity:** Universidad Politécnica de Valencia  
**Professional category:** Predoctoral position  
**Start-End date:** 1999 - 2001  
**Type of entity:** University



## Education

### University education

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

**1 University degree:** Máster

**Name of qualification:** Máster en Química

**Degree awarding entity:** Universidad Politécnica de Valencia **Type of entity:** University

**Date of qualification:** 1999

**2 University degree:** Higher degree

**Name of qualification:** Licenciado en Bioquímica

**Degree awarding entity:** Universitat de València **Type of entity:** University

**Date of qualification:** 1997

#### Doctorates

**Doctorate programme:** Doctorado en Química

**Degree awarding entity:** Universidad Politécnica de Valencia **Type of entity:** University

**Date of degree:** 09/2001

### Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
Catalan		C1	C1	C1	C1
Spanish		C1	C1	C1	C1
French		C1	C1	C1	C1
English		C1	C1	C1	C1

## Teaching experience



## General teaching experience

**Name of the course:** Macro and Supramolecular chemistry

**University degree:** Máster en Nanociencia y Nanotecnología

**Start date:** 2006

**Entity:** Universitat Rovira i Virgili

**Type of entity:** University

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

- 1 Project title:** Synthetic Approaches for the Development of Organic Molecules and their Application  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Dora Alejandra González Ruiz  
**Date of reading:** 16/05/2024
- 2 Project title:** Self-assembled molecules as selective contacts in quantum-dot light emitting diodes  
**Entity:** Universitat de Barcelona **Type of entity:** University  
**Student:** Sarika Kumari  
**Date of reading:** 20/12/2023
- 3 Project title:** Low-Molecular Weight Molecules as Selective Contacts for Perovskite Solar Cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Ece Aktas  
**Date of reading:** 28/09/2021
- 4 Project title:** Analysis of the Different Kinetic Processes in Perovskite Solar Cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Jesús Jiménez López  
**Date of reading:** 22/11/2019
- 5 Project title:** Advanced Characterization and Modelling of Charge Transfer in Perovskite Solar Cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Ilario Gelmetti  
**Date of reading:** 15/07/2019
- 6 Project title:** Low-molecular Weight Organic Semiconductors for Organic and Perovskite Solar Cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Cristina Rodríguez Seco  
**Date of reading:** 21/06/2019
- 7 Project title:** Optoelectronics properties of Quantum Dots for Biomedicine and Energy-to-light  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Sofia Paulo Mirasol  
**Date of reading:** 14/06/2019
- 8 Project title:** Semiconductor Nanoparticles as Platform for Bio-Applications and Energy Related Systems  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Alba Maria Matas Adams  
**Date of reading:** 25/11/2015





- 9** **Project title:** Solution Processed Inorganic Semiconductor Solar Cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Jose Manuel Marin Beloqui  
**Date of reading:** 23/11/2015
- 10** **Project title:** Relationships between opto-electronic properties, molecular structure and morphology in fullerenecontaining solar cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Daniel Fernandez Pinto  
**Date of reading:** 21/10/2015
- 11** **Project title:** Design and synthesis of small molecules for Organic and Grätzel Solar Cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Lydia Cabau Parra  
**Date of reading:** 10/07/2014
- 12** **Project title:** Analysis of key loss mechanisms in organic solar cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Núria Fernández Montcada  
**Date of reading:** 08/07/2014
- 13** **Project title:** Exploring novel dye concepts in dye sensitized solar cells  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Laia Pellejà i Puxeu  
**Date of reading:** 05/06/2014
- 14** **Project title:** Bioapplications for nanoparticles  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Iván Castelló Serrano  
**Date of reading:** 26/06/2013
- 15** **Project title:** Organic bulk-heterojunction photovoltaic devices: materials, device architecture and interfacial processes  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Margherita Bolognesi  
**Date of reading:** 07/06/2013
- 16** **Project title:** Small molecule solar cells: role of architecture on device performance  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** James Ryan  
**Date of reading:** 06/06/2013
- 17** **Project title:** Photo-Induced Charge Transfer Reactions in Quantum Dot Based Solar Cells”  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Josep Albero Sancho  
**Date of reading:** 30/01/2012
- 18** **Project title:** Interfacial charge recombination dynamics and the role of the morphology in organic solar cells”  
**Entity:** Universitat Rovira i Virgili **Type of entity:** University  
**Student:** Antonio Sánchez Díaz



**Date of reading:** 27/04/2011

**19 Project title:** Design and synthesis of organic sensitizers for dye solar cells: Molecular structure vs device performance”

**Entity:** Universitat Rovira i Virgili

**Type of entity:** University

**Student:** Miquel Àngel Planells Dillundé

**Date of reading:** 28/10/2010

**20 Project title:** Ruthenium Polypyridyl complexes as photosensitizers for molecular photovoltaic devices: influence of the dye structure and the presence of additives to the device performance”

**Entity:** Universitat Rovira i Virgili

**Type of entity:** University

**Student:** Anna Reynal Verdú

**Date of reading:** 21/10/2010

**21 Project title:** Development of an optical fiber probe for mercury detection”

**Entity:** Universitat Rovira i Virgili

**Type of entity:** University

**Student:** Javier Pérez Hernández

**Date of reading:** 11/07/2008

## Student tutorials

**Name of the programme:** Máster Nanociencia y Nanotecnología

**Entity:** Universitat Rovira i Virgili

**Type of entity:** University

## 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:** Engineering Excited States, Orbital Coupling and Quantum Coherence Phenomena in Photoelectrochemical Energy Conversion Devices

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Funding entity or bodies:**

European Research Council Executive Agency, ERCEA (European commission). Horizon Europe ERC Advanced

**Start-End date:** 01/09/2023 - 31/08/2028

**Total amount:** 2.500.000 €

**2 Name of the project:** PEARL: Flexible Perovskite Solar Cells with Carbon Electrodes

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**City of entity:** Tarragona, Catalonia, Spain

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Funding entity or bodies:**

European Climate, Infrastructure and Environment Executive Agency (EU Administration). Horizon Europe





**Start-End date:** 01/10/2023 - 30/09/2026

**Total amount:** 420.313 €

**3 Name of the project:** ELECTROVOLT: Electrovoltaic materials for CO2 reduction

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**City of entity:** Tarragona, Catalonia, Spain

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Start-End date:** 01/09/2023 - 31/08/2026

**Total amount:** 332.500 €

**4 Name of the project:** NEFERTITI: Innovative photocatalysts integrated in flow photoreactor systems for direct CO2 and H2O conversion into solar fuels

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**City of entity:** Tarragona, Catalonia, Spain

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Funding entity or bodies:**

European Commission (EU Administration). Horizon 2020-LC-SC3-RES-3-2020

**Start-End date:** 01/07/2021 - 30/06/2025

**Total amount:** 363.750 €

**5 Name of the project:** PHOTORED: Photocatalytic Co2 Reductions by Green Hydrogen

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**City of entity:** Tarragona, Catalonia, Spain

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Funding entity or bodies:**

Ministerio de Ciencia e Innovación

**Type of entity:** Agencia estatal

**Start-End date:** 01/11/2021 - 31/10/2024

**Total amount:** 198.500 €

**6 Name of the project:** SOLARCO: Solar Energy Driven CO2 Reduction

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**City of entity:** Tarragona, Catalonia, Spain

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Funding entity or bodies:**

Ministerio de Ciencia e Innovación/AEI/EU/PRTR

**Type of entity:** State agency

**Start-End date:** 01/12/2022 - 30/10/2024

**Total amount:** 234.485 €

**7 Name of the project:** SOL-Future: Solar Catalysis for a Renewable Energy Future ()

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ) **Type of entity:** State agency

**City of entity:** Tarragona, Catalonia, Spain

**Name principal investigator (PI, Co-PI....):** Emilio Palomares Gil

**Funding entity or bodies:**

Ministerio de Ciencia e Innovación

**Type of entity:** -

**Start-End date:** 01/12/2021 - 30/10/2024

**Total amount:** 169.075 €



- 8** **Name of the project:** LIGHT4LUNGS Inhalable Aerosol Light Source for Controlling Drug-Resistant Bacterial Lung Infections  
**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)  
**City of entity:** Tarragona, Catalonia, Spain  
**Name principal investigator (PI, Co-PI....):** Santi Nollel; Emilio Palomares  
**Funding entity or bodies:**  
European Commission  
**Type of participation:** Socio del consorcio  
**Name of the programme:** H2020-FETOPEN-2018-2020  
**Code according to the funding entity:** 863102  
**Start-End date:** 01/12/2019 - 31/05/2024  
**Total amount:** 372.500 €
- 9** **Name of the project:** DECADE Distributed chemicals and fuels production from CO2 in photoelectrocatalytic devices  
**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)  
**Name principal investigator (PI, Co-PI....):** José Ramón Galán; Emilio Palomares  
**Funding entity or bodies:**  
European Collaborative Projects **Type of entity:** 0  
**Type of participation:** Others  
**Name of the programme:** H2020-NMBP-25-2019  
**Code according to the funding entity:** 862030  
**Start-End date:** 01/05/2020 - 30/04/2024  
**Total amount:** 269.468 €
- 10** **Name of the project:** Integración de celdas solares moleculares y electrocatálisis para la reducción de CO2  
**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)  
**Funding entity or bodies:**  
Ministerio de Ciencia e Innovación **Type of entity:** .  
**Name of the programme:** MICIN Proyectos I+D 2019  
**Code according to the funding entity:** INTEGRAD2 PID2019-109389RB-I00  
**Start-End date:** 01/06/2020 - 31/05/2023  
**Total amount:** 254.100 €
- 11** **Name of the project:** Grup de recerca en materials i dispositius optoelectrònics (AGAUR 2017)  
**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
AGAUR  
**Name of the programme:** Suport a la recerca SGR AGAUR  
**Code according to the funding entity:** 2017SGR978  
**Start-End date:** 01/01/2017 - 30/09/2021  
**Total amount:** 44.480 €
- 12** **Name of the project:** Time resolved spectroscopic integral system (TAS)  
**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
MINECO



**Name of the programme:** MICIU Equipamiento Científico-técnico  
**Code according to the funding entity:** TAS EQC2018-005188-P  
**Start-End date:** 01/01/2018 - 31/12/2019  
**Total amount:** 127.923 €

**13 Name of the project:** Charge Transfer on hybrid photovoltaic devices: semiconductor nanocrystals/organic semiconductor molecule (FotoTransfer)

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Name principal investigator (PI, Co-PI...):** Emilio Palomares

**Funding entity or bodies:**

MINECO

**Name of the programme:** MINECO Proyectos I+D-Retos

**Code according to the funding entity:** Foto Transfer CTQ2016-80042-R(FEDER)

**Start-End date:** 30/12/2016 - 29/12/2019

**Total amount:** 166.980 €

**14 Name of the project:** Grup de recerca en materials i dispositius optoelectrònics (AGAUR 2014)

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Name principal investigator (PI, Co-PI...):** Emilio Palomares

**Funding entity or bodies:**

AGAUR

**Name of the programme:** Suport a la recerca SGR AGAUR

**Code according to the funding entity:** 2014SGR763

**Start-End date:** 01/01/2014 - 31/12/2016

**Total amount:** 17.200 €

**15 Name of the project:** Nanocristales semiconductores y moléculas orgánicas de bajo peso molecular para dispositivos que convierten luz solar en energía

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Name principal investigator (PI, Co-PI...):** Emilio Palomares

**Funding entity or bodies:**

MINECO

**Name of the programme:** MINECO Proyectos I+D-Retos

**Code according to the funding entity:** CTQ2013-47183-R

**Start-End date:** 01/01/2014 - 31/12/2016

**Total amount:** 182.710 €

**16 Name of the project:** Ratiometric FRET Based Nanosensors for Trypsin Related Human Recessive Diseases (2NanoSi)

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Name principal investigator (PI, Co-PI...):** Emilio Palomares

**Funding entity or bodies:**

European Research Council

**Name of the programme:** ERC Proof of Concept 2014

**Code according to the funding entity:** ERC-PoC-665775

**Start-End date:** 01/04/2015 - 31/03/2016

**Total amount:** 150.000 €



- 17** **Name of the project:** Advanced Design and Industrialization of Organic Sensitizers without Ruthenium for Dye Sensitised Solar cells (Adios-Ru)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
Comissió Europea  
**Name of the programme:** Col·laboratiu FP7-SME-2012  
**Code according to the funding entity:** 315131  
**Start-End date:** 01/11/2012 - 31/10/2014  
**Total amount:** 359.040 €
- 18** **Name of the project:** Control of the Electronic Properties in Hybrid- Quantum Dot/Polymer-Materials for Energy Production (POLYDOT)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
European Research Council  
**Name of the programme:** ERC Starting Grant 2009 FP7-ERC-2008-StG  
**Code according to the funding entity:** ERC-StG-239582  
**Start-End date:** 01/11/2009 - 31/10/2014  
**Total amount:** 1.299.960 €
- 19** **Name of the project:** Laboratori de materials i dispositius optoelectrònics (AGAUR 2009)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
AGAUR  
**Name of the programme:** Suport a la recerca SGR AGAUR  
**Code according to the funding entity:** 2009SGR207  
**Start-End date:** 03/10/2009 - 05/05/2014  
**Total amount:** 65.520 €
- 20** **Name of the project:** Estudios de moléculas óptica y electroquímicamente activas y su aplicación en dispositivos fotovoltaicos y electroluminiscentes moleculares  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
MINECO  
**Name of the programme:** MINECO Investigación fundamental no orientada  
**Code according to the funding entity:** CTQ2010-18859  
**Start-End date:** 01/01/2011 - 31/12/2013  
**Total amount:** 75.020 €
- 21** **Name of the project:** Hybrid Optoelectronic and Photovoltaic Devices for Renewable Energy (CSD HOPE)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)



**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
MINECO

**Type of participation:** Socio del consorcio

**Name of the programme:** CONSOLIDER

**Code according to the funding entity:** CSD (HOPE)

**Start-End date:** 01/04/2010 - 09/06/2013

**Participating entity/entities:** Centro de Tecnologías Electroquímicas; ICFO; ICIQ; ICMSE; Ikerlan; Universidad de Alicante; UCLM; Universidad Jaime I; Universidad Miguel Hernández de Elche; UPCAT; UPCTG; Universidad Pablo de Olavide; Universitat Rovira i Virgili

**Total amount:** 412.372 €

- 22 Name of the project:** Grup de Treball FOLAEP  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
ACC1Ó  
**Name of the programme:** Xarxa Connect-EU Ajuts a la innovació 2010  
**Code according to the funding entity:** XCEU10-1-0010  
**Start-End date:** 01/01/2010 - 31/12/2012  
**Total amount:** 6.200 €
- 23 Name of the project:** Efficient and Robust Dyesensitized Solar Cells and Modules (ROBUST)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
Comissió Europea  
**Name of the programme:** Col.laboratiu FP7-Energy-2007  
**Code according to the funding entity:** 212792  
**Start-End date:** 01/02/2008 - 31/01/2011  
**Total amount:** 302.520 €
- 24 Name of the project:** Estudio de moléculas óptica y electroquímicamente activas y su aplicación en dispositivos fotovoltaicos moleculares  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
MINECO  
**Name of the programme:** MINECO Investigación fundamental no orientada  
**Code according to the funding entity:** CTQ2007-60746  
**Start-End date:** 01/10/2007 - 30/09/2010  
**Total amount:** 133.100 €
- 25 Name of the project:** Nuevos dispositivos fotovoltaicos basados en materiales moleculares: Conceptos y tecnologías de fabricación (FOTOMOL)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)



**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
MINECO

**Name of the programme:** MINECO Proyectos singulares  
**Code according to the funding entity:** PSE-120000-2009-008  
**Start-End date:** 01/01/2009 - 30/06/2010  
**Total amount:** 414.500 €

- 26** **Name of the project:** Nuevos dispositivos fotovoltaicos basados en materiales moleculares: Conceptos y tecnologías de fabricación (FOTOMOL)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
MINECO  
**Name of the programme:** MINECO Proyectos Singulares  
**Code according to the funding entity:** PSE-120000-2008-003  
**Start-End date:** 01/01/2008 - 31/01/2010  
**Total amount:** 490.000 €

- 27** **Name of the project:** Coordination Action Towards Stable and Low-Cost Organic Solar Cell Technologies and Their Application (OrgaPVNet)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
Comissió Europea  
**Name of the programme:** Col.laboratiu FP6-Energy-2007  
**Code according to the funding entity:** 38889  
**Start-End date:** 01/11/2006 - 31/07/2009  
**Total amount:** 43.201 €

- 28** **Name of the project:** Nanocrystalline Heterosupermolecular Materials for Optoelectronic Applications (HETEROMOLMAT)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
Comissió Europea  
**Name of the programme:** Col.laboratiu FP6-NMP-2003  
**Code according to the funding entity:** 516982 (COORDINATOR)  
**Start-End date:** 01/01/2005 - 31/10/2008  
**Total amount:** 212.501 €

- 29** **Name of the project:** Hybrid Molecular Materials with Relevance in Magnetism and Molecular Electronics  
**Entity where project took place:** Instituto de Ciencia **Type of entity:** University Research Institute Molecular  
**Name principal investigator (PI, Co-PI....):** Prof. Eugenio Coronado  
**Funding entity or bodies:**  
MEC (Spanish Office of Science)





**Start-End date:** 13/12/2004 - 13/12/2007      **Duration:** 3 years  
**Participating entity/entities:** Instituto de Ciencia Molecular-UV

- 30 Name of the project:** Celdas Solares Moleculares  
**Entity where project took place:** Generalitat Valenciana      **Type of entity:** -  
**Name principal investigator (PI, Co-PI....):** Dr. Emilio Palomares  
**Start-End date:** 2006 - 2007      **Duration:** 1 year
- 31 Name of the project:** Nanopartículas Semiconductoras para Energía Solar  
**Entity where project took place:** PROFIT (MICYT)  
**Name principal investigator (PI, Co-PI....):** Francisco Estela ( coordinador del proyecto); Emilio Palomares  
**Start-End date:** 2006 - 2007      **Duration:** 1 year
- 32 Name of the project:** Paneles Solares Moleculares  
**Entity where project took place:** Generalitat Valenciana      **Type of entity:** -  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Start-End date:** 2005 - 2006      **Duration:** 1 year
- 33 Name of the project:** Sensores Optoelectrónicos par la Detección de Sustancias Nocivas para la Salud y el Medio Ambiente  
**Entity where project took place:** Generalitat Valenciana      **Type of entity:** -  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Start-End date:** 2005 - 2006      **Duration:** 1 year
- 34 Name of the project:** The Faculty of Physical Sciences Proof of Concept Fund  
**Entity where project took place:** Imperial College  
**City of entity:** London, United Kingdom  
**Name principal investigator (PI, Co-PI....):** Dr. James R. Durrant  
**Funding entity or bodies:**  
Imperial College of Science  
Technology and Medicine  
**Start-End date:** 01/12/2004 - 01/12/2005      **Duration:** 1 year
- 35 Name of the project:** Polímeros conductores dopados con polioxometalatos electroactivos para su utilización como electrodos inyectores de carga en dispositivos orgánicos emisores de luz (OLED's) y en células fotovoltaicas orgánicas- GV2004-A-118.  
**Entity where project took place:** Instituto de Ciencia Molecular      **Type of entity:** University Research Institute Molecular  
**Name principal investigator (PI, Co-PI....):** Carlos Jiménez ( ICMol-UV)  
**Funding entity or bodies:**  
Generalitat Valenciana      **Type of entity:** -  
**City funding entity:** Valencia, Valencian Community, Spain  
**Start-End date:** 2004 - 2005      **Duration:** 1 year
- 36 Name of the project:** Molecular Solar Cells  
**Entity where project took place:** Imperial College  
**City of entity:** London, United Kingdom



**Name principal investigator (PI, Co-PI....):** Dr. James R. Durrant

**Funding entity or bodies:**

Imperial College of Science, Technology and Medicine

**Start-End date:** 07/10/2001 - 31/08/2004

**Duration:** 2 years - 10 months - 24 days

**37 Name of the project:** Nanocrystalline Dye Sensitised Solar Cells Having Maximum Performance

**Entity where project took place:** Imperial College of Science, Technology and Medicine

**City of entity:** London, United Kingdom

**Name principal investigator (PI, Co-PI....):** Dr. James R. Durrant

**Funding entity or bodies:**

Imperial College of Science

Technology and Medicine

**Start-End date:** 07/10/2001 - 18/08/2004

**Duration:** 2 years - 10 months - 11 days

**38 Name of the project:** Towards the Control of Charge Recombination Processes in Dye Sensitised Photovoltaic Cells. Marie Curie European Fellowship Contract HPMF-CT-2002-01744

**Entity where project took place:** Imperial College of Science, Technology and Medicine

**Name principal investigator (PI, Co-PI....):** Dr. James R. Durrant

**Funding entity or bodies:**

Imperial College of Science, Technology and Medicine. Centre for Electronic Materials and Devices.

**Start-End date:** 14/06/2002 - 14/05/2004

**Duration:** 1 year - 11 months

## R&D non-competitive contracts, agreements or projects with public or private entities

**1 Name of the project:** Dispositivos híbridos luminiscentes preparados por impresión para aplicaciones en sectores industriales y de gran consumo (HYPRINT)

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Entity where project took place:** Fundació Institut Català d'Investigació Química (ICIQ)

**Name principal investigator (PI, Co-PI....):** Emilio Palomares

**Funding entity or bodies:**

CDTI

Centro para el Desarrollo Tecnológico Industrial

**Type of entity:** Business

**City funding entity:** Madrid, Community of Madrid, Spain

**Name of the programme:** Programa CIEN

**Start date:** 01/11/2014

**Duration:** 3 years

**Total amount:** 100.000 €

**2 Name of the project:** Nanocristales luminiscentes para aplicaciones biológicas

**Name principal investigator (PI, Co-PI....):** Emilio Palomares

**Funding entity or bodies:**

Ikerlan

**Type of entity:** Innovation and Technology Centres

**City funding entity:** Arrasate, Basque Country, Spain

**Start date:** 2010

**Duration:** 3 years



- 3** **Name of the project:** Multiplicación de esfuerzos para el desarrollo. Innovación, Optimización y diseño de Invernaderos avanzados (CENIT Mediodía)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Entity where project took place:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
Centro para el Desarrollo Tecnológico Industrial      **Type of entity:** Business  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Name of the programme:** CENIT Mediodía  
**Start date:** 01/10/2008      **Duration:** 2 years  
**Total amount:** 323.600 €
- 4** **Name of the project:** Dye Sensitised Solar Cells-CENIT Mediodía  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
ACCIONA SOLAR  
**Start date:** 2008      **Duration:** 4 years
- 5** **Name of the project:** Dispositivos fotovoltaicos híbridos  
**Name principal investigator (PI, Co-PI....):** Emilio Palomares  
**Funding entity or bodies:**  
ACCIONA SOLAR  
**Start date:** 2007      **Duration:** 1 year
- 6** **Name of the project:** Escalado de dispositivos fotovoltaicos y luminiscentes orgánicos e híbridos mediante distintas técnicas pre-industriales  
**Funding entity or bodies:**  
FUNDACION PRIVADA CETEMMSA  
**City funding entity:** Spain  
**Start date:** 2007      **Duration:** 9 years

## Results

### Industrial and intellectual property

- 1** **Title registered industrial property:** Ratiometric assay for hydrolytic enzyme quantification  
**Inventors/authors/obtainers:** Emilio Palomares Gil; Georgiana Stoica; Iván Castelló Serrano  
**Entity holder of rights:** FUNDACIO PRIVADA INSTITUT CATALA D'INVESTIGACIO QUIMICA (ICIQ)  
**Nº of application:** 13382239.5-1405  
**Date of register:** 2013
- 2** **Title registered industrial property:** Chemical sensors  
**Inventors/authors/obtainers:** Durrant, James; Palomares, Emilio; Vilar, Ramon.  
**Entity holder of rights:** Imperial College Innovations Limited  
**Nº of application:** USXXCO US 2006144720 A1 20060706  
**Country of inscription:** United States of America



- 3 Title registered industrial property:** Colorimetric Sensors for Cyanide Detection  
**Inventors/authors/obtainers:** Palomares Gil, Emilio J.; Coronado Miralles, Eugenio; Torres Cebada, Tomas; Martinez Diaz, Victoria  
**Entity holder of rights:** Universitat de València - Universidad Autonoma de Madrid  
**Nº of application:** SPXXAD ES 2303756 A1 20080816 CAN 150:25912 AN 2008:1166731
- 4 Title registered industrial property:** Colorimetric analytical procedure for detection of cyanide based anions derived from subphthalocyanine.  
**Inventors/authors/obtainers:** Palomares Gil, Emilio J.; Coronado Miralles, Eugenio; Torres Cebada, Tomas; Martinez Diaz, Victoria  
**Entity holder of rights:** Universitat de València - Universidad Autonoma de Madrid  
**Nº of application:** SPXXAD ES 2303756 A1 20080816 CAN 150:25912 AN 2008:1166731
- 5 Title registered industrial property:** Low Temperature Metal Oxide Coating  
**Inventors/authors/obtainers:** Emilio Palomares; John N. Clifford; Saif A. Haque; Thierry Lutz; James R. Durrant  
**Entity holder of rights:** Imperial College  
**Nº of application:** 0217990.1.  
**Country of inscription:** United Kingdom
- 6 Title registered industrial property:** Mercury scavenging  
**Inventors/authors/obtainers:** Durrant, James; Palomares, Emilio; Xiaoe, Li  
**Entity holder of rights:** Imperial Innovations Limited, UK; Institute of Chemical Research of Catalonia (ICIQ)  
**Nº of application:** PIXXD2 WO 2008025977 A1 20080306
- 7 Title registered industrial property:** Tri-tert-butylcarboxyphthalocyanines, uses thereof and a process for their preparation.  
**Inventors/authors/obtainers:** Torres Cebada, Tomas; Cid Martin, Juan Jose; Nazeerudin, Mohammad Khaja; Yum, Jun Ho; Graetzel, Michael; Palomares, Emilio  
**Entity holder of rights:** Universidad Autonoma de Madrid, Spain; Institut Catala de Investigacio Quimica; Ecole Polytechnique Federale de Lausanne  
**Nº of application:** PIXXD2 WO 2008145172 A1 20081204



## Scientific and technological activities

### Scientific production

#### Publications, scientific and technical documents

- 1 Tamal Chatterjee; Beatriu Domingo-Tafalla; Pablo Ballester; Emilio Palomares. Insights into the Interfacial Charge Transfer Dynamics in Semiconductor-Molecular Catalyst Assemblies for Photo-induced CO<sub>2</sub> Reduction. *ChemElectroChem*. 11 - 11, pp. e202300620. Chemistry Europe, 06/2024.  
**Type of production:** Scientific paper **Format:** Journal
- 2 Anna M. Beiler; Wenhui Li; Alisa Denisiuk; Emilio Palomares; Antoni Llobet. Solar hydrogen production from electrochemical ammonia splitting powered by a single perovskite solar cell. *Journal of Energy Chemistry*. 92, pp. 292 - 295. ScienceDirect, 05/2024.  
**Type of production:** Scientific paper **Format:** Journal
- 3 Tawanwit Luangwanta; Silver-Hamil Turren-Cruz; Sofia Masi; Samrat Das Adhikari; Ileana B. Recalde; Marciela Zanatta; Diego Iglesias; Jhonatan Rodríguez-Pereira; Santi Gené-Marimon; Eugenia Martínez-Ferrero; Sulawan Kaowphong; Emilio Palomares; Victor Sans; Andrés F. Gualdrón-Reyes; Iván Mora-Seró. Enabling white color tunability in complex 3D-printed composites by using lead-free self-trapped exciton 2D perovskite/carbon quantum dot inks. *Nanoscale*. 16, pp. 10262 - 10272. Royal Society of Chemistry, 04/2024.  
**Type of production:** Scientific paper **Format:** Journal
- 4 Dora A. González; Carlos E. Puerto Galvis; Wnhui Li; Maria Méndez; José G. Sánchez; Eugenia Martínez-Ferrero; Emilio Palomares. Exploring the Interactions at the Interface: Tailoring Carbazole-Based Self-Assembled Molecules with Varying Functional Groups for Enhancing the Performance of Inverted Perovskite Solar Cells. *Solar RRL*. 2400242, Wiley, 04/2024.  
**Type of production:** Scientific paper **Format:** Journal
- 5 Andrea Cabrera-Espinoza; Silvia Collavini; José G. Sánchez; Ivet Kosta; Emilio Palomares; Juan Luis Delgado. Photo-Cross-Linked Fullerene-Based Hole Transport Material for Moisture-Resistant Regular Fullerene Sandwich Perovskite Solar Cells. *ACS Appl. Mater. Interfaces*. 16 - 16, pp. 20852 - 20864. American Chemical Society, 04/2024.  
**Type of production:** Scientific paper **Format:** Journal
- 6 Mohamed Samir; Enas Moustafa; Osbel Almora; Magaly Ramírez-Como; Maria Pilar Montero-Rama; José G. Sánchez; Emilio Palomares; Josep Pallarès; Lluís F. Marsal. CPE-Na-Based Hole Transport Layers for Improving the Stability in Nonfullerene Organic Solar Cells: A Comprehensive Study. *ACS Appl. Mater. Interfaces*. 16 - 13, pp. 16317 - 16327. 03/2024.  
**Type of production:** Scientific paper **Format:** Journal
- 7 Eyyup Yalcin; Ece Aktas; Maria Méndez; Emre Arkan; José G. Sánchez; Eugenia Martínez-Ferrero; Francesco Silvestri; Esther Barrena; Mustafa Can; Serafettin Demic; Emilio Palomares. Monodentate versus Bidentate Anchoring Groups in Self-Assembling Molecules (SAMs) for Robust p-i-n Perovskite Solar Cells. *ACS Appl Mater Interfaces*. 15 - 49, pp. 57153 - 57164. American Chemical Society, 12/2023.  
**Type of production:** Scientific paper **Format:** Journal



- 8** Carlos E. Puerto Galvis; Dora A. González; Eugenia Martínez-Ferrero; Emilio Palomares. Challenges in the design and synthesis of self-assembling molecules as selective contacts in perovskite solar cells. *chemical Science*. 15, pp. 1534 - 1556. Royal Society of Chemistry, 11/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 9** Ece Aktas; Isabella Poli; Corinna Ponti; Guixiang Li; Andrea Olivati; Diego Di Girolamo; Fahad Ahmed Alharthi; Meng Li; Emilio Palomares; Annamaria Petrozza; Antonio Abate. One-Step Solution Deposition of Tin-Perovskite onto a Self-Assembled Monolayer with a DMSO-Free Solvent System. *ACS Energy Lett.* 8 - 12, pp. 5170 - 5174. American Chemical Society, 11/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 10** Giuseppina Anna Corrente; Dora A. González; Ece Aktas; Agostina Lina Capodilupo; Francesco Ruighi; Gianluca Accorsi; Daniela Imbardelli; Cristina Rodríguez-Seco; Eugenia Martínez-Ferrero; Emilio Palomares; Amerigo Beneduci. Reversible vis-NIR electrochromic/electrofluorochromic switching in dual-functional devices modulated by different benzothiadiazole-arylamine anodic components. *Journal of Materials Chemistry C*. 11, pp. 17115 - 17127. Royal Society of Chemistry, 11/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 11** Wnhui Li; Eugenia Martínez-Ferrero; Emilio Palomares. Self-assembled molecules as selective contacts for efficient and stable perovskite solar cells. *Materials Chemistry Frontiers*. 8, pp. 681 - 699. Royal Society of Chemistry, 11/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 12** Ece Aktas; Thi Huong Le; Michel Frigoli; Guixiang Li; Hans Köbler; Johan Liotier; Antonio J. Riquelme; Antonio Abate; Renaud Demadrille; Emilio Palomares. Triisopropylsilylethynyl-Functionalized Anthracene-Based Hole Transport Materials for Efficient Hybrid Lead Halide Perovskite Solar Cells. *Chem. Mater.* 35 - 21, pp. 9378 - 9389. American Chemical Society, 11/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 13** Dora A. González; Carlos E. Puerto Galvis; Wenhui Li; Maria Méndez; Ece Aktas; Eugenia Martínez-Ferrero; Emilio Palomares. Influence of the carbazole moiety in self-assembling molecules as selective contacts in perovskite solar cells: interfacial charge transfer kinetics and solar-to-energy efficiency effects. *Nanoscale Advances*. 5, pp. 6542 - 6547. Royal Society of Chemistry, 10/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 14** Helena Uceta; Andrea Cabrera-Espinoza; Myriam Barrejón; José G. Sánchez; Edgar Gutierrez-Fernandez; Ivet Kosta; Jaime Martin; Silvia Collavini; Eugenia Martínez-Ferrero; Fernando Langa; Juan Luis Delgado. p-Type Functionalized Carbon Nanohorns and Nanotubes in Perovskite Solar Cells. *ACS Appl. Mater. Interfaces*. 15 - 38, pp. 45212 - 45228. American Chemical Society, 09/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 15** Fabio Vieira; Jean-Bernars Ledeuil; Dominique Foix; Geyla Caridad; Julio Lloret; Laurent Billon; Emilio Palomares; Aurelien Viterisi. Narrow band gap cuprous/cupric oxide thin films prepared via sol-gel methods for the electrochemical reduction of CO<sub>2</sub>. *Solid State Sciences*. 143, pp. 107276. ScienceDirect, 08/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 16** Raquel Royo; José G. Sánchez; Wenhui Li; Eugenia Martínez-Ferrero; Emilio Palomares; Raquel Andreu; Santiago Franco. Novel Spiro-Core Dopant-Free Hole Transporting Material for Planar Inverted Perovskite Solar Cells. *Nanomaterials*. 13 - 14, pp. 2042. 07/2023.  
**Type of production:** Scientific paper **Format:** Journal
- 17** Alfonsina A. A. Torim tubun; Maria Méndez; Enas Moustafa; Josep Pallarès; Emilio Palomares; Lluís F. Marsal. Achieving 17.7% Efficiency of Ternary Organic Solar Cells by Incorporating a High Lowest Unoccupied Molecular Orbital Level and Miscible Third Component. *solar RRL*. 7 - 11, pp. 2300228. Wiley, 06/2023.



**Type of production:** Scientific paper

**Format:** Journal

- 18** Beatriu Domingo-Tafalla; Tamal Chatterjee; Federico Franco; Javier Pérez Hernandez; Eugenia Martínez-Ferrero; Pablo Ballester; Emilio Palomares. Electro- and Photoinduced Interfacial Charge Transfers in Nanocrystalline Mesoporous TiO<sub>2</sub> and TiO<sub>2</sub>/Iron Porphyrin Sensitized Films under CO<sub>2</sub> Reduction Catalysis. ACS Appl. Mater. Interfaces. 15 - 11, pp. 14304 - 14315. American Chemical Society, 03/2023.

**Type of production:** Scientific paper

**Format:** Journal

- 19** Beatriu Domingo-Tafalla; Tamal Chatterjee; Emilio Palomares. Recent advances in the rational designing of metalloporphyrinoid-based CO<sub>2</sub> reduction catalysts: From molecular structural tuning to the application in catalysis. Journal of Porphyrins and Phthalocyanines. 27 - 01n04, pp. 23 - 46. 03/2023.

**Type of production:** Scientific paper

**Format:** Journal

- 20** Sarika Kumari; José G. Sánchez; Muhammad Imran; Ece Aktas; Dora A. González; Liberato Manna; Eugenia Martínez-Ferrero; Emilio Palomares. Self-assembled molecules as selective contacts in CsPbBr<sub>3</sub> nanocrystal light emitting diodes. Journal of Materials Chemistry C. 11, pp. 3788 - 3795. Royal Society of Chemistry, 02/2023.

**Type of production:** Scientific paper

- 21** Wenhui Li; Michele Cariello; Maria Méndez; Graeme Cooke; Emilio Palomares. Self-Assembled Molecules for Hole-Selective Electrodes in Highly Stable and Efficient Inverted Perovskite Solar Cells with Ultralow Energy Loss. ACS Appl. Energy Mater. 6 - 3, pp. 1239 - 1247. American Chemical Society, 01/2023.

**Type of production:** Scientific paper

- 22** Ece Aktas; Nagalingman Rajamanickman; Jorge Pascual; Shuaifeng Hu; Mahmoud H. Aldamasy; Diego Di Girolamo; Wenhui Li; Giuseppe Nasti; Eugenia Martínez-Ferrero; Atsushi Wakamiya; Emilio Palomares; Antonio Abate. Challenges and strategies toward long-term stability of lead-free tin-based perovskite solar cells. Communications Materials. 3 - 104, 12/2022.

**Type of production:** Scientific paper

**Format:** Journal

- 23** Enas Moustafa; Maria Méndez; José G. Sánchez; Josep Pallarès; Emilio Palomares; Lluís F. Marsal. Thermal Activation of PEDOT:PSS/PM6:Y7 Based Films Leads to Unprecedented High Short-Circuit Current Density in Nonfullerene Organic Photovoltaics. Advanced Energy Materials. 13 - 4, pp. 2203241. Wiley, 12/2022.

**Type of production:** Scientific paper

**Format:** Journal

- 24** José G. Sánchez; Ece Aktas; Eugenia Martínez-Ferrero; Agostina Lina Capodilupo; Giuseppina Anna Corrente; Amerigo Beneduci; Emilio Palomares. Increasing the stability of perovskite solar cells with dibenzofulvene-based hole transporting materials. Electrochimica Acta. 432, pp. 141190. 11/2022.

**Type of production:** Scientific paper

**Format:** Journal

- 25** Giuseppina Anna Corrente; Dora A. González; Ece Aktas; Agostina Lina Capodilupo; Gloria Mazzone; Francesco Ruighi; Gianluca Accorsi; Daniela Imbardelli; Cristina Rodríguez-Seco; Eugenia Martínez-Ferrero; Emilio Palomares; Amerigo Beneduci. Vis-NIR Electrochromism and NIR-Green Electroluminescence in Dual Functional Benzothiadiazole-Arylamine Mixed-Valence Compounds. Advanced Optical Materials. 11 - 1, pp. 2201506. Wiley, 11/2022.

**Type of production:** Scientific paper

**Format:** Journal

- 26** Emilio Palomares; Laurent Billon; Aurelien Viteresi. Crystallinity and Molecular Packing of Small Molecules in Bulk-Heterojunction Organic Solar Cells. Appl. Sci. 12 (11), pp. 5683. 06/2022.

**Type of production:** Scientific paper



- 27** Ece Aktas; Rajesh Pudi; Nga Phung; Robert Wenisch; Luca gregori; Daniele Meggiolaro; Marion A. Flatken; Filippo De Angelis; Iver Lauermann; Antonio Abate; Emilio Palomares. Role of Terminal Group Position in Triphenylamine-Based Self-Assembled Hole-Selective Molecules in Perovskite Solar Cells. *ACS Applied Materials & Interfaces*. 14 (15), pp. 17461 - 17469. 06/2022.  
**Type of production:** Scientific paper **Format:** Journal
- 28** Jesús Jiménez-López; Maria Méndez; Emilio Palomares. Influence of the Electron Selective Contact on the Interfacial Recombination in Fresh and Aged Perovskite Solar Cells. *Applied Sciences*. 12 (9), pp. 4545. 04/2022.  
**Type of production:** Scientific paper **Format:** Journal
- 29** Beatriu Domingo-Tafalla; Eugenia Martínez-Ferrero; Federico Franco; Emilio Palomares. Applications of Carbon Dots for the Photocatalytic and Electrocatalytic Reduction of CO<sub>2</sub>. *Molecules*. 27 (3), pp. 1081. 02/2022.  
**Type of production:** Scientific paper **Format:** Journal
- 30** Maria Mendez; Daniel Fernández; Aurelien Viteresi; Eugenia Martínez-Ferrero; Emilio Palomares. Joule-Heating Annealing to Increase Organic Solar Cells Performance: A Comparative Study. *Applied Sciences*. 12 (5), pp. 2552. 02/2022.  
**Type of production:** Scientific paper
- 31** Alfonsina Abat Amelenan Torimtubun; Maria Méndez; José G. Sánchez; Josep Pallarès; Emilio Palomares; Lluís F. Marsal. Shelf lifetime analysis of organic solar cells combining frequency and time resolved techniques. *Sustainable Energy & Fuels*. 5, pp. 6498 - 6508. 11/2021.  
**Type of production:** Scientific paper
- 32** José G. Sánchez; Andrea Cabrera-Espinoza; Eugenia Martínez-Ferrero; Juan Luis Delgado; Emilio Palomares. Chalcogen-substituted PCBM derivatives as ternary component in PM6:Y6 solar cells. *Materials Advances*. 3, pp. 1071 - 1078. 10/2021.  
**Type of production:** Scientific paper **Format:** Journal
- 33** Franziska S. Hegner; Felipe A. Garcés-Pineda; Jesús González-Cobos; Barbara Rodríguez-García; Mabel Torrén; Emilio Palomares; Núria Lopez; José Ramón Galán-Mascarós. Understanding the Catalytic Selectivity of Cobalt Hexacyanoferrate toward Oxygen Evolution in Seawater Electrolysis. *ACS Catalysis*. 11 - 21, pp. 13140 - 13148. 10/2021.  
**Type of production:** Scientific paper **Format:** Journal
- 34** Lijun Su; Maria Méndez; Jesús Jiménez-Lopez; Miaoli Zhu; Yaoming Xiao; Emilio Palomares. Analysis of the Oxygen Passivation Effects on MAPbI<sub>3</sub> and MAPbBr<sub>3</sub> in Fresh and Aged Solar Cells by the Transient Photovoltage Technique. *ChemPlusChem*. 86 - 9, pp. 1316 - 1321. 09/2021.  
**Type of production:** Scientific paper **Format:** Journal
- 35** Katherine Villa; José Ramón Galán-Mascarós; Nuria López; Emilio Palomares. Photocatalytic water splitting: advantages and challenges. *Sustainable Energy & Fuels*. 5, pp. 4560 - 4569. 08/2021.  
**Type of production:** Scientific paper **Format:** Journal
- 36** Ece Aktas; Nga Phung; Hans Köbler; Dora A. González; Maria Méndez; Ivona Ivona Kafedjiska; Silver-Hamill Turren-Cruz; Robert Wenisch; Iver Lauermann; Antonio Abate; Emilio Palomares. Understanding the perovskite/self-assembled selective contact interface for ultra-stable and highly efficient p-i-n perovskite solar cells. *Energy Environ. Sci.* 14, pp. 3976 - 3985. 05/2021.  
**Type of production:** Scientific paper
- 37** Neeta Karjule; Chanderpratap Singh; Jesús Barrio; Jonathan Tzadikov; Itamar Liberman; Michael Volokh; Emilio Palomares; Idan Hod; Menny Shalom. Carbon Nitride-Based Photoanode with Enhanced Photostability and Water Oxidation Kinetics. *Advanced Functional Materials*. pp. 2101724. Wiley, 04/2021.





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

- 38** E. Palomares; Y. Xiao; M. Zhu; M. Méndez; L. Su. Use of Organic Bulk-heterojunction Solar Cells as Selective Contacts in Wide Band-Gap Perovskite Solar Cells: Advantages and Limitations. *Advanced Functional Materials*. pp. 13979 - 13985. Wiley, 04/2021.

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

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- 119** Sheng-Wei Wang; Chun-Cheng Chou; Fa-Chun Hu; Kuan-Lin Wu; Yun Chi; John N. Clifford; Emilio Palomares; Shih-Hung Liu; Pi-Tai Chou; Tzu-Chien Wei; Ting-Yun Hsiao. Panchromatic Ru(II) sensitizers bearing single thiocyanate for high efficiency dye sensitized solar cells. JOURNAL OF MATERIALS CHEMISTRY A. 2 - 41, pp. 17618 - 17627. 11/2014. ISSN 2050-7488  
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- 122** Polina Yaseneva; Cristina F. Marti; Eduardo Palomares; Xiaolei Fan; Tobias Morgan; Pablo Saz Perez; Magnus Ronning; Fan Huang; Tatiana Yuranova; Liubov Kiwi-Minsker; Salim Derrouiche; Alexei A. Lapkin. Efficient reduction of bromates using carbon nanofibre supported catalysts: Experimental and a comparative life cycle assessment study. CHEMICAL ENGINEERING JOURNAL. 248, pp. 230 - 241. 07/2014. ISSN 1385-8947  
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- 123** Laia Pelleja; Rocio Dominguez; Ana Aljarilla; John N. Clifford; Pilar de la Cruz; Fernando Langa; Emilio Palomares. Use of Thienylenevinylene and Ethynyl Molecular Bridges in Organic Dyes for Dye-Sensitized Solar Cells: Implications for Device Performance. CHEMELECTROCHEM. 1 - 7, pp. 1126 - 1129. 07/2014. ISSN 2196-0216  
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- 254** JR Durrant; SA Haque; E Palomares. Towards optimisation of electron transfer processes in dye sensitised solar cells. COORDINATION CHEMISTRY REVIEWS. 248 - 13-14, pp. 1247 - 1257. 07/2004. ISSN 0010-8545  
**Type of production:** Scientific paper **Format:** Journal



- 255** JN Clifford; E Palomares; K Nazeeruddin; R Thampi; M Gratzel; JR Durrant. Multistep electron transfer processes on dye co-sensitized nanocrystalline TiO<sub>2</sub> films. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 126 - 18, pp. 5670 - 5671. 05/2004. ISSN 0002-7863  
**Type of production:** Scientific paper **Format:** Journal
- 256** JN Clifford; E Palomares; MK Nazeeruddin; M Gratzel; J Nelson; X Li; NJ Long; JR Durrant. Molecular control of recombination dynamics in dye-sensitized nanocrystalline TiO<sub>2</sub> films: Free energy vs distance dependence. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 126 - 16, pp. 5225 - 5233. 04/2004. ISSN 0002-7863  
**Type of production:** Scientific paper **Format:** Journal
- 257** M Alvaro; A Corma; B Ferrer; H Garcia; E Palomares. Laser flash photolysis study of anthracene/viologen charge transfer complex in non-polar, dealuminated zeolites. PHYSICAL CHEMISTRY CHEMICAL PHYSICS. 6 - 6, pp. 1345 - 1349. 03/2004. ISSN 1463-9076  
**Type of production:** Scientific paper **Format:** Journal
- 258** E Palomares; R Vilar; A Green; JR Durrant. Alizarin complexone on nanocrystalline TiO<sub>2</sub>: A heterogeneous approach to anion sensing. ADVANCED FUNCTIONAL MATERIALS. 14 - 2, pp. 111 - 115. 02/2004. ISSN 1616-301X  
**Type of production:** Scientific paper **Format:** Journal
- 259** E Palomares; R Vilar; JR Durrant. Heterogeneous colorimetric sensor for mercuric salts. CHEMICAL COMMUNICATIONS. 4, pp. 362 - 363. 02/2004. ISSN 1359-7345  
**Type of production:** Scientific paper **Format:** Journal
- 260** N Hirata; JJ Lagref; EJ Palomares; JR Durrant; MK Nazeeruddin; M Gratzel; D Di Censo. Supramolecular control of charge-transfer dynamics on dye-sensitized nanocrystalline TiO<sub>2</sub> films. CHEMISTRY-A EUROPEAN JOURNAL. 10 - 3, pp. 595 - 602. 02/2004. ISSN 0947-6539  
**Type of production:** Scientific paper **Format:** Journal
- 261** SA Haque; E Palomares; HM Upadhyaya; L Otley; RJ Potter; AB Holmes; JR Durrant. Flexible dye sensitised nanocrystalline semiconductor solar cells. CHEMICAL COMMUNICATIONS. 24, pp. 3008 - 3009. 12/2003. ISSN 1359-7345  
**Type of production:** Scientific paper **Format:** Journal
- 262** M Alvaro; B Ferrer; H Garcia; EJ Palomares; V Balzani; A Credi; M Venturi; JF Stoddart; S Wenger. Photochemistry of a dumbbell-shaped multicomponent system hosted inside the mesopores of Al/MCM-41 aluminosilicate. Generation of long-lived viologen radicals. JOURNAL OF PHYSICAL CHEMISTRY B. 107 - 51, pp. 14319 - 14325. 12/2003. ISSN 1520-6106  
**Type of production:** Scientific paper **Format:** Journal
- 263** L Betancur-Galvis; E Palomares; JA Marco; E Estornell. Tiglliane diterpenes from the latex of Euphorbia obtusifolia with inhibitory activity on the mammalian mitochondrial respiratory chain. JOURNAL OF ETHNOPHARMACOLOGY. 85 - 2-3, pp. 279 - 282. 04/2003. ISSN 0378-8741  
**Type of production:** Scientific paper **Format:** Journal
- 264** E Palomares; JN Clifford; SA Haque; T Lutz; JR Durrant. Control of charge recombination dynamics in dye sensitized solar cells by the use of conformally deposited metal oxide blocking layers. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 125 - 2, pp. 475 - 482. 01/2003. ISSN 0002-7863  
**Type of production:** Scientific paper **Format:** Journal
- 265** P Formentin; M Alvaro; H Garcia; E Palomares; MJ Sabater. Laser flash photolysis study of azides derived from Cr(III) and Mn(III) salen complexes. NEW JOURNAL OF CHEMISTRY. 26 - 11, pp. 1646 - 1650. 11/2002. ISSN 1144-0546



**Type of production:** Scientific paper

**Format:** Journal

- 266** W Adam; H Garcia; M Diederig; V Marti; M Olivucci; E Palomares. Stereochemical memory in the temperature-dependent photodenitrogenation of bridgehead-substituted DBH-type azoalkanes: Inhibition of inverted-housane formation in the diazenyl diradical through the mass effect (inertia) and steric hindrance. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 124 - 41, pp. 12192 - 12199. 10/2002. ISSN 0002-7863

**Type of production:** Scientific paper

**Format:** Journal

- 267** M Alvaro; P Formentin; H Garcia; E Palomares; MJ Sabater. Chiral N-alkyl-2,4,6-triphenylpyridiniums as enantioselective triplet photosensitizers. Laser flash photolysis and preparative studies. JOURNAL OF ORGANIC CHEMISTRY. 67 - 15, pp. 5184 - 5189. 07/2002. ISSN 0022-3263

**Type of production:** Scientific paper

**Format:** Journal

- 268** F Marquez; V Marti; E Palomares; H Garcia; W Adam. Observation of azo chromophore fluorescence and phosphorescence emissions from DBH by applying exclusively the orbital confinement effect in siliceous zeolites devoid of charge-balancing cations. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 124 - 25, pp. 7264 - 7265. 06/2002. ISSN 0002-7863

**Type of production:** Scientific paper

**Format:** Journal

- 269** E Topoglidis; CJ Campbell; E Palomares; JR Durrant. Photoelectrochemical study of Zn cytochrome-c immobilised on a nanoporous metal oxide electrode. CHEMICAL COMMUNICATIONS. 14, pp. 1518 - 1519. Royal Society of Chemistry, 06/2002. ISSN 1359-7345

**Type of production:** Scientific paper

**Format:** Journal

- 270** E Palomares; JN Clifford; SA Haque; T Lutz; JR Durrant. Slow charge recombination in dye-sensitised solar cells (DSSC) using Al<sub>2</sub>O<sub>3</sub> coated nanoporous TiO<sub>2</sub> films. CHEMICAL COMMUNICATIONS. 14, pp. 1464 - 1465. Royal Society of Chemistry, 06/2002. ISSN 1359-7345

**Type of production:** Scientific paper

**Format:** Journal

- 271** A Corma; MS Galletero; H Garcia; E Palomares; F Rey. Pyrene covalently anchored on a large external surface area zeolite as a selective heterogeneous sensor for iodide. CHEMICAL COMMUNICATIONS. 10, pp. 1100 - 1101. Royal Society of Chemistry, 04/2002. ISSN 1359-7345

**Type of production:** Scientific paper

**Format:** Journal

- 272** B de Castro; R Ferreira; C Freire; H Garcia; EJ Palomares; MJ Sabater. Photochemistry of nickel salen based complexes and relevance to catalysis. NEW JOURNAL OF CHEMISTRY. 26 - 4, pp. 405 - 410. Royal Society of Chemistry, 03/2002. ISSN 1144-0546

**Type of production:** Scientific paper

**Format:** Journal

- 273** M Alvaro; H Garcia; E Palomares; R Achour; A Moussaif; R Zniber. A bis-benzimidazole-derived N, S macrocycle as sensor for transition metal ions in aqueous solution. CHEMICAL PHYSICS LETTERS. 350 - 3-4, pp. 240 - 246. 12/2001. ISSN 0009-2614

**Type of production:** Scientific paper

**Format:** Journal

- 274** A Corma; MJ Diaz-Cabanas; H Garcia; E Palomares. Characterization of germanium site distribution in zeolite ITQ-7 by photoluminescence. CHEMICAL COMMUNICATIONS. 20, pp. 2148 - 2149. Royal Society of Chemistry, 10/2001. ISSN 1359-7345

**Type of production:** Scientific paper

**Format:** Journal

- 275** F Marquez; CM Zicovich-Wilson; A Corma; E Palomares; H Garcia. Naphthalene included within all-silica zeolites: Influence of the host on the naphthalene photophysics. JOURNAL OF PHYSICAL CHEMISTRY B. 105 - 41, pp. 9973 - 9979. 10/2001. ISSN 1089-5647

**Type of production:** Scientific paper

**Format:** Journal





- 276** MJ Sabater; M Alvaro; H Garcia; E Palomares; JC Scaiano. Laser flash photolysis study of Jacobsen catalyst and related manganese(III) salen complexes. Relevance to catalysis. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 123 - 29, pp. 7074 - 7080. 07/2001. ISSN 0002-7863  
**Type of production:** Scientific paper **Format:** Journal
- 277** H Garcia; JML Nieto; E Palomares; B Solsona. Photoluminescence of supported vanadia catalysts: linear correlation between the vanadyl emission wavelength and the isoelectric point of the oxide support. CATALYSIS LETTERS. 69 - 3-4, pp. 217 - 221. Springer Link, 11/2000. ISSN 1011-372X  
**Type of production:** Scientific paper **Format:** Journal
- 278** A Corma; H Garcia; MT Navarro; EJ Palomares; F Rey. Observation of a 390-nm emission band associated with framework Ti in mesoporous titanosilicates. CHEMISTRY OF MATERIALS. 12 - 10, pp. 3068 - 3072. 10/2000. ISSN 0897-4756  
**Type of production:** Scientific paper **Format:** Journal
- 279** A Corma; M Crocker; H Garcia; E Palomares. Photoluminescence of titanosilsesquioxanes in solution and its relevance for the understanding of the emission of titanosilicates. CHEMPHYSCHEM. 1 - 2, pp. 93+ - 93+. 09/2000. ISSN 1439-4235  
**Type of production:** Scientific paper **Format:** Journal
- 280** F Marquez; H Garcia; E Palomares; L Fernandez; A Corma. Spectroscopic evidence in support of the molecular orbital confinement concept: Case of anthracene incorporated in zeolites. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. 122 - 27, pp. 6520 - 6521. 07/2000. ISSN 0002-7863  
**Type of production:** Scientific paper **Format:** Journal
- 281** JA Marco; JF Sanz-Cervera; J Checa; E Palomares; BM Fraga. Jatrophane and tiglane diterpenes from the latex of Euphorbia obtusifolia. PHYTOCHEMISTRY. 52 - 3, pp. 479 - 485. 10/1999. ISSN 0031-9422  
**Type of production:** Scientific paper **Format:** Journal
- 282** Emilio Palomares; Núria F. Montcada; María Méndez; Jesús Jiménez-López; Wenxing Yang; Gerrit Boschloo. Photovoltage/photocurrent transient techniques. CHARACTERIZATION TECHNIQUES FOR PEROVSKITE SOLAR CELL MATERIALS. pp. 161 - 180. ELSEVIER, 01/2020.  
**Type of production:** Book chapter **Format:** Book
- 283** Lydia Cabau; JohnN. Clifford; Emilio Palomares. 2: Porphyrins in Molecular Solar Cells. Bioinspired Chemistry From Enzymes to Synthetic Models. 5, pp. 19 - 46. World Scientific, 05/2019.  
**Type of production:** Book chapter

### Works submitted to national or international conferences

- 1** **Title of the work:** The Contact Makes the Device: Molecules that Rule the Solar Cells Efficiency.  
**Name of the conference:** #NanoSeries2024: 3rd Annual Nanotechnology Conference  
**City of event:** Lisboa, Portugal  
**Date of event:** 17/06/2024  
**End date:** 19/06/2024  
**Organising entity:** Instituto Superior Técnico (IST, University of Lisbon)
- 2** **Title of the work:** Self-assembled molecules as a selective contact for molecular photovoltaics  
**Name of the conference:** ESEMA workshop (Emerging Solar Energy Materials & Applications)  
**City of event:** Virtual, France



**Date of event:** 27/05/2024  
**End date:** 31/05/2024  
**Organising entity:** Scienceconf

- 3** **Title of the work:** Molecular photovoltaic devices: The Central Role of Chemistry.  
**Name of the conference:** 6th International Conference on Hybrid and Organic Photovoltaics (HOPV)  
**City of event:** València, Valencian Community, Spain  
**Date of event:** 13/05/2024  
**End date:** 15/05/2024  
**Organising entity:** nanoGe Conferences / Scito
- 4** **Title of the work:** Organizer  
**Name of the conference:** The Future of Hydrogen: Science, Applications and Energy Transition  
**City of event:** Ibiza, Balearic Islands, Spain  
**Date of event:** 17/04/2024  
**End date:** 19/04/2024  
**Organising entity:** nanoGe Conferences / Scito
- 5** **Title of the work:** Advanced Spectroscial Characterization of CO2 conversion  
**Name of the conference:** MATSUS Spring 2024 (Advances in Photo-driven Energy Conversion and Storage: From Nanoscale Materials to Sustainable Solutions symposium)  
**City of event:** Barcelona, Catalonia, Spain  
**Date of event:** 06/03/2024  
**End date:** 06/03/2024  
**Organising entity:** nanoGe Conferences / Scito
- 6** **Title of the work:** Molecular photovoltaic devices: The Central Role of Chemistry  
**Name of the conference:** 16th International Conference on Organic Electronics (ICOE2023)  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 04/07/2023  
**End date:** 07/07/2023  
**Organising entity:** Facultad de Física, Universidad Complutense de Madrid **Type of entity:** University  
**City organizing entity:** Madrid, Community of Madrid, Spain
- 7** **Title of the work:** Molecular solar cells: From Dyes to Hybrid Semiconductors  
**Name of the conference:** NanoSpain Conference 2023  
**City of event:** Tarragona, Catalonia, Spain  
**Date of event:** 25/04/2023  
**End date:** 25/04/2023  
**Organising entity:** The Phantoms Foundation
- 8** **Title of the work:** #STECH – Sustainable Technology Forum  
**Name of the conference:** MATSUS23: Materials for Sustainable Development Conference & Sustainable Technology Forum  
**City of event:** Valencia, Valencian Community, Spain  
**Date of event:** 08/03/2023  
**End date:** 08/03/2023  
**Organising entity:** nanoGe Conferences / Scito



- 9** **Title of the work:** Self assembling molecules as selective contacts in efficient and stable perovskite solar cells  
**Name of the conference:** New Horizons in Photovoltaic Technologies Using Organic Materials  
**City of event:** Virtual, United Kingdom  
**Date of event:** 21/02/2023  
**End date:** 21/02/2023  
**Organising entity:** Loughborough University      **Type of entity:** University
- 10** **Title of the work:** Molecular Solar Cells. From Dyes to Hybrid Semiconductors  
**Name of the conference:** SHIFT 2022-Spectral s-HapIng for biomedical and energy applicaTions  
**City of event:** Tenerife, Canary Islands, Spain  
**Date of event:** 13/10/2022  
**End date:** 13/10/2022  
**Organising entity:** Universidad de La Laguna      **Type of entity:** University  
**City organizing entity:** Tenerife, Canary Islands, Spain  
Emilio Palomares.
- 11** **Title of the work:** Water splitting using wired perovskite tandem solar cells and molecular catalysts  
**Name of the conference:** E-MRS 2022 Spring Meeting Conference  
**City of event:** Virtual,  
**Date of event:** 02/06/2022  
**End date:** 02/06/2022  
**Organising entity:** European Materials Research Society  
**City organizing entity:** Estrasburgo, France  
Emilio Palomares.
- 12** **Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the conference:** Hybrid & Organic Photovoltaics International Conference HOPV22  
**City of event:** Valencia, Valencian Community, Spain  
**Date of event:** 23/05/2022  
**End date:** 23/05/2022  
**Organising entity:** nanoGe Conferences / Scito  
**City organizing entity:** Valencia, Valencian Community, Spain  
Emilio Palomares.
- 13** **Title of the work:** The Role of Interfaces on Perovskite Solar Cell Performance  
**Name of the conference:** 2022 Gordon Research Conference on “Hybrid Electronic and Photonic Materials and Phenomena.”  
**City of event:** Castelldefels, Catalonia, Spain  
**Date of event:** 15/05/2022  
**End date:** 15/05/2022  
**Organising entity:** Gordon Research Conferences
- 14** **Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the conference:** 2nd Meeting Red MODE Photovoltaic  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 27/04/2022  
**End date:** 27/04/2022  
**Organising entity:** IMDEA-Nanoscience Institute  
**City organizing entity:** Madrid, Community of Madrid, Spain  
Emilio Palomares.



- 15** **Title of the work:** From Molecules to Energy Conversion Devices: A Spectroscopy Journey  
**Name of the conference:** 4th "Hetero-elements and Coordination Chemistry: from Concepts to Applications" (HC3A) Meeting  
**City of event:** Virtual, Spain  
**Date of event:** 20/01/2022  
**End date:** 20/01/2022  
**Organising entity:** Universitat de Barcelona  
**Type of entity:** University  
Emilio Palomares.
- 16** **Title of the work:** Understanding the perovskite/self-assembled selective contact interface for ultra-stabñe p-i-n and highly efficient perovskite solar cells  
**Name of the conference:** XIX Brazil MRS Meeting & International Union of Materials Research Societies – International Conference on Electronic Materials (IUMRS-ICEM 2021)  
**City of event:** Virtual, Brazil  
**Date of event:** 02/09/2021  
**End date:** 02/09/2021  
**Organising entity:** Brazilian Materials Research Society (SBPMat)  
**City organizing entity:** Rio de Janeiro, Brazil  
Emilio Palomares.
- 17** **Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the conference:** Invited talk to University of Erlangen (Webinar)  
**City of event:** Erlangen, Germany  
**Date of event:** 07/06/2021  
**End date:** 07/06/2021  
**Organising entity:** University of Erlangen  
**City organizing entity:** Erlangen, Germany
- 18** **Title of the work:** Molecular Selective Contacts in Perovskite Solar Cells  
**Name of the conference:** Online Conference Organic Materials in Perovskite-based Optoelectronic Devices (OrgMatPerPV)  
**City of event:** Spain  
**Date of event:** 29/04/2021  
**End date:** 30/04/2021  
**Organising entity:** nanoGe Conferences / Scito
- 19** **Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the conference:** IN2UB INTERNATIONAL RESEARCH SEMINAR  
**City of event:** Tarragona (Virtual), Catalonia, Spain  
**Date of event:** 25/03/2021  
**End date:** 25/03/2021  
**Organising entity:** Institute of Nanoscience and Nanotechnology of the University of Barcelona  
**City organizing entity:** Barcelona, Catalonia, Spain
- 20** **Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the conference:** Small Chem International Online Conference  
**City of event:** Spain  
**Date of event:** 17/02/2021  
**End date:** 18/02/2021  
**Organising entity:** The Phantoms Foundation



**City organizing entity:** Virtual, Spain

- 21** **Title of the work:** Molecular solar cells: from polymers to molecules and hybrid materials  
**Name of the conference:** Online workshop "The Future of Renewable Energy in Scotland and Spain"  
**City of event:** Virtual,  
**Date of event:** 26/11/2020  
**End date:** 26/11/2020  
**Organising entity:** The University of Edinburgh      **Type of entity:** University  
**City organizing entity:** Edinburgh, United Kingdom  
Emilio Palomares.
- 22** **Title of the work:** Energy, sustainability and chemistry  
**Name of the conference:** NanotechExpo2020 and 1&2D Materials International Conference and Exhibition  
**City of event:** Virtual, Japan  
**Date of event:** 28/01/2020  
**End date:** 28/01/2020  
**Organising entity:** The Phantoms Foundation & The Institut Catala de Nanociencia I Nanotecnologia (ICN2)  
**City organizing entity:** Spain  
Emilio Palomares.
- 23** **Title of the work:** Seminarios de Master englobados dentro del Programa Master ChemBio&Mat USC  
**Name of the conference:** Master ChemBio&Mat; Centro Singular de Investigación en Química Biológica y Materiales Moleculares (CIQUS) de la Universidade de Santiago de Compostela  
**City of event:** Santiago de Compostela, Spain  
**Date of event:** 12/11/2019  
**End date:** 14/11/2019  
**Organising entity:** Universidade de Santiago de Compostela  
Emilio Palomares.
- 24** **Title of the work:** Carrier Recombination and Ion Migration: Role of the Contacts.  
**Name of the conference:** NGMF19 NanoGe Fall Meeting Berlin  
**City of event:** Berlin, Germany  
**Date of event:** 04/11/2019  
**End date:** 08/11/2019  
**Organising entity:** nanoGe Conferences / Scito
- 25** **Title of the work:** Molecular Solar Cells Efficiency Losses Under Operando Conditions  
**Name of the conference:** Invited talks Trinity College Dublin  
**City of event:** Dublin, Ireland  
**Date of event:** 02/10/2019  
**End date:** 04/10/2019  
**Organising entity:** Trinity College Dublin
- 26** **Title of the work:** Carrier Recombination and Ion migration Processes in Efficient Perovskite Solar Cells  
**Name of the conference:** Research Network Perovskites for Solar Energy Conversion and Optoelectronics  
**City of event:** Madrid, Spain  
**Date of event:** 27/09/2019  
**End date:** 27/09/2019  
**Organising entity:** Institute of Advanced Materials UJI Castelló



- 27** **Title of the work:** Non conventional solar cells for water oxidation  
**Name of the conference:** International Bunsen-Discussion-Meeting  
**City of event:** Taormina, Italy  
**Date of event:** 01/04/2019  
**End date:** 05/04/2019  
**Organising entity:** Deutsche Bunsen-Gesellschaft für physikalische Chemie e.V. (DBG)
- 28** **Title of the work:** Perovskite Solar Cells  
**Name of the conference:** International Workshop & Conference on Perovskite & Hybrid Photovoltaics  
**City of event:** New Delhi, India  
**Date of event:** 04/02/2019  
**End date:** 09/02/2019  
**Organising entity:** Centre For Energy Studies, IIT Delhi
- 29** **Title of the work:** Energy Alignment and Recombination in Perovskite Solar Cells: Weighted Influence on the Open Circuit Voltage  
**Name of the conference:** II Meeting of the Spanish Photovoltaic Excellence Network  
**City of event:** Madrid, Spain  
**Date of event:** 24/01/2019  
**End date:** 25/01/2019  
**Organising entity:** IMDEA
- 30** **Title of the work:** Going Slow to Go Far: A Scientific Journey To Power the World" and "A scientist life: and It Seems Like Yesterday To Me"  
**Name of the conference:** Invited talk at UAM: XIV Yearly Cycle of Thematic Conferences 2018: "Nanoscience and Molecular Materials"  
**City of event:** Madrid, Spain  
**Date of event:** 18/12/2018  
**End date:** 18/12/2018  
**Organising entity:** Universidad Autónoma de Madrid **Type of entity:** University
- 31** **Title of the work:** Photo-induced charge recombination kinetics in hybrid lead perovskite solar cells  
**Name of the conference:** 1st International Conference on NanoTechnologies and Bionanoscience (NanoBio 2018)  
**City of event:** Heraklion, Crete, Greece  
**Date of event:** 24/09/2018  
**End date:** 28/09/2019  
**Organising entity:** TEI of Crete and FORTH
- 32** **Title of the work:** Solar cell materials: efficiency and stability issues; Discussion pannel  
**Name of the conference:** Scientific meeting : Materials challenges for sustainable energy technologies >The Royal Society at Chicheley Hall  
**City of event:** Chicheley, Buckinghamshire, United Kingdom  
**Date of event:** 19/09/2018  
**End date:** 20/09/2019  
**Organising entity:** The Royal Society London
- 33** **Title of the work:** Materials for energy conversion : Photovoltaics II (organic/hybrid PV materials & devices)  
**Name of the conference:** MATENER 2018: Severo Ochoa Summer School in Materials for Energy /Institut de Ciència de Materials de Barcelona (ICMAB-CSIC)  
**City of event:** Barcelona, Spain



**Date of event:** 17/09/2018  
**End date:** 17/09/2018  
**Organising entity:** ICMA/Severo Ochoa

- 34** **Title of the work:** Dialogues on the boundaries of knowledge Biosensors for diagnostics  
**Name of the conference:** Keynote speaker at 2018 BIST Conference  
**City of event:** Barcelona, Spain  
**Date of event:** 27/06/2018  
**End date:** 27/06/2018  
**Organising entity:** BIST (The Barcelona Institute of Science and Technology)
- 35** **Title of the work:** Conference Organizer & chair  
**Name of the conference:** Conference Organizer of 10th International Conference on Hybrid and Organic Photovoltaics (HOPV18)  
**City of event:** Benidorm, Spain  
**Date of event:** 28/05/2018  
**End date:** 31/05/2018  
**Organising entity:** nanoGe Conferences / Scito
- 36** **Title of the work:** Non Conventional Solar Cells: Need of New Techniques for New Devices  
**Name of the conference:** Invited talk at Chalmers University of Technology  
**City of event:** Goteborg, Sweden  
**Date of event:** 26/04/2018  
**End date:** 26/04/2018  
**Organising entity:** Chalmers University of Technology
- 37** **Title of the work:** Walking slow to go far: the slow road towards molecular photovoltaics  
**Name of the conference:** Charla en la UAM  
**City of event:** Madrid, Spain  
**Date of event:** 14/11/2017  
**End date:** 14/11/2017  
**Organising entity:** Universidad Autónoma de Madrid
- 38** **Title of the work:** Carrier Recombination Kinetics at the Perovskite/Selective Contacts Interfaces  
**Name of the conference:** 3rd International Conference on Perovskite Solar Cells and Optoelectronics (PSCO17)  
**City of event:** Oxford, United Kingdom  
**Date of event:** 18/09/2017  
**End date:** 20/09/2017  
**Organising entity:** University of Oxford
- 39** **Title of the work:** Organizer of: "SF2: Solution Processed Innovative Solar Cells"  
**Name of the conference:** NanoGe September Meeting  
**City of event:** Barcelona, Spain  
**Date of event:** 04/09/2017  
**End date:** 08/09/2017  
**Organising entity:** nanoGe Conferences / Scito
- 40** **Title of the work:** Coordinador en el Simposio" S2.Materiales Orgánicos Optoelectronicos para Conversión de Energía"  
**Name of the conference:** XXXVI Reunión Bienal de la Real Sociedad Española de Química



**City of event:** Sitges, Spain  
**Date of event:** 26/06/2017  
**Organising entity:** RSEQ

- 41 Title of the work:** Invited Speaker en el SISF2017  
**Name of the conference:** The 6th Sungkyun International Solar Forum 2017  
**City of event:** Seoul, Republic of Korea  
**Date of event:** 14/06/2017  
**Organising entity:** Sungkyunkwan University
- 42 Title of the work:** Carrier recombination in perovskite solar cells  
**Name of the conference:** 10th European School on Molecular Nanoscience (ESMolNa2017)  
**City of event:** Madrid, Spain  
**Date of event:** 08/05/2017  
**Organising entity:** ICMOL
- 43 Title of the work:** Perovskite solar cells  
**Name of the conference:** Meeting at ITT ( Milan)  
**City of event:** Milan, Italy  
**Date of event:** 04/05/2017  
**Organising entity:** Center for Nano Science and Technology @Polimi Istituto Italiano di Tecnologia
- 44 Title of the work:** Non-conventional solar cells: new techniques for new solar cell devices  
**Name of the conference:** Charla en Institut de Ciència de Materials de Barcelona  
**City of event:** Barcelona, Spain  
**Date of event:** 24/04/2017  
**Organising entity:** ICMAB
- 45 Title of the work:** 1st Workshop on Future Emerging Technologies for Low Carbon Energy Supply  
**Name of the conference:** Joint Research Center ( Ispra-Italy)  
**City of event:** Ispra, Italy  
**Date of event:** 30/11/2016  
**End date:** 01/12/2016  
**Organising entity:** Comisión Europea  
**Type of entity:** European Commission/EU SCIENCE HUB  
**City organizing entity:** Ispra, Italy
- 46 Title of the work:** Nous materials per a fotovoltaica: Entre la química i la física  
**Name of the conference:** Conferencia en la UIB (Palma de Mallorca)  
**City of event:** Palma de Mallorca, Balearic Islands, Spain  
**Date of event:** 25/11/2016  
**End date:** 25/11/2016  
**Organising entity:** UIB  
**Type of entity:** University  
**City organizing entity:** Palma de Mallorca,
- 47 Title of the work:** Photo-induced charge recombination kinetics in hybrid lead perovskite solar cells  
**Name of the conference:** ORGANIC & PEROVSKITE SOLAR CELLS CONFERENCE AND MC/WG MEETINGS OF COST ACTION MP1307  
**City of event:** Heraklion, Creta, Greece  
**Date of event:** 19/10/2016  
**End date:** 21/10/2016





**Organising entity:** TEI of Crete

- 48** **Title of the work:** Photo-induced Time Resolved Spectroscopy for the Determination of Carrier Density, Charge Recombination and Efficiency Losses in Perovskite solar cells  
**Name of the conference:** European Optical Society Annual Meeting (EOSAM) 2016  
**City of event:** Berlin, Germany  
**Date of event:** 26/09/2016  
**End date:** 30/09/2016  
**Organising entity:** European Optical Society
- 49** **Title of the work:** Photo-induced Carrier Recombination Kinetics in Mixed Halide Perovskite Solar Cells  
**Name of the conference:** E-MRS 2016 FALL  
**Type of event:** Conference  
**City of event:** Varsovia, Poland  
**Date of event:** 19/09/2016  
**End date:** 22/09/2016  
**Organising entity:** Warsaw University of Technology
- 50** **Title of the work:** Go Slow to Go Far: Learning About MAPI Solar Cells  
**Name of the conference:** The International Conference on Hybrid and Organic Photovoltaics (HOVP16)  
**City of event:** Swansea, United Kingdom  
**Date of event:** 28/06/2016  
**End date:** 01/07/2016  
**Organising entity:** nanoGe Conferences / Scito
- 51** **Title of the work:** Third generation photovoltaics: Analysis of efficiency Losses  
**Name of the conference:** Solar Energy Conversion  
**City of event:** Valencia, Spain  
**Date of event:** 20/05/2016  
**End date:** 20/05/2016  
**Organising entity:** Instituto de Tecnología Química. CSIC-Universidad Politécnica de Valencia
- 52** **Title of the work:** Going slowly to go far: Learning About Perovskite Based Solar Cells  
**Name of the conference:** Seminar at ITT -Istituto Italiano di Tecnologia  
**City of event:** Milan, Italy  
**Date of event:** 10/03/2016  
**Organising entity:** ITT Center for Nano Science and Technology @Polimi Istituto Italiano di Tecnologia
- 53** **Title of the work:** Inorganic Nanoparticles for the Construction of Solution Processed Perovskite-based Solar Cells  
**Name of the conference:** Conference chair at International Conference on Perovskite Thin Film Photovoltaics (ABXPV)  
**City of event:** Barcelona, Catalonia, Spain  
**Date of event:** 03/03/2016  
**End date:** 04/03/2016  
**Organising entity:** nanoGe Conferences / Scito
- 54** **Title of the work:** Go Slow to Go Far: Learning About MAPI Solar Cells  
**Name of the conference:** Invitation to National Institute for Materials Science (NIMS) and talk in International Center for Young Scientists (ICYS)  
**City of event:** Tsukuba, Ibaraki Prefecture, Japan



**Date of event:** 20/02/2016

**End date:** 27/02/2016

**Organising entity:** NIMS - National Institute for Materials Science

- 55** **Title of the work:** Inorganic-Organic Heterojunctions in Nanocrystals Based Photonic Devices for Energy Conversion  
**Name of the conference:** 225th ECS Meeting  
**City of event:** Orlando, United States of America  
**Date of event:** 11/05/2015  
**End date:** 15/05/2015  
**Organising entity:** The Electrochemical Society (ECS)  
**City organizing entity:** New Jersey,
- 56** **Title of the work:** Solution Processed Inorganic and Organic Materials for Device Applications  
**Name of the conference:** Invited Seminar at IMDEA  
**Date of event:** 2015  
**End date:** 2015  
**Organising entity:** IMDEA
- 57** **Title of the work:** Photo-induced interfacial charge transfer reactions in double heterojunction solar cells  
**Name of the conference:** International Conference Solution processed Semiconductor Solar Cells (SSSC14)  
**City of event:** Oxford, United Kingdom  
**Date of event:** 10/09/2014  
**Organising entity:** nanoGe Conferences / Scito  
**City organizing entity:** Valencia, Valencian Community, Spain
- 58** **Title of the work:** Photo-redox reactions in Ruthenium Complexes Used as Sensitizers in PhotoElectrochemical Dye Sensitized Solar Cells  
**Name of the conference:** Electrochem 2014  
**City of event:** Loughborough, United Kingdom  
**Date of event:** 07/09/2014  
**Organising entity:** Loughborough University
- 59** **Title of the work:** Nuevas moléculas orgánicas para fotovoltaica  
**Name of the conference:** Universidad Complutense de Madrid  
**Date of event:** 2014  
**End date:** 2014  
**Organising entity:** Universidad Complutense de Madrid      **Type of entity:** University
- 60** **Title of the work:** Nanocrystals and organic materials for energy conversion: New concepts for old challenges  
**Name of the conference:** 2nd international congress "Next Generation Solar Energy"  
**City of event:** Erlangen, Germany  
**Date of event:** 08/12/2013  
**End date:** 12/12/2013  
Emilio Palomares Gil.



- 61** **Title of the work:** Quantum Photoelectricity  
**Name of the conference:** E2KW Congress 2013, Energy and Environmental Knowledge week  
**City of event:** Toledo, Spain  
**Date of event:** 20/11/2013  
**End date:** 23/11/2013  
Emilio Palomares Gil.
- 62** **Title of the work:** Fullerene functionalized quantum dot/P3HT bulk-heterojunction solar cells  
**Name of the conference:** HOPV-13  
**City of event:** Sevilla, Andalusia, Spain  
**Date of event:** 05/05/2013  
**End date:** 09/05/2013  
Emilio Palomares Gil.
- 63** **Title of the work:** Layered Double Hydroxides as Carriers for Quantum Dots@silica Nanospheres  
**Name of the conference:** Layered Double Hydroxides as Carriers for Quantum Dots@silica Nanospheres  
**City of event:** San Francisco, United States of America  
**Date of event:** 01/02/2013  
**End date:** 06/02/2013  
Emilio Palomares Gil.
- 64** **Title of the work:** Recent Advances on Cobalt Based Dye Sensitized Solar Cells  
**Name of the conference:** DSC-OPV7  
**City of event:** Taipei, Taiwan  
**Date of event:** 26/10/2012  
**End date:** 29/10/2012  
Emilio Palomares Gil.
- 65** **Title of the work:** Small Molecules for Organic Solar Cells  
**Name of the conference:** The 8th International Conference On Organics Electronics  
**City of event:** Tarragona, Spain  
**Date of event:** 25/06/2012  
**End date:** 25/06/2012  
Emilio Palomares.
- 66** **Title of the work:** SPIE Photonics Europe 2012 | Photonics, Optics, Lasers, Micro- Nanotechnologies Research  
**Name of the conference:** SPIE Photonics Europe 2012 | Photonics, Optics, Lasers, Micro- Nanotechnologies Research  
**City of event:** Bruselas, Belgium  
**Date of event:** 15/04/2012  
**End date:** 19/04/2012  
Emilio Palomares.
- 67** **Title of the work:** Analysing Efficiency Losses in Molecular Solar Cells  
**Name of the conference:** Excitonic Solar Cells Workshop  
**City of event:** Diablerets, Switzerland  
**Date of event:** 12/03/2012  
**End date:** 15/03/2012  
Emilio Palomares.



- 68** **Title of the work:** Challenges for the XXI Century: An Overview about DSSC.  
**Name of the conference:** VIII International Krutyn Summer School 2011. Frontiers in Organic, Dye-Sensitized and Hybrid Solar Cells  
**City of event:** Krutyn, Polonia, Poland  
**Date of event:** 2011  
Emilio Palomares. 2011.
- 69** **Title of the work:** Charge transfer reactions in organic solar cells  
**Name of the conference:** Esmolna 2011  
**City of event:** El Escorial. Madrid, Spain  
**Date of event:** 2011  
**End date:** 2011  
Emilio Palomares. 2011.
- 70** **Title of the work:** Interfacial Charge Transfer Dynamics in Organic Solar Cells.  
**Name of the conference:** Symposium on Carbon Nanoforms  
**City of event:** Toledo, España,  
**Date of event:** 2011  
Emilio Palomares. 2011.
- 71** **Title of the work:** Molecular Photovoltaic Devices. Can We Do Better than Silicon?  
**Name of the conference:** V Congreso REQOMED  
**City of event:** Cádiz, Spain  
**Date of event:** 2011  
Emilio Palomares. 2011.
- 72** **Title of the work:** Molecular Photovoltaic Devices: Molecular Structure vs Device Efficiency Relationship.  
**Name of the conference:** ICCES (Conference on Clean Energy Science)  
**City of event:** Dalian, China  
**Date of event:** 2011  
**End date:** 2011  
Emilio Palomares. 2011.
- 73** **Title of the work:** Advanced on Organic Solar Cells  
**Name of the conference:** HOPE  
**City of event:** Tarragona, España,  
**Date of event:** 2010  
Emilio Palomares. 2010.
- 74** **Title of the work:** Charge Recombination Dynamics at the Nanoscale in Molecular PV  
**Name of the conference:** HOPV  
**City of event:** Assisi. Italy,  
**Date of event:** 2010  
Emilio Palomares. 2010.
- 75** **Title of the work:** Charge Transfer Reactions in Dye Sensitized Solar Cells  
**Name of the conference:** HOPV-Israel  
**City of event:** Jerusalem, Israel,  
**Date of event:** 2010  
Emilio Palomares. 2010.



- 76** **Title of the work:** Design of Efficient Organic Deys  
**Name of the conference:** ROBUST meeting  
**City of event:** Freiburg,  
**Date of event:** 2010  
Emilio Palomares. 2010.
- 77** **Title of the work:** Molecular Photovoltaics: The Chemistry Road  
**Name of the conference:** DEEA-Universidad Rovira i Virgili de Tarragona  
**City of event:** Tarragona, Spain  
**Date of event:** 2010  
**End date:** 2010  
Emilio Palomares. 2010.
- 78** **Title of the work:** Molecular Solar Cells at ICIQ  
**Name of the conference:** Launching the Nanofutures European Initiative  
**City of event:** Gijón, España,  
**Date of event:** 2010  
Emilio Palomares. 2010.
- 79** **Title of the work:** Molecular Structure-Device Function Relationship  
**Name of the conference:** Burgenstok  
**City of event:** Brunen. Switzerland,  
**Date of event:** 2010  
Emilio Palomares. 2010.
- 80** **Title of the work:** Organic Solar Cells  
**Name of the conference:** Conference in Partnership with LFUI on Nanotechnology for Sustainable Energy.  
**City of event:** Obergurgl. Austria,  
**Date of event:** 2010  
Emilio Palomares. 2010.
- 81** **Title of the work:** Células solares orgánicas y moleculares  
**Name of the conference:** Energía Solar Fotovoltaica: Innovación y Tecnologías  
**City of event:** Madrid, España,  
**Date of event:** 2009  
Emilio Palomares. 2009.
- 82** **Title of the work:** Hybrid and Organic Photovoltaic Devices  
**Name of the conference:** HOPV conference  
**City of event:** Benidorm, España,  
**Date of event:** 2009  
Emilio Palomares. 2009.
- 83** **Title of the work:** Las nuevas perspectivas de la energía solar fotovoltaica  
**Name of the conference:** Master ITE  
**City of event:** Valencia, España,  
**Date of event:** 2009  
Emilio Palomares. 2009.



- 84** **Title of the work:** Molecular Photovoltaic Devices: New Opportunities to solve light to energy conversion problems  
**Name of the conference:** Basic research science seminars at the UCLM  
**City of event:** Toledo, España,  
**Date of event:** 2009  
Emilio Palomares. 2009.
- 85** **Title of the work:** Organic Photovoltaic and small molecule devices  
**Name of the conference:** ISOPHOS09  
**City of event:** Castellón, España,  
**Date of event:** 2009  
Emilio Palomares. 2009.
- 86** **Title of the work:** Transferencia de carga en dispositivos fotovoltaicos  
**Name of the conference:** Escuela de Materiales 2009  
**City of event:** Elche, España,  
**Date of event:** 2009  
Emilio Palomares. 2009.
- 87** **Title of the work:** Advances on Molecular Photovoltaic Devices  
**Name of the conference:** IPS-17  
**City of event:** Melbourne, Australia,  
**Date of event:** 2008  
Emilio Palomares. 2008.
- 88** **Title of the work:** Charge Recombination Reactions in polymer/nanocrystalline solar cells  
**Name of the conference:** OrgaPVNet Conference  
**City of event:** Warwick, UK,  
**Date of event:** 2008  
Emilio Palomares. 2008.
- 89** **Title of the work:** Development of Dye Sensitized Solar cells devices. New Insights on PV  
**Name of the conference:** Photovoltaic Meeting at Imperial College of London  
**City of event:** Londres, UK,  
**Date of event:** 2008  
Emilio Palomares. 2008.
- 90** **Title of the work:** Dye Sensitized Solar Cells: The control of the charge transfer reactions that limit the device performance  
**Name of the conference:** International Photovoltaic Conference  
**City of event:** Valencia, España,  
**Date of event:** 2008  
Emilio Palomares. 2008.
- 91** **Title of the work:** Modern chemical techniques for light harvesting  
**Name of the conference:** ERA-NET Conference  
**City of event:** El Escorial, España,  
**Date of event:** 2008  
Emilio Palomares. 2008.



- 92** **Title of the work:** Molecular Photovoltaic Devices  
**Name of the conference:** Meeting-Research Conference at Repsol SA facilities – CENIT Mediodia  
**City of event:** Madrid, España,  
**Date of event:** 2008  
Emilio Palomares. 2008.
- 93** **Title of the work:** Molecular Photovoltaic Devices: New Materials for the conversión of sun light into energy  
**Name of the conference:** Invited Lecture at ICIQ  
**City of event:** Tarragona, España,  
**Date of event:** 2008  
Emilio Palomares. 2008.
- 94** **Title of the work:** New Materials for Hybrid Photovoltaic Devices  
**Name of the conference:** Joint ICTP-KFAS Workshop on Nanoscience for Solar Energy Conversion  
**City of event:** Trieste, Italia,  
**Date of event:** 2008  
Emilio Palomares. 2008.

### Works submitted to national or international seminars, workshops and/or courses

- 1** **Title of the work:** Sun, electrons and electricity  
**Name of the event:** Campus Físicomatemàtic d'Estiu URV 2024  
**City of event:** Tarragona, Catalonia, Spain  
**Date of event:** 27/06/2024  
**End date:** 27/06/2024  
**Organising entity:** Universitat Rovira i Virgili **Type of entity:** University
- 2** **Title of the work:** Discussion Panel  
**Name of the event:** Ciclo de conferencias: ¿Qué sabes del último premio nobel?  
**City of event:** Zaragoza, Aragon, Spain  
**Date of event:** 01/02/2024  
**End date:** 01/02/2024  
**Organising entity:** Real Sociedad Española de Química de Aragón
- 3** **Title of the work:** Molecular photovoltaic devices: The Central Role of Chemistry  
**Name of the event:** Echegoyen International Symposium on Solid State Chemistry for Sustainable Development (2nd Intl. Symp.) - SIPS 2023  
**City of event:** Playa Bonita, Panama  
**Date of event:** 27/11/2023  
**End date:** 02/12/2023
- 4** **Title of the work:** Maximizing Your Potential: Career Advice for Post-PhD graduation  
**Name of the event:** Durrant Group Reunion  
**City of event:** London, United Kingdom  
**Date of event:** 16/06/2023  
**End date:** 16/06/2023  
**Organising entity:** Imperial College London



- 5** **Title of the work:** "De la quàntica a les cel·les fotovoltaiques moleculars: El paper central de la Química"  
**Name of the event:** UAB Seminar Program  
**City of event:** Bellaterra, Catalonia, Spain  
**Date of event:** 21/03/2023  
**End date:** 21/03/2023  
**Organising entity:** Universitat Autònoma de Barcelona  
**Type of entity:** University
- 6** **Title of the work:** The energy transition: from photon to renewable hydrogen to decarbonize the industry  
**Name of the event:** 2023 Conference Series  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 02/03/2023  
**End date:** 02/03/2023  
**Organising entity:** Fundación Ramón Areces  
**Type of entity:** Foundation
- 7** **Title of the work:** Mapping the Unexplored: The Interface is the Device  
**Name of the event:** Seminar Program  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 21/10/2022  
**End date:** 21/10/2022  
**Organising entity:** Institute of Advanced Materials
- 8** **Title of the work:** Sun, electrons and electricity  
**Name of the event:** Campus Físicomatemàtic d'Estiu URV 2022  
**City of event:** Tarragona, Catalonia, Spain  
**Date of event:** 30/06/2022  
**End date:** 30/06/2022  
**Organising entity:** Universitat Rovira i Virgili  
**Type of entity:** University
- 9** **Title of the work:** Going slow to go far: A journey through molecules for solar cells  
**Name of the event:** Seminar Program - Institut de Química Computacional i Catàlisi (IQCC)  
**City of event:** Girona, Catalonia, Spain  
**Date of event:** 22/03/2022  
**End date:** 22/03/2022  
**Organising entity:** Universitat de Girona  
**Type of entity:** University
- 10** **Title of the work:** Molecular solar cells  
**Name of the event:** webinar  
**City of event:** Virtual, Germany  
**Date of event:** 16/03/2022  
**End date:** 16/03/2022  
**Organising entity:** Helmholtz-Zentrum Berlin für Materialien und Energie  
**City organizing entity:** Berlin,
- 11** **Title of the work:** From molecules to energy conversion devices  
**Name of the event:** Seminar  
**City of event:** Virtual, India  
**Date of event:** 03/03/2022  
**End date:** 03/03/2022  
**Organising entity:** LNM Institute of Information Technology, Deemed University  
**Type of entity:** University





- 12 Title of the work:** Light driving energy devices: from solar cells to catalytic reactors  
**Name of the event:** Seminar Program  
**City of event:** Barcelona, Catalonia, Spain  
**Date of event:** 21/02/2022  
**End date:** 21/02/2022  
**Organising entity:** IQS School of Engineering - Universitat Ramon Llull  
**Type of entity:** University  
**City organizing entity:** Barcelona,
- 13 Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the event:** Lectures on Organic Electronics  
**City of event:** Tarragona, Catalonia, Spain  
**Date of event:** 16/12/2021  
**End date:** 16/12/2021  
**Organising entity:** Universitat Rovira i Virgili  
**Type of entity:** University
- 14 Title of the work:** InterMat: Molecular Solar Cells and Novel Catalyst for Green Production of Solar Fuels  
**Name of the event:** PCM Seminars of IPREM  
**City of event:** Virtual, France  
**Date of event:** 14/12/2021  
**End date:** 14/12/2021  
**Organising entity:** Université de Pau et des Pays de l'Adour (UPPA)  
**Type of entity:** University
- 15 Title of the work:** Third generation photovoltaics. Organic systems (OPV)  
**Name of the event:** Fundamental concepts and innovation in photovoltaic solar energy: the third generation  
**City of event:** Virtual, Andalusia, Spain  
**Date of event:** 21/07/2021  
**End date:** 21/07/2021  
**Organising entity:** Universidad Pablo de Olavide  
**Type of entity:** University
- 16 Title of the work:** Molecular Approaches to Energy Conversion  
**Name of the event:** Seminar  
**City of event:** Virtual, United Kingdom  
**Date of event:** 02/07/2021  
**End date:** 02/07/2021  
**Organising entity:** University of Glasgow
- 17 Title of the work:** Energy and sustainability  
**Name of the event:** Seminar  
**City of event:** Virtual, Community of Madrid, Spain  
**Date of event:** 23/03/2021  
**End date:** 23/03/2021  
**Organising entity:** IESE Business School  
**Type of entity:** University Centres and Structures and Associated Bodies

## R&D management and participation in scientific committees

### Scientific, technical and/or assessment committees

- 1** **Committee title:** Member of the Chemistry evaluation panel at 2023 Call for Exploratory Research Projects in all Scientific Domains  
**Affiliation entity:** Fundação para a Ciência e a Tecnologia, I.P. (FCT)  
**City affiliation entity:** Portugal  
**Start-End date:** 16/07/2024 - 17/07/2024
- 2** **Committee title:** Evaluating grants for Ramón y Cajal 2023 Call  
**Affiliation entity:** Ministerio de Ciencia e Innovación **Type of entity:** .  
**Start-End date:** 29/04/2024 - 30/04/2024
- 3** **Committee title:** CNATS Advisory Board (Center for Nanoscience and Technologies for Sustainability)  
**Affiliation entity:** Universidad Pablo de Olavide **Type of entity:** University  
**City affiliation entity:** Sevilla, Andalusia, Spain  
**Start-End date:** 05/06/2023 - 06/06/2023
- 4** **Committee title:** Member of the committee of the PhD defense of Ms. Cansu Igci  
**Affiliation entity:** École Polytechnique Fédérale de Lausanne  
**City affiliation entity:** Lausanne, Switzerland  
**Start-End date:** 18/02/2022 - 18/02/2022
- 5** **Committee title:** Member of the committee of the PhD defense of Ms. María Cabrero Antonino  
**Affiliation entity:** Universidad Politécnica de Valencia **Type of entity:** University  
**City affiliation entity:** Valencia, Valencian Community, Spain  
**Start-End date:** 07/10/2021 - 07/10/2021
- 6** **Committee title:** Member of the committee of the PhD defense of Mr. Valentin I.E. Queloz  
**Affiliation entity:** École Polytechnique Fédérale de Lausanne  
**City affiliation entity:** Lausanne, Switzerland  
**Start-End date:** 19/08/2021 - 19/08/2021
- 7** **Committee title:** Member of the committee of the PhD defense of Mr. Albert Sutanto  
**Affiliation entity:** École Polytechnique Fédérale de Lausanne  
**City affiliation entity:** Lausanne, Switzerland  
**Start-End date:** 06/08/2021 - 06/08/2021
- 8** **Committee title:** Trainer at GOSCI: Operational Management in Research Centres and Units  
**Affiliation entity:** Fundación Empresa-Universidad Gallega (FEUGA) **Type of entity:** Foundation  
**City affiliation entity:** Santiago de Compostela, Galicia, Spain  
**Start-End date:** 04/06/2021 - 04/06/2021



- 9** **Committee title:** Member of the committee of the PhD defense of Mrs. Virginia Cuesta  
**Affiliation entity:** Universidad de Castilla-La Mancha **Type of entity:** University  
**City affiliation entity:** Toledo, Castile-La Mancha, Spain  
**Start-End date:** 12/02/2021 - 12/02/2021
- 10** **Committee title:** Member of the committee of the PhD defense of Ms. Carmen García López  
**Affiliation entity:** Universidad Complutense de Madrid **Type of entity:** University  
**City affiliation entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 27/01/2021 - 27/01/2021
- 11** **Committee title:** Member of the committee of the PhD defense of Mr. Federico Dattila  
**Affiliation entity:** Universitat Rovira i Virgili **Type of entity:** University  
**City affiliation entity:** Tarragona, Catalonia, Spain  
**Start-End date:** 30/11/2020 - 30/11/2020
- 12** **Committee title:** ERC 2019-CoG-PE Step 2 Pannel Meeting: Physical and Analytical Chemical Sciences  
**Affiliation entity:** European Research Council Executive Agency  
**City affiliation entity:** Bruselas, Belgium  
**Start-End date:** 23/09/2019 - 26/09/2019
- 13** **Committee title:** ERC 2019-CoG Step 1 panel meeting  
**Affiliation entity:** European Research Council Executive Agency  
**City affiliation entity:** Bruselas, Belgium  
**Start-End date:** 06/05/2019 - 08/05/2019
- 14** **Committee title:** Member of the committee of the PhD defense of Mr. Kyung Taek Cho  
**Affiliation entity:** École Polytechnique Fédérale de Lausanne  
**City affiliation entity:** Lausanne, Switzerland  
**Start-End date:** 12/10/2018 - 12/10/2018
- 15** **Committee title:** ERC-2017-CoG-Evaluations: Step 2 panel meeting  
**Affiliation entity:** European Research Council Executive Agency  
**City affiliation entity:** Bruselas, Belgium  
**Start-End date:** 03/10/2017 - 06/10/2017
- 16** **Committee title:** Member of the committee of the PhD defense of Mr. Mike Wang  
**Affiliation entity:** University of Technology of Eindhoven (Holanda)  
**City affiliation entity:** Eindhoven, Holland  
**Start-End date:** 28/09/2017 - 28/09/2017
- 17** **Committee title:** ERC Consolidator Grants  
**Affiliation entity:** European Research Council Executive Agency  
**City affiliation entity:** Bruselas, Belgium  
**Start-End date:** 15/05/2017 - 18/05/2017
- 18** **Committee title:** Conference chair at International Conference on Perovskite Thin Film Photovoltaics (ABXPV)  
**Affiliation entity:** Nanoge  
**City affiliation entity:** Barcelona, Spain  
**Start-End date:** 03/03/2016 - 04/03/2016



- 19** **Committee title:** ERC Consolidator Grants  
**Affiliation entity:** European Research Council Executive Agency  
**City affiliation entity:** Bruselas, Belgium  
**Start-End date:** 08/06/2015 - 11/06/2015
- 20** **Committee title:** Convocatoria "Reunión Evaluadores ERC"  
**Affiliation entity:** Ministerio de Economía y Competitividad  
**City affiliation entity:** Madrid, Spain  
**Start-End date:** 19/05/2015 - 19/05/2015
- 21** **Committee title:** Reunión Comité Ejecutivo FOTOPLAT  
**Affiliation entity:** Fotoplát  
**City affiliation entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 18/05/2015 - 18/05/2015
- 22** **Committee title:** The FNP Proze-2012  
**Affiliation entity:** Polish Academy of Science  
**Start-End date:** 25/06/2012 - 25/06/2012
- 23** **Committee title:** Agence National du Reserche ( ANR) Blanc Inter II-SIMI 7 2012  
**Affiliation entity:** ANR  
**Start-End date:** 05/06/2012 - 05/06/2012
- 24** **Committee title:** Brazilian Swiss Joint Research Programme BSJRP  
**Affiliation entity:** Ecóle Polytechnique Federal de Laussane  
**Start-End date:** 20/07/2011 - 20/07/2011
- 25** **Committee title:** Evaluation of the Research Program Thalís  
**Affiliation entity:** Hellenic republic .Ministry of Education Lifelong Learning & Religious affairs.  
**Start-End date:** 11/07/2011 - 11/07/2011
- 26** **Committee title:** Israel Science Foundation (ISF)  
**Affiliation entity:** Israel Science Foundation (ISF)  
**Start-End date:** 17/02/2011 - 17/02/2011
- 27** **Committee title:** DOE-BES  
**Affiliation entity:** USA Department of Energy  
**Start-End date:** 11/01/2009 - 11/01/2009

## Organization of R&D activities

- 1** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2012  
**Geographical area:** académico e industrial
- 2** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2011  
**Geographical area:** académico e industrial



- 3** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2010  
**Geographical area:** académico e industrial
- 4** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2009  
**Geographical area:** académico e industrial
- 5** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2008  
**Geographical area:** académico e industrial
- 6** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2007  
**Geographical area:** académico e industrial
- 7** **Title of the activity:** Escuela de Verano ICIQ-URV  
**Type of activity:** Seminarios científicos  
**Start date:** 2006  
**Geographical area:** académico e industrial

## Other achievements

### Stays in public or private R&D centres

**Entity:** Centre for Electronic Materials and Devices. Dep. Chemistry. Imperial College  
**City of entity:** Londres, United Kingdom  
**Start-End date:** 2001 - 2004  
**Duration:** 36 months  
**Goals of the stay:** Contracted

### Scientific societies and professional associations

- 1** **Name of the society:** Spanish Royal Society of Chemistry (RSEQ)  
**City affiliation entity:** Madrid, Community of Madrid, Spain  
**Start date:** 2021
- 2** **Name of the society:** Royal Society of Chemistry (RSC)  
**City affiliation entity:** London, United Kingdom  
**Start date:** 2014



## Prizes, mentions and distinctions

- 1** **Description:** Medalla Narcís Monturiol al mérito científico y tecnológico  
**Awarding entity:** Generalitat de Catalunya **Type of entity:** Catalan Government  
**City awarding entity:** Barcelona, Catalonia, Spain  
**Conferral date:** 24/04/2024
- 2** **Description:** Distintiu 9 d'Octubre  
**Awarding entity:** Ayuntamiento de Cullera  
**City awarding entity:** Cullera, Valencian Community, Spain  
**Conferral date:** 2023
- 3** **Description:** Fellow of the Spanish Royal Society of Chemistry (RSEQ)  
**Awarding entity:** Real Sociedad Española de Química **Type of entity:** -  
**Conferral date:** 2021
- 4** **Description:** Fellow of the ROYAL SOCIETY OF CHEMISTRY  
**Conferral date:** 2014
- 5** **Description:** Premio Innova SUSCHEM-España  
**Conferral date:** 2010
- 6** **Description:** ICREA Research Professor  
**Awarding entity:** Institució Catalana de Recerca i Estudis Avançats **Type of entity:** -  
**City awarding entity:** Barcelona, Catalonia, Spain  
**Conferral date:** 2008
- 7** **Description:** Premio al Joven Investigador Químico por la Real Sociedad Española de Química  
**Conferral date:** 2006
- 8** **Description:** Miembro de la REAL SOCIEDAD ESPAÑOLA DE QUIMICA  
**Conferral date:** 2004
- 9** **Description:** Roscoe Medal "2004 Younger European Chemist's Conference" ( Aspectos destacados en la investigación Europea Química e Investigación y desarrollo en 2004)  
**Conferral date:** 2004
- 10** **Description:** Beca RAMON Y CAJAL. Proyecto: RYC-2003-000592.  
**Awarding entity:** Instituto de Ciencia Molecular / ICIQ  
**City awarding entity:** Valencia, Spain  
**Conferral date:** 2003
- 11** **Description:** Beca Europea MARIE CURIE. Proyecto HPMF-CT-2002-01744: "Towards The Control of Charge Recombination Processes in Dye Sensitised Photovoltaic Cells"  
**Awarding entity:** Imperial College



**City awarding entity:** London, United Kingdom

**Conferral date:** 2002

**12 Description:** Beca de Jóvenes investigadores en 14th International Conference on Photochemical Conversion and Storage of Solar Energy. Sappor

**City awarding entity:** Japan

**Conferral date:** 2002