



Part A. PERSONAL INFORMATION		CV date		11/10/2019
First and Family name	Juan Miguel Feliu Martínez			
Social Security, Passport, ID number		Age	68	
Researcher numbers	Researcher ID	D-1890-2010		
	Author ID			
	ORCID code	0000-0003-4751-3279		

A.1. Current position

Name of University/Institution	Universidad de Alicante		
Department	Dpto. Química Física/ Instituto de Electroquímica		
Address and Country	Apdo. 99, E-03080, Alicante, Spain		
Phone number	965909301	E-mail	Juan.feliu@ua.es
Current position	Full Professor	From	1993
UNESCO code	2210.05		
Key words	Electrochemistry, electrocatalysis, fuel cell		

A.2. Education

Degree/PhD	University	Year
Bachelor degree in Chemistry	Barcelona	1973
PhD in Chemistry	Barcelona	1978

A.3. JCR articles, h Index, thesis supervised...

6 accredited six-year periods of research positively evaluated (1978-1983;1984-1989;1990-1995; 1996-2001; 2002-2007 y 2008-2013)

13 PhD thesis completed after 2009, and 2 under supervision.

More than 500 research articles in the Web of Science, with 280 in publication in the first quartile. H index: 69. Sum of Times Cited 17523; Average citations/year in the period 2014/2018/: >1300. Average citation per article: 33.71

Part B. CV SUMMARY (3500 characters, including spaces)

Research interest deals with the establishment of relationships between surface structure and composition of metallic electrodes and its electrochemical reactivity, within the framework of Surface Electrochemistry and Electrocatalysis. Both aspects are believed to be strongly interconnected, because interfacial properties govern reactivity. To achieve this purpose, single crystal electrodes are prepared and routinely used. The interfacial properties are characterized by using different structure sensitive probes. Determination of interfacial properties and surface stability of well-defined substrates is a key step in this investigation. This methodology has been extended to rationalize the polycrystalline metal/solution interface, including nanoparticles. Surface composition is modified by adsorption of foreign adatoms in a controlled way. The electrocatalytic reactions under scope are those clearly related with the previous, more fundamental approach, and are focused to the surface effects in the kinetics of oxidation/reduction of molecular surface probes, oxidation of potential fuels and small nitrogen-containing molecules, as well as the reduction of oxygen and other green chemistry related species.

Part C. RELEVANT MERITS

C.1. Publications

- Title: Interfacial water reorganization as a pH-dependent descriptor of the hydrogen evolution rate on platinum electrodes
 Authors: Ledezma-Yanez, I; Wallace, WDZ; Sebastian-Pascual, P; Climent, V; Feliu, JM; Koper, MTM
 Nature Energy; Volume: 2; Article Number: 17031; DOI: 10.1038/nenergy.2017.31; Total Times Cited: 101



2. Title: Elemental Anisotropic Growth and Atomic-Scale Structure of Shape-Controlled Octahedral Pt-Ni-Co Alloy Nanocatalysts
Authors: Aran-Ais, RM; Dionigi, F ; Merzdorf, T ; Gocyla, M ; Heggen, M ; Dunin-Borkowski, RE; Gliech, M ; Solla-Gullon, J ; Herrero, E ; Feliu, JM ; Strasser, P
Nano Letters; Volume: 15; Pages: 7473-7480; DOI: 10.1021/acs.nanolett.5b03057; Total Times Cited: 65
3. Title: Synthesis of Pt Nanoparticles in Water-in-Oil Microemulsion: Effect of HCl on Their Surface Structure
Authors: Martinez-Rodriguez, RA; Vidal-Iglesias, FJ; Solla-Gullon; Cabrera, CR; Feliu, JM
Journal of the American Chemical Society; Volume: 136; Pages: 1280-1283; DOI: 10.1021/ja411939d; Total Times Cited: 63
4. Title: Electrochemical Characterization of Shape-Controlled Pt Nanoparticles in Different Supporting Electrolytes
Authors: Vidal-Iglesias, FJ; Aran-Ais, RM; Solla-Gullon, J; Herrero, E; Feliu, JM
ACS Catalysis; Volume: 2; Pages: 901-910; DOI: 10.1021/cs200681x; Total Times Cited: 125
5. Title: Electrochemical reduction of oxygen on palladium nanocubes in acid and alkaline solutions
Authors: Erikson, H; Sarapuu, A ; Alexeyeva, N ; Tammeveski, K ; Solla-Gullon, J ; Feliu, JM
Electrochimica Acta; Volume: 59; Pages: 329-335; DOI: 10.1016/j.electacta.2011.10.074; Total Times Cited: 103
6. Title: Role of surface defect sites: from Pt model surfaces to shape-controlled nanoparticles
Authors: Chen, QS; Vidal-Iglesias, FJ; Solla-Gullon, J; Sun, SG; Feliu, JM
Chemical Science; Volume: 3; Pages: 136-147; DOI: 10.1039/c1sc00503k; Total Times Cited: 71
7. Title: Significantly Enhancing Catalytic Activity of Tetrahedral Pt Nanocrystals by Bi Adatom Decoration
Authors: Chen, QS; Zhou, ZY; Vidal-Iglesias, FJ; Solla-Gullon, J; Feliu, JM ; Sun, SG
Journal of the American Chemical Society; Volume: 133; Pages: 12930-12933; DOI: 10.1021/ja2042029; Total Times Cited: 86
8. Title: The potential of zero total charge of Pt nanoparticles and polycrystalline electrodes with different surface structure The role of anion adsorption in fundamental electrocatalysis
Authors: Chen, QS; Solla-Gullon, J; Sun, SG; Feliu, JM
Electrochimica Acta; Volume: 55; Issue: 27; Special Issue: SI; Pages: 7982-7994; DOI: 10.1016/j.electacta.2010.03.050; Total Times Cited: 117
9. Title: The study of electrochemically active microbial biofilms on different carbon-based anode materials in microbial fuel cells
Authors: Liu, Y ; Harnisch, F ; Fricke, K ; Schroder, U ; Climent, V ; Feliu, JM
Biosensors & Bioelectronics; Volume: 25; Issue: 9; Pages: 2167-2171; DOI: 10.1016/j.bios.2010.01.016; Total Times Cited: 64
10. Title: Pd Adatom Decorated (100) Preferentially Oriented Pt Nanoparticles for Formic Acid Electrooxidation
Authors: Vidal-Iglesias, FJ; Solla-Gullon, J; Herrero, E; Aldaz, A; Feliu, JM
Angewandte Chemie-International Edition; Volume: 49; Issue: 39; Pages: 6998-7001; DOI: 10.1002/anie.201002501; Total Times Cited: 65

C.2. Research projects and grants

Title of the project: Estructura interfacial y reactividad electroquímica (CTQ2016-76221-P)

Funding body: Ministerio de Economía y Competitividad

Participants: Universidad de Alicante

From: 30/12/2016 until: 29/06/2020

Leading researcher: FELIU MARTINEZ, JUAN MIGUEL, HERRERO RODRÍGUEZ, ENRIQUE

Total number of researchers involved: 5

Total amount: 246.840,00 €



- Title of the project: Estudios avanzados sobre la reacción de reducción de oxígeno (CTQ2013-44083-P)
- Funding body: Ministerio de Economía y Competitividad
Participants: Universidad de Alicante
From: 01/01/2014 until: 31/12/2016
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 7 Total amount: 223.850,00 €
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- Title of the project: Reactividad superficial en la electrooxidación del etanol: buscando condiciones operativas. (PROMETEOII/2014/013)
- Funding body: Conselleria de Educación, Cultura y Deporte
Participants: Universidad de Alicante
From: 01/01/2014 until: 31/12/2017
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 5 Total amount: 201.680,00 €
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- Title of the project: Conversión electrocatalítica de CO₂ en electrodos monocristalinos y nanopartículas mono- y bi-metálicos (PCIN-2013-046)
- Funding body: Ministerio de Economía y Competitividad
Participants: Universidad de Alicante
From: 01/02/2013 until: 01/02/2015
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 3 Total amount: 45.000,00 €
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- Title of the project: Surface electrochemical reactivity in electrocatalysis: a combined theoretical and experimental approach (ELCAT)
- Funding body: EUROPEAN COMMISSION
Participants: Universidad de Alicante
From: 01/09/2008 until: 31/08/2012
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 2 Total amount: 436.622,20 €
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- Title of the project: Electroquímica de superficies y combustibles sostenibles. (CTQ2010-16271)
- Funding body: Ministerio de Ciencia e Innovación
Participants: Universidad de Alicante
From: 01/01/2011 until: 30/06/2014
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 7 Total amount: 261.360,00 €
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- Title of the project: Electroquímica de superficies (PROMETEO/2009/045)
- Funding body: Consellería de Educación
Participants: Universidad de Alicante
From: 01/01/2009 until: 31/12/2013
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 5 Total amount: 320.350,00 €
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- Title of the project: Novel nanostructured catalysts for the high-temperature electro-oxidation of small organic molecules (EUI2009-04176)
- Funding body: Ministerio de Ciencia e Innovación
Participants: Universidad de Alicante
From: 01/04/2010 until: 31/03/2013
Leading researcher: FELIU MARTINEZ, JUAN MIGUEL
Total number of researchers involved: 2 Total amount: 108.000,00 €
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- Title of the project: BACTERIAL WIRING FOR ENERGY CONVERSION AND REMEDIATION (BACWIRE)
- Funding body: EUROPEAN COMMISSION
Participants: Universidad de Alicante
From: 01/10/2009 Until: 30/09/2012



Leading researcher: FELIU MARTINEZ, JUAN MIGUEL

Total number of researchers involved: 6

Total amount: 590.180,00 €

C.3. Contracts

C.4. Patents

Inventors: Attard, G.A.; Feliu-Martínez, J.M.

Title: Chiral surfaces.

No.: 9814500.6 Country: REINO UNIDO

Date: 01/01/1998

C.5, Others

Director of the Institute of Electrochemistry, University of Alicante (2003-2012)

Chairman (1999-2002) of ISE's Division 1 (Interfacial Electrochemistry).

ISE President (2005-2006).

Titular Member and Secretary of the Commission I.3 (Electrochemistry) of IUPAC (2000-2001).

IUPAC (2002) and ISE (2010) Fellow. FRSC (2017).

Editor of the Journal of Electroanalytical Chemistry (2003-June 2015).

Editor-in Chief of the Journal of Electroanalytical Chemistry (July 2015-).

BKC Visiting Professor 2013.

FY2017 JSPS Fellowship.

Visiting Professor, Xiamen University (2017-)

CIDETEC Prize for the Trajectory in Electrochemistry 2006.

Brian Conway Prize of Physical Electrochemistry 2008.

Charles N. Reilley Award of Electroanalytical Chemistry 2017.

Premio a la Trayectoria A. Arévalo, Sociedad Iberoamericana de Electroquímica 2018.

Electrochimica Acta Gold Medal 2018.