Francisco J Vidal-Iglesias

List of Publications by Year
in descending order

74 papers	4,223 citations	108046 37 h-index	124990 64 g-index
78 all docs	78 docs citations	78 times ranked	4055 citing authors

#	Article	IF	Citations
1	Investigating the presence of adsorbed species on Pt steps at low potentials. Nature Communications, 2022, 13, 2550.	5.8	37
2	Surface Structure Characterization of Shape and Size Controlled Pd Nanoparticles by Cu UPD: A Quantitative Approach. Frontiers in Chemistry, 2019, 7, 527.	1.8	20
3	Mobility and Oxidation of Adsorbed CO on Shape-Controlled Pt Nanoparticles in Acidic Medium. Langmuir, 2017, 33, 865-871.	1.6	20
4	Chronoamperometric Study of Ammonia Oxidation in a Direct Ammonia Alkaline Fuel Cell under the Influence of Microgravity. Microgravity Science and Technology, 2017, 29, 253-261.	0.7	12
5	Understanding CO oxidation reaction on platinum nanoparticles. Journal of Electroanalytical Chemistry, 2017, 793, 126-136.	1.9	22
6	Recent Advances in the Use of Shape-Controlled Metal Nanoparticles in Electrocatalysis. Nanostructure Science and Technology, 2016, , 31-92.	0.1	8
7	Electrochemical Characterisation of Platinum Nanoparticles Prepared in a Waterâ€inâ€Oil Microemulsion in the Presence of Different Modifiers and Metal Precursors. ChemElectroChem, 2016, 3, 1601-1608.	1.7	9
8	Carbon materials for the electrooxidation of nucleobases, nucleosides and nucleotides toward cytosine methylation detection: a review. Analytical Methods, 2016, 8, 702-715.	1.3	31
9	Electrochemical detection of cytosine and 5-methylcytosine on Au(111) surfaces. Electrochemistry Communications, 2016, 65, 27-30.	2.3	10
10	Adatom modified shape-controlled platinum nanoparticles towards ethanol oxidation. Electrochimica Acta, 2016, 196, 270-279.	2.6	15
11	Ethanol oxidation on shape-controlled platinum nanoparticles at different pHs: A combined in situ IR spectroscopy and online mass spectrometry study. Journal of Electroanalytical Chemistry, 2016, 763, 116-124.	1.9	46
12	Oxidation of ethanol on platinum nanoparticles: surface structure and aggregation effects in alkaline medium. Journal of Solid State Electrochemistry, 2016, 20, 1095-1106.	1.2	20
13	Influence of the metal loading on the electrocatalytic activity of carbon-supported (100) Pt nanoparticles. Journal of Solid State Electrochemistry, 2016, 20, 1107-1118.	1.2	7
14	Surface Treatment Strategies on Catalytic Metal Nanoparticles. , 2016, , 1101-1125.		0
15	Electrochemical Oxidation of Small Organic Molecules on Au Nanoparticles with Preferential Surface Orientation. ChemElectroChem, 2015, 2, 958-962.	1.7	18
16	Electrochemical Characterization of Clean Shapeâ€Controlled Pt Nanoparticles Prepared in Presence of Oleylamine/Oleic Acid. Electroanalysis, 2015, 27, 945-956.	1.5	47
17	Surface Treatment Strategies on Catalytic Metal Nanoparticles. , 2015, , 1-21.		0
18	Carbon-supported shape-controlled Pt nanoparticle electrocatalysts for direct alcohol fuel cells. Electrochemistry Communications, 2015, 55, 47-50.	2.3	39

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19	Spectroelectrochemical behavior of 4-aminobenzenethiol on nanostructured platinum and silver electrodes. Surface Science, 2015, 631, 213-219.	0.8	8
20	Formic acid electrooxidation on thallium-decorated shape-controlled platinum nanoparticles: an improvement in electrocatalytic activity. Physical Chemistry Chemical Physics, 2014, 16, 13616-13624.	1.3	27
21	Synthesis and Electrocatalytic Properties of H₂SO₄â€induced (100) Pt Nanoparticles Prepared in Waterâ€inâ€Oil Microemulsion. ChemPhysChem, 2014, 15, 1997-2001.	1.0	20
22	On the behavior of CO oxidation on shape-controlled Pt nanoparticles in alkaline medium. Journal of Electroanalytical Chemistry, 2014, 716, 16-22.	1.9	26
23	Synthesis of Pt Nanoparticles in Water-in-Oil Microemulsion: Effect of HCl on Their Surface Structure. Journal of the American Chemical Society, 2014, 136, 1280-1283.	6.6	124
24	Surface structure and anion effects in the oxidation of ethanol on platinum nanoparticles. Journal of Materials Chemistry A, 2013, 1, 7068.	5.2	52
25	Tailoring properties of platinum supported catalysts by irreversible adsorbed adatoms toward ethanol oxidation for direct ethanol fuel cells. Applied Catalysis B: Environmental, 2013, 140-141, 378-385.	10.8	33
26	Citrate adsorption on Pt{hkl} electrodes and its role in the formation of shaped Pt nanoparticles. Journal of Electroanalytical Chemistry, 2013, 688, 249-256.	1.9	25
27	Electrodeposited platinum thin films with preferential (100) orientation: Characterization and electrocatalytic properties for ammonia and formic acidÂoxidation. Journal of Power Sources, 2013, 225, 323-329.	4.0	52
28	Do You Really Understand the Electrochemical Nernst Equation?. Electrocatalysis, 2013, 4, 1-9.	1.5	4
29	Nitrate reduction at Pt(100) single crystals and preferentially oriented nanoparticles in neutral media. Catalysis Today, 2013, 202, 2-11.	2.2	50
30	Towards More Active and Stable Electrocatalysts for Formic Acid Electrooxidation: Antimonyâ€Đecorated Octahedral Platinum Nanoparticles. Angewandte Chemie - International Edition, 2013, 52, 964-967.	7.2	52
31	Au Electrocatalysis for Oxygen Reduction. Lecture Notes in Energy, 2013, , 483-512.	0.2	2
32	Nitrate Reduction on Platinum (111) Surfaces Modifiedl with Bi: Single Crystalsl and Nanoparticles. Zeitschrift Fur Physikalische Chemie, 2012, 226, 901-917.	1.4	6
33	Role of surface defect sites: from Pt model surfaces to shape-controlled nanoparticles. Chemical Science, 2012, 3, 136-147.	3.7	109
34	SERS on (111) Surface Nanofacets at Pt Nanoparticles: The Case of Acetaldehyde Oxime Reduction. Journal of Physical Chemistry C, 2012, 116, 10781-10789.	1.5	11
35	Understanding the Nernst Equation and Other Electrochemical Concepts: An Easy Experimental Approach for Students. Journal of Chemical Education, 2012, 89, 936-939.	1.1	38
36	Effect of the nature of (100) surface sites on the electroactivity of macroscopic Pt electrodes for the electrooxidation of ammonia. Electrochemistry Communications, 2012, 22, 197-199.	2.3	43

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37	Shape-dependent electrocatalysis: formic acid electrooxidation on cubic Pd nanoparticles. Physical Chemistry Chemical Physics, 2012, 14, 10258.	1.3	90
38	Pd-Modified Shape-Controlled Pt Nanoparticles Towards Formic Acid Electrooxidation. Electrocatalysis, 2012, 3, 313-323.	1.5	13
39	Electrochemical Characterization of Shape-Controlled Pt Nanoparticles in Different Supporting Electrolytes. ACS Catalysis, 2012, 2, 901-910.	5.5	238
40	Errors in the use of the Koutecký–Levich plots. Electrochemistry Communications, 2012, 15, 42-45.	2.3	27
41	Significantly Enhancing Catalytic Activity of Tetrahexahedral Pt Nanocrystals by Bi Adatom Decoration. Journal of the American Chemical Society, 2011, 133, 12930-12933.	6.6	132
42	Preparation, characterization and catalytic performance of a novel Pt/SiC. Electrochemistry Communications, 2011, 13, 1309-1312.	2.3	22
43	Size and diffusion effects on the oxidation of formic acid and ethanol on platinum nanoparticles. Electrochemistry Communications, 2011, 13, 1194-1197.	2.3	35
44	On the behavior of the Pt(100) and vicinal surfaces in alkaline media. Electrochimica Acta, 2011, 58, 184-192.	2.6	55
45	Adsorption of Formate and Its Role as Intermediate in Formic Acid Oxidation on Platinum Electrodes. ChemPhysChem, 2011, 12, 1641-1644.	1.0	74
46	Evaluating the ozone cleaning treatment in shape-controlled Pt nanoparticles: Evidences of atomic surface disordering. Electrochemistry Communications, 2011, 13, 502-505.	2.3	74
47	Electroreduction of oxygen on Vulcan carbon supported Pd nanoparticles and Pd–M nanoalloys in acid and alkaline solutions. Electrochimica Acta, 2011, 56, 6702-6708.	2.6	68
48	Pd Adatom Decorated (100) Preferentially Oriented Pt Nanoparticles for Formic Acid Electrooxidation. Angewandte Chemie - International Edition, 2010, 49, 6998-7001.	7.2	86
49	Scanning electrochemical microscopy for studying electrocatalysis on shape-controlled gold nanoparticles and nanorods. Electrochimica Acta, 2010, 55, 8252-8257.	2.6	50
50	Imaging Structure Sensitive Catalysis on Different Shape-Controlled Platinum Nanoparticles. Journal of the American Chemical Society, 2010, 132, 5622-5624.	6.6	220
51	CO monolayer oxidation on stepped Pt(S) [(n-1)(100)×(110)] surfaces. Electrochimica Acta, 2009, 54, 4459-4466.	2.6	62
52	Alkylidynes-modified Pt nanoparticles: A spectroelectrochemical (SERS) and electrocatalytic study. Electrochimica Acta, 2009, 54, 6971-6977.	2.6	4
53	Electrochemical characterisation of gold on Pt{hkl} for ethanol electrocatalysis. Journal of Electroanalytical Chemistry, 2009, 625, 123-130.	1.9	26
54	Formic acid electrooxidation on Bi-modified Pt(110) single crystal electrodes. Journal of Electroanalytical Chemistry, 2009, 637, 63-71.	1.9	35

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55	Electrooxidation of methanol and 2-propanol mixtures at platinum single crystal electrodes. Electrochimica Acta, 2009, 54, 6576-6583.	2.6	42
56	Formic acid electrooxidation on Bi-modified polyoriented and preferential (111) Pt nanoparticles. Physical Chemistry Chemical Physics, 2009, 11, 416-424.	1.3	65
57	A study of the growth and CO electrooxidation behaviour of PtRh alloys on Pt{100} single crystals. Journal of Electroanalytical Chemistry, 2008, 622, 73-78.	1.9	19
58	Shape-dependent electrocatalysis: methanol and formic acid electrooxidation on preferentially oriented Pt nanoparticles. Physical Chemistry Chemical Physics, 2008, 10, 3689.	1.3	265
59	Microwave properties of platinum nanoparticle films. , 2008, , .		3
60	Electrochemical characterization of PtPd alloy single crystal surfaces prepared using Pt basal planes as templates. Journal of Electroanalytical Chemistry, 2007, 611, 117-125.	1.9	20
61	Screening of electrocatalysts for direct ammonia fuel cell: Ammonia oxidation on PtMe (Me: Ir, Rh, Pd,) Tj ETQq1 1 0.784314 rgBT /Ov	4.0	144
62	A new method for the preparation of PtPd alloy single crystal surfaces. Electrochemistry Communications, 2006, 8, 1147-1150.	2.3	23
63	Evidence by SERS of azide anion participation in ammonia electrooxidation in alkaline medium on nanostructured Pt electrodes. Electrochemistry Communications, 2006, 8, 102-106.	2.3	61
64	CO monolayer oxidation on semi-spherical and preferentially oriented (100) and (111) platinum nanoparticles. Electrochemistry Communications, 2006, 8, 189-194.	2.3	160
65	DEMS study of ammonia oxidation on platinum basal planes. Journal of Electroanalytical Chemistry, 2006, 588, 331-338.	1.9	99
66	Formic acid oxidation on Pd-modified Pt(100) and Pt(111) electrodes: A DEMS study. Journal of Applied Electrochemistry, 2006, 36, 1207-1214.	1.5	42
67	Specific surface reactions for identification of platinum surface domains. Electrochimica Acta, 2005, 50, 4308-4317.	2.6	83
68	Electrochemical characterization of irreversibly adsorbed germanium on platinum stepped surfaces vicinal to Pt(100). Electrochimica Acta, 2005, 50, 3111-3121.	2.6	57
69	Ammonia Selective Oxidation on Pt(100) Sites in an Alkaline Medium. Journal of Physical Chemistry B, 2005, 109, 12914-12919.	1.2	118
70	Determination of (111) Ordered Domains on Platinum Electrodes by Irreversible Adsorption of Bismuth. Analytical Chemistry, 2005, 77, 5317-5323.	3.2	66
71	In Situ Surface Characterization of Preferentially Oriented Platinum Nanoparticles by Using Electrochemical Structure Sensitive Adsorption Reactions. Journal of Physical Chemistry B, 2004, 108, 13573-13575.	1.2	116
72	Shape-dependent electrocatalysis: ammonia oxidation on platinum nanoparticles with preferential (100) surfaces. Electrochemistry Communications, 2004, 6, 1080-1084.	2.3	218

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73	Electrochemical characterization of platinumâ€“ruthenium nanoparticles prepared by water-in-oil microemulsion. Electrochimica Acta, 2004, 49, 5079-5088.	2.6	100
74	Selective electrocatalysis of ammonia oxidation on Pt(100) sites in alkaline medium. Electrochemistry Communications, 2003, 5, 22-26.	2.3	148