F Javier Del Campo

List of Publications by Year in Descending Order

119 papers	4,298 citations	32 h-index	61 g-index
125 ext. papers	4,826 ext. citations	6 avg, IF	5.56 L-index

#	Paper	IF	Citations
119	Understanding Electrogenerated Chemiluminescence at graphite screen-printed electrodes. *Journal of Electroanalytical Chemistry*, **2022**, 116331	4.1	
118	Laser-activated screen-printed carbon electrodes for enhanced dopamine determination in the presence of ascorbic and uric acid. *Electrochimica Acta*, **2021**, 399, 139374	6.7	2
117	Recycling and environmental issues of lithium-ion batteries: Advances, challenges and opportunities. *Energy Storage Materials*, **2021**, 37, 433-465	19.4	48
116	A self-powered skin-patch electrochromic biosensor. *Biosensors and Bioelectronics*, **2021**, 175, 112879	11.8	13
115	Integrated Photonic System for Early Warning of Cyanobacterial Blooms in Aquaponics. *Analytical Chemistry*, **2021**, 93, 722-730	7.8	3
114	Laser-induced highly oriented pyrolytic graphite for high-performance screen-printed electrodes. *Materials Advances*, **2021**, 2, 5912-5921	3.3	3
113	A 15-W 105-dB 1.8-Vpp Potentiostatic Delta-Sigma Modulator for Wearable Electrochemical Transducers in 65-nm CMOS Technology. *IEEE Access*, **2020**, 8, 62127-62136	3.5	4
112	Fully-printed and silicon free self-powered electrochromic biosensors: Towards naked eye quantification. *Sensors and Actuators B: Chemical*, **2020**, 306, 127535	8.5	8
111	Electrochemical POC device for fast malaria quantitative diagnosis in whole blood by using magnetic beads, Poly-HRP and microfluidic paper electrodes. *Biosensors and Bioelectronics*, **2020**, 150, 111925	11.8	28
110	Rapid Detection of in Drinking Water, Based on Filter Immunoassay and Chronoamperometric Measurement. *Biosensors*, **2020**, 10,	5.9	6
109	Screen-printable Electrochromic Polymer Inks and Ion Gel Electrolytes for the Design of Low-power, Flexible Electrochromic Devices. *Electroanalysis*, **2019**, 31, 1664-1671	3	5
108	Electrochromic sensors: Innovative devices enabled by spectroelectrochemical methods. *Current Opinion in Electrochemistry*, **2019**, 15, 66-72	7.2	14
107	Electrochromic biosensors based on screen-printed Prussian Blue electrodes. *Sensors and Actuators B: Chemical*, **2019**, 290, 591-597	8.5	29
106	CMOS Interfaces for Internet-of-Wearables Electrochemical Sensors: Trends and Challenges. *Electronics (Switzerland)*, **2019**, 8, 150	2.6	11
105	iR Drop Effects in Self-Powered and Electrochromic Biosensors. *Journal of Physical Chemistry C*, **2018**, 122, 2596-2607	3.8	15
104	Antimony tin oxide (ATO) screen-printed electrodes and their application to spectroelectrochemistry. *Electrochemistry Communications*, **2018**, 93, 123-127	5.1	6
103	Detection of plasma MMP-9 within minutes. Unveiling some of the clues to develop fast and simple electrochemical magneto-immunosensors. *Biosensors and Bioelectronics*, **2018**, 115, 45-52	11.8	18

102	An electrochemical flow cell for the convenient oxidation of Furfuryl alcohols. *Journal of Flow Chemistry*, **2018**, 8, 123-128	3.3	11
101	Electrochemical Lateral Flow Devices: Towards Rapid Immunomagnetic Assays. *ChemElectroChem*, **2017**, 4, 880-889	4.3	35
100	Quantitative self-powered electrochromic biosensors. *Chemical Science*, **2017**, 8, 1995-2002	9.4	47
99	Inkjet-printed electrochemical sensors. *Current Opinion in Electrochemistry*, **2017**, 3, 29-39	7.2	97
98	Suspended Silicon Microphotodiodes for Electrochemical and Biological Applications. *Small*, **2017**, 13, 1701920	11	4
97	Paper-based microfluidic biofuel cell operating under glucose concentrations within physiological range. *Biosensors and Bioelectronics*, **2017**, 90, 475-480	11.8	43
96	Use of sinusoidal voltages with fixed frequency in the preparation of tyrosinase based electrochemical biosensors for dopamine electroanalysis. *Sensors and Actuators B: Chemical*, **2017**, 240, 801-809	8.5	31
95	Paper-based enzymatic microfluidic fuel cell: From a two-stream flow device to a single-stream lateral flow strip. *Journal of Power Sources*, **2016**, 326, 410-416	8.9	41
94	Rapid prototyping of electrochemical lateral flow devices: stencilled electrodes. *Analyst, The*, **2016**, 141, 2515-22	5	14
93	A low-power electronic instrumentation for multi-parametric diabetes mellitus analysis **2016**,		1
92	All-inkjet-printed dissolved oxygen sensors on flexible plastic substrates. *Organic Electronics*, **2016**, 39, 168-176	3.5	39
91	Multi-analyte determination of dopamine and catechol at single-walled carbon nanotubes Conducting polymer Tyrosinase based electrochemical biosensors. *Journal of Electroanalytical Chemistry*, **2015**, 744, 53-61	4.1	42
90	Construction of a Hydrogen Peroxide Biosensor on Interdigitated Microband Electrodes Fabricated by a Mix-and-Match Process. *Journal of the Electrochemical Society*, **2015**, 162, B133-B137	3.9	5
89	Dual chronoamperometric detection of enzymatic biomarkers using magnetic beads and a low-cost flow cell. *Biosensors and Bioelectronics*, **2015**, 69, 328-36	11.8	23
88	Disposable hydrogen fuel cells for powering next-generation lateral flow devices **2015**,		1
87	Small-volume multiparametric electrochemical detection at low cost polymeric devices featuring nanoelectrodes **2015**,		1
86	Profiling of oxygen in biofilms using individually addressable disk microelectrodes on a microfabricated needle. *Mikrochimica Acta*, **2015**, 182, 985-993	5.8	12
85	**2015**,		2

84	Development of an Automated Heavy Metal Analyser. *Electroanalysis*, **2015**, 27, 929-937	3	5
83	Chapter 2:Development of Microelectrode-based Biosensors for Biomedical Analysis. *RSC Detection Science*, **2015**, 19-84	0.4	1
82	Scanning electrochemical microscopy for study of aptamer-thrombin interfacial interactions on gold disk microelectrodes. *Journal of Colloid and Interface Science*, **2014**, 417, 333-5	9.3	3
81	Miniaturization of electrochemical flow devices. *Electrochemistry Communications*, **2014**, 45, 91-94	5.1	28
80	Biofilm Oxygen Profiling using an Array of Microelectrodes on a Microfabricated Needle. *Procedia Engineering*, **2014**, 87, 256-259		6
79	Non-Conventional Electrochemical Techniques for Assembly of Electrodes on Glassy Carbon-Like PPF Materials and Their Use in a Glucose Microfluidic Fuel-Cell. *Fuel Cells*, **2014**, 14, 810-817	2.9	8
78	(Invited) Micro Fuel Cells: Can We Apply Them to a Successful Market?. *ECS Transactions*, **2014**, 64, 875-880		4
77	Determination of heterogeneous electron transfer rate constants at interdigitated nanoband electrodes fabricated by an optical mix-and-match process. *Sensors and Actuators B: Chemical*, **2014**, 194, 86-95	8.5	19
76	Microfluidic fuel cells on paper: meeting the power needs of next generation lateral flow devices. *Energy and Environmental Science*, **2014**, 7, 1744-1749	35.4	132
75	Sensitive electrochemical thrombin aptasensor based on gold disk microelectrodearrays. *Biosensors and Bioelectronics*, **2013**, 42, 17-22	11.8	42
74	Mercury detection at microfabricated pyrolyzed photoresist film (PPF) disk electrodes. *Sensors and Actuators B: Chemical*, **2013**, 186, 293-299	8.5	12
73	In situ electrodeposition of biocomposite materials by sinusoidal voltages on microelectrodes array for tyrosinase based amperometric biosensor development. *Sensors and Actuators B: Chemical*, **2013**, 181, 136-143	8.5	29
72	Membraneless glucose/O2 microfluidic enzymatic biofuel cell using pyrolyzed photoresist film electrodes. *Lab on A Chip*, **2013**, 13, 2972-9	7.2	60
71	Improved electrical characteristics of porous germanium photodiode obtained by phosphorus ion implantation. *International Journal of Nanotechnology*, **2013**, 10, 553	1.5	2
70	Development of amperometric biosensors based on nanostructured tyrosinase-conducting polymer composite electrodes. *Sensors*, **2013**, 13, 6759-74	3.8	43
69	Design of a microfluidic respirometer for semi-continuous amperometric short time biochemical oxygen demand (BODst) analysis. *Biochemical Engineering Journal*, **2012**, 66, 27-37	4.2	9
68	Design and fabrication of a COP-based microfluidic chip: chronoamperometric detection of Troponin T. *Electrophoresis*, **2012**, 33, 3187-94	3.6	16
67	High Aspect-Ratio, Fully Conducting Gold Micropillar Array Electrodes: Silicon Micromachining and Electrochemical Characterization. *Journal of Physical Chemistry C*, **2012**, 116, 18831-18846	3.8	20

66	Publisher's Note: A Non-Enzymatic Glucose Sensor Based on the Use of Gold Micropillar Array Electrodes [J. Electrochem. Soc., 159, F134 (2012)]. *Journal of the Electrochemical Society*, **2012**, 159, X1-X1	3.9	16
65	Thick-film voltammetric pH-sensors with internal indicator and reference species. *Talanta*, **2012**, 99, 737-43	4.2	10
64	Sinusoidal voltage electrodeposition and characterization of conducting polymers on gold microelectrode arrays. *Journal of Electroanalytical Chemistry*, **2012**, 687, 71-78	4.1	16
63	Fuel cell-powered microfluidic platform for lab-on-a-chip applications: Integration into an autonomous amperometric sensing device. *Lab on A Chip*, **2012**, 12, 4232-5	7.2	19
62	Cancer prognostics by direct detection of p53-antibodies on gold surfaces by impedance measurements. *Small*, **2012**, 8, 2106-15	11	19
61	Microfabrication and characterization of cylinder micropillar array electrodes. *Journal of Electroanalytical Chemistry*, **2011**, 662, 361-370	4.1	24
60	Electrochemical detection of testosterone by use of three-dimensional disc-ring microelectrode sensing platforms: application to doping monitoring. *Analytical Chemistry*, **2011**, 83, 4037-44	7.8	14
59	Improved bacteria detection by coupling magneto-immunocapture and amperometry at flow-channel microband electrodes. *Biosensors and Bioelectronics*, **2011**, 26, 3633-40	11.8	60
58	Disposable Miniaturized Screen-Printed pH and Reference Electrodes for Potentiometric Systems. *Electroanalysis*, **2011**, 23, 115-121	3	16
57	Fabrication of PPF Electrodes by a Rapid Thermal Process. *Journal of the Electrochemical Society*, **2011**, 158, H63	3.9	19
56	Toward membrane-free amperometric gas sensors: a microelectrode array approach. *Analytical Chemistry*, **2010**, 82, 5238-45	7.8	93
55	Integration of a zero dead-volume PDMS rotary switch valve in a miniaturised (bio)electroanalytical system. *Lab on A Chip*, **2010**, 10, 1841-7	7.2	12
54	Amperometric detection of Enterobacteriaceae in river water by measuring β-galactosidase activity at interdigitated microelectrode arrays. *Analytica Chimica Acta*, **2010**, 677, 156-61	6.6	42
53	Chronoamperometry on ring, ring-recessed and disk electrodes, and their arrays. The sensitive measurement of diffusion coefficients independent of a knowledge of concentration or number of electrons transferred. *Journal of Electroanalytical Chemistry*, **2010**, 647, 20-28	4.1	8
52	Construction and characterisation of a modular microfluidic system: coupling magnetic capture and electrochemical detection. *Microfluidics and Nanofluidics*, **2010**, 8, 393-402	2.8	25
51	Ion Transport Across Liquid|Liquid Interfacial Boundaries Monitored at Generator-Collector Electrodes. *Electroanalysis*, **2010**, 22, 2889-2896	3	10
50	Development of microelectrode arrays modified with inorganic–organic composite materials for dopamine electroanalysis. *Journal of Electroanalytical Chemistry*, **2010**, 639, 147-153	4.1	32
49	Plane-recessed disk electrodes and their arrays in transient generator–collector mode: The measurement of the rate of the chemical reaction of electrochemically generated species. *Journal of Electroanalytical Chemistry*, **2010**, 648, 28-35	4.1	18

48	Coupled triple phase boundary processes: Liquid|liquid generator|collector electrodes. *Electrochemistry Communications*, **2010**, 12, 455-458	5.1	8
47	Impedance biosensing using phages for bacteria detection: generation of dual signals as the clue for in-chip assay confirmation. *Biosensors and Bioelectronics*, **2010**, 26, 1261-7	11.8	68
46	Current collection efficiency of micro- and nano-ring-recessed disk electrodes and of arrays of these electrodes. *Sensors and Actuators B: Chemical*, **2009**, 138, 362-367	8.5	23
45	Biosensing at disk microelectrode arrays. Inter-electrode functionalisation allows formatting into miniaturised sensing platforms of enhanced sensitivity. *Biosensors and Bioelectronics*, **2009**, 25, 920-6	11.8	33
44	Fast electrochemical detection of anti-HIV antibodies: coupling allosteric enzymes and disk microelectrode arrays. *Analytica Chimica Acta*, **2009**, 641, 1-6	6.6	23
43	Investigating the concept of diffusional independence. Potential step transients at nano- and micro-electrode arrays: theory and experiment. *Analyst, The*, **2009**, 134, 343-8	5	32
42	Microarrays of ring-recessed disk electrodes in transient generator-collector mode: theory and experiment. *Analytical Chemistry*, **2009**, 81, 9372-82	7.8	41
41	Mass Transport to Nanoelectrode Arrays and Limitations of the Diffusion Domain Approach: Theory and Experiment. *Journal of Physical Chemistry C*, **2009**, 113, 11119-11125	3.8	146
40	Why 'the bigger the better' is not always the case when utilising microelectrode arrays: high density vs. low density arrays for the electroanalytical sensing of chromium(VI). *Analyst, The*, **2009**, 134, 2301-5	5	33
39	Gold immuno-functionalisation via self-assembled monolayers: study of critical parameters and comparative performance for protein and bacteria detection. *Journal of Immunological Methods*, **2008**, 336, 203-12	2.5	28
38	Detection of Escherichia coli and Salmonella typhimurium using interdigitated microelectrode capacitive immunosensors: the importance of transducer geometry. *Analytical Chemistry*, **2008**, 80, 7239-47	7.8	87
37	On-chip electric field driven electrochemical detection using a poly(dimethylsiloxane) microchannel with gold microband electrodes. *Analytical Chemistry*, **2008**, 80, 3622-32	7.8	77
36	Developing Random Network Theory for Carbon Nanotube Modified Electrode Voltammetry: Introduction and Application to Estimating the Potential Drop between MWCNT|MWCNT Contacts. *Journal of Physical Chemistry C*, **2008**, 112, 13729-13738	3.8	15
35	Measuring acute toxicity using a solid-state microrespirometer. *Sensors and Actuators B: Chemical*, **2008**, 135, 13-20	8.5	4
34	Self-assembled monolayers as a base for immunofunctionalisation: unequal performance for protein and bacteria detection. *Analytical and Bioanalytical Chemistry*, **2008**, 390, 1557-62	4.4	13
33	Immunofunctionalisation of gold transducers for bacterial detection by physisorption. *Analytical and Bioanalytical Chemistry*, **2008**, 391, 2825-35	4.4	21
32	Vertically aligned carbon nanotube based electrodes: Fabrication, characterisation and prospects. *Electrochemistry Communications*, **2008**, 10, 1242-1245	5.1	20
31	Photoelectrochemical ruler: measurement at the micron scale. *Analyst, The*, **2007**, 132, 983-5	5	6

30	Electrochemical Investigation of Hemispherical Microdroplets of N,N-Didodecyl-N′,N′-diethylphenylenediamine Immobilized as Regular Arrays on Partially-Blocked Electrodes: A New Approach to Liquid|Liquid Voltammetry. *Journal of Physical Chemistry C*, **2007**, 111, 9992-10002	3.8	31
29	Electroanalysis Utilizing Amperometric Microdisk Electrode Arrays. *Electroanalysis*, **2007**, 19, 1973-1986	3	93
28	Electrochemical sizing of hemispherical microdroplets immobilized as regular arrays on partially blocked electrodes. *Journal of Electroanalytical Chemistry*, **2007**, 602, 1-7	4.1	14
27	Continuous measurement of acute toxicity in water using a solid state microrespirometer. *Sensors and Actuators B: Chemical*, **2007**, 126, 515-521	8.5	15
26	Pathogen detection: a perspective of traditional methods and biosensors. *Biosensors and Bioelectronics*, **2007**, 22, 1205-17	11.8	1048
25	Voltammetric sizing and shaping of a cylinder. *Journal of Electroanalytical Chemistry*, **2007**, 611, 201-207	4.1	3
24	Voltammetry at Regular Microband Electrode Arrays: Theory and Experiment. *Journal of Physical Chemistry C*, **2007**, 111, 12058-12066	3.8	66
23	Experimental cyclic voltammetry at partially blocked electrodes: Elevated cylindrical blocks: Significantly blocked and non-flat electrodes can appear to show one-dimensional diffusion. *Journal of Electroanalytical Chemistry*, **2006**, 596, 25-32	4.1	19
22	Sulfite Determination at In Situ Plated Copper Modified Gold Ultramicroelectrode Arrays. *Electroanalysis*, **2006**, 18, 247-252	3	25
21	Trace Detection of Mercury(II) Using Gold Ultra-Microelectrode Arrays. *Electroanalysis*, **2006**, 18, 573-578	3	91
20	Electroanalysis of Bromate, Iodate and Chlorate at Tungsten Oxide Modified Platinum Microelectrode Arrays. *Electroanalysis*, **2006**, 18, 1672-1680	3	25
19	Preliminary Contribution to the Quantification of HMF in Honey by Electrochemical Biosensor Chips. *Electroanalysis*, **2006**, 18, 2435-2440	3	3
18	A new method for the study of processes at the liquid-liquid interface using an array of microdroplets on a au electrode. *ChemPhysChem*, **2006**, 7, 2585-92	3.2	8
17	Diffusional protection of electrode surfaces using regular arrays of immobilised droplets: overcoming interferences in electroanalysis. *Analyst, The*, **2006**, 131, 987-9	5	15
16	Regular arrays of microdisc electrodes: simulation quantifies the fraction of 'dead' electrodes. *Analyst, The*, **2006**, 131, 440-5	5	53
15	Gold ultra-microelectrode arrays: application to the steady-state voltammetry of hydroxide ion in aqueous solution. *Analytical Sciences*, **2006**, 22, 679-83	1.7	23
14	The linear sweep voltammetry of random arrays of microdisc electrodes: Fitting of experimental data. *Journal of Electroanalytical Chemistry*, **2006**, 592, 126-130	4.1	20
13	Improved free chlorine amperometric sensor chip for drinking water applications. *Analytica Chimica Acta*, **2005**, 554, 98-104	6.6	37

12	The cyclic and linear sweep voltammetry of regular arrays of microdisc electrodes: Fitting of experimental data. *Journal of Electroanalytical Chemistry*, **2005**, 585, 51-62	4.1	160
11	Continuous Detection of Hypochlorous Acid/Hypochlorite for Water Quality Monitoring and Control. *Electroanalysis*, **2005**, 17, 1641-1648	3	86
10	Microelectrode study of single cavitational bubbles induced by 500 kHz ultrasound. *Ultrasonics Sonochemistry*, **2002**, 9, 275-83	8.9	15
9	Low-temperature sonoelectrochemical processes. *Journal of Electroanalytical Chemistry*, **2001**, 507, 144-151	4.1	13
8	Emulsion electrosynthesis in the presence of power ultrasound Biphasic Kolbe coupling processes at platinum and boron-doped diamond electrodes. *Journal of Electroanalytical Chemistry*, **2001**, 507, 135-143	4.1	48
7	Low-temperature sonoelectrochemical processes: Part 3. Electrodimerisation of 2-nitrobenzylchloride in liquid ammonia. *Journal of Electroanalytical Chemistry*, **2001**, 506, 170-177	4.1	19
6	Sonoelectrochemistry at platinum and boron-doped diamond electrodes: achieving fast mass transport for slow diffusers. *Journal of Electroanalytical Chemistry*, **2001**, 513, 94-99	4.1	24
5	Stability of Mercury Film Electrodes under the Influence of High Frequency (500kHz) Ultrasound. *Journal of Applied Electrochemistry*, **2001**, 31, 475-480	2.6	6
4	Differential Pulse and Chronoamperometric Studies of Insonated Systems: Acoustic Streaming and Cavitational Effects. *Journal of Physical Chemistry A*, **2001**, 105, 666-674	2.8	25
3	Voltammetry at Boron-Doped Diamond Electrodes in Liquid Ammonia: Solvent Window Effects and Diamond Surface Modification. *Electrochemical and Solid-State Letters*, **1999**, 3, 224		14
2	Low-temperature sonoelectrochemical processes: Part 1. Mass transport and cavitation effects of 20 kHz ultrasound in liquid ammonia. *Journal of Electroanalytical Chemistry*, **1999**, 477, 71-78	4.1	30
1	High-frequency sonoelectrochemical processes: mass transport, thermal and surface effects induced by cavitation in a 500 kHz reactor. *Ultrasonics Sonochemistry*, **1999**, 6, 189-197	8.9	35