

# M Teresa Fernández-Abedul

## List of Publications by Year in descending order

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106  
papers

3,649  
citations

172457

29  
h-index

144013

57  
g-index

110  
all docs

110  
docs citations

110  
times ranked

4653  
citing authors

#	ARTICLE	IF	CITATIONS
1	Signal detection techniques. , 2022, , 71-122.		1
2	Multiplex bioimaging of proteins-related to neurodegenerative diseases in eye sections by laser ablation - Inductively coupled plasma " Mass spectrometry using metal nanoclusters as labels. Talanta, 2021, 221, 121489.	5.5	19
3	Electrochemical micropipette-tip for low-cost environmental applications: Determination of anionic surfactants through their interaction with methylene blue. Talanta, 2021, 224, 121732.	5.5	5
4	Paper-Based Screen-Printed Electrodes: A New Generation of Low-Cost Electroanalytical Platforms. Biosensors, 2021, 11, 51.	4.7	49
5	Fully integrated sampler and dilutor in an electrochemical paper-based device for glucose sensing. Mikrochimica Acta, 2021, 188, 302.	5.0	7
6	Synthesis of Iridium and Palladium Nanoclusters for Biomedical Applications. Materials Proceedings, 2021, 4, 49.	0.2	0
7	Obtaining information from the brain in a non-invasive way: determination of iron in nasal exudate to differentiate hemorrhagic and ischemic strokes. Clinical Chemistry and Laboratory Medicine, 2020, 58, 847-853.	2.3	9
8	Nanoparticles as labels of specific-recognition reactions for the determination of biomolecules by inductively coupled plasma-mass spectrometry. Analytica Chimica Acta, 2020, 1128, 251-268.	5.4	23
9	Paper-based platforms with coulometric readout for ascorbic acid determination in fruit juices. Analyst, The, 2020, 145, 3431-3439.	3.5	8
10	Folding-Based Electrochemical Aptasensor for the Determination of $\hat{I}^2$ -Lactoglobulin on Poly-L-Lysine Modified Graphite Electrodes. Sensors, 2020, 20, 2349.	3.8	20
11	Imaging of proteins in biological tissues by fluorescence microscopy and laser ablation-ICP-MS using natural and isotopically enriched silver nanoclusters. Journal of Analytical Atomic Spectrometry, 2020, 35, 1868-1879.	3.0	10
12	Iron Measured in Nasal Exudate Samples as a New and Useful Biomarker in the Differential Diagnosis of Patients with Acute Stroke. Cerebrovascular Diseases, 2020, 49, 625-631.	1.7	1
13	Metallic Pins as Electrodes in Low-Cost (Bio)Electroanalytical Devices. , 2020, 60, .		0
14	Microcentrifuge tubes as disposable immunoelectrochemical cells for the on-site detection of GFAP, biomarker of hemorrhagic stroke. , 2020, 60, .		1
15	Bimodal determination of immunoglobulin E by fluorometry and ICP-MS by using platinum nanoclusters as a label in an immunoassay. Mikrochimica Acta, 2019, 186, 705.	5.0	10
16	Micropipette Tip-Based Immunoassay with Electrochemical Detection of Antitissue Transglutaminase to Diagnose Celiac Disease Using Staples and a Paper-Based Platform. ACS Sensors, 2019, 4, 2679-2687.	7.8	13
17	Laser ablation ICP-MS for simultaneous quantitative imaging of iron and ferroportin in hippocampus of human brain tissues with Alzheimer's disease. Talanta, 2019, 197, 413-421.	5.5	64
18	Florescent silver nanoclusters as antibody label in a competitive immunoassay for the complement factor H. Mikrochimica Acta, 2019, 186, 429.	5.0	14

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19	Preconcentration and sensitive determination of the anti-inflammatory drug diclofenac on a paper-based electroanalytical platform. <i>Analytica Chimica Acta</i> , 2019, 1074, 89-97.	5.4	43
20	Disposable Sensors in Diagnostics, Food, and Environmental Monitoring. <i>Advanced Materials</i> , 2019, 31, e1806739.	21.0	540
21	Paper-based electrochemical transducer modified with nanomaterials for mercury determination in environmental waters. <i>Sensors and Actuators B: Chemical</i> , 2019, 290, 87-92.	7.8	47
22	Sampling and multiplexing in lab-on-paper bioelectroanalytical devices for glucose determination. <i>Biosensors and Bioelectronics</i> , 2019, 135, 64-70.	10.1	27
23	Isotopically Enriched Tracers and Inductively Coupled Plasma Mass Spectrometry Methodologies to Study Zinc Supplementation in Single-Cells of Retinal Pigment Epithelium in Vitro. <i>Analytical Chemistry</i> , 2019, 91, 4488-4495.	6.5	10
24	Quantitative mapping of specific proteins in biological tissues by laser ablation-ICP-MS using exogenous labels: aspects to be considered. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 549-558.	3.7	27
25	Open-Source Potentiostat for Wireless Electrochemical Detection with Smartphones. <i>Analytical Chemistry</i> , 2018, 90, 6240-6246.	6.5	260
26	Optimization and characterization of nanostructured paper-based electrodes. <i>Electrochimica Acta</i> , 2018, 265, 717-725.	5.2	9
27	Double-chained cationic surfactant modification of SU-8/Pyrex® microchips for electrochemical sensing of carboxylic ferrocene after reverse electrophoresis. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 490-497.	7.8	2
28	Quantitative Imaging of Specific Proteins in the Human Retina by Laser Ablation ICPMS using Bioconjugated Metal Nanoclusters as Labels. <i>Analytical Chemistry</i> , 2018, 90, 12145-12151.	6.5	26
29	Staple-Based Paper Electrochemical Platform for Celiac Disease Diagnosis. <i>ChemElectroChem</i> , 2018, 5, 4036-4045.	3.4	10
30	In situ gold-nanoparticle electrogeneration on gold films deposited on paper for non-enzymatic electrochemical determination of glucose. <i>Talanta</i> , 2018, 178, 160-165.	5.5	29
31	Pin-based electrochemical glucose sensor with multiplexing possibilities. <i>Biosensors and Bioelectronics</i> , 2017, 88, 34-40.	10.1	41
32	Fabrication of Paper-Templated Structures of Noble Metals. <i>Advanced Materials Technologies</i> , 2017, 2, 1600229.	5.8	17
33	Integration of gold-sputtered electrofluidic paper on wire-included analytical platforms for glucose biosensing. <i>Biosensors and Bioelectronics</i> , 2017, 91, 824-832.	10.1	32
34	Point-of-need simultaneous electrochemical detection of lead and cadmium using low-cost stencil-printed transparency electrodes. <i>Analytica Chimica Acta</i> , 2017, 981, 24-33.	5.4	81
35	Electrogeneration of Gold Nanoparticles on Porous-Carbon Paper-Based Electrodes and Application to Inorganic Arsenic Analysis in White Wines by Chronoamperometric Stripping. <i>Analytical Chemistry</i> , 2017, 89, 6415-6423.	6.5	47
36	Bioelectroanalysis in a Drop: Construction of a Glucose Biosensor. <i>Journal of Chemical Education</i> , 2017, 94, 806-812.	2.3	23

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37	Au@Ag SERRS tags coupled to a lateral flow immunoassay for the sensitive detection of pneumolysin. <i>Nanoscale</i> , 2017, 9, 2051-2058.	5.6	91
38	Gold Nanostructuring in Paper-based Electrodes. <i>Procedia Technology</i> , 2017, 27, 133-134.	1.1	2
39	Batch injection electroanalysis with stainless-steel pins as electrodes in single and multiplexed configurations. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 1207-1213.	7.8	21
40	Pin-based Enzymatic Electrochemical Sensing. <i>Procedia Technology</i> , 2017, 27, 98-99.	1.1	0
41	Integrated Electrophoresis Separation and Electrochemical Detection in a Paper-based Device. <i>Procedia Technology</i> , 2017, 27, 21-22.	1.1	6
42	Paper-based Stencil-free Enzymatic Sensor with Ink and Wire Electrodes. <i>Procedia Technology</i> , 2017, 27, 126-128.	1.1	0
43	Point-of-Use Simultaneous Electrochemical Detection of Lead and Cadmium Using Low-cost Screen-printed Transparency Electrodes. <i>Procedia Technology</i> , 2017, 27, 135-136.	1.1	1
44	Paper-based maskless enzymatic sensor for glucose determination combining ink and wire electrodes. <i>Biosensors and Bioelectronics</i> , 2017, 93, 40-45.	10.1	69
45	Pin-Based Flow Injection Electroanalysis. <i>Analytical Chemistry</i> , 2016, 88, 9958-9963.	6.5	10
46	Coated and uncoated cellophane as materials for microplates and open-channel microfluidics devices. <i>Lab on A Chip</i> , 2016, 16, 3885-3897.	6.0	24
47	Integrating Electronics and Microfluidics on Paper. <i>Advanced Materials</i> , 2016, 28, 5054-5063.	21.0	216
48	Poly(glycidyl methacrylate) as a tunable platform of modifiers for microfluidic devices. <i>Reactive and Functional Polymers</i> , 2016, 100, 89-96.	4.1	6
49	Electroanalytical devices with pins and thread. <i>Lab on A Chip</i> , 2016, 16, 112-119.	6.0	52
50	Enzymatic amplification-free nucleic acid hybridisation sensing on nanostructured thick-film electrodes by using covalently attached methylene blue. <i>Talanta</i> , 2015, 142, 11-19.	5.5	9
51	Enhanced detection of the potential electroactive label methylene blue by electrode nanostructuring with carbon nanotubes. <i>Sensors and Actuators B: Chemical</i> , 2014, 202, 129-136.	7.8	19
52	Design and evaluation of a new Peltier-cooled laser ablation cell with on-sample temperature control. <i>Analytica Chimica Acta</i> , 2014, 809, 88-96.	5.4	36
53	Dual screen-printed electrodes with elliptic working electrodes arranged in parallel or perpendicular to the strip. <i>Sensors and Actuators B: Chemical</i> , 2014, 198, 302-308.	7.8	9
54	Methylene blue covalently attached to single stranded DNA as electroactive label for potential bioassays. <i>Sensors and Actuators B: Chemical</i> , 2014, 191, 784-790.	7.8	28

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55	Folding Analytical Devices for Electrochemical ELISA in Hydrophobic R<sup>H</sup> Paper. Analytical Chemistry, 2014, 86, 11999-12007.	6.5	127
56	Universal mobile electrochemical detector designed for use in resource-limited applications. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11984-11989.	7.1	248
57	Electrochemical properties of spaghetti and forest like carbon nanotubes grown on glass substrates. Sensors and Actuators B: Chemical, 2014, 192, 253-260.	7.8	11
58	Ionic liquids as modifiers for glass and SU-8 electrochemical microfluidic chips. Sensors and Actuators B: Chemical, 2013, 188, 837-846.	7.8	9
59	Dispersion studies of carboxyl, amine and thiol-functionalized carbon nanotubes for improving the electrochemical behavior of screen printed electrodes. Sensors and Actuators B: Chemical, 2013, 181, 353-360.	7.8	28
60	Nafion® modified-screen printed gold electrodes and their carbon nanostructuring for electrochemical sensors applications. Talanta, 2013, 107, 376-381.	5.5	20
61	REFRACTIVE INDEX AND THICKNESS EVALUATION OF MONOMODE AND MULTIMODE STEP-INDEX PLANAR OPTICAL WAVEGUIDES USING LONGITUDINAL SECTION MAGNETIC (LSM) AND LONGITUDINAL SECTION ELECTRIC (LSE) FORMULATION. Progress in Electromagnetics Research B, 2013, 46, 213-231.	1.0	1
62	Microchip electrophoresis with amperometric detection for a novel determination of phenolic compounds in olive oil. Analyst, The, 2012, 137, 5153.	3.5	24
63	Poly (acrylic acid) microchannel modification for the enhanced resolution of catecholamines microchip electrophoresis with electrochemical detection. Analytica Chimica Acta, 2012, 724, 136-143.	5.4	12
64	Characterization of Doped Amorphous Silicon Thin Films through the Investigation of Dopant Elements by Glow Discharge Spectrometry: A Correlation of Conductivity and Bandgap Energy Measurements. International Journal of Molecular Sciences, 2011, 12, 2200-2215.	4.1	4
65	MCEâ€electrochemical detection for following interactions of ssDNA and dsDNA with methylene blue. Electrophoresis, 2009, 30, 1943-1948.	2.4	15
66	Multipleâ€point electrochemical detection for a dualâ€channel hybrid PDMSâ€glass microchip electrophoresis device. Electrophoresis, 2009, 30, 3372-3380.	2.4	15
67	Fabrication of SU-8 based microchip electrophoresis with integrated electrochemical detection for neurotransmitters. Talanta, 2009, 80, 24-30.	5.5	33
68	Electrochemical characterization of different screen-printed gold electrodes. Electrochimica Acta, 2008, 53, 3242-3249.	5.2	53
69	Critical points in the fabrication of microfluidic devices on glass substrates. Sensors and Actuators B: Chemical, 2008, 130, 436-448.	7.8	50
70	Carbon nanotubes (CNTs)-based electroanalysis. Analytical and Bioanalytical Chemistry, 2008, 390, 293-298.	3.7	33
71	Fabrication and evaluation of single- and dual-channel (Î-design) microchip electrophoresis with electrochemical detection. Journal of Chromatography A, 2008, 1180, 193-202.	3.7	20
72	Chapter 34 Miniaturised devices: electrochemical capillary electrophoresis microchips for clinical application. Comprehensive Analytical Chemistry, 2007, , 827-872.	1.3	2

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73	Chapter 26 Thick- and thin-film DNA sensors. <i>Comprehensive Analytical Chemistry</i> , 2007, , 603-641.	1.3	2
74	Procedure 36 Genosensor on gold thin-films with enzymatic electrochemical detection of a SARS virus sequence. <i>Comprehensive Analytical Chemistry</i> , 2007, 49, e251-e256.	1.3	0
75	Procedure 48 Separation and amperometric detection of hydrogen peroxide and l-ascorbic acid using capillary electrophoresis microchips. <i>Comprehensive Analytical Chemistry</i> , 2007, 49, e343-e349.	1.3	0
76	Electroactive intercalators for DNA analysis on microchip electrophoresis. <i>Electrophoresis</i> , 2007, 28, 4679-4689.	2.4	29
77	DNA single-base mismatch study with an electrochemical enzymatic genosensor. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1642-1650.	10.1	42
78	Oriented immobilisation of anti-pneumolysin Fab through a histidine tag for electrochemical immunosensors. <i>Biosensors and Bioelectronics</i> , 2007, 23, 210-217.	10.1	30
79	Amperometric detector designs for capillary electrophoresis microchips. <i>Journal of Chromatography A</i> , 2006, 1109, 291-299.	3.7	40
80	Analytical Performance of CE Microchips with Amperometric Detection. <i>Instrumentation Science and Technology</i> , 2006, 34, 697-710.	1.8	11
81	Genosensor on gold films with enzymatic electrochemical detection of a SARS virus sequence. <i>Biosensors and Bioelectronics</i> , 2005, 20, 2251-2260.	10.1	68
82	Poly(methylmethacrylate) and Topas capillary electrophoresis microchip performance with electrochemical detection. <i>Electrophoresis</i> , 2005, 26, 3160-3168.	2.4	60
83	Amperometric PMMA-microchip with integrated gold working electrode for enzyme assays. <i>Analytical and Bioanalytical Chemistry</i> , 2005, 382, 303-310.	3.7	15
84	Gold Electrodes for Detection of Enzyme Assays with 3-Indoxylphosphate as Substrate. <i>Electroanalysis</i> , 2004, 16, 1487-1496.	2.9	8
85	Detection of Human Immunoglobulin in Microchip and Conventional Capillary Electrophoresis with Contactless Conductivity Measurements. <i>Analytical Chemistry</i> , 2004, 76, 1282-1288.	6.5	83
86	The use of gold bands for flow immunoelectrochemical devices. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 377, 267-272.	3.7	5
87	Sensitive Adsorptive Stripping Voltammetric Methodologies for the Determination of Melatonin in Biological Fluids. <i>Electroanalysis</i> , 2003, 15, 773-778.	2.9	18
88	Voltammetric and flow amperometric methods for the determination of melatonin in pharmaceuticals. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2003, 31, 421-429.	2.8	25
89	High-voltage contactless conductivity-detection for lab-on-chip devices using external electrodes on the holder. <i>Analyst</i> , The, 2003, 128, 1019-1022.	3.5	97
90	Gold bands as a suitable surface for enzyme immunoassays. <i>Biosensors and Bioelectronics</i> , 2002, 17, 797-802.	10.1	20

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91	Simultaneous and sequential enzyme immunoassays on gold bands with flow electrochemical detection. <i>Analytica Chimica Acta</i> , 2002, 453, 63-69.	5.4	8
92	Flow amperometric detection of indigo for enzyme-linked immunosorbent assays with use of screen-printed electrodes. <i>Analytica Chimica Acta</i> , 2002, 462, 31-37.	5.4	25
93	Determination of buprenorphine in biological samples by high performance liquid chromatography with electrochemical detection. <i>Chromatographia</i> , 2001, 53, 704-708.	1.3	4
94	Sensitive detection for enzyme-linked immunosorbent assays based on the adsorptive stripping voltammetry of indigo in a flow system. <i>Analytica Chimica Acta</i> , 2001, 442, 55-62.	5.4	14
95	Determination of Buprenorphine in Pharmaceuticals and Human Urine by Adsorptive Stripping Voltammetry in Batch and Flow Systems. <i>Electroanalysis</i> , 2000, 12, 483-489.	2.9	26
96	Kinetic determination of acid phosphatase activity by double injection flow analysis with electrochemical detection. <i>Analytica Chimica Acta</i> , 2000, 413, 103-108.	5.4	17
97	Determination of acid phosphatase activity in a double injection flow system with electrochemical detection. <i>Analytica Chimica Acta</i> , 2000, 406, 225-232.	5.4	8
98	Flow injection electrochemical enzyme immunoassay based on the use of gold bands. <i>Analytica Chimica Acta</i> , 2000, 409, 149-158.	5.4	31
99	Determination of Buprenorphine in Pharmaceuticals and Human Urine by Adsorptive Stripping Voltammetry in Batch and Flow Systems. <i>Electroanalysis</i> , 2000, 12, 483-489.	2.9	1
100	Comparative electrochemical behaviour of biotin hydrazide and photobiotin. Importance in the development of biosensors. <i>Biosensors and Bioelectronics</i> , 1999, 14, 729-735.	10.1	3
101	Voltammetric study and determination of buprenorphine in pharmaceuticals. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1999, 21, 809-815.	2.8	15
102	Anodic Stripping of Heavy Metals Using a Hanging Mercury Drop Electrode in a Flow System. <i>Electroanalysis</i> , 1998, 10, 701-706.	2.9	31
103	Voltammetric Determination of Naltrexone in Pharmaceuticals.. <i>Analytical Letters</i> , 1997, 30, 1491-1502.	1.8	20
104	Flow injection analysis with amperometric detection of naltrexone in pharmaceuticals. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1997, 16, 15-19.	2.8	22
105	Flow injection analysis with amperometric detection of cocaine in confiscated samples. <i>Analytica Chimica Acta</i> , 1996, 328, 67-71.	5.4	27
106	Comparative voltammetric study of 2,4-dinitrophenol (DNP), albumin and DNP-albumin as an analytical approach to the use of DNP as a universal label in immunoelectrochemical assays. <i>Talanta</i> , 1994, 41, 1191-1200.	5.5	11