

MarÃ-a Pedrero

List of Publications by Year in descending order

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113
papers

3,551
citations

109321

35
h-index

168389

53
g-index

115
all docs

115
docs citations

115
times ranked

3961
citing authors

#	ARTICLE	IF	CITATIONS
1	Anticipating metastasis through electrochemical immunosensing of tumor hypoxia biomarkers. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 399-412.	3.7	11
2	Electrochemical immunosensing of Growth arrest-specific 6 in human plasma and tumor cell secretomes. <i>Electrochemical Science Advances</i> , 2022, 2, e2100096.	2.8	4
3	Contemporary electrochemical sensing and affinity biosensing to assist traces metal ions determination in clinical samples. <i>Electrochemical Science Advances</i> , 2022, 2, e2100144.	2.8	1
4	Empowering Electrochemical Biosensing through Nanostructured or Multifunctional Nucleic Acid or Peptide Biomaterials. <i>Advanced Materials Technologies</i> , 2022, 7, .	5.8	10
5	Dextran-coated nanoparticles as immunosensing platforms: Consideration of polyaldehyde density, nanoparticle size and functionality. <i>Talanta</i> , 2022, 247, 123549.	5.5	13
6	Electrocatalytic (bio)platforms for the determination of tetracyclines. <i>Journal of Solid State Electrochemistry</i> , 2021, 25, 3-13.	2.5	5
7	Disposable immunoplatfoms for the simultaneous determination of biomarkers for neurodegenerative disorders using poly(amidoamine) dendrimer/gold nanoparticle nanocomposite. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 799-811.	3.7	32
8	Magnetic microbeads-based amperometric immunoplatfom for the rapid and sensitive detection of N6-methyladenosine to assist in metastatic cancer cells discrimination. <i>Biosensors and Bioelectronics</i> , 2021, 171, 112708.	10.1	14
9	Electrochemical Immunosensing of ST2: A Checkpoint Target in Cancer Diseases. <i>Biosensors</i> , 2021, 11, 202.	4.7	11
10	New challenges in point of care electrochemical detection of clinical biomarkers. <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130349.	7.8	67
11	Multiplexed magnetic beads-assisted amperometric bioplatfoms for global detection of methylations in nucleic acids. <i>Analytica Chimica Acta</i> , 2021, 1182, 338946.	5.4	10
12	Dual Amperometric Immunosensor for Improving Cancer Metastasis Detection by the Simultaneous Determination of Extracellular and Soluble Circulating Fraction of Emerging Metastatic Biomarkers. <i>Electroanalysis</i> , 2020, 32, 706-714.	2.9	10
13	Magnetic beads-based electrochemical immunosensing of HIF-1 α , a biomarker of tumoral hypoxia. <i>Sensors and Actuators B: Chemical</i> , 2020, 307, 127623.	7.8	23
14	A novel zinc finger protein-based amperometric biosensor for miRNA determination. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 5031-5041.	3.7	26
15	Easily Multiplexable Immunoplatfom to Assist Heart Failure Diagnosis through Amperometric Determination of Galectin-3. <i>Electroanalysis</i> , 2020, 32, 2775-2785.	2.9	4
16	An electrochemical immunosensor using gold nanoparticles-PAMAM-nanostructured screen-printed carbon electrodes for tau protein determination in plasma and brain tissues from Alzheimer patients. <i>Biosensors and Bioelectronics</i> , 2020, 163, 112238.	10.1	83
17	Enlightening the advancements in electrochemical bioanalysis for the diagnosis of Alzheimer's disease and other neurodegenerative disorders. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 189, 113437.	2.8	25
18	Beyond Sensitive and Selective Electrochemical Biosensors: Towards Continuous, Real-Time, Antibiofouling and Calibration-Free Devices. <i>Sensors</i> , 2020, 20, 3376.	3.8	33

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19	Nanozymes in electrochemical affinity biosensing. <i>Mikrochimica Acta</i> , 2020, 187, 423.	5.0	34
20	Amperometric Bioplatforms To Detect Regional DNA Methylation with Single-Base Sensitivity. <i>Analytical Chemistry</i> , 2020, 92, 5604-5612.	6.5	35
21	Electrochemical biosensing to move forward in cancer epigenetics and metastasis: A review. <i>Analytica Chimica Acta</i> , 2020, 1109, 169-190.	5.4	17
22	A novel peptide-based electrochemical biosensor for the determination of a metastasis-linked protease in pancreatic cancer cells. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 6177-6188.	3.7	26
23	Biosensing and Delivery of Nucleic Acids Involving Selected Well-Known and Rising Star Functional Nanomaterials. <i>Nanomaterials</i> , 2019, 9, 1614.	4.1	2
24	Magnetic Janus Particles for Static and Dynamic (Bio)Sensing. <i>Magnetochemistry</i> , 2019, 5, 47.	2.4	26
25	Opportunities, Challenges, and Prospects in Electrochemical Biosensing of Circulating Tumor DNA and its Specific Features. <i>Sensors</i> , 2019, 19, 3762.	3.8	21
26	Antifouling (Bio)materials for Electrochemical (Bio)sensing. <i>International Journal of Molecular Sciences</i> , 2019, 20, 423.	4.1	93
27	Electrochemical biosensors for autoantibodies in autoimmune and cancer diseases. <i>Analytical Methods</i> , 2019, 11, 871-887.	2.7	27
28	Advances in Electrochemical (Bio)Sensing Targeting Epigenetic Modifications of Nucleic Acids. <i>Electroanalysis</i> , 2019, 31, 1816-1832.	2.9	12
29	Disposable Amperometric Immunosensor for the Determination of the E-cadherin Tumor Suppressor Protein in Cancer Cells and Human Tissues. <i>Electroanalysis</i> , 2019, 31, 309-317.	2.9	12
30	Versatile Electroanalytical Bioplatforms for Simultaneous Determination of Cancer-Related DNA 5-Methyl- and 5-Hydroxymethyl-Cytosines at Global and Gene-Specific Levels in Human Serum and Tissues. <i>ACS Sensors</i> , 2019, 4, 227-234.	7.8	56
31	Electrochemical affinity biosensors for fast detection of gene-specific methylations with no need for bisulfite and amplification treatments. <i>Scientific Reports</i> , 2018, 8, 6418.	3.3	62
32	Comparison of Different Strategies for the Development of Highly Sensitive Electrochemical Nucleic Acid Biosensors Using Neither Nanomaterials nor Nucleic Acid Amplification. <i>ACS Sensors</i> , 2018, 3, 211-221.	7.8	41
33	Rapid Electrochemical Assessment of Tumor Suppressor Gene Methylations in Raw Human Serum and Tumor Cells and Tissues Using Immunomagnetic Beads and Selective DNA Hybridization. <i>Angewandte Chemie</i> , 2018, 130, 8326-8330.	2.0	49
34	Rapid Electrochemical Assessment of Tumor Suppressor Gene Methylations in Raw Human Serum and Tumor Cells and Tissues Using Immunomagnetic Beads and Selective DNA Hybridization. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8194-8198.	13.8	61
35	Electrochemical Nucleic Acid-Based Biosensing of Drugs of Abuse and Pharmaceuticals. <i>Current Medicinal Chemistry</i> , 2018, 25, 4102-4118.	2.4	16
36	Hybrid 2D-nanomaterials-based electrochemical immunosensing strategies for clinical biomarkers determination. <i>Biosensors and Bioelectronics</i> , 2017, 89, 269-279.	10.1	45

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37	Electrochemical (Bio)sensing of Clinical Markers Using Quantum Dots. <i>Electroanalysis</i> , 2017, 29, 24-37.	2.9	21
38	Quantum Dots as Components of Electrochemical Sensing Platforms for the Detection of Environmental and Food Pollutants: a Review. <i>Journal of AOAC INTERNATIONAL</i> , 2017, 100, 950-961.	1.5	46
39	Magnetic Beads-Based Sensor with Tailored Sensitivity for Rapid and Single-Step Amperometric Determination of miRNAs. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2151.	4.1	30
40	Amperometric Immunosensing Scaffolds for Rapid, Simple, Non-Invasive and Accurate Determination of Protein Biomarkers of Well-Accepted and Emerging Clinical Importance. <i>Proceedings (mdpi)</i> , 2017, 1, 727.	0.2	0
41	Non-Invasive Breast Cancer Diagnosis through Electrochemical Biosensing at Different Molecular Levels. <i>Sensors</i> , 2017, 17, 1993.	3.8	40
42	Electrochemical Nucleic Acid-Based Strategies for miRNAs Determination. <i>Comprehensive Analytical Chemistry</i> , 2017, 77, 179-205.	1.3	3
43	Electrochemical sensor for rapid determination of fibroblast growth factor receptor 4 in raw cancer cell lysates. <i>PLoS ONE</i> , 2017, 12, e0175056.	2.5	22
44	Disposable Amperometric Immunosensor for the Determination of Human P53 Protein in Cell Lysates Using Magnetic Micro-Carriers. <i>Biosensors</i> , 2016, 6, 56.	4.7	24
45	Rapid endoglin determination in serum samples using an amperometric magneto-actuated disposable immunosensing platform. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 129, 288-293.	2.8	10
46	Viral protein-based bioanalytical tools for small RNA biosensing. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 79, 335-343.	11.4	16
47	Dual Functional Graphene Derivative-Based Electrochemical Platforms for Detection of the <i>p53</i> Gene with Single Nucleotide Polymorphism Selectivity in Biological Samples. <i>Analytical Chemistry</i> , 2015, 87, 2290-2298.	6.5	76
48	Hybrid Metallic Nanoparticles: Enhanced Bioanalysis and Biosensing via Carbon Nanotubes, Graphene, and Organic Conjugation. , 2015, , 137-166.		5
49	Amperometric magnetoimmunoassay for the determination of lipoprotein(a). <i>Mikrochimica Acta</i> , 2015, 182, 1457-1464.	5.0	6
50	Electrochemical genosensors for the detection of cancer-related miRNAs. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 27-33.	3.7	65
51	Electrochemical Biosensors for the Determination of Cardiovascular Markers: a Review. <i>Electroanalysis</i> , 2014, 26, 1132-1153.	2.9	58
52	Lipoprotein(a) determination in human serum using a nitrilotriacetic acid derivative immunosensing scaffold on disposable electrodes. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 5379-5387.	3.7	5
53	Multiplexed Determination of Amino-Terminal Pro-B-Type Natriuretic Peptide and C-Reactive Protein Cardiac Biomarkers in Human Serum at a Disposable Electrochemical Magnetoimmunosensor. <i>Electroanalysis</i> , 2014, 26, 254-261.	2.9	37
54	Clinical evaluation of a disposable amperometric magneto-genosensor for the detection and identification of <i>Streptococcus pneumoniae</i> . <i>Journal of Microbiological Methods</i> , 2014, 103, 25-28.	1.6	17

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55	Ultrasensitive amperometric magnetoimmunosensor for human C-reactive protein quantification in serum. <i>Sensors and Actuators B: Chemical</i> , 2013, 188, 212-220.	7.8	68
56	Nanostructured rough gold electrodes as platforms to enhance the sensitivity of electrochemical genosensors. <i>Analytica Chimica Acta</i> , 2013, 788, 141-147.	5.4	18
57	Disposable amperometric magnetoimmunosensor for the sensitive detection of the cardiac biomarker amino-terminal pro-B-type natriuretic peptide in human serum. <i>Analytica Chimica Acta</i> , 2013, 784, 18-24.	5.4	34
58	Disposable Electrochemical Magnetoimmunosensor for the Determination of Troponin T Cardiac Marker. <i>Electroanalysis</i> , 2013, 25, 51-58.	2.9	23
59	Oligonucleotide and DNA Microarrays as Versatile Tools for Rapid Diagnostics. <i>Series in Sensors</i> , 2013, , 571-604.	0.0	0
60	Carbon-Polymer Bio-Nano-Composite Electrodes for Electrochemical Genosensing Mar ± á Isabel Pividori and Salvador Alegret. , 2012, , 75-120.		0
61	Design and fabrication of a COP -based microfluidic chip: Chronoamperometric detection of Troponin T . <i>Electrophoresis</i> , 2012, 33, 3187-3194.	2.4	19
62	Sensitive and rapid amperometric magnetoimmunosensor for the determination of <i>Staphylococcus aureus</i> . <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 917-925.	3.7	66
63	Magnetic Beads-Based Electrochemical Sensors Applied to the Detection and Quantification of Bioterrorism/Biohazard Agents. <i>Electroanalysis</i> , 2012, 24, 470-482.	2.9	41
64	Electrochemical Biosensing of Pathogen Micro-Organisms. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2012, , 119-137.	0.5	0
65	Electrochemical genosensors based on PCR strategies for microorganisms detection and quantification. <i>Analytical Methods</i> , 2011, 3, 780.	2.7	32
66	Development of amperometric magnetogenosensors coupled to asymmetric PCR for the specific detection of <i>Streptococcus pneumoniae</i> . <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 2413-2420.	3.7	30
67	Disposable amperometric magnetoimmunosensors for the specific detection of <i>Streptococcus pneumoniae</i> . <i>Biosensors and Bioelectronics</i> , 2010, 26, 1225-1230.	10.1	40
68	Molecular mechanisms of methylmercury-induced cell death in human HepG2 cells. <i>Food and Chemical Toxicology</i> , 2010, 48, 1405-1411.	3.6	32
69	Electroanalytical Sensors and Devices for Multiplexed Detection of Foodborne Pathogen Microorganisms. <i>Sensors</i> , 2009, 9, 5503-5520.	3.8	60
70	Gold screen-printed-based impedimetric immunobiosensors for direct and sensitive <i>Escherichia coli</i> quantisation. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3365-3371.	10.1	87
71	Ultrasensitive detection of coliforms by means of direct asymmetric PCR combined with disposable magnetic amperometric genosensors. <i>Analyst</i> , The, 2009, 134, 34-37.	3.5	22
72	Amperometric DNA quantification based on the use of peroxidase-mercaptopropionic acid-modified gold electrodes. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 250-257.	7.8	14

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73	Immunosensor for the determination of <i>Staphylococcus aureus</i> using a tyrosinase-mercaptropionic acid modified electrode as an amperometric transducer. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 391, 837-845.	3.7	48
74	Designs of Enterobacteriaceae Lac Z Gene DNA Gold Screen Printed Biosensors. <i>Electroanalysis</i> , 2008, 20, 1397-1405.	2.9	28
75	Development of amperometric biosensors using thiolated tetrathiafulvalene-derivatized self-assembled monolayer modified electrodes. <i>Sensors and Actuators B: Chemical</i> , 2008, 134, 974-980.	7.8	12
76	Disposable Magnetic DNA Sensors for the Determination at the Attomolar Level of a Specific Enterobacteriaceae Family Gene. <i>Analytical Chemistry</i> , 2008, 80, 8239-8245.	6.5	62
77	Electrochemical immunosensor designs for the determination of <i>Staphylococcus aureus</i> using 3,3-dithiodipropionic acid di(N-succinimidyl ester)-modified gold electrodes. <i>Talanta</i> , 2008, 77, 876-881.	5.5	36
78	DNA sensor based on an <i>Escherichia coli</i> lac Z gene probe immobilization at self-assembled monolayers-modified gold electrodes. <i>Talanta</i> , 2007, 73, 838-844.	5.5	45
79	Adaptive Orientation of Multifunctional Nanowires for Magnetic Control of Bioelectrocatalytic Processes. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1508-1511.	13.8	43
80	Development of an Amperometric Immunosensor for the Quantification of <i>Staphylococcus aureus</i> Using Self-Assembled Monolayer-Modified Electrodes as Immobilization Platforms. <i>Electroanalysis</i> , 2007, 19, 1476-1482.	2.9	22
81	Tetrathiafulvalene thiolated derivatives self-assembled monolayers as platforms for the construction of electrochemical biosensors. <i>Electrochemistry Communications</i> , 2006, 8, 299-304.	4.7	8
82	Characterization of alkanethiol-self-assembled monolayers-modified gold electrodes by electrochemical impedance spectroscopy. <i>Journal of Electroanalytical Chemistry</i> , 2006, 586, 112-121.	3.8	166
83	Development of a DNA Sensor Based on Alkanethiol Self-Assembled Monolayer-Modified Electrodes. <i>Sensors</i> , 2005, 5, 344-363.	3.8	30
84	A peroxidase-tetrathiafulvalene biosensor based on self-assembled monolayer modified Au electrodes for the flow-injection determination of hydrogen peroxide. <i>Talanta</i> , 2005, 66, 1310-1319.	5.5	66
85	Voltammetric Determination of Antibacterial Nitro-Compounds at Activated Carbon Fibre Microelectrodes. <i>Electroanalysis</i> , 2004, 16, 1763-1770.	2.9	21
86	A Lactulose Bienenzyme Biosensor Based on Self-Assembled Monolayer Modified Electrodes. <i>Electroanalysis</i> , 2004, 16, 1385-1392.	2.9	11
87	An integrated bienzyme glucose oxidase-fructose dehydrogenase-tetrathiafulvalene-3-mercaptopropionic acid-gold electrode for the simultaneous determination of glucose and fructose. <i>Bioelectrochemistry</i> , 2004, 63, 199-206.	4.6	36
88	An integrated electrochemical fructose biosensor based on tetrathiafulvalene-modified self-assembled monolayers on gold electrodes. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 377, 600-607.	3.7	36
89	Voltametric and Flow Injection Determination of Oxytetracycline Residues in Food Samples Using Carbon Fiber Microelectrodes. <i>Electroanalysis</i> , 2003, 15, 601-607.	2.9	10
90	Amperometric flow-injection determination of phenolic compounds at self-assembled monolayer-based tyrosinase biosensors. <i>Analytica Chimica Acta</i> , 2003, 494, 187-197.	5.4	136

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91	Flow injection and HPLC determination of furosemide using pulsed amperometric detection at microelectrodes. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2003, 33, 923-933.	2.8	32
92	Carbon fiber cylindrical microelectrode-based detector for the determination of antithyroid drugs. <i>Talanta</i> , 2002, 56, 577-584.	5.5	10
93	Determination of Disulfiram by Adsorptive Stripping Voltammetry at Gold Disk Microelectrodes. <i>Electroanalysis</i> , 2002, 14, 486-492.	2.9	5
94	Preparation, characterization and application of alkanethiol self-assembled monolayers modified with tetrathiafulvalene and glucose oxidase at a gold disk electrode. <i>Journal of Electroanalytical Chemistry</i> , 2002, 526, 92-100.	3.8	113
95	Determination of the herbicide desmetryne in organised media by adsorptive stripping voltammetry. <i>Talanta</i> , 2001, 53, 991-1000.	5.5	9
96	Ruthenium and ruthenium dioxide-modified graphite-ethylene/propylene/diene and graphite-Teflon composite electrodes as amperometric flow detectors. Application to the determination of methionine. <i>Fresenius' Journal of Analytical Chemistry</i> , 2001, 371, 507-513.	1.5	8
97	Voltammetric Determination of Methylthiouracil in Animal Feed Using Carbon Fiber Microelectrodes. <i>Electroanalysis</i> , 2001, 13, 1301-1304.	2.9	6
98	Oil-in-water emulsions as suitable working media for the direct polarographic determination of aziprotryne and desmetryne from its organic extracts in water samples. <i>Fresenius' Journal of Analytical Chemistry</i> , 2000, 367, 454-460.	1.5	4
99	Graphite-Ethylene/Propylene/Diene Terpolymer Composite Electrodes. A New Electrode Material for Electrochemical Detection. <i>Electroanalysis</i> , 1999, 11, 161-166.	2.9	4
100	Graphite-teflon-tyrosinase composite electrodes for the monitoring of phenolic compounds in predominantly non aqueous media. <i>Analisis - European Journal of Analytical Chemistry</i> , 1999, 27, 592-599.	0.4	17
101	Electrochemical activation of screen-printed carbon strips. <i>Analyst, The</i> , 1996, 121, 345.	3.5	160
102	Determination of the pKa values for polycationic species derived from 9-hydroxy and 9-aminothiazolo[5,4-b]quinolines. A problem related to the tautomerism of these systems. <i>Tetrahedron</i> , 1996, 52, 11929-11946.	1.9	5
103	Remarkably selective metallized-carbon amperometric biosensors. <i>Analytica Chimica Acta</i> , 1995, 305, 3-7.	5.4	53
104	Screen-printed amperometric biosensors for glucose and alcohols based on ruthenium-dispersed carbon inks. <i>Analytica Chimica Acta</i> , 1995, 300, 111-116.	5.4	50
105	Highly selective biosensing of lactate at lactate oxidase containing rhodium-dispersed carbon paste electrodes. <i>Analytica Chimica Acta</i> , 1995, 304, 41-46.	5.4	23
106	Adsorptive stripping voltammetry in dispersed media. Application to the determination of the herbicide terbutryn. <i>Electroanalysis</i> , 1995, 7, 644-648.	2.9	11
107	Metal-dispersed screen-printed carbon electrodes. <i>Electroanalysis</i> , 1995, 7, 1032-1034.	2.9	21
108	Palladium-doped screen-printed electrodes for monitoring formaldehyde. <i>Analyst, The</i> , 1995, 120, 1969.	3.5	20

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109	Determination of dinoseb by adsorptive stripping voltammetry using a mercury film electrode. Fresenius' Journal of Analytical Chemistry, 1994, 349, 546-551.	1.5	7
110	Polarographic study of simazine in micellar and emulsified media. Analytica Chimica Acta, 1993, 273, 343-349.	5.4	22
111	Determination of methoprotrene and terbutryn by adsorptive stripping voltammetry on the hanging mercury drop electrode. Analyst, The, 1993, 118, 1405-1410.	3.5	21
112	Determination of Dinoseb by adsorptive stripping voltammetry. Electroanalysis, 1991, 3, 419-422.	2.9	13
113	Determination of formaldehyde in air by flow injection using pararosaniline and spectrophotometric detection. Analyst, The, 1989, 114, 1469-1471.	3.5	37