NoemÃ- de-los-Santos-Ãlvarez

List of Publications by Year
in descending order

105 papers	3,495 citations	126907 33 h-index	155660 55 g-index
106 all docs	106 docs citations	106 times ranked	4639 citing authors

#	Article	IF	Citations
1	Bioanalytical methods for circulating extracellular matrix-related proteins: new opportunities in cancer diagnosis. Analytical and Bioanalytical Chemistry, 2022, 414, 147-165.	3.7	4
2	Aptamers targeting a tumor-associated extracellular matrix component: The human mature collagen XIÎ±1. Analytica Chimica Acta, 2022, 1189, 339206.	5.4	5
3	Editorial: Electrochemical aptasensors are gaining momentum. Electrochimica Acta, 2022, 401, 139520.	5.2	1
4	A competitive assay for the detection of a 16-mer peptide from Î±1 chain of human collagen XI. Talanta, 2022, 240, 123196.	5.5	2
5	Impedimetric aptamer-based glycan PSA score for discrimination of prostate cancer from other prostate diseases. Biosensors and Bioelectronics, 2021, 175, 112872.	10.1	38
6	NEW MOLECULAR RECEPTORS FOR DIAGNOSIS AND THERAPY OF PANCREATIC DUCTAL ADENOCARCINOMA. British Journal of Surgery, 2021, 108, .	0.3	0
7	Multiplexed Prostate Cancer Companion Diagnostic Devices. Sensors, 2021, 21, 5023.	3.8	12
8	Dual electrochemical genosensor for early diagnosis of prostate cancer through lncRNAs detection. Biosensors and Bioelectronics, 2021, 192, 113520.	10.1	26
9	Fe3O4@Au nanoparticles-based magnetoplatform for the HMGA maize endogenous gene electrochemical genosensing. Talanta, 2020, 206, 120220.	5.5	12
10	Determination of ascorbic acid in dietary supplements by cyclic voltammetry. , 2020, , 13-23.		1
11	Amperometric detection of NADH using carbon-based electrodes. , 2020, , 67-74.		0
12	Impedimetric aptasensor for determination of the antibiotic neomycin B. , 2020, , 109-118.		0
13	New Uses for the Personal Glucose Meter: Detection of Nucleic Acid Biomarkers for Prostate Cancer Screening. Sensors, 2020, 20, 5514.	3.8	7
14	Aptamers targeting protein-specific glycosylation in tumor biomarkers: general selection, characterization and structural modeling. Chemical Science, 2020, 11, 9402-9413.	7.4	22
15	Electrochemical aptasensors for cancer diagnosis in biological fluids â€“ A review. Analytica Chimica Acta, 2020, 1124, 1-19.	5.4	62
16	On the Electrochemical Detection of Alpha-Fetoprotein Using Aptamers: DNA Isothermal Amplification Strategies to Improve the Performance of Weak Aptamers. Biosensors, 2020, 10, 46.	4.7	7
17	Truncated aptamers as selective receptors in a gluten sensor supporting direct measurement in a deep eutectic solvent. Biosensors and Bioelectronics, 2020, 165, 112339.	10.1	20
18	A convenient renewable surface plasmon resonance chip for relative quantification of genetically modified soybean in food and feed. PLoS ONE, 2020, 15, e0229659.	2.5	7

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19	Engaging in analytical chemistry in review classes: contests based on TV shows as fun evaluable checkpoints. Analytical and Bioanalytical Chemistry, 2020, 412, 5891-5896.	3.7	0
20	The Translational Potential of Electrochemical DNA-Based Liquid Biopsy. Frontiers in Chemistry, 2020, 8, 143.	3.6	21
21	Improving the analytical performance of weak aptamers: DNA isothermal amplification approaches. , 2020, 60, .		0
22	Electrochemical platforms for solid-phase isothermal 2amplification and detection of bacterial genome. , 2020, 60, .		0
23	Giving New Uses to Glucose Meters: Detection of Prostate Cancer. , 2020, 60, .		0
24	Effect of Graphene Oxide Modification on a DNA Biosensor Developed for the Detection of Methylated DNA Associated with Cancer. Proceedings (mdpi), 2019, 15, .	0.2	0
25	Unravelling the lipocalin 2 interaction with aptamers: May rolling circle amplification improve their functional affinity?. Talanta, 2019, 197, 406-412.	5.5	12
26	Long noncoding RNAs: from genomic junk to rising stars in the early detection of cancer. Analytical and Bioanalytical Chemistry, 2019, 411, 4265-4275.	3.7	32
27	Focusing aptamer selection on the glycan structure of prostate-specific antigen: Toward more specific detection of prostate cancer. Biosensors and Bioelectronics, 2019, 128, 83-90.	10.1	46
28	Electrochemical aptamer-based assays coupled to isothermal nucleic acid amplification techniques: New tools for cancer diagnosis. Current Opinion in Electrochemistry, 2019, 14, 32-43.	4.8	20
29	Chronoamperometric magnetogenosensing for simultaneous detection of two Roundup Readyâ„¢ soybean lines: GTS 40-3-2 and MON89788. Sensors and Actuators B: Chemical, 2019, 283, 262-268.	7.8	3
30	Onâ€Gold Recombinase Polymerase Primer Elongation for Electrochemical Detection of Bacterial Genome: Mechanism Insights and Influencing Factors. ChemElectroChem, 2019, 6, 793-800.	3.4	13
31	Understanding the Factors Affecting the Analytical Performance of Sandwichâ€hybridization Genosensors on Gold Electrodes. Electroanalysis, 2018, 30, 1229-1240.	2.9	27
32	Post-translational modifications in tumor biomarkers: the next challenge for aptamers?. Analytical and Bioanalytical Chemistry, 2018, 410, 2059-2065.	3.7	23
33	Sequence-specific electrochemical detection of enzymatic amplification products of Salmonella genome on ITO electrodes improves pathogen detection to the single copy level. Sensors and Actuators B: Chemical, 2018, 268, 438-445.	7.8	16
34	Electrochemical genoassays on gold-coated magnetic nanoparticles to quantify genetically modified organisms (GMOs) in food and feed as GMO percentage. Biosensors and Bioelectronics, 2018, 110, 147-154.	10.1	26
35	Helicase-dependent isothermal amplification: a novel tool in the development of molecular-based analytical systems for rapid pathogen detection. Analytical and Bioanalytical Chemistry, 2018, 410, 679-693.	3.7	96
36	Ferroceneâ€Decorated Phenol Derivatives by Trapping orthoâ€Quinone Methide Intermediates with Ferrocene. European Journal of Organic Chemistry, 2018, 2018, 2858-2862.	2.4	6

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37	Selection of Antiâ€gluten DNA Aptamers in a Deep Eutectic Solvent. Angewandte Chemie - International Edition, 2018, 57, 12850-12854.	13.8	17
38	Trapping para-Quinone Methide Intermediates with Ferrocene: Synthesis and Preliminary Biological Evaluation of New Phenol-Ferrocene Conjugates. Molecules, 2018, 23, 1335.	3.8	4
39	Selection of Antiâ€gluten DNA Aptamers in a Deep Eutectic Solvent. Angewandte Chemie, 2018, 130, 13032-13036.	2.0	12
40	Electrochemical genosensors in food safety assessment. Critical Reviews in Food Science and Nutrition, 2017, 57, 2758-2774.	10.3	25
41	Thioaromatic DNA monolayers for target-amplification-free electrochemical sensing of environmental pathogenic bacteria. Biosensors and Bioelectronics, 2017, 92, 162-170.	10.1	32
42	Self-assembled gold nanoparticles for impedimetric and amperometric detection of a prostate cancer biomarker. Sensors and Actuators B: Chemical, 2017, 251, 637-643.	7.8	52
43	Disposable electrochemical aptasensor for gluten determination in food. Sensors and Actuators B: Chemical, 2017, 241, 522-527.	7.8	29
44	Electrochemical and SERS Based Biosensors for Cancer Biomarkers Detection. Proceedings (mdpi), 2017, 1, .	0.2	0
45	A Quantitative PCR-Electrochemical Genosensor Test for the Screening of Biotech Crops. Sensors, 2017, 17, 881.	3.8	9
46	Solid-phase helicase dependent amplification and electrochemical detection of Salmonella on highly stable oligonucleotide-modified ITO electrodes. Chemical Communications, 2017, 53, 9721-9724.	4.1	26
47	Fabrication of a Horizontal and a Vertical Large Surface Area Nanogap Electrochemical Sensor. Sensors, 2016, 16, 2128.	3.8	8
48	Harnessing Aptamers to Overcome Challenges in Gluten Detection. Biosensors, 2016, 6, 16.	4.7	20
49	High resolution melting analysis as a new approach to discriminate gluten-containing cereals. Food Chemistry, 2016, 211, 383-391.	8.2	14
50	Comparison of isothermal helicase-dependent amplification and PCR for the detection of Mycobacterium tuberculosis by an electrochemical genomagnetic assay. Analytical and Bioanalytical Chemistry, 2016, 408, 8603-8610.	3.7	25
51	Aptamers as Synthetic Receptors for Food Quality andÂSafety Control. Comprehensive Analytical Chemistry, 2016, , 155-191.	1.3	4
52	Electrochemical biosensors and nanobiosensors. Essays in Biochemistry, 2016, 60, 69-80.	4.7	265
53	Highly Monodisperse Fe₃O₄@Au Superparamagnetic Nanoparticles as Reproducible Platform for Genosensing Genetically Modified Organisms. ACS Sensors, 2016, 1, 1044-1053.	7.8	49
54	Hybrid Synthetic Receptors on MOSFET Devices for Detection of Prostate Specific Antigen in Human Plasma. Analytical Chemistry, 2016, 88, 11486-11490.	6.5	35

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55	Label-Free Ultrasensitive Memristive Aptasensor. Nano Letters, 2016, 16, 4472-4476.	9.1	87
56	DNA aptamer-based sandwich microfluidic assays for dual quantification and multi-glycan profiling of cancer biomarkers. Biosensors and Bioelectronics, 2016, 79, 313-319.	10.1	61
57	Electrochemical magnetoassay coupled to PCR as a quantitative approach to detect the soybean transgenic event GTS40-3-2 in foods. Sensors and Actuators B: Chemical, 2016, 222, 1050-1057.	7.8	17
58	Challenging genosensors in food samples: The case of gluten determination in highly processed samples. Talanta, 2016, 146, 490-495.	5.5	18
59	Optimisation and Characterisation of Anti-Fouling Ternary SAM Layers for Impedance-Based Aptasensors. Sensors, 2015, 15, 25015-25032.	3.8	50
60	Point-of-Care Diagnostics in Low Resource Settings: Present Status and Future Role of Microfluidics. Biosensors, 2015, 5, 577-601.	4.7	259
61	Optimisation of an electrochemical impedance spectroscopy aptasensor by exploiting quartz crystal microbalance with dissipation signals. Sensors and Actuators B: Chemical, 2015, 220, 369-375.	7.8	58
62	Attomolar quantitation of Mycobacterium tuberculosis by asymmetric helicase-dependent isothermal DNA-amplification and electrochemical detection. Biosensors and Bioelectronics, 2015, 68, 122-128.	10.1	51
63	Multiplex electrochemical DNA platform for femtomolar-level quantification of genetically modified soybean. Biosensors and Bioelectronics, 2015, 68, 259-265.	10.1	32
64	Sensitive gluten determination in gluten-free foods by an electrochemical aptamer-based assay. Analytical and Bioanalytical Chemistry, 2015, 407, 6021-6029.	3.7	42
65	Targeting Helicase-Dependent Amplification Products with an Electrochemical Genosensor for Reliable and Sensitive Screening of Genetically Modified Organisms. Analytical Chemistry, 2015, 87, 8547-8554.	6.5	41
66	DNA aptamer-based detection of prostate cancer. Chemical Papers, 2015, 69, .	2.2	41
67	Hairpin-based DNA electrochemical sensor for selective detection of a repetitive and structured target codifying a gliadin fragment. Analytical and Bioanalytical Chemistry, 2015, 407, 3481-3488.	3.7	17
68	Affinity of aptamers binding 33-mer gliadin peptide and gluten proteins: Influence of immobilization and labeling tags. Analytica Chimica Acta, 2015, 873, 63-70.	5.4	31
69	3D-nanostructured Au electrodes for the event-specific detection of MON810 transgenic maize. Talanta, 2015, 134, 158-164.	5.5	18
70	Strongly structured DNA sequences as targets for genosensing: Sensing phase design and coupling to PCR amplification for a highly specific 33-mer gliadin DNA fragment. Biosensors and Bioelectronics, 2014, 60, 244-251.	10.1	30
71	Aptamer Binding to Celiac Disease-Triggering Hydrophobic Proteins: A Sensitive Gluten Detection Approach. Analytical Chemistry, 2014, 86, 2733-2739.	6.5	58
72	Localized Surface Plasmon Resonance as a Biosensing Platform for Developing Countries. Biosensors, 2014, 4, 172-188.	4.7	142

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73	Effect of Tags and Labels on the Performance of Enzymeâ€Amplified Electrochemical Genomagnetic Assays. Electroanalysis, 2013, 25, 147-153.	2.9	20
74	Monovalent labeling system improves the sensitivity of aptamer-based inhibition assays for small molecule detection. Sensors and Actuators B: Chemical, 2013, 182, 668-674.	7.8	16
75	A label-free DNA aptamer-based impedance biosensor for the detection of E. coli outer membrane proteins. Sensors and Actuators B: Chemical, 2013, 181, 766-772.	7.8	69
76	Aptamer-Based Analysis: A Promising Alternative for Food Safety Control. Sensors, 2013, 13, 16292-16311.	3.8	113
77	SPR evaluation of binding kinetics and affinity study of modified RNA aptamers towards small molecules. Talanta, 2012, 99, 767-773.	5.5	32
78	Towards a reliable technology for antioxidant capacity and oxidative damage evaluation: Electrochemical (bio)sensors. Biosensors and Bioelectronics, 2011, 30, 1-12.	10.1	103
79	DNA-based biosensor for the electrocatalytic determination of antioxidant capacity in beverages. Biosensors and Bioelectronics, 2011, 26, 2396-2401.	10.1	66
80	Aptamerâ€Based Inhibition Assay for the Electrochemical Detection of Tobramycin Using Magnetic Microparticles. Electroanalysis, 2011, 23, 43-49.	2.9	22
81	Amperometric Quantification of Gluten in Food Samples Using an ELISA Competitive Assay and Flow Injection Analysis. Electroanalysis, 2011, 23, 108-114.	2.9	15
82	Impedimetric aptasensor for tobramycin detection in human serum. Biosensors and Bioelectronics, 2011, 26, 2354-2360.	10.1	51
83	Electrocatalytic evaluation of DNA damage by superoxide radical for antioxidant capacity assessment. Journal of Electroanalytical Chemistry, 2011, 659, 43-49.	3.8	39
84	Carbon Nanostructure-Based Field-Effect Transistors for Label-Free Chemical/Biological Sensors. Sensors, 2010, 10, 5133-5159.	3.8	145
85	Structured Nucleic Acid Probes for Electrochemical Devices. Electroanalysis, 2009, 21, 2077-2090.	2.9	39
86	SPR sensing of small molecules with modified RNA aptamers: Detection of neomycin B. Biosensors and Bioelectronics, 2009, 24, 2547-2553.	10.1	70
87	CO tolerance of ordered intermetallic phases. Journal of Electroanalytical Chemistry, 2009, 626, 14-22.	3.8	52
88	PCR-coupled electrochemical sensing of Legionella pneumophila. Biosensors and Bioelectronics, 2009, 24, 2390-2396.	10.1	40
89	Electrochemical Oxidation of Guanosine and Xanthosine at Physiological pH: Further Evidences of a Convergent Mechanism for the Oxidation of Purine Nucleosides. Electroanalysis, 2008, 20, 833-839.	2.9	7
90	Aptamers as recognition elements for label-free analytical devices. TrAC - Trends in Analytical Chemistry, 2008, 27, 437-446.	11.4	85

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91	Modified-RNA Aptamer-Based Sensor for Competitive Impedimetric Assay of Neomycin B. Journal of the American Chemical Society, 2007, 129, 3808-3809.	13.7	106
92	Electrochemical oxidation of guanosine and adenosine: Two convergent pathways. Electrochemistry Communications, 2007, 9, 1862-1866.	4.7	22
93	Electrocatalytic activity of oxidation products of guanine and 5â€²-GMP towards the oxidation of NADH. Electrochimica Acta, 2007, 53, 829-836.	5.2	5
94	Amplified label-free electrocatalytic detection of DNA in the presence of calcium ions. Biosensors and Bioelectronics, 2006, 21, 1507-1512.	10.1	6
95	Electrochemical and Catalytic Properties of the Adenine Coenzymes FAD and Coenzyme A on Pyrolytic Graphite Electrodes. Electroanalysis, 2005, 17, 445-451.	2.9	10
96	Flavin Adenine Dinucleotide As Precursor for NADH Electrocatalyst. Analytical Chemistry, 2005, 77, 4286-4289.	6.5	18
97	5-Hydroxytryptophan as a Precursor of a Catalyst for the Oxidation of NADH. Analytical Chemistry, 2005, 77, 2624-2631.	6.5	18
98	Electrocatalytic Oxidation of NADH by Oxidized s-Adenosyl-L-Methionine (SAMe): Application to NADH and SAMe Determinations. Electroanalysis, 2004, 16, 881-887.	2.9	6
99	Electrocatalytic adsorptive voltammetry for fludarabine determination in urine. Analytica Chimica Acta, 2004, 504, 271-277.	5.4	8
100	Catalytic Voltammetric Determination of Cladribine in Biological Samples. Electroanalysis, 2003, 15, 441-446.	2.9	12
101	Amperometric determination of serum lactate dehydrogenase activity using an ADP-modified graphite electrode. Analytica Chimica Acta, 2002, 457, 275-284.	5.4	6
102	A comparative study of different adenine derivatives for the electrocatalytic oxidation of Î²-nicotinamide adenine dinucleotide. Journal of Electroanalytical Chemistry, 2001, 502, 109-117.	3.8	45
103	Catching the Sugars: Electrochemical Aptasensors for the Detection of Cancer-Related Glycosylation Changes in Prostate-Specific Antigen. , 0, , .		1
104	Electrochemical Detection of Salmonella via On-surface Isothermal Amplification of its Genetic Material onto Highly Stable and Reproducible Indium Tin Oxide Platforms. , 0, , .		0
105	APTAMER SELECTION THROUGH MAGNETIC BEADS-BASED SELEX TECHNOLOGY FOR GLYCOPEPTIDE ANTIBIOTIC. , 0, , .		0