Beatriz Prieto-Simon

List of Publications by Year
in descending order

76 papers	3,391 citations	126708 33 h-index	143772 57 g-index
77 all docs	77 docs citations	77 times ranked	4635 citing authors

#	Article	IF	Citations
1	Biosensors for Pesticide Detection: New Trends. American Journal of Analytical Chemistry, 2012, 03, 210-232.	0.3	169
2	New advances in electrochemical biosensors for the detection of toxins: Nanomaterials, magnetic beads and microfluidics systems. AÂreview. Analytica Chimica Acta, 2016, 908, 8-21.	2.6	164
3	Highly sensitive detection of pathogen Escherichia coli O157:H7 by electrochemical impedance spectroscopy. Biosensors and Bioelectronics, 2013, 45, 174-180.	5.3	155
4	Enzyme-Linked Aptamer Assays (ELAAs), based on a competition format for a rapid and sensitive detection of Ochratoxin A in wine. Food Control, 2011, 22, 737-743.	2.8	139
5	Aptamer-DNAzyme hairpins for biosensing of Ochratoxin A. Biosensors and Bioelectronics, 2012, 32, 208-212.	5.3	130
6	Novel highly-performing immunosensor-based strategy for ochratoxin A detection in wine samples. Biosensors and Bioelectronics, 2008, 23, 995-1002.	5.3	120
7	Nanostructured Electrochemical Biosensors for Label-Free Detection of Water- and Food-Borne Pathogens. ACS Applied Materials & Interfaces, 2018, 10, 6055-6072.	4.0	115
8	Biosensors to detect marine toxins: Assessing seafood safety. Talanta, 2007, 72, 884-895.	2.9	108
9	Skin in the diagnostics game: Wearable biosensor nano- and microsystems for medical diagnostics. Nano Today, 2020, 30, 100828.	6.2	106
10	Enzyme-Linked Immunosorbent Assay (ELISA) based on superparamagnetic nanoparticles for aflatoxin M1 detection. Talanta, 2008, 77, 138-143.	2.9	103
11	A review of the use of genetically engineered enzymes in electrochemical biosensors. Seminars in Cell and Developmental Biology, 2009, 20, 3-9.	2.3	93
12	Bioelectronic tongues: New trends and applications in water and food analysis. Biosensors and Bioelectronics, 2016, 79, 608-626.	5.3	91
13	Comparative study of electron mediators used in the electrochemical oxidation of NADH. Biosensors and Bioelectronics, 2004, 19, 1131-1138.	5.3	89
14	Electrochemical biosensors as a tool for antioxidant capacity assessment. Sensors and Actuators B: Chemical, 2008, 129, 459-466.	4.0	79
15	Emerging biotools for assessment of mycotoxins in the past decade. TrAC - Trends in Analytical Chemistry, 2007, 26, 689-702.	5.8	76
16	Label-free ITO-based immunosensor for the detection of very low concentrations of pathogenic bacteria. Bioelectrochemistry, 2015, 101, 146-152.	2.4	76
17	Novel nanobiotechnological concepts in electrochemical biosensors for the analysis of toxins. Analyst, The, 2012, 137, 1055.	1.7	72
18	Advances in Nanoporous Anodic Aluminaâ€Based Biosensors to Detect Biomarkers of Clinical Significance: A Review. Advanced Healthcare Materials, 2018, 7, 1700904.	3.9	70

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19	Trends in Flow-based Biosensing Systems for Pesticide Assessment. Sensors, 2006, 6, 1161-1186.	2.1	66
20	Transdermal Electrochemical Monitoring of Glucose via Highâ€Density Silicon Microneedle Array Patch. Advanced Functional Materials, 2022, 32, 2009850.	7.8	66
21	Biomolecule Immobilization in Biosensor Development: Tailored Strategies Based on Affinity Interactions. Protein and Peptide Letters, 2008, 15, 757-763.	0.4	62
22	Porous polymeric membranes: fabrication techniques and biomedical applications. Journal of Materials Chemistry B, 2021, 9, 2129-2154.	2.9	56
23	Novel peptidylated surfaces for interference-free electrochemical detection of cardiac troponin I. Biosensors and Bioelectronics, 2018, 99, 486-492.	5.3	53
24	Electrochemical immunosensor for breast cancer biomarker detection using high-density silicon microneedle array. Biosensors and Bioelectronics, 2021, 192, 113496.	5.3	53
25	Label-free electrochemical DNA sensor using â€œclickâ€•functionalized PEDOT electrodes. Biosensors and Bioelectronics, 2015, 74, 751-756.	5.3	52
26	Rapid high-throughput analysis of ochratoxin A by the self-assembly of DNAzymeâ€“aptamer conjugates in wine. Talanta, 2013, 116, 520-526.	2.9	51
27	Dense Arrays of Uniform Submicron Pores in Silicon and Their Applications. ACS Applied Materials & Interfaces, 2015, 7, 1160-1169.	4.0	48
28	Electrochemical Biosensors Featuring Oriented Antibody Immobilization via Electrografted and Self-Assembled Hydrazide Chemistry. Analytical Chemistry, 2014, 86, 1422-1429.	3.2	46
29	Past, present and future of diatoms in biosensing. TrAC - Trends in Analytical Chemistry, 2016, 79, 276-285.	5.8	46
30	Array of peptide-modified electrodes for the simultaneous determination of Pb(II), Cd(II) and Zn(II). Talanta, 2014, 125, 159-166.	2.9	44
31	Label-Free Bacterial Toxin Detection in Water Supplies Using Porous Silicon Nanochannel Sensors. ACS Sensors, 2019, 4, 1515-1523.	4.0	40
32	Development of l-lactate dehydrogenase biosensor based on porous silicon resonant microcavities as fluorescence enhancers. Biosensors and Bioelectronics, 2015, 74, 637-643.	5.3	37
33	Porous silicon membrane-modified electrodes for label-free voltammetric detection of MS2 bacteriophage. Biosensors and Bioelectronics, 2016, 80, 47-53.	5.3	37
34	Toward Multiplexing Detection of Wound Healing Biomarkers on Porous Silicon Resonant Microcavities. Advanced Science, 2016, 3, 1500383.	5.6	33
35	Tailored carbon nanotube immunosensors for the detection of microbial contamination. Biosensors and Bioelectronics, 2015, 67, 642-648.	5.3	31
36	Evaluation of different mediator-modified screen-printed electrodes used in a flow system as amperometric sensors for NADH. Talanta, 2007, 71, 2102-2107.	2.9	30

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37	Electrochemical detection of Nâ€nitrosodimethylamine using a molecular imprinted polymer. Sensors and Actuators B: Chemical, 2016, 237, 613-620.	4.0	30
38	Performance optimisation of porous silicon rugate filter biosensor for the detection of insulin. Sensors and Actuators B: Chemical, 2018, 273, 1313-1322.	4.0	30
39	Latest trends in mycotoxin detection. Stewart Postharvest Review, 0, 4, 1-7.	0.7	30
40	Sensitive detection of ochratoxin A in wine and cereals using fluorescence-based immunosensing. Food Chemistry, 2012, 135, 1323-1329.	4.2	29
41	Amplification-free electrochemiluminescence molecular beacon-based microRNA sensing using a mobile phone for detection. Sensors and Actuators B: Chemical, 2021, 330, 129261.	4.0	29
42	High-sensitive flow-based kinetic exclusion assay for okadaic acid assessment in shellfish samples. Biosensors and Bioelectronics, 2010, 25, 1395-1401.	5.3	26
43	Silicon Micropillar Array-Based Wearable Sweat Glucose Sensor. ACS Applied Materials & Interfaces, 2022, 14, 2401-2410.	4.0	26
44	Evaluation of different strategies for the development of amperometric biosensors for l-lactate. Biosensors and Bioelectronics, 2007, 22, 2663-2668.	5.3	25
45	â€œSignal Offâ€•Aptasensor Based on Enzyme Inhibition Induced by Conformational Switch. Analytical Chemistry, 2014, 86, 1437-1444.	3.2	25
46	Immunochemical tools for mycotoxin detection in food. Monatshefte FÃ¼r Chemie, 2009, 140, 915-920.	0.9	24
47	Malate Biosensors for the Monitoring of Malolactic Fermentation: Different Approaches. Analytical Letters, 2006, 39, 1543-1558.	1.0	23
48	Electrochemical aptamer-based sensors. Bioanalytical Reviews, 2010, 1, 141-157.	0.1	23
49	Porous Silicon Nanostructures as Effective Faradaic Electrochemical Sensing Platforms. Advanced Functional Materials, 2019, 29, 1809206.	7.8	23
50	New redox mediator-modified polysulfone composite films for the development of dehydrogenase-based biosensors. Biosensors and Bioelectronics, 2006, 22, 131-137.	5.3	22
51	Porous Alumina Membrane-Based Electrochemical Biosensor for Protein Biomarker Detection in Chronic Wounds. Frontiers in Chemistry, 2020, 8, 155.	1.8	20
52	Metal-Dispersed Xerogel-Based Composite Films for the Development of Interference Free Oxidase-Based Biosensors. Chemistry of Materials, 2004, 16, 1026-1034.	3.2	18
53	Inhibition equivalency factors for microcystin variants in recombinant and wild-type protein phosphatase 1 and 2A assays. Environmental Science and Pollution Research, 2014, 21, 10652-10660.	2.7	18
54	Microwave Heating of Poly(N-isopropylacrylamide)-Conjugated Gold Nanoparticles for Temperature-Controlled Display of Concanavalin A. ACS Applied Materials & Interfaces, 2015, 7, 27755-27764.	4.0	18

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55	Electrochemical fingerprints of brominated trihaloacetic acids (HAA3) mixtures in water. Sensors and Actuators B: Chemical, 2017, 247, 70-77.	4.0	17
56	Dual-Mode and Label-Free Detection of Exosomes from Plasma Using an Electrochemical Quartz Crystal Microbalance with Dissipation Monitoring. Analytical Chemistry, 2022, 94, 2465-2475.	3.2	14
57	Hyaluronic Acidâ€“Modified Porous Silicon Films for the Electrochemical Sensing of Bacterial Hyaluronidase. Macromolecular Rapid Communications, 2018, 39, e1800178.	2.0	12
58	Disperse-and-Collect Approach for the Type-Selective Detection of Matrix Metalloproteinases in Porous Silicon Resonant Microcavities. ACS Sensors, 2017, 2, 203-209.	4.0	11
59	Magnetic Nanoparticles Enhance Pore Blockage-Based Electrochemical Detection of a Wound Biomarker. Frontiers in Chemistry, 2019, 7, 438.	1.8	11
60	High-adhesion vertically aligned gold nanowire stretchable electrodesviaa thin-layer soft nailing strategy. Nanoscale Horizons, 2019, 4, 1380-1387.	4.1	11
61	Label-Free <inline-formula> <tex-math notation="TeX">$hbox{Si}_{3}hbox{N}_{4}$</tex-math></inline-formula> Photonic Crystal Based Immunosensors for Diagnostic Applications. IEEE Photonics Journal, 2014, 6, 1-7.	1.0	10
62	Designing Electrochemical Biosensing Platforms Using Layered Carbon-Stabilized Porous Silicon Nanostructures. ACS Applied Materials & Interfaces, 2022, 14, 15565-15575.	4.0	10
63	Identification of Inflammatory and Regulatory Cytokines IL-1Î±-, IL-4-, IL-6-, IL-12-, IL-13-, IL-17A-, TNF-Î±-, and IFN-Î³-Producing Cells in the Milk of Dairy Cows with Subclinical and Clinical Mastitis. Pathogens, 2022, 11, 372.	1.2	10
64	Carbon-stabilized porous silicon as novel voltammetric sensor platforms. Electrochimica Acta, 2021, 377, 138077.	2.6	9
65	Development of a sustainable nanosensor using green Cu nanoparticles for simultaneous determination of antibiotics in drinking water. Analytical Methods, 2022, 14, 2014-2025.	1.3	8
66	Enzyme-like electrocatalysis from 2D gold nanograss-nanocube assemblies. Journal of Colloid and Interface Science, 2020, 575, 24-34.	5.0	6
67	A portable point-of-use EIS device for in-vivo biomédical applications. , 2014, , .		3
68	Differential functionalisation of the internal and external surfaces of carbon-stabilised nanoporous silicon. Chemical Communications, 2019, 55, 8001-8004.	2.2	3
69	Determination of the Antioxidantsâ€™ Ability to Scavenge Free Radicals Using Biosensors. Advances in Experimental Medicine and Biology, 2010, 698, 222-233.	0.8	3
70	Towards a portable point-of-use blood analysis with EIS technique device. , 2014, , .		2
71	Transdermal Electrochemical Monitoring of Glucose via Highâ€Density Silicon Microneedle Array Patch (Adv. Funct. Mater. 3/2022). Advanced Functional Materials, 2022, 32, .	7.8	2
72	2D photonic crystal membranes for optical biosensors. , 2014, , .		1

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73	Formation and biofunctionalisation of polymer photonic crystals by replica moulding from porous silicon. Materials Letters, 2021, 284, 128907.	1.3	1
74	Electrochemical Biosensors Based on Convectively Assembled Colloidal Crystals. Biosensors, 2022, 12, 480.	2.3	1
75	Biosensors for Secondary Metabolites, Two Case Studies: Ochratoxin A and Microcystin. Advances in Experimental Medicine and Biology, 2010, 698, 282-292.	0.8	0
76	Photonic crystal based immunosensor for clinical diagnosis. , 2014, , .		0