

# Esperanza Garcia Ruiz

## List of Publications by Year in descending order

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50  
papers

2,059  
citations

201674

27  
h-index

233421

45  
g-index

52  
all docs

52  
docs citations

52  
times ranked

1840  
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ preparation of a cholesterol biosensor: entrapment of cholesterol oxidase in an overoxidized polypyrrole film electrodeposited in a flow system. <i>Analytica Chimica Acta</i> , 1999, 385, 213-222.	5.4	165
2	Recent Advances in Electropolymerized Conducting Polymers in Amperometric Biosensors. <i>Mikrochimica Acta</i> , 2003, 143, 93-111.	5.0	165
3	Amperometric cholesterol biosensors based on the electropolymerization of pyrrole and the electrocatalytic effect of Prussian-Blue layers helped with self-assembled monolayers. <i>Talanta</i> , 2004, 64, 655-664.	5.5	117
4	Comparison of biosensors based on entrapment of cholesterol oxidase and cholesterol esterase in electropolymerized films of polypyrrole and diamionaphthalene derivatives for amperometric determination of cholesterol. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 377, 273-280.	3.7	86
5	Electropolymerization of pyrrole and immobilization of glucose oxidase in a flow system: influence of the operating conditions on analytical performance. <i>Biosensors and Bioelectronics</i> , 1998, 13, 371-382.	10.1	77
6	Laser ablation-inductively coupled plasma mass spectrometry in archaeometric research. <i>Mass Spectrometry Reviews</i> , 2010, 29, 55-78.	5.4	77
7	In situ preparation of overoxidized PPy/oPPD bilayer biosensors for the determination of glucose and cholesterol in serum. <i>Sensors and Actuators B: Chemical</i> , 1999, 57, 219-226.	7.8	73
8	High-resolution continuum source atomic absorption spectrometry for the simultaneous or sequential monitoring of multiple lines. A critical review of current possibilities. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 88, 85-97.	2.9	65
9	Progress in the determination of metalloids and non-metals by means of high-resolution continuum source atomic or molecular absorption spectrometry. A critical review. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 2239-2259.	3.7	65
10	Characterization of cobalt pigments found in traditional Valencian ceramics by means of laser ablation-inductively coupled plasma mass spectrometry and portable X-ray fluorescence spectrometry. <i>Talanta</i> , 2008, 74, 1271-1280.	5.5	59
11	High-resolution continuum source graphite furnace atomic absorption spectrometry: Is it as good as it sounds? A critical review. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 323-330.	3.7	55
12	Rapid screening method for arsenic speciation by combining thin layer chromatography and laser ablation-inductively coupled plasma-dynamic reaction cell-mass spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2007, 22, 1158.	3.0	54
13	Development of a Platinized and Ferrocene-Mediated Cholesterol Amperometric Biosensor Based on Electropolymerization of Polypyrrole in a Flow System.. <i>Analytical Sciences</i> , 2002, 18, 537-542.	1.6	49
14	Dried matrix spots and clinical elemental analysis. Current status, difficulties, and opportunities. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 99, 75-87.	11.4	49
15	Strategies for the improvement of an amperometric cholesterol biosensor based on electropolymerization in flow systems: use of charge-transfer mediators and platinization of the electrode. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2000, 24, 51-63.	2.8	48
16	Laser ablation-inductively coupled plasma-dynamic reaction cell-mass spectrometry for the multi-element analysis of polymers. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 1472-1481.	2.9	42
17	Solid sampling-graphite furnace atomic absorption spectrometry for the direct determination of silver at trace and ultratrace levels. <i>Analytica Chimica Acta</i> , 2006, 571, 142-149.	5.4	40
18	Comparison of the solid sampling techniques laser ablation-ICP-MS, glow discharge-MS and spark-OES for the determination of platinum group metals in Pb buttons obtained by fire assay of platiniferous ores. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 899-909.	3.0	39

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19	Solid sampling in the determination of precious metals at ultratrace levels. <i>TrAC - Trends in Analytical Chemistry</i> , 2007, 26, 385-395.	11.4	39
20	Design of a Multilayer Cholesterol Amperometric Biosensor for Preparation and Use in Flow Systems. <i>Electroanalysis</i> , 2001, 13, 229-235.	2.9	38
21	Laser Ablation-Inductively Coupled Plasma Mass Spectrometry for the Characterization of Pigments in Prehistoric Rock Art. <i>Analytical Chemistry</i> , 2007, 79, 8947-8955.	6.5	38
22	Three approaches to the development of selective bilayer amperometric biosensors for glucose by in situ electropolymerization. <i>Analyst</i> , 1999, 124, 319-324.	3.5	37
23	Evaluation of solid sampling-electrothermal vaporization-inductively coupled plasma mass spectrometry and solid sampling-graphite furnace atomic absorption spectrometry for the direct determination of Cr in various materials using solution-based calibration approaches. <i>Journal of Analytical Atomic Spectrometry</i> , 2004, 19, 958.	3.0	35
24	Laser ablation-inductively coupled plasma-dynamic reaction cell-mass spectrometry (LA-ICP-DRC-MS) for the determination of Pt, Pd and Rh in Pb buttons obtained by fire assay of platiniferous ores. <i>Journal of Analytical Atomic Spectrometry</i> , 2004, 19, 632.	3.0	35
25	Living in a transient world: ICP-MS reinvented via time-resolved analysis for monitoring single events. <i>Chemical Science</i> , 2022, 13, 4436-4473.	7.4	35
26	Solid sampling-graphite furnace atomic absorption spectrometry for Hg monitoring in soils. Performance as a quantitative and as a screening method. <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 1374.	3.0	33
27	Minimally-invasive filter paper test in combination with solid sampling-graphite furnace atomic absorption spectrometry for Pb determination in whole blood. <i>Journal of Analytical Atomic Spectrometry</i> , 2007, 22, 1250.	3.0	31
28	Quo vadis high-resolution continuum source atomic/molecular absorption spectrometry?. <i>Journal of Analytical Atomic Spectrometry</i> , 2019, 34, 59-80.	3.0	30
29	Chlorine isotope determination via the monitoring of the AlCl molecule by high-resolution continuum source graphite furnace molecular absorption spectrometry – a case study. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 1531-1540.	3.0	27
30	Solid sampling-graphite furnace atomic absorption spectrometry for palladium determination at trace and ultratrace levels. <i>Journal of Analytical Atomic Spectrometry</i> , 2003, 18, 1477.	3.0	26
31	Design of an Interference-Free Cholesterol Amperometric Biosensor Based on the Electrosynthesis of Polymeric Films of Diaminonaphthalene Isomers. <i>Electroanalysis</i> , 2004, 16, 497-504.	2.9	26
32	Solid sampling-electrothermal vaporization-inductively coupled plasma mass spectrometry for the direct determination of traces of iodine. <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 81.	3.0	26
33	High-resolution continuum source graphite furnace atomic absorption spectrometry for the monitoring of Au nanoparticles. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 2233-2241.	3.0	25
34	Analysis of whole blood by ICP-MS equipped with a high temperature total sample consumption system. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 78-87.	3.0	25
35	Laser ablation-inductively coupled plasma-dynamic reaction cell-mass spectrometry for the determination of platinum group metals and gold in NiS buttons obtained by fire assay of platiniferous ores. <i>Journal of Analytical Atomic Spectrometry</i> , 2008, 23, 1599.	3.0	24
36	Br isotope determination via the monitoring of CaBr transitions using high-resolution continuum source graphite furnace molecular absorption spectrometry. Potential for direct determination of Br in solid samples using isotope dilution. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 1381-1390.	3.0	24

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37	Breaking the boundaries in spectrometry. Molecular analysis with atomic spectrometric techniques. TrAC - Trends in Analytical Chemistry, 2020, 129, 115955.	11.4	23
38	Laser ablation-inductively coupled plasma mass spectrometry for the fast and direct characterization of antique glazed ceramics. Journal of Analytical Atomic Spectrometry, 2005, 20, 508.	3.0	20
39	A POLYMERIC BILAYER CONFIGURATION FOR A CHOLESTEROL AMPEROMETRIC BIOSENSOR BASED ON THE COMBINATION OF OVEROXIDIZED POLYPYRROLE AND A POLYNAPHTHALENE DERIVATIVE. Analytical Letters, 2002, 35, 837-853.	1.8	19
40	Determination of chlorine via the CaCl molecule by high-resolution continuum source graphite furnace molecular absorption spectrometry and direct solid sample analysis. Talanta, 2017, 162, 354-361.	5.5	18
41	A simple dilute-and-shoot approach for the determination of ultra-trace levels of arsenic in biological fluids via ICP-MS using CH <sub>3</sub> F/He as a reaction gas. Journal of Analytical Atomic Spectrometry, 2016, 31, 245-251.	3.0	17
42	Solid sampling-graphite furnace atomic absorption spectrometry for the direct determination of Au in samples of various natures. Journal of Analytical Atomic Spectrometry, 2005, 20, 479-481.	3.0	14
43	Application of the ligand vapour technique to the volatilization of unstable chelate compounds (particularly iron(III) trifluoroacetylacetonate) in AAS. Fresenius' Journal of Analytical Chemistry, 1990, 338, 721-725.	1.5	11
44	Industrial process sensor based on surface plasmon resonance (SPR) 1. Distillation process monitoring. Sensors and Actuators A: Physical, 1993, 37-38, 221-225.	4.1	11
45	Determination of chromium, cobalt, and iron by flame-atomic absorption spectrophotometry using volatilization of metal trifluoroacetyl acetates. Microchemical Journal, 1990, 42, 103-109.	4.5	10
46	Surface plasmon resonance sensor as a detector in HPLC and specific lactate determination. Sensors and Actuators A: Physical, 1993, 37-38, 582-586.	4.1	9
47	Cerebrospinal fluid elemental analysis by using a total sample consumption system operated at high temperature adapted to inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2017, 32, 1916-1924.	3.0	9
48	Energy dispersive X-ray fluorescence spectrometry for the direct multi-element analysis of dried blood spots. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 139, 13-19.	2.9	9
49	Direct analysis of silica by means of solid sampling graphite furnace atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 71-72, 24-30.	2.9	8
50	Introducing multi-energy ratios as an alternative to multi-energy calibration for Br determination via high-resolution continuum source graphite furnace molecular absorption spectrometry. A case study. Journal of Analytical Atomic Spectrometry, 2020, 35, 2606-2619.	3.0	1