Alfredo de la Escosura-Muiz

List of Publications by Citations

81 papers	3,214 citations	32 h-index	56 g-index
86 ext. papers	3,634 ext. citations	7.7 avg, IF	5.76 L-index

#	Paper	IF	Citations
81	Enhanced lateral flow immunoassay using gold nanoparticles loaded with enzymes. *Biosensors and Bioelectronics*, **2013**, 40, 412-6	11.8	219
80	Label-free impedimetric aptasensor for ochratoxin-A detection using iridium oxide nanoparticles. *Analytical Chemistry*, **2015**, 87, 5167-72	7.8	182
79	Nanochannels preparation and application in biosensing. *ACS Nano*, **2012**, 6, 7556-83	16.7	156
78	Biosensors for plant pathogen detection. *Biosensors and Bioelectronics*, **2017**, 93, 72-86	11.8	142
77	Improving sensitivity of gold nanoparticle-based lateral flow assays by using wax-printed pillars as delay barriers of microfluidics. *Lab on A Chip*, **2014**, 14, 4406-14	7.2	130
76	A nanochannel/nanoparticle-based filtering and sensing platform for direct detection of a cancer biomarker in blood. *Small*, **2011**, 7, 675-82	11	117
75	Immunosensing using nanoparticles. *Materials Today*, **2010**, 13, 24-34	21.8	116
74	Simple paper architecture modifications lead to enhanced sensitivity in nanoparticle based lateral flow immunoassays. *Lab on A Chip*, **2013**, 13, 386-90	7.2	99
73	Electrochemical analysis with nanoparticle-based biosystems. *TrAC - Trends in Analytical Chemistry*, **2008**, 27, 568-584	14.6	92
72	ICP-MS: a powerful technique for quantitative determination of gold nanoparticles without previous dissolving. *Journal of Nanoparticle Research*, **2009**, 11, 2003-2011	2.3	89
71	Simple monitoring of cancer cells using nanoparticles. *Nano Letters*, **2012**, 12, 4164-71	11.5	87
70	Rapid identification and quantification of tumor cells using an electrocatalytic method based on gold nanoparticles. *Analytical Chemistry*, **2009**, 81, 10268-74	7.8	87
69	Gold nanoparticle-based electrochemical magnetoimmunosensor for rapid detection of anti-hepatitis B virus antibodies in human serum. *Biosensors and Bioelectronics*, **2010**, 26, 1710-4	11.8	78
68	Aptamers based electrochemical biosensor for protein detection using carbon nanotubes platforms. *Biosensors and Bioelectronics*, **2010**, 26, 1715-8	11.8	76
67	Design, preparation, and evaluation of a fixed-orientation antibody/gold-nanoparticle conjugate as an immunosensing label. *ACS Applied Materials & Interfaces*, **2013**, 5, 10753-9	9.5	72
66	Nanochannels for diagnostic of thrombin-related diseases in human blood. *Biosensors and Bioelectronics*, **2013**, 40, 24-31	11.8	70
65	Highly sensitive and rapid determination of Escherichia coli O157:H7 in minced beef and water using electrocatalytic gold nanoparticle tags. *Biosensors and Bioelectronics*, **2015**, 67, 511-5	11.8	69

64	Alzheimer's disease biomarkers detection in human samples by efficient capturing through porous magnetic microspheres and labelling with electrocatalytic gold nanoparticles. *Biosensors and Bioelectronics*, **2015**, 67, 162-9	11.8	60
63	Controlling the electrochemical deposition of silver onto gold nanoparticles: reducing interferences and increasing the sensitivity of magnetoimmuno assays. *Biosensors and Bioelectronics*, **2009**, 24, 2475-82	11.8	60
62	Magnetic Bead/Gold Nanoparticle Double-Labeled Primers for Electrochemical Detection of Isothermal Amplified Leishmania DNA. *Small*, **2016**, 12, 205-13	11	60
61	Triple lines gold nanoparticle-based lateral flow assay for enhanced and simultaneous detection of Leishmania DNA and endogenous control. *Nano Research*, **2015**, 8, 3704-3714	10	55
60	Detection of circulating cancer cells using electrocatalytic gold nanoparticles. *Small*, **2012**, 8, 3605-12	11	53
59	Size-dependent direct electrochemical detection of gold nanoparticles: application in magnetoimmunoassays. *Nanoscale*, **2011**, 3, 3350-6	7.7	48
58	Nanoparticle based enhancement of electrochemical DNA hybridization signal using nanoporous electrodes. *Chemical Communications*, **2010**, 46, 9007-9	5.8	48
57	Electrochemical detection of plant virus using gold nanoparticle-modified electrodes. *Analytica Chimica Acta*, **2019**, 1046, 123-131	6.6	46
56	Label-free voltammetric immunosensor using a nanoporous membrane based platform. *Electrochemistry Communications*, **2010**, 12, 859-863	5.1	44
55	Electrochemical (Bio)Sensors for Pesticides Detection Using Screen-Printed Electrodes. *Biosensors*, **2020**, 10,	5.9	44
54	Lab-in-a-syringe using gold nanoparticles for rapid immunosensing of protein biomarkers. *Lab on A Chip*, **2015**, 15, 399-405	7.2	43
53	Nanochannel array device operating through Prussian blue nanoparticles for sensitive label-free immunodetection of a cancer biomarker. *Biosensors and Bioelectronics*, **2015**, 67, 107-14	11.8	38
52	Electrochemical quantification of gold nanoparticles based on their catalytic properties toward hydrogen formation: Application in magnetoimmunoassays. *Electrochemistry Communications*, **2010**, 12, 1501-1504	5.1	38
51	Silver, gold and the corresponding core shell nanoparticles: synthesis and characterization. *Journal of Nanoparticle Research*, **2008**, 10, 97-106	2.3	35
50	Electrochemical detection of proteins using nanoparticles: applications to diagnostics. *Expert Opinion on Medical Diagnostics*, **2010**, 4, 21-37		34
49	Alzheimer Disease Biomarker Detection Through Electrocatalytic Water Oxidation Induced by Iridium Oxide Nanoparticles. *Electroanalysis*, **2014**, 26, 1287-1294	3	32
48	DNA hybridization sensor based on aurothiomalate electroactive label on glassy carbon electrodes. *Biosensors and Bioelectronics*, **2007**, 22, 1048-54	11.8	32
47	DNA hybridization biosensors using polylysine modified SPCEs. *Biosensors and Bioelectronics*, **2008**, 23, 1340-6	11.8	32

46	Signal enhancement on gold nanoparticle-based lateral flow tests using cellulose nanofibers. *Biosensors and Bioelectronics*, **2019**, 141, 111407	11.8	31
45	A DNA Aptasensor for Electrochemical Detection of Vascular Endothelial Growth Factor. *Journal of Nanoscience and Nanotechnology*, **2015**, 15, 3411-6	1.3	30
44	Nanochannels for electrical biosensing. *TrAC - Trends in Analytical Chemistry*, **2016**, 79, 134-150	14.6	30
43	Iridium oxide (IV) nanoparticle-based lateral flow immunoassay. *Biosensors and Bioelectronics*, **2019**, 132, 132-135	11.8	28
42	Fully printed one-step biosensing device using graphene/AuNPs composite. *Biosensors and Bioelectronics*, **2019**, 129, 238-244	11.8	27
41	Direct competitive immunosensor for Imidacloprid pesticide detection on gold nanoparticle-modified electrodes. *Talanta*, **2020**, 209, 120465	6.2	27
40	Nanoparticles-based nanochannels assembled on a plastic flexible substrate for label-free immunosensing. *Nano Research*, **2015**, 8, 1180-1188	10	25
39	Detection of parathyroid hormone-like hormone in cancer cell cultures by gold nanoparticle-based lateral flow immunoassays. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2016**, 12, 53-61	6	23
38	Low-Cost Strategy for the Development of a Rapid Electrochemical Assay for Bacteria Detection Based on AuAg Nanoshells. *ACS Omega*, **2018**, 3, 18849-18856	3.9	23
37	A monoclonal antibody-based immunosensor for the electrochemical detection of imidacloprid pesticide. *Analyst, The*, **2019**, 144, 2936-2941	5	20
36	In Situ Plant Virus Nucleic Acid Isothermal Amplification Detection on Gold Nanoparticle-Modified Electrodes. *Analytical Chemistry*, **2019**, 91, 4790-4796	7.8	20
35	Casein modified gold nanoparticles for future theranostic applications. *Biosensors and Bioelectronics*, **2013**, 40, 271-6	11.8	20
34	Bifunctional Au@Pt/Au core@shell Nanoparticles As Novel Electrocatalytic Tags in Immunosensing: Application for Alzheimer's Disease Biomarker Detection. *Analytical Chemistry*, **2020**, 92, 7209-7217	7.8	19
33	Nanoparticles as Emerging Labels in Electrochemical Immunosensors. *Sensors*, **2019**, 19,	3.8	19
32	Paper-Based Electrodes for Nanoparticles Detection. *Particle and Particle Systems Characterization*, **2013**, 30, 662-666	3.1	18
31	Quantum Dot Bioconjugates for Diagnostic Applications. *Topics in Current Chemistry*, **2020**, 378, 35	7.2	17
30	Electrochemical Biosensors Based on Nanomaterials for Early Detection of Alzheimer's Disease. *Sensors*, **2020**, 20,	3.8	16
29	In situ monitoring of PTHLH secretion in neuroblastoma cells cultured onto nanoporous membranes. *Biosensors and Bioelectronics*, **2018**, 107, 62-68	11.8	15

28	Electrocatalytic detection of aurothiomalate on carbon electrodes: Application as a non-enzymatic label to the quantification of proteins. *Analytica Chimica Acta*, **2004**, 524, 355-363	6.6	14
27	Folding-Based Electrochemical Aptasensor for the Determination of β-Lactoglobulin on Poly-L-Lysine Modified Graphite Electrodes. *Sensors*, **2020**, 20,	3.8	11
26	Electrical Evaluation of Bacterial Virulence Factors Using Nanopores. *ACS Applied Materials & Interfaces*, **2019**, 11, 13140-13146	9.5	10
25	Organic-based field effect transistors for protein detection fabricated by inkjet-printing. *Organic Electronics*, **2020**, 84, 105794	3.5	10
24	Catalytic Effect on Silver Electrodeposition of Gold Deposited on Carbon Electrodes. *Electroanalysis* , **2004**, 16, 1561-1568	3	10
23	Iridium oxide (IV) nanoparticle-based electrocatalytic detection of PBDE. *Biosensors and Bioelectronics*, **2019**, 127, 150-154	11.8	10
22	Aurothiomalate as an electroactive label for the determination of immunoglobulin M using glassy carbon electrodes as immunoassay transducers. *Sensors and Actuators B: Chemical*, **2006**, 114, 473-481	8.5	8
21	Gold Nanoparticles: A Versatile Label for Affinity Electrochemical Biosensors177-197		7
20	Production and printing of graphene oxide foam ink for electrocatalytic applications. *Electrochemistry Communications*, **2019**, 98, 6-9	5.1	7
19	Electrochemical quantification of AgS quantum dots: evaluation of different surface coating ligands for bacteria determination. *Mikrochimica Acta*, **2020**, 187, 169	5.8	6
18	Determination of human serum albumin using aurothiomalate as electroactive label. *Analytical and Bioanalytical Chemistry*, **2006**, 384, 742-50	4.4	5
17	Nanoceria quantification based on its oxidative effect towards the ferrocyanide/ferricyanide system. *Journal of Electroanalytical Chemistry*, **2019**, 840, 338-342	4.1	3
16	Lateral Flow Biosensors Based on Gold Nanoparticles. *Comprehensive Analytical Chemistry*, **2014**, 66, 569-605	1.9	3
15	Control of Electron-transfer in Immunonanosensors by Using Polyclonal and Monoclonal Antibodies. *Electroanalysis*, **2016**, 28, 1795-1802	3	3
14	Simple and rapid electrochemical quantification of water-stabilized HgSe nanoparticles of great concern in environmental studies. *Talanta*, **2019**, 200, 72-77	6.2	2
13	Protein and DNA Electrochemical Sensing Using Anodized Aluminum Oxide Nanochannel Arrays. *Springer Series in Materials Science*, **2015**, 271-291	0.9	2
12	Electrocatalytic Detection: Magnetic Bead/Gold Nanoparticle Double-Labeled Primers for Electrochemical Detection of Isothermal Amplified Leishmania DNA (Small 2/2016). *Small*, **2016**, 12, 204-204	11	2
11	Application of Nanomaterials for DNA Sensing. *Nucleic Acids and Molecular Biology*, **2014**, 305-332		2

10	Nanoparticle/Nanochannels-Based Electrochemical Biosensors. *Nanoscience and Technology*, **2015**, 205-228		1
9	Nanomaterials for Electroanalysis **2010**,		1
8	Electrochemical immunosensing using micro and nanoparticles. *Methods in Molecular Biology*, **2009**, 504, 145-55	1.4	1
7	Electrochemical Antibody-Aptamer Assay for VEGF Cancer Biomarker Detection. *Lecture Notes in Electrical Engineering*, **2014**, 175-178	0.2	1
6	Strip modification and alternative architectures for signal amplification in nanoparticle-based lateral flow assays. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 4111-4117	4.4	1
5	Enhancing the electrocatalytic activity of palladium nanocluster tags by selective introduction of gold atoms: Application for a wound infection biomarker detection.. *Biosensors and Bioelectronics*, **2021**, 200, 113926	11.8	0
4	Advances in quantum dots as diagnostic tools.. *Advances in Clinical Chemistry*, **2022**, 107, 1-40	5.8	0
3	Electrical monitoring of infection biomarkers in chronic wounds using nanochannels.. *Biosensors and Bioelectronics*, **2022**, 209, 114243	11.8	0
2	Nanoparticles for DNA, Protein, and Cell Electrochemical Detection **2014**, 209-241		
1	Nanoparticles and Inductively Coupled Plasma Mass Spectroscopy Based Biosensing 355-376		