

Laura Garcia Carrascosa

List of Publications by Year in descending order

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48
papers

2,545
citations

257450

24
h-index

254184

43
g-index

48
all docs

48
docs citations

48
times ranked

3908
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanomechanical biosensors: a new sensing tool. <i>TrAC - Trends in Analytical Chemistry</i> , 2006, 25, 196-206.	11.4	248
2	Detecting Exosomes Specifically: A Multiplexed Device Based on Alternating Current Electrohydrodynamic Induced Nanoshearing. <i>Analytical Chemistry</i> , 2014, 86, 11125-11132.	6.5	220
3	PARTICLE, a Triplex-Forming Long ncRNA, Regulates Locus-Specific Methylation in Response to Low-Dose Irradiation. <i>Cell Reports</i> , 2015, 11, 474-485.	6.4	189
4	Epigenetically reprogrammed methylation landscape drives the DNA self-assembly and serves as a universal cancer biomarker. <i>Nature Communications</i> , 2018, 9, 4915.	12.8	135
5	DNA-bare gold affinity interactions: mechanism and applications in biosensing. <i>Analytical Methods</i> , 2015, 7, 7042-7054.	2.7	131
6	Poly(A) Extensions of miRNAs for Amplification-Free Electrochemical Detection on Screen-Printed Gold Electrodes. <i>Analytical Chemistry</i> , 2016, 88, 2000-2005.	6.5	128
7	Real time and label free profiling of clinically relevant exosomes. <i>Scientific Reports</i> , 2016, 6, 30460.	3.3	124
8	Suitable combination of noble/ferromagnetic metal multilayers for enhanced magneto-plasmonic biosensing. <i>Optics Express</i> , 2011, 19, 8336.	3.4	107
9	Nanomechanics of the Formation of DNA Self-Assembled Monolayers and Hybridization on Microcantilevers. <i>Langmuir</i> , 2004, 20, 9663-9668.	3.5	97
10	Improved Biosensing Capability with Novel Suspended Nanodisks. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5344-5351.	3.1	89
11	Silicon Photonic Biosensors for Lab-on-a-Chip Applications. <i>Advances in Optical Technologies</i> , 2008, 2008, 1-6.	0.8	80
12	Molecular inversion probe-based SPR biosensing for specific, label-free and real-time detection of regional DNA methylation. <i>Chemical Communications</i> , 2014, 50, 3585-3588.	4.1	78
13	Label-free detection of DNA mutations by SPR: application to the early detection of inherited breast cancer. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 1173-1182.	3.7	75
14	Label-free detection of exosomes using a surface plasmon resonance biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 1311-1318.	3.7	70
15	A highly sensitive microsystem based on nanomechanical biosensors for genomics applications. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 2-10.	7.8	68
16	eMethylsorb: electrochemical quantification of DNA methylation at CpG resolution using DNA-gold affinity interactions. <i>Chemical Communications</i> , 2014, 50, 13153-13156.	4.1	68
17	Amplification-Free Detection of Gene Fusions in Prostate Cancer Urinary Samples Using mRNA-Gold Affinity Interactions. <i>Analytical Chemistry</i> , 2016, 88, 6781-6788.	6.5	65
18	Methylsorb: A Simple Method for Quantifying DNA Methylation Using DNA-Gold Affinity Interactions. <i>Analytical Chemistry</i> , 2014, 86, 10179-10185.	6.5	59

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19	Detection of regional DNA methylation using DNA-graphene affinity interactions. <i>Biosensors and Bioelectronics</i> , 2017, 87, 615-621.	10.1	56
20	eMethylsorb: rapid quantification of DNA methylation in cancer cells on screen-printed gold electrodes. <i>Analyst, The</i> , 2014, 139, 6178-6184.	3.5	51
21	Prospects of optical biosensors for emerging label-free RNA analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 80, 177-189.	11.4	39
22	Sensitive and label-free biosensing of RNA with predicted secondary structures by a triplex affinity capture method. <i>Nucleic Acids Research</i> , 2012, 40, e56-e56.	14.5	33
23	DNA-directed assembly of copper nanoblocks with inbuilt fluorescent and electrochemical properties: Application in simultaneous amplification-free analysis of multiple RNA species. <i>Nano Research</i> , 2018, 11, 940-952.	10.4	32
24	DNA Methylation-Based Point-of-Care Cancer Detection: Challenges and Possibilities. <i>Trends in Molecular Medicine</i> , 2019, 25, 955-966.	6.7	30
25	PARTICLE triplexes cluster in the tumor suppressor WWOX and may extend throughout the human genome. <i>Scientific Reports</i> , 2017, 7, 7163.	3.3	27
26	Alternating current electrohydrodynamics in microsystems: Pushing biomolecules and cells around on surfaces. <i>Biomicrofluidics</i> , 2015, 9, 061501.	2.4	25
27	Quantitative evaluation of alternatively spliced mRNA isoforms by label-free real-time plasmonic sensing. <i>Biosensors and Bioelectronics</i> , 2016, 78, 118-125.	10.1	22
28	Detection of flagellin by interaction with human recombinant TLR5 immobilized in liposomes. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 1267-1281.	3.7	20
29	Understanding the role of thiol and disulfide self-assembled DNA receptor monolayers for biosensing applications. <i>European Biophysics Journal</i> , 2010, 39, 1433-1444.	2.2	18
30	Interfacial nano-mixing in a miniaturised platform enables signal enhancement and <i>in situ</i> detection of cancer biomarkers. <i>Nanoscale</i> , 2018, 10, 10884-10890.	5.6	18
31	An exosomal- and interfacial-biosensing based strategy for remote monitoring of aberrantly phosphorylated proteins in lung cancer cells. <i>Biomaterials Science</i> , 2018, 6, 2336-2341.	5.4	17
32	Detection of aberrant protein phosphorylation in cancer using direct gold-protein affinity interactions. <i>Biosensors and Bioelectronics</i> , 2017, 91, 8-14.	10.1	15
33	Electrochemical detection of protein glycosylation using lectin and protein-gold affinity interactions. <i>Analyst, The</i> , 2016, 141, 2356-2361.	3.5	13
34	Surface plasmon resonance biosensors for highly sensitive detection in real samples. , 2009, , .		12
35	Influence of the linker type on the Au-S binding properties of thiol and disulfide-modified DNA self-assembly on polycrystalline gold. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3301.	2.8	11
36	Biosensing made easy with PEG-targeted bi-specific antibodies. <i>Chemical Communications</i> , 2016, 52, 5730-5733.	4.1	11

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37	A multiplex microplatform for the detection of multiple DNA methylation events using goldâ€™DNA affinity. <i>Analyst, The</i> , 2017, 142, 3573-3578.	3.5	10
38	Biosensors Based on Cantilevers. <i>Methods in Molecular Biology</i> , 2009, 504, 51-71.	0.9	9
39	Capture and On-chip analysis of Melanoma Cells Using Tunable Surface Shear forces. <i>Scientific Reports</i> , 2016, 6, 19709.	3.3	8
40	Phosphoprotein Biosensors for Monitoring Pathological Protein Structural Changes. <i>Trends in Biotechnology</i> , 2020, 38, 519-531.	9.3	8
41	Methylation dependent gold adsorption behaviour identifies cancer derived extracellular vesicular DNA. <i>Nanoscale Horizons</i> , 2020, 5, 1317-1323.	8.0	8
42	Lab-on-a-chip platforms based on highly sensitive nanophotonic Si biosensors for single nucleotide DNA testing. , 2007, , .		6
43	The effects of lipids and surfactants on TLR5-proteoliposome functionality for flagellin detection using surface plasmon resonance biosensing. <i>Talanta</i> , 2014, 126, 136-144.	5.5	5
44	Nanomechanics for specific biological detection. , 2003, 5118, 197.		3
45	Reading Conformational Changes in Proteins with a New Colloidal-Based Interfacial Biosensing System. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 11125-11135.	8.0	3
46	Methylsorb: A simple method for quantifying DNA methylation using DNA-gold affinity interactions. , 2014, , .		2
47	Study of the Adsorption of Sulfur-Derivatized Single Stranded DNA on Gold by Atomic Force Microscopy and the Cantilever Bending Technique. <i>Sensor Letters</i> , 2006, 4, 275-280.	0.4	2
48	Photonic Micro/Nanobiosensors for Early Diagnosis of Diseases. , 2006, , .		0