

# Maria Minunni

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

110 papers	5,763 citations	36 h-index	75 g-index
121 ext. papers	6,199 ext. citations	6.3 avg, IF	5.65 L-index

#	Paper	IF	Citations
110	Analytical applications of aptamers. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 2424-34	11.8	813
109	Aptamer-based detection of plasma proteins by an electrochemical assay coupled to magnetic beads. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 1466-73	7.8	377
108	Surface plasmon resonance imaging for affinity-based biosensors. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 25, 957-66	11.8	353
107	Aptamers-based assays for diagnostics, environmental and food analysis. <i>New Biotechnology</i> , <b>2007</b> , 24, 191-200		232
106	Electrochemical and piezoelectric DNA biosensors for hybridisation detection. <i>Analytica Chimica Acta</i> , <b>2008</b> , 609, 139-59	6.6	217
105	Aptamer-based biosensors for the detection of HIV-1 Tat protein. <i>Bioelectrochemistry</i> , <b>2005</b> , 67, 135-41	5.6	207
104	New trends in affinity sensing. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2003</b> , 22, 810-818	14.6	188
103	Quartz crystal microbalance (QCM) affinity biosensor for genetically modified organisms (GMOs) detection. <i>Biosensors and Bioelectronics</i> , <b>2003</b> , 18, 129-40	11.8	180
102	Analytical performances of aptamer-based sensing for thrombin detection. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 3016-9	7.8	178
101	Development of biosensors with aptamers as bio-recognition element: the case of HIV-1 Tat protein. <i>Biosensors and Bioelectronics</i> , <b>2004</b> , 20, 1149-56	11.8	170
100	Detection of Pesticide in Drinking Water Using Real-Time Biospecific Interaction Analysis (BIA). <i>Analytical Letters</i> , <b>1993</b> , 26, 1441-1460	2.2	128
99	Surface modifications for the development of piezoimmunosensors. <i>Biosensors and Bioelectronics</i> , <b>1998</b> , 13, 347-57	11.8	123
98	Surface plasmon resonance applications in clinical analysis. <i>Analytical and Bioanalytical Chemistry</i> , <b>2014</b> , 406, 2303-23	4.4	121
97	Surface plasmon resonance biosensor for genetically modified organisms detection. <i>Analytica Chimica Acta</i> , <b>2002</b> , 453, 165-172	6.6	96
96	Direct immobilisation of DNA probes for the development of affinity biosensors. <i>Bioelectrochemistry</i> , <b>2005</b> , 66, 129-38	5.6	91
95	Immobilisation of DNA probes for the development of SPR-based sensing. <i>Biosensors and Bioelectronics</i> , <b>2004</b> , 20, 967-74	11.8	90
94	Detection of fragmented genomic DNA by PCR-free piezoelectric sensing using a denaturation approach. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 7966-7	16.4	84

93	The Quartz Crystal Microbalance as Biosensor. A Status Report on Its Future. <i>Analytical Letters</i> , <b>1995</b> , 28, 749-764	2.2	82
92	Self-powered microneedle-based biosensors for pain-free high-accuracy measurement of glycaemia in interstitial fluid. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 66, 162-8	11.8	80
91	Comparison among differential pulse voltammetry, amperometric biosensor, and HPLC/DAD analysis for polyphenol determination. <i>Journal of Agricultural and Food Chemistry</i> , <b>2000</b> , 48, 1197-203	5.7	78
90	Development of an optical RNA-based aptasensor for C-reactive protein. <i>Analytical and Bioanalytical Chemistry</i> , <b>2008</b> , 390, 1077-86	4.4	76
89	Surface Plasmon Resonance Imaging: What Next?. <i>Journal of Physical Chemistry Letters</i> , <b>2012</b> , 3, 2682-916.4		71
88	An optimized digestion method coupled to electrochemical sensor for the determination of Cd, Cu, Pb and Hg in fish by square wave anodic stripping voltammetry. <i>Talanta</i> , <b>2009</b> , 77, 1143-8	6.2	71
87	Detection of TP53 mutation using a portable surface plasmon resonance DNA-based biosensor. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 1939-45	11.8	69
86	A quartz crystal microbalance displacement assay for <i>Listeria monocytogenes</i> . <i>Analytica Chimica Acta</i> , <b>1996</b> , 325, 169-174	6.6	69
85	Piezoelectric biosensors: strategies for coupling nucleic acids to piezoelectric devices. <i>Methods</i> , <b>2005</b> , 37, 48-56	4.6	63
84	A new approach for the detection of DNA sequences in amplified nucleic acids by a surface plasmon resonance biosensor. <i>Biosensors and Bioelectronics</i> , <b>2004</b> , 20, 598-605	11.8	61
83	A Piezoelectric Quartz Crystal Biosensor as a Direct Affinity Sensor. <i>Analytical Letters</i> , <b>1994</b> , 27, 1475-1482		60
82	Detection of $\beta$ -thalassemia by a DNA piezoelectric biosensor coupled with polymerase chain reaction. <i>Analytica Chimica Acta</i> , <b>2003</b> , 481, 55-64	6.6	52
81	Combination of amplification and post-amplification strategies to improve optical DNA sensing. <i>Biosensors and Bioelectronics</i> , <b>2003</b> , 19, 337-44	11.8	50
80	Biosensors as new analytical tool for detection of Genetically Modified Organisms (GMOs). <i>Fresenius Journal of Analytical Chemistry</i> , <b>2001</b> , 369, 589-93		50
79	Detection of clinically relevant point mutations by a novel piezoelectric biosensor. <i>Biosensors and Bioelectronics</i> , <b>2006</b> , 21, 1876-9	11.8	49
78	Characterization of monoclonal antibodies to 2,4-dichlorophenoxyacetic acid using a piezoelectric quartz crystal microbalance in solution. <i>Journal of Immunological Methods</i> , <b>1994</b> , 176, 117-25	2.5	49
77	An optical DNA-based biosensor for the analysis of bioactive constituents with application in drug and herbal drug screening. <i>Talanta</i> , <b>2005</b> , 65, 578-85	6.2	45
76	Development of combined DNA-based piezoelectric biosensors for the simultaneous detection and genotyping of high risk Human Papilloma Virus strains. <i>Clinica Chimica Acta</i> , <b>2007</b> , 383, 140-6	6.2	42

75	Surface plasmon resonance imaging (SPRI)-based sensing: a new approach in signal sampling and management. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 1380-5	11.8	36
74	A DNA-based piezoelectric biosensor: strategies for coupling nucleic acids to piezoelectric devices. <i>Talanta</i> , <b>2006</b> , 68, 806-12	6.2	36
73	Detecting Alzheimer's disease biomarkers: From antibodies to new bio-mimetic receptors and their application to established and emerging bioanalytical platforms - A critical review. <i>Analytica Chimica Acta</i> , <b>2016</b> , 940, 21-37	6.6	36
72	Direct detection of genomic DNA by surface plasmon resonance imaging: an optimized approach. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 40, 193-9	11.8	35
71	A reusable optical biosensor for the ultrasensitive and selective detection of unamplified human genomic DNA with gold nanostars. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 74, 981-8	11.8	34
70	An ultra-sensitive aptasensor on optical fibre for the direct detection of bisphenol A. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 135, 102-110	11.8	33
69	Non-SELEX isolation of DNA aptamers for the homogeneous-phase fluorescence anisotropy sensing of tau Proteins. <i>Analytica Chimica Acta</i> , <b>2018</b> , 1038, 173-181	6.6	33
68	Transgenes monitoring in an industrial soybean processing chain by DNA-based conventional approaches and biosensors. <i>Food Chemistry</i> , <b>2009</b> , 113, 658-664	8.5	33
67	Bioanalytical approaches for the detection of single nucleotide polymorphisms by Surface Plasmon Resonance biosensors. <i>Biosensors and Bioelectronics</i> , <b>2014</b> , 61, 28-37	11.8	30
66	Disposable electrochemical sensor for rapid determination of heavy metals in herbal drugs. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <b>2003</b> , 32, 251-6	3.5	27
65	A novel optical biosensor format for the detection of clinically relevant TP53 mutations. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 2310-3	11.8	27
64	A PIEZOELECTRIC AFFINITY BIOSENSOR FOR GENETICALLY MODIFIED ORGANISMS (GMOs) DETECTION. <i>Analytical Letters</i> , <b>2001</b> , 34, 825-840	2.2	27
63	Cytogenetic effects of benzimidazoles in mouse bone marrow. <i>Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure</i> , <b>1993</b> , 300, 15-28		27
62	Surface plasmon resonance imaging technique for nucleic acid detection. <i>Sensors and Actuators B: Chemical</i> , <b>2008</b> , 130, 82-87	8.5	24
61	A SURFACE PLASMON RESONANCE BIOSENSOR FOR THE DETERMINATION OF THE AFFINITY OF DRUGS FOR NUCLEIC ACIDS. <i>Analytical Letters</i> , <b>2002</b> , 35, 599-613	2.2	24
60	Genotoxicity of methylglyoxal: cytogenetic damage in human lymphocytes in vitro and in intestinal cells of mice. <i>Carcinogenesis</i> , <b>1990</b> , 11, 1503-7	4.6	23
59	A rational approach in probe design for nucleic acid-based biosensing. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 26, 4785-90	11.8	22
58	Affinity-based biosensors as promising tools for gene doping detection. <i>Trends in Biotechnology</i> , <b>2008</b> , 26, 236-43	15.1	22

57	. <i>IEEE Sensors Journal</i> , <b>2003</b> , 3, 369-375	4	22
56	In vitro selection of RNA aptamers against CA125 tumor marker in ovarian cancer and its study by optical biosensing. <i>Methods</i> , <b>2016</b> , 97, 58-68	4.6	21
55	Detection of highly repeated sequences in non-amplified genomic DNA by bulk acoustic wave (BAW) affinity biosensor. <i>Analytica Chimica Acta</i> , <b>2004</b> , 526, 19-25	6.6	21
54	Biosensors and Related Bioanalytical Tools. <i>Comprehensive Analytical Chemistry</i> , <b>2017</b> , 77, 1-33	1.9	20
53	Surface Plasmon Resonance imaging-based sensing for anti-bovine immunoglobulins detection in human milk and serum. <i>Analytica Chimica Acta</i> , <b>2011</b> , 707, 178-83	6.6	20
52	An optical immunosensor for rapid vitellogenin detection in plasma from carp ( <i>Cyprinus carpio</i> ). <i>Talanta</i> , <b>2007</b> , 72, 785-90	6.2	19
51	Identification of mammalian species using genosensors. <i>Bioelectrochemistry</i> , <b>2005</b> , 67, 163-9	5.6	18
50	In vivo cytogenetic effects of natural humic acid. <i>Mutagenesis</i> , <b>1996</b> , 11, 467-9	2.8	18
49	Colorimetric determination of p-nitrophenol by using ELISA microwells modified with an adhesive polydopamine nanofilm containing catalytically active gold nanoparticles. <i>Mikrochimica Acta</i> , <b>2019</b> , 186, 146	5.8	16
48	Simultaneous detection of transgenic DNA by surface plasmon resonance imaging with potential application to gene doping detection. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 6245-53	7.8	16
47	Determination of phenylbutazone and flunixin meglumine in equine plasma by electrochemical-based sensing coupled to selective extraction with molecularly imprinted polymers. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 179, 226-231	8.5	15
46	Towards fast and inexpensive molecular diagnostic: the case of TP53. <i>Clinica Chimica Acta</i> , <b>2004</b> , 343, 45-60	6.2	14
45	. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 3374-3384	4	13
44	Label-free methods for probing the interaction of clioquinol with amyloid- $\beta$ <i>Analytical Methods</i> , <b>2012</b> , 4, 2228	3.2	13
43	A Biosensor Approach for DNA Sequences Detection in Non-amplified Genomic DNA. <i>Analytical Letters</i> , <b>2007</b> , 40, 1360-1370	2.2	13
42	Colorimetric analysis of the early oxidation of dopamine by hypochlorous acid as preliminary screening tool for chemical determinants of neuronal oxidative stress. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <b>2020</b> , 179, 113016	3.5	13
41	Investigating nanoparticle properties in plasmonic nanoarchitectures with DNA by surface plasmon resonance imaging. <i>Chemical Communications</i> , <b>2015</b> , 51, 6587-90	5.8	12
40	SPR detection of human hepcidin-25: a critical approach by immuno- and biomimetic-based biosensing. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 40, 135-40	11.8	12

39	Affinity sensing for transgenes detection in antidoping control. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 9571-7	7.8	12
38	Characterization of troponin T binding aptamers for an innovative enzyme-linked oligonucleotide assay (ELONA). <i>Analytical and Bioanalytical Chemistry</i> , <b>2019</b> , 411, 7709-7716	4.4	11
37	Improving surface plasmon resonance imaging of DNA by creating new gold and silver based surface nanostructures. <i>Mikrochimica Acta</i> , <b>2013</b> , 180, 1093-1099	5.8	10
36	Colorimetric determination of total protein content in serum based on the polydopamine/protein adsorption competition on microplates. <i>Talanta</i> , <b>2019</b> , 198, 15-22	6.2	9
35	Polynorepinephrine: state-of-the-art and perspective applications in biosensing and molecular recognition. <i>Analytical and Bioanalytical Chemistry</i> , <b>2020</b> , 412, 5945-5954	4.4	9
34	Selective and simultaneous determination of NSAIDs in equine plasma by HPLC with molecularly imprinted solid-phase extraction. <i>Bioanalysis</i> , <b>2014</b> , 6, 2147-58	2.1	8
33	A small heterobifunctional ligand provides stable and water dispersible core-shell CdSe/ZnS quantum dots (QDs). <i>Nanoscale</i> , <b>2018</b> , 10, 19720-19732	7.7	8
32	Direct genotyping of C3435T single nucleotide polymorphism in unamplified human MDR1 gene using a surface plasmon resonance imaging DNA sensor. <i>Analytical and Bioanalytical Chemistry</i> , <b>2015</b> , 407, 4023-8	4.4	7
31	Real-Time Tau Protein Detection by Sandwich-Based Piezoelectric Biosensing: Exploring Tubulin as a Mass Enhancer. <i>Sensors</i> , <b>2018</b> , 18,	3.8	7
30	Tunable growth of gold nanostructures at a PDMS surface to obtain plasmon rulers with enhanced optical features. <i>Mikrochimica Acta</i> , <b>2017</b> , 184, 3093-3102	5.8	6
29	Probing DNA hybridization in thiolipid monolayers by means of impedance spectroscopy. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 2380-2386	5.1	6
28	Sensing benzo[a]pyrene-DNA adducts formation via decrease of hybridization reaction. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 179, 187-193	8.5	5
27	Disposable electrochemical sensor for rapid measurement of heavy metals in fish by square wave anodic stripping voltammetry (SWASV). <i>Veterinary Research Communications</i> , <b>2009</b> , 33 Suppl 1, 249-52	2.9	5
26	Biosensors for RNA aptamers-protein interaction. <i>Methods in Molecular Biology</i> , <b>2008</b> , 419, 109-19	1.4	5
25	New Trends in Nucleic Acids Based Biosensors Florence, Italy, October 25-28, 2003. <i>Analytical Letters</i> , <b>2004</b> , 37, 1037-1052	2.2	5
24	Simultaneous Determination of $\beta$ -Microglobulin and Ig E Using Real-Time Biospecific Interaction Analysis (BIA). <i>Analytical Letters</i> , <b>1995</b> , 28, 933-944	2.2	5
23	SPR in drug discovery: searching bioactive compounds in plant extracts. <i>Methods in Molecular Biology</i> , <b>2009</b> , 572, 203-18	1.4	5
22	A straightforward synthesis of phenyl boronic acid (PBA) containing BODIPY dyes: new functional and modular fluorescent tools for the tethering of the glycan domain of antibodies.. <i>RSC Advances</i> , <b>2019</b> , 9, 30773-30777	3.7	5

21	Transgene traceability in transgenic mice: a bioanalytical approach for potential gene-doping analysis. <i>Bioanalysis</i> , <b>2011</b> , 3, 2523-31	2.1	4
20	Piezoelectric biosensors for aptamer-protein interaction. <i>Methods in Molecular Biology</i> , <b>2009</b> , 504, 23-36	1.4	4
19	Sensitive two-steps competitive assay for gonadotropin-releasing hormone detection via SPR biosensing and polynorepinephrine-based molecularly imprinted polymer. <i>Analytica Chimica Acta</i> , <b>2021</b> , 1161, 338481	6.6	4
18	Electrochemical and optical study of metallothionein interactions with prion proteins. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <b>2017</b> , 140, 355-361	3.5	3
17	Analytical Applicationsof QCM-based Nucleic Acid Biosensors <b>2006</b> , 211-235		3
16	Protein-templated copper nanoclusters for fluorimetric determination of human serum albumin. <i>Mikrochimica Acta</i> , <b>2021</b> , 188, 116	5.8	3
15	To the memory of Marco Mascini: His contribution in the field of biosensors. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2016</b> , 79, 2-8	14.6	2
14	Aptamer-Based Bioanalytical Assays: Amplification Strategies159-179		2
13	Analytical applications of aptamers <b>2007</b> , 6585, 255		2
12	A biomimetic enzyme-linked immunosorbent assay (BELISA) for the analysis of gonadorelin by using molecularly imprinted polymer-coated microplates.. <i>Analytical and Bioanalytical Chemistry</i> , <b>2022</b> , 1	4.4	2
11	Melanochrome-based colorimetric assay for quantitative detection of levodopa in co-presence of carbidopa and its application to relevant anti-Parkinson drugs. <i>Analytical and Bioanalytical Chemistry</i> , <b>2021</b> , 414, 1713	4.4	2
10	3,3',4,4'-tetramethylbenzidine as multi-colorimetric indicator of chlorine in water in line with health guideline values. <i>Analytical and Bioanalytical Chemistry</i> , <b>2020</b> , 412, 7861-7869	4.4	2
9	Polydopamine-based quantitation of albuminuria for the assessment of kidney damage. <i>Analytical and Bioanalytical Chemistry</i> , <b>2021</b> , 413, 2217-2224	4.4	2
8	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2019</b> , 25, 1-9	3.8	1
7	(Bio)Sensor Approach in the Evaluation of Polyphenols in Vegetal Matrices. <i>Natural Product Communications</i> , <b>2008</b> , 3, 1934578X0800301	0.9	1
6	Development of an Efficient Multiple Sclerosis Diagnostic Technology Based on an Optical Glycopeptide Immunosensor <b>2006</b> , 785-786		1
5	Colorimetric selective quantification of anthocyanins with catechol/pyrogallol moiety in edible plants upon zinc complexation.. <i>Talanta</i> , <b>2021</b> , 240, 123156	6.2	1
4	Analytical Applicationsof QCM-based Nucleic Acid Biosensors <b>2006</b> , 211		1

- 3 Piezoelectric Sensing for Sensitive Detection of DNA. *Soft and Biological Matter*, **2012**, 203-233 0.8 1
- 2 MINI REVIEW: SCREENING METHODOLOGIES FOR GENETIC MODIFIED ORGANISMS (GMOs).  
*Analytical Letters*, **2001**, 34, 469-469 2.2
- 1 Structurally Constrained MUC1-Tn Mimetic Antigen as Template for Molecularly Imprinted  
Polymers (MIPs): A Promising Tool for Cancer Diagnostics.. *ChemPlusChem*, **2022**, e202200068 2.8