

Sara Tombelli

List of Publications by Year in descending order

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121
papers

6,463
citations

81900

39
h-index

62596

80
g-index

131
all docs

131
docs citations

131
times ranked

6413
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytical applications of aptamers. <i>Biosensors and Bioelectronics</i> , 2005, 20, 2424-2434.	10.1	906
2	Aptamer-Based Detection of Plasma Proteins by an Electrochemical Assay Coupled to Magnetic Beads. <i>Analytical Chemistry</i> , 2007, 79, 1466-1473.	6.5	396
3	Nucleic Acid and Peptide Aptamers: Fundamentals and Bioanalytical Aspects. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1316-1332.	13.8	315
4	Aptamers-based assays for diagnostics, environmental and food analysis. <i>New Biotechnology</i> , 2007, 24, 191-200.	2.7	258
5	Aptamer-based biosensors for the detection of HIV-1 Tat protein. <i>Bioelectrochemistry</i> , 2005, 67, 135-141.	4.6	242
6	Electrochemical and piezoelectric DNA biosensors for hybridisation detection. <i>Analytica Chimica Acta</i> , 2008, 609, 139-159.	5.4	240
7	Biosensing with optical fiber gratings. <i>Nanophotonics</i> , 2017, 6, 663-679.	6.0	224
8	Quartz crystal microbalance (QCM) affinity biosensor for genetically modified organisms (GMOs) detection. <i>Biosensors and Bioelectronics</i> , 2003, 18, 129-140.	10.1	210
9	New trends in affinity sensing. <i>TrAC - Trends in Analytical Chemistry</i> , 2003, 22, 810-818.	11.4	207
10	Development of biosensors with aptamers as bio-recognition element: the case of HIV-1 Tat protein. <i>Biosensors and Bioelectronics</i> , 2004, 20, 1149-1156.	10.1	196
11	Femtomolar Detection by Nanocoated Fiber Label-Free Biosensors. <i>ACS Sensors</i> , 2018, 3, 936-943.	7.8	193
12	Analytical Performances of Aptamer-Based Sensing for Thrombin Detection. <i>Analytical Chemistry</i> , 2007, 79, 3016-3019.	6.5	190
13	Biosensors for biomarkers in medical diagnostics. <i>Biomarkers</i> , 2008, 13, 637-657.	1.9	158
14	Polyphenol Content and Antioxidative Activity in Some Species of Freshly Consumed Salads. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 1724-1729.	5.2	144
15	Immobilisation of DNA probes for the development of SPR-based sensing. <i>Biosensors and Bioelectronics</i> , 2004, 20, 967-974.	10.1	104
16	Solâ€“Gel-Based Titaniaâ€“Silica Thin Film Overlay for Long Period Fiber Grating-Based Biosensors. <i>Analytical Chemistry</i> , 2015, 87, 12024-12031.	6.5	102
17	Detection of C Reactive Protein (CRP) in Serum by an Electrochemical Aptamerâ€“Based Sandwich Assay. <i>Electroanalysis</i> , 2009, 21, 1309-1315.	2.9	98
18	Direct immobilisation of DNA probes for the development of affinity biosensors. <i>Bioelectrochemistry</i> , 2005, 66, 129-138.	4.6	97

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19	Detection of Fragmented Genomic DNA by PCR-Free Piezoelectric Sensing Using a Denaturation Approach. <i>Journal of the American Chemical Society</i> , 2005, 127, 7966-7967.	13.7	95
20	A DNA piezoelectric biosensor assay coupled with a polymerase chain reaction for bacterial toxicity determination in environmental samples. <i>Analytica Chimica Acta</i> , 2000, 418, 1-9.	5.4	94
21	Different approaches for the detection of thrombin by an electrochemical aptamer-based assay coupled to magnetic beads. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1602-1609.	10.1	94
22	Towards sensitive label-free immunosensing by means of turn-around point long period fiber gratings. <i>Biosensors and Bioelectronics</i> , 2014, 60, 305-310.	10.1	92
23	Development of an optical RNA-based aptasensor for C-reactive protein. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 1077-1086.	3.7	89
24	Improved procedures for immobilisation of oligonucleotides on gold-coated piezoelectric quartz crystals. <i>Biosensors and Bioelectronics</i> , 2002, 17, 929-936.	10.1	84
25	Piezoelectric biosensors: Strategies for coupling nucleic acids to piezoelectric devices. <i>Methods</i> , 2005, 37, 48-56.	3.8	76
26	SPR-based plastic optical fibre biosensor for the detection of C-reactive protein in serum. <i>Journal of Biophotonics</i> , 2016, 9, 1077-1084.	2.3	73
27	An Electrochemical Immunoassay for HER2 Detection. <i>Electroanalysis</i> , 2012, 24, 735-742.	2.9	72
28	A new approach for the detection of DNA sequences in amplified nucleic acids by a surface plasmon resonance biosensor. <i>Biosensors and Bioelectronics</i> , 2004, 20, 598-605.	10.1	69
29	Coupling of a DNA piezoelectric biosensor and polymerase chain reaction to detect apolipoprotein E polymorphisms. <i>Biosensors and Bioelectronics</i> , 2000, 15, 363-370.	10.1	66
30	Detection of clinically relevant point mutations by a novel piezoelectric biosensor. <i>Biosensors and Bioelectronics</i> , 2006, 21, 1876-1879.	10.1	65
31	Electrochemical biosensors for biogenic amines: a comparison between different approaches. <i>Analytica Chimica Acta</i> , 1998, 358, 277-284.	5.4	64
32	A novel low-cost and easy to develop functionalization platform. Case study: Aptamer-based detection of thrombin by surface plasmon resonance. <i>Talanta</i> , 2010, 80, 2157-2164.	5.5	63
33	Biosensors as new analytical tool for detection of Genetically Modified Organisms (GMOs). <i>Fresenius' Journal of Analytical Chemistry</i> , 2001, 369, 589-593.	1.5	58
34	Combination of amplification and post-amplification strategies to improve optical DNA sensing. <i>Biosensors and Bioelectronics</i> , 2003, 19, 337-344.	10.1	57
35	Detection of β -thalassemia by a DNA piezoelectric biosensor coupled with polymerase chain reaction. <i>Analytica Chimica Acta</i> , 2003, 481, 55-64.	5.4	56
36	An optical DNA-based biosensor for the analysis of bioactive constituents with application in drug and herbal drug screening. <i>Talanta</i> , 2005, 65, 578-585.	5.5	54

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37	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> , 2007, 383, 140-146.	1.1	49
38	Magnetically driven drug delivery systems improving targeted immunotherapy for colon-rectal cancer. <i>Journal of Controlled Release</i> , 2018, 280, 76-86.	9.9	47
39	A DNA-based piezoelectric biosensor: Strategies for coupling nucleic acids to piezoelectric devices. <i>Talanta</i> , 2006, 68, 806-812.	5.5	43
40	Transgenes monitoring in an industrial soybean processing chain by DNA-based conventional approaches and biosensors. <i>Food Chemistry</i> , 2009, 113, 658-664.	8.2	40
41	Design, fabrication and characterisation of silica-titania thin film coated over coupled long period fibre gratings: Towards bio-sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 418-427.	7.8	39
42	Long-period fiber grating: a specific design for biosensing applications. <i>Applied Optics</i> , 2017, 56, 9846.	1.8	38
43	A PIEZOELECTRIC AFFINITY BIOSENSOR FOR GENETICALLY MODIFIED ORGANISMS (GMOs) DETECTION. <i>Analytical Letters</i> , 2001, 34, 825-840.	1.8	33
44	Oligonucleotide optical switches for intracellular sensing. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 6181-6196.	3.7	32
45	A SURFACE PLASMON RESONANCE BIOSENSOR FOR THE DETERMINATION OF THE AFFINITY OF DRUGS FOR NUCLEIC ACIDS. <i>Analytical Letters</i> , 2002, 35, 599-613.	1.8	26
46	Molecular beacon-decorated polymethylmethacrylate core-shell fluorescent nanoparticles for the detection of survivin mRNA in human cancer cells. <i>Biosensors and Bioelectronics</i> , 2017, 88, 15-24.	10.1	26
47	Detection of human apolipoprotein E genotypes by DNA biosensors coupled with PCR. <i>Clinica Chimica Acta</i> , 2001, 307, 241-248.	1.1	24
48	Theranostic Properties of a Survivin-Directed Molecular Beacon in Human Melanoma Cells. <i>PLoS ONE</i> , 2014, 9, e114588.	2.5	24
49	Bulk acoustic wave affinity biosensor for genetically modified organisms detection. <i>IEEE Sensors Journal</i> , 2003, 3, 369-375.	4.7	23
50	Detection of highly repeated sequences in non-amplified genomic DNA by bulk acoustic wave (BAW) affinity biosensor. <i>Analytica Chimica Acta</i> , 2004, 526, 19-25.	5.4	23
51	A Complete Optical Sensor System Based on a POF-SPR Platform and a Thermo-Stabilized Flow Cell for Biochemical Applications. <i>Sensors</i> , 2016, 16, 196.	3.8	23
52	Aptamers Biosensors for Pharmaceutical Compounds. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2010, 13, 641-649.	1.1	23
53	Electronic Detection of DNA Hybridization by Coupling Organic Field-Effect Transistor-Based Sensors and Hairpin-Shaped Probes. <i>Sensors</i> , 2018, 18, 990.	3.8	21
54	DNA biosensors for the detection of aflatoxin producing <i>Aspergillus flavus</i> and <i>A. parasiticus</i> . <i>Monatshefte für Chemie</i> , 2009, 140, 901-907.	1.8	19

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55	Optical Fiber Nanotips Coated with Molecular Beacons for DNA Detection. <i>Sensors</i> , 2015, 15, 9666-9680.	3.8	19
56	Recent Advances in Optical DNA Biosensors Technology. <i>Chimia</i> , 2005, 59, 236-242.	0.6	18
57	Optical Monitoring of Therapeutic Drugs with a Novel Fluorescence- Based POCT Device. <i>Procedia Engineering</i> , 2014, 87, 392-395.	1.2	18
58	Detection of biomarkers for inflammatory diseases by an electrochemical immunoassay: The case of neopterin. <i>Talanta</i> , 2015, 134, 48-53.	5.5	18
59	Analysis of the Lowest Order Cladding Mode of Long Period Fiber Gratings Near Turn Around Point. <i>Journal of Lightwave Technology</i> , 2021, 39, 4006-4012.	4.6	18
60	Biosensors exploiting unconventional platforms: The case of plasmonic light-diffusing fibers. <i>Sensors and Actuators B: Chemical</i> , 2021, 337, 129771.	7.8	16
61	A Biosensor Approach for DNA Sequences Detection in Non-amplified Genomic DNA. <i>Analytical Letters</i> , 2007, 40, 1360-1370.	1.8	14
62	Fluorescence biosensing in selectively photo-activated microbubble resonators. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 1057-1064.	7.8	14
63	Real-time kinetic binding studies at attomolar concentrations in solution phase using a single-stage opto-biosensing platform based upon infrared surface plasmons. <i>Optics Express</i> , 2017, 25, 39.	3.4	13
64	A Hetero-bifunctional Spacer for the Smart Engineering of Carbon-Based Nanostructures. <i>ChemPlusChem</i> , 2015, 80, 704-714.	2.8	10
65	Aptamer optical switches: From biosensing to intracellular sensing. <i>Sensors and Actuators Reports</i> , 2021, 3, 100030.	4.4	10
66	Polymeric nanoparticles promote endocytosis of a survivin molecular beacon: Localization and fate of nanoparticles and beacon in human A549 cells. <i>Life Sciences</i> , 2018, 215, 106-112.	4.3	8
67	Immunosuppressant quantification in intravenous microdialysate towards novel quasi-continuous therapeutic drug monitoring in transplanted patients. <i>Clinical Chemistry and Laboratory Medicine</i> , 2021, 59, 935-945.	2.3	8
68	Recent Advances on DNA Biosensors. <i>International Journal of Environmental Analytical Chemistry</i> , 2001, 80, 87-99.	3.3	7
69	Optical Fibre Micro/Nano Tips as Fluorescence-Based Sensors and Interrogation Probes. <i>Optics</i> , 2020, 1, 213-242.	1.2	7
70	Label-free immunosensing by long period fiber gratings at the lowest order cladding mode and near turn around point. <i>Optics and Laser Technology</i> , 2021, 142, 107194.	4.6	7
71	New Trends in Nucleic Acids Based Biosensors Florence, Italy, October 25-28, 2003. <i>Analytical Letters</i> , 2004, 37, 1037-1052.	1.8	6
72	An integrated device for fast and sensitive immunosuppressant detection. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 3243-3255.	3.7	6

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73	Biosensors for RNA Aptamersâ€™Protein Interaction. Methods in Molecular Biology, 2008, 419, 109-119.	0.9	5
74	Piezoelectric Biosensors for Aptamerâ€™Protein Interaction. Methods in Molecular Biology, 2009, 504, 23-36.	0.9	5
75	Sensitivity Analysis of Sidelobes of the Lowest Order Cladding Mode of Long Period Fiber Gratings at Turn Around Point. Sensors, 2022, 22, 2965.	3.8	5
76	Complex Nanostructures Based on Oligonucleotide Optical Switches and Nanoparticles for Intracellular mRNA Sensing and Silencing. Procedia Engineering, 2014, 87, 751-754.	1.2	4
77	Optical micro-bubble resonators as promising biosensors. Proceedings of SPIE, 2015, , .	0.8	4
78	Label-free IgG/anti-IgG biosensing based on long period fiber gratings: a comprehensive feasibility study. , 2015, , .		4
79	Optical sensing in POCT: the contribution of the Institute of Applied Physics of the Italian CNR. Laboratoriums Medizin, 2017, 41, .	0.6	4
80	In-Parallel Polar Monitoring of Chemiluminescence Emission Anisotropy at the Solidâ€™Liquid Interface by an Optical Fiber Radial Array. Chemosensors, 2020, 8, 18.	3.6	4
81	Analytical Applications of QCM-based Nucleic Acid Biosensors. , 2006, , 211-235.		3
82	A newly designed optical biochip for a TDM-POCT device. , 2014, , .		3
83	Localized biomolecules immobilization in optical microbubble resonators. Proceedings of SPIE, 2016, , .	0.8	3
84	A Point-of-Care Device for Immunosuppressants Monitoring in Transplanted Patients. Lecture Notes in Electrical Engineering, 2015, , 27-31.	0.4	3
85	Analytical applications of aptamers. , 2007, 6585, 255.		2
86	Aptamer-Based Bioanalytical Assays: Amplification Strategies. , 0, , 159-179.		2
87	Development of an Aptamer-Based Electrochemical Sandwich Assay for the Detection of a Clinical Biomarker. Lecture Notes in Electrical Engineering, 2010, , 207-210.	0.4	2
88	Intracellular delivery of molecular beacons by PMMA nanoparticles and carbon nanotubes for mRNA sensing. , 2013, , .		2
89	Total Internal Reflection Fluorescence-based Optical Biochip for the Detection of Immunosuppressants in Transplanted Patients. , 2015, , .		2
90	A waveguide absorption filter for fluorescence measurements. Sensors and Actuators B: Chemical, 2019, 281, 90-95.	7.8	2

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91	Detection of a Tumor Marker in Serum by an Electrochemical Assay Coupled to Magnetic Beads. Lecture Notes in Electrical Engineering, 2011, , 157-161.	0.4	2
92	In Vitro Radical Scavenging and Anti-Yeast Activity of Extracts from Leaves of Aloe Species Growing in Congo. Natural Product Communications, 2008, 3, 1934578X0800301.	0.5	1
93	Oligonucleotide switches and nanomaterials for intracellular mRNA sensing. , 2013, , .		1
94	IgG/anti-IgG immunoassay based on a turn-around point long period grating. , 2014, , .		1
95	New Affinity Biosensors as Diagnostic Tools for Tumour Marker Analysis. Lecture Notes in Electrical Engineering, 2014, , 19-23.	0.4	1
96	Optical heterogeneous bioassay for the detection of the inflammatory biomarker suPAR. , 2015, , .		1
97	Localized immunoassay in flow-through optical microbubble resonator (Conference Presentation). , 2016, , .		1
98	Lossy Mode Resonance Fiber-Optic Biosensing Allowing Ultra-Low Detection Limit. , 2019, , .		1
99	Realization of Enhanced Evanescent Field Long Period Fiber Grating near Turn around Point for Label-Free Immunosensing. , 0, , .		1
100	Silencing Survivin: a Key Therapeutic Strategy for Cardiac Hypertrophy. Journal of Cardiovascular Translational Research, 2021, , 1.	2.4	1
101	Analytical Applications of QCM-based Nucleic Acid Biosensors. , 2006, , 211-235.		1
102	Biosensing with microresonators and fibre nanotips. , 2013, , .		0
103	Optical fiber nanotips as carriers for molecular beacon-based biosensors. , 2013, , .		0
104	Miniaturised optical fiber pH sensor for gastro-esophageal applications. Proceedings of SPIE, 2013, , .	0.8	0
105	Impact of thermal oxidation, surface chemistry and porous silicon morphology for sensing applications. Proceedings of SPIE, 2013, , .	0.8	0
106	Comparative assessment of the performance of long period fiber grating-based biosensors. , 2015, , .		0
107	Polymethylmethacrylate Nanoparticles as Vehicle for a Molecular Beacon Specific for Survivin mRNA in A549 Cells. , 2015, , .		0
108	A Hetero-Bifunctional Spacer for the Smart Engineering of Carbon-Based Nanostructures. ChemPlusChem, 2015, 80, 636-636.	2.8	0

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109	Polymethylmethacrylate nanoparticles as carrier of an oligodeoxynucleotide molecular beacon specific for survivin mRNA in A549 human lung adenocarcinoma epithelial cells. , 2015, , .		0
110	A thermo-stabilized flow cell for surface plasmon resonance sensors in D-shaped plastic optical fibers. Proceedings of SPIE, 2016, , .	0.8	0
111	The light at the service of medicine: optical sensing beside the patient's bed (Conference Presentation). , 2017, , .		0
112	Novel fluorescence-based POCT platform for therapeutic drug monitoring in transplanted patients (Conference Presentation). , 2017, , .		0
113	A POCT platform for sepsis biomarkers (Conference Presentation). , 2017, , .		0
114	Manufacturing and Optimization of Sol-gel-based TiO ₂ -SiO ₂ thin Films as High Refractive Index Overlays for Long Period Grating-based Biosensing. , 2016, , .		0
115	DNA-Surfactant Thin-Film Processing and Characterization. , 2016, , 192-243.		0
116	Oligonucleotide molecular beacons for intracellular diagnosis and therapy. SPIE Newsroom, 0, , .	0.1	0
117	High numerical aperture waveguide absorption filter for fluorescence detection. , 2019, , .		0
118	Internalization by PMMA nanoparticle-mediated endocytosis of a survivin molecular beacon as theranostic agent in human cancer cells.. , 2020, , .		0
119	Optimization of optical fiber long period gratings for biosensing applications. , 2020, , .		0
120	A fluorescence-based POCT device for immunosuppressant-drug monitoring in transplanted patient. , 0, , .		0
121	Intracellular sensing by a survivin molecular beacon coupled to PMMA nanoparticles in human cancer cells. , 0, , .		0