

# Carlotta Guiducci

## List of Publications by Year in descending order

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Version: 2024-02-01

44  
papers

1,301  
citations

361413

20  
h-index

377865

34  
g-index

47  
all docs

47  
docs citations

47  
times ranked

1774  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recombinase polymerase amplification in minimally buffered conditions. Biosensors and Bioelectronics, 2022, 198, 113802.	10.1	11
2	Integration of Ultra-Low Volume Pneumatic Microfluidics with a Three-Dimensional Electrode Network for On-Chip Biochemical Sensing. Micromachines, 2021, 12, 762.	2.9	1
3	Selective Retrieval of Individual Cells from Microfluidic Arrays Combining Dielectrophoretic Force and Directed Hydrodynamic Flow. Micromachines, 2020, 11, 322.	2.9	11
4	Rapid Multianalyte Microfluidic Homogeneous Immunoassay on Electrokinetically Driven Beads. Biosensors, 2020, 10, 212.	4.7	4
5	Active Posts in Deterministic Lateral Displacement Devices. Advanced Materials Technologies, 2019, 4, 1900339.	5.8	19
6	Microfluidics: Active Posts in Deterministic Lateral Displacement Devices (Adv. Mater. Technol. 9/2019). Advanced Materials Technologies, 2019, 4, 1970048.	5.8	0
7	On-chip technology for single-cell arraying, electrorotation-based analysis and selective release. Electrophoresis, 2019, 40, 1830-1838.	2.4	29
8	Isothermal multiple displacement amplification of DNA templates in minimally buffered conditions using phi29 polymerase. Chemical Communications, 2018, 54, 2158-2161.	4.1	12
9	Comparison against current standards of a DNA aptamer for the label-free quantification of tobramycin in human sera employed for therapeutic drug monitoring. Journal of Pharmaceutical and Biomedical Analysis, 2018, 159, 341-347.	2.8	22
10	Selection of Structure-Switching DNA Aptamers Binding Soluble Small Molecules and SPR Validation of Enrichment. Methods in Molecular Biology, 2018, 1811, 183-197.	0.9	0
11	Label-free identification of activated T lymphocytes through tridimensional microsensors on chip. Biosensors and Bioelectronics, 2017, 94, 193-199.	10.1	36
12	Integrated electrical sensing for high-throughput bioanalytics. , 2017, , .		0
13	Multi-Wire Tri-Gate Silicon Nanowires Reaching Milli-pH Unit Resolution in One Micron Square Footprint. Biosensors, 2016, 6, 9.	4.7	20
14	Analysis of dielectric microbead detection by impedance spectroscopy with nanoribbons. , 2016, , .		3
15	Metal-Coated SU-8 Structures for High-Density 3-D Microelectrode Arrays. Journal of Microelectromechanical Systems, 2016, 25, 425-431.	2.5	24
16	Label-Free Detection of Tobramycin in Serum by Transmission-Localized Surface Plasmon Resonance. Analytical Chemistry, 2015, 87, 5278-5285.	6.5	115
17	More DNA Aptamers for Small Drugs: A Capture SELEX Coupled with Surface Plasmon Resonance and High-Throughput Sequencing. ACS Combinatorial Science, 2015, 17, 326-333.	3.8	82
18	Hybridization chain reaction performed on a metal surface as a means of signal amplification in SPR and electrochemical biosensors. Biosensors and Bioelectronics, 2014, 54, 102-108.	10.1	26

#	ARTICLE	IF	CITATIONS
19	Another transistor-based revolution: on-chip qPCR. <i>Nature Methods</i> , 2013, 10, 617-618.	19.0	12
20	Post-CMOS Processing and 3-D Integration Based on Dry-Film Lithography. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2013, 3, 1458-1466.	2.5	10
21	Peak shift measurement of localized surface plasmon resonance by a portable electronic system. <i>Sensors and Actuators B: Chemical</i> , 2013, 176, 225-231.	7.8	13
22	Metal-coated silicon micropillars for freestanding 3D-electrode arrays in microchannels. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 713-719.	7.8	22
23	A $0.18 \mu\text{m}$ Biosensor Front-End Based on $1/f$ Noise, Distortion Cancellation and Chopper Stabilization Techniques. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2013, 7, 660-673.	4.0	19
24	Overview of Micro- and Nano-Technology Tools for Stem Cell Applications: Micropatterned and Microelectronic Devices. <i>Sensors</i> , 2012, 12, 15947-15982.	3.8	21
25	A Portable Setup for Molecular Detection by Transmission LSPR. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1479, 27-32.	0.1	0
26	Detecting particles flowing through interdigitated 3D microelectrodes. , 2012, 2012, 5002-5.		4
27	A CMOS-compatible chip-to-chip 3D integration platform. , 2012, , .		7
28	A comparative study on fabrication techniques for on-chip microelectrodes. <i>Lab on A Chip</i> , 2012, 12, 4920.	6.0	31
29	Robust microelectrodes developed for improved stability in electrochemical characterization of biomolecular layers. , 2010, , .		6
30	Overview of Electrochemical DNA Biosensors: New Approaches to Detect the Expression of Life. <i>Sensors</i> , 2009, 9, 3122-3148.	3.8	119
31	High parallelism, portability, and broad accessibility. <i>ACM Journal on Emerging Technologies in Computing Systems</i> , 2008, 4, 1-39.	2.3	4
32	Novel front-end circuit architectures for integrated bio-electronic interfaces. , 2008, , .		8
33	Real-time high-sensitivity impedance measurement interface for tethered BLM biosensor arrays. , 2008, , .		3
34	Electronic Detection of DNA Hybridization: Toward CMOS Microarrays. <i>IEEE Design and Test of Computers</i> , 2007, 24, 38-48.	1.0	14
35	A Fully Electronic Label-Free DNA Sensor Chip. <i>IEEE Sensors Journal</i> , 2007, 7, 577-585.	4.7	92
36	Microelectrodes on a Silicon Chip for Label-Free Capacitive DNA Sensing. <i>IEEE Sensors Journal</i> , 2006, 6, 1084-1093.	4.7	41

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37	CMOS DNA Sensor Array With Integrated A/D Conversion Based on Label-Free Capacitance Measurement. IEEE Journal of Solid-State Circuits, 2006, 41, 2956-2964.	5.4	161
38	Metallic oxide CdIn <sub>2</sub> O <sub>4</sub> films for the label free electrochemical detection of DNA hybridization. Biosensors and Bioelectronics, 2006, 22, 178-184.	10.1	22
39	Semiconductor oxide based electrodes for the label-free electrical detection of DNA hybridization: Comparison between Sb doped SnO <sub>2</sub> and CdIn <sub>2</sub> O <sub>4</sub> . Electrochimica Acta, 2006, 51, 5206-5214.	5.2	31
40	Development and functionalisation of Sb doped SnO <sub>2</sub> thin films for DNA biochip applications. Sensors and Actuators B: Chemical, 2006, 113, 1025-1033.	7.8	29
41	Wireless sensor networks: Enabling technology for ambient intelligence. Microelectronics Journal, 2006, 37, 1639-1649.	2.0	76
42	FULLY ELECTRONIC DNA DETECTION TECHNIQUE. , 2005, , .		0
43	DNA detection by integrable electronics. Biosensors and Bioelectronics, 2004, 19, 781-787.	10.1	95
44	Characterization of effective mobility by split C(V) technique in N-MOSFETs with ultra-thin gate oxides. Solid-State Electronics, 2003, 47, 1147-1153.	1.4	41