Alessandra Bonanni

List of Publications by Year
in descending order

88	6,222	94433 37	66911 78
papers	citations	h-index	g-index

97	97	97	8447
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Graphene for electrochemical sensing and biosensing. TrAC - Trends in Analytical Chemistry, 2010, 29, 954-965.	11.4	1,041
2	Electrochemistry of Graphene and Related Materials. Chemical Reviews, 2014, 114, 7150-7188.	47.7	968
3	Graphene and its electrochemistry â€“ an update. Chemical Society Reviews, 2016, 45, 2458-2493.	38.1	366
4	Graphene Platform for Hairpin-DNA-Based Impedimetric Genosensing. ACS Nano, 2011, 5, 2356-2361.	14.6	289
5	Electrochemistry at Chemically Modified Graphenes. Chemistry - A European Journal, 2011, 17, 10763-10770.	3.3	288
6	Carboxylic Carbon Quantum Dots as a Fluorescent Sensing Platform for DNA Detection. ACS Applied Materials & Interfaces, 2016, 8, 1951-1957.	8.0	261
7	Lithium Aluminum Hydride as Reducing Agent for Chemically Reduced Graphene Oxides. Chemistry of Materials, 2012, 24, 2292-2298.	6.7	187
8	Use of nanomaterials for impedimetric DNA sensors: A review. Analytica Chimica Acta, 2010, 678, 7-17.	5.4	163
9	Graphene for impedimetric biosensing. TrAC - Trends in Analytical Chemistry, 2012, 37, 12-21.	11.4	140
10	Inherently Electroactive Graphene Oxide Nanoplatelets As Labels for Single Nucleotide Polymorphism Detection. ACS Nano, 2012, 6, 8546-8551.	14.6	113
11	Biosensors for determination of total and natural antioxidant capacity of red and white wines: comparison with other spectrophotometric and fluorimetric methods. Biosensors and Bioelectronics, 2004, 19, 641-651.	10.1	101
12	Molybdenum disulfide (MoS₂) nanoflakes as inherently electroactive labels for DNA hybridization detection. Nanoscale, 2014, 6, 11971-11975.	5.6	98
13	Oxidation Debris in Graphene Oxide Is Responsible for Its Inherent Electroactivity. ACS Nano, 2014, 8, 4197-4204.	14.6	77
14	Genomagnetic assay based on label-free electrochemical detection using magneto-composite electrodes. Sensors and Actuators B: Chemical, 2006, 114, 591-598.	7.8	76
15	Electrochemistry of folded graphene edges. Nanoscale, 2011, 3, 2256.	5.6	74
16	Nucleic Acid Functionalized Graphene for Biosensing. Chemistry - A European Journal, 2012, 18, 1668-1673.	3.3	72
17	Impedimetric thrombin aptasensor based on chemically modified graphenes. Nanoscale, 2012, 4, 143-147.	5.6	69
18	On Oxygenâ€Containing Groups in Chemically Modified Graphenes. Chemistry - A European Journal, 2012, 18, 4541-4548.	3.3	69

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19	Impedimetric genosensors for the detection of DNA hybridization. Analytical and Bioanalytical Chemistry, 2006, 385, 1195-1201.	3.7	67
20	Influence of gold nanoparticle size (2â€“50 nm) upon its electrochemical behavior: an electrochemical impedance spectroscopic and voltammetric study. Physical Chemistry Chemical Physics, 2011, 13, 4980.	2.8	67
21	Signal amplification for impedimetric genosensing using gold-streptavidin nanoparticles. Electrochimica Acta, 2008, 53, 4022-4029.	5.2	63
22	Exfoliated transition metal dichalcogenides (MoS2, MoSe2, WS2, WSe2): An electrochemical impedance spectroscopic investigation. Electrochemistry Communications, 2015, 50, 39-42.	4.7	62
23	Impedimetric genosensors employing COOH-modified carbon nanotube screen-printed electrodes. Biosensors and Bioelectronics, 2009, 24, 2885-2891.	10.1	59
24	DNA hybridization detection by electrochemical impedance spectroscopy using interdigitated gold nanoelectrodes. Mikrochimica Acta, 2010, 170, 275-281.	5.0	55
25	Thrombin aptasensing with inherently electroactive graphene oxide nanoplatelets as labels. Nanoscale, 2013, 5, 4758.	5.6	55
26	Impedimetric immunoglobulin G immunosensor based on chemically modified graphenes. Nanoscale, 2012, 4, 921-925.	5.6	54
27	Detection of DNA hybridization on chemically modified graphene platforms. Analyst, The, 2012, 137, 580-583.	3.5	54
28	Determination of antioxidant properties of aromatic herbs, olives and fresh fruit using an enzymatic sensor. Analytical and Bioanalytical Chemistry, 2003, 375, 1011-1016.	3.7	53
29	Determination of the antioxidant capacity of samples of different types of tea, or of beverages based on tea or other herbal products, using a superoxide dismutase biosensor. Journal of Pharmaceutical and Biomedical Analysis, 2003, 32, 725-736.	2.8	51
30	Impedimetric detection of influenza A (H1N1) DNA sequence using carbon nanotubes platform and gold nanoparticles amplification. Analyst, The, 2010, 135, 1765.	3.5	49
31	Large-scale quantification of CVD graphene surface coverage. Nanoscale, 2013, 5, 2379.	5.6	47
32	Graphene platforms for the detection of caffeine in real samples. Analytica Chimica Acta, 2013, 804, 92-97.	5.4	46
33	Rational Design of Carboxyl Groups Perpendicularly Attached to a Graphene Sheet: A Platform for Enhanced Biosensing Applications. Chemistry - A European Journal, 2014, 20, 217-222.	3.3	43
34	Electrochemical immunosensor for the diagnosis of celiac disease. Analytical Biochemistry, 2009, 388, 229-234.	2.4	42
35	The potential of electrochemistry for the detection of coronavirus-induced infections. TrAC - Trends in Analytical Chemistry, 2020, 133, 116081.	11.4	42
36	Chemically-modified graphenes for oxidation of DNA bases: analytical parameters. Analyst, The, 2011, 136, 4738.	3.5	38

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37	Evaluation of the antioxidant and prooxidant properties of several commercial dry spices by different analytical methods. Food Chemistry, 2007, 102, 751-758.	8.2	37
38	Inherent Electrochemistry and Activation of Chemically Modified Graphenes for Electrochemical Applications. Chemistry - an Asian Journal, 2012, 7, 759-770.	3.3	37
39	Comparison of fluorimetric, voltammetric and biosensor methods for the determination of total antioxidant capacity of drug products containing acetylsalicylic acid. Journal of Pharmaceutical and Biomedical Analysis, 2004, 36, 91-99.	2.8	36
40	Application of the avidinâ€"biotin interaction to immobilize DNA in the development of electrochemical impedance genosensors. Analytical and Bioanalytical Chemistry, 2007, 389, 851-861.	3.7	36
41	Mycotoxin Aptasensing Amplification by using Inherently Electroactive Grapheneâ€Oxide Nanoplatelet Labels. ChemElectroChem, 2015, 2, 743-747.	3.4	36
42	Biorecognition on Graphene: Physical, Covalent, and Affinity Immobilization Methods Exhibiting Dramatic Differences. Chemistry - an Asian Journal, 2013, 8, 198-203.	3.3	31
43	Rapid electrochemical detection of COVID-19 genomic sequence with dual-function graphene nanocolloids based biosensor. FlatChem, 2022, 32, 100336.	5.6	30
44	Inherently electroactive graphene oxide nanoplatelets as labels for specific protein-target recognition. Nanoscale, 2013, 5, 7844.	5.6	29
45	High-resolution impedance spectroscopy for graphene characterization. Electrochemistry Communications, 2013, 26, 52-54.	4.7	29
46	Impedimetric detection of double-tagged PCR products using novel amplification procedures based on gold nanoparticles and Protein G. Analyst, The, 2009, 134, 602-608.	3.5	26
47	Impedimetric genosensing of DNA polymorphism correlated to cystic fibrosis: A comparison among different protocols and electrode surfaces. Biosensors and Bioelectronics, 2010, 26, 1245-1251.	10.1	26
48	Doped Graphene for DNA Analysis: the Electrochemical Signal is Strongly Influenced by the Kind of Dopant and the Nucleobase Structure. Scientific Reports, 2016, 6, 33046.	3.3	25
49	Improving the Analytical Performance of Graphene Oxide towards the Assessment of Polyphenols. Chemistry - A European Journal, 2016, 22, 3830-3834.	3.3	25
50	Strong dependence of fluorescence quenching on the transition metal in layered transition metal dichalcogenide nanoflakes for nucleic acid detection. Analyst, The, 2016, 141, 4654-4658.	3.5	25
51	Gold Nanospacers Greatly Enhance the Capacitance of Electrochemically Reduced Graphene. ChemPlusChem, 2012, 77, 71-73.	2.8	24
52	Biosensors for determination of total antioxidant capacity of phytotherapeutic integrators: comparison with other spectrophotometric, fluorimetric and voltammetric methods. Journal of Pharmaceutical and Biomedical Analysis, 2004, 35, 303-320.	2.8	22
53	Rapid, Sensitive, and Label-Free Impedimetric Detection of a Single-Nucleotide Polymorphism Correlated to Kidney Disease. Analytical Chemistry, 2010, 82, 3772-3779.	6.5	22
54	How 3D printing can boost advances in analytical and bioanalytical chemistry. Mikrochimica Acta, 2021, 188, 265.	5.0	21

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55	The dopant type and amount governs the electrochemical performance of graphene platforms for the antioxidant activity quantification. Nanoscale, 2015, 7, 9040-9045.	5.6	19
56	Functionalized Germanene-Based Nanomaterials for the Detection of Single Nucleotide Polymorphism. ACS Applied Nano Materials, 2021, 4, 5164-5175.	5.0	17
57	Surfactants used for dispersion of graphenes exhibit strong influence on electrochemical impedance spectroscopic response. Electrochemistry Communications, 2012, 16, 19-21.	4.7	16
58	Dualâ€Genic Hybridization Sensor Employing Electrochemical Impedance Spectroscopy. Electroanalysis, 2008, 20, 941-948.	2.9	15
59	Electrochemical Polymerase Chain Reaction Using Electroactive Graphene Oxide Nanoparticles as Detection Labels. ACS Applied Nano Materials, 2020, 3, 5489-5498.	5.0	15
60	Nanoporous carbon as a sensing platform for DNA detection: The use of impedance spectroscopy for hairpin-DNA based assay. RSC Advances, 2012, 2, 1021-1024.	3.6	14
61	CVD graphene based immunosensor. RSC Advances, 2014, 4, 23952-23956.	3.6	14
62	Transitional Metal/Chalcogen Dependant Interactions of Hairpin DNA with Transition Metal Dichalcogenides, MX₂. ChemPhysChem, 2015, 16, 2304-2306.	2.1	14
63	Oxidation of DNA bases is influenced by their position in the DNA strand. Electrochemistry Communications, 2012, 22, 207-210.	4.7	13
64	Chemically Modified Graphene: The Influence of Structural Properties on the Assessment of Antioxidant Capacity. Chemistry - A European Journal, 2015, 21, 11793-11798.	3.3	13
65	Effect of surface chemistry on bio-conjugation and bio-recognition abilities of 2D germanene materials. Nanoscale, 2021, 13, 1893-1903.	5.6	13
66	Doped and undoped graphene platforms: the influence of structural properties on the detection of polyphenols. Scientific Reports, 2016, 6, 20673.	3.3	12
67	Allâ€inâ€One: Electroactive Nanocarbon as Simultaneous Platform and Label for Singleâ€Step Biosensing. Chemistry - A European Journal, 2018, 24, 6380-6385.	3.3	12
68	Fabrication of handmade paper sensor based on silver-cobalt doped copolymer-ionic liquid composite for monitoring of vitamin D3 level in real samples. Microchemical Journal, 2021, 161, 105789.	4.5	12
69	An insight into the hybridization mechanism of hairpin DNA physically immobilized on chemically modified graphenes. Analyst, The, 2013, 138, 467-471.	3.5	11
70	Electroactive Nanocarbon Can Simultaneously Work as Platform and Signal Generator for Labelâ€Free Immunosensing. ChemElectroChem, 2019, 6, 3615-3620.	3.4	10
71	Unravelling the Aptamerâ€Analyte Interaction Dynamics through Fluorescence Quenching in Graphene Quantum Dots (GQDs) Based Homogeneous Assays. ChemPlusChem, 2019, 84, 420-426.	2.8	10
72	Electrochemically reduced graphene nanoribbons: Interference from inherent electrochemistry of the material in DPV studies. Electrochemistry Communications, 2014, 46, 137-139.	4.7	8

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73	Investigation on the ability of heteroatom-doped graphene for biorecognition. Nanoscale, 2017, 9, 3530-3536.	5.6	8
74	Determination of choline containing phospholipids in serum, bile and amniotic fluids by the derivative enzymaticâ€"spectrophotometric method. Journal of Pharmaceutical and Biomedical Analysis, 2004, 35, 399-407.	2.8	7
75	DNA polymorphism sensitive impedimetric detection on gold-nanoislands modified electrodes. Talanta, 2015, 136, 95-101.	5.5	7
76	Chemically Reduced Graphene Oxide for the Assessment of Food Quality: How the Electrochemical Platform Should Be Tailored to the Application. Chemistry - A European Journal, 2017, 23, 1930-1936.	3.3	7
77	The Role of Surface Chemistry in Impedimetric Aptasensing. ChemElectroChem, 2018, 5, 3654-3659.	3.4	7
78	Soldering DNA to graphene via 0, 1 and 2-point contacts: Electrochemical impedance spectroscopic investigation. Electrochemistry Communications, 2013, 28, 83-86.	4.7	5
79	Electroactivity of graphene oxide on different substrates. RSC Advances, 2012, 2, 10575.	3.6	4
80	Advances on the Use of Graphene as a Label for Electrochemical Biosensors. ChemElectroChem, 2020, 7, 4177-4185.	3.4	4
81	Exploring graphene oxide intrinsic electroactivity to elucidate the non-covalent interactions with DNA oligonucleotides. Chemical Communications, 2022, 58, 2662-2665.	4.1	4
82	Electroactive nanocarbon materials as signaling tags for electrochemical PCR. Talanta, 2022, 245, 123479.	5.5	2
83	Derivative enzymaticâ€"spectrophotometric method for choline containing phospholipid determination in human serum, bile and amniotic fluid: recovery data by â€˜standard additionâ€™ method. Microchemical Journal, 2005, 79, 61-67.	4.5	1
84	DNA Sensors Employing Nanomaterials for Diagnostic Applications. Springer Series on Chemical Sensors and Biosensors, 2012, , 189-216.	0.5	1
85	Advances on the Use of Graphene as a Label for Electrochemical Biosensors. ChemElectroChem, 2020, 7, 4157-4157.	3.4	1
86	Inside Cover: On Oxygen-Containing Groups in Chemically Modified Graphenes (Chem. Eur. J. 15/2012). Chemistry - A European Journal, 2012, 18, 4438-4438.	3.3	0
87	Guest Editorial: Electrochemistry of Graphene. Electroanalysis, 2014, 26, 4-4.	2.9	0
88	Electroactive Nanocarbon as Novel Label for DNA Analysis. Proceedings (mdpi), 2019, 15, 34.	0.2	0